## MANUALS FOR THIS PRINTER



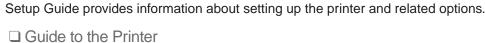


CD-ROM Manual CD-ROM manuals are included in each language folder on the CD-ROM "Operating Instructions".

## **PREPARATION**



## **Setup Guide**





☐ Installation and Connection



## **Getting Started**



Getting Started describes how to install software to enable users to print to the Fiery 3850C. Specifically, it describes installation of printer files, and other user software provided on the User Software CD. It also explains how to connect each user to the network.

- ☐ Installing User Software on a Windows Computer
- ☐ Installing User Software on a Mac OS Computer
- ☐ Fiery WebTools
- ☐ Troubleshooting



## **Configuration Guide**



Configuration Guide explains basic configuration and administration of the Fiery 3850C for the supported platforms and network environments. It also includes guidelines for setting up UNIX, Windows 2000, Windows XP, Windows NT 4.0, and Novell NetWare servers to provide printing services to clients.

- ☐ Connecting to the Network
- ☐ Preparing for Fiery 3850C
- ☐ Performing Setup from the Control Panel
- ☐ Setting up the Fiery 3850C from a Windows Computer
- ☐ Setting up Network Servers
- ☐ Administering the Fiery 3850C

## **USING THIS PRINTER**



## **Printing Guide**

Printing Guide describes the printing features of the Fiery 3850C for users who send jobs via remote workstations on the network.

- ☐ Printing from Windows Computers
- ☐ Printing from Mac OS Computers
- ☐ Printing from UNIX Workstations
- ☐ Special Features
- ☐ Tracking and Managing Print Jobs
- ☐ Print Options
- ☐ Font Lists
- □ Troubleshooting



## **Color Guide**

Color Guide provides information on managing the color output of your Fiery 3850C. It addresses concepts and issues associated with printing to the Fiery 3850C and outlines key workflow scenarios. This manual explains how to calibrate your printer and take advantage of the ColorWise color management system as well as features in ColorWise Pro Tools. In addition, Color Guide offers information on printing from popular Windows and Mac OS applications.

- ☐ Fiery 3850C Color Management
- ☐ Simple and Advanced Workflows
- ☐ Color Calibration
- ☐ ColorWise Pro Tools
- ☐ Working with Color in Applications
- ☐ Office Applications
- □ Adobe Photoshop
- ☐ Page Layout Applications
- ☐ Illustration Applications
- ☐ Desktop Color Primer
- □ Color Management
- ☐ Importing Densitometer Measurements



## **Job Management Guide**

Job Management Guide explains the functions of the Fiery utilities, including the Command WorkStation, and how they can be used to manage jobs. This book is intended for an operator or administrator, or a user with the necessary access privileges, who needs to monitor and manage job flow, and troubleshoot problems that may arise.

- ☐ Operating the Fiery 3850C
- ☐ Introduction to Command WorkStation
- ☐ Managing Print Jobs
- Overview of Fiery WebTools
- ☐ Fiery WebSpooler and Fiery Spooler
- ☐ Troubleshooting



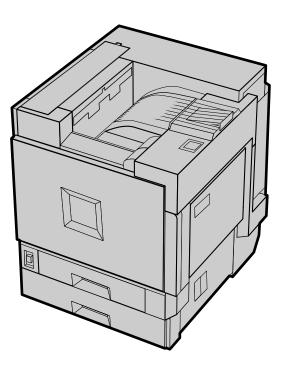
## **Maintenance Guide**



Maintenance Guide provides information about paper, adjusting the printer, replacing consumables, network utilities and dealing with error messages.

- ☐ Paper and Other Media
- ☐ Cleaning and Adjusting the Printer
- ☐ Using SmartNetMonitor
- ☐ Troubleshooting
- ☐ Replacing Consumables and Maintenance Kits
- ☐ Staple and Punch Positioning
- □ Consumables

# **Setup Guide**



For safety, please read this manual carefully before you use this product and keep it handy for future reference.

#### Introduction

This manual describes detailed instructions on the operation and notes about the use of this machine. To get maximum versatility from this machine all operators are requested to read this manual carefully and follow the instructions. Please keep this manual in a handy place near the machine.

#### **Power Source**

120 V, 60 Hz, 10 A or more

Please be sure to connect the power cable to a power source as above.

#### **Operator Safety:**

This machine is considered a CDRH class I laser device, safe for office/ EDP use. The machine contains 7 milliwatt, 645 - 660 nanometer wavelength, AlGaInp Laser Diode. Direct (or indirect reflected) eye contact with the laser beam might cause serious eye damage. Safety precautions and interlock mechanisms have been designed to prevent any possible laser beam exposure to the operator.

#### **Laser Safety:**

The Center for Devices and Radiological Health (CDRH) prohibits the repair of laser-based optical unit in the field. The optical housing unit can only be repaired in a factory or at a location with the requisite equipment. The laser subsystem is replaceable in the field by a qualified Customer Engineer. The laser chassis is not repairable in the field. Customer engineers are therefore directed to return all chassis and laser subsystems to the factory or service depot when replacement or the optical subsystem is required.

#### **Important**

Contents of this manual are subject to change without prior notice. In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

#### Caution:

Use of controls or adjustment or performance of procedures other than those specified in this manual might result in hazardous radiation exposure.

Do not attempt any maintenance or troubleshooting other than that mentioned in this manual. This printer contains a laser beam generator and direct exposure to laser beams can cause permanent eye damage.

Two kinds of size notation are employed in this manual. With this machine refer to the inch version.

For good copy quality, the supplier recommends that you use genuine toner from the supplier.

The supplier shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the supplier with your office products.

## **Trademarks**

Microsoft, Windows, and Windows NT are registered trademarks of Microsoft Corporation in the United States and/or other countries.

IPS-PRINT Printer Language Emulation Copyright© 1999-2000 Oak Technology, Inc., All rights reserved.

Ethernet is a registered trademark of Xerox Corporation.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights involved with those marks.

#### Notes:

Some illustrations in this manual might be slightly different from the machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

#### Note

The proper names of the Windows operating systems are as follows:

- Microsoft® Windows® 95 operating system
- Microsoft® Windows® 98 operating system
- Microsoft® Windows® Millennium Edition (Windows Me)
- The product names of Windows® 2000 are as follows:

Microsoft<sup>®</sup> Windows<sup>®</sup> 2000 Advanced Server Microsoft<sup>®</sup> Windows<sup>®</sup> 2000 Server

Microsoft® Windows® 2000 Professional

• The product names of Windows® XP are as follows:

Microsoft® Windows® XP Professional

Microsoft® Windows® XP Home Edition

• The product names of Windows NT® 4.0 are as follows:

Microsoft® Windows NT® Server 4.0

Microsoft® Windows NT® Workstation 4.0

## **Safety Information**

When using your equipment, the following safety precautions should always be followed.

## **Safety During Operation**

In this manual, the following important symbols are used:

#### **⚠ WARNING:**

Indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.

#### **A CAUTION:**

Indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to property.

#### **↑** WARNING:

- Confirm that the wall outlet is near the machine and freely accessible, so that in event of an emergency, it can be unplugged easily.
- Disconnect the power plug (by pulling the plug, not the cable) if the power cable or plug becomes frayed or damaged.
- To avoid hazardous electric shock or laser radiation exposure, do not remove any covers or screws other than those specified in this manual.
- Turn off the power and disconnect the power plug (by pulling the plug, not the cable) if any of the following conditions exist:
  - · You spill something into the equipment.
  - You suspect that your equipment needs service or repair.
  - Your equipment's cover has been damaged.
- Do not incinerate spilled toner or used toner. Toner dust is flammable and might ignite when exposed to an open flame.
- Disposal should take place at an authorized dealer or appropriate collection site.
- If you dispose of the used toner cartridges yourself, dispose of them according to local regulations.

#### A CAUTION:

- Protect the equipment from dampness or wet weather, such as rain, snow, and so on.
- Unplug the power cable from the wall outlet before you move the equipment. While moving the equipment, you should take care that the power cable will not be damaged under the equipment.
- When you disconnect the power plug from the wall outlet, always pull the plug (not the cable).
- Do not allow paper clips, staples, or other small metallic objects to fall inside the equipment.
- Do not eat or swallow toner.
- Keep toner (used or unused) and toner cartridge out of reach of children.
- For environmental reasons, do not dispose of the equipment or expended supplies at a household waste collection point. Disposal should take place at an authorized dealer or an appropriate collection site.
- Our products are engineered to meet the highest standards of quality and functionality. When purchasing expendable supplies, we recommend using only those specified by an authorized dealer.
- The inside of the machine becomes very hot. Do not touch the parts with a label indicating a "hot surface". Touching a "hot surface" could result in a burn. (♠: means "hot surface".)

## **ENERGY STAR Program**



As an ENERGY STAR Partner, we have determined that this machine model meets the ENERGY STAR Guidelines for energy efficiency.

The ENERGY STAR Guidelines intend to establish an international energy-saving system for developing and introducing energy-efficient office equipment to deal with environmental issues, such as global warming.

When a product meets the ENERGY STAR Guidelines for energy efficiency, the Partner shall place the ENERGY STAR logo onto the machine model.

This product was designed to reduce the environmental impact associated with office equipment by means of energy-saving features, such as Low-power mode.

#### Low-power Mode (Energy Saver mode)

This printer automatically lowers its power consumption 60 minutes after the last operation has been completed. To exit Low-power (Energy Saver) mode, press any key on the control panel.

### Specifications

Energy Saver mode	Power Consumption	45 W or less
	Default Time	60 minutes
	Recovery Time	120 seconds or less

## **How to Read This Manual**

#### **Symbols**

In this manual, the following symbols are used:

#### **⚠ WARNING:**

This symbol indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.

#### **↑** CAUTION:

This symbol indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to property.

\* The statements above are notes for your safety.

## ∰Important

If this instruction is not followed, paper might be misfed, or data might be lost. Be sure to read this.

## Preparation

This symbol indicates the prior knowledge or preparations required before operating.

### Ø Note

This symbol indicates precautions for operation, or actions to take after misoperation.

## Limitation

This symbol indicates numerical limits, functions that cannot be used together, or conditions in which a particular function cannot be used.

## 

This symbol indicates a reference.

[ ]

Keys that appear on the machine's panel display.

Keys built into the control panel of the machine.

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## 1. Getting Started

## **Features of this Printer**

#### High Productivity of 28 ppm in Full Color

This printer comes with a four-tandem engine which enables the high performance output of 28 ppm (pages per minute) in full color. You can print conference records, sales promotion ads, etc. in full color, as you would do with a monochrome printer. The printer's monochrome speed of 38 ppm is equivalent to that of a high-speed monochrome laser printer, enabling you to use this printer as your high performance network printer for both color and monochrome printing.

#### High Image Quality Output in True 1200 dpi

True 1200 dpi resolution makes it possible for this printer to output text documents, documents containing images that are read in with a digital camera or scanner, and graphics in fine detail. This high resolution can be output at the speed of 14 ppm.

#### Versatile Options with the New Generation Controller

With the new high-speed, 64-bit controller architecture, optimized for Windows software, this printer can output at top speed. You can also use "Secure Print", where the printer does not output unless a password is entered. This printer answers the controller's needs that only a color printer can do.

#### First-of-its-Class Finisher

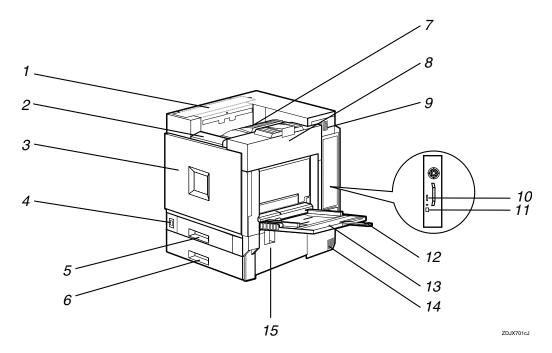
The first-of-its-class Finisher \*1 is not only compatible with Duplex Print \*2 and electronic sort printing, but also corresponds to post process printing. High-speed Duplex Print, stapling, punching, etc. can be done. The work flow of color documents up until now can be vastly improved.

\*1 Optional 2 Tray Finisher is required.

\*2 Optional Duplex Unit is required.

## Guide to the Printer

### **Exterior: Front View**



## 1. Upper Cover

Remove to install the optional 4-bin Mailbox.

#### 2. Control Panel

Contains keys for printer operation and a panel display that shows the printer status.

⇒ p.5 "Control Panel"

#### 3. Front Cover

Open this cover when replacing the Waste Toner Bottle, Development Unit or Photoconductor Unit. A screwdriver is attached to the front cover.

#### 4. Power Switch

Use this switch to turn the power on and off.

### 5. Tray 1

Loads up to 500 sheets of plain paper in this tray for printing. Exclusive for A4  $\square$  paper.

## 6. Tray 2

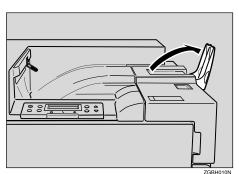
Loads up to 500 sheets of plain paper in this tray for printing.

### 7. Standard Tray

Output is stacked here with the print side down.

#### Note

☐ If printed A3 short-edge feed or 11×17 short-edge feed papers fall off the standard tray, raise the fence to prevent them from falling.



#### 8. Upper Right Cover

Open this cover to replace toner cartridge.

#### 9. Ventilator

This hole helps to keep components inside the printer from overheating. Do not block or obstruct the ventilator. A malfunction may occur due to overheating.

#### 10. Parallel Port (IEEE 1284, ECP)

Use a parallel cable to connect the printer to the host computer.

#### 11. Ethernet Port

Use an network interface cable to connect the printer to the network.

#### 12. Bypass Tray Extension

Pull out this extension to load paper in the bypass tray when its length is longer than A4  $\square$ .

#### 13. Bypass Tray

Use to print on thick paper, OHP transparencies, custom size paper, as well as plain paper. Up to 100 sheets of plain paper can be loaded.

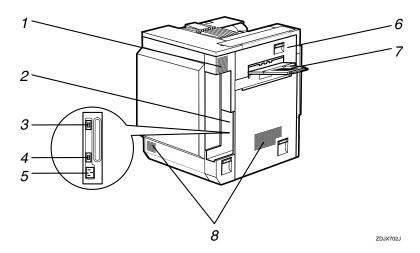
#### 14. Ventilator

This hole helps to keep components inside the printer from overheating. Do not block or obstruct the opening. A malfunction may occur due to overheating.

### 15. Right Cover

Open this cover to remove misfed paper.

## **Exterior: Rear View**



## 1. Ventilator and Dustproof Filter

This hole helps to keep components inside the printer from overheating. Do not block or obstruct the ventilator. A malfunction may occur due to overheating. Remove the ventilator to replace the internal dustproof filter.

#### 2. Connector

Connect the main power cable, cables from options, etc. to the appropriate port.

## 3. Duplex Unit Port

Connect the cable for the Duplex Reversal Unit to this port.

## 4. 4-bin Mailbox/2 Tray Finisher Port

Connect the cable for the 4-bin Mailbox or the 2 Tray Finisher to this port.

#### 5. Power Port

Connect the power cable to this port and the other cable end to the wall outlet.

## 6. Upper Left Cover

Open this cover to remove misfed paper or when replacing the Fusing Unit.

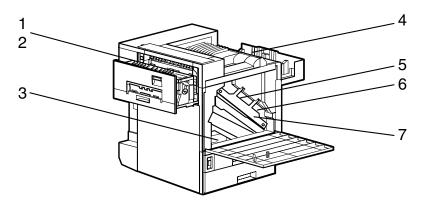
#### 7. External Tray

Printed output is stacked here with the print side up.

#### 8. Ventilators

These holes help to keep components inside the printer from overheating. Do not block or obstruct the ventilators. A malfunction may occur due to overheating.

## Inside



#### 1. Fusing Unit

Fuses the image on paper.

When "Replace Fusing Unit (Type C)" appears on the panel display, replace this unit.

#### 2. Fuser Oil Unit

Attach to the Fusing Unit.

When "Replace Fuser Oil Unit (TypeG)" appears on the panel display, replace this unit.

#### 3. Waste Toner Bottle

Collects toner that is wasted during printing.

When "Replace Waste Toner (Type E)" appears on the panel display, replace with a new waste toner bottle.

## 4. Toner Cartridge

Loads from the printer rear in the order of magenta (M), cyan (C), yellow (Y), and black (K).

When "Add Toner: color" appears on the panel display, replace the appropriate toner cartridge.

#### 5. Photoconductor Unit

The printer comes with one black Photoconductor Unit and three color (yellow, cyan, magenta) Photoconductor Units.

When "Replace Color PCU (Type A)" appears on the panel display, replace the three color Photoconductor Units.

When "Replace Black PCU (Type F)" appears on the panel display, replace the black Photoconductor Unit.

### 6. Development Unit

The printer comes with one black Development Unit and three color (yellow, cyan, magenta) Development Units.

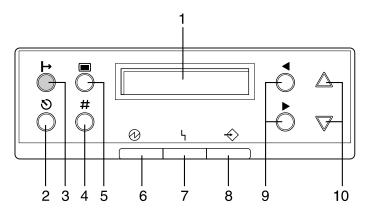
When "Replace Color Dev. Unit(TypeB)" appears on the panel display, replace the three color Development Units.

When "Replace Black Dev. Unit(TypeD)" appears on the panel display, replace the black Development Unit.

#### 7. Inner Cover

Open this cover when replacing the Photoconductor Unit or Development Unit.

### **Control Panel**



#### 1. Panel display

Shows the current status of the printer and error messages.

### 2. [Cancel] key

Press this key to return to the "Ready" condition on the panel display.

When the printer is online, press this key to cancel any ongoing print job.

## **3. (On Line)** key

Indicates whether the printer is online or offline.

Press this key to switch between online and offline.

When the lamp is lit, the printer is online, enabling data reception from the host computer.

When the lamp is off, the printer is offline, disabling data reception from the host computer.

Press this key to return to the ready condition.

## 4. [Enter] key

Press this key to execute menu items selected on the panel display.

Press this key to force the printer to print the data received in the online status when the paper size or type dose not match with the actual set size or type.

## 5. [Menu] key

Press this key to make and check the current printer settings.

#### 6. Power indicator

Power indicator is on while the power switch is on. Power indicator is off when the power is turned off or while the printer is in Energy Saver mode.

#### 7. Error indicator

Blinks or lights up whenever any printer error occurs. However, turns off in the Energy Saver mode.

#### 8. Data In indicator

Blinks while the printer is receiving data from a computer. Data In indicator is on if there is data to be printed.

## 9. [ ◀], [ ▶] keys

The 【◀】 key advances the cursor in text entry screens. The 【▶】 key backspaces or deletes.

## *10.* [▲], [▼] Keys

Use these keys to scroll a list of options or, in text entry, scroll individual characters.

# 2. Setting Up

## Where to Put the Printer

The printer's location should be carefully chosen because environmental conditions greatly affect its performance.

#### **⚠ WARNING:**

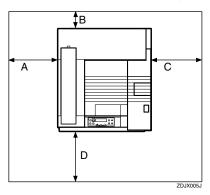
- Confirm that the wall outlet is near the machine and freely accessible, so that in the event of an emergency, it can be easily unplugged.
- Only connect the machine to the power source described on this sheet.
- Avoid multi-wiring.
- Do not damage, break or make any modifications to the power cable. Do not place heavy objects on it, pull it hard or bend it more than necessary. These actions could damage the cable. A frayed or damaged cable might cause an electrical and fire hazard.

#### **A** CAUTION:

- Do not handle the plug with wet hands. Doing this might cause an electrical shock.
- Keep the machine in an area that is within optimum environmental conditions. Operating the machine in an environment that is outside the recommended ranges of humidity and temperature can cause an electrical or fire hazard. Keep the area around the socket free of dust. Accumulated dust can become an electrical or fire hazard.
- Place the machine on a strong and level surface. Otherwise, the machine might fall and injure someone.
- If you use the machine in a confined space, confirm there is a continuous air turnover.

### Space Required for Installation

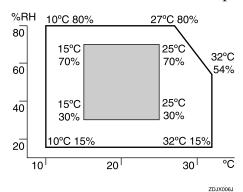
Leave enough space around the printer. This space is necessary to operate the printer. The recommended (or minimum) space requirements are as follows:

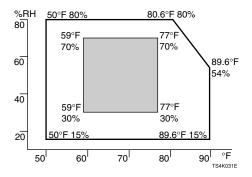


A: 46 cm (19 inch) or more B: 10 cm (4 inch) or more C: 55 cm (22 inch) or more D: 70 cm (28 inch) or more

#### Optimum Environmental Conditions

Possible and recommended temperature and humidity ranges are as follows:





- White area: Possible operation Range
- Gray area: Recommended Range

### Note

- ☐ The machine must be level within 5 mm, 0.2" both front to rear and left to right.
- ☐ To avoid possible build-up of ozone, locate this machine in a large well ventilated room that has an air turnover of more than 30 m³/hr/person.
- ☐ When you use this machine for a long time in a confined space without good ventilation, you may detect an odd smell. To keep the workplace comfortable, we recommend that you keep it well ventilated.

#### Environments to Avoid

## ∰Important

- ☐ Locations exposed to direct sunlight or strong light
- Dusty areas
- ☐ Areas with corrosive gases
- ☐ Areas excessively cold, hot, or humid
- ☐ Locations near an air conditioner or humidifier
- ☐ Locations near other electronic equipment
- ☐ Locations where the printer might be subjected to frequent strong vibration

#### Power Source

Connect the power cable to a power source with the following specifications:

• 120 V, 60 Hz, 10 A or more

## Checking the Contents of the Box

## 1 Check the contents of the box for the following items.

For missing items, contact your sales or service representative.

#### Manuals and CD-ROMs

- □Description form
- □ Manuals for this Printer
- □Getting Started
- □Configuration Guide
- □ Maintenance Guide
- □CD-ROM "Fiery 3850C User Software"
- □CD-ROM "Fiery 3850C Operating Instructions"
- □CD-ROM "Fiery 3850C Network Utilities"

#### Parts

□External Tray



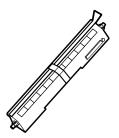
□Power Cable



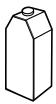
□ Ferrite Core



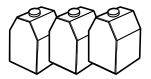
□Fuser Oil Unit



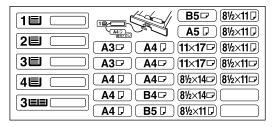
□Black Toner Cartridge (K)



□Magenta (M), Cyan (C), Yellow (Y) Toner Cartridges



□Paper Feed Unit Labels



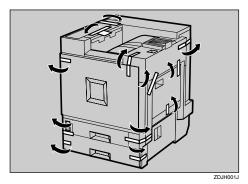
□ Additional Documentations



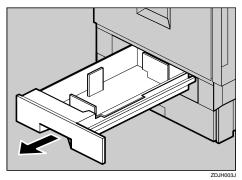
☐ This package does not include an interface cable. Please purchase one for use with your host computer.

## **Unpacking the Printer**

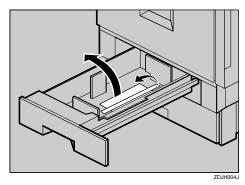
1 Remove the adhesive tape on the printer body. Remove the cardboard that is taped to the Standard Tray.



2 Open Tray 1.

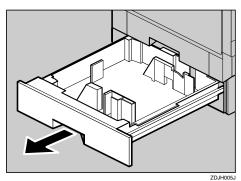


Remove the adhesive tape and sheet of paper.

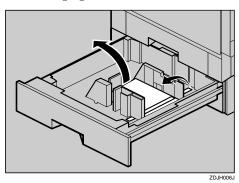


4 Close Tray 1 slowly.

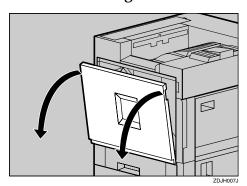
**5** Open Tray 2.



6 Remove the adhesive tape and sheet of paper.



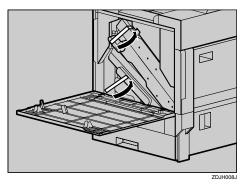
- **7** Close Tray 2 slowly.
- Open the front cover slowly by pulling down from the two areas on the left and right.



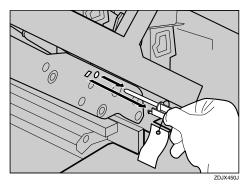
∰Important

☐ Do not place objects on the opened front cover.

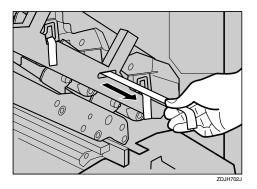
## **9** Remove the adhesive tape.



Remove the securing pin, as shown in the illustration, from the Transfer Unit. Pinch it, and then pull it out.

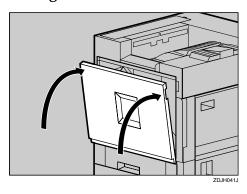


Pull out the four pieces of tapes coming out from the Development Unit slowly, in a level manner.

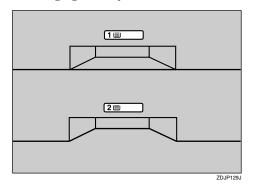


## **∰**Important

- ☐ Be sure to pull out all four pieces of tapes to avoid printer malfunction during operation.
- ☐ The removed tape is dirty. Be careful not to let it touch your hands or clothes.
- Close the front cover slowly by pushing the two areas on the left and right.



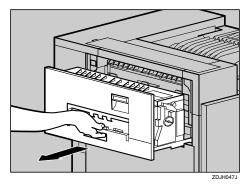
Put labels "1" and "2" on the front of the paper trays.



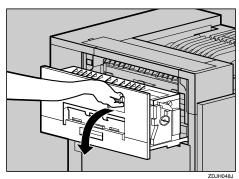
## Installing the Fuser Oil Unit

Install the Fuser Oil Unit to the Fusing Unit.

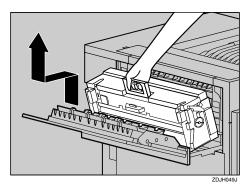
**1** Pull out the left cover slowly.



2 Open the upper left cover.



Holding the green handle, pull up the Fusing Unit slowly in the direction as shown in the illustration.

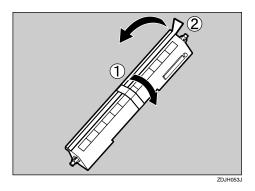


## **∰**Important

☐ Do not touch any areas other than the handle.

When replacing the fusing unit, do not turn the blue dial at the side of the new fusing unit until the power switch is turned on.

- Put the removed Fusing Unit in a stable and level place.
- Take out the Fuser Oil Unit from the bag, and remove seal (1), and then seal (2) as shown in the illustration.



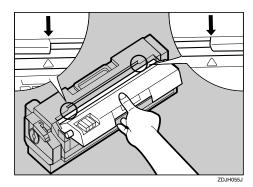
## Note

☐ Be sure to remove seal (①), and then pull it out in a level manner.

## **∰**Important

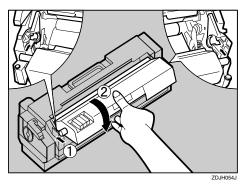
- ☐ Be sure to remove the seals to avoid printer malfunction.
- ☐ Be sure to remove seal (①) first, and then remove seal (②) to avoid an oil leak.
- ☐ There is oil on the removed seals. Be careful not to let them come in contact with your clothes.
- ☐ Be sure to put the Fusing Oil in a stable and level place.

Match (▲) on the front of the Fuser Oil Unit and the arrow on the Fusing Unit as shown in the illustration.

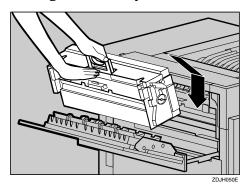


## ∰Important

- ☐ Be careful not to get oil on the metal part of the left side of the Fuser Oil Unit.
- Insert the left and right protrusions of the Fuser Oil Unit into the white holders of the Fusing Unit (①), and then move the Fuser Oil Unit in the direction shown by the arrow (②) to attach the Fuser Oil Unit to the Fusing Unit.



Holding the green handle with one hand, use your other hand to push the front area of the handle to a slight slant, and then push the Fusing Unit slowly to the back.



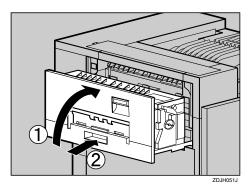
Confirm that the Fusing Unit is set to the printer vertically.

### **∅** Note

☐ Confirm that the Fuser Oil Unit is facing the inside of the printer.

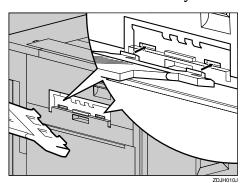
## **∰**Important

- ☐ Confirm that the Fusing Unit is in appropriate position.
- Close the upper left cover (1) and push the handle (2) slowly to the back until it clicks.



15

Attach the External Tray to the printer. Insert the hooks of the External Tray into the printer slits, and then lower it toward you.



## **Installing Options**

#### **A CAUTION:**

- Before installing options, the machine should be turned off and unplugged for at least an hour. Components inside the machine become very hot, and can cause a burn if touched.
- Before moving the machine, unplug the power cable from the outlet. If the cable is unplugged abruptly, it could become damaged. Damaged plugs or cables can cause an electrical or fire hazard.
- When lifting the machine, use the grips on both sides. The machine could break or cause an injury if dropped.

By installing options, you can improve the printer performance and have an expanded variety of features to use.

## **∰**Important

☐ Rating voltage of the connector for options: Max. DC 24 V.

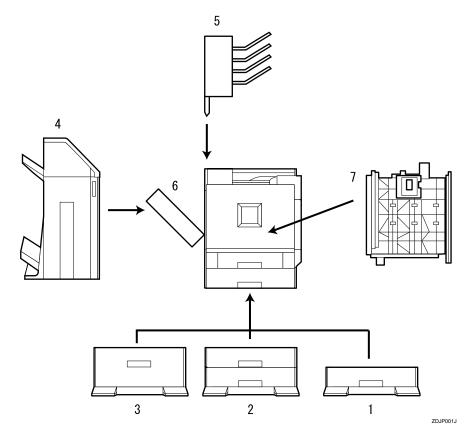
When installing multiple options on the printer, we recommend the following order of installation.

#### Flow of Option Installation

ļ	
0	Install the Paper Feed Unit to the bottom of the printer.
Install the 500, 1000-sheet Paper	You can choose to install the PAPER FEED UNIT Type
Feed Unit, or 2000-sheet Large	$3800C (500 \times 1)$ , Type $3800C (500 \times 2)$ or Paper Bank PS470.
Capacity Tray.	If you install the Paper Bank PS470, you can load up to 3,100
(PAPER FEED UNIT Type	sheets of paper at once.
3800C, Paper Bank PS 470)	
▼	
2	Attach the Duplex Reversal Unit to the left side of the print-
Install the Duplex Unit.	er, and the Duplex Feed Unit inside the printer.
(Duplex Unit Type 3800C)	
▼	
3	Attach the SR770 to the left side of the printer.
Install the 2 Tray Finisher.	You cannot install the SR770 unless both the Paper Feed Unit and Duplex Unit options are installed.
(SR770)	If you choose to install the 4-bin Mailbox, you cannot install
	the SR770.
▼	
Ø	Remove the upper cover to install Mail Bin Type 3800C.
Install the 4-bin Mailbox.	If you choose to install the 2 Tray Finisher, you cannot in-
(Mail Bin Type 3800C)	stall the 4-bin Mailbox.
1	1

Install options in the positions as shown in the illustration.

#### Exterior



## 1. PAPER FEED UNIT Type 3800C $(500 \times 1)$

Loads up to 500 sheets (500 sheets  $\times$  1 column) of paper.

 $\Rightarrow$  p.20 "Installing the PAPER FEED UNIT Type 3800C (500 x 1)"

## 2. PAPER FEED UNIT Type 3800C $(500 \times 2)$

Loads up to 1,000 sheets (500 sheets  $\times$  2 columns) of paper.

 $\Rightarrow$  p.23 "Installing the PAPER FEED UNIT Type 3800C (500 x 2)"

## 3. Paper Bank PS470 (2000-sheet Large Capacity Tray)

Loads up to 2,000 sheets  $(2,000 \text{ sheets} \times 1 \text{ column})$  of paper.

⇒ p.25 "Installing the Paper Bank PS470 (2000-sheet Large Capacity Tray)"

## 4. SR770 (2 Tray Finisher)

Performs Job Separation, staples and punches holes. Install the Finisher on the left side of the printer.

 $\Rightarrow$  p.34 "Installing the SR770 (2 Tray Finisher)"

## 5. Mail Bin Type 3800C (4-bin Mailbox)

Sorts printed documents from multiple users. Attach the Mailbox to the top of the printer.

⇒ p.40 "Installing the Mail Bin Type 3800C (4-bin Mailbox)"

## 6. Duplex Reversal Unit

Flips over the paper during duplex printing. Install the unit on the left side of the printer.

⇒ p.30 "Installing the Duplex Reversal Unit"

### 7. Duplex Feed Unit

Transports the paper during duplex printing. Install the unit inside the printer.

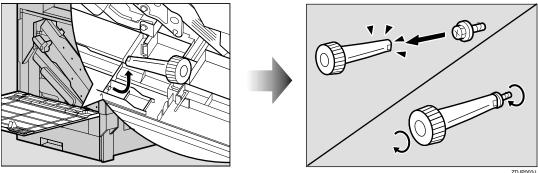
 $\Rightarrow$  p.30 "Installing the Duplex Reversal Unit"

## ∰Important

- ☐ You cannot install the 2 Tray Finisher unless both the Paper Feed Unit and Duplex Unit options are installed.
- ☐ You cannot install both the 2 Tray Finisher and 4-bin Mailbox at the same time.

## How to Use the Screwdriver

The exclusive screwdriver used for attaching options is attached to the inside of the front cover. By pushing the screw top into the screwdriver, you can work without having to worry about dropping the screw.



ZDJP003

## Note

☐ After using the screwdriver, return it to its original position on the inside of the front cover.

## **Installing the Paper Feed Unit**

## Preparation

If you want to use the optional Duplex Unit, 2 Tray Finisher or 4-bin Mailbox at the same time, install the optional Paper Feed Unit first, and then install these options.

If you have already installed the optional Duplex Unit, 2 Tray Finisher and 4-bin Mailbox, remove all these options before installing the optional Paper Feed Unit.

## **禁Important**

- ☐ Before installation, check the orientation of the Paper Feed Unit or 2000-sheet Large Capacity Tray you want to place.
- ☐ When installing multiple options, install the Paper Feed Unit first.
- ☐ Four persons are needed to install the Paper Feed Unit. Start the installation work after all four persons are ready.

#### **<u>A</u> CAUTION:**

When moving the machine, each person should hold the handle, where two are located on opposite sides, and lift slowly. Lifting it carelessly or dropping it may cause an injury.

## Note

☐ The printer weights approximately 83 kg (183 lbs).

### Installing the PAPER FEED UNIT Type 3800C (500 x 1)

## Preparation

If you want to use the optional Duplex Unit, 2 Tray Finisher or 4-bin Mailbox at the same time, install the optional Paper Feed Unit first, and then install these options.

If you have already installed the optional Duplex Unit, 2 Tray Finisher and 4-bin Mailbox, remove all these options before installing the optional Paper Feed Unit.

## **∰**Important

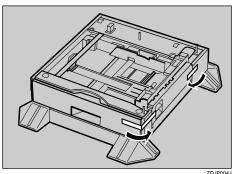
- ☐ Before installation, check the orientation of the Paper Feed Unit you want to place.
- ☐ When installing multiple options, install the Paper Feed Unit first.

#### riangle CAUTION:

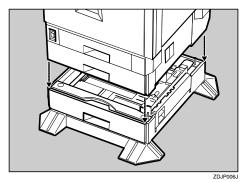
When moving the Paper Feed Unit, hold the bottom of both sides, and lift slowly. Lifting it carelessly or dropping it may cause an injury.

## Note

- ☐ The 500-sheet Paper Feed Unit weights approximately 18 kg (39.7 lbs).
- 11 Turn off the power switch and unplug the power cable.
- **2** Remove the adhesive tape.

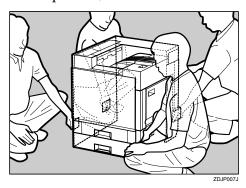


Adjust the four corners of the printer to those of the 500-sheet Paper Feed Unit, and then lower the printer slowly into place.

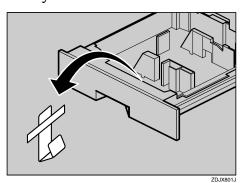


## **∰**Important

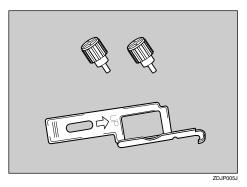
☐ Four persons should hold the handles, located on two sides of the printer, to move it.



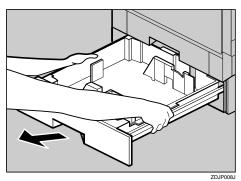
- 4 Open the tray of the 500-sheet Paper Feed Unit.
  - Remove the adhesive tape and sheet of paper.
  - 2 Remove the adhesive tape and the corrugated paper inside the tray as shown in the illustration.



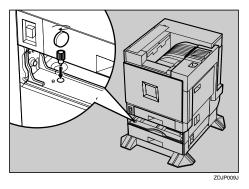
Take out the packaged items, making sure there are two thumb screws and one mounting bracket. Close the tray of the 500-sheet Paper Feed Unit tightly.



6 Pull out Tray 2 slowly while lifting it up a little.

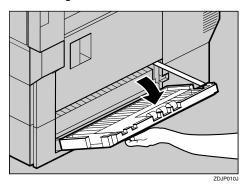


**7** Fasten one thumb screw. Use a coin to fasten it tightly.

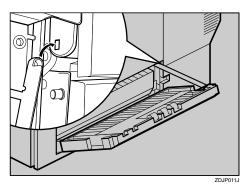


Slide Tray 2 back into the printer slowly until it stops.

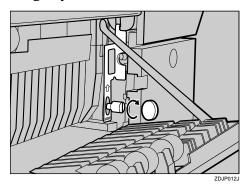
Open the right cover of the 500sheet Paper Feed Unit.



Hook the mounting bracket to the hole as shown in the illustration.

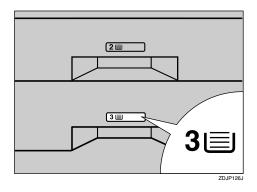


Fasten the bracket with the other thumb screw. Use a coin to fasten it tightly.



Close the right cover of the 500-sheet Paper Feed Unit.

Stick label "3" above the handle on the front of the 500-sheet Paper Feed Unit.



- Note
- ☐ After finishing all installation for printing, you can check whether the 500-sheet Paper Feed Unit is installed properly. Print the Configuration Page from the "Print Menu" menu. If it is installed properly, you will see "Tray 3" under the "Paper Tray Information" list.
- ☐ If the Paper Feed Unit is not installed properly, reinstall from step ①. If you cannot install it properly even after reinstallation, contact your sales or service representative.

 $\Rightarrow$  p.55 "Printing the Configuration Page".

## Installing the PAPER FEED UNIT Type 3800C (500 x 2)

## Preparation

If you want to use the optional Duplex Unit, 2 Tray Finisher or 4-bin Mailbox at the same time, install the optional Paper Feed Unit first, and then install these options.

If you have already installed the optional Duplex Unit, 2 Tray Finisher and 4-bin Mailbox, remove all these options before installing the optional Paper Feed Unit.

## **∰**Important

- ☐ Before installation, check the orientation of the Paper Feed Unit you want to place.
- ☐ When installing multiple options, install the Paper Feed Unit first.

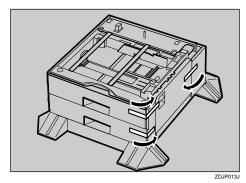
#### **⚠** CAUTION:

 When moving the Paper Feed Unit, hold the bottom of both sides, and lift slowly. Lifting it carelessly or dropping it may cause an injury.

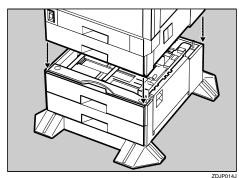
## Note

- ☐ The 1000-sheet Paper Feed Unit weights approximately 25 kg (55.2 lbs).
- 1 Turn off the power switch and unplug the power cable.

## **2** Remove the adhesive tape.

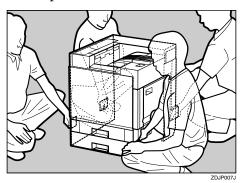


Adjust the four corners of the printer to those of the 1000-sheet Paper Feed Unit, and then lower the printer slowly into place.

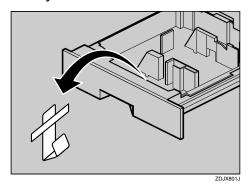


## **∰**Important

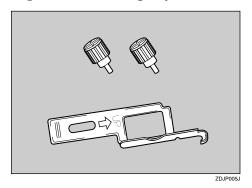
☐ Four persons should hold the handles, located on two sides of the printer, to move it.



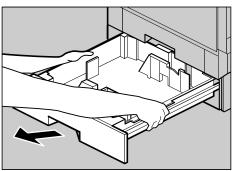
- 4 Open the tray of the 1000-sheet Paper Feed Unit.
  - Remove the adhesive tape and sheet of paper.
  - 2 Remove the adhesive tape and the corrugated paper inside the tray as shown in the illustration.



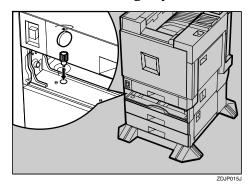
5 Take out the packaged items, making sure there are two thumb screws and one mounting bracket. Close the tray of the 1000-sheet Paper Feed Unit tightly.



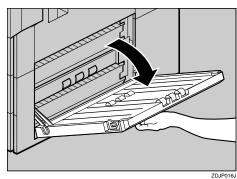
6 Pull out Tray 2 slowly while lifting it up a little.



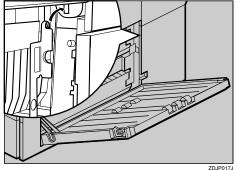
7 Fasten one thumb screw. Use a coin to fasten it tightly.



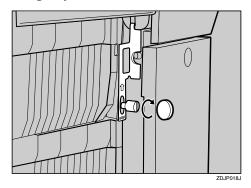
- 8 Slide Tray 2 back into the printer slowly until it stops.
- Open the right cover of the 1000sheet Paper Feed Unit.



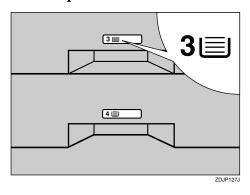
Hook the mounting bracket to the hole as shown in the illustration.



**II** Fasten the bracket with the other thumb screw. Use a coin to fasten it tightly.



- Close the right cover of the 1000sheet Paper Feed Unit.
- **B** Stick labels "3" and "4" above the handles on the front of the 1000sheet Paper Feed Unit.



## Note

- ☐ After finishing all installation for printing, you can check whether the 1000-sheet Paper Feed Unit is installed properly. Print the Configuration Page from the "Print Menu" menu. If it is installed properly, you will see "Tray 3, Tray 4" under the "Paper Tray Information" list.
- ☐ If the Paper Feed Unit is not installed properly, reinstall from step 1. If you cannot install it properly even after reinstallation, contact your sales or service representative.

### 

 $\Rightarrow$  p.55 "Printing the Configuration Page".

## Installing the Paper Bank PS470 (2000sheet Large Capacity Tray)

## Preparation

If you want to use the optional Duplex Unit, 2 Tray Finisher or 4-bin Mailbox at the same time, install the optional 2000-sheet Large Capacity Tray first, and then install these options.

If you have already installed the optional Duplex Unit, 2 Tray Finisher and 4-bin Mailbox, remove all these options before installing the optional 2000-sheet Large Capacity Tray.

## **#Important**

- ☐ Before installation, check the orientation of the 2000-sheet Large Capacity Tray you want to place.
- ☐ When installing multiple options, install the Paper Feed Unit first.

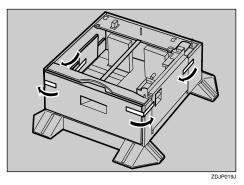
#### **⚠ CAUTION:**

When moving the Paper Feed Unit, hold the bottom of both sides, and lift slowly. Lifting it carelessly or dropping it may cause an injury.

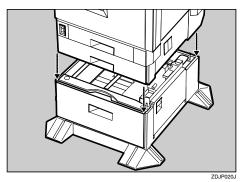
## 

- ☐ The 2000-sheet Large Capacity Tray weights approximately 25 kg (55.2 lbs).
- 11 Turn off the power switch and unplug the power cable.

## **2** Remove the adhesive tape.

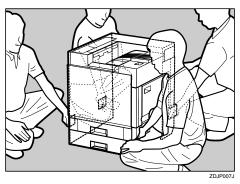


Adjust the four corners of the printer to those of the 2000-sheet Large Capacity Tray, and then lower the printer slowly into place.

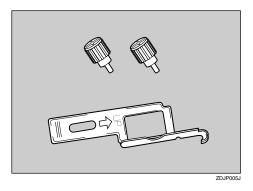


## **#Important**

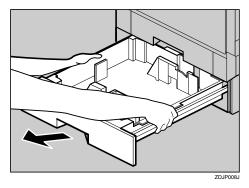
☐ Four persons should hold the handles, located on two sides of the printer, to move it.



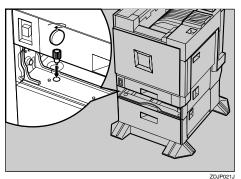
Take out the packaged items, making sure there are two thumb screws and one mounting bracket. Close the tray of the 2000-sheet Large Capacity Tray tightly.



Pull out Tray 2 slowly while lifting it up a little.

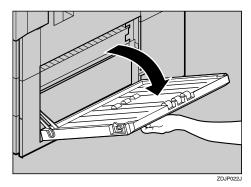


**6** Fasten one thumb screw. Use a coin to fasten it tightly.

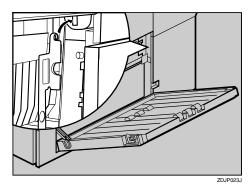


Slide Tray 2 back into the printer slowly until it stops.

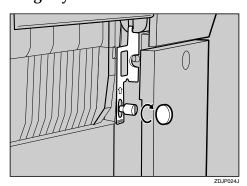
Open the right cover of the 2000sheet Large Capacity Tray.



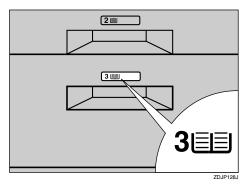
9 Hook the mounting bracket to the hole as shown in the illustration.



Fasten the bracket with the other thumb screw. Use a coin to fasten it tightly.



Close the right cover of the 2000sheet Large Capacity Tray. Stick label "3" above the handle on the front of the 2000-sheet Large Capacity Tray.



Note

- ☐ After finishing all installation for printing, you can check whether the 2000-sheet Large Capacity Tray is installed properly. Print the Configuration Page from the "Print Menu" menu. If it is installed properly, you will see "LCT" under the "Paper Tray Information" list.
- ☐ If the Paper Feed Unit is not installed properly, reinstall from step ①. If you cannot install it properly even after reinstallation, contact your sales or service representative.

#### 

 $\Rightarrow$  p.55 "Printing the Configuration Page".

## **Installing the Duplex Unit Type** 3800C



## Preparation

If you want to use the optional Paper Feed Unit at the same time, install the optional Paper Feed Unit first, and then install the Duplex Unit.

#### **A CAUTION:**

The inside of the machine becomes very hot. Do not touch the parts with a label indicating a "hot surface". Touching a "hot surface" could result in a burn.

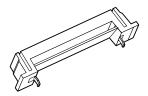
#### **⚠** CAUTION:

· Do not let go of the Duplex Reversal Unit until it is fastened in place. It could drop and cause an injury.

## **Installing the Duplex Reversal Unit Stand**

**1** Check the contents of the box.

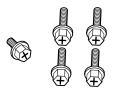
#### Stand



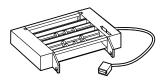
**Paper Guide** 



One Short Screw, Four Long Screws



#### Duplex Reversal Unit



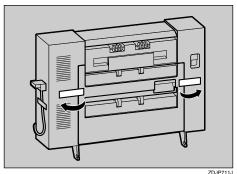
#### Duplex Feed Unit



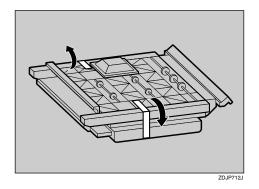
2 Remove the adhesive tape and packing materials.

#### **#Important**

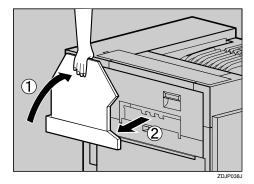
- ☐ Do not remove the adhesive tape which hold the auxiliary bar at this point. Remove it in step 3 on p.30 "Installing the Duplex Reversal Unit"
- ☐ Do not remove the adhesive tape which hold the cable of the Duplex Reversal Unit at this point. Remove it in step 7 on p.30 "Installing the Duplex Reversal Unit"



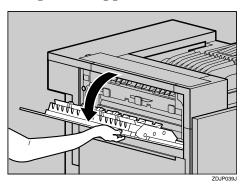




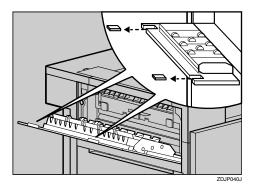
- Turn off the power switch and unplug the power cable from the wall outlet.
- 4 Lift the External Tray in the direction of the arrow (1) and remove (2).



- **5** Remove the two small covers on the upper left cover of the printer.
  - Open the upper left cover.



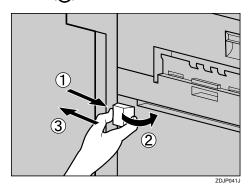
2 Pinch the two small covers and pull in the direction of the arrow to remove them.



**3** Close the upper left cover.

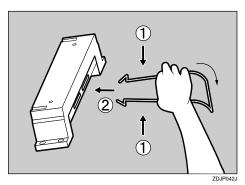
#### Note

- ☐ You will not use the removed two covers.
- Remove the protective cover on the left side of the printer. Hold the protective cover by both sides, and while pushing the left side of the cover (1), open it in the direction of the arrow (2), and then remove (3).

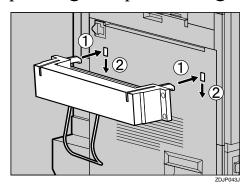


Note

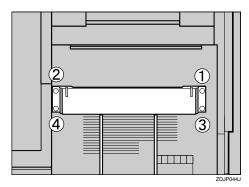
- ☐ You will not use the removed protective cover.
- Attach the paper guide to the stand. Hold the paper guide so that its right side bends down as shown in the illustration, and while holding it lightly (①), insert it into the holes of the stand (②).



Insert the claws of the stand into the holes on the left side of the printer (1), and push down (2).



Tighten four long screws to fasten the Duplex Reversal Unit Stand using provided screwdriver. Fasten in the order of ①⇒②⇒③⇒④ as shown in the illustration.



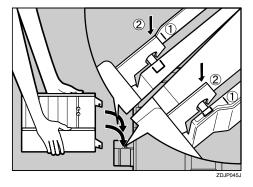
## 

See p.19 "How to Use the Screwdriver".

This completes the installation of the stand. Next, install the Duplex Reversal Unit.

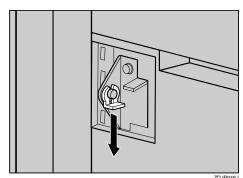
#### **Installing the Duplex Reversal Unit**

Holding the Duplex Reversal Unit in a level position with both hands, insert the hooks into the groove of the stand. At this point, adjust the tip of the hooks to the line on the stand (①) and insert slowly (②). Do not let go of the Duplex Reversal Unit even after insertion.



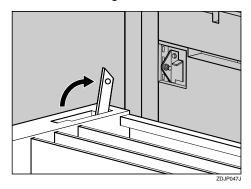
The hooks of the Duplex Reversal Unit grasp the bar inside the groove of the stand.

2 Supporting the Duplex Reversal Unit, remove the stopper of the mounting bracket on the printer.

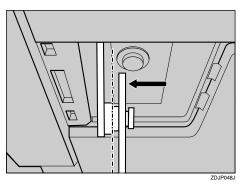


This stopper will be used in a later step **5**, so be careful not to lose it.

Supporting the Duplex Reversal Unit, remove the adhesive tape and hold the auxiliary bar in front of the hook on the left side, and then stand it up.

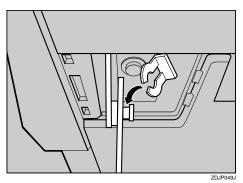


4 Hook the hole of the auxiliary bar on the mounting bracket of the printer.



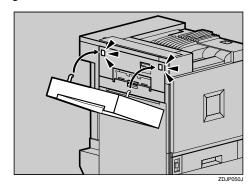
In step **5**, move the auxiliary bar to the position shown with a perforated line in the illustration.

Hang the auxiliary bar on the deep left end as shown in the illustration, and then install the stopper that was removed in step 2.

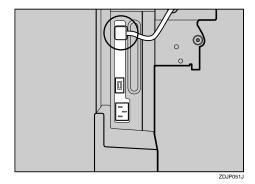


Make sure the auxiliary bar and stopper are installed in the positions shown in the illustration.

6 Raise the Duplex Reversal Unit slowly, and then adhere it to the printer.

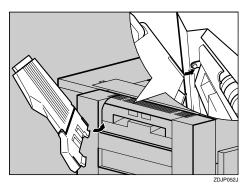


Remove the adhesive tape which hold the cable, and then connect the cable of the Duplex Reversal Unit to the upper connector on the back of the printer.

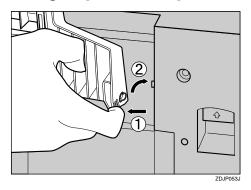


This completes the installation of the Duplex Reversal Unit. Install the Duplex Feed Unit after installing the External Tray.

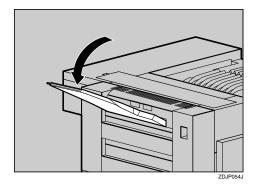
- 8 Install the External Tray.
  - Stand the External Tray and insert it from the left side with both hands.



2 Pushing the right edge of the External Tray lightly with your finger (1), insert it (2).

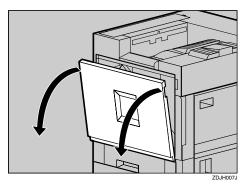


3 Lower the External Tray toward you.

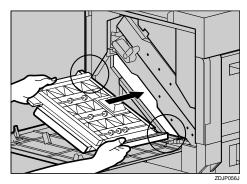


#### **Installing the Duplex Feed Unit**

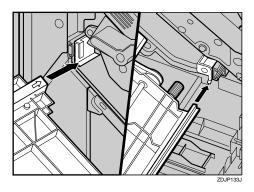
1 Open the front cover slowly by pulling the two points on the left and right.



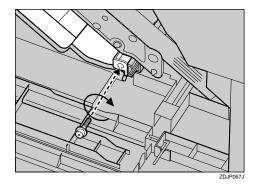
2 Holding the Duplex Feed Unit with both hands, place it on the vertical rail and insert slowly until it stops.



The vertical rail is in the position as shown in the illustration.



Fasten the Duplex Feed Unit with one short screw using provided screwdriver.

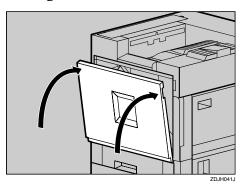


#### Note

☐ Be sure to return the provided screwdriver to its original position on the inside of the front cover.

This completes the installation of the Duplex Feed Unit.

4 Close the front cover slowly by pressing the two points on the left and right.



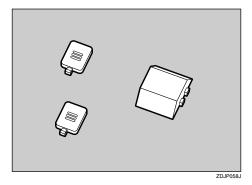
#### Ø Note

- ☐ After finishing all installation for printing, you can check whether the Duplex Unit is installed properly. Print the Configuration Page from the "Print Menu" menu. If it is installed properly, you will see "Duplex Unit" under the "Installed Options" list.
- ☐ If the Duplex Unit is not installed properly, reinstall from step ☐ ⇒ p.28. If you cannot install it properly even after reinstallation, contact your sales or service representative.

## 

See p.55 "Printing the Configuration Page".

# Check for spare parts. You will not use these spare parts.



# Installing the SR770 (2 Tray Finisher)

## Preparation

Install the optional Paper Feed Unit first, and then install the 2 Tray Finisher.

#### **⚠** CAUTION:

 When moving the 2 Tray Finisher, hold the center of both sides, and lift slowly. Lifting it carelessly or dropping it may cause an injury.

#### Note

☐ The 2 Tray Finisher weighs approximately 53 kg (116.9 lbs).

## **∰**Important

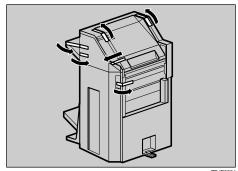
- ☐ You cannot install the 2 Tray Finisher unless both the Paper Feed Unit and Duplex Unit options are installed.
- ☐ You cannot install the 4-bin Mailbox and 2 Tray Finisher at the same time.
- 1 Turn off the power switch and unplug the power cable.

# Remove the adhesive tape and packing materials.

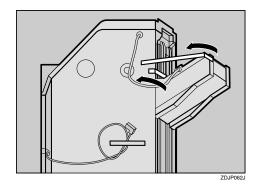
#### **#Important**

☐ Do not remove the adhesive tape which hold the cable at this point. Remove it in step ②.

#### Front and Side

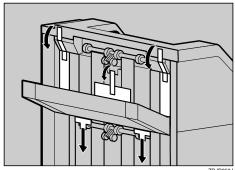


ZDJP059J

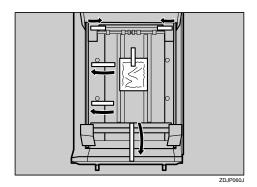


•

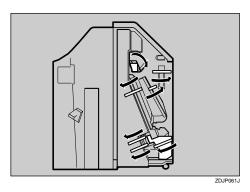
#### ◆ Back



ZDJP950J



**❖** Interior



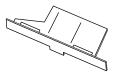
- **3** Check the contents of the box.
  - Two short screws, six long screws



## Connecting Bracket



**♦** Mounting Bracket



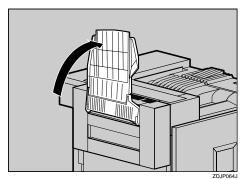
❖ Rail



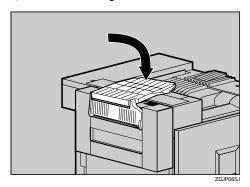
**♦ Two 2 Tray Finisher Trays** 



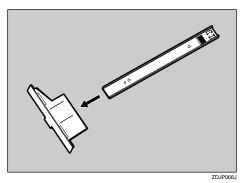
- 4 Stand the External Tray of the printer.
  - Stand it vertically.



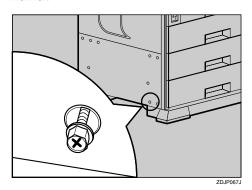
#### 2 Fold it into printer.



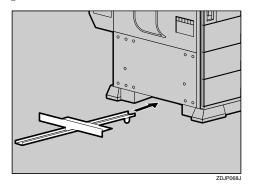
Insert the rail with a wheel in the mounting bracket.



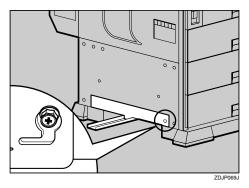
Temporarily fasten one long screw in the position shown in the illustration. Turn the screw three to four times using your hand.



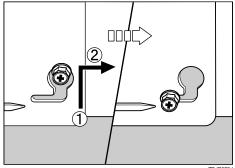
Insert the rail, assembled in step 5, into the bottom area of the printer.



Hook the hole of the mounting bracket on the screw that was temporarily fastened in step 6.

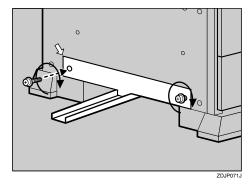


Holding the mounting bracket with both hands, move it in the direction of up (①) ⇒ right (②).



ZDJP070

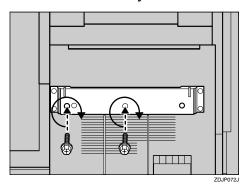
With the left corner of the mounting bracket adjusted to the position shown by the arrow in the illustration, fasten the left side of the mounting bracket with a long screw using provided screwdriver. Also tighten the screw on the right side that was temporarily fastened in step 6.



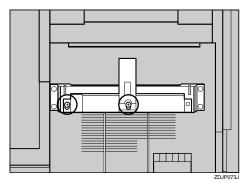
## 

See p.19 "How to Use the Screwdriver".

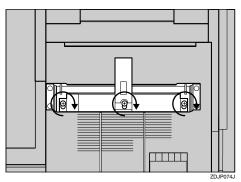
Temporarily fasten the two long screws in the positions shown in the illustration of the Duplex Reversal Unit. Turn the screws three to four times with your hand.



Hook the connecting bracket on the screws that were temporarily tightened in step 1.



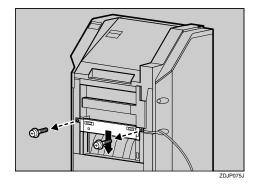
Fasten the right side of the connecting bracket with a long screw using provided screwdriver. Also tighten two screws that were temporarily tightened in step 1.

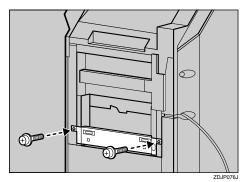


#### Note

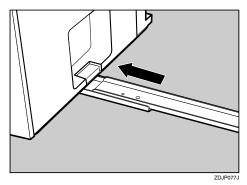
☐ If you have the 1000-sheet Paper Feed Unit or 2000-sheet Large Capacity Tray installed, proceed to step **⑤**.

If you have the 500-sheet Paper Feed Unit installed, change the position of the connecting bracket on the side of the 2 Tray Finisher to the lower level. Remove two screws using provided screwdriver, move the connecting bracket down, and then refasten the screws.

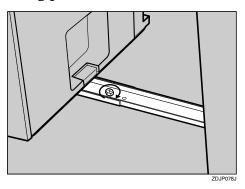




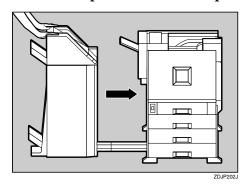
Place the rail of the printer on the rail of the 2 Tray Finisher, and then slide until it stops.



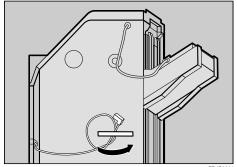
Fasten the rails with a long screw using provided screwdriver.



Push the 2 Tray Finisher slowly toward the printer until it stops.

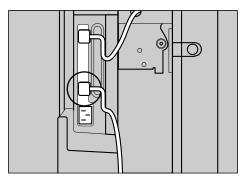


Remove the tape that is fastening the cable to the 2 Tray Finisher.

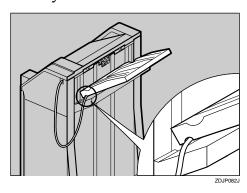


ZDJP080

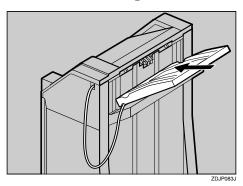
Connect the cable of the 2 Tray Finisher to the lower connector on the back of the printer.



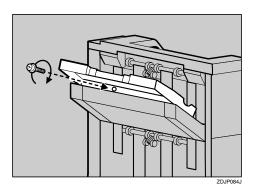
- Install the two 2 Tray Finisher Trays to the 2 Tray Finisher.
  - Ø Note
  - ☐ The two Finisher Trays are identical.
  - Adjust the notch on the left side of the 2 Tray Fisher Tray to the cable coming out from the 2 Tray Finisher.



2 With the 2 Tray Fisher Tray laid horizontally, slide it in at a slant until it stops.



3 Fasten the Fisher Tray with a short screw using provided screwdriver.



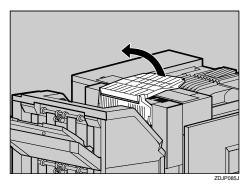
4 Use the same steps (steps 2 and 3) to install the other 2 Tray Fisher Trays.

#### Note

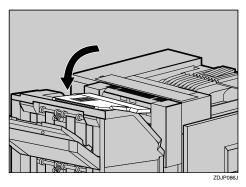
☐ Be sure to return the provided screwdriver to its original position on the inside of the front cover.

## 21 Return the Fisher Tray that is installed on the Duplex Unit back into place.

#### **1** Lift the top.



#### **2** Lower slowly.



## Note

- ☐ After finishing all installation for printing, you can check whether the Finisher is installed properly. Print the Configuration Page from the "Print Menu" menu. If it is installed properly, you will see "Finisher: Installed" under the "Installed Options" list.
- ☐ If the Finisher is not installed properly, reinstall from step 1. If you cannot install it properly even after reinstallation, contact your sales or service representative.

## $^{\mathcal{S}}$ Reference

See p.55 "Printing the Configuration Page".

## **Installing the Mail Bin Type** 3800C (4-bin Mailbox)

# Preparation

If you want to use the optional Paper Feed Unit at the same time, install the optional Paper Feed Unit first, and then install the 4-bin Mailbox.

#### **CAUTION:**

When moving the 4-bin Mailbox, hold the center of both sides. and lift slowly. Lifting it carelessly or dropping it may cause an injury.

#### Note

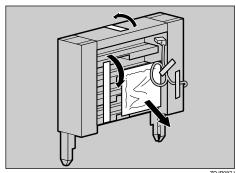
☐ The 4-bin Mailbox weighs approximately 7 kg (15.5 lbs).

#### **CAUTION:**

When installing the 4-bin Mailbox, be sure to hold both sides. If you hold it by the bottom, you might get your hand caught and injured.

## **∰**Important

- ☐ You cannot install the 4-bin Mailbox and 2 Tray Finisher at the same time.
- 1 Turn off the power switch and unplug the power cable.
- **2** Remove the attached package.

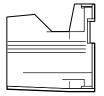


## **∰**Important

- □ Do not remove the adhesive tape that is fastening the cable at this point. Remove it in step **[**].
- **3** Check the contents of the box.
  - Two Screws





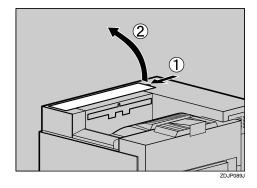


#### ❖ Labels



Remove the top cover. Draw the lever (1) and lift (2) to remove.

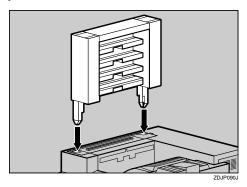
There is an opening for installing the 4-bin Mailbox.



## Note

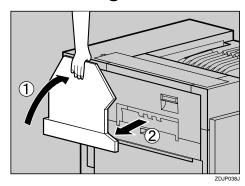
☐ You will not use the removed cover.

Holding both sides of the 4-bin Mailbox with both hands, stand on the left side of the printer. Lower it slowly to fit into the openings, and then insert until you hear a click.

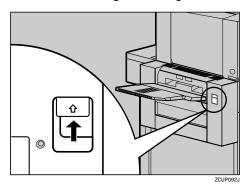


If the Duplex Unit is installed, proceed to step **7**.

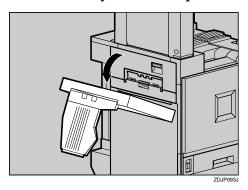
Pull up the External Tray in the direction of the arrow (1), and then remove (2).



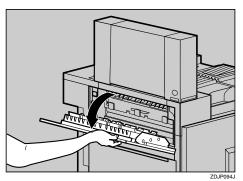
- If the Duplex Unit is installed, open the Duplex Reversal Unit.
  - 1 Push up the lock release button, and keep in that position.



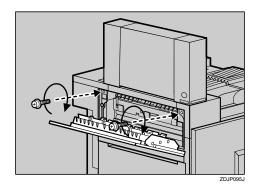
**2** Lower the Duplex Reversal Unit slowly until it stops.



8 Open the upper left cover.



9 Fasten the 4-bin Mailbox with two screws using provided screwdriver.



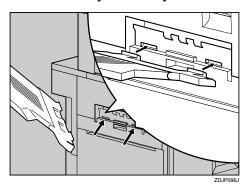
#### 

See p.19 "How to Use the Screwdriver".

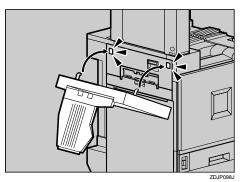
#### **𝚱** Note

- ☐ Be sure to return the provided screwdriver to its original position on the inside of the front cover.
- Close the upper left cover.

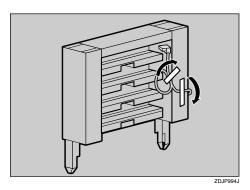
  If the Duplex Unit is installed, proceed to step .
- Install the External Tray to the printer. Hook the External Tray to the slits of the printer, and then lower the tray toward you.



If the Duplex Unit is installed, return the Duplex Reversal Unit to its original position. Lift it slowly until you hear a click.

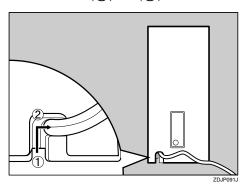


Remove the adhesive tape of the cable of the 4-bin Mailbox.

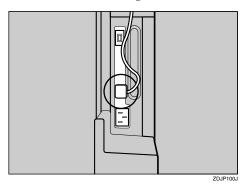


Check that the cable of the 4-bin Mailbox is in the position as shown in the illustration.

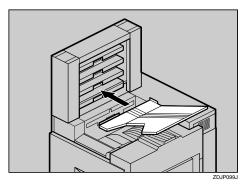
If it is not, change its position in the direction of  $(1) \Rightarrow (2)$ .



Connect the cable of the 4-bin Mailbox to the lower connector on the back of the printer.



Insert four output bins in order, starting from the bottom.



#### Ø Note

☐ If you have decided to assign Mail Box Bins to individuals and departments decided, write their names on the labels provided and stick them to the sides of the 4-bin Mailbox.

## Note

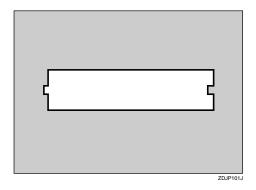
☐ After finishing all installation for printing, you can check whether the 4-bin Mailbox is installed properly. Print the Configuration Page from the "Print Menu" menu. If it is installed properly, you will see "Mailbox: Installed" under the "Installed Options" list.

☐ If the 4-bin Mailbox is not installed properly, reinstall from step ①. If you cannot install it properly even after reinstallation, contact your sales or service representative.

## 

See p.55 "Printing the Configuration Page".

Check for spare part. You will not use this spare part.



# **Installing the Toner Cartridge**

#### **⚠ WARNING:**

- Do not incinerate spilled toner or used toner. Toner dust is flammable and might ignite when exposed to an open flame.
- Disposal should take place at an authorized dealer or an appropriate collection site. If you dispose of the used toner cartridges yourself, dispose of them according to local regulations.

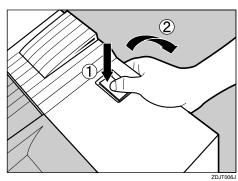
#### **⚠** CAUTION:

- The inside of the machine becomes very hot. Do not touch the parts with a label indicating a "hot surface". Touching a "hot surface" could result in a burn.
- Keep toner (used or unused) and the toner cartridge out of reach of children.
- Our products are engineered to meet the highest standards of quality and functionality. When purchasing expendable supplies, we recommend using only those provided by an authorized dealer.

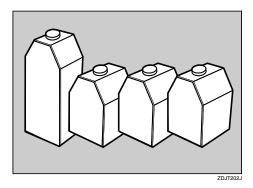
## Ø Note

☐ The toner cartridge allows you to print up to about 20,000 pages in black, and about 10,000 pages in color. These numbers were obtained from printing A4 ☐ 5% charts, and the actual number of pages will differ depending on the media type, paper size, contents and settings.

1 Open the upper right cover.

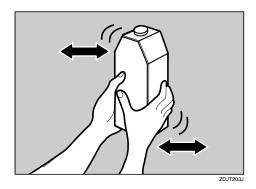


2 Take out the toner cartridges from the box.



Note

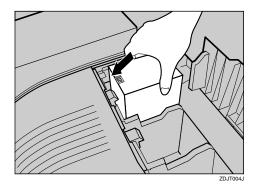
- ☐ The black (K) toner cartridge contains more than the other toner cartridges.
- 3 Shake the toner cartridge back and forth about 5 6 times.



45

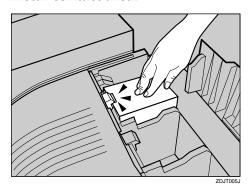
4 Holding the toner cartridge with the metal contact area in front, attach in the direction of the arrow.

Insert each toner cartridge to the same color slot.



## ∰Important

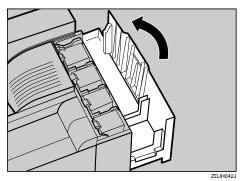
- ☐ Be careful not to touch the metal contact point with your fingers.
- Insert the toner cartridge slowly until the green hook snaps on the metal contact area.



## ∰Important

- ☐ Do not insert and remove the toner cartridges over and over. This could result in a toner leak.
- **6** Use the same steps to attach the remaining three toner cartridges.

**7** Close the upper right cover.



#### **#Important**

☐ Do not turn off the power switch during "Loading Toner..." appears on the panel display to avoid a printer malfunction.

# **Loading Paper**

This section shows how to load paper in the paper tray. If you do not load paper, the setup procedure will not complete properly.

The side guide and end guide of each paper tray is set to the following values at factory default. The loading procedure is different if you choose to load paper that is a different size from that of factory default.

- ⇒ p.47 "Loading Paper in Tray 1"
- ⇒ p.49 "Changing the settings"

#### Settings of the Paper Trays at Factory Default

- Tray 1 (Standard):  $11'' \times 8^1/2'' \square$  exclusive
- 2000-sheet Large Capacity Tray (Optional):  $11" \times 8^1/_2" \square$  exclusive

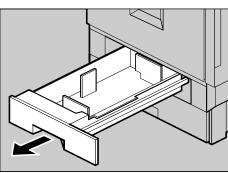
## **₽** Reference

For more information on the size and feed direction of paper that can be loaded in the tray, see "*Paper and Other Media*" in Maintenance Guide.

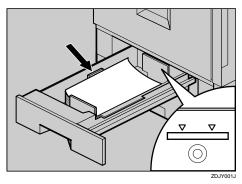
For more information on loading paper in the Bypass Tray, see "Load Paper in the Bypass Tray" in Maintenance Guide.

## **Loading Paper in Tray 1**

- **∰**Important
- $\hfill\Box$  Tray 1 is 11"  $\times\,8^1/_2$  "  $\hfill\Box$  paper exclusive. Load only the 11"  $\times\,8^1/_2$  " size paper.
- **1** Slide the paper tray out slowly until it stops.



# 2 Align all four sides of the paper stack, and then load it in the tray.

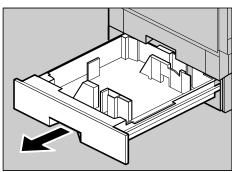


#### **∰**Important

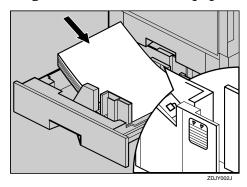
- ☐ Confirm that the top of the stack is not higher than the Limit mark inside the tray.
- $\square$  Be sure to adjust the side guides to the paper size, or paper misfeed might occur.
- 3 Slide the paper tray back slowly until it stops.

# Tray 2 (Standard), 500-sheet Paper Feed Unit, 1000-sheet Paper Feed Unit

**1** Slide the paper tray out slowly until it stops.



# 2 Align all four sides of the paper stack, and then load it in the tray.



## ∰Important

- ☐ Confirm that the top of the stack is not higher than the Limit mark inside the tray.
- 3 Slide the paper tray back slowly until it stops.

## **∰**Important

- ☐ Do not slide the paper tray in with force. If you do, the front and side guide might move.
- ☐ Be sure to adjust the side guides to the paper size, or paper misfeeds might occur.

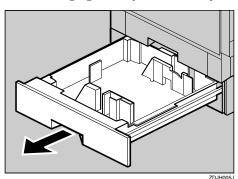
## **Changing the settings**

## ∰Important

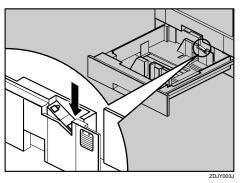
- $\square$  Tray 1 is 11"  $\times$  8<sup>1</sup>/<sub>2</sub>"  $\square$  paper exclusive. Load only the 11"  $\times$  8<sup>1</sup>/<sub>2</sub>" size paper.
- ☐ If you want to load A4 paper in 2000-sheet Large Capacity Tray (optional), contact your sales or service representative.

The following example describes changing the settings for Tray 2.

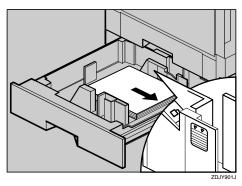
1 Slide the paper tray out slowly until it stops.



# **2** Release the lock of the side guide.

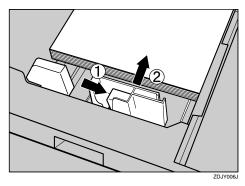


3 Align all four sides of the paper stack, and then load it in the tray.



## **#Important**

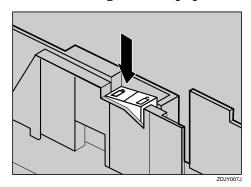
- ☐ Confirm that the top of the stack is not higher than the Limit mark inside the tray.
- Pressing the green lever of the side guide (1), adjust it to the loaded paper size (2).



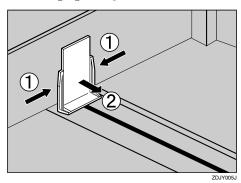
## **𝒯** Note

☐ To avid paper skew, confirm that there is no space between the side guides and the paper.

**5** After checking that the paper is fixed in place, lock the side guide.



Gripping both edges of the end guide (1), move it to the position of the loaded paper (2).



**7** Slide the paper tray back slowly until it stops.

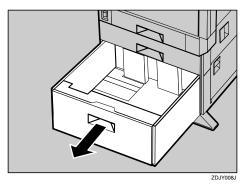
## **#Important**

- ☐ Do not slide the paper tray in with force. If you do, the front and side guides might move.
- $\square$  Be sure to adjust the side guides to the paper size, or paper misfeed might occur.

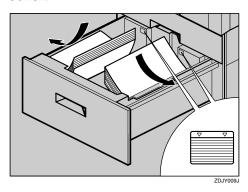
## 2000-sheet Large Capacity Tray

## **∰**Important

- □ The 2000-sheet Large Capacity Tray is set to  $11" \times 8^1/2"$  □ at factory default.
- ☐ If you want to load A4 paper in the 2000-sheet Large Capacity Tray (optional), contact your sales or service representative.
- **1** Slide the paper tray out slowly until it stops.



2 Align all four sides of the paper stack, and then load two stacks next to each other.



#### **∰**Important

- ☐ Be sure to align the paper and load them against the left and right walls, or it could result in a paper misfeed.
- ☐ Confirm that the top of the stack is not higher than the Limit mark inside the tray.
- 3 Slide the paper tray back slowly until it stops.

## **∰**Important

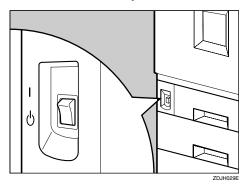
☐ Do not forcefully slide in the paper tray. This may skew the paper stack and cause misfeeds.

# **Turning On/Off the Power**

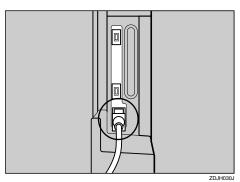
## **Turning On the Power**

#### ⚠ WARNING:

- Plug and unplug the power cable with dry hands, or it could result in an electric shock.
- 1 Confirm that the power switch is set to "U Stand-by".



2 Connect the power cable to the connector on the back of the printer.

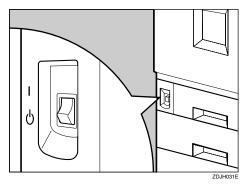


3 Plug in the power cable.

## ∰Important

- ☐ Make sure the power cable is plugged securely into the wall outlet.
- ☐ Turn the power switch off when plugging and unplugging the power plug.

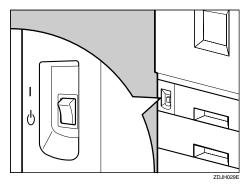
4 Turn the power switch to " | On".



## **Turning Off the Power**

## **∰**Important

- ☐ If the printer has just finished processing a job, wait five seconds for the printer to reach the idle state, and then turn the power to "Ü Stand-by".
- 1 Turn the power to "U Stand-by".



#### Note

☐ If you turn the printer off in Energy Saver Mode, the message on the control panel is displayed for another 10 seconds before disappearing. Before you turn the printer back on, make sure the message is not being displayed. If you turn the printer back on while the message is still on the control panel, the printer remains in Energy Saver Mode.

#### 2

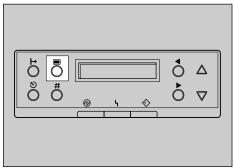
# Selecting the Panel Display Language

Select a language following the procedures described.

The message for the selected language will appear on the panel display.

#### **𝚱** Note

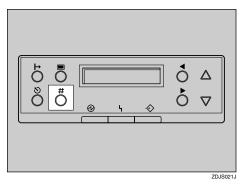
- $\Box$  The default setting is English.
- ☐ If you want to use the English panel display, the following procedures are unnecessary.
- 1 Keep pressing [Menu] to display "Panel Language".



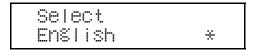
ZDJS001J

Panel Lanŝuaŝe

2 Press [Enter].



The following message appears on the panel display.



- Press [▲] or [▼] until the language you want to select appears on the panel display.
- 4 Press [Enter].

"Panel Language" appears on the panel display.

Press [Cancel] or in a few minutes, "Ready" appears on the panel display.

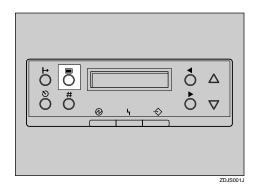


# **Printing the Configuration Page**

Printing the configuration page checks the printer actions, and does not test the connection to the host computer.

Here, you will print the Configuration Page to check the options.

1 Keep pressing [Menu] to display "Print Menu".



Print Menu

Press [Enter #].

The menu for selecting the contents to be test printed is shown.

Print Confis Pase Press (▲) or (▼) to display "Print Config Page", and then press [Enter #].

P11rint Confis Pase

The following message appears and the Configuration Page is printed.

Processin% Job From Tray 1

**𝚱** Note

☐ If printing is not normal, check to see if an error message is shown on the panel display. If there is an error message, see "Troubleshooting" in Maintenance Guide.

In a few minutes, "Ready" appears on the panel display.

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#### Note to users in the United States of America

#### Notice:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

## • •

#### Warning

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. 

# 

#### Caution (in case of 100BaseTX environment):

Properly shielded and grounded cables (STP) and connectors must be used for connections to host computer (and/or peripheral) in order to meet FCC emission limits.

#### **Declaration of Conformity**

Product Name: Laser Printer

Model Number: Aficio AP3850C/SLP38c DE/DSc38F/2138E

Responsible party: Ricoh Corporation

Address: 5 Dedrick Place, West Caldwell, NJ 07006

Telephone number: 973-882-2000

This device complies with part 15 of FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. this device must accept any interference received,

including interference that may cause undesired operation.

Properly shielded cables must be used for connections to host computer (and/or peripheral) in order to meet FCC emission limits.

Network interface cable with ferrite core must be used for RF interference suppression.

# Note to users in Canada

 -	-	_			-		_					-																																
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•	•	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

This Class B digital apparatus complies with Canadian ICES-003.

## 

#### Remarque concernant les utilisateurs au Canada

# ••••••••••••

#### Avertissement:

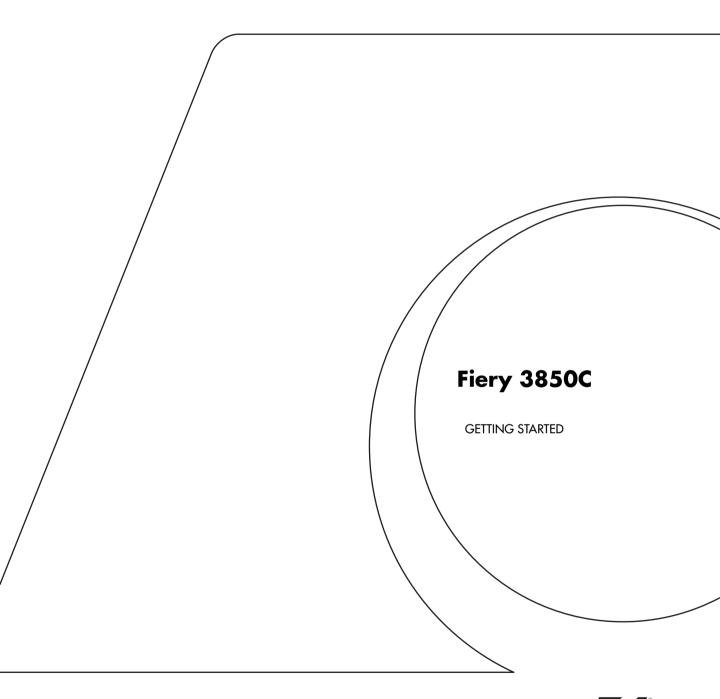
Note:

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

In accordance with IEC 60417, this machine uses the following symbols for the main power switch:

I means POWER ON.

() means STAND-BY





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#### Part Number:

#### **FCC Information**

WARNING: FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

#### Class B Declaration of Conformity

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

#### **Industry Canada Class B Notice**

This Class B digital apparatus complies with Canadian ICES-003.

#### Avis de Conformation Classe B de l'Industrie Canada

Cet appareil numérique de la Classe B est conforme à la norme NMB-003 du Canada.

#### Certificate by Manufacturer/Importer

This is to certify that the FC07 is shielded against radio interference in accordance with the provisions of VFG 243/1991. The German Postal Services have been advised that this device is being put on the market and that they have been given the right to inspect the series for compliance with the regulations.

#### Bescheinigung des Herstellers/Importeurs

Hiermit wird bescheinigt, dass der FC07 im Übereinstimmung mit den Bestimmungen der VFG 243/1991 funkentstört ist. Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeräumt.

### **RFI Compliance Notice**

This equipment has been tested concerning compliance with the relevant RFI protection requirements both individually and on system level (to simulate normal operation conditions). However, it is possible that these RFI Requirements are not met under certain unfavorable conditions in other installations. It is the user who is responsible for compliance of his particular installation.

Dieses Gerät wurde sowohl einzeln als auch in einer Anlage, die einen normalen Anwendungsfall nachbildet, auf die Einhaltung der Funkentstörbestimmungen geprüft. Es ist jedoch möglich, dass die Funkentstörbestimmungen unter ungünstigen Umständen bei anderen Gerätekombinationen nicht eingehalten werden. Für die Einhaltung der Funkentstörbestimmungen einer gesamten Anlage, in der dieses Gerät betrieben wird, ist der Betreiber verantwortlich.

Compliance with applicable regulations depends on the use of shielded cables. It is the user who is responsible for procuring the appropriate cables.

Die Einhaltung zutreffender Bestimmungen hängt davon ab, dass geschirmte Ausführungen benützt werden. Für die Beschaffung richtiger Ausführungen ist der Betreiber verantwortlich.

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# Introduction

Welcome to Getting Started. This manual describes installing the user software for the Fiery  $3850C^{\text{\tiny TM}}$  and setting up printing from Windows and Mac OS computers. For information about setting up network servers and clients to use the Fiery 3850C, see the Configuration Guide. For general information on using the printer, your computer, your application software, or your network, see the manuals that accompany those products.

NOTE: The term "Windows 9x/Me" is used to refer to Windows 95/98/Me. Individual differences are noted. Windows XP is supported. If you are using Windows XP, follow the procedures for Windows 2000.

# Media Pack

Your Fiery 3850C includes:

- User Software CD
- Network Utilities CD
- Documentation CD
- Printed Getting Started
- Printed Configuration Guide
- Printed Release Notes

# About the documentation

This manual is part of the set of Fiery 3850C documentation, which includes the following manuals for users and system administrators:

• The Configuration Guide explains basic configuration and administration of the Fiery 3850C for the supported platforms and network environments. It also includes guidelines for setting up UNIX, Windows NT 4.0, and Novell NetWare servers to provide Adobe PostScript printing services to clients.

- Getting Started describes how to install software to enable users to print to the
  Fiery 3850C. Specifically, it describes installation of the PostScript and PCL printer
  drivers, printer description files, and other software provided on the User Software
  CD. It also explains how to connect each user to the network.
- The *Printing Guide* describes the printing features of the Fiery 3850C for users who send jobs via remote workstations on the network or via a direct parallel port connection.
- The Color Guide provides information on managing the color output of the Fiery 3850C. It addresses concepts and issues associated with printing to the Fiery 3850C and outlines key workflow scenarios. This manual explains how to calibrate your copier and take advantage of the ColorWise® color management system as well as features in ColorWise Pro Tools.
- The Job Management Guide explains the functions of the Fiery<sup>®</sup> client utilities, including Command WorkStation<sup>™</sup>, and how they can be used to manage jobs.
   This book is intended for an operator or administrator, or a user with the necessary access privileges, who needs to monitor and manage job flow, and troubleshoot problems that may arise.
- Release Notes provide last-minute product information and workarounds for some of the problems you may encounter.

**NOTE:** Printing Guide, Job Management Guide, and Color Guide are on the Documentation CD only. Getting Started and the Configuration Guide are both printed and on the Documentation CD.

# **Specifications**

• Supports Windows 9x/Me, Windows NT, Windows 2000/XP, and Mac OS

**Note:** For Windows XP, see instructions for Windows 2000.

- Pentium III 700MHz CPU
- 128MB RAM
- 10 GB (or more) hard disk drive
- Supports AppleTalk, TCP/IP, and IPX protocols simultaneously
- Supports Port 9100
- Supports parallel port communication

- Supports twisted pair (Fast Ethernet 100BaseTX or Ethernet 10BaseT)
- Supports Adobe PostScript 3
- Includes 136 fonts (126 Adobe Type 1 PostScript and 10 TrueType) In addition, two Adobe Multiple Master fonts are included and are used for font substitution in PDF files.
- Supports PCL 5c printing (Windows 9x/Me, Windows NT, and Windows 2000/XP)
- Includes 46 PCL fonts
- Fiery WebTools<sup>TM</sup>
- Command WorkStation software (available as an option) Command Workstation is available for Windows only.
- ColorWise Pro Tools

# **User software**

The full set of Fiery 3850C user software is provided on the User Software CD.

Adobe PostScript	Enables you to print to the Fiery 3850C from
Printer Driver	Windows 9x/Me, Windows NT 4.0, and Mac OS
	computers; also supports special Fiery and PostScript 3
	features. Windows 2000/XP users should use the
	Microsoft PostScript Printer Driver provided with those
	applications.
PostScript Printer	For use with the PostScript printer driver that allows the
Description file	Fiery 3850C to appear in popular applications' Print and
(PPD)	Page Setup dialog boxes. The Fiery 3850C PPDs provide

are using.

information about the Fiery 3850C and your particular printer model to the application and printer driver you

only)

PostScript Fonts (Mac OS only)	PostScript screen and printer fonts that correspond to the 136 PostScript printer fonts installed on the Fiery 3850C (126 Adobe Type 1 and 10 TrueType). See Appendix B of the <i>Printing Guide</i> for a complete list of PostScript and PCL fonts installed on the Fiery 3850C.
PCL Printer Driver	Enables you to print to the Fiery 3850C from Windows 9x/Me/NT/2000 computers; supports all special Fiery 3850C PCL 5c print features.
ColorWise Pro Tools	ICC-open color management and calibration tools; enables you to edit and download ICC profiles.
Calibration files	Includes measurements files and targets that you can use with ColorWise Pro Tools.
Color reference files	Reference pages that you can print to view the range of colors available on your Fiery 3850C. For the most predictable color results, refer to these pages when defining colors in applications. For more information on color management, see the <i>Color Guide</i> .
MRJ (Mac OS only)	Mac OS Runtime for Java installer v 2.2.4 MRJ is required by all Java-based Fiery utilities. When installing these utilities, if MRJ is not detected the MRJ installer is automatically launched.
JavaVM (Windows XP	JavaVM for Windows XP is required to run Fiery

WebTools.

# System requirements

To install the Fiery 3850C user software on a Windows or Mac OS computer, the computer must be equipped with a built-in or external CD-ROM drive.

# Windows

To print to the Fiery 3850C, you need:

- A Windows-based computer with an 80486, AMD, or Pentium processor
- Windows 9x/Me, Windows NT 4.0, or Windows 2000/XP
- At least 32MB of RAM for Windows 9x/Me
- At least 32MB of RAM for Windows NT 4.0
- At least 128MB of RAM for Windows 2000/XP

With Microsoft Windows 9x/Me, you also need:

- IPX/SPX or TCP/IP networking protocol installed
- Adobe PostScript Printer Driver (included with the user software)
- PCL Printer Driver (included with the user software)

With Microsoft Windows NT 4.0 and Windows 2000, you also need:

- IPX/SPX, TCP/IP, or AppleTalk networking protocol installed
- Microsoft PostScript Printer Driver for Windows 2000 (included with your Windows 2000 operating system)
- Adobe PostScript Printer Driver (included with the user software)
- PCL Printer Driver for Windows NT 4.0 (included with the user software)

To use ColorWise Pro Tools, you also need:

- Either Windows 9x/Me, Windows 2000, or Windows NT 4.0 with NT Service Pack 5 or later
- At least 64MB of RAM

To use Fiery WebTools, you also need:

- Either Netscape Communicator v4.5 or later, and Java enabled or Microsoft Internet Explorer v4.0.1 and Service Pack 1 or later, with Java enabled
- A monitor and video memory that supports 16-bit color at a minimum resolution of 800x600
- A TCP/IP-enabled network and the IP address or DNS name of the Fiery 3850C

# Mac OS

To print to the Fiery 3850C, you need:

- A Mac OS-based computer and Apple System software 8.6 or later
- At least 128MB of RAM
- EtherTalk installed
- Adobe PostScript Printer Driver version 8.5 or later (version 8.7.2 is included with the user software)

To use ColorWise Pro Tools, you also need:

- A Mac OS-based computer and Apple System software version 8.6 or later
- At least 128MB of RAM

To use Fiery WebTools, you also need:

- Netscape Communicator v4.5 or later, with Java enabled, or Internet Explorer v4.0.1 or later, with Java enabled
- A monitor and video memory that supports 16-bit color at a minimum resolution of 800x600
- A TCP/IP-enabled network and the IP address or DNS name of the Fiery 3850C

# UNIX (TCP/IP)

To print to the Fiery 3850C with a UNIX workstation, you need:

- A workstation with standard TCP/IP connectivity (for example, Sun SPARCStation or Silicon Graphics workstation with Solaris version 7.x)
- TCP/IP printing software that conforms to RFC1179 (Berkeley lpd protocol)

# Parallel port

To print to the Fiery 3850C using the parallel port, you need:

- A Windows computer with an 80486, AMD, or Pentium processor
- At least 16MB of RAM for Windows 95
- At least 32MB of RAM for Windows 98/Me
- At least 32MB of RAM for Windows NT 4.0
- At least 128MB of RAM for Windows 2000/XP
- The parallel cable

The included IEEE-1284 cable has a 36-pin mini C connector on one end and a 25-pin D-sub connector on the other.

**Note:** Do not use a parallel cable that is longer than 10 feet (3 meters).

# IPX (Novell)

To use the Fiery 3850C with an IPX (Novell) network, you need:

- A Novell server
- Novell NetWare software version 3.x, 4.x, or 5.x
- Support for Ethernet SNAP, Ethernet II, Ethernet 802.3, Ethernet 802.2 frame types

# **Command WorkStation (Option)**

To run the Command WorkStation application (available as an option) from a remote workstation, you need:

- A Windows-based computer with a 200MHz Pentium processor (at minimum)
- Windows 9x/Me, Windows NT 4.0 with NT Service Pack 5, or Windows 2000/XP
- TCP/IP networking protocol installed
- A video adapter card with at least 2MB of video memory
- At least 64MB of RAM
- 100MB of available hard disk space
- A 2x or faster CD-ROM drive
- A 17" monitor that supports 16-bit color at a minimum resolution of 1024x768

# Installing User Software on a Windows Computer

This chapter describes installing software and setting up printing from a Windows-based computer running Windows 9x/Me, Windows NT 4.0, or Windows 2000/XP.

NOTE: If you are using Windows XP, follow the procedures for Windows 2000.

The general steps for installing the software are:

- Install the PostScript printer driver or PCL5c printer driver (Windows 9x/Me, Windows NT 4.0, or Windows 2000/XP) and corresponding printer driver files.
- Set up the printer driver to communicate with the Fiery 3850C.
- Install ColorWise Pro Tools.
- Configure the connection for ColorWise Pro Tools.
- Copy additional files from the User Software CD as needed.

# Setting up PostScript or PCL printing with Windows 9x/Me

To set up the Fiery 3850C as a PostScript or PCL printer, you must install the PostScript or PCL printer drivers for Windows 9x/Me and the corresponding printer description files from the User Software CD. You must also configure a particular type of print connection between the workstation and the Fiery 3850C.

If AutoRun is enabled on your computer, the installer runs automatically when the User Software CD is inserted in the CD ROM drive. You can specify which files to install on your computer.

**NOTE:** If AutoRun is not enabled, you can run the installer by double-clicking the CD-ROM drive icon in My Computer, or by double-clicking the Setup.exe file in the Installr folder on the User Software CD.

If you are printing using SMB (Server Message Block), you can connect to the Fiery 3850C and install the printer drivers in a single procedure. To configure the Fiery 3850C for SMB printing, see "Setting up SMB printing with Windows 9x/Me" on page 15, "Setting up SMB printing with Windows NT 4.0" on page 32, or "Setting up SMB printing on Windows 2000" on page 46.

If you are printing through a Novell server, see "To set up IPX (Novell) printing with Windows 9x/Me" on page 14, "To set up IPX (Novell) printing for Windows NT 4.0" on page 29, or "To set up IPX (Novell) printing for Windows 2000" on page 43.

# TO INSTALL THE POSTSCRIPT OR PCL PRINTER DRIVER USING AUTORUN OR INSTALLER

- 1. Insert the User Software CD in your CD-ROM drive.
- 2. Follow the instructions on screen.
- 3. Choose from the Typical, Compact, or Custom installation options.

Choose this	To install
Typical	The PostScript printer driver and printer description files for the Fiery 3850C and the PCL printer driver and printer description files for the Fiery 3850C.
Compact	The PostScript printer driver and printer description files.
Custom	You can select from the following: PostScript printer driver and printer description files PCL printer driver and printer description file

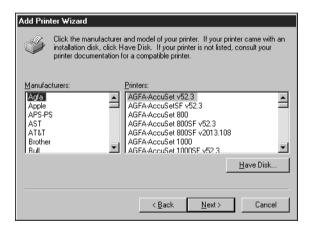
# TO INSTALL THE POSTSCRIPT OR PCL PRINTER DRIVER FOR WINDOWS 9x/Me using the Add Printer Wizard

**NOTE:** The procedure for installing printer drivers is similar for the PostScript and PCL printer drivers. For the purpose of the following instructions, the PostScript printer driver is used in screen captures.

- Click Start, choose Settings, and then choose Printers to display the Printers window.
- 2. Double-click the Add Printer icon, and click Next.
- 3. Specify whether you are printing using a Local printer, and click Next.

This procedure describes installing a printer locally. You can modify the connection later, according to your network type.

4. In the dialog box displaying lists of manufacturers and printers, click Have Disk.



The Install from Disk dialog box prompts you for the disk.

5. If you are installing from the CD, type the name of the CD-ROM drive (for example, D:\), and click Browse.

To install the PostScript driver, browse to English\Prntdrvr\Ps\_drvr\Win\_98\_ME. To install the PCL driver, browse to English\Prntdrvr\Pcl\_drvr\Win\_98\_ME. Make sure "Oemsetup.inf" is selected.

4 Installing User Software on a Windows Computer

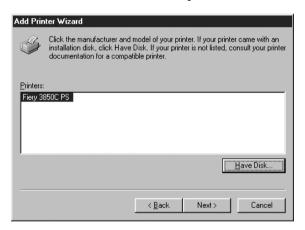
# 6. Click OK.

The path is copied to the Install From Disk dialog box.

7. Verify the path is correct, and click OK.

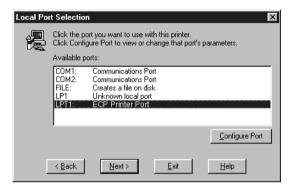


8. In the Printers box, select the Fiery 3850C PS or PCL file and click Next.



# 9. In the Available ports box, select the LPT1 port and click Next.

You will configure the port later, according to your network type.



Using a maximum of 31 characters, enter a name for the Fiery 3850C (or leave the default name) in the Printer Name box.

This name will be used in the Printers and queue windows.

**NOTE:** Entering more than 31 characters may cause printing problems with some network applications.

- 11. If you want the Fiery 3850C to be the default printer select Yes; if not, select No. Click Next.
- 12. Select No to printing the test page, and click Finish.

The necessary files are installed to your hard disk.

# To configure installable options on the Fiery 3850C from the PostScript or PCL printer drivers for Windows 9x/Me

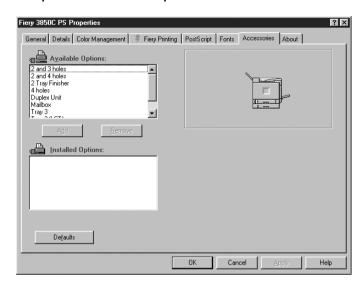
**NOTE:** The procedures for configuring installable options are similar for the PostScript and PCL printer drivers. For the purpose of the following instructions, the PostScript printer driver is used in screen captures.

 In the Printers window, select the icon for the Fiery 3850C PostScript or PCL printer driver.

Choose Properties from the File menu.

2. Select the Accessories tab.

Select an installed option from the Available Options list, and click Add to move the option to the Installed Options list.



Option Tray—Not Installed, Tray 3, Tray 3 and Tray 4, Tray 3 (LCT)

Finisher Option—Not Installed, 2 Tray Finisher, Mailbox

Duplex Unit—Not Installed, Installed

**Punch Option**—Not Installed, 2 and 3 holes, 2 and 4 holes, 4 holes

- 4. Click Apply.
- 5. Click OK.

You are ready for the instructions for connecting to your network type. See "Completing the Windows 9x/Me printer connection" on page 7.

# Completing the Windows 9x/Me printer connection

To print from Windows 9x/Me, you need to:

- Set up network servers, if any
- Set up the Fiery 3850C to accept print jobs from your computer
- Configure a port on each Windows computer for the network

# Completing the Windows 9x/Me parallel port connection

Preparing a parallel port connection for Windows 95/98 requires specific BIOS settings on your computer and specific port and printer settings for Windows 95/98. In addition, a change to one of the Fiery 3850C Setup settings may be required if you choose to spool files to the Fiery 3850C rather than print directly.

# TO PREPARE THE FIERY 3850C AND YOUR COMPUTER FOR PARALLEL PORT PRINTING

1. Connect the Fiery 3850C to the parallel port on your computer.

For instructions, see the Configuration Guide.

2. In Network Setup>Port Setup>Parallel Port Setup, set Enable Parallel Port to Yes.

For more information about Fiery 3850C Setup, see the Configuration Guide.

3. If you want to spool files to the Fiery 3850C, set Port Timeout in Seconds to 10. If you want to print directly to the Fiery 3850C, set Port Timeout in Seconds to 5.

Setting this option to 10 seconds ensures that spooling is not interrupted due to timeout.

4. In your computer's BIOS settings, set Parallel Port Mode to ECP.

To access the BIOS settings, restart the computer and press the key indicated on your monitor as soon as the computer starts up. You may have to scroll through several screens to reach the parallel port settings. After setting the Parallel Port Mode to ECP, save your changed setting and exit.

# TO PREPARE THE PRINTER FOR PARALLEL PORT PRINTING

- 1. Click the Start button, point to Settings, and click Printers.
- 2. Click the Fiery 3850C printer icon and choose Properties from the File menu.
- 3. Click the Details tab, and in the "Print to the following port" menu, select LPT 1: (ECP Printer Port).

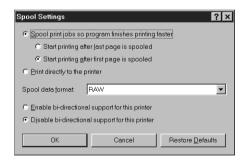
**NOTE:** Check this selection carefully. It may read LPT 1: (Printer Port), which is *not* equivalent to LPT 1: (ECP Printer Port).

If this box does *not* read LPT 1: (ECP Printer Port), change the port setting now, as described in "To prepare the port for parallel port printing" on page 9 (Windows 98/Me), and then return to this procedure. You may need your Windows System CD.

# If you changed the selection in the "Print to the following port" menu, click Apply.

A Warning dialog box may appear, stating that fonts you downloaded to the previously selected port may be lost; click OK.

# 5. Click Spool Settings.



6. Select either "Spool print jobs so program finishes printing faster" or "Print directly to the printer."

The selection you make depends on the action you took in step 3 on page 7:

- If you set the Port Timeout in Seconds to 10, you can select either option; however, spooling is faster.
- If you set the Port Timeout in Seconds to 5, select "Print directly to the printer."
- 7. Select "Disable bi-directional support for this printer" and click OK.
- 8. Click Apply.

You are now ready to print from your applications to the Fiery 3850C with the parallel port. To confirm the connection, print a Windows test page.

- 9. Click the General tab.
- 10. Click Print Test Page and click OK.
- 11. The Job Notes window appears. Enter user and job identification information for accounting purposes, or whatever information is required at your site, and click OK.

If the test page prints successfully, you are ready to print from the computer.

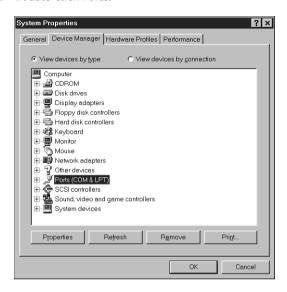
### TO PREPARE THE PORT FOR PARALLEL PORT PRINTING IN WINDOWS 98/ME

- 1. Click the Start button, choose Settings, and then choose Control Panel.
- 2. Double-click System.

The System Properties window appears.

3. Click the Device Manager tab.

Double-click Ports.



- Double-click the port with LPT1 in its name.
- 6. In the (LPT1) Properties dialog box, click the Driver tab and then click Update Driver.

The Update Device Driver Wizard appears.

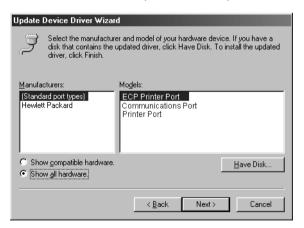
7. Click Next.

11

8. Choose "Display a list of all the drivers in a specific location, so you can select the driver you want," then click Next.



- 9. Select "Show all hardware."
- 10. From the Manufacturers list, select "(Standard port types)." From the Models list, select "ECP Printer Port" (not Printer Port). Click Next.



- 11. Click Yes in the Update Driver Warning dialog box.
- 12. Click Next.

Some files are copied.

# 13. Click Finish, and close the Printer Port Properties and System Properties dialog boxes.

You must restart your computer in order to activate the new settings. After Windows 98/Me restarts, you can complete the procedure described in "To prepare the printer for parallel port printing" on page 8.

# Completing the Windows 9x/Me IPX/SPX or IPX (Novell) connection

If you are printing through a Novell server, the Novell network and file server should be set up before you begin. The file server should be configured with a print server and print connection for the Fiery 3850C. For details, see your NetWare documentation and the Configuration Guide.

To print from Windows 9x/Me computers over IPX (Novell), you must first set up IPX/SPX protocols, and then configure the Fiery 3850C by choosing the IPX port type, and entering the settings for the port you use.

# TO SET UP IPX/SPX PRINTING

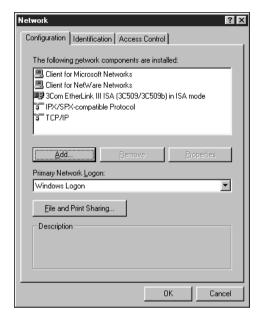
1. Click the Start button, choose Settings, and then choose Control Panel.

#### Double-click the Network icon.

Make sure that IPX/SPX-compatible Protocol is listed in the Installed Network Components section.

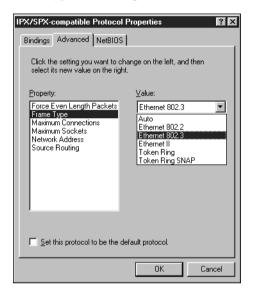
For instructions, see your Windows 9x/Me documentation.





- Click the Advanced tab.
- 5. In the Property list, click Frame Type. In the Value pop-up menu, select the Frame Type that corresponds to the one set during Fiery 3850C Network Setup.

If necessary, print the Configuration page from the Control Panel to check which Frame Type(s) are configured.



- 6. Click OK and close the Network Control Panel.
- 7. When prompted to restart your computer, click Yes.

# TO SET UP IPX (NOVELL) PRINTING WITH WINDOWS 9x/ME

- 1. Click the Start button, choose Settings, and then choose Printers.
- Right-click the Fiery 3850C printer icon and choose Properties from the File menu.
- 3. Click the Details tab and click Add Port.

A list of connection options is displayed.

- 4. In the Add Port dialog box, specify the network path, or click Browse for a display of your network environment.
- 5. If you are using a NetWare file server, double-click the icon of the NetWare file server you want to use for printing to the Fiery 3850C.

- Click the printer icon labeled with the NetWare print queue you will use and click OK.
- 7. In the Add Port dialog box, verify that the network path is updated and click OK.

Your print jobs are transmitted to the specified print queue on the Novell file server. The Fiery 3850C polls the file server, and if jobs are present, they are transmitted to the Fiery 3850C.

To confirm the connection, you can print a Windows 9x/Me test page.

8. Click the General tab, click Apply, and click Print Test Page.

If the test page prints successfully, you are ready to print from the computer.

# Setting up SMB printing with Windows 9x/Me

If you do not have a Novell network, you can print via SMB printing (also known as Windows printing or WINS printing). Printing by this method allows you to install the PostScript or PCL printer driver and printer description files, and print from your computer to a particular connection (Hold, Print, or Direct) on the Fiery 3850C. These instructions assume you have the TCP/IP protocol and Client for Microsoft Networks installed.

To set up printing to a second or third connection on Windows 9x/Me, you must install a new printer by repeating the procedure "To set up SMB printing on Windows 9x/Me" on page 16. If you install more than one printer, give each a descriptive name during printer driver installation, such as Aero-Print or Aero-Hold, so you can easily identify printers.

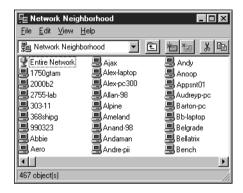
#### BEFORE YOU BEGIN

Configure the Fiery 3850C for SMB printing in Network Service Setup-SMB Setup.

SMB printing is referred to as Windows Printing in Setup, on the Control Panel Map, and on the Configuration page. For more information, see the *Configuration Guide*.

# TO SET UP SMB PRINTING ON WINDOWS 9x/ME

 Double-click the Network Neighborhood icon to display your network environment.

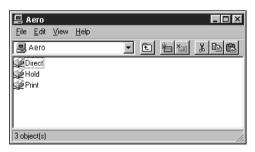


2. Browse for the printer you would like to print to.

The printer name you are browsing for is the name entered in Network Setup>Service Setup>Windows Setup>Server Name. Refer to the Configuration page for this information.

If you are not able to locate your Fiery 3850C, see your network administrator.

3. Double-click the name of the printer to display enabled print connections.



4. Double-click the name of the connection you want to print to.

The Printers dialog box appears, asking whether you would like to set up the printer.

Select Yes to install the PostScript or PCL printer driver and printer description file for the selected connection.

The Add Printer Wizard appears.

Specify whether you print from MS-DOS based programs, and then click Next.

If you choose Yes, you will be prompted to capture a printer port before proceeding with the installation. See your Windows documentation for details.

7. In the dialog box displaying lists of manufacturers and printers, click Have Disk.

The Install from Disk dialog box prompts you for the disk.

8. If you are installing from the CD, type the name of the CD-ROM drive (for example, D:\), and click Browse. Browse to the appropriate folder:

To install the PostScript driver, browse to English\Prntdrvr\Ps\_drvr\Win\_9x\_Me.

To install the PCL 5c driver, browse to English\Printdrvr\Pcl drvr\Win 9x Me.

Make sure "Oemsetup.inf" is selected.

The path is copied to the Install From Disk dialog box.

- Verify the path is correct, and click OK.
- In the Printers box, select the Fiery 3850C PS or PCL file and click Next.
- Enter a name for the Fiery 3850C in the Printer name box, and choose whether to make it the default printer. Click Next.
- 12. Choose whether to print a test page, and then click Finish.

The necessary files are installed to your hard disk

If the test page prints successfully, you are ready to print from the computer.

# Setting up PostScript or PCL printing with Windows NT 4.0

To set up the Fiery 3850C as a PostScript or PCL printer, you must install the PostScript or PCL Printer Driver for Windows NT 4.0 and its corresponding printer description files. You must also configure a particular type of print connection between the workstation and the Fiery 3850C.

If AutoRun in enabled on your computer, the installer runs automatically when the User Software CD is inserted in the CD-ROM drive. You can specify which files to install on your computer.

**NOTE:** If AutoRun is not enabled, you can run the installer by double-clicking the CD-ROM drive icon in My Computer, or by double-clicking the Setup.exe file in the Installr folder on the User Software CD.

The instructions below describe installing a printer locally. Adding a printer to a local system requires that you log in to your local Windows NT workstation (not the network server domain) and that you be a member of the Administrators group. The procedure for adding a network printer is similar to adding a port. This procedure is described in "Completing the Windows NT 4.0 TCP/IP and LPR connection" on page 27.

If you are printing using SMB (Server Message Block), you can connect to the Fiery 3850C and install the printer drivers in a single procedure. To configure the Fiery 3850C for SMB printing, see "Setting up SMB printing with Windows NT 4.0" on page 32.

# TO INSTALL THE POSTSCRIPT OR PCL PRINTER DRIVER USING AUTORUN OR INSTALLER

- 1. Insert the User Software CD in your CD-ROM drive.
- Follow the instructions on screen.
- 3. Choose from the Typical, Compact, or Custom installation options.

Choose this	To install
Typical	The PostScript printer driver and printer description files for the Fiery 3850C and the PCL printer driver and printer description files for the Fiery 3850C.
Compact	Installs the PostScript printer driver and printer description files.
Custom	Installs the files you select. You can select from the following: PostScript printer driver and printer description files PCL printer and printer description file

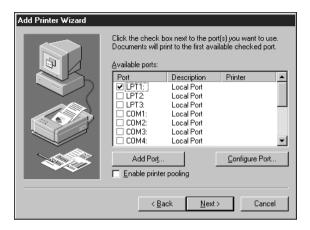
# TO INSTALL THE POSTSCRIPT OR PCL PRINTER DRIVER FOR WINDOWS NT 4.0 USING THE ADD PRINTER WIZARD

**NOTE:** The procedure for installing printer drivers is similar for the PostScript and PCL printer drivers. For the purpose of the following instructions, the PostScript printer driver is used in screen captures.

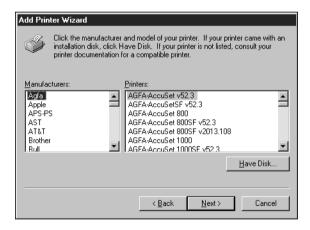
- 1. If you are installing from the CD, insert it into the CD-ROM drive.
- 2. Click Start in the Windows NT taskbar, choose Settings, and then choose Printers.
- 3. Double-click Add Printer.
- 4. To install a printer locally, select My Computer and click Next.



"My Computer" is available if you logged in to a computer on which you have Administrator privileges. If it is not available, you can add a network printer. The procedure is similar to adding a port (see page 27). Check LPT1: and click Next.



6. In the dialog box displaying lists of manufacturers and printers, click Have Disk.





The Install from Disk dialog box prompts you for the disk.

If you are installing from the CD, type the name of the CD-ROM drive (for example, D:\), and click Browse.

To install the PostScript driver, browse to English\Prntdrvr\Ps\_drvr\Win\_NT 4x To install the PCL driver, browse to English\Printdrvr\Pcl\_drvr\Win\_NT 4x.

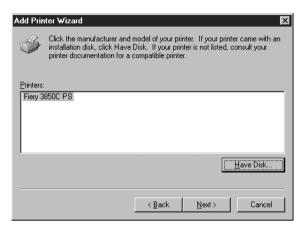
Make sure "Oemsetup.inf" or "Oemsetup" is selected.

The path is copied to the Install from Disk dialog box.

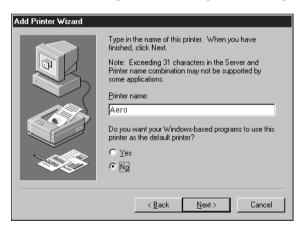
# 7. Verify the path is correct, and click OK.

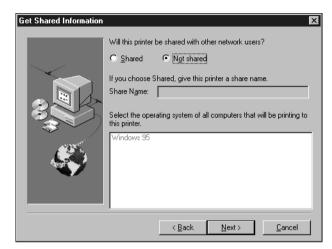


8. In the Printers box, select the Fiery 3850C PS or PCL file and click Next.



9. Enter a name for the Fiery 3850C (or leave the default name) in the Printer name box, and choose whether you want the Fiery 3850C to be your default printer. Click Next.





Indicate whether you want the printer installed as a shared printer. Click Next.

If you select Shared, you must also enter a Share Name for the printer (or leave the default name) and make selections from the list of operating systems used by client workstations. For information on shared printers, see the *Configuration Guide*.

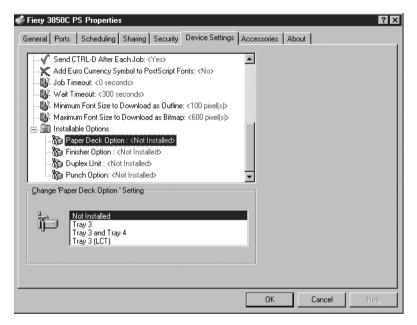
11. Click No in the next dialog box to postpone printing a test page, and click Finish.

When installation is complete, the Printers window appears with an icon for the newly installed printer.

## TO CONFIGURE INSTALLABLE OPTIONS ON THE FIERY 3850C FROM THE POSTSCRIPT PRINTER DRIVER FOR WINDOWS NT 4.0

- 1. Click the Start button, choose Settings, and then choose Printers.
- 2. Right-click the Fiery 3850C icon and choose Properties from the File menu.

3. Click the Device Settings tab, and scroll down to Installable Options. Specify the options installed on the Fiery 3850C.



**Option Tray**—Not Installed, Tray 3, Tray 3 and Tray 4, Tray 3 (LCT)

Finisher Option—Not Installed, 2 Tray Finisher, Mailbox

**Duplex Unit**—Not Installed, Installed

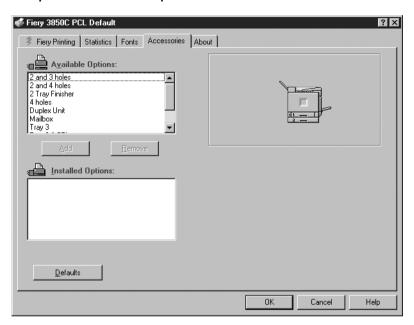
**Punch Option**—Not Installed, 2 and 3 holes, 2 and 4 holes, 4 holes

4. Click OK to activate the current settings.

## TO CONFIGURE INSTALLABLE OPTIONS ON THE FIERY 3850C FROM THE PCL PRINTER DRIVER FOR WINDOWS NT 4.0

- 1. Click the Start button, choose Settings, and then choose Printers.
- Right-click the Fiery 3850C icon and choose Document Defaults.
- 3. Click the Accessories tab.

4. Select an installed option from the Available Options list, and click Add to move the option to the Installed Options list.



Option Tray—Not Installed, Tray 3, Tray 3 and Tray 4, Tray 3 (LCT)

Finisher Option—Not Installed, 2 Tray Finisher, Mailbox

Duplex Unit—Not Installed, Installed

**Punch Option**—Not Installed, 2 and 3 holes, 2 and 4 holes, 4 holes

5. Click OK.

## Completing the Windows NT 4.0 printer connection

To print from Windows NT 4.0, you need to:

- Set up network servers, if any
- Set up the Fiery 3850C to accept print jobs from your computer
- Configure a port on each Windows NT computer for the network type

To do this	See
Configure the parallel connection	"Completing the Windows NT 4.0 parallel port connection" below.
Configure the TCP/IP (LPR port) connection	"Completing the Windows NT 4.0 TCP/IP and LPR connection" on page 27.
Configure the IPX (Novell) connection	"Completing the Windows NT 4.0 IPX (Novell) connection" on page 29.

## Completing the Windows NT 4.0 parallel port connection

The parallel port cable connects the Fiery 3850C to a single computer. Once you have installed the Windows NT PostScript printer driver and the Fiery 3850C PPD, complete the setup for parallel port printing.

#### TO SET UP PARALLEL PRINTING FOR WINDOWS NT 4.0

- 1. Click the Start button, choose Settings, and then choose Printers.
- 2. Double-click the Fiery 3850C icon and choose Properties from the Printer menu.

In the Ports tab, confirm that LPT1 (Local Port) is checked.

The Fiery 3850C is ready to accept parallel print jobs from your computer, using the Windows NT PostScript printer driver and the Fiery 3850C PPD.

### 3. Click the General tab and click Print Test Page.

When you select print, your files are transmitted over the parallel port connection to the Fiery 3850C.

Click the Sharing tab if you want to share the Fiery 3850C with network users. Select Shared, and select a share name.

Select the operating system or systems used by your network clients if you want to install a printer driver that those clients can download.

Click OK to exit the Printer Properties dialog box.

#### Completing the Windows NT 4.0 TCP/IP and LPR connection

Once you have installed the PostScript or PCL printer driver and printer driver files, complete the setup for the TCP/IP and LPR connection as follows:

- Prepare the Fiery 3850C to accept print jobs using TCP/IP and LPR protocols. (For details, see the Configuration Guide.)
- Configure the workstation for the TCP/IP connection.

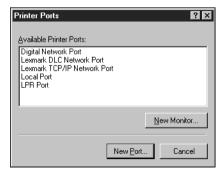
Before you continue, ask the system administrator for the IP address assigned to the Fiery 3850C, as well as the subnet mask and the gateway address, if they are used.

The TCP/IP Protocol and Microsoft TCP/IP Printing software should already be installed on the Windows NT workstation.

#### TO SET UP TCP/IP AND LPR PRINTING FOR WINDOWS NT 4.0

- 1. Open the Properties dialog box for the Fiery 3850C, and click the Ports tab.
- 2. Click Add Port.

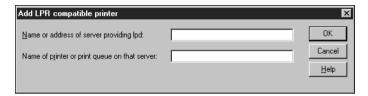
The available port types are displayed.



#### 3. Select LPR Port and click New Port.

If the LPR port is not listed, install the TCP/IP network protocol and Microsoft TCP/IP printing software. See the *Configuration Guide* or your Windows NT documentation.

#### 4. Enter the IP address of the Fiery 3850C.



If your network uses Domain Name Services (DNS), enter the DNS name assigned to the Fiery 3850C instead of the IP address.

# 5. Press Tab and type one of the following names, depending on the Fiery 3850C connection you would like to print to.

xjdirect

xjhold

xiprint

**Note:** This name is case-sensitive; type it *exactly* as shown above.

#### 6. Click OK.

The workstation checks the IP address or DNS name you entered and notifies you if it cannot resolve the address.

#### 7. Click Close in the Printer Ports dialog box.

The new port configuration is reflected in the Ports tab. You must now close the Printer Properties dialog box to verify the connection.

### 8. Click OK to close the Printer Properties dialog box.

### 9. Reopen the Printer Properties dialog box.

#### 10. Click the General tab and click Print Test Page.

When you print, your PostScript or PCL files are transmitted over the LPR Port connection to the Fiery 3850C.

11. Click OK to close the Printer Properties dialog box.

### Completing the Windows NT 4.0 IPX (Novell) connection

Complete the setup for the IPX (Novell) connection as follows:

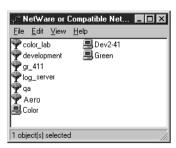
- Configure the Novell network and file server for handling Fiery 3850C print jobs.
   The file server should be configured with a print server and print connection for the Fiery 3850C. For details, see your NetWare documentation.
- Prepare the Fiery 3850C for IPX printing.
- Set up the IPX connection on the workstation.

NetWare protocols (NWLink IPX/SPX Compatible Transport) and NetWare client services should already be installed on the Windows NT workstation.

#### To SET UP IPX (Novell) PRINTING FOR WINDOWS NT 4.0

- 1. Double-click Network Neighborhood.
- 2. Double-click NetWare or Compatible Network.

A list of NetWare servers is displayed.



Double-click the NetWare Tree or File Server on which the network administrator defined a print connection for the Fiery 3850C.

You may have to log in to the file server to see the print connections.

- 4. Double-click the print connection defined for the Fiery 3850C.
- 5. If the NetWare server does not have a suitable driver for the Fiery 3850C, you may be asked if you want to set up the printer on your workstation.



6. Click Yes.

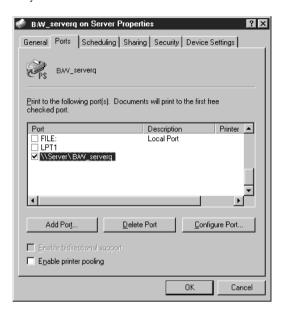


7. Click OK to install the Fiery 3850C PostScript or PCL printer driver (see your Windows NT documentation for instructions on how to install printer drivers with the Add Printer Wizard).

When installation is complete, a new printer window appears, with the name of the print queue on the NetWare server.

#### 8. Choose Properties from the File menu, and click the Ports tab.

The NetWare queue you just connected to is listed and checked as a port for the Fiery 3850C.



## 9. Click the General tab and click Print Test Page.

The printer Job Notes window appears.

## Enter user and job identification information for accounting purposes, or whatever is required at your site, and click OK.

The Fiery 3850C polls the NetWare server for print jobs in the print connection defined for the Fiery 3850C. When you print, your PostScript files are spooled to that connection and transmitted over the queue "port" to the Fiery 3850C.

The test page job is listed in the queue window until it is printed.

## Setting up SMB printing with Windows NT 4.0

If you do not have a Novell network, you can print via SMB printing (also known as Windows printing or WINS printing). Printing by this method allows you to install the PostScript or PCL printer driver and printer description files, and print from your computer to a particular print connection (Hold, Print, or Direct) on the Fiery 3850C. These instructions assume you have the TCP/IP Protocol and Microsoft TCP/IP Printing software installed on the Windows NT workstation.

To set up printing to a second or third connection, you must install a new printer by repeating the procedure "To set up SMB printing on Window NT 4.0" on page 32. If you install more than one printer, give each a descriptive name during printer driver installation, such as Aero-Direct, Aero-Print or Aero-Hold, so you can easily identify printers.

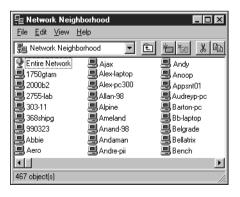
#### BEFORE YOU BEGIN

1. Configure the Fiery 3850C for SMB printing in Network Service Setup-SMB Setup.

SMB printing is referred to as Windows Printing in Setup, on the Control Panel Map, and on the Configuration page. For more information, see the *Configuration Guide*.

#### TO SET UP SMB PRINTING ON WINDOW NT 4.0

1. Double-click the Network Neighborhood icon to display your network environment.



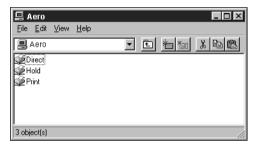
#### 2. Browse for the printer you would like to print to.

The printer name you are browsing for is the name entered in Network Setup>Service Setup>Windows Setup>Server Name. Refer to the Configuration page for this information.

The amount of network traffic determines the amount of time required for the Browse function.

If you are not able to locate your Fiery 3850C, see your network administrator.

3. Double-click the name of the Fiery 3850C to display enabled print connections.



4. Double-click the name of the connection you want to print to.

The Printers dialog box appears, asking whether you would like to set up the printer.



Select Yes to install the PostScript or PCL printer driver and printer description file for the selected connection.

The Add Printer Wizard appears.

6. Specify whether you print from MS-DOS based programs, and click Next.

If you choose Yes, you will be prompted to capture a printer port before proceeding with the installation. See your Windows documentation for details.

7. In the dialog box displaying lists of manufacturers and printers, click Have Disk.

The Install from Disk dialog box prompts you for the disk.

8. If you are installing from the CD, type the name of the CD-ROM drive (for example, D:\), and click Browse. Browse to the appropriate folder.

To install the PostScript driver, browse to English\Prntdrvr\Ps drvr\Win NT 4x.

To install the PCL driver, browse to English\Prntdrvr\Pcl\_drvr\Win\_NT 4x.

Make sure "Oemsetup.inf" or "Oemsetup" is selected.

The path is copied to the Install from Disk dialog box.

- 9. Verify the path is correct, and click OK.
- In the Printers box, select the Fiery 3850C PS or PCL file and click Next.
- Enter a name for the Fiery 3850C (or leave the default name) in the Printer name box, and choose whether you want the Fiery 3850C to be your default printer. Click Next.
- 12. Indicate whether you want the printer installed as a shared printer. Click Next.
- 13. You are asked if you would like to print a test page. Choose Yes and click Finish.

The necessary files are installed to your hard disk.

If the test page prints successfully, you are ready to print from the computer.

## Setting up PostScript or PCL printing with Windows 2000

To set up the Fiery 3850C as a PostScript or PCL printer, you must install the PostScript or PCL Printer Driver for Windows 2000 and its corresponding printer description files. You must have Windows 2000 with Service Pack 2 installed. You must also configure a particular type of print connection between the workstation and the Fiery 3850C. If you are printing over a network, you will need to configure a network connection; if you are printing directly to the printer, you will need to configure a parallel port connection.

If AutoRun is enabled on your computer, the installer runs automatically when the User Software CD is inserted in the CD-ROM drive. You can specify which files to install on your computer.

**Note:** If AutoRun is not enabled, you can run the installer by double-clicking the CD-ROM drive icon in My Computer, or by double-clicking the Setup.exe file in the Installr folder on the User Software CD.

The instructions below describe installing a printer locally. Adding a printer to a local system requires that you log in to your local Windows 2000 workstation (not the network server domain) and that you be a member of the Administrators group. The procedure for adding a network printer is similar to adding a port. This procedure is described in "Completing the Windows 2000 TCP/IP and LPR connection" on page 41.

The procedure below describes installing the printer drivers from the User Software CD. The procedures that follow describe setting up the print connection.

## TO INSTALL THE POSTSCRIPT OR PCL PRINTER DRIVER USING AUTORUN OR INSTALLER

- 1. Insert the User Software CD in your CD-ROM drive.
- Follow the instructions on screen.
- 3. Choose from the Typical, Compact, or Custom installation options.

Choose this	To install
Typical	The PostScript printer driver and printer description files for the Fiery 3850C and the PCL printer driver and printer description files for the Fiery 3850C.
Compact	Installs the PostScript printer driver and printer description files.
Custom	Installs the files you select. You can select from the following: PostScript printer driver and printer description files PCL printer and printer description files

## TO INSTALL THE POSTSCRIPT OR PCL PRINTER DRIVER FOR WINDOWS 2000 USING THE ADD PRINTER WIZARD

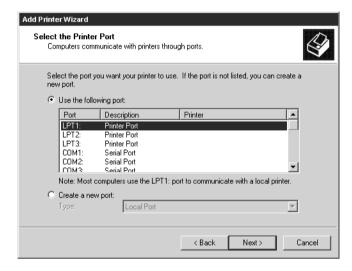
- 1. Click Start, choose Settings, and then choose Printers to display the Printers window.
- 2. Double-click the Add Printer icon, and click Next.

#### 3. Specify whether you are printing using a Local printer, and click Next.

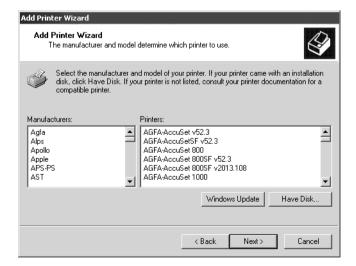
This procedure describes installing a printer locally. You can modify the connection later, according to your network type.

#### 4. Select the LPT1 port and click Next.

You will configure the port later, according to your network type.



5. In the dialog box displaying lists of manufacturers and printers, click Have Disk.



The Install from Disk dialog box prompts you for the disk.

6. Type the name of the CD-ROM drive (for example, D:\), and click Browse.

Browse to English\Prntdrvr\Pcl\_drvr\Win\_2000 or English\Prntdrvr\Ps\_drvr\Win\_2000.

Make sure "Oemsetup" or "Oemsetup.inf" is selected.

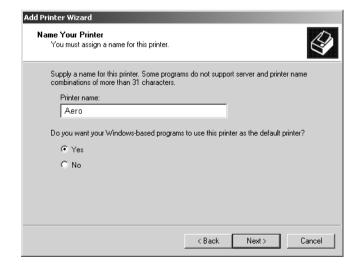
The path is copied to the Install From Disk dialog box.

7. Verify the path is correct, and click OK.



- 8. In the Printers box, select the Fiery 3850C PS or PCL file and click Next.
- 9. Enter a name for the Fiery 3850C (or leave the default name) in the Printer Name box.

This name will be used in the Printers and queue windows.



### If you want the Fiery 3850C to be the default printer, select Yes; if not, select No. Click Next.

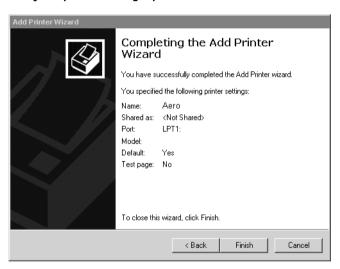
#### 11. Indicate whether you want the printer installed as a shared printer. Click Next.

If you select Share as, you must also enter a Share Name for the printer (or leave the default name) and make selections from the list of operating systems used by client workstations. Refer to the *Configuration Guide* and the corresponding documentation for more information on shared printers.

#### 12. Select No to printing a test page and click Next.

You will print the test page after you finish configuring the printer.

#### 13. Verify the printer settings specified and click Finish.



#### 14. Click Yes to complete installation.

The necessary files are installed on your hard disk.

**NOTE:** The Digital Signature Not Found window may appear, indicating that the printer driver for Windows 2000 does not have a Microsoft digital signature; however, printing to the Fiery 3850C is processed correctly.

If this is the first printer driver you are installing on the computer, you are prompted to install files from the Windows 2000 CD.

15. Insert the CD-ROM, browse to the win2000\english\i386 folder, and then click OK.

When installation is complete, the Printers window appears with an icon for the newly installed printer.

### TO CONFIGURE INSTALLABLE OPTIONS ON THE FIERY 3850C FROM THE POSTSCRIPT PRINTER DRIVER FOR WINDOWS 2000

- 1. Click the Start button, choose Settings, and then choose Printers.
- Right-click the Fiery 3850C icon, and choose Properties.
- Click the Accessories tab.
- 4. Select an installable option and click Add to move the option to the Installed Options list.

**Option Tray**—Not Installed, Tray 3, Tray 3 and Tray 4, Tray 3 (LCT)

Finisher Option—Not Installed, 2 Tray Finisher, Mailbox

Duplex Unit—Not Installed, Installed

**Punch Option**—Not Installed, 2 and 3 holes, 2 and 4 holes, 4 holes

5. Click OK.

## TO CONFIGURE INSTALLABLE OPTIONS ON THE FIERY 3850C FROM THE PCL PRINTER DRIVER FOR WINDOWS 2000

- 1. Click the Start button, choose Settings, and then choose Printers.
- 2. Right-click the Fiery 3850C icon, and choose Printing Preferences.
- 3. Click Accessories. Select an installed option from the Available Options list, and click Add to move the option to the Installed Options list.
- 4. Click OK.

## Completing the Windows 2000 printer connection

To print from Windows 2000, you need to:

- Set up network servers, if any
- Set up the Fiery 3850C to accept print jobs from your computer
- Configure a port on each Windows 2000 computer for the network type

To do this	See
Configure the parallel connection	"Completing the Windows 2000 parallel port connection" below.
Configure the TCP/IP (LPR port) connection	"Completing the Windows 2000 TCP/IP and LPR connection" on page 41.
Configure the IPX (Novell) connection	"Completing the Windows 2000 IPX (Novell) connection" on page 43.

## Completing the Windows 2000 parallel port connection

The parallel port cable connects the Fiery 3850C to a single computer. Once you have installed the Windows 2000 printer driver and the Fiery 3850C PPD, complete the setup for parallel port printing.

#### TO SET UP PARALLEL PRINTING FOR WINDOWS 2000

- 1. Click the Start button, choose Settings, and then choose Printers.
- 2. Click the Fiery 3850C icon, and choose Properties from the File menu.

In the Ports tab, confirm that LPT1 (Local Port) is checked. The Fiery 3850C is ready to accept parallel print jobs from your computer, using the Windows 2000 printer driver and the Fiery 3850C PPD.

#### 3. Click the General tab and click Print Test Page.

When you select print, your files are transmitted over the parallel port connection to the Fiery 3850C.

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4. Click the Sharing tab if you want to share the Fiery 3850C with network users. Select Shared, and select a share name.

Select the operating system or systems used by your network clients if you want to install a printer driver that those clients can download.

Click OK to exit the Printer Properties dialog box.

#### Completing the Windows 2000 TCP/IP and LPR connection

Once you have installed the PostScript or PCL printer driver and printer driver files, complete the setup for the TCP/IP and LPR connection as follows:

- Prepare the Fiery 3850C to accept print jobs using TCP/IP and LPR protocols. (For details, see the Configuration Guide.)
- Configure the workstation for the TCP/IP connection.

Before you continue, ask the system administrator for the IP address assigned to the Fiery 3850C, as well as the subnet mask and the gateway address, if they are used.

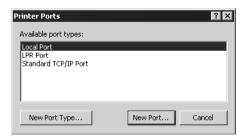
The TCP/IP Protocol and Microsoft TCP/IP Printing software should already be installed on the Windows 2000 workstation.

**NOTE:** The following procedure for PostScript and PCL printer drivers are similar. PostScript screen captures are used with PCL differences noted.

#### TO SET UP TCP/IP AND LPR PRINTING FOR WINDOWS 2000

- Open the Properties dialog box for the Fiery 3850C, and click the Ports tab.
- 2. Click Add Port.

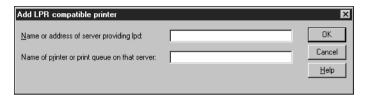
The available port types are displayed.



#### 3. Select LPR Port and click New Port.

If the LPR port is not listed, install the TCP/IP network protocol and Microsoft TCP/IP printing software. See the Configuration Guide or your Windows 2000 documentation.

#### Enter the IP address of the Fiery 3850C.



If your network uses Domain Name Services (DNS), enter the DNS name assigned to the Fiery 3850C instead of the IP address.

## 5. Press Tab and type one of the following names, depending on the Fiery 3850C connection you would like to print to.

xidirect

xjhold

xiprint

**Note:** This name is case-sensitive; type it *exactly* as shown above.

#### 6. Click OK.

The workstation checks the address or DNS name you entered and notifies you if it cannot resolve the address.

#### 7. Click Close in the Printer Ports dialog box.

The new port configuration is reflected in the Ports tab. You must now close the Printer Properties dialog box to verify the connection.

### Click OK to close the Printer Properties dialog box.

### Reopen the Printer Properties dialog box.

#### 10. Click the General tab and click Print Test Page.

When you print, your PostScript or PCL files are transmitted over the LPR Port connection to the Fiery 3850C.

#### 11. Click OK to close the Printer Properties dialog box.

## Completing the Windows 2000 IPX (Novell) connection

Complete the setup for the IPX (Novell) connection as follows:

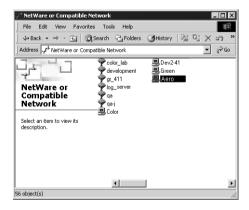
- Configure the Novell network and file server for handling Fiery 3850C print jobs.
   The file server should be configured with a print server and print connection for the Fiery 3850C. For details, see your NetWare documentation.
- Prepare the Fiery 3850C for IPX printing.
- Set up the IPX connection on the workstation.

NetWare protocols (NWLink IPX/SPX Compatible Transport) and NetWare client services should already be installed on the Windows 2000 workstation.

## TO SET UP IPX (NOVELL) PRINTING FOR WINDOWS 2000

- 1. Double-click My Network Places.
- 2. Double-click NetWare or Compatible Network.

A list of NetWare servers is displayed.



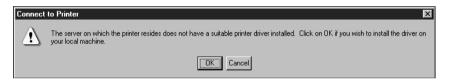
3. Double-click the NetWare Tree or File Server on which the network administrator defined a print connection for the Fiery 3850C.

You may have to log in to the file server to see the print connections.

- Double-click the print connection defined for the Fiery 3850C.
- 5. If the NetWare server does not have a suitable driver for the Fiery 3850C, you may be asked if you want to set up the printer on your workstation.



Click Yes.

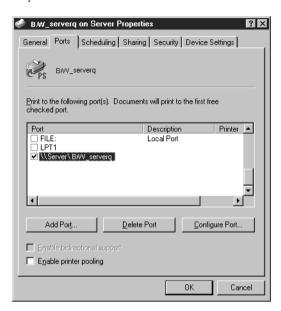


7. Click OK to install the Fiery 3850C PostScript or PCL printer driver (see your Windows 2000 documentation for instructions on how to install printer drivers with the Add Printer Wizard).

When installation is complete, a new printer window appears, with the name of the print queue on the NetWare server.

#### 8. Choose Properties from the File menu, and then click the Ports tab.

The NetWare queue you just connected to is listed and checked as a port for the Fiery 3850C.



#### 9. Click the General tab and click Print Test Page.

The printer Job Notes window appears.

## Enter user and job identification information for accounting purposes, or whatever is required at your site, and click OK.

The Fiery 3850C polls the NetWare server for print jobs in the print connection defined for the Fiery 3850C. When you print, your PostScript files are spooled to that connection and transmitted over the queue "port" to the Fiery 3850C.

The test page job is listed in the queue window until it is printed.

## Setting up SMB printing on Windows 2000

If you do not have a Novell network, you can print via SMB printing (also known as Windows printing or WINS printing). Printing by this method allows you to install the PostScript or PCL printer driver and printer description files, and print from your computer to a particular print connection (Hold, Print, or Direct) on the Fiery 3850C. These instructions assume you have the TCP/IP Protocol and Microsoft TCP/IP Printing software installed on the Windows 2000 workstation.

To set up printing to a second or third connection, you must install a new printer by repeating the procedure "To set up SMB printing on Windows 2000" on page 47. If you install more than one printer, give each a descriptive name during printer driver installation, such as Aero-Print or Aero-Hold, so you can easily identify printers.

**NOTE:** With Windows 2000, you cannot install the driver and configure the printing connection to the Fiery 3850C in a single procedure. The printer driver needs to be installed from the User Software CD. Refer to your Windows documentation for more details.

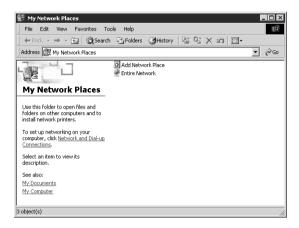
#### BEFORE YOU BEGIN

- 1. Configure the Fiery 3850C for SMB printing in Network Service Setup>SMB Setup.

  SMB printing is referred to as Windows Printing in Setup, on the Control Panel Map, and on the Configuration page. For more information, see the *Configuration Guide*.
- 2. Install the PS or PCL printer driver (see "To install the PostScript or PCL printer driver for Windows 2000 using the Add Printer Wizard" on page 35).

#### TO SET UP SMB PRINTING ON WINDOWS 2000

### 1. Double-click My Network Places.

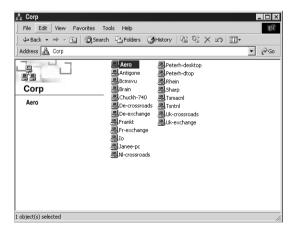


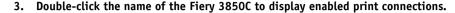
#### 2. Browse for the printer you would like to print to.

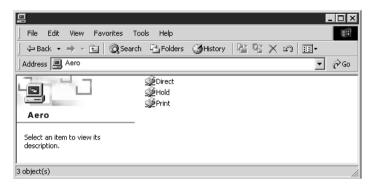
The printer name you are browsing for is the name entered in Network Setup> Service Setup> SMB Setup> Server Name. Refer to the Configuration page for this information.

The amount of network traffic determines the amount of time required for the Browse function.

If you are not able to locate your Fiery 3850C, see your network administrator.







4. Double-click the name of the connection you want to print to.

The Printers dialog box appears, asking whether you would like to set up the printer.



5. Select Yes to install the PostScript or PCL printer driver and printer description file for the selected connection.

The Add Printer Wizard appears.

6. Specify whether you print from MS-DOS based programs, and click Next.

If you choose Yes, you will be prompted to capture a printer port before proceeding with the installation. See you Windows documentation for details.

Complete the instructions for installing the printer driver and printer description file starting with step 5 on page 36.

7. Enter a name for the Fiery 3850C (or leave the default name) in the Printer name box, and choose whether you want the Fiery 3850C to be your default printer. Click Next.



## **Installing Fiery 3850C software**

The User Software CD includes the software installer for ColorWise Pro Tools. Fiery utility software must be separately installed on each user's computer.

## ColorWise Pro Tools

The ColorWise Pro Tools software installer is located on the User Software CD. Before you begin this installation, determine the following:

- Where do you want to install the software on your hard disk?
   By default, the installer places ColorWise Pro Tools software in the Programs\Fiery folder on your hard disk.
- What do you want to name the ColorWise Pro Tools folder in the Windows\Start Menu\Programs folder?

By default, the installer names the folder "ColorWise Pro Tools."

#### TO INSTALL COLORWISE PRO TOOLS SOFTWARE

- 1. On the User Software CD, double-click to open the ColorWise Pro folder.
- 2. Double-click the Setup.exe icon.

For specific instructions, read the information in each dialog box.

## Using the software for the first time

Before you can use the newly installed software, you must properly configure the connection to the Fiery 3850C.

## Configuring the connection for Fiery utilities

The first time you launch one of the Fiery utilities, you are prompted to configure the connection to the Fiery 3850C. The same configuration is used for all Fiery utilities, so any change in one configuration affects all the other connections.

#### BEFORE YOU BEGIN

 Print the Configuration page from the Control Panel and note the IP address of the Fiery 3850C.

You can also set up a Domain Name Server (DNS) for the IP address of the Fiery 3850C. See your Windows system documentation for information.

#### To configure the connection for Fiery utilities

- 1. Start the utility for which you want to configure a connection.
- 2. If the No Servers Configured dialog box appears, click OK.



3. Enter the appropriate information for the Fiery 3850C.

**Nickname**—Enter a name for the Fiery 3850C. This name can be any name you wish; it does not have to match the actual Server Name of the Fiery 3850C.

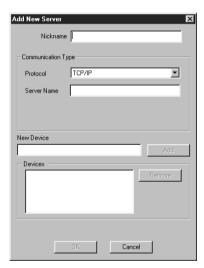
**Note:** The nickname cannot contain any of the following seven characters: [] \_ " ' <space> <tab>

**Protocol**—Choose the type of network protocol you are using from the pop-up menu.

**NOTE:** Fiery utilities for the Fiery 3850C are not supported over IPX/SPX. Command WorkStation software is supported on Windows computers over TCP/IP.

**Server Name**—Enter the IP address (or DNS name) of the Fiery 3850C.

**New Device**—Enter 3850C, the device name for the Fiery 3850C.



For TCP/IP networks

- When you have entered all the information, click Add to add the Fiery 3850C to the Devices list.
- 5. With the device name (3850C) selected in the Devices list, click OK.

The Fiery 3850C appears in the list of Available servers. The first line of the entry displays the nickname you gave the server, followed by the protocol you chose. The second line displays the device name.



6. With the device name (3850C) selected in the list of Available servers, click OK to begin using the utility.

### Modifying the configuration

You should edit the configuration whenever there is any change to your Fiery 3850C server or network, such as a server name or IP address. Change the specific Fiery 3850C Setup information before configuring the connection.

#### TO MODIFY THE CONFIGURATION

- 1. To edit information for a Fiery 3850C in the list of Available servers, select the Fiery 3850C by its nickname and click Modify.
- Edit information in the Modify Server Settings dialog box as necessary, and click OK when finished.
- 3. To add a new Fiery 3850C to the list of Available servers, click Add. Configure the Add New Server dialog box as outlined in steps 3 through 5 in the previous procedure.
- 4. To remove a Fiery 3850C, select the Fiery 3850C by its nickname, and click Remove.

**Note:** The nickname cannot be modified.

## Copying color files from the User Software CD

You can copy additional color files from the User Software CD to your hard disk.

Icm folder ICM monitor setting file and a device profile specially designed

> for use with the Fiery 3850C and particular copier models. For instructions on installing see "Installing the ICM profiles on a

Windows computer" on page 54.

CIrfiles folder (inside English

folder)

Cmyk.ps, an 11-page, PostScript file to use for reference when

defining CMYK colors in applications.

Pantone.ps, a 19-page, PostScript file that indicates the closest equivalent of PANTONE coated colors that the Fiery 3850C

and your copier model can produce. The method used to print

the Pantone.ps file differs depending on the Spot Color

Matching setting. For more information, see the *Printing Guide* 

and the Color Guide.

Rgb\_01.doc, a file you can print from Microsoft Word 97 or

later to view available RGB colors.

Rgb 02.ppt, a file you can print from PowerPoint 6.0 or later to

view available RGB colors.

Calibrat folder (inside English/ Clrfiles folder)

Four PostScript files of color patches for obtaining

measurements: Custom21.ps, Custom34.ps, Stand21.ps, and

Stand34.ps.

The numbers in the filenames refer to the number of patches on the page. The Custom files allow you to download measurement patches that incorporate the copier's current calibration set. The Standard files allow you to download standard measurement patches that bypass the copier's current calibration set. For information on how to use these files, see the Color Guide.

**Note:** These files are provided for expert users and should not be used for day-to-day calibration.

## Installing the printer description files for Windows

The User Software CD contains printer description files for popular Windows applications. PageMaker 5.0, 6.0, 6.5, and 7.x do not support automatic installation of printer description files from the Printers Control Panel. To make the Fiery 3850C available in the Print and Page Setup dialog boxes of this application, copy printer description files to the appropriate location.

#### TO COPY THE PRINTER DESCRIPTION FILES

- On the User Software CD, open the PageMaker folder.
- 2. Copy the printer description file for your Fiery 3850C to the appropriate location.

If you use	Copy this file	To this location
PageMaker 5.0 or later	EFDR60PM.ppd	For PageMaker 5.0, \ALDUS\USENGLSH\PPD4 For PageMaker 6.0, \PM6\RSRC\USENGLSH\PPD4 For PageMaker 6.5, \PM65\RSRC\USENGLSH\PPD4 For PageMaker 7.x, \PM7\RSRC\USENGLSH\PPD4

## Installing the ICM profiles on a Windows computer

The ICM profiles included in the Icm folder on the User Software CD are for use with ColorWise Pro Tools. You can also use the ICM profiles with applications that support ICC standards, such as Photoshop. For most ICC aware applications, the files must be installed into a folder named Color in the System folder. For use with ColorWise Pro Tools, you can copy the files to a folder of your choice.

For more information on using ICC profiles with ColorWise Pro Tools, see the *Color Guide*.

#### TO INSTALL THE ICM PROFILES ON A WINDOWS COMPUTER

- 1. On the User Software CD, open the Icm folder.
- If you are using Windows 9x/Me, copy the profiles to the Windows\System\Color folder on your hard disk.

If you are using Windows NT or Windows 2000/XP, copy the profiles to the Winnt\System32\Color folder on your hard disk.

**NOTE:** If a folder named "Color" does not exist in the Sytem32 folder, create one and install the profiles into it.

## Loading the monitor settings file

The Efirgb.icm monitor settings file can be used in Photoshop, or other applications that support ICM profiles, to define a source color space for printing to the Fiery 3850C.

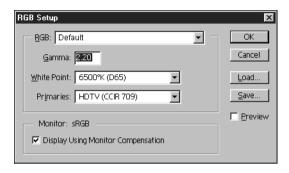
These instructions assume you have installed the ICM profiles included on the User Software CD. For more information, see "Copying color files from the User Software CD" on page 53.

**NOTE:** The internal name of an ICC profile may vary slightly from its file name.

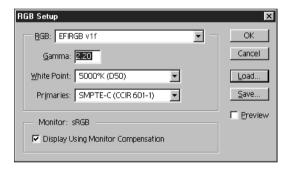
#### TO LOAD THE RGB WORKING SPACE PROFILE FOR PHOTOSHOP 5.X

- 1. Launch Photoshop.
- From the File menu, choose Color Settings, and from the Color Settings submenu, choose RGB Setup.

3. In the RGB Setup dialog box, click Load.



 For Windows 9X/Me, browse to the Windows\System\Color, select Efirgb.icm, and click Load.



For Windows NT 4.0 and Windows 2000/XP, browse to the Winnt\System32\Color folder, select Efirgb.icm, and click Load.

The Efirgb v1f file appears as the selection in the RGB pop-up menu of the RGB Setup dialog box.

#### 5. Click OK.

For more information about ICM profiles, see your application's documentation.

## Loading the ICM copier device profile

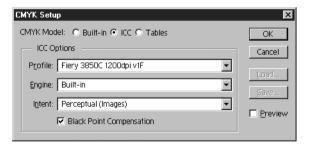
This ICM profile defines the target color space for printing to the copier.

These instructions assume you have installed the ICM profiles included on the User Software CD. For more information, see "Installing the ICM profiles on a Windows computer" on page 54.

**Note:** The internal name of an ICC profile may vary slightly from its filename.

# TO LOAD THE ICM COPIER DEVICE PROFILE IN PHOTOSHOP 5.X

- 1. Launch Photoshop.
- From the File menu, choose Color Settings, and from the Color Settings submenu, choose CMYK Setup.
- 3. In the CMYK Setup dialog box, choose ICC as the CMYK color model.
- 4. Select the profile that corresponds to the Fiery 3850C from the Profile pop-up menu.



#### 5. Click OK.

For more information about ICC profiles, see your application's documentation.

## Loading monitor settings files and ICM device profiles in Photoshop 6.x

Once you have installed the Efirgb.icm monitor settings file and the ICM device profile for the Fiery 3850C, they can be loaded at the same time in Photoshop 6.x.

## TO LOAD THE MONITOR SETTINGS FILE AND ICM DEVICE PROFILE IN **Р**нотоѕнор 6.х

- 1. Start Photoshop.
- Choose Color Settings from the Edit menu, and select Advanced Mode in the Color Settings dialog box.
- Choose EFI RGB v1f from the RGB menu.
- Choose the profile that corresponds to the Fiery 3850C from the CMYK menu.
- Click OK. 5.

For more information, see your application's documentation.

## Installing User Software on a Mac OS Computer

The general steps for installing the Fiery 3850C user software and setting up printing on a Mac OS computer are:

- Install the Adobe PostScript printer driver and PostScript Printer Description file (PPD).
- Set up the Fiery 3850C in the Chooser.
- Install ColorWise Pro Tools.
- Install the printer and screen fonts.
- Copy additional application-specific files from the User Software CD as needed.

## **Installing Mac OS software**

The User Software CD contains the following installers:

- Printer Driver—Adobe PostScript printer driver and PPD installer
- ColorWise Pro Tools
- Fonts

## Setting up the Fiery 3850C as a PostScript printer

To set up the Fiery 3850C as a PostScript printer, you must install the Adobe PostScript printer driver and the PPD file that corresponds to your printer. The Adobe PostScript printer driver and PPD files are provided on the User Software CD.

Printer drivers provide a way to communicate information on print jobs between your applications, the Fiery 3850C, and any other PostScript printer connected to your computer. You can use the following procedures

## TO INSTALL THE ADOBEPS PRINTER DRIVER AND PPD FILE

- 1. Open the English: Printer Driver folder.
- 2. Double-click the AdobePS 8.7.2 Installer icon.

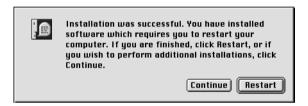
A warning dialog box appears.



3. Click Yes to continue with installation of printer driver software, and to confirm that your computer must be restarted after installation.

The AdobePS Installer installs the Adobe PostScript printer driver and the PPD file that corresponds to your printer.

4. Click Restart when installation is complete.



**NOTE:** If you operate the Fiery 3850C in a copy shop, quick print shop, or service bureau, you might want to provide copies of the printer driver or PPD file used in conjunction with the image and relevant documentation to customers. This ensures that jobs they create and print to files are properly formatted for printing to the Fiery 3850C.

## Setting up the Fiery 3850C in the Chooser

After you install the Adobe PostScript printer driver and PPD file (see "Setting up the Fiery 3850C as a PostScript printer" on page 59), you need to set up the Fiery 3850C in the Chooser in order to take full advantage of its features. This section describes how to set up the Fiery 3850C with the AdobePS printer driver.

## TO SET UP THE FIERY 3850C IN THE CHOOSER

1. Select Chooser from the Apple menu.

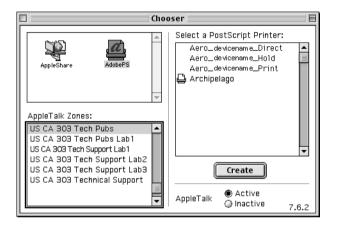
Make sure AppleTalk is set to Active.

2. Select the correct AppleTalk Zone, if necessary.

#### Click the AdobePS icon.

The Fiery 3850C appears in the Select a PostScript Printer list in the form of <server name>\_<device name>\_<print connection>. The device name (3850C) is the internal name of your printer.

**NOTE:** Only the print connections (Direct, Hold, and Print) that have been enabled in Setup appear in the Chooser.



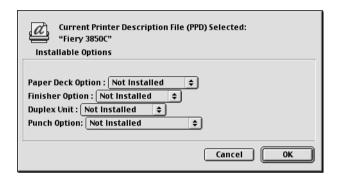
Select a Fiery 3850C connection from the "Select a PostScript Printer" list, and click Create.

The AdobePS printer driver automatically selects the correct PPD file for your Fiery 3850C.

**NOTE:** You will need to set up each print connection separately. Repeat step 4 for all enabled connections.

In the Chooser list, select the icon that appears next to the newly installed Fiery 3850C, and click Setup.

- 6. Click Configure in the dialog box that appears.
- In the Installable Options dialog box, select the appropriate settings from the pop-up menus, and click OK.



**Option Tray**—Not Installed, Tray 3, Tray 3 and Tray 4, Tray 3 (LCT)

Finisher Option—Not Installed, 2 Tray Finisher, Mailbox

**Duplex Unit**—Not Installed, Installed

**Punch Option**—Not Installed, 2 and 3 holes, 2 and 4 holes, 4 holes

8. Close the Chooser.

## **Installing Fiery 3850C software and fonts**

The Mac OS installers function essentially the same for each type of software. Before you begin each installation, determine where you want to install each item on your hard disk. By default, the installers place:

- ColorWise Pro Tools in a folder named "Fiery f" on the top level of your hard disk.
- Fonts in the System folder: Fonts folder on your hard disk.

For instructions on installing fonts, see "Fonts" on page 67.

## TO INSTALL MAC OS SOFTWARE

- 1. On the User Software CD, double-click the Installer icon of the item you would like to install.
- 2. Read the Software License Agreement, and click Accept.
- 3. Click Install to copy the item to the default location, or navigate to a location in which to install the item.

Use the table below as a guide when installing software.

If you are installing	Action	To install
ColorWise Pro Tools	Specify a hard disk location for ColorWise Pro Tools software.	Click Install.

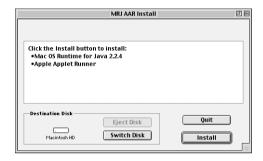
## 4. If prompted, click Quit to close the software installer.

In order to use ColorWise Pro Tools, you must have Mac OS Runtime for Java (MRJ 2.2.4) installed on your computer.

If you do not have MRJ installed, the ColorWise Pro Tools installer automatically initiates the MRJ 2.2.4 installation process.

## TO INSTALL MAC OS RUNTIME FOR JAVA

- Read the Apple Computer Inc., License agreement and click Agree to install the software.
- 2. Click Install.



Some files are installed.

3. Click Quit.

## Using the software for the first time

Before you can use the newly installed software, you must properly configure the connection to the Fiery 3850C.

## Configuring a connection for ColorWise Pro Tools

The first time you use ColorWise Pro Tools, you are prompted to configure a connection to the Fiery 3850C.

**Note:** ColorWise Pro Tools function only over TCP/IP networks.

## BEFORE YOU BEGIN

 Print the Configuration page from the Control Panel and note the IP address of the Fiery 3850C.

## TO CONFIGURE A CONNECTION FOR COLORWISE PRO TOOLS

1. Launch the utility by double-clicking its icon.

The Choose Printer Device dialog box appears.



If you have previously configured a connection to the Fiery 3850C, then you are ready to use ColorWise Pro Tools. If you have not configured a connection, click Add.



3. Enter the appropriate information for the Fiery 3850C.

**Nickname**—Enter a name for the Fiery 3850C. This can be any name you wish; it does not have to match the actual server name of the Fiery 3850C.

**Note:** The nickname cannot contain any of the following seven characters: []\_"'<space> <tab>

**Protocol**—Choose the type of network protocol you are using from the pop-up menu. ColorWise Pro Tools is supported only with TCP/IP, so no selection is necessary.

**Server Name**—Enter the IP address (or DNS or hosts name) of the Fiery 3850C.

**New Device**—Enter the name of the device the Fiery 3850C is connected to: 3850C. This device name appears in the Printer Setup section of the Configuration page.

- 4. When you have added all the information, click Add.
- With the device name (3850C) selected in the Devices list, click OK.

The Fiery 3850C appears in the list of available servers. The first line of the entry displays the nickname you gave the server, followed by the protocol. The second line displays the device name.

6. With the device name (3850C) selected in the list of Available Servers, click Select to begin using ColorWise Pro Tools.



## Modifying the configuration

You should edit the configuration whenever there is any change in your original configuration, such as a change of IP address. Change the specific Fiery 3850C Setup information before configuring the connection.

## TO MODIFY THE CONFIGURATION

- To edit information for a Fiery 3850C in the list of available servers, select the Fiery 3850C by its nickname and click Modify. Edit information in the Modify Server Settings dialog box as necessary, and click OK when finished.
- To add a new Fiery 3850C to the list of available servers, click Add. Configure the Add New Server dialog box as outlined in steps 3 through step 5 in the previous procedure.
- To remove a Fiery 3850C from the list of available servers, select the Fiery 3850C by its nickname and click Remove.

## **Fonts**

The fonts on the User Software CD include screen and printer fonts that correspond to the 136 built-in PostScript printer fonts on the Fiery 3850C. The Font installer copies both kinds of fonts to the System folder: Fonts folder on your hard disk. To be available to applications, the screen fonts must remain in the System: Fonts folder. The printer fonts can be copied to a folder of your choice.

**NOTE:** In the System: Fonts folder, when displayed by Kind, screen fonts appear as type "Font Suitcase" and PostScript printer fonts appear as type "PostScript™ font."

## TO INSTALL SCREEN AND PRINTER FONTS

 On the User Software CD, double-click the Fonts icon to launch the Fonts installer.

#### 2. Click Install.

By default, the fonts are installed to the System folder: Fonts folder on your hard disk. If you have any applications open, you must quit and relaunch them before the newly installed screen fonts are available.

## Copying color files from the User Software CD

You can copy additional color files from the User Software CD to your hard disk.

The User Software CD contains the following color files:

ColorSync files (inside the ColorSync Folder) If you are using ColorSync 2.5 or later, install the profiles into the ColorSync Profiles folder inside the System folder. If you are using an earlier version of ColorSync, install the profiles to the ColorSync Profiles folder inside the System: Preferences folder. The printer profile can be moved to a folder of your choice.

Color Files folder (inside the English folder) CMYK Color Reference.ps, an 11-page, letter-size PostScript file to use for reference when defining CMYK colors in applications. PANTONE Book.ps, a 19-page, letter-size PostScript file that indicates the closest equivalent of PANTONE coated colors that the Fiery 3850C and your particular printer model can produce. The method used to print the PANTONE Book.ps file differs depending on the Spot Color Matching setting. For more information, see the *Printing Guide* and the *Color Guide*. RGB page 01, a file you can print from Microsoft Word 97 or later to view available RGB colors.

RGB page 02, a file you can print from PowerPoint 6.0 or later to view available RGB colors.

Calibration folder (inside Color Files folder) Four PostScript measurements files of color patches: custom21.ps, custom34.ps, standard21.ps and standard34.ps. The numbers in the filenames refer to the number of patches on the page. The Custom files are provided to enable you to download measurement patches that incorporate the copier's current calibration set. The Standard files are provided to enable you to download standard measurement patches that bypass the printer's current calibration set. For information on how to use these files, see the *Color Guide*.

These files are provided for expert users and should not be used for day-to-day calibration.

## **Loading ICC profiles**

The ICC profiles installed by the ColorSync installer are for use with ColorWise Pro Tools and applications that support ICC standards.

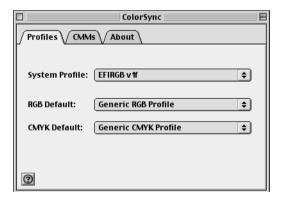
These instructions assume that you have already installed the ICC profiles included on the User Software CD. For more information, see "Copying color files from the User Software CD" on page 68.

**Note:** The internal name of an ICC profile may vary slightly from its filename.

The following procedure describes installing the ICC profiles with ColorSync 4.0. For more information about ColorSync, see your application's documentation.

## TO SET THE COLORSYNC SYSTEM PROFILE

- Choose Control Panels > ColorSync from the Apple Menu.
- 2. Select EFIRGB v1f from the System Profile list.



When selected as the ColorSync system profile, EFIRGB v1f sets the optimal source color space for printing to the Fiery 3850C. The color space set by the EFIRGB v1f profile is the same as that set by the EFIRGB setting of the RGB Source Profile print option.

**NOTE:** The RGB Source Profile print option setting overrides the ColorSync system profile setting.

## 3. Close the ColorSync window.

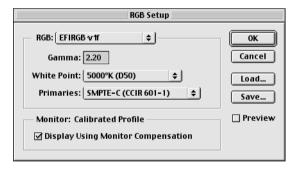
For more information about ICC profiles, see your application's documentation.

## Loading the monitor settings file

The EFIRGB ICC monitor settings file can be used in Photoshop, or other applications that support ICC profiles to define a source color space for printing to the Fiery 3850C.

#### TO LOAD THE MONITOR SETTINGS FILE IN PHOTOSHOP 5.X

- 1. Launch Photoshop.
- From the File menu, choose Color Settings, and from the Color Settings submenu, choose RGB Setup.
- 3. In the RGB Setup dialog box, click Load.
- 4. Browse to the System: Preferences: ColorSync Profiles, select the EFIRGB ICC file, and click Open.



**NOTE:** If you are using ColorSync 2.5 or later, the ColorSync profiles are is located in System Folder: ColorSync Profiles.

The EFIRGB ICCv1f file appears as the selection in the RGB pop-up menu of the RGB Setup dialog box.

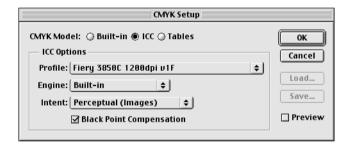
## 5. Click OK.

## Loading the ICC printer profile

The ICC printer profile enables RGB-to-CMYK conversions that are specific to the kind of printer you are using.

## TO LOAD THE ICC PRINTER PROFILE IN PHOTOSHOP 5.X

- 1. Launch Photoshop.
- 2. From the File menu, choose Color Settings, and from the Color Settings submenu, choose CMYK Setup.
- 3. In the CMYK Setup dialog box, choose ICC as the CMYK color model.
- Select the profile that corresponds to the Fiery 3850C from the Profile pop-up menu.



## 5. Click OK.

For more information about ICC profiles, see your application's documentation.

## Loading the monitor settings file and the ICC device profile in Photoshop 6.x

In Photoshop 6.x, you can load the monitor settings file and the ICC device profile at the same time.

## TO LOAD THE MONITOR SETTINGS FILE AND THE ICC DEVICE PROFILE IN **Р**нотоѕнор 6.х

- 1. Start Photoshop.
- Choose Color Settings from the Edit menu and then choose Advanced Mode.
- 3. Choose EFI RGB v1F from the RGB menu.
- Select the profile that corresponds to the Fiery 3850C from the CMYK menu.
- Click OK.

For more information, see your Photoshop documentation.

## Fiery WebTools

Fiery WebTools allow you to manage your Fiery 3850C remotely from the Internet or from your company's intranet. The Fiery 3850C has its own home page, from which you are able to select from a variety of functions including Status, WebSpooler, WebSetup, WebLink, and WebDownloader.

For more information on using Fiery WebTools, see the *Printing Guide* and the *Job Management Guide*.



## Setting up Fiery WebTools

In order for network users to access and use Fiery WebTools, you need to set certain Fiery 3850C options in Network Setup and Printer Setup. You also need to prepare each user's workstation to communicate with the Fiery 3850C over the Internet or intranet.

For more information about Network Setup, see the Configuration Guide.

## TO SET UP FIERY WEBTOOLS ON THE FIERY 3850C

- 1. In Fiery 3850C Network Setup, enable TCP/IP.
- 2. Set a valid, unique IP address for the Fiery 3850C, and then set the subnet mask. Set a gateway address if necessary.
- 3. In Fiery 3850C Printer Setup, confirm the Print Queue is published.

## TO SET UP CLIENT WORKSTATIONS TO USE FIERY WEBTOOLS

- 1. Enable TCP/IP networking.
- 2. Make sure the workstation has a valid, unique IP address.
- Make sure the workstation is installed with one of the following Internet browsers:

**Windows 9x/Me, Windows NT 4.0, and Windows 2000**—*Either* Netscape Communicator v4.7 or later *or* Microsoft Internet Explorer v5.5 and SP2 or later.

**Windows XP**—*Either* Netscape Communicator v6.0 *or* Microsoft Internet Explorer v6.0.

**Mac 0S**—*Either* Netscape Communicator v4.7 or later, *or* Internet Explorer v5.0 or later.

4. Make sure Java is enabled in your Internet browser.

For more information on setting up the Fiery 3850C and your network, see the *Configuration Guide*.

## **Troubleshooting**

This chapter provides troubleshooting tips.

## On a Windows computer

Make sure the printer is on line.

# Setting up printing on Windows NT or Windows 2000/XP computers

If you have problems installing the Fiery 3850C with Windows NT, try installing another PostScript printer, and then install the Fiery 3850C. Installing another printer ensures that all files are properly installed and available. For instructions, see your Windows NT documentation.

For additional information about problems you may encounter using the Adobe Printer Driver for Windows NT 4.0, see the Adobe README file (readmeNT.wri) included in English\Prntdrvr\Ps\_drvr\Win\_NT4x on the User Software CD.

For Windows 2000XP, see your Windows 2000 or Windows XP documentation.

## Reinstalling the Adobe PostScript Printer Driver on Windows 9x/Me

If you are reinstalling the Adobe PostScript Printer Driver, delete any previous versions and related files before installing.

For additional information about problems you may encounter using the Adobe Printer Driver for Windows 9x/Me, see the Adobe README file (readme9x.wri) included in English\Prndrvr\Ps\_drvr\Win\_9x on the User Software CD.

## Problems with the Fiery utilities on Windows computers

 If you are using Windows 9x/Me, make sure that IPX/SPX and TCP/IP networking protocols are both enabled.

See "Completing the Windows 9x/Me IPX/SPX or IPX (Novell) connection" on page 12.

- 2. If you are using Windows NT or Windows 2000/XP, make sure the TCP/IP networking protocol is enabled.
- 3. Make sure that the connection is configured correctly for your site.

To check the current configuration, launch a Fiery utility and choose Open from the File menu. Select the Fiery 3850C and click Modify to see current settings. If the settings are incorrect, you can change them in this dialog box.

## On a Mac OS computer

Make sure the printer is on line.

## Setting up the Fiery 3850C in the Chooser

If auto-setup does not work and you are prompted to select the PPD, select the appropriate Fiery 3850C file in your System folder:Extensions:Printer Descriptions folder.

Select "Fiery 3850C."

## **Installing screen fonts**

If you experience problems installing the PostScript screen fonts from the User Software CD to the System folder: Fonts folder, try the following:

- 1. Quit all applications and close all windows.
- 2. Create a new folder and name it "Uninstalled Fonts."

This folder must be located outside of the System folder.

- Move fonts that you are not using from the System folder: Fonts folder to the Uninstalled Fonts folder.
- 4. Install the fonts from the User Software CD to a folder called CD fonts. Copy the fonts to the System folder: Fonts folder.
- 5. Create an alias to the System folder: Fonts folder and to the Uninstalled Fonts folder.
- 6. Place both aliases on your desktop.
- 7. When necessary, use the aliases to open both folders and move fonts between them.

If you have any applications running, you must quit and relaunch them in order to view and use the newly installed fonts.

Alternatively, you can try combining fonts from multiple suitcases into a single suitcase.

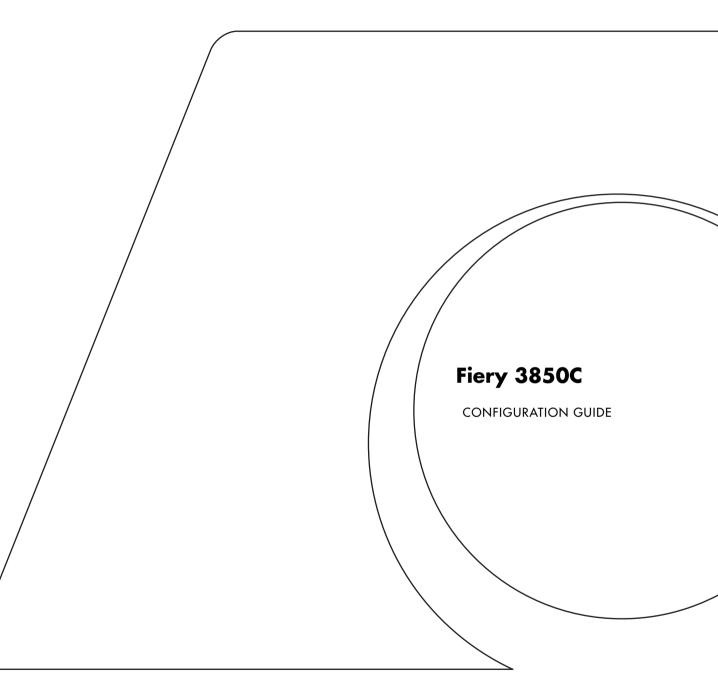
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## Part Number:

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This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

#### Industry Canada Class B Notice

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#### Avis de Conformation Classe B de l'Industrie Canada

Cet appareil numérique de la Classe B est conforme à la norme NMB-003 du Canada.

#### Certificate by Manufacturer/Importer

This is to certify that the FC07 is shielded against radio interference in accordance with the provisions of VFG 243/1991. The German Postal Services have been advised that this device is being put on the market and that they have been given the right to inspect the series for compliance with the regulations.

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Dieses Gerät wurde sowohl einzeln als auch in einer Anlage, die einen normalen Anwendungsfall nachbildet, auf die Einhaltung der Funkentstörbestimmungen geprüft. Es ist jedoch möglich, dass die Funkentstörbestimmungen unter ungünstigen Umständen bei anderen Gerätekombinationen nicht eingehalten werden. Für die Einhaltung der Funkentstörbestimmungen einer gesamten Anlage, in der dieses Gerät betrieben wird, ist der Betreiber verantwortlich.

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## Introduction

This manual is intended for anyone who is responsible for integrating the Fiery 3850C<sup>™</sup> into a business environment that includes networked personal computers. After you set up the Fiery 3850C and client workstations as described in this manual and in *Getting Started*, individual users can print to the Fiery 3850C as a high-performance color Adobe PostScript printer.

**Note:** The term "Fiery 3850C" is used in this manual to refer to the Fiery 3850C installed in the printer. The name "Aero" is used in illustrations to represent the Fiery 3850C. The term "Windows 9x" is used in this manual to refer to Windows 95 and Windows 98.

**NOTE:** Windows XP is supported. Follow the instructions for Windows 2000 if you are using a Window XP operating system.

The Fiery 3850C includes support for the Fiery WebTools<sup>™</sup> and software for the Command WorkStation<sup>™</sup>, which enable an operator to manage all jobs sent to the Fiery 3850C. Although it may not be the case at all sites, the documentation for this product assumes the presence of an operator who controls and manages jobs sent by users from remote workstations.

Any connectivity or administrative features specific to the printer are described in *Getting Started*, the *Printing Guide*, or the *Release Notes*.

## About this manual

This manual covers the following topics:

- Basic configuration of the Fiery 3850C to support printing over AppleTalk, TCP/IP, and IPX (Novell) networks
- Configuring Novell and Microsoft Windows NT 4.0/2000 servers and UNIX systems to provide Fiery 3850C printing services
- Administering network printing
- Using the Fiery 3850C in mixed network environments

**NOTE:** The network guidelines in this book are not intended to replace the services of an experienced network engineer.

## **Organization**

This manual is organized as follows:

- Chapter 1 illustrates the supported network configurations and shows the network connectors on the Fiery 3850C.
- Chapter 2 describes how to prepare for Fiery 3850C Setup, including planning system security through access levels.
- Chapter 3 describes Fiery 3850C configuration (Setup) from the Control Panel.
- Chapter 4 describes Fiery 3850C Setup from a Windows computer.
- Chapter 5 provides guidelines for setting up Windows network servers and UNIX systems for printing to the Fiery 3850C and for using the Fiery WebTools.
- Chapter 6 summarizes some administrative features of Fiery 3850C software that are available for IPX/SPX, TCP/IP, and AppleTalk networks, and also offers some troubleshooting hints.

**Note:** Administrator features described in other manuals are summarized on page 6-1.

## About the documentation

This manual is part of a set of Fiery 3850C documentation, which includes the following manuals for users and system administrators:

- The Configuration Guide explains basic configuration and administration of the Fiery 3850C for the supported platforms and network environments. It also includes guidelines for setting up UNIX, Windows NT 4.0/2000, and Novell NetWare servers to provide printing services to clients.
- Getting Started describes how to install software to enable users to print to the Fiery 3850C. Specifically, it describes installation of printer files, and other user software provided on the User Software CD. It also explains how to connect each user to the network.
- The *Printing Guide* describes the printing features of the Fiery 3850C for users who send jobs via remote workstations on the network.
- The Color Guide provides information on managing the color output of your Fiery 3850C. It addresses concepts and issues associated with printing to the Fiery 3850C and outlines key workflow scenarios. This manual explains how to calibrate your printer and take advantage of the ColorWise® color management system as well as features in ColorWise Pro Tools™. In addition, the Color Guide offers information on printing from popular Windows and Mac OS applications.
- The Job Management Guide explains the functions of the Fiery utilities, including
  the Command WorkStation, and how they can be used to manage jobs. This book is
  intended for an operator or administrator, or a user with the necessary access
  privileges, who needs to monitor and manage job flow, and troubleshoot problems
  that may arise.
- Release Notes provide last-minute product information and workarounds for some of the problems you may encounter.

The Printing Guide, Color Guide, and Job Management Guide are provided on a CD-ROM.

## Chapter 1: Connecting to the Network

This chapter summarizes the stages in setting up the Fiery 3850C, and includes diagrams that refer you to other chapters or other manuals for completing your installation. Check those references to find the information you need quickly.

## Fiery 3850C on the network

When the Fiery 3850C is connected to a network, it behaves as a networked PostScript printer. The built-in Ethernet interface on the Fiery 3850C supports the following network protocols:

- AppleTalk
- TCP/IP (the lpd, nbt, and http protocols)

TCP/IP stands for Transmission Control Protocol/Internet Protocol. The lpd protocol is the standard TCP/IP printing protocol. The nbt protocol supports Windows (SMB) printing. The http protocol is commonly used for Web pages on the Internet and on intranets.

 IPX/SPX (Novell) IPX/SPX stands for Internetwork Packet Exchange/Sequenced Packet Exchange.

These protocols (rules that enable computers on a network to communicate with each other) are supported on the Mac OS, Windows, and UNIX platforms and can run concurrently on the same cable. Workstations that use other protocols can print through a server that uses one of the protocols mentioned.

When you add the Fiery 3850C to a network, it is assumed that a network administrator has already installed a network cabling system and connected workstations and servers.



## Stages of installation on the network

Installation can be performed by a network or printing administrator. The stages of a successful installation are:

#### Physically connecting the Fiery 3850C to a functioning network

Prepare a network node for the Fiery 3850C—obtain cable and route it to the location where the Fiery 3850C will be installed and attach the cable to the network interface of the Fiery 3850C.

**NOTE:** If you plan to run the Command WorkStation software from a remote computer, you need to install the software and connect the Command WorkStation computer to the network. See *Getting Started* for details.

#### · Configuring the network server

When network servers are required, you need to configure those servers to provide client access to the Fiery 3850C as a color PostScript printer. See Chapter 5 for information on configuring network servers in Windows and UNIX network environments.

#### Setting up the Fiery 3850C

Configure the Fiery 3850C for your particular printing and network environment. Read Chapter 2, and see the following chapters for details.

#### • Preparing client workstations for printing

Install the files needed for printing, install additional user software, and connect the client to the Fiery 3850C over the network. These steps are described in *Getting Started*, and some information is provided in Chapter 5 of this manual.

#### Administering the Fiery 3850C

Monitor and maintain system performance and troubleshoot problems that arise. See Chapter 6 and the *Job Management Guide* for details.

#### Summary of Fiery 3850C network installation

#### CONNECTION



Prepare a network node. Connect the Fiery 3850C to the network. If you use a computer running the Command WorkStation software, connect it to the network.

#### SERVER CONFIGURATION

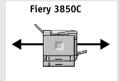


Configure UNIX, Windows NT 4.0/2000 and IPX (Novell) servers to specify Fiery 3850C print queues and Fiery 3850C users.

Install PostScript printer files on the server.

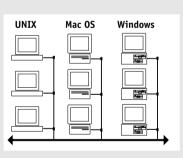
No special configuration of AppleShare servers is required.

#### FIERY 3850C SETUP



On the Fiery 3850C Control Panel, configure at least the System Setup, Network Setup, and Printer Setup. From the Control Panel or the Command WorkStation, configure the remaining Setups. Calibrate the Fiery 3850C.

#### **CLIENT SETUP**



At each workstation that will print to the Fiery 3850C:

- Install the appropriate printer files and connect to one or more queues.
- For computers that will use them, install Fiery utilities and an Internet browser.
- Verify the Fiery 3850C in the list of printers and run a test print.



Fiery 3850C available on the network



## Quick path to installation

The diagrams on the following pages show typical systems that can be used for printing and running Fiery software from remote workstations. Find the page with your preferred platform and network type, and then look up the setup procedures referenced in the "Key to setup" at the top left of each diagram.

The diagrams describe devices that use the supported networking protocols. They are logical diagrams and are not intended to describe the physical arrangement (topology) of devices on the network. A variety of physical arrangements is possible with each logical arrangement. For example, twisted pair Ethernet networks commonly use a star configuration around a hub, rather than a bus arrangement. The design of physical networks is beyond the scope of this manual.

If the network uses more than one protocol or more than one type of workstation, combine the setups listed for each component of your system. Multiple protocols (shown in the diagrams as parallel lines) can run on the same cable. A solid connection from the Fiery 3850C with an arrow indicates that other supported network types can be operational at the same time.

The protocols used in these diagrams are indicated as follows:

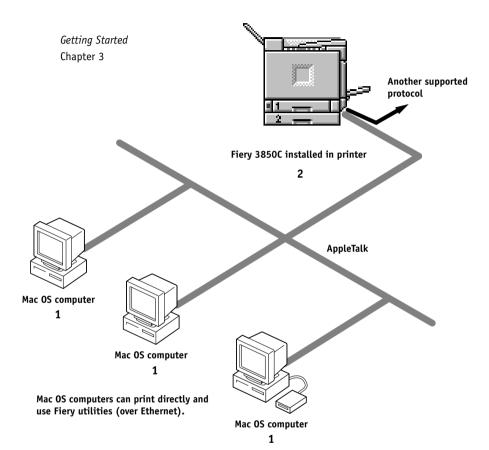


# 1-9

## Mac OS environment with AppleTalk

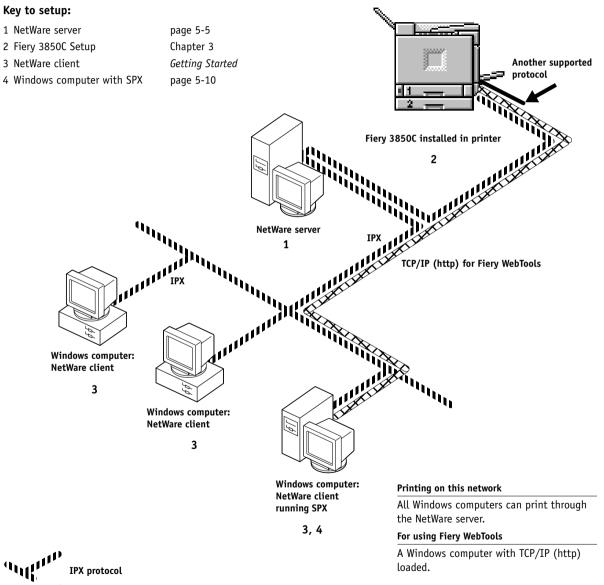
## Key to setup:

- 1 Mac OS computer
- 2 Fiery 3850C Setup



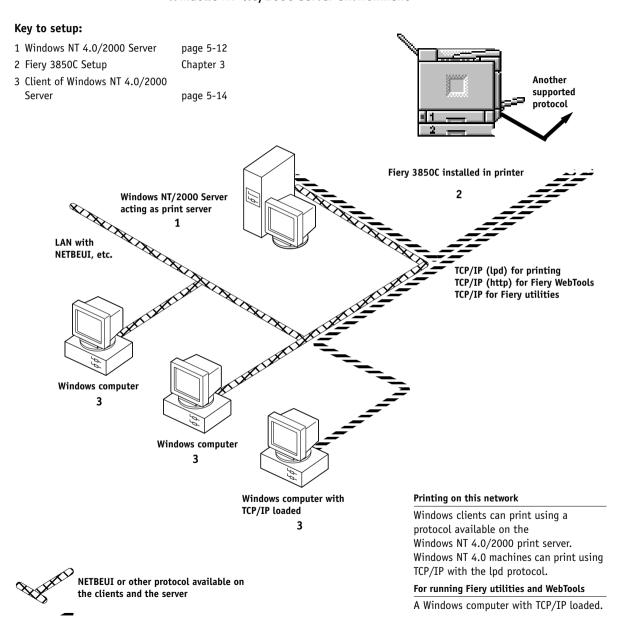


## Windows computers in a Novell environment





## Windows NT 4.0/2000 Server environment

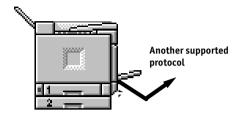


## Windows computers using Windows (SMB) printing

## Key to setup:

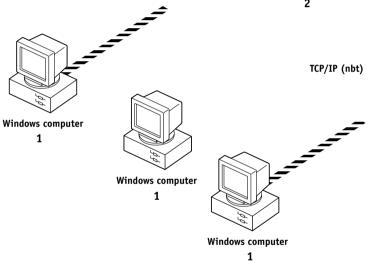
- 1 Windows computer
- 2 Fiery 3850C Setup

Getting Started Chapter 3



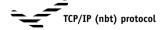
Fiery 3850C installed in printer

2



#### For Windows printing

Windows computers Windows (SMB) printing enabled



# 1-9

## UNIX workstations and Windows NT 4.0/2000 computers on a TCP/IP network

## Key to setup:

1 UNIX server/host

2 Fiery 3850C Setup

3 UNIX workstation

4 TCP/IP client

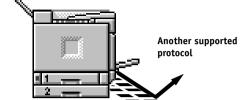
5 Windows NT 4.0 client

page 5-18

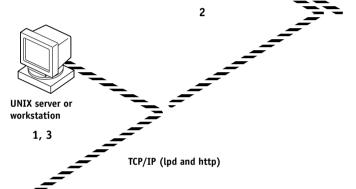
Chapter 3 page 5-19

Getting Started, page 5-14

page 5-14



Fiery 3850C installed in printer





Windows NT 4.0 /2000 computer with TCP/IP

5

#### Printing on this network

UNIX workstations with the TCP/IP (lpd) protocol can print directly and act as host for shared printing.
TCP/IP clients can print through
UNIX server or directly; requires
TCP/IP and the lpr print service loaded.

## For running Fiery utilities and WebTools

Windows computers with TCP/IP loaded can use these applications.





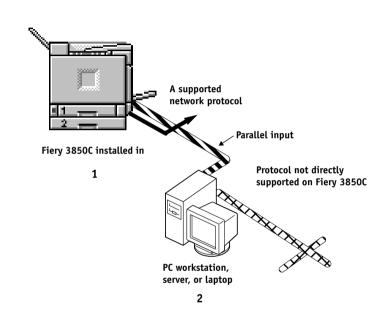
## Fiery 3850C parallel port connection

### Key to setup:

1 Fiery 3850C Setup Chapter 3
2 Windows computer Printing Guide

With the parallel port enabled, the Fiery 3850C can accept and print jobs sent to its parallel port.

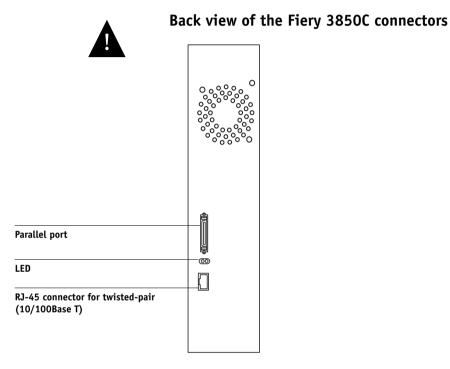






## Connecting network cable to the Fiery 3850C

In this section, the back panel of the Fiery 3850C is illustrated, followed by information for connecting to the Ethernet board.





#### Ethernet cable connection

For connecting to Ethernet, the Fiery 3850C supports Unshielded Twisted Pair (UTP) cabling, defined as Category 5 for use with 100BaseT; or as Category 3, Category 4, or Category 5 for use with 10BaseT. The cable uses an 8-pin RJ-45 connector that plugs into the RJ-45 socket on the Fiery 3850C.

**NOTE:** The 100BaseT type supported by the Fiery 3850C is 100BaseTX, also known as Fast Ethernet. If an Ethernet hub is used, it must be a 100BaseTX hub. The term "100BaseT" is used to refer to 100BaseTX.

#### TO CONNECT TO THE ETHERNET BOARD:

• Connect the network cable to the RJ-45 connector on the back of the Fiery 3850C.

A Category 5 unshielded twisted pair cable network cable must be used for 100BaseT.



#### Parallel cable connection

In addition to receiving print jobs over Ethernet, the Fiery 3850C can accept print jobs from a Windows computer through its high-speed parallel port. This connection is advantageous for portable computers and for workstations on dedicated networks using protocols other than AppleTalk, TCP/IP, or IPX.

#### TO USE PARALLEL CABLE:

1. With the Fiery 3850C and the Windows computer turned off, attach the parallel cable to the parallel port of the Fiery 3850C.

See the illustration on page 1-11 for the location of the parallel port.

- 2. Connect the other end of the cable to the parallel port on the Windows computer.
- 3. Turn on the computer and the Fiery 3850C.
- 4. Proceed to Setup.

To print to the parallel port, you need to set up the parallel port connection. See "Parallel Port Setup options" on page 3-11. For information on setting up printing, see *Getting Started*; for printing to the parallel port, see the *Printing Guide*.

2-1 Levels of access and control

## Chapter 2: Preparing for Fiery 3850C Setup

To prepare for printing at your site, you need to do some initial Fiery 3850C configuration, or Setup, to specify the network environment and the kind of printing you will do. Before you perform Setup, you must decide the levels of access you will implement for your site.

## Levels of access and control

When you configure the Fiery 3850C during Setup, you (as system administrator) implement a particular level of control by enabling or not enabling print connections, passwords, and access to Fiery WebTools. The level of control you implement can range from strict to moderate to minimal—or none at all.

Strictest control might be appropriate for a high-volume printing environment
where an administrator or operator controls the job flow and all printing; jobs sent
by users are spooled (stored) to the Fiery 3850C disk until the operator decides it is
time to print them. In addition, only the administrator and/or operator have access
to job management tools.

**NOTE:** The term "job management tools" is used in this manual to refer to the Command WorkStation, and Fiery WebSpooler.

 Least control might be appropriate for a small site where anyone on the local network can control all printing and Fiery 3850C functions. Although there may be an administrator or operator charged with certain duties, all users have equal access to the system and job management tools.

## Fiery 3850C print connections

The Fiery 3850C supports three print connections: Hold queue, Print queue, and Direct connection. These print connections can be enabled, or "published," to users on the network when you configure Printer Setup. All published connections are constantly checked for the presence of jobs. The Print queue and the Direct connection give remote users more direct access to the Fiery 3850C than the Hold queue. Therefore, do not publish the Print queue and the Direct connection in environments where stricter control is desired.

2-2 Preparing for Fiery 3850C Setup

In addition, you can enable the Printed queue, which is a storage area for the most recent jobs from the Print queue. The Printed queue makes it convenient to reprint those jobs. In Setup, you enable the Printed queue and specify the maximum number of jobs retained in it. Reprinting jobs in the Printed queue requires the job management tools.

#### Hold queue

Jobs sent to the Hold queue are spooled to the Fiery 3850C hard disk for printing at a later time or for repeated printing. Because the Hold queue is a storage place, jobs sent to it cannot proceed through the printing process without intervention via the job management tools (see the *Job Management Guide*).

#### Print queue

This is the standard Fiery 3850C queue. Jobs sent to the Print queue are processed and printed in the order they are received. Jobs prioritized by an operator from the job management tools and jobs sent via the Direct connection can take priority over jobs sent to the Print queue.

To use the Fiery utilities and Fiery WebTools, you must enable either the Hold queue or the Print queue.

#### Direct connection

The Direct connection transmits jobs directly to the Fiery 3850C, but only when the Fiery 3850C is not processing another job. If the Fiery 3850C is busy, the job remains at the user workstation until the Fiery 3850C is ready. The job is then processed as soon as the previous job is finished and before the next queued job is processed.

Jobs sent to the Direct connection are not stored on the Fiery 3850C hard disk, and they cannot be selected for reprinting, moving, or deletion. Therefore, the Direct connection provides a measure of security for sensitive files. Jobs sent to the Direct connection *do* appear in the Job Log, for accounting purposes.

**NOTE:** To download fonts to the Fiery 3850C, you must publish the Direct connection.

2-3 Levels of access and control

#### **Passwords**

You can implement password requirements as a means of controlling access to Fiery 3850C functions. The Fiery 3850C allows for the following passwords to be set in Setup:

- Administrator—from the Control Panel
- Operator—from Fiery WebSetup or the Command WorkStation

**NOTE:** By default, *no* passwords are set on the Fiery 3850C. If you do not specifically set passwords, all users will have administrator privileges, which include access to important functions such as Setup (including setting passwords), and job control. It is *strongly recommended* that you set *at least* an Administrator password to protect the Fiery 3850C from random or accidental changes to Setup.

#### Administrator privileges

Administrator control, which confers control of Setup, is the highest level of control, since the person who has access to Setup can control the printing and job management environment. Administrator privileges include publishing print connections, setting passwords, deleting fonts, clearing the Fiery 3850C of all job data, and setting the WebLink destination.

When performing a function from the Fiery 3850C Control Panel that prompts you for the Administrator password, you must enter it promptly. Otherwise, the Fiery 3850C Control Panel returns to Ready, and you must start over again.

#### Operator privileges

Operator control includes control of print jobs from the job management tools, including the ability to override job settings.

## Guest privileges (no password)

No password is needed for a user to log in as a Guest from the job management tools. A Guest can view the status of active jobs but cannot make changes to jobs or to the Fiery 3850C state.

2-4 Preparing for Fiery 3850C Setup

# 2-4

## Fiery WebTools

The Fiery 3850C can support Internet or intranet access with Fiery WebTools from Windows and Mac OS computers. To enable use of Fiery WebTools, you must do the following in Setup:

- Enable TCP/IP
- Set an IP address, subnet mask, and gateway address for the Fiery 3850C

Instead of manually assigning the IP address, subnet mask, and gateway address, you can use DHCP, RARP, or BOOTP protocols to assign some or all of these addresses (see page 3-13).

Passwords can be set to control access to Fiery WebTools features. If you do not specifically set these passwords, all users have access to all Fiery WebTools functions (see page 2-3).

Fiery WebTools include Status, WebSpooler, WebDownloader, WebSetup, and WebLink.

#### **Status**

The Status WebTool provides you with current information on the jobs processing and printing on the Fiery 3850C. It is not affected by any password setting. For more information, see the *Printing Guide*.

2-5 Levels of access and control

#### WebSpooler

WebSpooler allows remote users to preview, manipulate, reorder, reprint, and delete jobs currently spooling, processing, or printing on the Fiery 3850C. It also allows the administrator to view, print, or delete the Job Log.

Fiery WebSpooler access can be controlled by setting an Operator password in Setup. If you set a password, only users with that password can manipulate jobs from Fiery WebSpooler. A user who does not have the password can still log in to Fiery WebSpooler as a Guest with view-only access (see page 2-3). For more information, see the *Job Management Guide*.

#### WebDownloader

WebDownloader allows you to download PostScript, PDF, and EPS files directly to the Fiery 3850C without first opening the file in an application.

#### WebSetup

WebSetup allows you to view and modify Fiery 3850C Setup options from a remote workstation. For more information, see Chapter 4.

**NOTE:** Fiery WebSetup is supported on Windows computers only. To access WebSetup, you must use Microsoft Internet Explorer 5.0 or 5.5 with Java enabled. You must install the Java VM provided on the User Software CD if you are running WebTools from a Windows XP computer. For more information, see *Getting Started*.

#### WebLink

WebLink provides all users with a link to a pre-set Fiery WebLink destination. To change the WebLink destination, see page 5-18. This function requires the Administrator password, if one has been set. See "Passwords" on page 2-3.

**NOTE:** If no Administrator password has been set, any user can change the WebLink destination, which affects all users. For this reason, it is strongly recommended that you set an Administrator password.

2-6 Preparing for Fiery 3850C Setup

## **Control level scenarios**

Typical scenarios of access and control, ranging from least control to strictest control, are described in this section. Choose the scenario that best matches your site requirements, and then refer to the corresponding number in the table for guidance on how to configure your system for those requirements.

**NOTE:** It is *strongly recommended* that you set *at least* an Administrator password to prevent unauthorized changes to system settings.

#### 1. (Least control—not recommended) No designated administrator or operator

All users have equal access to all system functions including Setup, clearing the Fiery 3850C, deleting printer fonts, setting the WebLink destination printing to all Fiery 3850C print connections, and managing all jobs from the job management tools.

#### 2. A designated administrator but no designated operator

Only an administrator can perform Setup, calibration, and other administrator functions, but all other system functions are accessible to all users, including printing to all Fiery 3850C print connections, and managing all jobs from the job management tools.

#### 3. A designated administrator and a superuser operator

Only an administrator can perform Setup and other administrator functions, and only an operator or administrator can control jobs from the job management tools. Users can print to all Fiery 3850C print connections.

2-7 Levels of access and control

#### 4. A designated administrator and a designated operator, no Fiery WebTool access

Only an administrator can perform Setup and other administrator functions, and only an operator or administrator can control jobs from the job management tools; users can print to the Hold queue and the Print queue, but not to the Direct connection; the operator controls all job flow, but jobs sent to the Print queue may not require operator intervention; no access to Fiery WebTools.

### (Strictest control) A designated administrator and a designated operator, no Fiery WebTool access, operator controls all jobs

Only an administrator can perform Setup and other administrator functions, and only an operator or administrator can control jobs from the job management tools; users can print only to the Hold queue; the administrator and the operator have complete control of job flow; no access to Fiery WebTools.

Use these settings in Setup:	1 (Least)	2	3	4	5 (Strictest)
Enable Direct connection	√	√	√		
Enable Print queue	√	√	√	√	
Set an Administrator Password (strongly recommended)		V	V	V	√
Set an Operator password			√	√	√

2-8 Preparing for Fiery 3850C Setup

## **About Setup**

Setup configures the Fiery 3850C to communicate with other devices and manage print jobs. It is required the first time the Fiery 3850C is powered on after new system software is loaded or after server software is reinstalled. An initial Setup using default settings is adequate for getting the Fiery 3850C to reach Ready status, but not for full functionality. When your network or user printing environment changes, you can change Setup options accordingly.

Initial Setup must be performed at the Fiery 3850C Control Panel. Configure at least System Setup, Network Setup, and Printer Setup, in that order. Afterwards, you can complete or change most Setup options from a Windows computer using the Command WorkStation or Fiery WebSetup.

## Network server setup requirements

The diagrams in Chapter 1 give chapter references for network server setup.

To configure network settings in Setup, you need a live network connection so the Fiery 3850C can query the network for zones, servers, and server-based queues.

Whenever the configuration of the Fiery 3850C or the network itself changes at your site, you can alter individual settings to correspond to the changed environment. Changing network or port settings may require that you make changes to other Setup options as well.

## Chapter 3: Performing Setup from the Control Panel

Setup is required the first time the Fiery 3850C is turned on after new system software is loaded. In this initial Setup, you (or the service technician who loads the software) choose the language to use for Fiery 3850C Control Panel menus and messages.

## **About Fiery 3850C Setup**

In initial Setup, you must configure at least System Setup, Network Setup, and Printer Setup, in that order, from the Control Panel. If you do not configure the remaining Setups, the Fiery 3850C uses default settings. These defaults allow the Fiery 3850C to reach the Ready state, but might not allow users to print to the Fiery 3850C. You need to make settings appropriate for the printing environment at your site.

## Making changes to Setup

After initial Setup, you can change Setup options from the Control Panel (page 3-2) or the Command WorkStation (page 4-1). Most Setup options can be set from any of these methods.

## Network server setup requirements

For Novell and Windows NT 4.0/2000 (using TCP/IP) networks, the network servers must be configured for printing to the Fiery 3850C *before* you configure Fiery 3850C network settings in Setup. You need a live network connection so the Fiery 3850C can query the network for zones, servers, and server-based queues. The diagrams on pages 1-5 through 1-10 give chapter references for network server setup.

Whenever the configuration of the Fiery 3850C, the printer, or the network itself changes at your site, you can alter individual settings to correspond to the changed environment. Likewise, if printing needs or administrative requirements change, you can alter the corresponding settings. Changing network or port settings may require that you make changes to other Setup options as well.

## Fiery 3850C Setup from the Control Panel

Setup performed from the Control Panel configures the Fiery 3850C to communicate with other devices and manage print jobs sent to it.

Setup provides these groups of options:

- System Setup to specify system options
- Network Setup to specify all the active network systems that transmit print jobs to the Fiery 3850C

Network Setup includes I/O Port Setup, Network Protocol Setup, and Network Services Setup.

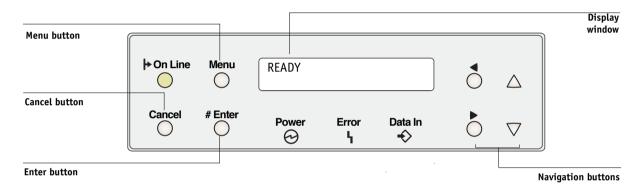
- · Printer Setup to specify how print jobs and queues are managed
- PS Setup to specify PostScript settings
- PCL Setup to specify PCL settings
- ColorWise Setup to specify color settings
- Tray Setup to adjust the placement of text and images on the page so that they are
  correctly aligned on the sheet of paper or so that both sides of a duplex sheet have
  the exact same alignment. For more information on this function, see the .Job
  Management Guide



## **Accessing Setup options**

The Control Panel enables you to set options and view information about jobs printed to the Fiery 3850C.

#### Fiery 3850C Control Panel



The *Job Management Guide* describes the online display screens in detail. This chapter describes only the screens you might see when performing Setup.

#### TO ACCESS SETUP WHEN THE FIERY 3850C IS AT READY:

#### 1. Make sure the information screen on the Control Panel reads Ready.

If Printing or RIPping appears, the Fiery 3850C is processing, and you must wait until the system finishes and reaches the Ready state.

## About the Control Panel Setup interface

When you perform Setup from the Control Panel, you select one menu after another and enter information about your Fiery 3850C and your network and printing environment.



## **Entering Setup information**

There are two types of Setup options:

Multiple choice questions

You are given choices (for example, Yes or No, or a list of options from which to choose).

Use the arrow buttons to scroll through the choices, and choose Enter when the correct information is displayed.

Information entry options

You must specify information for your site, such as the printer name or IP address.

Some numeric information is grouped into separate parts. For example, to change the System Date, use the right or left arrow on the Control Panel to select the month, day, or year. Use the up or down arrows to display the correct information.

**NOTE:** When you enter text, enter it from left to right, as the left arrow button acts as a delete key as well as a cursor-moving key.

In some menus, you can use the Menu button to cancel the current selection and return to the next higher level menu.

Some system messages that you might see during Setup are longer than can be displayed completely on the Control Panel. Use the down arrow on the Control Panel to show the remaining part of these messages.

When you have entered the settings, the settings are automatically saved. The Fiery 3850C reboots after you exit from some of the Setup menus.

## **System Setup options**

The System Setup menu lets you specify system information that pertains to the Fiery 3850C itself and all users. Accessing the menu is described on page 3-3.

When you choose System Setup, the options appear in sequence as described below. Default values, where applicable, appear in square brackets. Words shown in italics indicate that a product- or site-specific value is displayed.

# Printer Name Default printer name

Enter a name for the Fiery 3850C (up to 16 characters long). This is the name that appears in the Chooser on an AppleTalk network.

**NOTE:** Do not use the device name (3850C) as the server name. Also, if you have more than one Fiery 3850C, do not give them the same name. Windows does not support two computers with the same name in the same workgroup or domain.

### Start Page Yes/No [No]

Specify whether the Fiery 3850C should print a start page every time it is restarted. The start page displays information about the Fiery 3850C, including the printer name, current date and time, amount of memory installed in the Fiery 3850C, last calibration date, network protocols enabled, and connections published.

#### Publish Printed Q Yes/No [Yes]

Specify whether to publish the Printed queue, which creates a storage location on the Fiery 3850C disk for recent jobs that were printed from the Print queue. Users with Administrator or Operator access to the job management tools can reprint jobs from the Printed queue without sending them to the Fiery 3850C again. If you select No, jobs are deleted from the Fiery 3850C disk immediately after they are printed.

#### Jobs to Save 1-99 [10]

This option appears only if Publish Printed Queue is set to Yes. Specify the number of jobs to be stored in the Printed queue. Jobs in the Printed queue take up space on the Fiery 3850C hard disk. If disk space is low, use a smaller value for saved jobs.

#### Energy Saver 1 Off/On [Off]

Specify if you want the printer to use Energy Saver 1 mode in which it only shuts down the printer's fuser.

# Energy Saver 2 Off/60 minutes/45 minutes/30 minutes/15 minutes/5 minutes/0n [0n]

Specify if you want the printer to use Energy Saver 2 mode in which it shuts down the entire printer.

# E. Saver 2 Timer 60 minutes/45 minutes...5 minutes [60 minutes]

Specify the amount of time to elapse before the printer goes into Energy Saver mode.

#### Time

Enter the correct system time. Enter the time based on the 24-hour clock in the form HH:MM (Hours:Minutes). The time is used on the Job Log.

#### **Date**

Enter the correct system date in the standard form for your usage. The date is used on the Job Log.



# Unit of Measure Inch/MM [Inch]

Specify the default unit of measure that the printer will display.

# Change Password No/yes [No]

Change Password enables you to set or change the Administrator password for the Fiery 3850C. Anyone with the Administrator password can modify the Setup options, and control the flow and order of print jobs with the job management tools.

#### **New Password**

Use the up and down buttons to select the characters and the left and right arrow buttons to move between them. The password can be any combination of letters and numbers up to 19 characters. Choose Enter when you are done. Be sure to keep track of the password.

**NOTE:** If you forget the Administrator Password, contact your authorized service representative.

#### Verify Password

Enter the new password again exactly as before to verify that you have entered it correctly. If you make a mistake, you are prompted to enter the password again.



## **Network Setup options**

Network Setup configures the Fiery 3850C to receive print jobs over the network systems that will be used at your site.

In the Setup menu, choose Network Setup, where you specify network addresses and names to be used by workstations, servers, and the Fiery 3850C when they communicate with each other.

The Network Setup menu includes three submenus that let you choose port types, protocols, and network services.

For each item you enable, you are prompted to enter settings for that item. Default values, where applicable, appear in this manual with square brackets.

You need to display and select options only for the network systems that are currently used at your site. If your network requirements change, you can change network setup at any time.

If the Fiery 3850C is configured to enable more than one protocol, it automatically switches to the correct protocol when it receives a print job.

The available network types, and the Setup areas that pertain to them, are summarized in the following table.

For this Network or Connection Type:	Use this Port Setup:	Use this Protocol Setup:	Use this Service Setup:
AppleTalk over Ethernet	Ethernet Setup	AppleTalk Setup	AppleTalk printing (PAP) is enabled automatically.
TCP/IP over Ethernet	Ethernet Setup	TCP/IP Setup: Ethernet Setup	Port 9100
IPX/SPX over Ethernet	Ethernet Setup	IPX/SPX Setup	PServer Setup (NDS, Bindery, or both)
Parallel	Parallel Port Setup	_	_
SMB over TCP/IP	Network Service Setup	_	Enable SMB

#### TO ACCESS NETWORK SETUP OPTIONS:

1. Confirm that the network cable is connected to the Fiery 3850C.

During Network Setup, the Fiery 3850C queries the network for zones, servers, and server-based queues. If you perform Network Setup without a connected and functioning network, default settings are used that may not meet your needs.

- 2. Choose I/O Port Setup from the main Setup menu.
- 3. To use Ethernet, enable Ethernet from the I/O Port Setup menu, and enter the appropriate settings.
- 4. To print to the parallel port, enable Parallel Port Setup from the I/O Port Setup menu, and enter the appropriate settings.

- 5. When you have finished entering port settings, choose Network Protocol Setup.
- 6. Enter the appropriate settings for the protocol or protocols you will use.
- 7. When you have finished entering protocol settings, choose Network Service Setup.
- 8. Enter the appropriate settings for the services you will use.

The options are described in detail in the following pages.

#### TO EXIT NETWORK SETUP:

- 1. When you have finished entering service settings, press Enter.
- 2. From the main Setup menu, choose another Setup or choose Cancel. Choosing Cancel causes the printer to reboot.

After speciying all setup items, press Cancel and the Fiery 3850C reboots and any changes you entered during the Setup take effect. If you do not press Cancel, the Fiery 3850C will reboot after a few moments.

## I/O Port Setup options

To configure the Fiery 3850C, choose Ethernet and enter the appropriate settings. Since network setups are nested, the names of higher-level menus are shown in this chapter to the left of each menu heading.

#### **Ethernet Setup**

#### Ethernet On/Off [On]

Select On if you have Ethernet cabling connected to the Fiery 3850C.

#### Speed

#### Auto Detect/100 Mbps/10 Mbps [Auto Detect]

Select Auto Detect if your network environment is mixed, or if you do not know the network speed. If you know the speed of the network to which the Fiery 3850C is attached (10 Mbps or 100 Mbps), select it.

#### **Parallel Port Setup options**

You must enable the parallel port in order to enter the Parallel Port Setup options and print to the parallel port.

#### Parallel Port Setup

#### **Parallel Port** On/Off [On]

Select On if you want to print through the parallel port. You can connect a single Windows computer to the parallel port and print directly to the Fiery 3850C.

**Note:** Enabling the parallel port does not conflict with using Ethernet communication to the Fiery 3850C.

#### Port Timeout 5-300 [15]

This option appears only if Parallel Port is set to On. Your setting determines how long (in seconds) the Fiery 3850C waits without receiving data from the parallel port before deciding that the current job is complete. Until the timeout, the Fiery 3850C cannot receive new jobs through the parallel port, but it can continue to receive network print jobs.

#### Ignore EOF Yes/No [Yes]

This option appears only if Parallel Port is set to On. This option specifies that the Fiery 3850C should ignore end-of-file (EOF) messages in a file. This option must be set to Yes to print PostScript files in binary format (not ASCII); under normal circumstances, it should be set to No. When this option is set to Yes, the Fiery 3850C uses the parallel port timeout value to determine when the end of the file has been reached. If you experience printing problems, set this option to No.

## **Protocol Setup options**

To configure the Fiery 3850C, choose each protocol and enter the settings for that protocol.

#### TCP/IP Setup - Ethernet

# TCP/IP-Ethernet Yes/No [Yes]

Select Yes if you have a TCP/IP network connected to the Fiery 3850C over Ethernet cabling.

**NOTE:** If you are using TCP/IP for printing from Windows computers, enabling TCP/IP here also enables you to use Fiery utilities from Windows computers using TCP/IP protocols.

# Enable AutoIP Yes/No [No]

Select Yes to allow the Fiery 3850C to obtain its Ethernet IP address by searching the network. Depending on your network and the protocol you select in the following option (DHCP, BOOTP, or RARP), the IP address can change. Select No to assign the Fiery 3850C a static IP address that will not change. If you select No, you proceed to the IP Address option, where you manually set the IP address.

#### Enable DHCP Yes/No [Yes]

This option appears only if you answered Yes to Enable Auto IP Configuration. DHCP allows the Fiery 3850C to obtain the Ethernet IP address and Subnet Mask automatically.

Depending on your network, the Fiery 3850C might be assigned a different address after you reboot the Fiery 3850C. With the DHCP setting, the Fiery 3850C can be assigned a different address even if it is not rebooted. Make sure the network is already configured properly for the protocol you select.

#### Enable BOOTP Yes/No [No]

This option appears only if you answered Yes to Enable Auto IP Configuration. BOOTP allows the Fiery 3850C to obtain the Ethernet IP address and Subnet Mask automatically.

#### Enable RARP Yes/No [No]

This option appears only if you answered Yes to Enable Auto IP Configuration. RARP only allows the Fiery 3850C to obtain the Ethernet IP address automatically.

# Eth. IP Address [127.0.0.1]

Enter the Fiery 3850C IP address for Ethernet. This IP address, unlike an IP address set automatically, remains the same if you reboot the Fiery 3850C. You must change the default to a valid address for your network. For information about setting up printing with TCP/IP, see Chapter 5.



# Eth. Subnet Mask [255.255.2]

This option lets you modify the subnet mask for printing with TCP/IP over Ethernet. To set the subnet mask, enter one of the following values:

- 255.0.0.0 if the IP address starts with a number less than 128
- 255.255.0.0 if the IP address starts with a number from 128 through 191
- 255.255.255.0 if the IP address starts with a number greater than 191

Confirm the subnet mask setting with your network administrator before proceeding. In some cases the required setting may be different from those listed.

#### Auto Gateway Yes/No [Yes]

Use this option to get the gateway address automatically for printing with TCP/IP. This option appears only if you selected DHCP or BOOTP as the protocol in the previous options.

If you select a DHCP or BOOTP protocol and later change it to RARP, you must return to Setup and set this option to No. You can then set the address manually. This is because RARP does not support automatic assignment of the gateway address.

# Gateway Address [127.0.0.1]

This option appears only if you answered No to Auto Gateway, or if you selected RARP as the protocol.

Use this option to set the gateway address for printing with TCP/IP. If your network uses a gateway, you must change the default to a correct gateway address for your network.

# IP Filtering Off/On [Off]

Select On to setup a range of IP addresses that is available for connecting to the printer.

#### IP Filter Mask 000.000.000.000

Enter the IP filter mask that specifies the available range for connecting to the printer.

#### IP Filter Addr 000.000.000.000

Enter the IP filter address that will determine the available range for connecting to the printer.

#### AppleTalk Setup

#### Enable AppleTalk Yes/No [Yes]

Select Yes if you have an AppleTalk network connected to the Fiery 3850C. This setting enables the Fiery 3850C to communicate over AppleTalk networks.

#### AppleTalk Zone List of zones

The Fiery 3850C searches the network for AppleTalk zones in your network segment. Scroll through the list to select the AppleTalk zone in which you want the Fiery 3850C to appear. If your segment has only one zone, the Fiery 3850C is assigned to that zone automatically.

The message "No AppleTalk zone found" may mean your network has no zones, or the network cable is not connected (see page 6-4). Choose Enter to dismiss the message.

#### **Novell Setup options**

#### Enable Novell Yes/No [No]

To specify the frame types the Fiery 3850C uses for IPX/SPX protocols, choose Yes to Enable Novell.

You must choose at least one frame type to enable IPX/SPX protocols. The Fiery 3850C supports the following frame types for IPX/SPX: Ethernet 802.2, Ethernet 802.3, Ethernet II, and Ethernet SNAP.

For protocols other than IPX/SPX, the frame type is automatically enabled and does not require setup, as follows:

With this protocol:	And these printing services:	This frame type is automatically enabled:
AppleTalk	PAP (Printer Access Protocol)	Ethernet SNAP
TCP/IP with Ethernet	LPD (Line Printer Daemon)	Ethernet II

#### Auto Frame Type Yes/No [Yes]

Specify whether the Fiery 3850C should try to bind to all available frame types automatically. The Fiery 3850C does so whether or not all frame types are appropriate. To determine the frame types that were successfully bound, save your changes, exit Setup, allow the Fiery 3850C to reboot, and print a Configuration page. The Configuration page lists only one of the frame types that were successfully bound.

If you answer No to this option, you can select frame types manually. You must choose at least one frame type to enable IPX/SPX protocols.

#### Select Frame Types

The frame selection screen allows you to make multiple selections. Press Enter to select the frame type used on your IPX/SPX network. You can choose to enable Ethernet 802.3, Ethernet 802.2, Ethernet II, and Ethernet SNAP.

Select all the frame types that are appropriate for your network. An asterisk (\*) appears beside each selected frame type.

### **Service Setup options**

Network Service Setup has options for TCP/IP and IPX/SPX networks.

- For IPX/SPX networks, PServer Setup allows you to enter the names of the Novell objects that are concerned with Fiery 3850C print jobs.
- SMB Setup enables the Microsoft SMB (Server Message Block) protocol, which supports peer-to-peer printing, also known as Windows printing or SMB printing.
- Port 9100 Setup allows users to download jobs to a print connection on the Fiery 3850C.

PServer is a program in the Fiery 3850C that can service the Novell print queues assigned to the Novell print servers you have set up for printing to the Fiery 3850C. When you choose PServer Setup and enable PServer, you can set up NDS (Novell Directory Services), Bindery Services, or both. NDS is used with NetWare 4.x; Bindery Services are used with NetWare 3.x or with NetWare 4.x in bindery emulation mode.

#### **PServer Setup options**

#### **Enable PServer** Yes/No [No]

Select Yes if you have a Novell network connected to the Fiery 3850C.

Choose NDS Setup if your network uses NetWare 4.x in native mode. Choose Bindery Setup if your network uses NetWare 3.x or uses NetWare 4.x in bindery emulation mode.

If your network uses both NDS and Bindery, set up NDS first. Setting up NDS after Bindery will overwrite Bindery Setup.

If your network uses both NDS and Bindery, and uses NetWare 4.x servers in bindery emulation, note that the Fiery 3850C cannot service NDS and bindery emulation servers on the same NDS tree.

#### NDS Setup

Before entering NDS settings, be sure the Fiery 3850C is connected to the network and you have already configured an NDS directory tree with a Printer, a Print Server, and one or more Print Queue objects for Fiery 3850C jobs (see page 5-7). To perform NDS Setup you may need permission to browse the NDS tree. If access to the Print Server is restricted, you need a login password.

The main objective of NDS Setup is to specify the Print Server object. In addition, you can indicate the location of the Fiery 3850C print queues.

The terms NetWare server, Novell server, and IPX server are in common use and are used here interchangeably to mean the server on an IPX network running Novell NetWare networking software.

#### **Enable NDS** Yes/No [No]

Select Yes if the NetWare servers you will use to print to the Fiery 3850C are running NetWare 4.x in native mode.

#### Change Settings No/Yes [No]

This option appears only if an earlier NDS setting exists.

#### NDS Tree List of trees

Use the up and down buttons to browse the list of NDS trees available to the Fiery 3850C. Choose Enter when you have displayed the tree that contains the Printer, Print Server, and print queue objects you have previously defined for the Fiery 3850C.

Your new NDS tree selection automatically overwrites any previous tree selection. If you change the NDS tree selection and there are also current Bindery settings, you are alerted that they will be deleted. If you continue with NDS Setup, you can replace Bindery settings afterwards. If you do not want to continue, you can exit NDS Setup by pressing the Menu button to escape.

#### Del Bind Setup? No/Yes [No]

Select Yes to overwrite previous bindery setup settings.

#### Login to browse? Yes/No [No]

Select No if no password is required to browse the tree. You can proceed to navigate to the Print Server object.

Select Yes if network permissions require that you log in to browse the NDS tree and see the Print Server object you want to select. If you select Yes, you are prompted to navigate to the User Login object.

#### Find Login Object

This message is displayed if you selected Yes for the previous option. Choose Enter and browse the NDS tree as described in the following paragraphs.

# NDS Tree name Object list, ".."

Browsing to find the User Login object begins with the NDS tree that you selected previously (with NDS Tree). Use the up and down buttons to scroll a list of objects in the tree beneath the [Root] in the hierarchy, or use the navigation symbol ".." to go up one level at a time.

In each subsequent browse screen, the top line represents your current location. The second line contains:

- A list of objects in the current container directly below your current location.
- The symbol ".." to go up one level.

With an object selected, choose Enter to travel down the tree, or choose ".." to go up the tree. When you select an object and choose Enter, that object is then displayed on the top line, and the second line lists objects directly below it.

Continue to browse the NDS tree until the User Login object is displayed in the second line. Choose Enter.

#### **Enter Password**

Enter the login password for the NDS tree, using the up and down buttons to select characters, and the left and right arrow buttons to move the cursor. Choose Enter.

Choose Enter to browse the NDS tree to the Print Server object.

Browsing to find the Print Server object begins with the NDS tree that you selected previously (with Select NDS Tree). In each subsequent browse screen, the top line represents your current location. The second line contains:

- A list of objects in the current container directly below your current location.
- The symbol ".." to go up one level.

With a container object selected, choose Enter to travel down the tree, or choose ".." to go up the tree. When you select an object and choose Enter, that object is then displayed on the top line, and the second line lists objects directly below it.

When the Print Server is displayed in the second line, choose Enter.

#### **Enter Password**

Enter the Print Server password, using the up and down buttons to enter characters, and the left and right arrow buttons to move the cursor. Choose Enter. (If no password is required, choose Enter.)

#### Print Q Search: Entire NDS Tree/Specified subtree [Entire NDS Tree]

By default, the Fiery 3850C searches the entire NDS tree for Fiery 3850C print connections. This option lets you restrict the search for Fiery 3850C print jobs to a subtree (the Print Queue root) in which the Fiery 3850C print connections have been defined. This makes the search more efficient. Select Entire NDS Tree if the tree is small. Select Specified Subtree to restrict the search and specify the subtree.

If you select Entire NDS Tree, choosing Enter returns to PServer Setup. Proceed with Bindery Setup (see page 3-23), set the Polling Interval (see page 3-25), or choose Exit PServer Setup to return to the Service Setup menu.

#### Browse to Print O Subtree Root

This message is displayed if you selected Specified Subtree in the previous option. Choose Enter to browse the NDS tree to the Print Queue subtree.

Browsing to find the container object begins with the NDS tree that you selected previously (with Select NDS Tree). In each subsequent browse screen, the top line represents your current container. The second line contains:

- A list of objects directly below your current location
- The symbol ".." to go up one level
- The symbol "." to select the current container object (displayed in the top line) without traveling down the tree

With an object selected, choose Enter to travel down the tree, or choose ".." to go up the tree. When you select an object and choose Enter, that object is then displayed on the top line, and the second line lists objects contained within.

When the container that contains print queues is displayed in the second line, choose Enter. In the next screen, choose "." and choose Enter to select the object in the top line.

When the Fiery 3850C displays the container name, choose Enter.

Proceed with Bindery Setup (see page 3-23), set the Polling Interval (see page 3-25), or return to the Network Service Setup menu.

#### **Bindery Setup options**

# Enable Bindery Setup No/Yes [No]

Use Bindery Setup if you have already configured one or more bindery servers (file servers running NetWare 3.x or NetWare 4.x in bindery emulation) with a Print Server and a Print Queue for Fiery 3850C jobs. Before entering bindery settings, be sure the Fiery 3850C is connected to the network and the NetWare file server is running. If Guest Login is not supported, you need a valid user name and password.

**NOTE:** The terms NetWare server, Novell server, and IPX file server are in common use and are used here interchangeably to mean the server on an IPX network running Novell NetWare networking software.

#### Add File Server

This option gives you two ways to add a Novell NetWare file server.

#### Select File Server From List/Search by Name [From List]

You may select the file server from a scrollable list, or by a name search. Choose From List if your network does not have a large number of file servers. Select Search by Name if the number of file servers is so large that scrolling through the list would take a long time.

#### If you selected **From List**:

# Add Server List of all servers

The Fiery 3850C obtains a list of NetWare file servers by querying the IPX network. Use the up and down buttons to select a NetWare file server from the list. Choose the server on which you have configured a print server and print queue to handle Fiery 3850C print jobs.

#### If you selected Search by Name:

Use the up and down buttons to enter the first letters of the name of the file server you want to use, and choose Enter.

#### Add Server List of servers matching the search

This option is displayed if you entered letters to search. Scroll to select the server you want from the list.

Once you have chosen a file server, the Fiery 3850C immediately tries to log in as a guest without a password. If it succeeds, it skips to the NetWare Print Server option.

If you try to add a file server but all Fiery 3850C connections are already being used, you are prompted to remove a file server (see "Remove FServer" on page 3-27).

#### File Server Login administrator/supervisor/Enter Login Name [supervisor]

This option appears only if a password is required for login or if there is no guest account or the guest account is restricted. Choose Enter Login Name to enter your own login name and password or to log in as a guest. Choose administrator or supervisor if you have those privileges.

# Enter Login Name [guest]

This option and the next appear only if you selected Enter Login Name for the File Server Login. Enter your login name or select guest.

#### **FServer Password**

Enter the password for logging in to your NetWare file server.

#### NetWare Print Server Print Server Name

Select the name of the print server that you have configured in the NetWare utility PCONSOLE. This is the print server that will route print jobs to the Fiery 3850C from computers on IPX networks.

Choose Yes to Another FS until you have connected each NetWare file server you have configured for printing to the Fiery 3850C.

You can choose another Bindery Setup option (such as adding another file server) or proceed to set the polling interval.

#### Polling Interval options

#### **Polling Interval**

Whether you are using NDS or Bindery services, choose Polling Interval from the main PServer Setup menu. If you do not reset the interval, the default value of 15 seconds is used.

#### Poll Int. (Sec) 1-3600 [15]

Specify the interval, in seconds, at which the Fiery 3850C communicates with the Novell print server to see if there are print jobs waiting.

**NOTE:** If you select a short interval, the amount of network traffic increases. This may slow down other network jobs.

#### SMB Setup options

#### Enable SMB Yes/No [Yes]

Enabling SMB (Server Message Block), the file and printer sharing protocol built into Windows, allows the Fiery 3850C to be listed on the network so that Windows clients can print to a particular print connection (Hold, Print, or Direct) on the Fiery 3850C without any other networking software. For information on how to set up a Windows computer for Windows printing, see Getting Started. Windows printing runs via TCP/IP, so TCP/IP must be configured on the Fiery 3850C and on all workstations that use Windows printing.

#### **Auto NETBIOS** Yes/No [No]

This option appears if you chose DHCP or BOOTP as the protocol for automatically obtaining the IP address of the Fiery 3850C.

Choose Yes to have the Fiery 3850C use a WINS name server and automatically obtain its IP address. After making your choice, you proceed to the Server Name option.

Choose No to proceed to the Use WINS Name Server option, where you specify whether to use a WINS name server, and then to the WINS IP Address option, where you specify its IP address.

#### **Use Name Server** Yes/No [No]

Broadcasts from SMB devices cannot pass across a router without a WINS name server. Setting up the WINS name server is outside the scope of this manual. To find out if a name server is available, contact your network administrator.

#### Name Server IP [127.0.0.1]

This option appears only if you choose Yes for Use WINS Name Server. Change the default address to the correct IP address for the WINS Name Server. Obtain the correct address from your network administrator.

#### Server Name Default Name

The server name is the name that will appear on the network for accessing the Fiery 3850C via SMB. The default name is the same as the server name assigned in Server Setup (see page 3-5).

#### **Server Comments**

Server comments (optional) can contain information about the printer. These comments are listed in the Properties of the Fiery 3850C in Network Neighborhood. Comments can be up to 15 characters long.

#### **Domain Name**

Enter the name of the workgroup or domain. For more information about entering text and characters, see "Entering Setup information" on page 3-4.



#### Port 9100 Setup

#### Enable Port 9100 Yes/No [Yes]

This option allows application programs to open a TCP/IP socket to the Fiery 3850C at Port 9100 to download a print job.

# Port 9100 Queue Direct/Print Queue/Hold Queue [Direct]

Specify the Fiery 3850C print connection for downloading jobs to Port 9100. Only the print connections you have enabled in Printer Setup are available.

#### Remove FServer

## Remove FServer File server name

Allows you to select a NetWare file server from a list of connected file servers and remove the connection to it. You are notified that you have removed the connection, and the Bindery Setup menu is displayed again. If you change your mind and don't want to remove any of the file servers, press the Menu button.

### **Printer Setup options**

Printer Setup configures the connections and printing behavior associated with a particular printing device. For more information on Fiery 3850C print connections, see page 2-1.

In the list of options that follows, default values, where applicable, appear in square brackets.

NOTE: For users to use the Fiery utilities and Fiery WebTools or to print to the Fiery 3850C over a TCP/IP network, you must publish at least the Hold queue or the Print queue.

#### Page Desc-Lang Auto/PCL/PostScript [Auto]

In PCL or PostScript mode, the Fiery 3850C is restricted to PCL or PostScript jobs, respectively. Jobs sent to the Fiery 3850C that do not match the page description language selected on the Fiery 3850C are not printed. In Auto mode, the Fiery 3850C switches to the appropriate page description language for each job.

#### **Default Paper** A4 (297x210)/11x8 1/2 [11x 8 1/2]

Specify the default paper size the Fiery 3850C will print jobs on. When no page size is defined within a PostScript file, jobs are printed on this size.



# Auto Continue Off/15 minutes/ 10...0 minutes [Off]

Specify if you want the printer to wait a certain amount of time before it prints a job that does not have the correct media loaded. If the job resumes printing without the specified media, it will print with the printer defaults.

# Def. Output Tray Standard Tray/External Tray/ Mailbox Tray 1/Mailbox Tray 2/ Mailbox Tray 3/ Mailbox Tray 4/Finisher Tray 1/Finisher Tray 2/Auto Tray Sw. [Standard Tray]

Specify the default tray to output jobs. Mailbox Trays 1-4 are only available when the 4-bin tray is installed. Finisher Trays 1-2 are only available when the finisher tray is installed.

# Job Separation On/Off [On]

This option enables you to offset multiple copy print jobs.

#### B&W Page Detect On/Off [On]

Specify if the printer should detect black and white pages in a single print job which will allow adjustments for print speed. Off prints both color and black and white pages at 28 PPM. On prints black and white pages at 38 PPM until the printer detects a color page. It will then print at 28 PPM for the remainder of the job, regardless of any subsequent black and white pages.

#### Hex Dump Off/On [Off]

Enable this option for troubleshooting help for service technicians. When this option is set to On, Hex Dump Mode appears instead of Ready when the printer is at idle.

### PostScript Setup options

PS (PostScript) Setup allows you to set defaults for the Fiery 3850C. Users can override most of these defaults on a job-by-job basis. However, users printing from UNIX or DOS command lines cannot override defaults from their applications. Therefore, you must set defaults in PostScript Setup. For information about these defaults, see the *Printing Guide*.

In the list of options that follows, default values, where applicable, appear in square brackets.

#### Error Page Yes/No [Yes]

Specify whether the Fiery 3850C should print the available portion of a print job when it encounters a PostScript error. Select Yes to print the portion of the job that was processed before the error occurred; select No to cancel the print job entirely when a PostScript error is encountered. Leave this option at No unless you encounter printing problems.

#### Def Resolution 600x600 DPI/1200x1200 DPI [600x600 DPI]

Specify the copier's print resolution for all jobs.

### **PCL Setup options**

PCL (Printer Control Language) Setup allows you to set defaults for the Fiery 3850C. Users sending jobs from a Windows computer can override most of the defaults on a job-by-job basis from an application. PCL defaults determine how jobs sent from a DOS or UNIX prompt are printed.

**NOTE:** PCL printing is not supported for Mac OS computers.

#### **Orientation**

#### Portrait/Landscape [Portrait]

This option determines whether the text or image will be oriented along the short edge of the paper (portrait) or along the long edge of the paper (landscape).

# Form Length 5-128 [60]

This option sets the number of lines to be printed per page.

# Font Number 0-45 [0]

The font number designates the default font for the Fiery 3850C.

To determine font numbers, print the internal PCL Font List. At the Control Panel, press the Menu button to access the Functions menu. Select Print Pages and press PCL Font List. The standard 46 fonts are listed in order from font #0 to font #45. The font numbers, however, are not displayed.

#### Pitch 0.44-99.99 [10.00]

When the number selected in Pitch represents a fixed pitch scalable font, the Pitch option appears, allowing you to determine the width of scalable type. Pitch is measured by characters per inch, so 10-pitch type fits ten characters per linear inch.

#### Symbol Set ASCII/Roman-8/ECMA-94 L1/PC-8... [Roman-8]

This option lets you choose the symbol set that best matches the needs of users printing to the Fiery 3850C.

#### Memory Overflow Yes/No [Yes]

Specify whether the Fiery 3850C should print the available portion of a print job when it encounters a PCL error. Select Yes to print the portion of the job that was processed before the error occurred; select No to cancel the print job entirely when a PCL error is encountered. Leave this option at No unless you encounter printing problems.

### **ColorWise Setup options**

ColorWise Setup allows you to set defaults the Fiery 3850C uses to control color output. Mac OS and Windows users who use the printer drivers provided on the User Software CD can override most of these defaults on a job-by-job basis. However, users printing from UNIX or DOS command lines cannot override defaults from their applications. Therefore, you must set defaults in Color Setup. For information about these defaults, see the *Printing Guide* and the *Color Guide*.

**NOTE:** Besides the defaults described in this section, Mac OS and Windows users have additional settings available from the printer drivers.

In the list of options that follows, default values, where applicable, appear in square brackets.

#### Source Profile EFIRGB/sRGB (PC)/Apple Standard/None [EFIRGB]

The RGB source is the color space used to control color for conversion from screen to printed output. EFIRGB is based on the reference points used in the creation of the Fiery 3850C software. sRGB is based on an average of a large number of PC monitors. Apple Standard is the standard reference point for Apple's ColorSync software.

# Rendering Style Photographic/Presentation/Abs Colorimetric/Rel Colorimetric [Presentation]

The CRD (color rendering dictionary) defines how colors are converted from the RGB color space to device CMYK. Photographic, designed for images, retains the relative balance between colors to maintain the overall appearance of the image. Presentation, designed for bright colors, produces the saturated prints needed for most business presentations, but handles photographic images the same way as the Photographic CRD. Absolute Colorimetric provides the closest match to the CMYK device being simulated, including rendering the paper color as the background. Relative Colorimetric provides a close match to the CMYK device being simulated, regardless of the media used.

# CMYK Sim Prof. SWOP-Coated (EFI) / DIC (EFI) / Euroscale (EFI) / None [None]

CMYK simulation allows color correction to simulate printed output on a commercial press, so that the Fiery 3850C output can be used for proofing. The SWOP-Coated standard is used in the United States, DIC in Japan, and Euroscale in Europe. Custom simulations are user defined and named. The simulations provided with the Fiery 3850C have the designation "EFI" after their names.

If any custom simulations have been created and loaded on the Fiery 3850C with ColorWise Pro Tools, they also appear in the list of simulations. A custom simulation can be selected as the default simulation. See the *Color Guide* for more information about custom simulations.

# Spot Color Match On/Off [On]

With this option On, the Fiery 3850C uses an internal lookup table to print the best equivalents of PANTONE colors. With this option Off, PANTONE colors are printed using the CMYK values defined in the originating applications. See the *Color Guide* for more information.

#### Pure Black Text On/Off [On]

The Pure Black Text option optimizes black text and line art. The option also minimizes toner use for documents consisting of both color and black-only pages.

With this option On, black text and line art are printed with black toner only. With the option Off, black text and line art are printed using all four colors of toner. See the *Color Guide* for more information.

# Black Overprint On/Off [Off]

With this option On, black text overprints on colored backgrounds. With this option Off, black text knocks out color backgrounds. Generally this option should be On. See the *Color Guide* for more information.

### Administrative functions in the Setup menu

The remaining choices in the Setup menu are intended to help you manage print jobs and color output but are not required for printing.

- Change Password enables you to create or change an Administrator password on the Fiery 3850C so that casual users cannot enter the Setup menus and change Fiery 3850C settings without permission. The Administrator password also controls many functions available from the job management tools.
- Resets can clear logs and all queued jobs, clear fonts, reset color and can also reset the Fiery 3850C Setup options to the factory defaults.

### **Change Password**

Change Password enables you to set or change the Administrator password for the Fiery 3850C. Anyone with the Administrator password can modify the Setup options, and control the flow and order of print jobs with the job management tools.

When the Fiery 3850C is installed, there is no password. If you do not create an Administrator password, users are not required to enter a password to modify the Setup or use the administrator functions in the job management tools. If an Administrator password has been set previously, you are required to enter it when you run Setup. For more information, see "Entering Setup information" on page 3-4.

For more information on Administrator access privileges, see page 2-3. For information on controlling print jobs with the job management tools, see the Job Management Guide.

#### TO CHANGE THE FIERY 3850C PASSWORD:

- 1. Scroll the main Setup menu and choose System Setup
- 2. Press Enter until you reach the Change Password option.
- 3. Enter and confirm the password as described below.

#### **New Password**

Use the up and down buttons to select the characters and the left and right arrow buttons to move between them. The password can be any combination of letters and numbers up to 19 characters. Choose Enter when you are done. Be sure to keep track of the password.

**Note:** If you forget the Administrator Password, contact your authorized service representative.

#### Verify Password

Enter the new password again exactly as before to verify that you have entered it correctly. If you make a mistake, you are prompted to enter the password again. The new password is effective after you save changes and reboot the Fiery 3850C.

#### Resets

Resets enables you to clear all queued print jobs from the Fiery 3850C—jobs in the Fiery 3850C Print, Hold, and Printed queues. Jobs can also be deleted, individually or as a group, from the job management tools.

Resets also clears all jobs archived on the Fiery 3850C hard disk, the index of archived jobs, and the Job Log. If you keep Job Logs, print or export the Job Log before you choose Clear Log/Queues.

In addition, you can clear fonts and restore default color settings on the Fiery 3850C.

To reset these options, Scroll to the main Setup menu and select Resets. Choose the options that you want reset: Clear Log/Queuess, Clear Fonts, Reset Color.

If you want to return the all the printer features to Fiery 3850C defaults, choose Yes to Restore Defaults. Choosing Restore Defaults returns the Fiery 3850C to its default settings. Restore Defaults also clears all queued jobs from the Fiery 3850C. The Job Log is cleared at the same time. Restore Defaults does *not* reset color settings. Use Reset Color to reset color settings.

### **Exit Setup**

After speciying all setup items, press Cancel and the Fiery 3850C reboots and any changes you entered during the Setup take effect. If you do not press Cancel, the Fiery 3850C will reboot after a few moments.

### Printing a Configuration page from the Control Panel

The Configuration page lists all the settings in effect from the current Setup. After you have finished running Setup, print a Configuration page to confirm your settings. The Configuration page can also be printed from the Command WorkStation. See page 4-26 for details.

After you make changes to Setup and press Cancel, the Fiery 3850C reboots. This allows the Fiery 3850C to recognize the new settings and display them properly on the Configuration page. Allow the Fiery 3850C to reboot and return to Ready before printing a Configuration page. In particular, the reboot is necessary if you specified the DHCP, BOOTP, or RARP protocol to obtain an IP address automatically for the Fiery 3850C.

Post the current Configuration page near the server for quick reference. Users need the information on this page, such as the current printer default settings.

The other pages you can print from the Control Panel of the Fiery 3850C include the Test Page, PCL and PostScript font lists, Job Log, Counter Page (if enabled), Help Map, and PANTONE, CMY, and RGB color charts. For information on these pages, see the *Job Management Guide*.

#### TO PRINT THE CONFIGURATION PAGE:

- At the Control Panel, press the Menu button.
- 2. Choose Print Pages From List.
- 3. Choose Configuration.

### Chapter 4: Setting up the Fiery 3850C from a Windows Computer

After you have performed initial Setup (Server, Network and Printer Setup) from the Control Panel, you can change most Setup options from a Windows computer.

### **Accessing Setup**

In addition to using the Control Panel, you can set up the Fiery 3850C remotely. Some Setup options, however, cannot be accessed from remote Setup; use the Fiery 3850C Control Panel instead.

Remote Setup is performed from a Windows computer using the Command WorkStation or Fiery WebSetup. To use either of these applications, you must enter the Fiery 3850C Administrator password. See *Getting Started* for information on system requirements for the Command WorkStation and Fiery WebSetup.

**Note:** Fiery WebSetup is supported on Windows computers only.

### **Remote Fiery Setup**

You can access Fiery 3850C Setup from Fiery WebSetup or the Command WorkStation.

#### TO ACCESS SETUP FROM THE COMMAND WORKSTATION:

- 1. Start the Command WorkStation application.
- 2. Log in as Administrator.
- 3. Choose Setup from the Server menu.



#### TO ACCESS FIERY WEBSETUP:

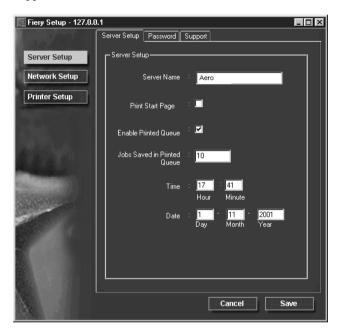
- 1. Start your Internet browser application and enter the IP address of the Fiery 3850C.
- 2. Log in as Administrator.
- When the Fiery 3850C home page appears, click the WebSetup button.
   Regardless of how you access Setup remotely, the following window appears.



**NOTE:** The interface of remote Setup from the Command WorkStation and from Fiery WebSetup is identical. The remote Setup illustrations in this chapter are from the Command WorkStation.

### **Server Setup**

From this window, you can access Server Setup, Passwords, Job Log Setup, and Support.



### **Server Setup**

**Server Name**—Specify a name for the Fiery 3850C. This is the name that appears in the Chooser on an AppleTalk network.

**NOTE:** Do not use the device name (3850C) as the server name. Also, if you have more than one Fiery 3850C, do not give them the same name. Windows does not support two computers with the same name in the same workgroup or domain.



**Print Start Page**—Specify whether the Fiery 3850C should print a start page when it is turned on or rebooted. The Start Page displays information about the Fiery 3850C, including server name, the current date and time, amount of memory installed, last calibration date, network protocols enabled, and print connections published.

**Enable Printed Queue**—Specify whether to enable the Printed Queue, a storage location on the Fiery 3850C disk for recently printed jobs. You can reprint jobs from the Printed queue without sending them to the Fiery 3850C again. If the Printed queue is not enabled, jobs are deleted from the Fiery 3850C disk immediately after they are printed.

**Jobs Saved in Printed Queue**—Specify the number of jobs to be stored in the Printed Queue. Jobs in the Printed queue take up space on the Fiery 3850C hard disk.

**Date & Time**—Specify the system date and time, which are used on the Job Log.

#### **Passwords**

You can set, change, and remove passwords for the Fiery 3850C. Keep careful track of the passwords you set for each.

**Administrator**—Controls access to Setup; Administrator privileges also include Operator privileges.

**Operator**—Controls access to job management functions via the job management tools.

**NOTE:** For more information on Fiery 3850C passwords and the access privileges they allow, see page 2-3.

By default, *no* passwords are set. If you do not specifically set passwords, all users will have access to important functions such as Setup (including setting passwords) and job control. It is strongly recommended that you set at least an Administrator password to protect the Fiery 3850C from unauthorized changes to Setup.



#### TO SET OR CHANGE A PASSWORD:

- 1. Select the password you want to change.
- Type the password in both the Enter New Password and the Verify New Password fields.

Passwords are case-sensitive and can be any combination of letters and numbers up to 19 characters. You must enter the password *exactly* the same way both times. The new password remains in effect until you change it again.



#### TO REMOVE A PASSWORD:

- 1. Select the password you want to delete.
- Delete the asterisks (\*) in both the Enter New Password and the Verify New Password fields.

**Note:** If you forget the Administrator Password, contact your authorized service representative.

### Support

Use the Support tab to enter names, phone numbers, and e-mail addresses of contact people at your organization who provide support for the printer.



### **Network Setup**

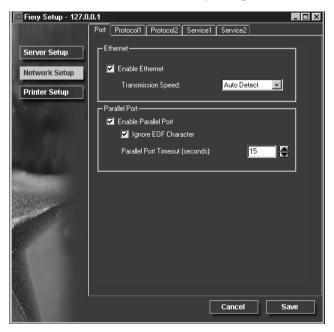
Network Setup configures the Fiery 3850C to receive print jobs over the networks that are used at your site. If the Fiery 3850C is configured to enable more than one protocol, it automatically switches to the correct protocol when it receives a print job.

You can modify these Network Setup options:

- Ports—Ethernet
- Protocols—TCP/IP, AppleTalk, and IPX/SPX
- Print Services—NetWare printing (PServer) and Windows print sharing (SMB),

#### TO CONFIGURE NETWORK PORTS:

Click the Port tab in the Network Setup dialog box.



You can adjust settings as detailed in the following sections.



### **Ethernet (Port Setup)**

**Enable Ethernet**—Select if the Fiery 3850C is to be connected to an Ethernet network.

**Transmission Speed**—Select Auto Detect if your network environment is mixed, or select the speed (10 Mbps or 100 Mbps) of the network to which the Fiery 3850C is attached.

### Parallel Port (Port Setup)

**Enable Parallel Port**—Select if you want to print through the parallel port. You can connect a single Windows computer to the parallel port and print directly to the Fiery 3850C.

**NOTE:** Enabling the parallel port does not conflict with using Ethernet or Token Ring communication to the Fiery 3850C.

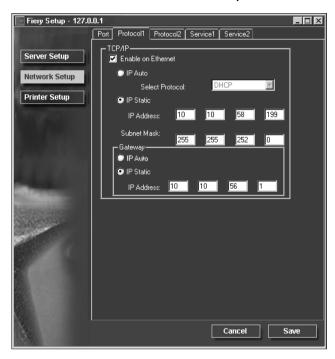
**Ignore E0F Character**—Available only if Enable Parallel Port is selected, this option specifies that the Fiery 3850C should ignore end-of-file (EOF) messages. Check this box to print PostScript files in binary format (not ASCII); under normal circumstances, the box should not be checked. When this option is selected, the Fiery 3850C uses the parallel port timeout value to determine when the end of the file has been reached.

Parallel Port Timeout (seconds)—Available only if Enable Parallel Port is selected, this setting determines how long the Fiery 3850C waits without receiving data from the parallel port before deciding that the current job is complete. Until the timeout, the Fiery 3850C cannot receive new jobs through the parallel port, but it can continue to receive network print jobs.



#### TO CONFIGURE THE TCP/IP PROTOCOL:

• Click the Protocol1 tab in the Network Setup window.



You can change AppleTalk, IPX/SPX, and TCP/IP protocol settings for the Fiery 3850C on the Protocol1 and Protocol2 tabs.

The Fiery 3850C can accept jobs via TCP/IP, AppleTalk, and IPX/SPX simultaneously. To configure the Fiery 3850C, choose each protocol and enter the settings for that protocol.

Enable Ethernet. If your network uses a gateway, enter the gateway address.

When you set an IP address, subnet mask, or gateway address for the Fiery 3850C during Setup, you can allow the Fiery 3850C to get these addresses automatically from a DHCP, BOOTP, or RARP server. First, turn on or reboot the Fiery 3850C and allow it reach Ready. Next, make sure the DHCP, BOOTP, or RARP server is running. Finally, perform Fiery 3850C Setup.



### Protocol Setup (TCP/IP)

**Enable on Ethernet**—Click to enable if you have a TCP/IP network connected to the Fiery 3850C over Ethernet cabling.

You must enable TCP/IP for Ethernet to use the Fiery WebTools over Ethernet. If you are using TCP/IP for printing from Windows NT 4.0/2000 workstations, enabling TCP/IP here also enables you to use Fiery utilities from Windows NT 4.0/2000 workstations using TCP/IP protocols.

**IP Auto (Ethernet)**—Click to allow the Fiery 3850C to obtain its Ethernet IP address by searching the network. Depending on your network and the protocol you select (DHCP, BOOTP, or RARP), the IP address can change.

**Select protocol (Ethernet)**—Select the protocol over which the Fiery 3850C should search for its IP address. Both DHCP and BOOTP allow the Fiery 3850C to obtain the Ethernet IP address and Subnet Mask automatically. RARP obtains only the Ethernet IP address.

Depending on your network, the Fiery 3850C might be assigned a different address after you reboot the Fiery 3850C. With the DHCP setting, the Fiery 3850C can be assigned a different address even if it is not rebooted. Make sure the network is already configured properly for the protocol you select.

IP Static (Ethernet)—Click to assign the Fiery 3850C a static IP address, which will not change.

IP Address (Ethernet)—Enter the Fiery 3850C IP address for Ethernet. You must change the default to a valid address for your network. For information about setting up printing with TCP/IP, see Chapter 5.

Subnet Mask (Ethernet)—If you need to set the subnet mask, enter one of the following values:

- 255.0.0.0 if the IP address starts with a number less than 128
- 255.255.0.0 if the IP address starts with a number from 128 through 191
- 255.255.255.0 if the IP address starts with a number greater than 191

**Note:** Be sure to confirm the subnet mask setting with your network administrator before proceeding. In some cases the required setting may be different from those listed.

# Gateway

If your TCP/IP network has a gateway, and users outside the gateway print to the Fiery 3850C using TCP/IP, enter the gateway address. Obtain the correct gateway address from your network administrator.

**IP Auto**—Use this option to get the gateway address automatically for printing with TCP/IP. This option is available only if you selected DHCP or BOOTP as the protocol.

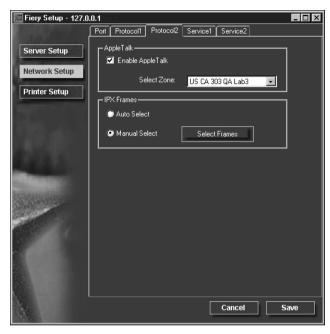
If you select the DHCP or BOOTP protocol and later change it to RARP, you must return to Gateway Setup and enter a static Gateway address. You can then set the address manually. This is because RARP does not support automatic assignment of the gateway address.

**IP Static**—Use this option to set the gateway address for printing with TCP/IP. If your network uses a gateway, you must change the default to a correct gateway address for your network.



#### TO CONFIGURE APPLETALK:

• Click the Protocol2 tab in the Network Setup window.



# Protocol Setup (AppleTalk)

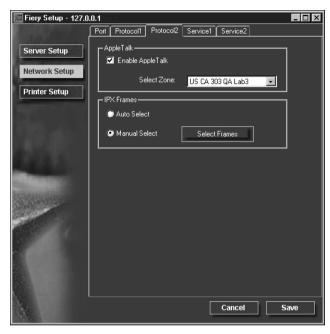
**Enable AppleTalk**—Select to enable Apple Talk if you have an AppleTalk network connected to the Fiery 3850C. This setting enables the Fiery 3850C to communicate over AppleTalk networks.

**Select Zone**—The Fiery 3850C searches the network for AppleTalk zones in your network segment. Scroll through the list to select the AppleTalk zone in which you want the Fiery 3850C to appear. If your segment has only one zone, the Fiery 3850C is assigned to that zone automatically.

If no AppleTalk zone can be found, your network may have no defined zones, or else the network cable has not been connected (see page 6-4). Choose OK.

#### TO CONFIGURE IPX FRAME TYPES:

• Click the Protocol2 tab in the Network Setup window.



The Fiery 3850C supports these following Ethernet frame types for IPX/SPX: Ethernet 802.2, Ethernet 802.3, Ethernet II, and Ethernet SNAP. You can also allow the Fiery 3850C to select the frame type automatically.

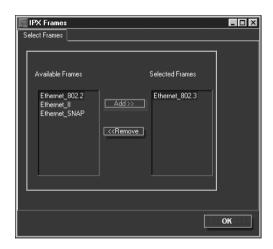


# **Protocol Setup (IPX Frames)**

**Auto Select**—Click Auto Select to specify all supported IPX frames, whether or not they are supported on your network. To determine the frame types that were successfully bound, save your settings, reboot the Fiery 3850C, and print a Configuration page.

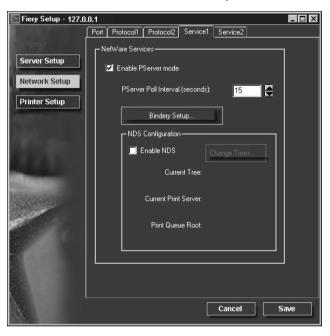
**Manual Select**—To specify IPX frames used with NetWare, click Manual Select, and click the Select Frames button. See your network administrator to verify which frame type to choose.

In the IPX Frames dialog box, select frames and use the Add and Remove buttons to specify the selected frames.



#### TO CONFIGURE PSERVER SETUP:

Click the Service1 tab in the Network Setup window.



You can modify NetWare 3.x (Bindery), and NetWare 4.x/5.x (NDS) configurations. Turn on the Enable NDS option if your network uses NetWare 4.x/5.x in native mode. Click Bindery Setup if your network uses NetWare 3.x, or uses NetWare 4.x/5.x in bindery emulation mode.

**NOTE:** If your network uses *both* NDS and Bindery, set up NDS first. Setting up NDS after Bindery will overwrite Bindery Setup. If your network uses both NDS and Bindery, including using NetWare 4.x/5.x servers in bindery emulation, the Fiery 3850C cannot service NDS and bindery emulation servers on the same NDS tree.



# **PServer Setup (NetWare Services)**

The Enable PServer option must be turned on if you have a Novell server connected. You can, however, change the PServer polling interval and then modify either Bindery Setup or NDS Configuration.

**NOTE:** The terms NetWare server, Novell server, and IPX server are in common use and are used here interchangeably to mean the server on an IPX network running Novell NetWare networking software.

# **PServer Setup (NDS Configuration)**

In initial setup, the Fiery 3850C was connected to the network and an NDS directory tree, with a Printer, a Print Server, and one or more Print Queue objects for Fiery 3850C jobs (see page 5-7), was configured. To modify NDS Setup you may need permission to browse the NDS tree. If access to the Print Server is restricted, you will need a login password.

**Enable NDS** 

Check this box if NDS has already been enabled on the network.

Change Trees...

Click to open the NDS Configuration window. This option is available only when Enable NDS is selected.

Add NDS Tree

You can have only one NDS tree, so the following process is required to change trees:

- 1. Select the current NDS tree and click Remove.
- 2. Select the new NDS tree and click Add.

Your new NDS tree selection automatically overwrites any previous tree selection. If you change the NDS tree selection and there are also current Bindery settings, you are alerted that they will be deleted. If you continue with NDS Setup, you can replace Bindery settings afterwards. To exit NDS Setup, choose Cancel.

#### 3. Click OK.

The Select login user window appears.

#### Select User Login

- Select the User Login object from the display in the Select User Login window.
- 2. Enter a password if necessary.
- 3. Click Next.

The Select print server window appears.

#### **Select Print Server**

- 1. Select the print server from the display in the Select Print Server window.
- 2. Enter a password if necessary.
- 3. Click OK.

The Select print queue root window appears.

#### Select Print Queue Root

- 1. Select the print queue root from the display in the Select Print Queue Root window.
- 2. Enter a password if necessary.
- 3. Click Finish.

The NetWare Setup window reappears, showing the new settings.

## Enter Print Server Password

- 1. Enter the Print Server password if necessary.
- 2. Choose OK.



# **PServer Setup (Bindery Setup)**

Use Bindery Setup if you have already configured one or more bindery servers (file servers running NetWare 3.x, or NetWare 4.x/5.x in bindery emulation) with a Print Server and a Print Queue for Fiery 3850C jobs (see page 5-7). Before entering bindery settings, be sure the Fiery 3850C is connected to the network and the NetWare file server is running. You will need a login name, and, if access to the file server or print server is restricted, you will need a login password.

Because you can set up more than one Novell server to handle Fiery 3850C print jobs, Bindery Setup allows you to add or delete new file server connections and view the connections you have selected. The options are:

#### Bindery Setup...

Click the Bindery Setup button to bring up the Novell Setup window.

#### **Novell Setup**

- 1. Click the server you want to add.
- 2. Click Add.
- 3. Enter your user name and password.
- 4. Click Next.

The Add Server window shows a list of print servers you can add.

#### Add Server

- 1. Select a print server from the list on the left.
- 2. Enter a password if a password is required.
- 3. Click Finish.

You return to the main Novell Setup dialog box.

4. Click OK.

#### TO CONFIGURE WINDOWS PRINTING:

• Click the Service2 tab in the Network Setup window.



The Service2 tab provides the following:

• Windows Printing Service enables the Microsoft SMB protocol, which supports peer to peer printing, also known as Windows or SMB printing.

# Service Setup (Windows Printing Service)

For setting up the Windows printing service, these characters are allowed in the text fields: uppercase letters, numerals, space, and the following characters:

-\_.~!@#\$%^&(){}\',

**Note:** Lowercase letters are *not* allowed, except in the Comment field.



Enable Windows Printing Service—Select to enable SMB (Server Message Block), the file and printer sharing protocol built into Windows. Enabling SMB allows the Fiery 3850C to be listed on the network so that Windows clients can print to a particular print connection (Hold, Print, or Direct) on the Fiery 3850C without any other networking software. For information on how to set up a Windows client for Windows printing, see Getting Started.

NOTE: Windows (SMB) printing runs over TCP/IP, so TCP/IP must be configured on the Fiery 3850C and on workstations that use Windows printing.

**Server Name**—The server name is the name that will appear on the network. It can, but does not have to, be the same name as the server name assigned to the Fiery 3850C (see page 4-3).

**Comment**—You can enter information about the printer, up to 15 characters. These comments are listed in the Properties of the Fiery 3850C in Network Neighborhood. Lowercase letters are allowed in this field.

**Domain or Workgroup**—Enter the workgroup or domain where the Fiery 3850C should appear.

Auto IP—If you have already enabled IP Auto in Protocol Setup, and selected either DHCP or BOOTP as the protocol for obtaining an IP address, check this option to allow the Fiery 3850C to obtain the IP address automatically for the WINS Name Server. If you do not check this option, you can use the following two options to specify whether to use a WINS Name Server and what its IP address is.

**Use WINS Server**—Select to use a WINS name server. Broadcasts from SMB devices cannot be routed beyond their original network segment without a WINS name server. Setting up the WINS name server is outside the scope of this manual. To find out if a name server is available, contact your network administrator.

**IP Address**—Enter the IP address of the WINS name server.

Broadcasts from SMB devices cannot be routed beyond their original network segment without a WINS name server. Setting up the WINS name server is outside the scope of this manual. To find out if a name server is available, contact your network administrator.



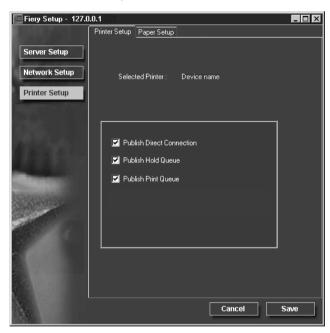
# **Printer Setup**

From this window, you can access two tabs: Printer Setup and Paper Setup.

**Note:** In the following illustration, "Device name" represents the model of the printer connected to the Fiery 3850C, which is 3850C.

#### TO PUBLISH PRINT CONNECTIONS:

• Click the Printer Setup tab.



# **Printer Setup**

Publish Direct Connection—Select to enable users to print (or download) jobs to the Fiery 3850C without spooling. When the Direct connection is published, users can print jobs to the Direct connection and download and delete printer fonts. Jobs printed to the Direct connection are not available to be reprinted from the Printed queue.

**Note:** The Direct connection must be published to download fonts.

Publish Hold Queue—Select to enable users to print jobs to the Hold queue. Jobs printed to the Hold queue are not processed until the administrator or the operator releases them for printing from the job management tools. For users to use Fiery utilities, you must publish the Hold queue, regardless of whether users send jobs to the Hold queue.

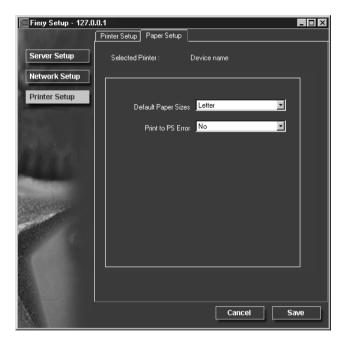
**Publish Print Queue**—Select to enable users to print jobs to the Print queue. Jobs printed to the Print queue are spooled on the Fiery 3850C disk.



#### TO SET PAPER SETUP OPTIONS:

Click the Paper Setup tab in the Printer Setup window.

**NOTE:** In the following illustration, "Device name" represents the model of the printer connected to the Fiery 3850C, which is 3850C.



# **Paper Setup**

On the Paper Setup tab, you can set most of the same options as appear on the Fiery 3850C Control Panel for PS Setup. For more information about color options, see the *Color Guide*.

**Default Paper Sizes**—Specify whether to print on US paper sizes (for example, letter,), or Metric paper sizes (for example, A4) by default.

**Print to PS Error**—Specify whether the Fiery 3850C should print the available portion of a print job when it encounters a PostScript error. In general, this option should be set to No.

- When this option is set to No, printing of the entire job is canceled when a
  PostScript error occurs, but the processed portion of the job and the PostScript error
  information are stored on the Fiery 3850C. You can view the job and the error
  information from the job management tools.
- When this option is set to Yes, the portion of the job processed before the error occurred is printed.

# **Exiting Setup**

When you have finished specifying Setup options, click Save and close the Setup dialog box. You must reboot the Fiery 3850C for the new settings to take effect. Click Reboot Server and then click Yes in the reboot dialog box.

After you have completed Setup and rebooted the Fiery 3850C for the first time, install user software for printing on remote workstations as described in *Getting Started*. To confirm the network connection and your Setup, print a test job from a remote workstation.



# **Printing the Configuration page**

The Configuration page lists the settings in effect for the current Setup. After you have performed Setup, print a Configuration page to confirm your settings.

# TO PRINT THE CONFIGURATION PAGE FROM THE CONTROL PANEL:

- 1. At the Control Panel, press the Menu button.
- 2. Choose Print Pages From List.
- 3. Choose Configuration.

You can also print a Configuration page from Command WorkStation (available as an option). The other pages you can print from the Command WorkStation include the test page, Job Log, color charts, and font list. For information on these Fiery 3850C pages, see the *Job Management Guide*.

# TO PRINT THE CONFIGURATION PAGE FROM COMMAND WORKSTATION:

- 1. From the Command WorkStation, choose Print Pages from the File menu.
- 2. Click Configuration.
- 3. Click Print.

Post the current Configuration page near the Fiery 3850C for quick reference. Users need the information on this page, such as the current printer default settings.

# Chapter 5: Setting up Network Servers

This chapter describes environments that typically include one or more network servers—Novell NetWare servers and Windows NT 4.0/2000 servers—that share printing to the Fiery 3850C. It describes setting up servers that use IPX/SPX or TCP/IP protocols for communicating with the Fiery 3850C. In addition, it includes guidelines for setting up direct communication from Windows NT 4.0/2000 and UNIX workstations, where a network server is optional. The chapter also outlines the requirements for users to print to the Fiery 3850C and to run the Fiery utilities and Fiery WebTools.

The Fiery 3850C can accept jobs concurrently from NetWare, Windows NT 4.0/2000, and AppleShare servers, as well as jobs sent directly from Windows NT 4.0, Windows 2000, or UNIX workstations. Because AppleShare servers require no special configuration, they are not discussed in this chapter, except for use in a Windows NT 4.0/2000 environment (see "Fiery 3850C on a TCP/IP network with Windows NT 4.0/2000" on page 5-11).

If your network is based on Windows NT 4.0/2000, proceed to page 5-11. For information on UNIX workstations, proceed to page 5-18.

**NOTE:** Windows XP is supported. If you use Windows XP, follow the procedures for Windows 2000.

# **Support for Fiery utilities**

The following table describes the Fiery utilities supported over each protocol and Windows platform. More information is provided in later sections, according to your network type.

Fiery utility:	Windows 9x/Me/2000 IPX:	Windows 9x/Me/2000 TCP/IP:	Windows NT 4.0/2000 IPX:	Windows NT 4.0/2000 TCP/IP:
ColorWise Pro Tools	_	V	_	√
Command WorkStation (available as an option)	_	V	_	V



# Fiery 3850C on a NetWare 5.x network with NDPS

The Fiery 3850C supports printing over a NetWare 5.x network running either the TCP/IP protocols or the IPX protocol. For pure IP printing, the Fiery 3850C takes advantage of features in NDPS (Novell Distributed Print Services). For IPX printing, the Fiery 3850C supports the PServer service in Bindery emulation or through NDS (Novell Directory Services). For more information on IPX-based printing, see "Fiery 3850C on a NetWare 3.x or 4.x network" on page 5-5.

**NOTE:** Setting up a NetWare environment correctly requires the presence and active cooperation of the Novell network administrator. You must have administrator privileges on the network to create new NDS or bindery objects.

NDPS is not like the earlier queue-based versions of NetWare printing. Instead, you use an NDPS Manager and a Printer Agent, which control the tasks previously handled by a print queue, print server, and spooler. You can also make the printer driver available for clients to download from Windows computers.

The Fiery 3850C can receive print jobs from NetWare clients over EthernetDuring Fiery 3850C Setup, you select the frame type or types that will be used for communication between the Fiery 3850C and network servers. Frame type refers to the format of a communications packet; frame types are specified in a startup file when the NetWare server (or any other workstation) loads its network drivers.

# Tips for experts—NetWare 5.x networks

Setting up the Fiery 3850C in an NDPS environment is similar to setting up any other PostScript printer on the network. The following information is useful for experienced network administrators:

- Make sure you have a valid IP address for the Fiery 3850C and for any workstations that will print to it or run the Fiery utilities.
- In Fiery 3850C Setup, enable TCP/IP and enter the IP address, Subnet mask, and Gateway address for the Fiery 3850C. You can enter these manually or use DHCP, RARP, or BOOTP protocols to assign the addresses dynamically.
- Bi-directional communication features in NDPS are not supported on the Fiery 3850C.



# Configuring a NetWare 5.x server for printing

## Before you begin

The following procedure assumes NDPS has been installed during NetWare 5 installation and that a Broker is running on the server. Unless you have manually unloaded the Broker, it loads and runs when you install NDPS. Make sure you are using the latest NetWare 5.x service pack and Novell Gateway. Finally, create an NDPS Manager. For more information, see your NetWare documentation.

In Fiery 3850C Setup, make sure you have enabled TCP/IP (page 3-12) on the Fiery 3850C. You can ping the Fiery 3850C (page 5-21) to verify that TCP/IP communication is successful.

#### Setting up the Fiery 3850C printer driver

You first need to create a directory for Windows NT 4.0/2000 or a folder for Windows 95/98/Me in the NetWare server for NDPS to install the corresponding printer driver files from the User Software CD.

#### To SET UP THE PRINTER DRIVER FOR WINDOWS NT 4.0/2000

- 1. Log in to the Novell file server as a superuser or Administrator.
- 2. In the SYS:ndps\resdir\Prndrv\NT4/2000 directory, create a directory called Fiery.
- From the User Software CD, copy the contents of the ENGLISH\PS\_DRVR\WIN\_NT4x/2000 or ENGLISH\PCL\_DRVR\WIN\_NT4x/2000 folder to the Fiery directory.

## TO SET UP THE PRINTER DRIVER FOR WINDOWS 95/98/ME

- 1. Log in to the Novell file server as a superuser or Administrator.
- 2. In the SYS:ndps\resdir\Prndrv\Win95/98/Me directory, create a folder called Fiery.
- From the User Software CD, copy the contents of the ENGLISH\PS\_DRVR\WIN\_9x\_ME or ENGLISH\PCL\_DRVR\WIN\_9x\_ME folder to the Fiery directory.



#### Setting up the Fiery 3850C on a NetWare 5.x network

Depending on the security needs at your organization, you can set up the Fiery 3850C as a Public Access printer or a Controlled Access printer. The following procedure describes setting up a Public Access printer. You can then convert this type of printer to Controlled Access if necessary. For more information, see your NetWare documentation.

#### TO SET UP THE FIERY 3850C AS A PUBLIC ACCESS PRINTER:

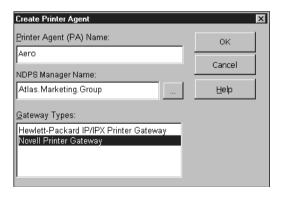
- 1. In NetWare Administrator, double-click the NDPS Manager object you have created.
- In the Details window for the NDPS Manager object, click the Printer Agent List button.

The list of Printer Agents appears.

3. Click New.

The Create Printer Agent dialog box appears.

4. In the Printer Agent (PA) Name field, enter a name.



- 5. Under Gateway Types, select Novell Printer Gateway, and click OK.
- In the Configure Novell PDS for Printer Agent dialog box, select "((NONE))", and click OK.
- 7. In the Configure Port Handler dialog box, choose "Remote LPR on IP" as the connection type, and click Next.
- For Host Address, enter the IP address of the Fiery 3850C.

For Printer Name, enter the name of the Fiery 3850C print connection you want users to print to, and click Finish.

This name must be either print or hold.

- In the Select Printer Drivers dialog box, select the printer driver for Windows 9x/Me/ 2000 and the driver for Windows NT 4.0.
- 11. Click Continue, and click OK.

# Fiery 3850C on a NetWare 3.x or 4.x network

The NetWise features built into the Fiery 3850C support the following network operating environments:

- NetWare 4.x—NDS (Novell Directory Services)
- NetWare 3.x—Bindery services
- Servers running NetWare 4.x in bindery emulation mode

For Ethernet-based networks, the IPX/SPX protocol is supported.

**NOTE:** Setting up a NetWare environment correctly requires the presence and active cooperation of the Novell network administrator. You must have administrator privileges on the network to create new NDS or bindery objects.

The term "bindery server" is used to refer to a Novell file server running NetWare 3.x, or running NetWare 4.x in emulation mode. The term "NDS" is used to describe components of a NetWare operating system running NetWare 4.x in native mode.

NetWare clients print to the Fiery 3850C through the Novell network server. Server setup and client network setup are outlined in this chapter. Client printing setup is described in *Getting Started*, and printing is described in the *Printing Guide*.

During Fiery 3850C Setup, you select the frame type or types that will be used for communication between the Fiery 3850C and network servers. Frame type refers to the format of a communications packet; frame types are specified in a startup file when the NetWare server (or any other workstation) loads its network drivers.



# Tips for experts—IPX networks

Setting up the Fiery 3850C is similar to setting up any other PostScript printer on the network. The following information is useful for experienced network administrators.

The Fiery 3850C with IPX connections has these characteristics:

- Both NetWare 3.x and NetWare 4.x are supported directly. NetWare 4.x is also supported through bindery emulation.
- A minimum connection to the Fiery 3850C consists of a NetWare file server, a NetWare print server, and a NetWare queue.
- A single directory tree (for NetWare 4.x) and up to eight bindery servers can be configured simultaneously.
- The Fiery 3850C looks for print jobs on one NetWare print server per bindery server.
- Each print server can store jobs for any print connection on the Fiery 3850C.

# Overview of IPX printing to the Fiery 3850C

NetWare file servers support the creation of print queues, which are storage areas for print jobs. When a client on a remote computer decides to print, the job is directed to a print queue on the NetWare file server and spooled to the NetWare server disk, freeing up the client workstation.

The queues on the NetWare server must be named to match the Direct connection, Hold queue, and Print queue on the Fiery 3850C. The NetWare queue names should be given an extension corresponding to the Fiery 3850C print connection, as follows:

_print
_hold
_direct

**NOTE:** These extension names must be in English and in all lowercase letters.

There is no need to rerun Setup when adding or removing a NetWare queue; however, you should reboot the Fiery 3850C after a queue is created or removed.

When the Fiery 3850C is configured to connect to a NetWare server, it polls the NetWare server for jobs in each of its queues. If jobs are found, they are automatically transferred over the network to the matching connection on the Fiery 3850C. For example, jobs from the NetWare queue with the \_print extension are sent to the Fiery 3850C Print queue, and so on. While a job is processed and printed, a record of the job is being created. You can access the Job Log containing these records at any time.

# Configuring a NetWare 3.x or 4.x server for printing

The following sections explain how to set up a NetWare file server so that networked users can print to the Fiery 3850C from their workstations, and the Fiery 3850C can obtain print jobs from the NetWare server.

For *each* NetWare file server that you configure, follow these general steps. More detail is provided in subsequent sections and in your NetWare documentation.

- Make sure the server is connected to a functioning IPX network.
- Log in as the Supervisor on a PC connected to the NetWare file server.
- For NetWare 4.x installations, set up an NDS connection (see page 5-9).
- For NetWare 4.x in emulation mode, set the bindery context (see page 5-9).
- For NetWare 3.x and for NetWare 4.x in bindery emulation, set up a file server, a print server, and a print queue for the Fiery 3850C (see page 5-10).

With bindery services, you can route all Fiery 3850C print jobs through the same NetWare file server, or you can configure more than one file server to handle Fiery 3850C jobs.

The functions you perform on the Novell server, on the Fiery 3850C, and on the client workstation, are summarized in the following tables. The first table applies to NDS connections, the second to bindery connections. Complete the operations in the left column, then the center column, then the right column.



# Configuring an NDS connection

## **Abbreviations:**

FS = file server

PS = print server

PQ = print queue (on the NetWare server)

On NDS FS:	In Setup:	On client workstation:
In NETADMIN: Create NDS PQs Create NDS printer and assign PQs Create PS and assign the printer Configure users of the PQs	Port Setup Ethernet Setup Protocol Setup IPX/SPX Setup—select frame types Service Setup PServer Setup and NDS Setup Select Root Browse to select PS Specify PQ search root (optional) Set Polling Interval	Install user software For printing: Connect client to PQs that you set up on the NetWare FS (associated with the PS selected in NDS Setup)

# Configuring a bindery connection

On Bindery FS:	In Setup:	On client workstation:
In PCONSOLE: Select NetWare FS (up to 8) For each FS: Configure PS Configure PQ Configure users of the PQ	Port Setup Ethernet Setup Protocol Setup IPX/SPX Setup—select frame types Service Setup PServer Setup and Bindery Setup Add FS (up to 8) Set Polling Interval	Install user software For printing: Connect client to PQs that you set up on the NetWare FS (associated with the PS selected in Bindery Setup)

#### Setting up an NDS connection

In NDS, all NetWare entities (objects) are organized in a hierarchical tree structure. Objects have a name, properties, and a context which defines the location of the object in the directory tree. For the Fiery 3850C you are mainly concerned with defining a printer, a print server object and one or more print queue objects. Objects are created in NetWare administrator programs such as PCONSOLE, NETADMIN, or NetWare Administrator.

The top-level tree object is known as the [Root] object. The name of the [Root] object is also the name of the tree. Below the [Root] are other objects: either containers (which consist of other objects) or leaf objects (which do not contain other objects). Access to objects is controlled by rights that are defined as properties of each object. Rights are established by network administrators.

#### Setting the NetWare 4.x bindery context

You can connect only one directory tree to the Fiery 3850C. If you need to connect additional NetWare 4.x servers, you can do so by using bindery emulation, which causes the 4.x server to behave like and be accepted as a NetWare 3.x server.

**NOTE:** The file server selected must not be in the same tree as that selected in NDS Setup.

Up to eight bindery servers, whether in native 3.x mode or in 4.x emulation, can connect to the Fiery 3850C. If your server is using NetWare 3.x, proceed to "Setting up a NetWare print queue for bindery" on page 5-10.

In order to set up the NetWare 4.x server in bindery emulation mode for printing to the Fiery 3850C, the network administrator must do the following:

- Determine the Directory Services path to the container in which the print server and the print queue for the Fiery 3850C will be created.
  - The container defines the "bindery context" for your network structure.
- Edit the network startup file to set the bindery context.
- Activate the new bindery context.



#### Setting up a NetWare print queue for bindery

For NetWare 3.x and for 4.x in emulation, the NetWare print server and print queue for Fiery 3850C are created and configured from NetWare Print Console (PCONSOLE), a NetWare utility that is stored in NetWare's PUBLIC directory.

As with NDS, first you create several NetWare entities on a Novell server, then you select them in Network Setup (see page 3-23).

## Setting up NetWare Windows clients for printing

Before setting up client workstations for printing, make sure you perform Network Setup (see page 3-8), and that the settings reflect the entities you created in the NetWare administrator utilities (see page 5-7).

**Note:** For printing to the Fiery 3850C, connect all Windows clients to a Novell NetWare server and permit them to connect to the Netware print server or servers on which you defined a NetWare print queue for the Fiery 3850C.

After the Novell server and Fiery 3850C have been set up, client setup consists of:

 Installing the networking protocol, binding it to the network adapter card, and permitting the client to log in to the NetWare file server.

On Windows 9x/Me/2000 workstations, both the IPX/SPX-compatible protocol and the Client for NetWare Networks should be loaded from the Network Control Panel.

On Windows NT 4.0/2000 workstations, install Client Services for NetWare. Use the CSNW option in the Windows Control Panel to set printing options and specify a preferred NetWare server.

- Setting up the Fiery 3850C as a PostScript printer by installing a PostScript printer driver and the Fiery 3850C PPD (PostScript printer description).
- Adding a network port and connecting the workstation to one or more NetWare queues that have been defined for the Fiery 3850C.

See *Getting Started* for details on how to connect Windows 9x/Me/2000 and Windows NT 4.0 workstations.

Installing Fiery 3850C software, such as color reference files.

See Getting Started for details.

# Fiery 3850C on a TCP/IP network with Windows NT 4.0/2000

When a Windows NT 4.0/2000 computer is configured to connect to the Fiery 3850C using TCP/IP, it can print directly to the Fiery 3850C. If the computer shares the printer over the network, it is acting as a print server to all Windows clients. Client machines print to the Fiery 3850C by printing to the Windows NT 4.0/2000 print server. Printing can then be monitored and controlled at the Windows NT 4.0/2000 server machine.

Typical system combinations are:

- Print server running Windows NT 4.0/2000 Server; clients running Windows NT 4.0/2000 Workstation and Windows 9x/Me/2000
- Print server running Windows NT 4.0/2000 Workstation and clients running Windows 9x/Me/2000

With TCP/IP protocols loaded, you can run the Fiery utilities and Fiery WebTools from a Windows computer.

The Windows NT 4.0/2000 server can also use AppleTalk protocols for printing to the Fiery 3850C as an alternative to TCP/IP. When creating a printer to share with AppleTalk users, do not "capture" the printer. Capturing the printer forces all users to print to the server rather than directly to the printer. If you capture the printer, Fiery 3850C print connections will not appear in the Mac OS Chooser.

# Tips for experts—Windows NT 4.0/2000 with TCP/IP

Setting up printing from Windows NT 4.0/2000 using TCP/IP protocols is similar in some respects to setting up UNIX workstations with TCP/IP. When TCP/IP network connections are made from Windows NT 4.0/2000 workstations, note the following:

- Make sure you have a valid IP address for the Fiery 3850C and for any workstations that will print to it or run the Fiery utilities.
- In Fiery 3850C Setup, enable TCP/IP and enter the IP address, Subnet mask, and Gateway address for the Fiery 3850C.

You can enter these addresses manually or use DHCP, RARP, or BOOTP protocols to assign them dynamically.

- Make sure the Fiery 3850C name and address are listed in a domain name server (DNS)
  or hosts name database used by your system.
- Make sure the system host table includes the correct internal name for the Fiery 3850C as a remote printer.

See page 5-20 for more information.

 For Windows NT 4.0/2000, install the appropriate printer driver files on the Windows NT 4.0 /2000 server.

For more information, see Getting Started.

• Repeat the installation for everyone who prints to the Fiery 3850C.

Each server and workstation running the Fiery utilities with TCP/IP also needs the TCP/IP protocol and the Fiery utility software.

# Configuring a Windows NT 4.0/2000 server to support the Fiery 3850C

To configure a Windows NT 4.0/2000 server to communicate with the Fiery 3850C, follow these general steps. More detail is provided in subsequent sections and in your Microsoft documentation.

- Load the TCP/IP network protocol on the server and configure it with an IP address, subnet mask, and gateway.
- Enter the host name of the Fiery 3850C in the host database used by your system (see page 5-13).
- Perform Fiery 3850C Setup.
- On the Windows NT 4.0/2000 server, create a printer for each Fiery 3850C print
  connection, install the appropriate printer drivers and (optionally) share the printer
  on the network (see page 5-14).
- Enter the host name and remote printer name of the Fiery 3850C in the printer connection. See page 5-20 for more information.
- If the Windows NT 4.0/2000 server is also a workstation, install the Fiery utilities (see *Getting Started*).



#### Adding the Fiery 3850C to the TCP/IP network

If your TCP/IP network consists of Windows NT 4.0/2000 servers and Windows NT 4.0/2000 clients, use the directions in this section. If the network also includes UNIX workstations, also refer to the directions on page 5-20.

# TO ADD THE FIERY 3850C TO A TCP/IP NETWORK WITH A WINDOWS NT 4.0/2000 SERVER:

## Register the IP address of the Fiery 3850C in the host name database used by your system.

For installations that do not have a network administrator or a central host name database, add the Fiery 3850C to the hosts file on the Windows NT 4.0/2000 server. Also add it to the hosts file on any workstations that have TCP/IP loaded and will use the Fiery utilities.

The Windows NT 4.0/2000 hosts file provides compatibility with the UNIX hosts file. The hosts file is used as a local Domain Name Services (DNS) equivalent. It has the same format as the /etc/hosts file on UNIX servers. The format of the hosts entry is:

IP Address<TAB>host name<TAB>#comments

where <TAB> indicates that you press the Tab key.

To determine the IP Address and Server Name of your system, print a Configuration page (see page 3-38).

**NOTE:** If the Fiery 3850C has already been defined in an /etc/hosts file or equivalent host name database on a UNIX workstation on your network, it is recommended that you use the same host name here as you used for the name of the remote printer in the /etc/printcap file.

## 2. Perform Fiery 3850C Setup to support TCP/IP printing.

Enter the options in Protocol Setup (IP address of the Fiery 3850C, Subnet mask, and Gateway address).

# 5-14

#### Installing the Fiery 3850C as a shared printer

The first step in creating a printer is installing the printer driver files, which gives your applications access to printer features. The installation instructions in *Getting Started* can be used for every workstation that will print directly and independently to the Fiery 3850C. When a printer is shared, clients who are not able or are not given permission to establish an independent network connection to the Fiery 3850C can still print through the server.

You can specify sharing of the printer during installation of the Fiery 3850C printer files. If you have not yet installed the Fiery 3850C printer files on the Windows NT 4.0/2000 print server computer, do so now following the instructions in *Getting Started*. During installation, enter the information necessary to share the Fiery 3850C.

If you have already installed the Fiery 3850C printer files on the computer you are using as an NT 4.0/2000 print server, see your Windows documentation for information about sharing the Fiery 3850C.

If more than one Fiery 3850C print connection is published (for example, if both the Print queue and the Hold queue are published), you may wish to create a printer for each print connection so that you and other users can print to each connection directly. When prompted to specify the printer name, enter a name that indicates the Fiery 3850C print connection.

#### Configuring clients of a Windows NT 4.0/2000 server

Each client of a Windows NT 4.0/2000 server is already using a network protocol to communicate with the server. Each client can print to the Fiery 3850C if it has been shared by a Windows NT 4.0/2000 Server or Windows NT 4./2000 Workstation. In that case, the client does not have to use the same network protocol to connect to the Windows NT 4.0/2000 server as the server uses to communicate with the Fiery 3850C.

# TO CONNECT AND PRINT TO THE FIERY 3850C SHARED BY A WINDOWS NT 4.0/2000 SERVER:

 For Windows 9x/Me/2000 clients, before printing, double-click the Windows NT 4.0/ 2000 server icon in the Network Neighborhood window, and double-click the printer name.

You will be prompted to set up the printer. When you choose to set it up, the Add Printer Wizard dialog box appears. Follow the procedures in *Getting Started*.

 For Windows NT 4.0 clients, before printing, connect to the print server computer and select the Fiery 3850C. Right-click and choose the Open command.

When prompted, click Yes to have Windows set up the printer.

After clients have selected the printer, they can choose it from the Print Setup, Page Setup or Print dialog box of their application. Clients can change printing options for their own job, but printer properties are grayed and not available for changing. When a client chooses Print, the job is transmitted to the Windows NT 4.0/2000 print server, and from there to the selected print connection on the Fiery 3850C. The job is listed in the Print Manager on the client workstation, and the administrator can track it in the Fiery 3850C window in the Print Manager on the Windows NT 4.0/2000 print server.

#### Configuring Windows computers without a Windows NT 4.0/2000 server

If your network does not have a Windows NT 4.0/2000 server, Windows computers can still print to the Fiery 3850C. This method of printing is called Windows printing, sometimes known as SMB printing. In this type of network environment, the Windows computers operate in a peer-to-peer environment and communicate directly with the Fiery 3850C when users send print jobs.

Many of the same prerequisites for setting up printing through a Windows NT 4.0/2000 server also apply to setting up Windows printing where a server is not present. The prerequisites are summarized below, and you can find more detail in the Fiery 3850C documentation and your Microsoft documentation.

- Print a Configuration page (see page 3-38).
  - Use the information on this page to determine the current Fiery 3850C settings.
- Load the TCP/IP network protocol (for Windows 9x/Me/2000 only, also load Client for Microsoft Networks) on the computer.
- Verify the Workgroup name of the computer in the Windows Network control panel.
   Make sure the Workgroup name is the same as the one listed in Fiery 3850C Setup.
- For Windows 9x/Me/2000 only, in the Windows Network control panel, configure the computer to allow file sharing, and then restart the computer.
- Ping the Fiery 3850C (see page 5-21) to verify TCP/IP communication is successful.

# Configuring the Fiery 3850C and clients for Fiery WebTools

The Fiery WebTools provide access to many Fiery 3850C functions via the Internet (or intranet), providing additional flexibility in remote management. You can access the Fiery WebTools from a Windows or Mac OS computer.

#### TO SET UP FIERY WEBTOOLS ON THE FIERY 3850C:

- 1. In Fiery 3850C Network Setup, enable TCP/IP.
- Set a valid, unique IP Address for the Fiery 3850C, and then set the subnet mask. Set a gateway address if necessary.
- 3. In Fiery 3850C Printer Setup, confirm the Print Queue is published.

#### TO SET UP FIERY WEBTOOLS ON A COMPUTER:

- 1. Enable TCP/IP networking.
- Assign the workstation a valid, unique IP address and subnet mask, and a gateway address if needed.
- 3. Install an Internet browser that supports the Java language and frames.

Make sure Java is enabled. See *Getting Started* for more information on supported browsers and on Fiery WebTools requirements.

#### TO ACCESS THE FIERY WEBTOOLS:

- 1. Start the Internet browser.
- 2. Enter the IP address or DNS name of the Fiery 3850C.
- 3. Press Enter.

The Fiery 3850C home page appears. Click the name of a particular WebTool to use it.

4. Use the Configure button to enable only certain WebTools for users.



# Setting the WebLink destination

The pre-set WebLink destination can be changed; this function requires the Administrator password, if one has been set.

#### TO CHANGE THE WEBLINK DESTINATION:

- 1. Start your Internet browser application.
- 2. Enter the IP address or the DNS name of the Fiery 3850C.

The Fiery 3850C home page appears.

- 3. Enter the Administrator password (if required) and click OK.
- 4. Press the Control key (Mac OS) or Ctrl key (Windows) as you click the WebLink button.
  The Update WebLink dialog box appears.
- 5. Enter the new WebLink address (URL) and click OK.

# Fiery 3850C on a network with UNIX workstations

When a UNIX workstation is configured with the lpd protocol, and connected to the Fiery 3850C over a TCP/IP network, it can print directly to the Fiery 3850C.

Setting up UNIX workstations requires an administrator with root privileges. After the initial configuration, UNIX users simply submit print jobs to a named printer.

The job management tools, along with the other Fiery utilities and Fiery WebTools, are not available on the UNIX platform. A Windows or Mac OS computer on the same network as the UNIX computer that is set up to use TCP/IP for printing to the Fiery 3850C can use the job management tools to manage print jobs that originate from all workstations on the network.

# Tips for experts—UNIX workstations

Setting up the Fiery 3850C in a UNIX environment has the same requirements as setting up any printer or new device:

- A distinct IP address is needed for the Fiery 3850C as well as for each workstation on the network.
- You select a name for the Fiery 3850C that goes with the IP address.
- The IP address of the Fiery 3850C must be registered for the network in a host database, and also on the Fiery 3850C itself.
- The Print queue or the Hold queue (or both) must be published.

The following information applies especially to the Fiery 3850C:

- Fiery 3850C is a printer controller that understands lpd protocols.
- Fiery 3850C has a remote printer name you must use in order to communicate with it successfully.

See the next section for details.



# Important note about the remote printer name

Whichever UNIX system you use, the name used for remote printer (or rp in the /etc/printcap file) in configuring the Fiery 3850C must be one of the following:

xjprint xjhold xjdirect

The remote printer name is also used when setting up Windows NT 4.0/2000 Workstation or Windows NT 4.0/2000 Server to connect to the Fiery 3850C over TCP/IP. Enter the remote printer name when you set up your Windows NT 4.0/2000 printer, as the "Name of printer or print queue on that (lpd host) server" in the Add LPR Compatible Printer dialog box (see *Getting Started*).

# Setting up the Fiery 3850C on TCP/IP networks

Every machine (host) on a TCP/IP network, including the Fiery 3850C, must have a unique 32-bit internet address (IP address). Contact your network administrator to obtain an address for the Fiery 3850C. Workstations on a TCP/IP network can print directly to the Fiery 3850C as a remote printer, or can print to a Windows NT 4.0/2000 server or UNIX workstation acting as a print server. Since the Fiery 3850C spools jobs and acts as a print server, there is no advantage in placing another print server between a workstation and the Fiery 3850C. If you choose to do so, however, there is no difference in setup except that a client machine does not have its own spooling area.

#### TO SET UP FIERY 3850C PRINTING ON UNIX SYSTEMS:

1. Specify the appropriate settings in Fiery 3850C Server Setup.

To access Fiery 3850C Setup, see page 3-3.

2. Specify the appropriate settings in Fiery 3850C Network Setup.

Enter a valid IP address, subnet mask and gateway address for the Fiery 3850C.

3. Specify the appropriate settings in Fiery 3850C Printer Setup.

Publish the Print queue and/or the Hold queue.

#### TO SET UP TCP/IP FOR COMMUNICATION WITH THE FIERY 3850C:

- 1. A superuser (with root login) must add the Fiery 3850C to the network's IP host table or other system database of network printers.
- 2. In the file or utility used by your network, specify the remote printer name, the print server protocol, the queue, and the spool file for the Fiery 3850C name you assigned.
- 3. Make the Fiery 3850C available as a printer to other network users.
- 4. To verify the TCP/IP connection, ping the IP address or the host name. From any computer on the network, at the command prompt, type:

ping <IP address>

Type the Fiery 3850C IP address assigned in Fiery 3850C Network Setup.

After the Fiery 3850C is set up as a network printer, you can also ping the name you gave to the Fiery 3850C:

ping <hostname>

The server should respond with a message such as:

Reply from <IP address> ...

Some systems will respond with a continuous display of output from the IP address. To stop the output, type Control-C. You can use the ping command at any time.

#### TO PRINT TO THE FIERY 3850C:

- On a UNIX system running SunOS 4.x or other BSD-based variant, use the lpr command to send a job to the Fiery 3850C.
- On a UNIX system running Solaris 2.x or any System V implementation of UNIX, use the lp command to send a job to the Fiery 3850C.
- Windows NT 4.0 /2000 users with the TCP/IP protocol loaded can send print jobs to the Fiery 3850C from their applications or from a command prompt.

When Windows NT 4.0/2000 users print from applications, they can set print options with the printer driver, but not from the UNIX command line.



#### Managing print jobs

UNIX network administrators can use UNIX utilities for viewing the list of jobs, and for printing and removing jobs that are spooled on UNIX servers. If the network includes a Windows computer that has TCP/IP protocols loaded, you can use the Command WorkStation or WebSpooler to download fonts and files.

Even without the Fiery utilities, you can:

• Print a Job Log manually at any time from Fiery WebSpooler or the Command WorkStation Functions menu (see the Job Management Guide).



## Chapter 6: Administering the Fiery 3850C

This chapter provides tips on managing Fiery 3850C printing, and includes some troubleshooting hints.

## **Administrator functions**

Administration features are included with the user software and are built into the Fiery 3850C itself. The following table describes where to find information on these features (page references refer to this manual).

For these operations:	And these tasks:	See:
Setting up network servers	Setting up servers to manage and share printing services	This manual
Connecting and setting up the Fiery 3850C	Connecting the Fiery 3850C and performing Fiery 3850C Setup Setting up the Fiery 3850C to allow user access to Fiery WebTools	This manual This manual, Getting Started, and Release Notes
Setting up the printing environment	Setting printer defaults, including modes, imaging, paper size handling, error handling Setting printer model-specific options	Printer Setup and 4-20 PS Setup, page 3-18 Paper Setup, page 4-25 Color Guide Printing Guide
Setting up the job environment	Publishing the Direct connection or the Print queue or Hold queue to end users on various platforms	Printer Setup, page 3-28 and 4-22; Chapter 5
Protecting integrity of users' jobs, maintaining consistency of Fiery 3850C settings	Setting the Administrator password	Passwords, page 3-35 and 4-4; Chapter 2

6-2	2

For these operations:	And these tasks:	See:	
Setting up all new users	Setting up printing, including installing PostScript printer drivers and PPD files for the printer Installing optional user software Installing color reference pages (CMYK swatches, PANTONE Reference, color sample pages) Preparing users to access Fiery WebTools	Getting Started, Release Notes	
Getting users started with printing	Printing to the Fiery 3850C Setting job-specific options Using Fiery utilities	Printing Guide Job Management Guide	
Controlling the job flow	Using Fiery WebTools, the Command WorkStation and Fiery utilities and for managing job priorities, tracking current jobs, canceling jobs, printing jobs in the Hold queue, reprinting from the Printed or Hold queue	Printing Guide Job Management Guide Release Notes	
Job accounting	Viewing, printing, and exporting the Job Log, user notes Resetting the Job Log	Job Management Guide page 3-37	
Calibration and color management	Printing with CMYK simulations Calibrating the Fiery 3850C Printing color samples and swatch pages Installing color profiles	page 3-32 and Printing Guide Color Guide Getting Started	
Maintaining optimal Fiery 3850C performance	Tips Deleting jobs, clearing queues	page 6-3, also Job Management Guide	
Troubleshooting	Troubleshooting Fiery 3850C Setup Printing, printer, and user software troubleshooting	page 6-4, also Printing Guide Job Management Guide	



## Maintaining optimal Fiery 3850C performance

The Fiery 3850C does not require maintenance. Beyond the obvious requirements of servicing and maintaining the printer and replenishing consumables, there are a few things you can do that will improve the overall performance of your system:

#### • Make the best use of your network connections

Publish only connections that will be used; the Fiery 3850C constantly checks all published connections, even if they are inactive. Match the NetWare polling interval and the number of queues or connections to the demand for printing.

Review the published connections by printing a Configuration page. Eliminate the connections that are not being used. It is easy to re-establish them when needed. In general, network connections provide far superior throughput than a parallel port connection.

#### Leave some jobs that are less urgent to times when there is less network traffic or printing

Recurring print jobs or jobs that are not urgent can be printed to the Hold queue. At low-traffic times, the administrator or a user of the job management tools with Operator privileges can move (or copy) all the Hold queue jobs to the Print queue for printing.



#### Make sure you have adequate disk space on the Fiery 3850C

Periodically review the list of jobs in the Hold queue, and the number of jobs being retained in the Printed queue.

An administrator can print or delete jobs that are in the Printed queue and Hold queue. Consider printing or offloading inactive jobs. If disk space on the Fiery 3850C is frequently low, you can disable the Printed queue (in System Setup).

To move or remove queued jobs, use the job management tools. When you free up disk space by removing inactive jobs, new jobs are spooled and printed more quickly.

## Troubleshooting the Fiery 3850C

Startup diagnostics are described in the *Installation and Service Guide* for service technicians. Contact your authorized service/support center if you see any startup error messages or if the Fiery 3850C does not reach Ready status.

#### Troubleshooting during Setup from the Control Panel

The following section explains some error and alert messages that you may see during Setup that might not be self-explanatory.

#### **Network Setup messages**

After this Setup screen:	This message:	Means:
Enable AppleTalk	No AppleTalk zone found.	The Ethernet network cable is not attached to the connector on the Fiery 3850C, or the network cable is not plugged into the hub or network. If your AppleTalk network has zones, and you want to specify a zone for the Fiery 3850C, you must connect the network cable to the Fiery 3850C before performing AppleTalk Setup.  Also could mean that the AppleTalk network does not have zones. Zones are not required for printing to the Fiery 3850C. Press OK to continue.
Protocol Setup or Service Setup (Network Setup)	You must first enable a network port.	
Frame Type selection	Invalid frame size.	The network hub is not connected to a Novell machine when the Fiery 3850C tries to bind.

	6-5

After this Setup screen:	This message:	Means:
	Warning! IPX network number is zero.	No other IPX machine can be found on the network, or the network hub is not connected to the network, when the Fiery 3850C tries to bind. When this occurs, the network number defaults to zero.
Enable NDS	No NDS trees found.	No NDS trees were found on the Novell network. Check to see that the frame types on the Fiery 3850C are properly configured.
Bindery Setup	If you also plan to use NDS, set up NDS before Bindery.	No NDS settings are present. You are reminded to perform NDS Setup before Bindery Setup in case your network includes both NDS and bindery servers.
Select File Server From List	Error. Cannot open bindery connection to NDS server.	Select this server through NDS setup or disable NDS and select it through bindery.
	No NetWare file server found.	No file server was found when Fiery 3850C queried the network to create a list of supported servers or a list of all servers.  Check cable connections and make sure the NetWare server is turned on.
Add File Server	All connections used. Remove server?	You have added the maximum number of bindery servers, which is eight. You now have the option of disconnecting one of those servers, so as to add another.
Add Server, Enter Your Login Name, Enter Your File Server Password	No NetWare print server found.	No print server was found when Fiery 3850C queried the file server you selected.  You must configure a print server and a print queue for every NetWare file server that will handle Fiery 3850C print jobs (see page 5-5).
Any Bindery Setup screen	Novell error code, followed by a message.	Novell NetWare has reported an error. The Control Panel reports the error number and displays a brief message. For the most common errors (listed in the following table), a screen is displayed that enables you to retry the action that evoked the error, such as adding a server. If that is not possible, you are prompted to notify the Novell administrator, who will need to troubleshoot the network. Consult NetWare Administrator documentation for further explanation of Novell error codes.



In Network Setup, when you configure the IPX (Novell) connection, the Fiery 3850C queries the network for Novell file servers and trees, and attaches to them temporarily. If a guest login is enabled, it will be used. If not, you will be prompted to log in from the Control Panel.

If the selected NetWare file server or tree does not have a guest account, or if the guest account has expired or has been disabled by the NetWare supervisor, you will be prompted to notify the IPX (Novell) administrator. In that case, there are two options:

- Enable a guest account on the NetWare server or tree for the purpose of setup.
- Log in with a different account. At the ENTER LOGIN NAME screen, change the default
  name (guest) to supervisor or enter another valid login name. When you are
  prompted for a password, enter the correct password for the account you named.

For any Novell error, make sure:

- Your IPX (Novell) network is connected to the Fiery 3850C.
- The NetWare server you are trying to access is running.
- The Novell network has been configured with at least one print server and queue for the Fiery 3850C.
- You have the appropriate permissions and login information, including username and password, if necessary.
- The Fiery 3850C is configured with the correct frame types for communication with the desired Novell servers.



## Novell error messages

Novell error:	Cause:	Suggested action or exit:
220 Guest account not available.	The guest account, which you have chosen for initial login, has expired or has been disabled by the NetWare supervisor.	Enable a guest account on the NetWare server for the purpose of setup.  Alternatively, log in to a different account. In the ENTER LOGIN NAME screen, change the default name (guest) to supervisor or another valid login name. When you are prompted for a password, enter the correct password for the account you named.
222 Unable to log in to server. Password has expired for login name.	The server has connected to a file server, but is unable to log in to the file server or print server because the password has expired for the login account name or the named print server.	Select a different login account or print server. The error screen exits to the File Server Login screen (if login to file server failed) or NetWare Print Server screen (if login to Print Server failed). Pressing the Menu button returns to the PServer Setup screen.
252 Unable to log in to server. Login does not exist.	The server has connected to a file server, but is unable to log in to the server because the selected login account does not exist on the file server.	Select a different login account.  The error screen exits to the File Server Login screen. Pressing the Menu button returns to the PServer Setup screen.
Unable to connect to file server. File server is down or out of connections.	The Novell file server is down or out of connections.  This error occurs while the server is trying to connect to the requested file server.	Select a different file server (or try to get someone else to log off).  Pressing the Menu button returns to the PServer Setup screen.
nnn Notify IPX (Novell) Administrator.	Indicates other network errors when the Fiery 3850C is already connected to a file server. Something unexpected has happened and the user generally cannot recover without intervention of the network administrator.  Error #197 indicates that you have exceeded the number of login attempts permitted for this account on the NetWare file server.  Error #255 usually indicates a hard failure.	Notify the Novell administrator and report the error number. The error screen exits to the PServer Setup screen.



#### Runtime error messages

For error messages related to canceling jobs and printing, including the Disk Full message and alerts to load media, see the *Job Management Guide*. These messages are reported by the job management tools.

Users can turn on PostScript error reporting as a print option from Mac OS applications.

#### Printer not found

Most failures to find a printer on the network are due to conflicting or missing name or address settings for the Fiery 3850C. You must enter names in specific places. The required names are:

TCP/IP host name (also known as the DNS name), which is defined by your organization.

Enter the host name as the Server Name in Fiery 3850C Setup.

• Remote printer (internal machine) name. Use one of the following when printing with LPR:

```
xjprint
xjhold
xjdirect
```

Use one of the following when printing with SMB:

print hold direct

You must reconfigure one of the Fiery utilities on each workstation if you change the DNS name (also known as the TCP/IP host name) of the Fiery 3850C.



Check the table below for the appropriate name to use.

In this location:	For this item:	IPX/SPX networks:	TCP/IP networks:	See:
System Setup	Server Name option	Administrator defines name	Administrator defines name	page 3-5
Windows NT hosts file	host name	_	DNS name (TCP/IP host name)	page 5-11
Windows NT setup for TCP/IP	lpd host name	_	DNS name (TCP/IP host name)	page 5-11 and Getting
	Name of printer on lpd host machine	_	xjprint or xjhold	Started
UNIX /etc/printcap file (BSD)	rp line	_	xjprint or xjhold	page 5-19
Solaris	lpadmin queuename	_	xjprint or xjhold	
NetWare administration utility	print queues (must be all lowercase and in English)	_direct _print _hold	_	page 5-6
Add New Server dialog box, when configuring a Fiery utility	New Device	Utilities are not supported over IPX/SPX.	3850C	Getting Started
	Server Name	Utilities are not supported over IPX/SPX.	DNS name (TCP/IP host name)	



#### Cannot connect to Fiery 3850C with Fiery utilities

If users cannot connect to the Fiery 3850C, check the following:

• Fiery 3850C Setup—the appropriate network protocol must be enabled, with the correct parameters (for example, for TCP/IP, the IP address, etc.), and you must publish either the Print queue or Hold queue.

You can check these settings quickly by printing a Configuration page.

• On the client workstation—the appropriate network protocol(s) must be loaded, and your Windows directory should contain a configured Efinl.ini file.

#### Cannot connect to the Fiery 3850C with the Command WorkStation

If there is a problem connecting to the Fiery 3850C, an error message is displayed.

The problem can occur:

- When the Fiery 3850C is first turned on
- When the Fiery 3850C reboots
- When you have changed settings affecting the server address and have not reconfigured the connection to the server

If you see this problem, try the following solutions, in order:

- A remote workstation running the Fiery utilities or Fiery WebTools may be interfering by obtaining status information. If possible, close the remote application, and try again to connect.
- Restart the Command WorkStation application and try again to connect.
- Check the configuration of the connection and modify it if necessary, or delete the Efinl.ini file and start over with the process of configuring the connection as described in *Getting Started*.

For Windows 9x/Me, the Efinl.ini file is located in \WINDOWS. For Windows NT 4.0/2000, the Efinl.ini file is located in \WINNT.

• Reboot the Fiery 3850C.

See the Job Management Guide for information on other error conditions.

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# Operating Instructions Printing Guide



For safety, please read this manual carefully before you use this product and keep it handy for future reference.

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This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

#### Industry Canada Class B Notice

This Class B digital apparatus complies with Canadian ICES-003.

#### Avis de Conformation Classe B de l'Industrie Canada

Cet appareil numérique de la Classe B est conforme à la norme NMB-003 du Canada.

#### Certificate by Manufacturer/Importer

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## **Preface**

The Fiery 3850C<sup>™</sup> enables you to use your printer as a networked printer. You can use the Fiery 3850C to print final documents or to proof jobs you will later print on an offset press. You send a print job to the Fiery 3850C as you would to any other printer—you select it from the Printers dialog box on Microsoft Windows computers, or in the Chooser on Apple Mac OS computers—and then print from within any application.

**Note:** The name "Aero" is used in illustrations to represent the Fiery 3850C. The term "Windows 9x/Me" is used in this manual to refer to Windows 95/98/Me. Individual differences are noted. Windows XP is supported. If you are using Windows XP, follow the procedures for Windows 2000.

If you have purchased the Command WorkStation, the Fiery 3850C includes Command WorkStation™ software, which enables an operator to manage all jobs sent to the Fiery 3850C. Some of the job management features of the Command WorkStation<sup>™</sup> are also available from Fiery WebSpooler. Although it might not be the case at all sites, it is assumed that an operator controls and manages jobs sent by users from remote workstations. For information of the features of the Command WorkStation, see the Job Management Guide.

#### About this manual

This manual is intended for those remote users who send jobs via the network between their workstation and the Fiery 3850C. It covers the following topics:

- Printing from a Windows computer
- Printing from a Mac OS computer
- Printing from UNIX
- Using special features, such as printing duplex pages
- Monitoring jobs and accessing information using Fiery WebTools<sup>™</sup>.
- Specifying and overriding job settings, a list of fonts installed on the Fiery 3850C, and troubleshooting information

## About the documentation

This manual is part of a set of Fiery 3850C documentation that includes the following manuals for users and system administrators:

- The Configuration Guide explains basic configuration and administration of the Fiery 3850C for the supported platforms and network environments. It also includes guidelines for setting up UNIX, Windows NT 4.0, Windows 2000/XP and Novel NetWare servers to provide PCL and PostScript printing services to clients.
- Getting Started describes how to install software to enable users to print to the Fiery 3850C. Specifically, it describes installation of the PCL and PostScript printer drivers, printer description files, and other user software provided on the User Software CD. It also explains how to connect each user to the network.
- The *Printing Guide* describes the printing features of the Fiery 3850C for users who send jobs via remote workstations on the network or via a direct parallel port connection.
- The Color Guide provides information on managing the color output of your Fiery 3850C. It addresses concepts and issues associated with printing to the Fiery 3850C and outlines key workflow scenarios. This manual explains how to calibrate your printer and take advantage of the ColorWise color management system, as well as features of ColorWise Pro Tools. In addition, the Color Guide offers information on printing from popular Windows and Mac OS applications.
- The Job Management Guide explains the functions of the Fiery 3850C client utilities, including the Command WorkStation, and how they can be used to manage jobs. This book is intended for an operator or administrator, or a user with the necessary access privileges, who needs to monitor and manage job flow and troubleshoot problems that may arise.
- Release Notes provide last-minute product information and workarounds for some of the problems you may encounter.

## How the Fiery 3850C works

The Fiery 3850C receives files from computers on the network, processes (RIPs) those files, and then sends them to the printer's print engine for printing.

Windows and Mac OS computers communicate with the Fiery 3850C by means of a PostScript printer driver and PostScript printer description (PPD) files. Windows computers can also communicate with the Fiery 3850C by means of a Printer Control Language (PCL) printer driver and PDD files (PCL's equivalent of PPD files). Both drivers enable you to use special features of the Fiery 3850C from the Print dialog box.

### About printer drivers and PPDs/PDDs

A printer driver manages printing communication between your application software and the printer. It interprets the instructions generated by the application software, merges those instructions with printer-specific PPD/PDD options you specify, and translates all that information into PostScript or PCL, a language the printer understands. In other words, the printer driver writes a PostScript or PCL file based on your original file and the options you set from the Print dialog box.

A PPD/PDD file contains information about a particular device's features and capabilities (for example, what paper sizes and media types are supported). The printer driver reads the information in the PPD/PDD file and presents that information to you in the form of options you can choose from the Print dialog box. The PPD/PDD for the Fiery 3850C includes information about the features of both the printer and the Fiery 3850C.

For information on the PPD/PDD options, see Appendix A.

### Supported paper sizes

The Fiery 3850C supports PostScript at 600 and 1200 dpi (dots per inch) and PCL at 600 dpi on a wide range of paper sizes. For more information, see the description of the Paper Size print option in Appendix A.

## Before you begin

Before using the Fiery 3850C, follow these steps:

- 1. Confirm that the system administrator has completed Setup, as described in the Configuration Guide.
- 2. Find out what printer defaults the administrator specified in Setup.

These default settings can affect the results of your print jobs. Check with your administrator or operator for information on these default settings.

- 3. Confirm that the user software is installed correctly on your workstation, as described in Getting Started.
- 4. Find out how your workstation is configured for printing on the network.

If your site has an operator who controls all printing, you may have access to the Hold queue only. In this case, all jobs you send are spooled to the Fiery 3850C and held until the operator sends them to their next stage of processing.

You may also have access to the Print queue. If you send jobs to this queue, jobs spool to the Fiery 3850C and proceed to RIP and print according to your job settings unless someone (you, or an operator, for example) intervenes.

Lastly, you may have access to the Direct connection, which sends jobs straight to the server without spooling.

5. Find out whether the Fiery 3850C is set up to use Fiery WebTools and what your access privileges are.

The administrator may or may not have enabled access to the server via the Internet (or an intranet). If access is enabled, a password may be required to utilize certain functions.

## Chapter 1: Printing from Windows Computers

This chapter describes how to print to the Fiery 3850C from Windows 9x/Me, Windows NT 4.0, and Windows 2000. You can print from a networked Windows computer, from a computer using Windows (SMB) printing. If you plan to print files at another location, you should follow the procedures described in "Saving files to print at a remote location" on page 1-34.

**Note:** If you are using Windows XP, follow the procedures for Windows 2000.

Another way to print from a Windows computer is to download PCL, PostScript, Encapsulated PostScript (EPS), or Portable Document Format (PDF) files using WebDownloader. For details on using WebDownloader, see Chapter 5.

**Note:** For information on setting up the Windows environment for printing with Windows servers connected to the Fiery 3850C, see the *Configuration Guide*. For information on how to connect to the Fiery 3850C over the network, install printer drivers, and install the Fiery utilities, see *Getting Started*.

## **Printing from applications**

Once you have installed the Fiery 3850C printer driver and set it to the proper port as described in *Getting Started*, you can print directly from most Windows applications. Simply choose the Print command from within your application.

## Setting options and printing from Windows 9x/Me

To print from Windows 9x/Me, use either the PCL printer driver or the Adobe PostScript printer driver for Windows 9x/Me. Both drivers are included with the Fiery 3850C user software. See *Getting Started* for more information.

Once you have installed the PCL printer driver and PDD file, or the Adobe PostScript printer driver and the PPD file, you can specify print settings for a particular job and print it to the Fiery 3850C.

To print from Windows 9x/Me applications by connecting your computer to a print server via the network, one of the following is required: a NetWare server, a Windows NT 4.0 server, or a UNIX server. For more information, see the *Configuration Guide*.

To print from Windows 9x/Me applications without connecting to a print server, you can use Windows (SMB) printing. For more information, see *Getting Started*.

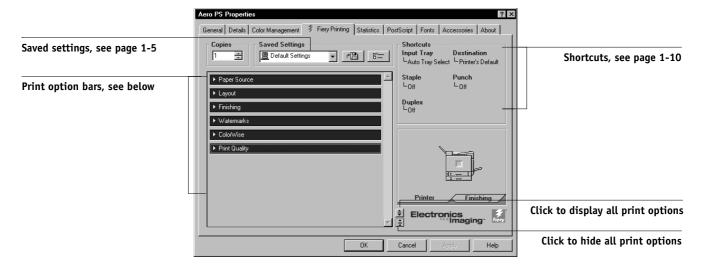
The procedures provide examples on how to use the driver to specify print options. For information about specific print options, refer to Appendix A, "Print Options".

**Note:** The following procedures use Windows 98 PostScript illustrations.

**NOTE:** The interface may vary slightly depending on whether you are using the PostScript or PCL driver.

## TO SET PRINT OPTIONS AND PRINT FROM WINDOWS 9x/ME USING THE PCL OR ADOBE POSTSCRIPT PRINTER DRIVER

- 1. Click the Start button, point to Settings, and click Printers.
- 2. Select the icon for the Fiery 3850C and choose Properties from the File menu.
- 3. Click the Fiery Printing tab.

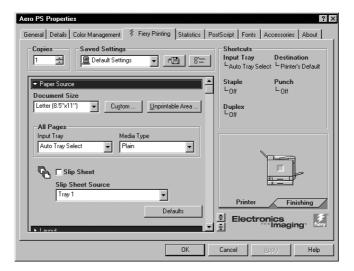


## 1-3 Printing from applications

The Fiery Printing tab serves as the control center for all frequently used printing functions.

### 4. Click the Paper Source print option bar.

In the Document Size area, specify the page size for the job.



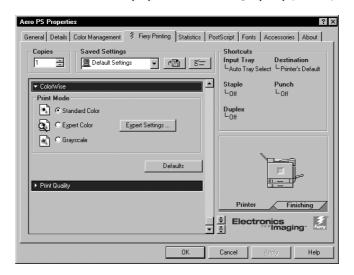
From the Input Tray menu, choose the paper source tray for the job. For example, you can specify that the job should be printed on pages from the Large Capacity Tray.

In the Media Type area, specify the type of media to use for the job.

For information on other print options, see Appendix A, "Print Options".

## 1-4





Specify the color profile options for the job.

**Note:** Expert Settings is not supported for PCL drivers.

#### 6. Specify the settings from the remaining print option bars.

These print options are specific to the Fiery 3850C and the printer. They override settings specified in Fiery 3850C Printer Setup, but can be overridden from Command WorkStation using the job's Properties dialog box, or WebSpooler using the job's Override Print Settings dialog box. For information about these options and overrides, see Appendix A, "Print Options".

**Note:** Some options listed in the printer driver could also be set from an application (for example, collation). In these cases, use the driver option to perform the function, rather than setting it from the application. The application may not set up the file properly for printing on the Fiery 3850C and may also take longer to process.

#### 7. Click OK.

#### 8. From your application, choose Print.

Make sure the Fiery 3850C is selected as your current printer.

#### 9. Click OK.

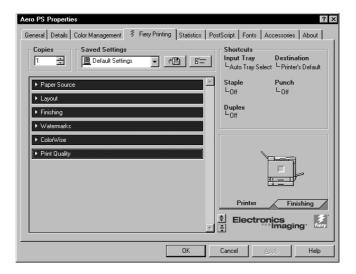
#### Using saved settings

Print option settings can be saved on your hard disk so you can easily load specifically configured settings for a particular job. Settings files can also be shared over a network, using the Import and Export features.

**NOTE:** Although the user interface differs slightly, the following procedures are the same for both PCL and PostScript printer drivers on Windows 9x/Me and Windows NT 4.0.

#### TO CREATE SAVED SETTINGS

- 1. Make sure that Default Settings appear in the Saved Settings pop-up menu.
- 2. Configure the options from the print option bars.

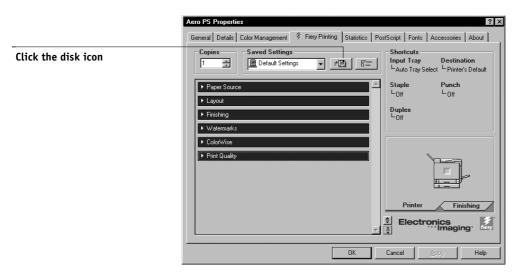


As soon as you change any settings, the Saved Settings menu displays Untitled instead of Default Settings.

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#### 1-6 | Printing from Windows Computers

3. Click the disk icon.



4. Using a maximum of 28 characters, enter a Settings Name and click OK.



The name appears in the Saved Settings pop-up menu.

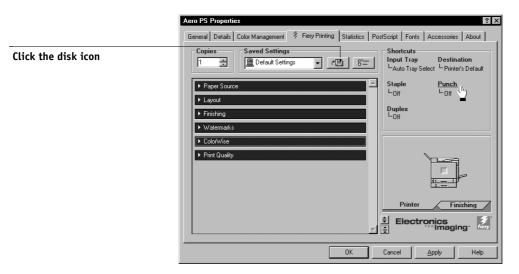
#### TO LOAD SAVED SETTINGS

- 1. From the Fiery Printing tab, click the Saved Settings pop-up menu.
- 2. Choose the settings you want to use.

The printer driver is automatically configured with the saved settings.

#### TO DELETE SAVED SETTINGS

1. From the Fiery Printing tab, click the list icon.



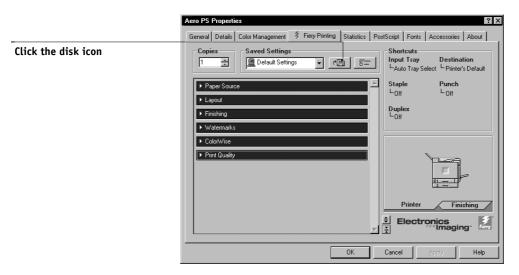
- 2. Select the settings you wish to delete and click Delete.
- 3. Click Yes to confirm deletion, and click OK.

#### TO MODIFY SAVED SETTINGS

- 1. From the Fiery Printing tab, click the Saved Settings pop-up menu.
- 2. Choose the settings you want to modify.

The PostScript and PCL options are automatically configured with the saved settings.

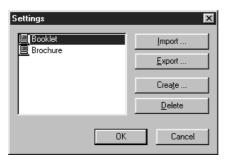
3. Configure the new settings from the print option bars, and click the disk icon.



4. Click OK to save the modified settings.

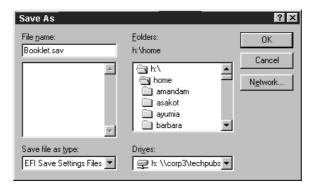
#### TO EXPORT SAVED SETTINGS

- 1. From the Fiery Printing tab, click the list icon.
- 2. Select the Saved Settings you want to export, and click Export.



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3. Browse to the location where you want to save the file, enter a file name, and click OK.

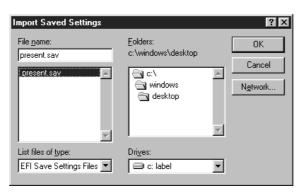


**Note:** The file name must include the .sav extension and can be up to eight characters long (not including the extension). The file name does not have to match the Settings Name.

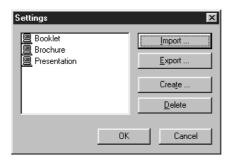
4. Click OK in the Settings dialog box.

#### TO IMPORT SAVED SETTINGS

- 1. From the Fiery Printing tab, click the list icon.
- 2. Click the Import button.
- 3. Browse to the location of the saved settings file you wish to import.
- 4. Select the file, and click OK.



#### Click OK in the Settings dialog box.



Note: When you import saved settings, they appear in the Saved Settings menu under their Settings Name, not the file name. In the example above, the file present.sav (file name) was imported, but it appears in the Saved Settings menu as Presentation (Settings Name).

#### **Using Shortcuts**

The Shortcuts section of the driver interface displays the current settings for some of the most common print options. You can access and change these settings quickly and easily using the Shortcuts. You can also access some page layout and finishing options by right-clicking the image of the page directly below Shortcuts.

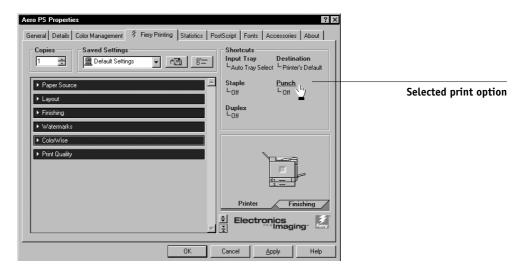
**Note:** You cannot modify the Shortcuts.

NOTE: Although the user interface differs slightly, the following procedures are the same for both PCL and PostScript printer drivers on Windows 9x/Me and Windows NT 4.0.

#### TO SET PRINT OPTIONS USING SHORTCUTS

1. From the Fiery Printing tab, place your cursor over the print option you wish to set.

When your cursor is directly over the print option name, the cursor turns into a hand and the option name is underlined; see the Orientation print option in the example below.



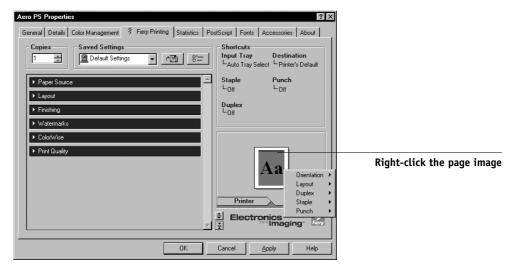
2. Click the selected print option and specify the appropriate settings.

Alternatively, you can right-click the print option and specify the settings directly.

3. Click OK.

#### TO SET PRINT OPTIONS USING THE PAGE SHORTCUTS

1. From the Fiery Printing tab, click the Finishing tab, place your cursor over the page image, and right-click.



- Specify the appropriate settings for the print options.
- Click OK.

#### Setting options and printing from Windows NT 4.0

You can print from Windows NT 4.0 using the PCL printer driver or the Adobe PostScript printer driver, both of which are included on the User Software CD. See Getting Started for more information.

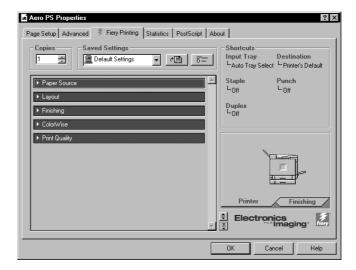
Once you have installed PCL printer driver and PDD file or the Adobe PostScript printer driver and the Fiery 3850C PPD file, you can specify print options. You can also change settings for a particular job when you print it to the Fiery 3850C.

You can set options on a job-by-job basis (see below), or establish default settings for all jobs printed from your computer to the Fiery 3850C (see page 1-15).

NOTE: The following procedures use Windows NT Postscript illustrations. The interface may vary slightly depending on whether you are using the PostScript or PCL driver.

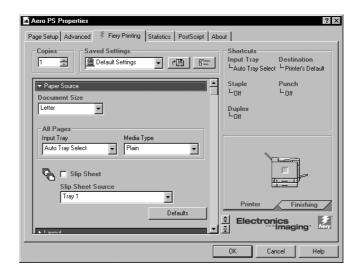
#### TO SET PRINT OPTIONS FOR A SPECIFIC WINDOWS NT 4.0 PRINT JOB USING THE PCL OR THE ADOBE POSTSCRIPT PRINTER DRIVER

- 1. Choose Print in your application.
- Make sure the Fiery 3850C is selected as your printer and click Properties.
- 3. Click the Fiery Printing tab.



The Fiery Printing tab serves as the control center for all frequently used printing functions.

4. Click the Paper Source print option bar and specify the appropriate settings for the print job.



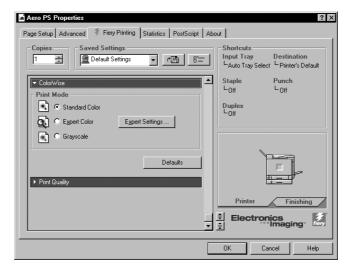
In the Document Size area, specify the page size for the job.

From the Input Tray menu, choose the paper source tray for the job. For example, you can specify that the job should be printed on pages from Large Capacity Tray.

In the Media Type area, specify the type of media to use for the job.

For information on other print options, see Appendix A, "Print Options".

5. Click the ColorWise (PS) or Color Setting (PCL) print option bar.



Specify the color profile options for the job.

**Note:** Expert Settings is not supported for PCL drivers.

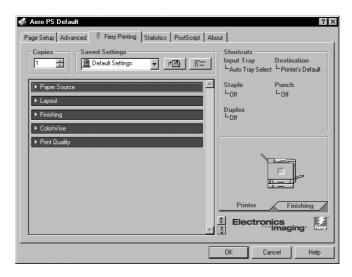
6. Specify the settings from the remaining print option bars.

These print options are specific to the Fiery 3850C and the printer. They override settings specified in Fiery 3850C Printer Setup, but can be overridden from Command WorkStation using the job's Properties dialog box, or from Fiery WebSpooler using the job's Override Print Settings dialog box. For information about these options and overrides, see Appendix A, "Print Options".

7. Click OK and then click OK in the Print dialog box.

#### TO SET DEFAULT PRINT OPTIONS FOR ALL WINDOWS NT 4.0 JOBS USING THE PCL OR THE ADOBE POSTSCRIPT PRINTER DRIVER

- 1. Click the Start button, point to Settings, and click Printers.
- Right-click to select the Fiery 3850C and choose Document Defaults. 2.
- Click the Fiery Printing tab. 3.



- Specify the default settings for your print jobs as described in the procedure starting on page 1-13.
- 5. Click OK.

#### Setting options and printing using the PostScript printer driver or the PCL driver on Windows 2000

You can print from Windows 2000 using the PCL printer driver or Microsoft printer driver, both of which are included with your Windows 2000 system, and the PostScript PPD included on the User Software CD. See Getting Started for more information.

Once you have installed the PCL printer driver and PDD file or the printer driver and the PPD file, you can specify print options.

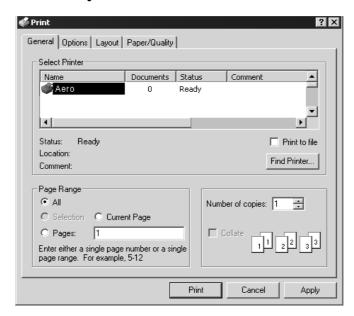
To print from Windows 2000 applications by connecting your computer to a print server via the network, one of the following is required: a NetWare server, a Windows server, or a UNIX server. For more information, see the Configuration Guide. To print from Windows 2000 applications without connecting to a print server, you can use SMB printing. For more information, see the Getting Started.

TO SET PRINT OPTIONS FOR A WINDOWS 2000 PRINT JOB USING THE MICROSOFT POSTSCRIPT PRINTER DRIVER

1. Choose Print in your application.

1-1

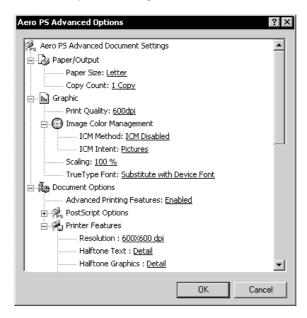
2. Click the Fiery 3850C icon.



**Note:** The dialog box that appears may vary, depending on the application you are printing from.

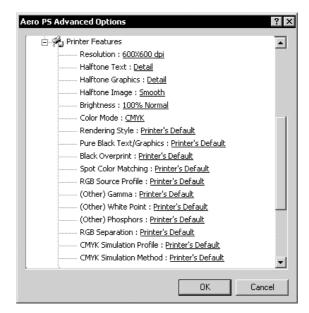
3. Select printing options from the General, Layout, and Paper/Quality tabs.

4. Click the Advanced button on the Layout or Paper/Quality tab to display the Advanced Options dialog box.



Select a setting from the Paper Size pop-up menu.

5. Scroll down to Printer Features, and select the appropriate settings for the print job.



These print options are specific to the Fiery 3850C and the printer. They override settings in Fiery 3850C Printer Setup, but can be changed in the Properties dialog box with the Command WorkStation, or in the Override Print Settings dialog box with Fiery WebSpooler. For information about these options and overrides, see Appendix A, "Print Options".

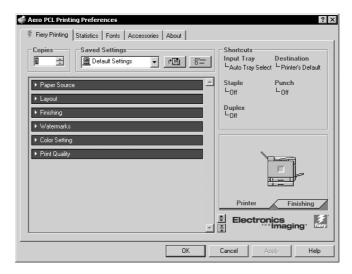
**Note:** As you select print options, incompatible print settings appear with a caution icon next to their names. If you specify incompatible print settings the Incompatible Print Settings dialog box appears. Follow the on-screen instructions to resolve the conflict.

- 6. Click OK.
- 7. Click Print.

The job prints with the specified settings.

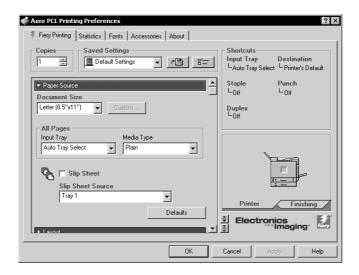
## TO SET PRINT OPTIONS FOR A WINDOWS 2000 PRINT JOB USING THE PCL PRINTER DRIVER

- 1. Choose Print in your application.
- 2. Make sure the Fiery 3850C is selected as your printer and click Properties.
- 3. Click the Fiery Printing tab.



The Fiery Printing tab serves as the control center for all frequently used printing functions.

Click the Paper Source print option bar and specify the appropriate settings for the print job.



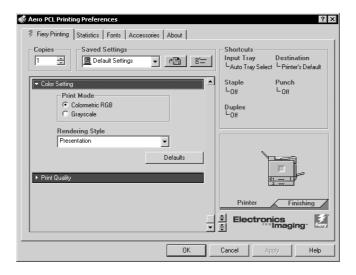
In the Page Size area, specify the page size for the job.

From the Paper Source menu, choose the paper source tray for the job. For example, you can specify that the job should be printed on pages from Auto Select Tray.

In the Media Type area, specify the type of media to use for the job.

For information on other print options, see Appendix A, "Print Options".

#### 5. Click the Color Settings print option bar.



Specify the Print Mode and Rendering Style options for the job.

#### 6. Specify the settings from the remaining print option bars.

These print options are specific to the Fiery 3850C and the printer. They override settings specified in Fiery 3850C Printer Setup, but can be overridden from Command WorkStation using the job's Properties dialog box, or from Fiery WebSpooler using the job's Override Print Settings dialog box. For information about these options and overrides, see Appendix A, "Print Options" .

#### 7. Click OK and then click OK in the Print dialog box.

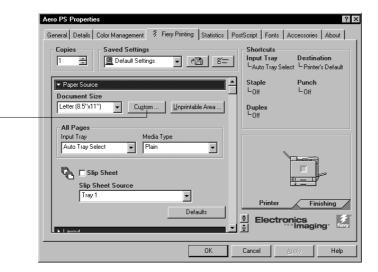
#### Working with custom page sizes in Windows 9x/Me

With custom page sizes, you can define the dimensions of the page. After you define a custom page size, you can use it from within an application without having to redefine it each time you print.

The printer must be set to print custom page sizes. See your printer service representative to enable custom page printing.

## TO DEFINE A CUSTOM PAGE SIZE WITH THE WINDOWS 9x/ME POSTSCRIPT OR PCL PRINTER DRIVER

- 1. Click the Start button, point to Settings, and choose Printers.
- 2. Right-click the Fiery 3850C PS or PCL icon and choose Properties.
- 3. Click the Fiery Printing tab and click the Paper Source print option bar.



**Note:** For PostScript drivers, you must set the Input Tray to Bypass Tray before you click the Custom button. For PCL drivers, set the Input Tray to Bypass Tray and select Custom for the Document Size before you click the Custom button.

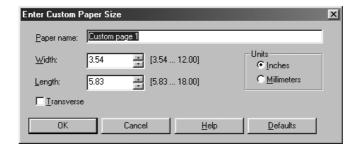
Click Custom

#### 1-23 | Printing from applications

1-2

#### 4. Click the Custom button.

The Enter Custom Paper Size dialog box appears.



5. Specify options to define the custom page size.

**Width**—Specify the width of the print job.

**Length**—Specify the length of the print job.

**Units**—Specify the unit of measurement for the print job.

**Transverse**—Check this option to swap Width and Length dimensions to correspond to the paper feed direction of the print job when printing from the PostScript driver.

**Paper name**—Enter a name for your custom page size. The new custom paper name appears in the Page Size pop-up menu.

NOTE: You cannot enter a name for the custom page size for PCL.

- 6. Click OK.
- 7. To define the unprintable area of the custom page, click the Unprintable Area button, enter the desired information, and click OK.

**Note:** The Unprintable Area feature is supported only on the PostScript printer driver.

8. Click OK.

## TO EDIT A CUSTOM PAGE SIZE WITH THE WINDOWS 9x/ME POSTSCRIPT OR PCL PRINTER DRIVER

- 1. Click the Start button, point to Settings, and choose Printers.
- 2. Right-click the Fiery 3850C PS or PCL icon, and choose Properties.
- 3. Click the Fiery Printing tab, and click the Paper Source print option bar.

#### 1-24 | Printing from Windows Computers



- 4. Select the custom page that you want to edit.
- 5. Click the Custom button.

The Enter Custom Paper Size dialog box appears.

6. Specify your edits, as described in step 5 on page 1-23, and click OK.

## TO PRINT A CUSTOM PAGE SIZE WITH THE WINDOWS 9x/ME POSTSCRIPT OR PCL PRINTER DRIVER

- 1. Choose Print from your application.
- 2. Make sure the Fiery 3850C PS or PCL is selected as the printer, then click Properties.
- 3. Click the Fiery Printing tab, then click the Paper Source print option bar.
- 4. Select the custom page size from the Document Size menu.
- 5. Click OK and then click OK again to print the job.

#### Working with custom page sizes in Windows NT 4.0

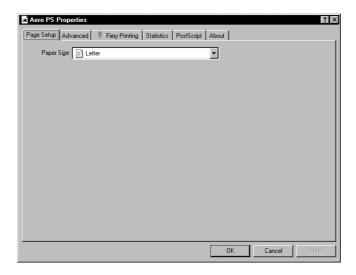
With custom page sizes, you can define the dimensions of the page. After you define a custom page size, you can use it from within an application without having to redefine it each time you print.

The printer must be set to print custom page sizes. See your printer service representative to enable custom page printing.

## TO DEFINE A CUSTOM PAGE SIZE WITH THE WINDOWS NT 4.0 POSTSCRIPT PRINTER DRIVER

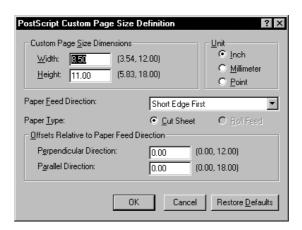
- 1. Click the Start button, point to Settings, and choose Printers.
- 2. Right-click the Fiery 3850C PS icon, and choose Document Defaults.
- 3. From the Page Setup tab, click the Paper Size menu.

Select to keep the setting and change it later.



#### 4. Select PostScript Custom Page Size.

The PostScript Custom Page Size Definition dialog box appears.



#### 5. Specify options to define the custom page size.

**Custom Page Size Dimensions**—Specify the width and height of the print job.

**Unit**—Specify the unit of measurement for the print job.

**Paper Feed Direction**—Specify the paper feed direction of the print job.

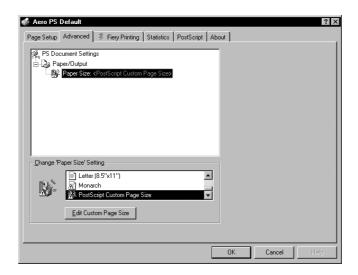
**Paper Type**—Specify the type of paper for the print job.

Offsets Relative to Paper Feed Direction—Specify the offsets (margins) of the print job relative to the paper feed direction.

- 6. Select the appropriate Paper Source.
- 7. Click OK.

## TO EDIT A CUSTOM PAGE SIZE WITH THE WINDOWS NT 4.0 POSTSCRIPT PRINTER DRIVER

- 1. Click the Start button, point to Settings, and choose Printers.
- 2. Right-click the Fiery 3850C PS icon and choose Document Defaults.
- 3. Click the Advanced tab.



4. For Paper Size, select PostScript Custom Page Size.

The PostScript Custom Page Size Definition dialog box automatically opens. If it does not, click the Edit Custom Page Size button.

5. Specify your edits, as described in step 5 on page 1-25, and click OK.

## TO PRINT A CUSTOM PAGE SIZE WITH THE WINDOWS NT 4.0 POSTSCRIPT PRINTER DRIVER

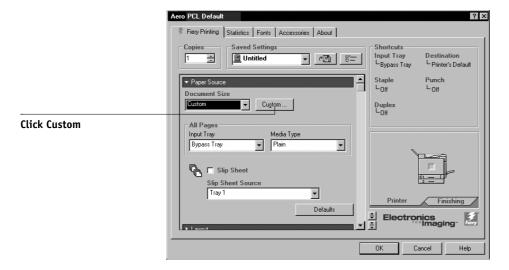
1. Choose Print from your application.

## 1-27 Printing from applications

- 2. Make sure the Fiery 3850C PS is selected as the printer, and click Properties.
- 3. Select PostScript Custom Page from the Document Size menu.
- 4. Click OK and click OK again to print the job.

#### TO DEFINE A CUSTOM PAGE SIZE WITH THE WINDOWS NT 4.0 PCL PRINTER DRIVER

- 1. Click the Start button, point to Settings, and choose Printers.
- 2. Right-click the Fiery 3850C PCL icon and choose Properties.
- 3. Click the Fiery Printing tab and click the Paper Source print option bar.



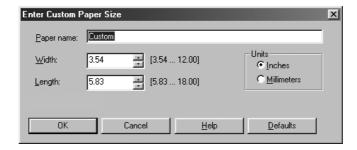
**Note:** Set the Input Tray to Bypass Tray and select Custom for the Document Size before you click the Custom button.

#### 1-28 | Printing from Windows Computers



#### 4. Click the Custom button.

The Enter Custom Paper Size dialog box appears.



5. Specify options to define the custom page size.

**Width**—Specify the width of the print job.

**Length**—Specify the length of the print job.

**Units**—Specify the unit of measurement for the print job.

- 6. Click OK.
- 7. Click OK again.

## TO EDIT A CUSTOM PAGE SIZE WITH THE WINDOWS NT 4.0 PCL PRINTER DRIVER

- 1. Click the Start button, point to Settings, and choose Printers.
- 2. Right-click the Fiery 3850C PCL icon, and choose Properties.
- 3. Click the Fiery Printing tab, and click the Paper Source print option bar.
- 4. Select Custom from the Document Size menu.
- 5. Click the Custom button.

The Enter Custom Paper Size dialog box appears.

6. Specify your edits, as described in step 5 in the previous section, and click OK.

## TO PRINT A CUSTOM PAGE SIZE WITH THE WINDOWS NT 4.0 PCL PRINTER DRIVER

1. Choose Print from your application.

- 2. Make sure the Fiery 3850C PCL is selected as the printer, then click Properties.
- 3. Click the Fiery Printing tab, then click the Paper Source print option bar.
- 4. Select the custom page size from the Document Size menu.
- 5. Click OK and then click OK again to print the job.

#### Working with custom page sizes in Windows 2000

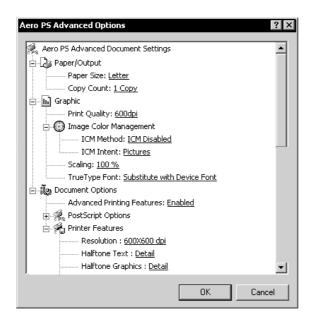
With custom page sizes, you can define the dimensions of the page. After you define a custom page size, you can use it from an application without having to redefine it each time you print.

The printer must be set to print custom page sizes. See your printer service representative to enable custom page printing.

## TO DEFINE A CUSTOM PAGE SIZE WITH THE WINDOWS 2000 POSTSCRIPT PRINTER DRIVER

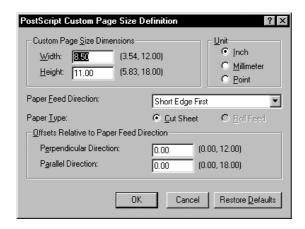
- 1. Click the Start button, point to Settings, and choose Printers.
- 2. Right-click the Fiery 3850C PS icon, and choose Printing Preferences.

#### 3. Click the Advanced button.



#### 4. Select PostScript Custom Page Size from the Paper Size pop-up menu.

The PostScript Custom Page Size Definition dialog box appears.



#### Specify options to define the custom page size.

Custom Page Size Dimensions—Specify the width and height of the print job.

**Unit**—Specify the unit of measurement for the print job.

Paper Feed Direction—Specify the paper feed direction of the print job.

**Paper Type**—Specify the type of paper for the print job.

Offsets Relative to Paper Feed Direction—Specify the offsets (margins) of the print job relative to the paper feed direction.

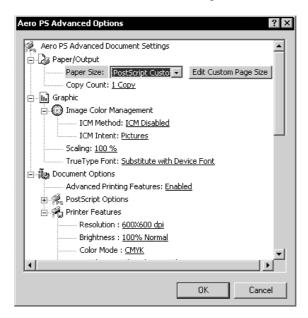
- 6. Click OK to close the Advanced Options dialog box.
- 7. Click OK to close the Printing Preferences dialog box.

You can now specify the custom page size from an application.

#### TO EDIT A CUSTOM PAGE SIZE WITH THE WINDOWS 2000 POSTSCRIPT PRINTER DRIVER

- Click the Start button, point to Settings, and choose Printers.
- Right-click the Fiery 3850C PS icon, and choose Printing Preferences. 2.
- Click the Advanced button. 3.
- 4. Select PostScript Custom Page Size from the Paper Size pop-up menu.

The PostScript Custom Page Size Definition dialog box automatically opens. If it does not, click the Edit Custom Page Size button.



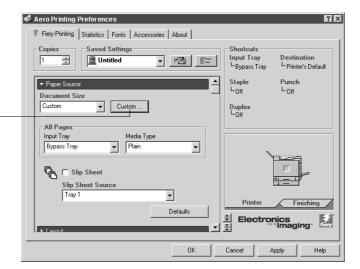
5. Specify your edits, as described in step 5 on page page 1-30 and click OK.

## TO PRINT A CUSTOM PAGE SIZE WITH THE WINDOWS 2000 POSTSCRIPT PRINTER DRIVER

- 1. Choose Print from your application.
- 2. Right-click the Fiery 3850C PS icon, and choose Printing Preferences.
- 3. Click the Advanced button.
- 4. Select PostScript Custom Page Size from the Paper Size pop-up menu.
- 5. Verify the custom page size settings and click OK.
- 6. Click OK to close the Advanced Options dialog box.
- 7. Click OK to close the Printing Preferences dialog box.

#### TO DEFINE A CUSTOM PAGE SIZE WITH THE WINDOWS 2000 PCL PRINTER DRIVER

- 1. Click the Start button, point to Settings, and choose Printers.
- 2. Right-click the Fiery 3850C PCL icon and choose Properties.
- 3. Click the Fiery Printing tab and click the Paper Source print option bar.

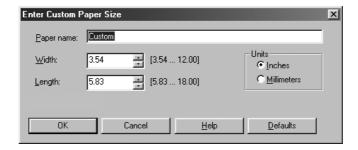


**Note:** Set the Input Tray to Bypass Tray and select Custom for the Document Size before you click the Custom button.

**Click Custom** 

#### 4. Click the Custom button.

The Enter Custom Paper Size dialog box appears.



5. Specify options to define the custom page size.

**Width**—Specify the width of the print job.

**Length**—Specify the length of the print job.

**Units**—Specify the unit of measurement for the print job.

6. Click OK then click OK again to print the job.

#### TO EDIT A CUSTOM PAGE SIZE WITH THE WINDOWS 2000 PCL PRINTER DRIVER

- Click the Start button, point to Settings, and choose Printers. 1.
- Right-click the Fiery 3850C PCL icon, and choose Properties. 2.
- Click the Fiery Printing tab, and click the Paper Source print option bar. 3.
- Select Custom from the Document Size menu.
- 5. Click the Custom button.

The Enter Custom Paper Size dialog box appears.

6. Specify your edits, as described in step 5 in the previous section, and click OK.

#### TO PRINT A CUSTOM PAGE SIZE WITH THE WINDOWS 2000 PCL PRINTER **DRIVER**

1. Choose Print from your application.

- 2. Make sure the Fiery 3850C PCL is selected as the printer, then click Properties.
- 3. Click the Fiery Printing tab, then click the Paper Source print option bar.
- 4. Select the custom page size from the Document Size menu.
- Click OK and then click OK again to print the job.

#### Printing to the parallel port

The Fiery 3850C has a parallel port that enables you to print most files directly from a Windows computer if your network administrator has connected the Windows computer's parallel port to the Fiery 3850C parallel port.

#### TO PRINT FILES TO THE PARALLEL PORT

1. Make sure the parallel port is enabled on the Fiery 3850C.

Check with your site administrator or operator to see whether printing to the parallel port is enabled. See Getting Started for information on setting up parallel port printing on your Windows computer.

2. Select the printer port that is connected to the Fiery 3850C parallel port.

Select one of the local ports: LPT1, LPT2, or LPT3. For instructions, see your Windows documentation.

3. Print from within your application.

#### Saving files to print at a remote location

If you do not have the Fiery 3850C and are preparing files to take to a service bureau or other location, print the final files to the File port (as opposed to one of the local ports). For instructions on printing to the File port, see your Windows documentation.

#### Chapter 2: Printing from Mac OS Computers

You can print to the Fiery 3850C just as you would print to any other printer from any application software. Select the Fiery 3850C as the current printer in the Chooser, and print the file from within the application.

Another way to print from a Mac OS computer is to download PostScript, Encapsulated PostScript (EPS), or Portable Document Format (PDF) files using WebDownloader. For details on using WebDownloader, see Chapter 5.

#### **Printing from applications**

Before you can print to the Fiery 3850C from applications, you must select the Fiery 3850C in the Chooser. Then, using the Adobe PostScript printer driver and the correct PostScript Printer Description file (PPD), you can control many Fiery 3850C printing features by specifying job settings from print dialog boxes.

#### Selecting the Fiery 3850C in the Chooser

Before you print a job, make sure the Fiery 3850C is the currently selected printer.

**Note:** For information about setting up the Fiery 3850C in the Chooser, see *Getting Started*.

#### To select the Fiery 3850C as the current printer

- 1. Make sure the Fiery 3850C is connected to the network and turned on.
- 2. Choose Chooser from the Apple menu.
- 3. Click the AdobePS icon to select it.

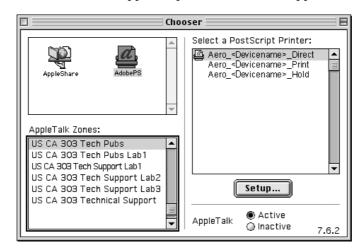
**Note:** Make sure AppleTalk is set to Active.

4. If your network is divided into zones, select the zone in which the Fiery 3850C is located.

2-2 Printing from Mac OS Computers

## 5. Select the Fiery 3850C by <Server Name>\_<Device Name>\_<Queue Name> from the "Select a PostScript Printer" list.

The names of all supported printers in the zone appear in the scroll list on the right.



**Note:** If your system administrator has not enabled the connection to the Print queue or the Direct connection, the corresponding names will *not* appear in this list. For example, if your site has an operator who controls the flow of print jobs from the Command WorkStation, you may be able to print only to the Hold queue. See the *Configuration Guide* for more information on enabling printer connections.

#### 6. Close the Chooser window.

The Fiery 3850C remains selected as the current printer until you choose a new printer in the Chooser.

2-3 Print

#### 2-3 | Printing from applications

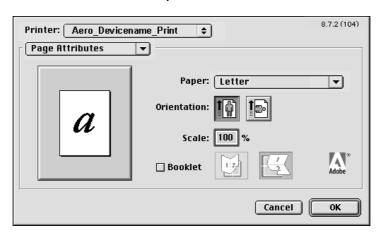
#### Setting options and printing from Mac OS computers

In Mac OS applications, print options are set from both the Page Setup dialog box and the Print dialog box. For details on specific print options, see Appendix A, "Print Options".

**Note:** Some default print options are set by the administrator during Setup. Check with the administrator or the operator for information on the current server default settings.

#### TO SET PRINT OPTIONS AND PRINT WITH THE ADOBEPS PRINTER DRIVER

- 1. Open a file and choose Page Setup from the application's File menu.
- 2. In the dialog box that appears, specify the Page Attributes settings for your print job. Make sure to select the Fiery 3850C in the "Printer" menu.



**Note:** Page Setup dialog boxes vary across applications.

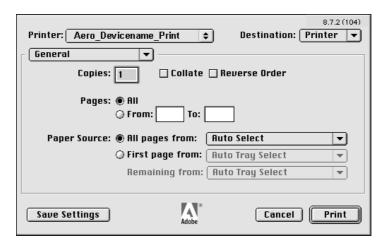
3. Click OK.

2-4 Printing fr

#### **Printing from Mac OS Computers**

#### 4. Choose Print from the application's File menu.

Make sure the Fiery 3850C is selected as your printer and specify settings for the print options displayed.



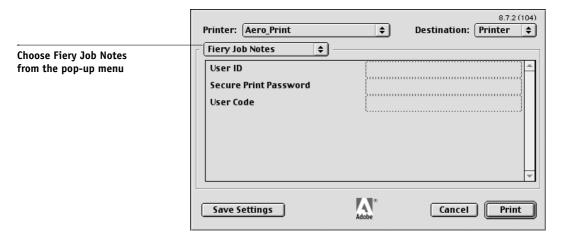
**Note:** Print dialog boxes vary across applications.

From the Paper Source pop-up menu, choose the paper tray for the job. For example, you can specify that the job should be printed on pages. The Paper Source selection is valid for the current job only.

**Note:** If paper loaded in the selected tray is a different size, orientation, and/or media type than that of the job you are sending, the Fiery 3850C displays an error message and the job will not print. You should then load the correct paper in the selected tray or cancel the job.

# 2-5 Printing from applications

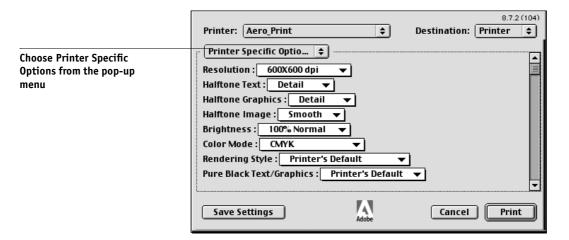
#### 5. Go to Fiery Job Notes.



Enter a User ID for your print job or a Secure Print Password to enter at the printer LCD if you are printing a secure print job.

For more information on entering User Codes, see Chapter 4.

#### 6. Go to Printer Specific Options and specify the appropriate settings for your print job.



These print options are specific to the Fiery 3850C and the printer (you may need to scroll to see all the options). They override settings in Fiery 3850C Printer Setup, but can be overridden from Fiery WebSpooler using the job's Override Print Settings dialog box. For information about these options and overrides, see Appendix A, "Print Options".

2-6 Printing from Mac OS Computers

**Note:** Some PPD options can also be set from an application (for example, Reverse Order printing or collation). In these cases, use the PPD option to perform the function, rather than setting it from the application. The application may not set up the file properly for printing on the Fiery 3850C and may also take longer to process.

7. If you want to make the new settings the default settings, click Save Settings.

### 8. Click Print.

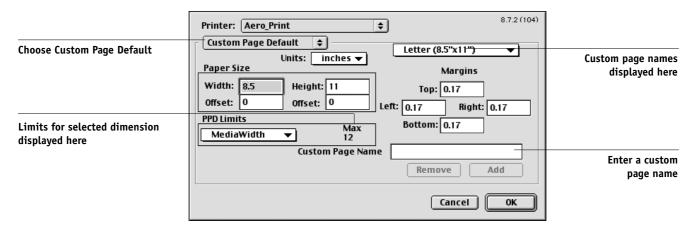
**Note:** The Fiery 3850C does not support printing the Cover Page from the AdobePS printer driver.

# Defining custom page sizes

With custom page sizes, you define the page dimensions and margins. After you define a custom page size, you can use it from within an application, without having redefine it each time you print.

### TO DEFINE A CUSTOM PAGE SIZE

- 1. Choose Page Setup from the application's File menu.
- 2. For Paper, choose Custom.
- 3. From the pull-down menu, choose Custom Page Default.



# 4. Enter the page dimensions and margins.

You can view the minimum and maximum sizes by using the pull-down menu under PPD Limits.

# 2-7 Printing from applications

If you enter invalid sizes, an error message appears. Click Cancel and enter sizes specified within the PPD Limits.

5. To save this custom page size, enter a name for it and click Add.

Saved custom page sizes appear in the menu of page sizes at the top right of the dialog box. To remove a saved custom page size, select it from the menu and click Remove.

6. Click OK.

### TO PRINT A CUSTOM PAGE SIZE

- 1. Choose Page Setup from the application's File menu
- For Paper, choose Custom.
- 3. Click OK.
- 4. Choose Print from your application's file menu.

Specify your printing options.

5. Click Print.

# Chapter 3: **Printing** from UNIX Workstations

You can print to the Fiery 3850C directly from UNIX workstations. Jobs printed to the Fiery 3850C are sent to the xjprint or xjhold queue and can be manipulated from the Command WorkStation or from Windows and Mac OS computers on the network using Fiery WebSpooler.

**Note:** If you print to the xjhold queue, an operator must intervene from the Command WorkStation or Fiery WebSpooler for the job to print; jobs sent to the xjhold queue are spooled to disk and held.

The queue name and Fiery 3850C printer name are determined by your system administrator. Contact your system administrator for the names of your queues.

For information about setting up printing from TCP/IP, see your UNIX system documentation.

# Printing to the Fiery 3850C

You can use UNIX commands to print PostScript and text files to the Fiery 3850C. In general, use basic print commands (lpr, lpq, lprm) to send print jobs to the Fiery 3850C. See UNIX manual pages or other documentation for information about UNIX commands.

#### TO PRINT FROM UNIX

On a system running SunOS 4.1.x or another BSD-based variant, use the lpr command to send a job to the Fiery 3850C as follows:

```
lpr <-Pprinter> <-#copies> <filename>
```

For example, if the xiprint queue of your Fiery 3850C is named print\_Server, your file is named Sample, and you want to print two copies, type:

lpr -Pprint\_Server -#2 Sample

# 3-2

# 3-2 | Printing from UNIX Workstations

 On a system running Solaris 2.x or any System V implementation of UNIX, use the lp command to send a job to the Fiery 3850C as follows:

lp -d <printername> {-n <copies>} <filename>

For example, if the xiprint queue of your Fiery 3850C is named print\_Server, your file is named Sample, and you want to print two copies, type:

lp -d print\_Server -n 2 Sample

### TO DISPLAY A LIST OF JOBS IN THE QUEUE

 On a system running SunOS 4.1.x or another BSD-based variant, use the lpq command to see printer jobs in the queue as follows:

lpq <-P*printer*>

For example, if the xjprint queue of your Fiery 3850C is named print\_Server, type:

lpq -Pprint\_Server

Your workstation displays the contents of the queue.

 On a system running Solaris 2.x or any System V implementation of UNIX, use the lpstat command to see printer jobs in the queue as follows:

lpstat -o <printername>

For example, if the xjprint queue of your Fiery 3850C is named print\_Server, type:

lpstat -o print\_Server

Your workstation displays the contents of the queue.

# 3-3 Printing to the Fiery 3850C

# TO REMOVE JOBS FROM THE QUEUE

**Note:** Unless you log in as the root user, you can remove only your own jobs.

 On a system running SunOS 4.1.x or another BSD-based variant, use the lprm command to remove jobs from the queue as follows.

```
lprm <-Pprinter> <job #...>
```

You can use the lpq command to check the job number.

For example, to remove job number 123 from the xjprint queue of your Fiery 3850C named print\_Server, type:

```
lprm -Pprint_Server 123
```

The lprm command reports the names of any files it removes.

• On a system running Solaris 2.x or any System V implementation of UNIX, use the cancel command to remove jobs from the queue.

```
cancel <printername> <job ID>
```

For example, to remove job number 123 from the xjprint queue of your Fiery 3850C named print\_Server, type:

cancel print\_Server 123

# 4-1 Printing simulations

# Chapter 4: Special Features

This chapter describes some of the special features supported by the Fiery 3850C including:

- Printing simulations
- Printing duplex pages
- · Check and Print Jobs
- Secured Print Jobs
- Entering User Codes

# **Printing simulations**

You can use the Fiery 3850C to proof offset press jobs or to simulate the output of other print devices by specifying settings for the CMYK Simulation Profile (from the printer driver) print option. This option affects CMYK data only.

The Fiery 3850C provides CMYK Simulation targets for the major international press standards: SWOP, DIC, and Euroscale. You can also create, save, and import custom simulation profiles using ColorWise Pro Tools (see the *Color Guide*).

- The Fiery 3850C provides CMYK Simulation targets for the major international press standards: SWOP, DIC, and Euroscale. When printing simulations on the Fiery 3850C, choose the CMYK Simulation Profile setting corresponding to the press standard for which the CMYK data was prepared, or choose a custom simulation profile.
- To simulate the color of a copy made from the printer glass, choose the Match Copy setting. This setting bypasses Fiery 3850C calibration.

# **Printing duplex pages**

You can use the Fiery 3850C to print 2-sided (duplex) pages.

### TO PRINT DUPLEX PAGES

1. When specifying print options, set Duplex to the desired setting.

prints both sides using the same long edge. prints using the same short edge.

- 2. Set other options and click OK.
- 3. Click Print.

# **Check and Print Jobs**

Use this option to specify if you want to print and proof a copy of your print job before printing multiple copies of the job.

# TO SPECIFY A CHECK AND PRINT JOB ON A WINDOWS COMPUTER

1. Choose Print from the application's File menu.

The print dialog box appears.

2. Select the Fiery 3850C and click Properties (Windows 9x/Me), Document Defaults (Windows NT), or Printing Preferences (Windows 2000/XP).

**NOTE:** The Check and Print Feature does not work with Windows 2000/XP PostScript printer drivers.

- 3. Click the Fiery printing tab.
- 4. Under the Finishing print option bar, select Check and Print under the Job Type print option.
- 5. Select other print options and click OK
- 6. Click Print

A copy of your job will print at the Fiery 3850C.

7. Proof and verify your print job.

# 4-3 Check and Print Jobs

If you want to print out or cancel the remaining copies at the control panel, see the "To retrieve Check and Print job copies at the control panel" on page 4-3.

# TO SPECIFY A CHECK AND PRINT JOB ON A MAC COMPUTER

- 1. Choose Print from the application's File menu.
- 2. Select Printer Specific options from the pull-down menu.
- 3. Under the Job Type print option, select Check and Print.
- 4. Click Print.

# TO RETRIEVE CHECK AND PRINT JOB COPIES AT THE CONTROL PANEL

- 1. From the control panel, select the Menu button and select Check and Print.
- 2. Press the Enter button.

Verify the user name and the name of the document displays.

3. Press the Enter button.

Verify the number of copies remaining.

**Note:** You can change the number of copies using the arrow keys. If you want to cancel the job, select 0.

4. Press the Enter button to print out the remaining copies.

# **Secured Print Jobs**

This option is used to specify if you want to enter a specific user name and password to make your print job private.

#### TO SPECIFY A SECURE PRINT JOB ON A WINDOWS COMPUTER

1. Choose Print from the application's File menu.

The print dialog box appears.

- 2. Select the Fiery 3850C and click Properties (Windows 9x/Me), Document Defaults (Windows NT) or Printing Preferences (Windows 2000/XP).
- 3. Click the Fiery printing tab.
- 4. Under the Finishing print option bar, select Secure Print under the Job Type print option.
- 5. Enter a User ID and a Secure Print Password to enter at the control panel.

**Note:** If you do not enter the User ID and Password, the job will be lost and you will not be able to retrieve the job.

**Note:** The User ID must not exceed 8 characters and the Secure Print Password must be 4 digits.

- 6. Set other print options and click OK.
- 7. Click Print.

Your job will not print until you retrieve it at the Fiery 3850C. See the procedure, "To retrieve a secure print job from the control panel" on page 4-5 on how to retrieve secured print jobs.

### TO SPECIFY A SECURE PRINT JOB ON A MAC OS COMPUTER

- 1. Choose Print from the application's File menu.
- 2. Select Printer Specific options from the pull-down menu.

# 4-5 Entering User Codes

- 3. Under the Job Type print option, select Secure Print.
- 4. Select Fiery Job Notes from the pull-down menu.
- 5. Enter a User ID and a Secure Print Password.

**NOTE:** The User ID must not exceed 8 characters and the Secure Print Password must be 4 digits.

# TO RETRIEVE A SECURE PRINT JOB FROM THE CONTROL PANEL

- 1. From the control panel, select the Menu button and select Secure Print.
- 2. Press the Enter button.

Verify the User ID and name of document displays.

3. Press the Enter button.

Scroll by using the left/right buttons and enter the password digits by using the arrow buttons.

**Note:** If you enter the wrong password, you will be prompted to retry.

4. Press Enter and use the arrow buttons to choose to print or delete your secure print job.

# **Entering User Codes**

A User Code can be entered by using the Statistics tab in the Windows printer driver or in Fiery Job Notes in the Mac printer driver. A User Code can be assigned optionally to each print job. A tally of all jobs printed using a User Code can be viewed or exported.

To view or export a tally of all jobs printing using a User Code, see your printer's documentation.

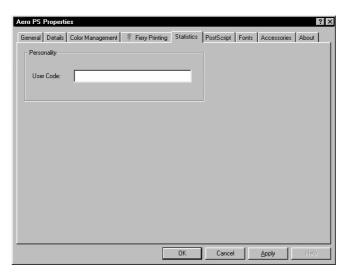
**Note:** Supported tabs may vary. The following procedure uses Windows 98 windows with any Windows Me and/or Windows NT/2000/XP differences noted.

## TO ENTER A USER CODE FROM THE POSTSCRIPT OR PCL PRINTER DRIVER:

1. In the Printer's window, right-click the Fiery 3850C icon and choose Properties (Windows 9x/Me), Document Defaults (Windows NT) or Printing Preferences (Windows 2000/XP).

**Note:** Entering User Codes does not work on Windows 2000/XP PostScript printer drivers.

### 2. Click the Statistics tab.



# 3. Using a maximum of 8 digits, enter a User Code.

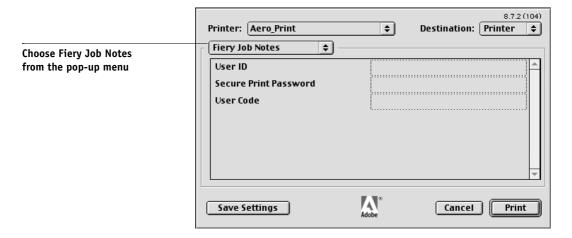
When a User Code is entered, a tally of all jobs printed using this code can be viewed and printed.

# 4. Click OK.

For more information on exporting or viewing a tally of jobs, see your copier's documentation.

# TO ENTER A USER CODE FROM THE MAC PRINTER DRIVER

- 1. Open a file and choose Print from the application's File menu.
- 2. Go to Fiery Job Notes.



- 3. Using a maximum of 8 digits, enter a User Code in the User Code field.
- 4. Verify print option settings and click Print.

For more information on exporting or viewing a tally of jobs, see your copier's documentation.

# 5-1 Fiery WebTools

# Chapter 5: Tracking and Managing Print Jobs

Fiery 3850C user software includes a variety of tools that allow you to track and manage print jobs. Access to some tools is controlled by your site administrator, but other tools are available to all users.

- The Status, WebLink, and WebDownloader WebTools do not require any special
  access privileges. As long as the administrator has provided users with the IP address
  of the Fiery 3850C, anyone can use these WebTools.
- The Command WorkStation and Fiery WebSpooler all provide the capability to
  view and control the flow of print jobs to the Fiery 3850C. If the administrator has
  set an Administrator password in Setup, you need the password to perform most
  Command WorkStation and Fiery WebSpooler functions. For information on these
  tools and the access privileges needed to use them, see the *Job Management Guide*.
- For more information on the WebSetup Webtool, see the *Configuration Guide*.

# Fiery WebTools

Fiery WebTools reside on the Fiery 3850C hard disk drive but can be accessed over the network from a variety of platforms. The Fiery 3850C has a home page that lets you view server functions and manipulate jobs remotely. This chapter describes only the WebDownloader, Status, and WebLink,. For information on Fiery WebSpooler, see the *Job Management Guide*. For information on WebSetup, see the *Configuration Guide*.

# TO ACCESS FIERY WEBTOOLS

1. Start up your Internet browser application.

See Getting Started for information about supported platforms and browsers.

2. Enter the IP address or the DNS name of the Fiery 3850C.

Check with the operator or administrator for this information.

## 3. If a Log In dialog box appears, select Guest and click OK.

The Log In dialog box appears only if the administrator has set a password. Guest access is sufficient to use the WebDownloader, Status, WebLink, Webspooler, and Installer, WebTools as described in this chapter.

# 4. When the Fiery 3850C home page appears, click to select one of the Fiery WebTools.

Move the cursor over the buttons to display information about the selections.

# Checking Fiery 3850C status with the Status WebTool

You can use the Status WebTool to see what jobs are currently processing and printing. To access the Status WebTool, point your browser to the Fiery 3850C home page and click the Status button. The current RIP Status and Printer Status appear in the window.



To open a new browser window for the Status display, click Float. You can then close other browser windows and leave the Status window open to continue checking the status of the Fiery 3850C. As long as you keep the Status window open, it is dynamically updated.

To obtain more information about the status of jobs, use Fiery WebSpooler or the Command WorkStation, as described in the *Job Management Guide*.

# Accessing information with WebLink

The WebLink button on the Fiery 3850C home page provides a link to another web page or to multiple web pages, provided you have a valid Internet connection. The administrator at your site can set the WebLink destination. Check your Fiery 3850C WebLink for any information available there.

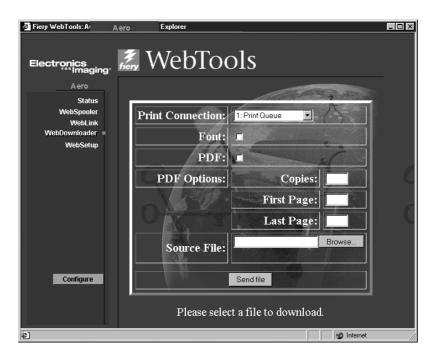
# Downloading files with WebDownloader

Using WebDownloader, you can send PostScript, Encapsulated PostScript (EPS), and Portable Document Format (PDF), PCL, or text files to the printer without first opening the file in an application.

You can also download PostScript and Adobe Type 1 fonts (\*.pfb). When downloading fonts, be sure to check the Font box.

## TO DOWNLOAD A FILE WITH WEBDOWNLOADER

- 1. Start up your Internet browser application.
  - See Getting Started for information about supported platforms and browsers.
- 2. Enter the IP address or the DNS name of the Fiery 3850C.
- When the Fiery 3850C home page appears, click the WebDownloader WebTool.
- 4. Click the WebDownloader WebTool.



# 5. Select the destination.

A file can be downloaded to the Direct connection, Print, or Hold queues. Files sent to the Print queue are spooled in the printer's memory. Files sent to the Hold queue remain in memory until they are moved to the Print queue or are deleted.

- 6. Select if you want to automatically download fonts to your system by indicating a checkmark in the Font checkbox.
- 7. Select if you are downloading a PDF file. and PDF options, such as the number of copies and page range.
- 8. Click Browse to search for the file, then select the file and click Open.
- 9. Click Send File.



# Appendix A: Print Options

Print options give you access to all the special features of your printer and Fiery 3850C. Print options can be specified in several places—in Fiery 3850C Setup, from the printing application, from ColorWise Pro Tools, from the Command WorkStation and from Fiery WebSpooler. The table in this appendix briefly describes each print option, gives its default setting, and provides information on any constraints or requirements in effect.

# Where to set print options

• During Setup

Some settings are specified during Setup by the administrator. For information on the current default server settings, check with the administrator or the operator.

From applications

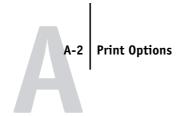
With the Adobe PostScript printer rivers, you can specify job settings when you print a job. See Chapter 1, "Printing from Windows Computers" and Chapter 2, "Printing from Mac OS Computers" for information about specifying job settings from applications.

• From ColorWise Pro Tools

You can set the default CMYK Simulation Profile, RGB Source Profile, Output Profile, Rendering Style, Spot Color Matching, Pure Black Text/Graphics, and Black Overprint settings. See the *Color Guide* for more information on using ColorWise Pro Tools.

• Overrides from the Command WorkStation or Fiery WebSpooler.

To change job settings from the Command WorkStation, double-click a job to display the Properties dialog box. To change job settings from Fiery WebSpooler, double-click a job to display the Override Print Settings dialog box. For more information, see the *Job Management Guide*.



# Print option override hierarchy

The override hierarchy is as follows:

- A user's printer driver settings override the Fiery 3850C Setup and ColorWise Pro Tools settings.
- Settings made from the Command WorkStation or Fiery WebSpooler override the user's printer driver settings.

# **Default settings**

In the following table, underlined settings in the "Option and settings" column indicate default printer driver settings (PPD defaults). In other words, if you do not use the printer driver interface to configure a particular option, the Fiery 3850C prints the job with the underlined setting.

For options that can be configured during Setup from the Control Panel, Command WorkStation, WebSetup, or ColorWise Pro Tools choosing **Printer's default** results in the Fiery 3850C printing the job with the Setup setting specified. For options that cannot be configured during Setup, the Fiery 3850C prints the job with a pre-configured "Printer's default" setting. For more information, see the "Requirements, constraints, and information" column.

To find out about the current Setup defaults, print the Configuration page from the Command WorkStation or from the Fiery 3850C Control Panel.



Option and settings: (Default setting is underlined)	Description:	Requirements, constraints, and information:
Black Overprint On/Printer's default/Off	Select <b>Off</b> to print black text with knockouts. Select <b>On</b> to overprint black text.	The <b>Printer's default</b> setting reflects the setting specified in Fiery 3850C Setup. For Windows 9x/Me and Windows NT 4.0, choose <b>Expert Color</b> as the Color Mode to access this option. If this option is set to <b>On</b> , the Combine Separations option must be set to <b>Off</b> . Setting this option to <b>On</b> automatically sets the Pure Black Text/Graphics option to <b>On</b> . This option is not available for PCL. For more information, see page A-10 and the <i>Color Guide</i> .
Brightness 85% Lightest/90% Lighter/95% Light/ 100% Normal/105% Dark/ 110% Darker/115% Darkest	Select <b>85%</b> for a substantially lighter image, <b>115%</b> for a substantially darker image, or use one of the settings in between.	
CMYK Simulation Profile Printer's default/SWOP-Coated/ DIC/Euroscale/Simulation-1/ Simulation-2/Simulation-3/ Simulation-4/Simulation-5/ Simulation-6/Simulation-7/ Simulation-8/Simulation-9/ Simulation-10/None	Specify the simulation goal to be used for the current print job.	The <b>Printer's default</b> setting reflects the setting specified in Fiery 3850C Setup. For Windows 9x/Me And Windows NT 4.0, choose <b>Expert Color</b> as the Color Mode to access this option. This option is not available for PCL. For more information, see the <i>Color Guide</i> .
Collate Off/On/	Specify how to output multiple-page/multiple-copy jobs.	For more information, see page A-11.



Option and settings: (Default setting is underlined)	Description:	Requirements, constraints, and information:
Color Mode Printer's default/CMYK/Grayscale (from the Mac OS and Windows 2000/XP drivers) OR Print Mode (PS) Standard Color/Expert Color/Grayscale (from the Windows 9x/Me and Windows NT 4.0 driver) OR Print Mode (PCL) Colormetric RGB/Grayscale (from the Windows 9x/Me, Windows 4.0 driver, and Windows 2000/XP)	Specify the color mode for the current print job. Select CMYK, Standard Color, Expert Color, or Color for a full-color document. Select Grayscale for a grayscale or black-and-white document.	The <b>Printer's default</b> setting reflects the setting specified in Fiery 3850C Setup. The options differ depending on which driver you use. For Windows 9x/Me and Windows NT 4.0, you must choose <b>Expert Color</b> to set other color print options, including Pure Black Text/Graphics. PCL does not support Expert Color.
Copies <u>1</u> -999	Specify the number of copies of the job to print.	Do not enter a value greater than <b>999</b> .
Destination Printer's Default/ Standard Tray/ External Tray/ Mailbox Tray 1/ Mailbox 2/ Mailbox 3/ Mailbox 4/ Finisher Shift Tray 1/ Finisher Shift Tray 2	Specify the location of your finished print job.	



Option and settings: (Default setting is underlined)	Description:	Requirements, constraints, and information:
Document Size Letter/Letter (8.5"x11")/A3 (297x420mm)/ B4 JIS(257x364mm)/ A4 (210x297mm)/ B5 JIS(182x257mm)/ A5 (148x210mm)/ A6 (105x148mm)/ A6 (105x148mm)/ 11"x17"/ Legal (8.5"x14")/ 5.5"x8.5"/ Executive (7.25"x10.5")/8"x13"/ 8.5"x13/ 8.25"x13"/ Com 10 Env. (9.5"x 4.125")/ Monarch Env. (7.5"x3.875")/ C6Env. (162x114mm)/ C5Env. (229x162mm)/ DLEnv (220x110mm)/8K/16K/ A5/ A4/ A3/ Statement/ Legal/ Tabloid (NT)/ PostScript Custom Page (NT)/ Custom Page 1-3 (Windows 9x/Me)	Specify the size of the paper which to print the document.	For more information on document sizes, see your printer's Setup Guide documentation.
Duplex Off/Side Binding/Top Binding	Select <b>Off</b> for simplex (single-sided) printing. Select <b>Side Binding</b> for duplex (double-sided) printing with both sides using the same top edge. Select <b>Top Binding</b> for duplex printing with the back side upside down.	For more information, see page A-12.
Halftone Text Detail/Smooth	Select what dither screen you want to use for your text. Select a <b>Detail</b> screen if you want the edges of your text to be better defined.	
Halftone Graphics Detail/ <u>Smooth</u>	Select what dither screen you want to use for your graphics. Select a <b>Detail</b> screen if you want a sharper image.	
Halftone Image Detail/ <u>Smooth</u>	Select what dither screen you want to use for your image. Select a <b>Detail</b> screen if you want a sharper image.	



Option and settings: (Default setting is underlined)	Description:	Requirements, constraints, and information:
Input Tray AutoSelect/ Tray 1/ Tray 2/ Tray 3/ Tray 4/ Tray 3 (LCT)/ Bypass Tray	Specify the paper tray to use for your job.	The AutoSelect setting automatically selects the tray containing the paper size specified for the job.
Job Type Normal/ Check and Print/ Secure Print	Specify what type of print job you want to execute.  Select <b>Check and Print</b> to print one copy of your print job to proof before printing multiple copies.  Select <b>Secure Print</b> to make your print job private by selecting a user ID and password to enter at the copier LCD.	For more information on Check and Print and Secure Print jobs, see Chapter 4, "Special Features".
Media Type Plain/ Recycled/ Special/ Color/ Letterhead/ Preprinted/ Prepunched/ Bond/ Labels/ Transparency/ Thick/ Cardstock/ Plain (Duplex Backside)/ Thick (Duplex Backside)	Specify the type of media for your print job. Select <b>Transparency</b> if you will be printing on transparencies.	
Orientation Portrait/Landscape	Specify the orientation of the document. Select <b>Rotated</b> if you want to rotate the pages of your job 180 degrees.	
(Other) Gamma  Printer's default/1.0/1.2/1.4/1.6/ 1.8/2.0/2.2/2.4/2.6/2.8/3.0	Specify a source gamma value for printing RGB images, objects, and text.	Setting this option to <b>Printer's default</b> produces the same result as the <b>2.2</b> setting.  This option is not available for PCL.  To enable this option, RGB Source Profile must be set to <b>0ther</b> .  For more information, see the  Color Guide.



Option and settings: (Default setting is underlined)	Description:	Requirements, constraints, and information:
(Other) Phosphors Printer's default/Hitachi EBU/ Hitachi-Ikegami/NTSC/ Radius Pivot/SMPTE/Trinitron	Specify a source phosphors value for printing RGB images, objects, and text.	Setting this option to <b>Printer's default</b> produces the same result as the <b>SMPTE</b> setting.  This option is not available for PCL.  To enable this option, RGB Source Profile must be set to <b>Other</b> .  For more information, see the <i>Color Guide</i> .
(Other) White Point <u>Printer's default</u> /5000 K (D50)/ 5500 K/6500 K (D65)/7500 K/9300 K	Specify a source white point value for printing RGB images, objects, and text.	Setting this option to <b>Printer's default</b> produces the same result as the <b>5000 K (D50)</b> setting.  This option is not available for PCL.  To enable this option, RGB Source Profile must be set to <b>0ther</b> .  For more information, see the <i>Color Guide</i> .
Output Profile  Printer's default/Fiery 3850C 600 dpi v1F/ Fiery 3850C 1200 dpi v1F/ Output-1/Output-2/ Output-3/Output-4/Output-5/ Output-6/Output-7/Output-8/ Output-9/Output-10	Specify the output profile to be used for the current print job.	The <b>Printer's default</b> setting reflects the setting specified in ColorWise Pro Tools. For Windows 9x/Me and Windows NT 4.0, choose <b>Expert Color</b> as the Color Mode to access this option. This option is not available for PCL. See page A-12 and the <i>Color Guide</i> for more information.
Punch Off/Left/Top/Right	Specify where you want to punch holes	The punch option must be installed. See the <i>Getting Started</i> for more information on installable options.
Punch Two Hole No/Yes	Specify if you want to punch two side by side holes.	



Option and settings: (Default setting is underlined)	Description:	Requirements, constraints, and information:
Pure Black Text/Graphics Printer's default/Off/On	Select <b>Off</b> to print black text and graphics as a four color black using C, M, Y, and K toner, and to use normal PostScript rendering.  Select <b>On</b> to print black text and graphics as a one color black, using 100% black toner only.	The <b>Printer's default</b> setting reflects the setting specified in Fiery 3850C Setup. For Windows 9x/Me and Windows NT 4.0, choose <b>Expert Color</b> as the Print Mode to access this option. This option is not available for PCL. This option is automatically set to <b>0n</b> if the Black Overprint option is set to <b>0n</b> . For more information, see the <i>Color Guide</i> .
Rendering Style Printer's default/Photographic/ Presentation/Relative Colorimetric/ Absolute Colorimetric	Specify a default color rendering dictionary (CRD) to be used when you print RGB images, objects, and text.	The <b>Printer's default</b> setting reflects the setting specified in Fiery 3850C Setup. For Windows 9x/Me and Windows NT 4.0, choose <b>Expert Color</b> as the Color Mode to access this option. For more information, see page A-13.
Resolution 600x600 dpi/ 1200x1200 dpi	Specify a resolution for your print job.	This option is not available for PCL.
RGB Source Profile Printer's default/EFIRGB/sRGB (PC)/ Apple Standard/Other/Source-1/ Source-2/Source-3/Source-4/Source-5/ Source-6/Source-7/Source-8/Source-9/ Source-10/None	Specify a source color space definition for printing RGB images, objects, and text.	The <b>Printer's default</b> setting reflects the setting specified in Fiery 3850C Setup. For Windows 9x/Me and Windows NT 4.0, choose <b>Expert Color</b> as the Color Mode to access this option. See page A-13 and the <i>Color Guide</i> for more information. This option is not available for PCL.
Rotate 180 Yes/ <u>No</u>	Specify if you want to rotate the pages of your job 180 degrees.	This option is only available from Mac OS. For Windows, use the Orientation option.  Depending on the application you are using, your landscape job may print with the incorrect orientation; if this occurs, or if you select a Stapler Mode (other than <b>Off</b> ) and the staple is inserted in the wrong place, select <b>Yes</b> .



Option and settings: (Default setting is underlined)	Description:	Requirements, constraints, and information:
Secure Print Password	Specify a password to enter at the copier LCD to retrieve your private job if you have selected the Secure Print job type.	The Secure Print Password field has an 4-digit character limit.
Slip Sheet On/ <u>Off</u>	Specify whether to insert a slip sheet between copies of multiple-copy jobs.	To use this option, your Media Type must be set to <b>Transparency</b> and Paper Source must be set to <b>Bypass Tray</b> .
Slip Sheet Source  Tray 1/ Tray 2/ Tray 3/ Tray 4/ Tray 3  (LCT)/ Bypass Tray	Select the tray for the slip sheet source	
Spot Color Matching Printer's default/Off/On	Select <b>0ff</b> to print specified PANTONE colors in your job using the current CMYK Simulation and CMYK Simulation Method. Select <b>0n</b> to activate the PANTONE Lookup Table. The Fiery 3850C prints specified PANTONE colors in your job by matching the CMYK print blend to the same color from the PANTONE library.	The <b>Printer's default</b> setting reflects the setting specified in Fiery 3850C Setup. For Windows 9x/Me and Windows NT 4.0, choose <b>Expert Color</b> as the Color Mode to access this option. This option is not available for PCL. For more information, see the <i>Color Guide</i> .
Staple Off/ Upper Left Slant/ Upper Left Vertical/ Upper Left Horizontal/ Left 2/ Top 2/ Upper Right Slant/ Upper Right Vertical/ Upper Right Horizontal/ Right 2	Specify whether or not and how to staple the job.	
User ID	Specify a User ID to enter at the copier LCD to retrieve your private job if you have selected the Secure Print job type	The User ID field has an 8-character limit.
User Code	Specify a User Code to tally all jobs printed using that User Code.	The User Code field has an 8-digit limit. For more information on entering User Codes, see Chapter 4, "Special Features".



# More about print options

The following sections provide additional information about print options. See the table above for information on the settings, requirements, and constraints in effect for these options.

# **Black Overprint**

When printing black text in combination with a color background or graphics, the text can be printed in one of two ways: either as part of the color background, or on top of the color background. Black Overprint allows you to choose a specific way to print the black text for such a job.

**Off**—Prints the black text with knockouts. The Fiery 3850C first prints the color background with the black text areas 'knocked out' (no color is printed in the text areas); the black text is then printed in the knocked out area, filling in the areas not printed in color. The result is a flatter appearance for the black text.

**On**—Overprint the black text. Used in combination with the Pure Black Text/Graphics option, the Fiery 3850C first prints the full color background, then lays the black text on top of the color background as 100% K toner. The result is a darker and glossier appearance for the black text. Overprinting also minimizes misregistration and 'haloing' problems.

# **CMYK Simulation Profile**

CMYK Simulation Profile allows you to change the simulation goal for the current print job. As the job begins processing, the simulation goal selected in CMYK Simulation Profile is applied before printing.

**Note:** Choosing Printer's default results in the job being printed with the simulation goal currently set on the Fiery 3850C.

**SWOP-Coated**—Uses the United States press standard.

**DIC**—Uses the Japanese press standard.

**Euroscale**—Uses the European press standard.

**Simulation-1 (2,3,4,5...10)**—Uses a custom simulation goal. Before selecting this setting, you are required to create a new simulation goal with ColorWise Pro Tools and link the new simulation to one of the custom simulation names, for example, Simulation-1.

# A-11 Print Options

**None**—Uses no simulation goal. Select this setting when the CMYK data for your job has already been separated for your specific printer (for example, when using the Color Management System built into your computer to convert the CMYK data to the printer's color space).

For more information about simulation and calibration, see the Color Guide.

# Collate

Use this option to specify sorting options.

**Off**—Copies of a complete job are output, uncollated into the top tray.

**On**—Copies of a complete job are collated and output into the top tray.



# **Duplex**

All duplex printing features are available only with plain paper media type.

### TO PRINT DUPLEX PAGES:

# 1. Choose Print in your application, and locate the Duplex print option.

The location of Fiery 3850C print options varies, depending on the printer driver you are using.

# 2. Choose one of the Duplex settings:

The following table shows how the Duplex settings correspond to printed output:

	Side Binding	Top Binding	
Portrait			
Landscape			

# **Output Profile**

**Output-1 through Output-10**—Uses a custom output profile. Before selecting this setting, you are required to download or create the output profile with ColorWise Pro Tools, then link it with one of the custom output profile names, for example, Output-1.

For information on output color space and color management, see the Color Guide.

# A-13 Print Options

# Rendering Style

Use this option to select a default color rendering dictionary (CRD) to be used when you print RGB images, objects, and text.

**Photographic**—Optimizes the range of colors on the Fiery 3850C to produce the best results for photographic or bitmapped images.

**Presentation**—Optimizes the output of pure, saturated colors such as those used in business presentations.

**Relative Colorimetric**— Provides a close match to the CMYK device being simulated, regardless of the media being used.

**Absolute Colorimetric**— Provides the closest match to the CMYK device being simulated, including rendering the paper color as the background.

### **RGB Source Profile**

This option is used to specify a source color space for RGB data.

**EFIRGB**—Optimal source space for printing to the Fiery 3850C. This setting provides consistent output across platforms.

**sRGB (PC)**—Specifies the source space of a generic Windows computer monitor.

**Apple Standard**—Specifies the source space of a Mac OS computer monitor.

**Other**—Allows you to specify a custom RGB source setting using the **(Other) Gamma**, **(Other) Phosphors**, and **(Other) White Point** print options.

**Source-1 through Source-10**—Uses a custom source profile. Before selecting this setting, you are required to download the source profile to the Fiery 3850C with ColorWise Pro Tools, then link it with one of the custom source profile names, for example, Source-1.

For information on source color space and color management, see the Color Guide.



# Appendix B: Font Lists

This appendix lists the built-in PostScript and PCL printer fonts included with your Fiery 3850C.

# PostScript and PCL printer fonts

The following tables list the 136 built-in PostScript printer fonts and 46 PCL printer fonts on the Fiery 3850C.

In addition to the PostScript fonts listed below, two Adobe Multiple Master fonts are included and are used for font substitution in PDF files.

**NOTE:** For Mac OS computers, install the corresponding screen fonts from the User Software CD. For instructions, see *Getting Started*.

# Adobe Type 1 fonts

The Fiery 3850C includes 126 Adobe Type 1 fonts:

- The Mac OS column lists the name as it appears on the Font menu on a Mac OS computer. For example, in most applications, to use "Bodoni-Bold," choose Bodoni Bold from the Font menu.
- The Windows menu name is the name as it appears on the Font menu on a Windows computer. The style refers to the style that must be selected in the application to access the particular PostScript font. For example, to use "Bodoni-Bold," choose Bodoni from the Font menu and Bold from the Style menu.

PostScript name:	Mac OS menu name:	Windows menu name, style:
AlbertusMT-Light	Albertus MT Lt	Albertus MT Lt
AlbertusMT	Albertus MT	Albertus MT
AlbertusMT-Italic	Albertus MT It	Albertus MT, Italic
AntiqueOlive-Roman	Antique Olive Roman	Antique Olive Roman
AntiqueOlive-Bold	Antique Olive Bold	Antique Olive Roman, Bold
AntiqueOlive-Italic	Antique Olive Italic	Antique Olive Roman, Italic

PostScript name:	Mac OS menu name:	Windows menu name, style:
AntiqueOlive-Compact	Antique Olive Compact	Antique Olive Compact
Arial-BoldItalicMT	Arial Bold Italic	Arial, Bold Italic
Arial-BoldMT	Arial Bold	Arial, Bold
Arial-ItalicMT	Arial Italic	Arial, Italic
ArialMT	Arial	Arial
AvantGarde-Book	Avant Garde	AvantGarde
AvantGarde-Demi	Avant Garde Demi	AvantGarde, Bold
AvantGarde-BookOblique	Avant Garde BookOblique	AvantGarde, Italic
AvantGarde-DemiOblique	Avant Garde DemiOblique	AvantGarde, Bold Italic
Bodoni	Bodoni	Bodoni
Bodoni-Bold	Bodoni Bold	Bodoni, Bold
Bodoni-Italic	Bodoni Italic	Bodoni, Italic
Bodoni-BoldItalic	Bodoni BoldItalic	Bodoni, Bold Italic
Bodoni-Poster	Bodoni Poster	Bodoni Poster
Bodoni-PosterCompressed	Bodoni PosterCompressed	Bodoni PosterCompressed
Bookman-Light	Bookman	Bookman
Bookman-Demi	Bookman Demi	Bookman, Bold
Bookman-LightItalic	Bookman LightItalic	Bookman, Italic
Bookman-DemiItalic	Bookman DemiItalic	Bookman, Bold Italic
Carta	Carta	Carta
Clarendon-Light	Clarendon Light	Clarendon Light
Clarendon	Clarendon	Clarendon
Clarendon-Bold	Clarendon Bold	Clarendon, Bold
CooperBlack	Cooper Black	Cooper Black
CooperBlack-Italic	Cooper Black Italic	Cooper Black, Italic
Copperplate-ThirtyThreeBC	Copperplate33bc	Copperplate33bc

PostScript name:	Mac OS menu name:	Windows menu name, style:
Copperplate-ThirtyTwoBC	Copperplate32bc	Copperplate32bc
Coronet	Coronet	Coronet
Courier	Courier	Courier
Courier-Bold	Courier Bold	Courier, Bold
Courier-Oblique	Courier Oblique	Courier, Italic
Courier-BoldOblique	Courier BoldOblique	Courier, Bold Italic
Eurostile	Eurostile	Eurostile
Eurostile-Bold	Eurostile Bold	Eurostile Bold
Eurostile-ExtendedTwo	Eurostile ExtendedTwo	Eurostile ExtendedTwo
Eurostile-BoldExtendedTwo	Eurostile BoldExtendedTwo	Eurostile ExtendedTwo, Bold
GillSans	GillSans	GillSans
GillSans-Bold	GillSans Bold	GillSans, Bold
GillSans-Italic	GillSans Italic	GillSans, Italic
GillSans-BoldItalic	GillSans BoldItalic	GillSans, Bold Italic
GillSans-Light	GillSans Light	GillSans Light
GillSans-LightItalic	GillSans LightItalic	GillSans Light, Italic
GillSans-Condensed	GillSans Condensed	GillSans Condensed
GillSans-BoldCondensed	GillSans BoldCondensed	GillSans Condensed, Bold
GillSans-ExtraBold	GillSans ExtraBold	GillSans ExtraBold
Goudy	Goudy	Goudy
Goudy-Bold	Goudy Bold	Goudy, Bold
Goudy-Italic	Goudy Italic	Goudy, Italic
Goudy-BoldItalic	Goudy BoldItalic	Goudy, Bold Italic
Goudy-ExtraBold	Goudy ExtraBold	Goudy ExtraBold
Helvetica	Helvetica	Helvetica
Helvetica-Bold	Helvetica Bold	Helvetica, Bold

PostScript name:	Mac OS menu name:	Windows menu name, style:
Helvetica-Oblique	Helvetica Oblique	Helvetica, Italic
Helvetica-BoldOblique	Helvetica BoldOblique	Helvetica, Bold Italic
Helvetica-Narrow	Helvetica Narrow	Helvetica-Narrow
Helvetica-Narrow-Bold	Helvetica Narrow Bold	Helvetica-Narrow, Bold
Helvetica-Narrow-Oblique	Helvetica Narrow Oblique	Helvetica-Narrow, Italic
Helvetica-Narrow-BoldOblique	Helvetica Narrow BoldObl	Helvetica-Narrow, Bold Italic
Helvetica-Condensed	Helvetica Condensed	Helvetica Condensed
Helvetica-Condensed-Bold	Helvetica CondensedBold	Helvetica Condensed, Bold
Helvetica-Condensed-Oblique	Helvetica CondensedOblique	Helvetica Condensed, Italic
Helvetica-Condensed-BoldObl	Helvetica CondensedBoldObl	Helvetica Condensed, Bold Italic
HoeflerText-Ornaments	Hoefler Text Ornaments	Hoefler Text Ornaments
JoannaMT	Joanna MT	Joanna MT
JoannaMT-Bold	Joanna MT Bd	Joanna MT, Bold
JoannaMT-Italic	Joanna MT It	Joanna MT, Italic
JoannaMT-BoldItalic	Joanna MT Bd It	Joanna MT, Bold Italic
LetterGothic	Letter Gothic	Letter Gothic
LetterGothic-Bold	Letter Gothic Bold	Letter Gothic, Bold
LetterGothic-Slanted	Letter Gothic Slanted	Letter Gothic, Italic
LetterGothic-BoldSlanted	Letter Gothic BoldSlanted	Letter Gothic, Bold Italic
LubalinGraph-Book	Lubalin Graph	LubalinGraph
LubalinGraph-Demi	Lubalin Graph Demi	LubalinGraph, Bold
LubalinGraph-BookOblique	Lubalin Graph BookOblique	LubalinGraph, Italic
LubalinGraph-DemiOblique	Lubalin Graph DemiOblique	LubalinGraph, Bold Italic
Marigold	Marigold	Marigold
MonaLisa-Recut	Mona Lisa Recut	Mona Lisa Recut

PostScript name:	Mac OS menu name:	Windows menu name, style:
NewCenturySchlbk-Roman	New Century Schlbk	NewCenturySchlbk
NewCenturySchlbk-Bold	New Century Schlbk Bold	NewCenturySchlbk, Bold
NewCenturySchlbk-Italic	New Century Schlbk Italic	NewCenturySchlbk, Italic
NewCenturySchlbk-BoldItalic	New Century Schlbk BoldIt	NewCenturySchlbk, Bold Italic
Optima	Optima	Optima
Optima-Bold	Optima Bold	Optima, Bold
Optima-Italic	Optima Italic	Optima, Italic
Optima-BoldItalic	Optima BoldItalic	Optima, Bold Italic
Oxford	Oxford	Oxford
Palatino-Roman	Palatino	Palatino
Palatino-Bold	Palatino Bold	Palatino, Bold
Palatino-Italic	Palatino Italic	Palatino, Italic
Palatino-BoldItalic	Palatino BoldItalic	Palatino, Bold Italic
StempelGaramond-Roman	StempelGaramond Roman	StempelGaramond Roman
StempelGaramond-Bold	StempelGaramond Bold	StempelGaramond Roman, Bold
StempelGaramond-Italic	StempelGaramond Italic	StempelGaramond Roman, Italic
StempelGaramond-BoldItalic	StempelGaramond BoldItalic	StempelGaramond Roman, Bold Italic
Symbol	Symbol	Symbol
Tekton	Tekton	Tekton
Times-Roman	Times	Times
Times-Bold	Times Bold	Times, Bold
Times-Italic	Times Italic	Times, Italic
Times-BoldItalic	Times BoldItalic	Times, Bold Italic
TimesNewRomanPS-BoldMT	Times New Roman Bold	Times New Roman, Bold

PostScript name:	Mac OS menu name:	Windows menu name, style:
TimesNewRomanPS- BoldItalicMT	Times New Roman Bold Italic	Times New Roman, Bold Italic
TimesNewRomanPS-ItalicMT	Times New Roman Italic	Times New Roman, Italic
TimesNewRomanPSMT	Times New Roman	Times New Roman
Univers-Extended	Univers Extended	Univers Extended
Univers-BoldExt	Univers BoldExt	Univers Extended, Bold
Univers-ExtendedObl	Univers ExtendedObl	Univers Extended, Italic
Univers-BoldExtObl	Univers BoldExtObl	Univers Extended, Bold Italic
Univers-Light	Univers 45 Light	Univers 45 Light
Univers-Bold	Univers 65 Bold	Univers 45 Light, Bold
Univers-LightOblique	Univers 45 LightOblique	Univers 45 Light, Italic
Univers-BoldOblique	Univers 65 BoldOblique	Univers 45 Light, Bold Italic
Univers	Univers 55	Univers 55
Univers-Oblique	Univers 55 Oblique	Univers 55, Italic
Univers-CondensedBold	Univers 67 CondensedBold	Univers 47 CondensedLight, Bold
Univers-CondensedBoldOb- lique	Univers 67 CondensedBoldObl	Univers 47 CondensedLight, Bold Italic
Univers-Condensed	Univers 57 Condensed	Univers 57 Condensed
Univers-CondensedOblique	Univers 57 CondensedOblique	Univers 57 Condensed, Italic
ZapfChancery-MediumItalic	Zapf Chancery	ZapfChancery
ZapfDingbats	Zapf Dingbats	ZapfDingbats

# TrueType fonts

The Fiery 3850C includes 10 TrueType fonts:

PostScript name:	Mac OS menu name:	Windows menu name, style:
Apple-Chancery	Apple Chancery	Apple Chancery
Chicago	Chicago	Chicago
Geneva	Geneva	Geneva
HoeflerText-Black	Hoefler Text Black	Hoefler Text Black
HoeflerText-BlackItalic	Hoefler Text Black	Hoefler Text Black, Italic
HoeflerText-Italic	Hoefler Text	Hoefler Text, Italic
HoeflerText-Regular	Hoefler Text	Hoefler Text
Monaco	Monaco	Monaco
New York	New York	New York
Wingdings-Regular	Wingdings	Wingdings



## **PCL** printer fonts

The following 46 PCL fonts are resident on the Fiery:

- Albertus Extra Bold, Albertus Medium
- Antique Olive, Antique Olive Bold, Antique Olive Italic
- Arial, Arial Bold, Arial Italic, Arial Bold Italic
- CG Omega, CG Omega Bold, CG Omega Italic, CG Omega Bold Italic, CG Times, CG Times Bold, CG Times Italic, CG Times Bold Italic
- Coronet
- Courier, Courier Bold, Courier Italic, Courier Bold Italic
- Garamond Antigua, Garamond Halbfett, Garamond Kursiv, Garamond Kursiv Halbfett
- Letter Gothic, Letter Gothic Bold, Letter Gothic Italic
- Line Printer (a bitmap font)
- Marigold
- Symbol
- Times New, Times New Bold, Times New Italic, Times New Bold Italic
- Univers Bold, Univers Bold Condensed, Univers Bold Condensed Italic, Univers Italic, Univers Medium, Univers Medium Condensed, Univers Medium Condensed Italic, Univers Bold Italic
- Wingdings



# Appendix C: Troubleshooting

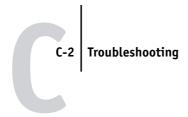
This appendix provides troubleshooting tips.

## Maintaining optimal system performance

The Fiery 3850C does not require maintenance. Beyond the routine requirements of servicing and maintaining the printer and replenishing consumables there are a few things you can do to improve the overall performance of your system:

- Reduce unnecessary two-way communication.
  - If users notice that the server is frequently too busy to receive jobs, it may be because several users are running utilities that are updated often. Large numbers of remote users running Fiery WebTools may have a significant effect on Fiery 3850C performance.
- Schedule the printing workload by checking job ticket information before printing.
   Print jobs with the same output and paper specifications together to minimize paper changes. Also, print routine jobs while you prepare to print jobs with special instructions or special media.
- Avoid printing with the server "Disk full" warning.

If you see this warning, delete jobs from the Queues window that have been held for a long time and are not likely to be needed. Avoid this condition by deleting old jobs on a regular basis. The date associated with a job is the original date it was sent.



## **Troubleshooting**

In case of problems, and before you call for service, check the guidelines in this section. If you are unable to resolve the problem, make a note of the error condition and contact your authorized service/support center.

This section provides some troubleshooting guidelines should a problem arise. If you are unable to resolve a problem after referring to this section, contact your site operator or administrator.

## General printing problems

If this happens:	Try this:
You cannot select or view one of the queues.	Have your system administrator enable the queue in Setup.
Printing ties up your	Print to a queue instead of to the Direct connection.
computer for too long.	When you print to a queue, the job is stored on the Fiery 3850C until it can be processed and printed; when you print to the Direct connection, the job cannot be sent to the Fiery 3850C until the previous job is finished processing, so you must wait longer to use your computer.
Message requests a paper size that you do not have.	Cancel the job and do one of the following:  If you are printing a file from an application, change the page size in the Page Setup dialog box.

If this happens:	Try this:
Fiery 3850C does not respond to a Print command.	<ul> <li>Did you select the Fiery 3850C as the current printer?  Before printing, you must select the Fiery 3850C as the current printer from your Mac OS, Windows, or UNIX workstation.</li> <li>Make sure that the printer is switched on.  Someone may have turned the printer off. Even with the printer off, the Fiery 3850C appears in the Chooser as long as the Fiery 3850C itself is turned on.</li> <li>Make sure that the printer is online.</li> <li>If you are printing over an IPX (Novell) network, verify through the PCONSOLE utility that the job was sent to the Novell queue and that the queue is being used by the Fiery 3850C.</li> <li>Make sure that the job does not contain a PostScript error.  Check with the operator, or use Fiery WebSpooler to check the job's status. A job containing a PostScript error appears in red in the Fiery WebSpooler display.  To obtain information on the PostScript error, make sure the Print to PS Error setup option is set to Yes. See the Configuration Guide for more information.</li> </ul>
The Test Page, or other pages, do not print from the Control Panel.	<ul> <li>Check the printer display for an error message and correct the problem.</li> <li>Restart the Fiery 3850C.</li> <li>If there is no error message at the printer, you should restart the Fiery 3850C.</li> </ul>



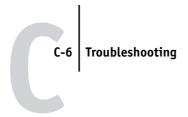
# Problems with print quality

If this happens:	Try this:
Print settings for your job output do not match the settings you gave.	Make sure that you did not override the setting for the job in another place.  For information about options and overrides, see Appendix A.
You get poor printing results.	Does your application require one of the Fiery 3850C printer description files?
	If you are printing from Adobe PageMaker, make sure that the Fiery 3850C printer description file is installed correctly. For information about installing these files, see <i>Getting Started</i> and the documentation for your application software.
Your printed file appears too	Adjust the Brightness option.
dark.	You can use the Brightness option when printing from an application or from Fiery Downloader to lighten your image whenever you print a PostScript or Encapsulated PostScript (EPS) file.
QuickDraw fill patterns print as solids.	Use the Adobe PostScript Printer driver.



# **Problems with Fiery Downloader**

If this happens:	Try this:
General problems	Make sure that the connections are properly set.  See Getting Started.
You have problems downloading a font with Fiery Downloader.	Check with the administrator to make sure that the Direct connection is enabled.  The Direct connection must be used to download fonts. (Files can be downloaded via the Print or Hold queue.)
Extra blank page prints after a Fiery Downloader job.	• Turn off the "Showpage (after EPS file)" option.  This option adds a special PostScript command that will cause an extra blank page to print if it is not needed.



# **Problems with Fiery WebTools**

If this happens:	Try this:
You cannot connect to Fiery WebTools, or it takes a long time to connect.	<ul> <li>Check with the administrator to make sure Web Services are enabled in Fiery 3850C Setup.</li> <li>Make sure you have the correct IP address or DNS name for the Fiery 3850C.</li> </ul>
	Check with the administrator or print a Configuration page from the Fiery 3850C Control Panel.  • Clear the cache (Netscape Communicator) or history (Microsoft Internet Explorer).

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#### **FCC Information**

WARNING: FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

#### Class B Declaration of Conformity

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

#### **Industry Canada Class B Notice**

This Class B digital apparatus complies with Canadian ICES-003.

#### Avis de Conformation Classe B de l'Industrie Canada

Cet appareil numérique de la Classe B est conforme à la norme NMB-003 du Canada.

#### Certificate by Manufacturer/Importer

This is to certify that the FC07 is shielded against radio interference in accordance with the provisions of VFG 243/1991. The German Postal Services have been advised that this device is being put on the market and that they have been given the right to inspect the series for compliance with the regulations.

#### Bescheinigung des Herstellers/Importeurs

Hiermit wird bescheinigt, dass der FC07 im Übereinstimmung mit den Bestimmungen der VFG 243/1991 funkentstört ist. Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeräumt.

#### RFI Compliance Notice

This equipment has been tested concerning compliance with the relevant RFI protection requirements both individually and on system level (to simulate normal operation conditions). However, it is possible that these RFI Requirements are not met under certain unfavorable conditions in other installations. It is the user who is responsible for compliance of his particular installation.

Dieses Gerät wurde sowohl einzeln als auch in einer Anlage, die einen normalen Anwendungsfall nachbildet, auf die Einhaltung der Funkentstörbestimmungen geprüft. Es ist jedoch möglich, dass die Funkentstörbestimmungen unter ungünstigen Umständen bei anderen Gerätekombinationen nicht eingehalten werden. Für die Einhaltung der Funkentstörbestimmungen einer gesamten Anlage, in der dieses Gerät betrieben wird, ist der Betreiber verantwortlich.

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### Introduction

This manual introduces the concepts and issues associated with printing to the Fiery 3850C<sup>™</sup>. It outlines key workflow scenarios, provides information on calibration and color profiles, and contains application notes that explain how to print to the Fiery 3850C from popular Microsoft Windows and Apple Mac OS applications.

This manual is part of a set of documentation that includes manuals for users and system administrators. The other manuals should be available at your site—refer to them for a complete description of your Fiery 3850C.

**NOTE:** The name "Aero" is used in illustrations to represent the Fiery 3850C. The term "Windows 9x/Me" is used in this manual to refer to Windows 95/98/Me; individual differences are noted. Windows XP is supported. If you use Windows XP, follow the procedures for Windows 2000.

#### About the documentation

The *Color Guide* is organized to supply you with key information about managing the color output of your Fiery 3850C. Chapter 1 describes the Fiery 3850C print options and how to get the best color results, and Chapter 2 describes several effective workflows. Calibration is discussed in the next two chapters. Chapter 3 covers ColorWise Pro Tools™ and other methods of calibrating the printer, and Chapter 4 takes you through the features of Profile Manager™, used to manage color profiles on the Fiery 3850C, and Color Editor™, which lets you customize simulation and output profiles. Succeeding chapters provide tips for printing from business and graphics applications. Finally, the appendixes offer information about color theory and color management.

**NOTE:** PCL printer drivers are provided with the Fiery 3850C, but they support only a few of the color features described in this manual. To take full advantage of the color management features, use the PostScript printer drivers.

Words in bold, for example, **output profile**, are terms that appear in the glossary. The bibliography at the end of this manual provides sources for further investigation of color printing issues.

Color terms and concepts such as "RGB data," "color space," "spot color," "gamut," and "source profile" are used throughout this manual. If you are new to desktop color, or if any terms are unfamiliar, read Appendixes A and B or check the glossary.

This manual is part of a set of Fiery 3850C documentation that also includes the following manuals for users and system administrators:

- The Configuration Guide explains basic configuration and administration of the Fiery 3850C for the supported platforms and network environments. It also includes guidelines for setting up UNIX, Windows NT/2000, and Novell NetWare servers to provide Adobe PostScript printing services to clients.
- Getting Started describes the process of installing the software that enables users to print to the Fiery 3850C. Specifically, it describes installation of printer drivers and other user software provided on the User Software CD. It also explains how to connect each user to the network.
- The Printing Guide describes the printing features of the Fiery 3850C for users who send jobs via remote workstations on the network.
- The *Job Management Guide* explains the functions of the Fiery 3850C client utilities, including the Command WorkStation™, and how you use them to manage jobs. This book is intended for an operator or administrator, or a user with the necessary access privileges, who needs to monitor and manage job flow and troubleshoot problems that may arise.
- Release Notes provide last-minute product information and workarounds for some of the problems you may encounter.

The Printing Guide, Color Guide, and Job Management Guide are provided on a CD-ROM.

### **Key features of ColorWise**

ColorWise<sup>®</sup> is the color management system (CMS) built into the Fiery 3850C and designed to provide both casual and expert users the best color output for a variety of purposes. The ColorWise default settings provide great out-of-box color from many Windows and Mac OS applications. This allows casual users to get quality output without knowing about or changing any color settings on the Fiery 3850C.

For consistent color make sure the Fiery 3850C is calibrated on a regular basis. ColorWise Pro Tools include a simple-to-use calibrator, which allows you to calibrate using a **densitometer** (see Chapter 3).

You can modify printing results using ColorWise features. Depending on your particular needs, you can:

- Set the behavior of CMYK printing to emulate DIC, Euroscale, and SWOP offset press standards
- Match PANTONE colors for the best match when printing using four-color press conditions or when printing using presses with extra, custom plates
- Select a color rendering dictionary (CRD), also called a rendering style, for RGB
  printing. CRDs allow for rich, saturated printing of presentation graphics; smooth,
  accurate printing of photographs; and relative or absolute colorimetric rendering for
  specialized needs
- Define the source of incoming RGB color data for better screen matching and better color conversion of RGB data with no source information

ColorWise offers an open color architecture, letting users customize the Fiery 3850C to meet new printing needs as they arise. ColorWise supports ICC profiles, which are industry standard color profiles that define the color behavior of a device. Downloading ICC profiles to the Fiery 3850C enables it to simulate a custom press (or another printer), as well as accurately print colors from a particular monitor or a scanner. In addition, you can create customized ICC profiles for the printer. ColorWise also lets you use any Status T densitometer by importing data in a standard file format (see Appendix C). In this case, it is important to note that the quality of the instrument used will determine the quality of the calibration.

1-1 | Managing color on the Fiery 3850C

## Chapter 1: Fiery 3850C Color Management

The first part of this chapter describes the options available from the **ColorWise** color management system and explains how to customize the color settings for your particular needs. It provides descriptions of the preset ColorWise default settings and covers additional options for users who need to customize ColorWise.

Beginning on page 1-11, there is a detailed explanation of what a **PostScript** Level 2 or PostScript 3 printer driver does, as well as information on the capabilities of various printer drivers and instructions for setting color options with the PostScript drivers for Windows and Mac OS computers.

PCL printer drivers are also available, but they support only a few of the color features described in this manual. To take full advantage of the color management features, use the PostScript printer drivers.

**Note:** If you use Windows XP, follow the procedures for Windows 2000.

### Managing color on the Fiery 3850C

You can modify the Fiery 3850C printing behavior in several ways:

- Select ColorWise options for an individual print job using menus that appear from the printer driver.
- Select most ColorWise options as server defaults from the Color Setup application in ColorWise Pro Tools (see page 4-19). Defaults can also be set from Fiery 3850C Setup or from the Control Panel, as described in the *Configuration Guide*. These defaults apply to all subsequent print jobs unless you override them.
- Select some ColorWise options, particularly default **ICC profile** settings and calibration options, from ColorWise Pro Tools. These options include default Simulation Profile (see page 1-6), Appear in Driver as (see page 4-8), default Source Profile (see page 1-5), and associated calibration set (see page 3-4).

The table below illustrates the print options in the Fiery 3850C color management process that affect color data conversions. You access these print options when you send a print job to the Fiery 3850C. Most of these options and settings are described in subsequent sections of this chapter.

RGB Source Profile is the only color option that applies strictly to RGB color data. The other options that affect RGB color also affect the more rarely used Lab, XYZ, and other calibrated color spaces.

**Note:** For users who are familiar with PostScript 3.0 color, RGB Source Profile affects all CIEBasedABC color spaces (if the source space is RGB). If you send CMYK data to the Fiery 3850C in CIEBasedDEFG format, for example, by choosing PostScript Color Management in Adobe Photoshop, the Fiery 3850C Rendering Style selection—which normally affects only RGB data—will also affect this CMYK data.

You can specify settings for the following options via print options when you send a job to the Fiery 3850C. The administrator can also set some settings as defaults during Fiery 3850C Setup. Settings specified via print options override the defaults. For information about the default settings, see the *Printing Guide*.

Fiery 3850C color print option	What it does
Rendering Style Photographic/Presentation/Relative Colorimetric/Absolute Colorimetric (Default set at Setup)	Applies a Fiery 3850C <b>color rendering style</b> ( <b>CRD</b> ) to <b>RGB</b> data (see page 1-4), or to any incoming data with a PostScript <b>source color space</b> definition, including CMYK.
RGB Source Profile EFIRGB/sRGB (PC)/Apple Standard/Other/ Source 1–10/None (Default set at Setup or with ColorWise Pro Tools)	Applies an RGB source space definition to RGB data (see page 1-5). If you choose the Other setting, you can specify particular settings for Gamma, Phosphors, and White Point. See the corresponding options in this table. This option, along with Gamma, Phosphors, and White Point, the only ColorWise options that affects <i>only</i> DeviceRGB or calibrated RGB color spaces.
(Other) Gamma 1.0/1.2/1.4/1.6/1.8/2.0/2.2/2.4/2.6/2.8/3.0	Applies the specified <b>gamma</b> value to the RGB source space definition (see page 1-5). To use this print option, you must choose Other as the RGB Source setting.
(Other) Phosphors Hitachi EBU/Hitachi-Ikegami/NTSC/ Radius Pivot/SMPTE/Trinitron	Applies the specified <b>phosphor</b> (monitor type) information to the RGB source space definition (see page 1-5). To use this print option, you must choose Other as the RGB Source setting.
(Other) White Point 5000 K (D50)/5500 K/6500 K (D65)/ 7500 K/9300 K	Applies the specified <b>white point</b> value to the RGB source color space definition (see page 1-5). To use this print option, you must choose Other as the RGB Source setting.

Fiery 3850C color print option	What it does
CMYK Simulation Profile SWOP-Coated/DIC/Euroscale/Simulation 1–10/None (Default set at Setup or in ColorWise Pro Tools)	Adjusts CMYK color data to simulate an offset press standard or a custom color <b>gamut</b> defined at your site. Choosing None bypasses simulation (see page 1-6).  NOTE: Some of the Simulation settings have slightly different names depending on the model of printer.
Output Profile Default output profile/Output 1–10 (Default set at Setup or in ColorWise Pro Tools)	The <b>Output Profile</b> is applied to all data in the print job (see page 1-6). User-defined output profiles can be downloaded to the Fiery 3850C using ColorWise Pro Tools (see Chapter 4).
Pure Black Text/Graphics On/Off (Default set at Setup)	The On setting optimizes the quality of black text and line art output. (see page 1-7).
Black Overprint On/Off (Default set at Setup)	The On setting overprints black text placed on colored backgrounds; it automatically activates the Pure Black Text/Graphics option (see page 1-8).
Spot Color Matching On/Off (Default set at Setup or with ColorWise Pro Tools)	The On setting enables Fiery 3850C matching of PANTONE colors; Off instructs the Fiery 3850C to match color output to a PANTONE-specified CMYK combination (see page 1-9).

Detailed explanations of how these and other settings affect your print jobs are provided in subsequent sections of this chapter.

## **Rendering styles**

The Rendering Style option specifies a CRD for color conversions. You can modify the Rendering Style option to control the appearance of images, such as prints from office applications or RGB photographs from Photoshop. The Fiery 3850C lets you select from the four rendering styles currently found in industry standard ICC profiles.

Fiery 3850C rendering style	Best used for	Equivalent ICC rendering style
Photographic—Typically results in less saturated output than presentation rendering when printing out-of-gamut colors. It preserves tonal relationships in images.	Photographs, including scans and images from stock photography CDs.	Image, Contrast, and Perceptual
Presentation—Creates saturated colors but does not match printed colors precisely to displayed colors. In-gamut colors such as flesh tones are rendered well, similar to the Photographic rendering style.	Artwork and graphs in presentations. In many cases it can be used for mixed pages that contain both presentation graphics and photographs.	Saturation, Graphics
Relative Colorimetric—Provides white-point transformation between the source and destination white points. For example, the bluish gray of a monitor will map to neutral gray. You may prefer this style to avoid visible borders when <i>not</i> printing full-bleed.	Advanced use when color matching is important but you prefer white colors in the document to print as paper white. It may also be used with PostScript color management to affect CMYK data for simulation purposes.	Relative Colorimetric
Absolute Colorimetric—Provides <i>no</i> white point transformation between the source and destination white points. For example, the bluish gray of a monitor will map to a bluish gray.	Situations when exact colors are needed and visible borders are not distracting. It may also be used with PostScript color management to affect CMYK data for simulation purposes.	Absolute Colorimetric

1-5 | Managing color on the Fiery 3850C



#### **RGB Source Profile**

The RGB **Source Profile** setting allows you to define the characteristics of the RGB data in your document so the appropriate color conversion can occur on the Fiery 3850C. Commonly used monitor color spaces are available from the driver and from the ColorWise Pro Tools Profile Manager. For special needs, you can use ColorWise Pro Tools to download custom monitor or scanner profiles.

When you specify a setting other than None for the RGB Source Profile, the Fiery 3850C overrides source color space definitions or profiles that other color management systems may have specified. For example, if you specified a ColorSync System Profile on your Mac OS computer, the RGB Source Profile setting overrides it. In cases where you do *not* want this setting to override another specified source color space, choose None.

When you specify a setting other than None for the RGB Source Profile—since the color space definitions are overridden—the prints from the Fiery 3850C will be consistent across platforms. Below are the Fiery 3850C RGB Source Profile options:

- **EFIRGB** specifies an EFI-defined color space recommended for users who have no detailed information about their RGB data.
- sRGB (PC) specifies the industry standard definition for a generic Windows PC monitor.
- Apple Standard specifies the definition of all standard Mac OS computer monitors.
- Other allows you to specify custom RGB source settings. If you choose Other as the RGB Source setting, you can choose settings for the Gamma, Phosphors, and White Point options.
- Sources 1–10 specify the definitions you download as RGB source profiles. For more
  information about downloading RGB source profiles, see Chapter 4.
- None instructs the Fiery 3850C to allow the RGB sources you defined elsewhere, such as in the application, to be used. When you set RGB Source to None, the appearance of colors will not be independent of the file type. For example, RGB EPS files will look different from RGB TIFF files.

With RGB Source set to None, PostScript RGB data that contains a source color space definition is converted using the CRD specified by the Rendering Style option (see page 1-4). Non-PostScript RGB data and PostScript RGB data that does not contain a source color space definition is converted using a general **undercolor removal** conversion method.

#### **CMYK Simulation Profile**

The CMYK Simulation Profile print option allows you to print press proofs or simulations. This option specifies the offset press standard or other color printing device you want to simulate. This option affects CMYK data only.

The number of custom simulations is limited by the disk space on the Fiery 3850C.

The CMYK Simulation Profile setting you specify depends on the press standard for which the CMYK data was separated.

- For images separated using a custom separation (such as a separation produced with an ICC profile), choose the corresponding profile on the Fiery 3850C with the CMYK Simulation Profile setting.
- For images separated for SWOP, choose SWOP as the CMYK Simulation Profile setting.

**NOTE:** To properly simulate a printed image that was separated through the use of an ICC profile, the same profile must be present on the Fiery 3850C. For more information about downloading ICC profiles to the Fiery 3850C, see "Downloading profiles" on page 4-5.

## Output profile

The output profile is applied to all data in the print job, so make sure the selected profile is the right one for your job. The default output profile consists of both a profile for your printer, describing its color characteristics, and a calibration target that describes the expected behavior of the printer at a particular print resolution (600x600 dpi or 1200x1200 dpi).

In certain cases, you may want to customize the default output profile using the ColorWise Pro Tools Color Editor to achieve particular color effects (see page 4-11). If you do so, the new customized output profile is applied to all data in the print job.

1-7 Managing color on the Fiery 3850C

1-7

Changing the output profile only does not affect its associated calibration target (since the target is based on a printer model). You can edit D-Max values of the calibration target separately (see page 4-6).

You can use the ColorWise Pro Tools Profile Manager to download your own output profile to the Fiery 3850C (see page 4-5). Downloaded output profiles are at first associated with the calibration target tied to the default output profile. You can edit calibration target D-Max values separately.

## Pure Black Text/Graphics

The Pure Black Text/Graphics option affects the printout for black text and vector graphics on a page. Under most circumstances, you can leave this option set to On. When Pure Black Text/Graphics is on, black colors generated by applications are printed using 100 percent black-only toner (for example, RGB = 0, 0, 0; CMYK = 0%, 0%, 0%, 100%; or K = 100%). This means the black text and line art will not exhibit halftone artifacts and will not be misregistered, since there is only one toner used. In addition, this setting eliminates **blasting**. This option is automatically set to On when the Black Overprint option is set to On

For some jobs you may want to turn this option Off, for example, if the page includes gradient fills that use black. The table below describes the behavior of the Pure Black Text/Graphics option with black data defined in different color spaces.

**NOTE:** The Pure Black Text/Graphics option can be used only when printing composites, not when printing separations.

Input black color	Pure Black Text/Graphics			
	On	Off		
RGB		With the default profile, prints a rich black using all toners.		
СМҮК	Prints 100% black	Prints only with black toner, because CMYK simulations preserve the black channel. The actual amount of toner used depends on the current simulation and the calibration state of the printer.		
Spot		Prints only with black toner, because spot color simulations preserve the black channel. The actual amount of toner used depends on the current simulation and the calibration state of the printer.		

**NOTE:** PostScript applications, such as QuarkXPress, may convert elements defined as RGB = 0, 0, 0 to four-color CMYK black before sending the job to the Fiery 3850C. These elements are not affected by the Pure Black Text/Graphics option. See the application notes for details. Also, black text and line art defined as RGB = 0, 0, 0 in office applications (such as Microsoft Word) are converted to single-color black (CMYK = 0%, 0%, 0%, 100%) by the Microsoft PostScript 3 driver for Windows 2000. To print this single-color black at the maximum toner density of the printer, set the Pure Black Text/Graphics option to On.

## **Black Overprint**

The Black Overprint option lets you specify whether or not black text, defined as RGB = 0, 0, 0, or as CMYK = 0%, 0%, 0%, 100%, overprints colored backgrounds.

- On—Black text overprints colored backgrounds, eliminating white gaps and reducing halo effects or misregistration of colors. Setting Black Overprint to On automatically activates the Pure Black Text/Graphics option.
- **Off**—Black text knocks out colored backgrounds.

**NOTE:** PostScript applications may perform their own black overprint conversions before sending the print job to the Fiery 3850C.

One example of how you might use this setting is with a page that contains some black text on a light blue background. The background blue color is CMYK = 40%, 30%, 0%, 0% and the black text is CMYK = 0%, 0%, 0%, 100%.

- With Black Overprint On, the final text portions of the page are overprinted, or combined with the underlying colors. This results in CMYK = 40%, 30%, 0%, 100% for the color used for the text. There is no transition in the cyan and magenta toners, and the quality of the output is improved since it will not show **artifacts** near the edges of the text. The option also works with text defined in the RGB color space, that is RGB = 0, 0, 0.
- With Black Overprint Off, the border of the text is on an edge that has cyan and
  magenta toners on one side (outside the text) and black toner on the other side
  (inside the text). On many devices, this transition causes visible artifacts because of
  the practical limitations of the printer.

## **Spot Color Matching**

The Spot Color Matching option provides automatic matching of PANTONE colors with their best CMYK equivalents.

 On—The Fiery 3850C uses a built-in table to generate the closest CMYK matches of PANTONE colors your printer can produce. (New tables are generated when you add new output profiles.)

NOTE: Spot colors not included in the built-in table are treated as CMYK.

 Off—The Fiery 3850C uses the CMYK equivalents defined by your application to print PANTONE colors.

For jobs that include PANTONE spot colors, set Spot Color Matching to On unless you are printing press simulations. In that case, set Spot Color Matching to Off and choose the appropriate CMYK Simulation setting (see page 1-6).

**NOTE:** You can use the Spot Color Matching option only when printing composites, not when printing separations.

#### Spot Color Matching and the PANTONE Coated Color Reference

The PANTONE Coated Color Reference (described on page 5-6) prints differently depending on the Spot Color Matching setting.

- **On**—The Fiery 3850C uses a built-in table to generate the best matches of the PANTONE colors that your printer can produce. The PANTONE number is printed below each swatch.
- Off—The Fiery 3850C prints swatches using the CMYK values recommended by PANTONE (and used by applications that provide PANTONE color libraries). The CMYK values used to generate the color, as well as the PANTONE number of the color, are printed below each swatch. These CMYK values are printed through the selected CMYK Simulation and Output Profile settings.

## Printer drivers and print options

This section describes the role of the printer driver and explains how to use Windows and Mac OS PostScript printer drivers for Fiery 3850C printing. PCL printer drivers are also available, but they support only a few of the color features described in this manual. To take full advantage of the color management features, use the PostScript printer drivers.

**NOTE:** The term "PostScript" by itself is used to refer to Adobe PostScript Level 2 or later.

## What a printer driver does

To take full advantage of the features of the Fiery 3850C, your print jobs must be sent as PostScript data. Since most applications cannot generate PostScript data directly, it is the function of a printer driver to interpret instructions from the application and convert them to PostScript data.

A PostScript printer driver also allows you to select print options specific to your printer. To do this, the printer driver must be matched with a **PostScript printer description file PPD** for your Fiery 3850C. The PPD contains information about the particular features supported by the Fiery 3850C and the printer. You can think of the PPD as the lines of PostScript code in the file that are device-specific. When you print a job, the printer driver lets you choose among features by displaying print options.

A few PostScript applications can send PostScript data directly to the printer and present print options within the application interface. Even these applications, however, require that you use a PostScript printer driver. See *Getting Started* for information on installing printer drivers.

We recommend you set the print options initially in Fiery 3850C Setup (see the *Configuration Guide*). This provides you with a default configuration that is appropriate for most Fiery 3850C print jobs.



## PostScript printer driver for Windows computers

You can access the printer driver options described in this section by clicking Start\Settings\Printers, right-clicking the appropriate printer, and selecting Properties (Windows 9x/Me), Document Defaults (Windows NT), or Printing Preferences (Windows 2000) from the pop-up menu. These settings are also accessible from the Print Setup or Page Setup dialog boxes of most applications.

For Window 9x/Me, the Fiery 3850C driver interface enables you to save combinations of settings that you can later access. In addition, you can choose different settings for individual jobs from the applications you use.

The printer driver writes a PostScript file containing the instructions generated by your application and the Fiery 3850C print options you selected. The printer driver sends the PostScript file to the Fiery 3850C. The Fiery 3850C then performs PostScript processing and color conversions and sends raster color data to the print device.

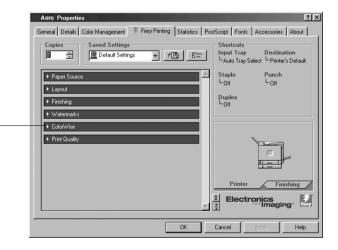
**Note:** The following illustrations and instructions do not apply to all applications. Many applications, such as Adobe PageMaker, Adobe Photoshop, Adobe Illustrator, QuarkXPress, and CorelDRAW, have other color management options in addition to those presented in the printer driver. For information on specific applications, see Chapters 6 through 9.

#### Setting color management print options for Windows 9x/Me and Windows NT

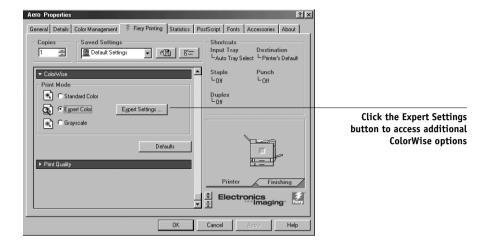
This section explains how to set Fiery 3850C color print options with the Adobe PostScript printer driver, a PostScript 3 printer driver that takes full advantage of the color features of the Fiery 3850C. Before you proceed, make sure you have completed the following procedures described in *Getting Started*.

- Install the Adobe PostScript Printer Driver and the Fiery 3850C PPD.
- Set up the Fiery 3850C for printing.

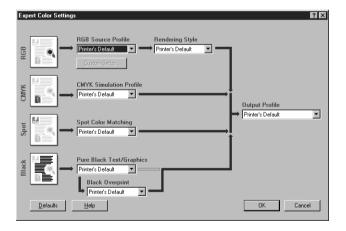
To set print options, see the information for your operating system on page 1-12. Under the Fiery Printing tab, click the ColorWise menu to select settings for the print options described on page 1-2.



Click the ColorWise menu



Click Expert Settings to display additional color settings for the Fiery 3850C. Each option allows you to select settings for your specific job.



Selecting Other for RGB Source Profile brings up the following window for specifying custom RGB source settings (see page 1-5).



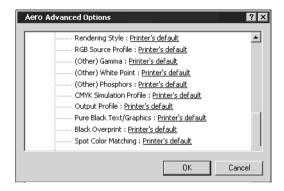
For most users, the default settings provide the right level of color control. For more information about individual print options, see page 1-2.

#### Setting color management print options for Windows 2000

This section explains Fiery 3850C color print options with the Microsoft PostScript Printer Driver for Windows 2000. This PostScript driver takes full advantage of the color features of the Fiery 3850C. Before you proceed, make sure you have completed the following procedures described in *Getting Started*:

- Install the Fiery 3850C PPD for the Microsoft PostScript Printer Driver.
- Set up the Fiery 3850C for printing.

To set print options, access the printer driver options as described on page 1-12. Click the Advanced tab in the Printing Preferences dialog box, and then choose settings for the print options described on page 1-2.



#### Adobe PostScript printer driver for Mac OS

This section explains how to set color management print options with the AdobePS printer driver for Mac OS, a PostScript 3 driver that takes full advantage of the color features of the Fiery 3850C and lets you save a set of print option settings.

Before you continue, make sure you have completed the following:

- Install the AdobePS printer driver and the Fiery 3850C PPD, as described in Getting Started.
- Select the Fiery 3850C in the Chooser and set it up with the Fiery 3850C PPD.

**NOTE:** The following illustrations and instructions do not apply to all applications. Many applications, such as PageMaker, Photoshop, Illustrator, QuarkXPress, and CorelDRAW have other color management options in addition to those presented in the printer driver. For information on specific applications, see Chapters 6 through 9.

#### Setting color management print options

You can choose print options from the various panes of the AdobePS driver dialog box. To access the initial AdobePS dialog box, choose Print from the File menu of your application.

**NOTE:** The word "pane" is used to describe the different pages that appear in the driver dialog box when you make selections from the pull-down menu at the upper left. Each pane presents a particular set of print options.

The AdobePS driver includes the following Color Matching options.

- **Color/Grayscale**—When this setting is used to print to the Fiery 3850C, ColorWise provides all color conversions on the Fiery 3850C. Typically, you should use this option when printing to the Fiery 3850C.
- PostScript Color Matching—Can be used with PostScript devices such as the
  Fiery 3850C. It provides for color conversion using a color rendering dictionary
  (CRD) that is downloaded with the print job. This method requires that the file be
  saved as an EPS with PostScript Color Management selected.

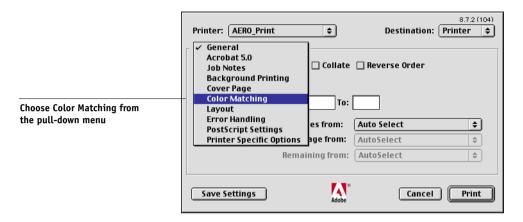
**NOTE:** If you use the PostScript Color Matching option, the driver may, depending on the application in use, attach a CMYK source definition to the CMYK data in your document. In this case, the CMYK data in the document is reseparated using a Fiery 3850C CRD and converted to the selected output profile's CMYK color space.

• ColorSync Color Matching—Provides for color conversion on the host computer. This option can be used with PostScript devices such as the Fiery 3850C, but it is intended for use with PostScript Level 1 devices. If you use this option, be sure to specify the Fiery 3850C ICC profile as the Printer Profile. ColorSync Color Matching is not a suggested color matching method, because it does not work in conjunction with all applications and requires that you disable features of ColorWise on the Fiery 3850C.

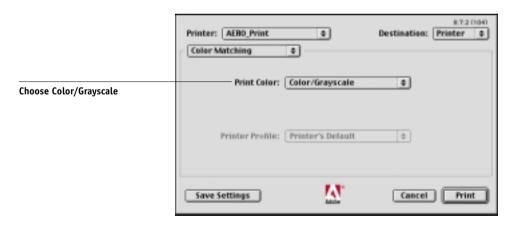


#### Setting Fiery 3850C color management options

In the AdobePS Print dialog box, choose Color Matching from the pull-down menu.



In the Color Matching pane, choose Color/Grayscale from the Print Color pull-down menu.



1-1

In the Printer Specific Options pane, choose settings for the print options described on page 1-2.



If these settings are ones you use regularly, click Save Settings to save them for subsequent jobs.

2-1 Workflow concepts

## Chapter 2: Simple and Advanced Workflows

This chapter discusses color management workflows used in short-run color printing, as well as color proofing on the Fiery 3850C. It also gives examples of color management in specific desktop applications and discusses the interaction between those applications and ColorWise color management.

## **Workflow concepts**

The term "workflow" is used to describe the path a job follows from its creation in a desktop application to final printed output. It is helpful to think of the following categories when describing workflows:

- Short-run printing versus color proofing for eventual output on an offset press
- RGB, CMYK, and PANTONE color systems
- Desktop color management within an application versus color management on the Fiery 3850C, along with the notion that different versions of desktop applications handle color management differently. It is important to pay close attention to the version of a particular application when considering the workflows in this chapter.

## Short-run printing versus color proofing

Short-run color printing refers to those jobs for which the Fiery 3850C is the final print device. Printing jobs to the Fiery 3850C in preparation for printing on an offset press is referred to as color proofing. Both types of Fiery 3850C print jobs use RGB, CMYK, and PANTONE colors.

- For short-run jobs, bright, saturated colors are often desirable. These are achieved by
  using the full range of colors available, referred to as the full gamut of the printer or,
  more simply, printer CMYK. See "Advanced Workflows" on page 2-7 for short-run
  printing examples.
- Offset jobs proofed on the Fiery 3850C require the printed colors to match those
  from another set of CMYK printing conditions. Colors specified for an offset press
  require CMYK simulation optimized for proofing on the printer. See "Advanced
  Workflows" on page 2-7 for color proofing examples that simulate the gamut of
  another digital printer or press standard.

2-2 Simple and Advanced Workflows

#### RGB, CMYK, and PANTONE colors

Colors can be defined in several different color models, the most common being RGB, CMYK, and the PANTONE color matching system. Each model requires a different color conversion at the Fiery 3850C. Color conversion workflows for CMYK and PANTONE colors are explained below.

- CMYK colors are device-dependent. In a proofing scenario, colors specified in
  prepress applications are adjusted so the gamut of the Fiery 3850C printer can
  simulate that of the press. In a short-run printing workflow, specifying CMYK
  colors according to the calibrated printer output eliminates the need for simulation
  during printing.
- PANTONE spot colors are special inks manufactured to run on an offset printing press. Spot colors can be simulated using CMYK printer toners or process color inks. Two basic workflows exist for printing PANTONE colors to the Fiery 3850C:

Spot Color Matching On instructs the Fiery 3850C to match the output of the printer to the PANTONE spot color.

Spot Color Matching Off instructs the Fiery 3850C to match the printer output to a PANTONE-specified process simulation. This CMYK combination is then printed with the CMYK Simulation setting you choose, such as SWOP or DIC.

## Desktop versus Fiery 3850C color management

A desktop color management system uses ICC profiles to convert colors from one device gamut to the next (see Appendix B). The color data is converted when it is passed from one application to another or when the job is sent to the printer, so the processing occurs on your computer, as opposed to the Fiery 3850C.

One advantage of using ColorWise color management over desktop color management is that your computer is spared added processing. Delaying color conversions until the color data reaches the Fiery 3850C frees your computer so you can continue working, and color conversions on the Fiery 3850C are, in most cases, much faster than similar conversions on a host computer.

Managing most or all of your color on the Fiery 3850C can also eliminate the potential for undesirable color management-related conflicts, such as iterative color conversions and inconsistent color. The Fiery 3850C applies global corrections to specific groups of RGB, CMYK, and PANTONE colors to avoid such conflicts.

2-3 Simple workflows

Finally, by sending RGB files instead of larger CMYK files from applications to the Fiery 3850C, network traffic is minimized and jobs generally print faster.

ColorWise uses ICC profiles to convert colors to the printer gamut or simulate other devices, such as an offset printing press. ColorWise manages color conversions for all users printing to the Fiery 3850C from Windows and Mac OS computers. It lets users follow a simple workflow with minimal intervention using robust default settings, while giving advanced users the control and precision they need.

The Fiery 3850C can intelligently manage the printed appearance of RGB, CMYK, and PANTONE colors. You can let the Fiery 3850C manage color for most short-run color printing jobs without adjusting any settings.

## Simple workflows

Every time you print a document containing colors that were not chosen for your specific printer, those colors need to be converted, which requires color management. You can define or modify colors at any stage in the workflow. Since ColorWise is compatible with most other color management systems, you can use the workflow most familiar to you.

This section provides examples of color workflows that should meet the needs of most Fiery 3850C users. For information on specific desktop applications, see Chapters 6 through 9.

## Select your colors wisely

For the colors you see on your monitor to match those on your printed output, they must go through color management, including precise calibration of your monitor and printer. If you are not equipped or inclined to maintain accurate monitor color management, you may opt for an easier approach. First, determine which is more important you—printed colors or monitor displayed colors.

If displayed colors are more important, trust your eyes and your monitor. Visually select colors on your monitor, but be aware that colors will be optimized only for your monitor. When the document is opened on other monitors, the colors may look different. And even though printed colors may not match those displayed on your monitor, they will still print on the Fiery 3850C with good results.

Simple and Advanced Workflows

If printed colors are your priority, choose colors from printed samples. By using these sample colors, your printed output will remain consistent regardless of how the colors appear on different monitors. Print the palette of available colors from business applications and then select colors from the printed samples. Fiery 3850C Color reference files are included on the User Software CD (see page 5-2). You can also print

No matter which workflow most closely matches your own, you should calibrate your printer regularly (see Chapter 3).

color charts from the Control Panel and select colors by number or name from the printed samples. Advanced applications let you define colors in the easier-to-control PANTONE and CMYK color spaces. See Chapter 5 for more advice on color

#### Select a short workflow

selection.

Every time colors are converted, performance and color accuracy are affected. Therefore, a workflow with fewer steps minimizes the risk of error.

## Workflow 1 using ColorWise calibration—minimal workflow

A minimal color workflow requires that you calibrate the printer. Select from printed colors as described above, and set the CMYK Simulation option to None, since simulation is not needed when colors are already defined using CMYK values optimized for your calibrated printer.

**NOTE:** CMYK Simulation set to None is also useful when you want to prepare an output profile of your calibrated printer or when you use less efficient color management from the desktop (such as ColorSync or ICM).

In this workflow, colors are modified only at the calibration stage. This is indicated by the black box in the diagram below.

Workflow 1—Colors you define in an application

Colors in output from the printer

Application CMS

File format

Printer driver

ColorWise CMS

ColorWise calibration

2-5 Simple workflows

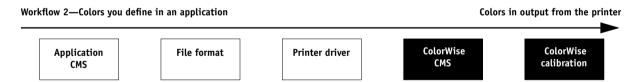
While this workflow lends some control over the color quality produced by the printer, you should consider additional ColorWise color management, as described in the next section.

#### Workflow 2 using ColorWise color management—standard workflow

Fiery 3850C servers are highly optimized for the specific printer they drive, and ColorWise addresses many issues unique to your printer, including screens, individual toner response, interactions among toners, natural smoothness of blends, and the capability to render PANTONE and custom colors. The Fiery 3850C distinguishes text and graphic from image elements, so the black channel information is preserved while parameters used for CMYK color separations are maintained.

Conventional color management systems typically address only color conversions, and they occupy your computer processor. When you use ColorWise, jobs leave your computer faster to be processed more quickly on the Fiery 3850C.

The recommended standard color workflow (indicated by the black boxes in the diagram below) uses ColorWise calibration and color management.



The Fiery 3850C comes into play near the end of the color workflow. To ensure the colors you selected reach the Fiery 3850C and ColorWise in a usable form, you should bypass any color management from applications and printer drivers. Keep in mind, however, that color management from applications and printer drivers is fully supported by ColorWise (see "Advanced workflows" on page 2-7).

You must print with the CMYK Simulation print option set to match the CMYK color space in your application when you selected the colors. Any CMYK Simulation setting applies calibration, so the response of the printer will appear to be stable.

2-6 Simple and Advanced Workflows

The recommended values for CMYK Simulation are SWOP in the US, Euroscale in Europe, and DIC in Japan—choices that respect the color standard for each region. If colors have been selected specifically for your calibrated printer, set CMYK Simulation to None.

See the table on page 1-2 for a list and descriptions of ColorWise print options that affect CMYK, RGB, PANTONE, and other colors.

#### Workflow 3 bypassing ColorWise—not recommended

Bypassing ColorWise color management, while an option, is not a recommended workflow. When you bypass ColorWise, you must choose colors using only CMYK formulas designed specifically for your printer. The Fiery 3850C still prints pages using your PostScript files, and drives the printer and its accessories, but it does not perform CMYK color transformation, nor does it consider the calibration of the printer. Calibration is needed in order to get consistent output, since the color response from your printer varies significantly depending on wear, heat, humidity, and service.

The diagram below indicates that no modifications are made to colors in this workflow.



### Turn off color management in your application

Generally, when printing to the Fiery 3850C, you should disable color management in the application to ensure the Fiery 3850C receives color data properly and prints it accurately.

2-7 Advanced workflows

#### Save your files using color-safe settings

You can take several additional steps to ensure color accuracy.

- When saving EPS files, do not include PostScript Color Management information.
   This minimizes the risk conflicting data and multiple color conversions. PostScript Color Management causes your CMYK and RGB colors to be interpreted by the Fiery 3850C as though they were supplied in the Lab color space and, as a result, to be processed by CRDs rather than your simulation settings.
- Include ICC color information in files. ColorWise does not conflict with this
  information, and such data is useful for identifying the specific color space used by
  your files.
- Do not include halftone and transfer functions.
- Turn off color management in the printer driver.

On Windows computers, if the printer driver offers Image Color Matching options, select Printer Image Color Matching.

On Mac OS computers, set the printer driver to include *no* color management commands at print time (see page 1-16).

## Advanced workflows

The following sections present advanced color management workflow examples for three short-run printing and three color proofing situations. Each workflow example consists of a brief description, steps for creating and manipulating the files, a list of the ColorWise settings used in the example, and a table that summarizes the workflow.

**NOTE:** These examples reference specific software applications to illustrate image-editing, illustration, page layout, and business/office applications; they are Adobe Photoshop, Adobe Illustrator, QuarkXPress, and Microsoft PowerPoint, respectively.

## Short-run printing examples

The following examples illustrate short-run printing on the Fiery 3850C.

#### Photoshop RGB workflow

This short-run workflow of printing an RGB image from Photoshop is one of the simplest Fiery 3850C color workflows. RGB data is sent from the application, through the printer driver, to the Fiery 3850C, and the RGB-to-CMYK conversion takes place

2-8 Simple and Advanced Workflows

on the Fiery 3850C using a CRD rather than the application. Use the settings illustrated in this workflow for printing photographs and artwork.

This document could be created as follows:

- Create an RGB image in Photoshop.
- Print the file directly to the Fiery 3850C.
   See Chapter 7 for recommended print settings from Photoshop.
- Use ColorWise to convert the RGB image to printer CMYK, or the full copier gamut.

The ColorWise settings used in this example are:

- RGB Source Profile set to EFIRGB or another RGB source definition
- Rendering Style set to Photographic

The diagram below indicates the steps for this particular workflow in black.

#### Photoshop RGB workflow

Photoshop

# Read Embedded Profiles Define RGB Source Embed Source Profiles Convert RGB to CMYK Convert CMYK to CMYK Select RGB Mode Select CMYK Mode

Select CMYK Mode
Select Destination Profile
Save as TIFF
Save as EPS
Save as JPEG
Print

Printer driver

(Mac OS-Only)
Black and White

Color/Grayscale ColorSync Color Matching PostScript Color Matching ColorWise print options

Define RGB Source Select RGB Source: None

Select Rendering Style (CRD)

Convert Press CMYK to Press Sim.
Convert Press CMYK to Custom Sim.
Select Copier CMYK Sim.: None
Turn Spot Color Matching On
Turn Spot Color Matching Off

Select Output Profile Select Custom Output Profile 2-9 Advanced workflows

#### Photoshop RGB with Illustrator and QuarkXPress CMYK and PANTONE colors

This workflow involves short-run printing of a complex page layout with images saved in Photoshop, illustrations created in Illustrator, and PANTONE spot colors. A Photoshop image is saved in an RGB color space using the EPS file format. Illustrator artwork contains objects defined as CMYK and as PANTONE spot colors selected from printed output, and they are saved using the Illustrator EPS file format. After all of these individual objects are imported into QuarkXPress, additional design elements in QuarkXPress are colored using CMYK process colors or PANTONE spot colors. Use the settings illustrated in this workflow for printing brochures, newsletters, and other layouts.

**NOTE:** Anytime you place CMYK colors in a document, select them from printed output (see page 2-3).

This document could be created as follows:

- Create an RGB image in Photoshop and save it as Photoshop EPS.
- Create a graphic in Illustrator using CMYK and PANTONE colors and save as Illustrator EPS.
- Use CMYK colors and a PANTONE color in a QuarkXPress document.
- Import the Illustrator EPS into QuarkXPress and place the Photoshop EPS image.
- Print the QuarkXPress document to the Fiery 3850C.
- Use ColorWise to convert the RGB image to printer CMYK, to adjust the process colors for short-run printing, and to match the PANTONE spot colors using the full printer gamut.

#### Simple and Advanced Workflows

The ColorWise settings used in this example are:

- RGB Source Profile set to EFIRGB or another RGB source definition
- Rendering Style set to Photographic
- CMYK Simulation set to None
- Spot Color Matching set to On

The diagram below indicates the steps for this particular workflow in black.

#### Photoshop RGB workflow with Illustrator, QuarkXPress CMYK, and PANTONE colors

#### Photoshop

**Read Embedded Profiles** Define RGB Source **Embed Source Profiles** Convert RGB to CMYK Convert CMYK to CMYK

Select RGB Mode Select CMYK Mode

Save as TIFF

Save as EPS Save as JPEG Print

#### Illustrator

Read Embedded Profile Define RGB Colors

## **Define CMYK Colors Define PANTONE Colors**

Convert RGB to CMYK Convert PANTONE to CMYK **Embed Source Profile** Select Destination Profile Select Destination Profile

> Save as EPS Print

#### QuarkXPress

Read Embedded Profile **Define RGB Colors** 

#### **Define CMYK Colors Define PANTONE Colors**

Convert RGB to CMYK Convert CMYK to CMYK Convert PANTONE to CMYK **Embed Source Profile Select Destination Profile** 

Print

#### Printer driver

(Mac OS-Only) Black and White Color/Grayscale Matching PostScript Color Matching

#### ColorWise print options

Define RGB Source Select RGB Source: None

Select Rendering Style (CRD)

Convert Press CMYK to Press Sim. Convert Press CMYK to Custom Sim.

Select Copier CMYK Simulation: None Turn Spot Color Matching On

Turn Spot Color Matching Off Select Output Profile

Select Custom Output Profile

#### Photoshop RGB with Illustrator CMYK and PANTONE and PowerPoint RGB

This workflow involves short-run printing of a complex presentation document with images saved in Photoshop, illustrations created in Illustrator, and PANTONE spot colors. All elements are imported into PowerPoint for output.

This document could be created as follows:

- Create an RGB image in Photoshop and save it as Photoshop EPS.
- Create a graphic in Illustrator using CMYK colors and a PANTONE spot color and save as Illustrator EPS.
- Create a presentation in PowerPoint using RGB colors.
- Import the Illustrator EPS graphic into the PowerPoint presentation and place the Photoshop EPS image.
- Print the PowerPoint document to the Fiery 3850C.
- Use ColorWise to convert the PowerPoint RGB colors and Photoshop RGB image to printer CMYK, to adjust the process colors for more saturated short-run printing, and to match the PANTONE spot colors using the full printer gamut.

#### Simple and Advanced Workflows

The ColorWise settings used in this example are:

- RGB Source Profile set to EFIRGB or another RGB source definition
- Rendering Style set to Presentation
- CMYK Simulation set to None
- Spot Color Matching set to On

The diagram below indicates the steps for this particular workflow in black.

#### Photoshop RGB and Illustrator CMYK and PANTONE in PowerPoint RGB workflow

#### Photoshop

Read Embedded Profiles
Define RGB Source
Embed Source Profiles
Convert RGB to CMYK
Convert CMYK to CMYK

Select RGB Mode
Select CMYK Mode
Select Destination Profile
Save as TIFF

Select Destination Profile
Select Destination Profile
Export as TIFF

Save as EPS Save as JPEG Print

#### Illustrator

Read Embedded Profile Define RGB Colors Define CMYK Colors Define PANTONE colors Convert RGB to CMYK Convert PANTONE to CMYK Embed Source Profile

Save as EPS
Print

#### **PowerPoint**

Define RGB Colors Convert CMYK to RGB Print

#### Printer driver

(Mac OS-Only)
Black and White
Color/Grayscale
ColorSync Color
Matching
PostScript Color
Matching

## ColorWise print options

Define RGB Source Select RGB Source: None

Select Rendering Style (CRD)
Convert Press CMYK to Press Sim.
Convert Press CMYK to Custom Sim.

Select Copier CMYK Simulation: None Turn Spot Color Matching On Turn Spot Color Matching Off Select Output Profile

Select Custom Output Profile

## Color proofing examples

The following examples illustrate methods for simulating the output from another printing system, such as an offset press. Each of the proofing examples uses an ICC profile to describe the destination color space. While some examples use simulation profiles built into the Fiery 3850C, others use ColorWise Pro Tools (see Chapter 4) to download custom ICC output profiles to the Fiery 3850C for use as simulation profiles.

#### Photoshop 5.x RGB-to-CMYK conversion using a custom ICC profile

This workflow is useful for prepress environments that have integrated ICC color management and have profiles for the presses they use. In this example, an image in Photoshop 5.x is converted from RGB to CMYK using the Photoshop ICC color conversion features in the CMYK Setup option. (For more information on CMYK Setup, see your Photoshop 5.x documentation.) Using the Simulation settings available in ColorWise, the CMYK image is printed to the Fiery 3850C, and the output is made to appear as if it were printed on an offset press.

This document could be created as follows:

- In Photoshop 5.x, set CMYK Model in CMYK Setup to ICC.
- In the Profile menu, select an ICC profile for the desired offset press. Click OK.
- Open an RGB image. From the Image pull-down menu select Mode>CMYK Color.
- Save the image in any file format.
- Print directly to the Fiery 3850C.
- Use ColorWise Pro Tools to select a simulation profile or download a custom ICC profile to the Fiery 3850C for use as a CMYK Simulation Profile.

The ColorWise settings used in this example are:

• CMYK Simulation Profile set to the desired press standard or to the corresponding custom simulation (Simulation 1-10) if you downloaded your profile with ColorWise Pro Tools

The diagram below indicates the steps for this particular workflow in black.

#### Photoshop RGB-to-CMYK workflow using ICC profile

#### Photoshop 5.x

Read Embedded Profiles Define RGB Source **Embed Source Profiles** Convert RGB to CMYK Convert CMYK to CMYK Select RGB Mode

#### Select CMYK Mode Select Destination Profile

Save as EPS Save as JPEG Print

#### Printer driver

(Mac OS-Only) Black and White Color/Grayscale ColorSync Color Matching PostScript Color Matching

#### ColorWise print options

Define RGB Source Select RGB Source: None Select Rendering Style (CRD) Convert Press CMYK to Press Sim.

#### Convert Press CMYK to Custom Sim. Select Copier CMYK Simulation: None

Turn Spot Color Matching On Turn Spot Color Matching Off Select Output Profile

**Select Custom Output Profile** 

#### Photoshop 5.x Built-in RGB-to-CMYK workflow

This workflow is useful for prepress environments that have *not* integrated ICC color management and do not have profiles for the presses they use. In this example, an image is converted from RGB to CMYK using the Photoshop 5.x/6.0 Built-in color conversion features in the CMYK Setup option. (For more information on CMYK Setup, see your Photoshop 5.x documentation.) Using the Simulation settings available in ColorWise, the CMYK image is printed to the Fiery 3850C, and the output is made to appear as if it were printed on an offset press.

This document could be created as follows:

- Select the Built-in option from CMYK Setup in Photoshop 5.x/6.0 Color Settings.
- Adjust the Ink Options and Separation Options to match your offset press.
- Select the Tables option in CMYK Setup and click Save.

This saves your settings as a CMYK ICC profile that you will later download to the Fiery 3850C as a custom simulation profile.

- Select the Built-in option in CMYK Setup again and click OK.
- Launch ColorWise Pro Tools and download your new CMYK ICC profile to the Fiery 3850C as a custom Simulation profile.

For the Appear in Driver as option in Profile Settings, select Simulation-1. (For more information on downloading profiles, see page 4-5.)

- Open an RGB image in Photoshop 5.x. From the Image menu, select Mode>CMYK Color. Save the image as Photoshop EPS.
- Print the image directly to the Fiery 3850C and choose Simulation-1 as the CMYK Simulation Profile setting.

The ColorWise settings used in this example are:

• CMYK Simulation Profile set to Simulation-1

The diagram below indicates the steps for this particular workflow in black.

#### Photoshop5.x RGB-to-CMYK workflow

#### Photoshop 5.x

Read Embedded Profiles
Define RGB Source
Embed Source Profiles

Convert RGB to CMYK
Convert CMYK to CMYK
Select RGB Mode
Select CMYK Mode
Select Destination Profile
Save as TIFF

Save as EPS Save as JPEG Print

#### Printer driver

(Mac OS-Only)
Black and White
Color/Grayscale
ColorSync Color Matching

PostScript Color Matching

# ColorWise print options

Define RGB Source Select RGB Source: None Select Rendering Style (CRD) Convert Press CMYK to Press Sim.

Convert Press CMYK to Custom Sim.
Select Copier CMYK Simulation: None
Turn Spot Color Matching On
Turn Spot Color Matching Off
Select Output Profile

Select Custom Output Profile

## Chapter 3: Color Calibration

Calibrating the Fiery 3850C ensures consistent, reliable color output. You can calibrate the Fiery 3850C with ColorWise Pro Tools using any of these instruments:

- X-Rite DTP41 automatic scanning spectrophotometer (page 3-7)
- X-Rite DTP32 automatic scanning densitometer (page 3-25)
- EFI ED-100 Densitometer (page 3-25)

Each of these instruments must be purchased separately. By connecting the instrument to the serial port on your computer, you can quickly measure color patches and download measurements to the Fiery 3850C. You can also obtain measurements from the printer's built-in scanner and calibrate using VisualCal, which does not require the use of a densitometer and can be run from ColorWise Pro Tools. VisualCal is run from the Control Panel on the Fiery 3850C.

This chapter explains how **calibration** works and provides instructions for all calibration procedures. Calibrating with VisualCal is described onpage 3-5.
Calibrating with ColorWise Pro Tools is described on page 3-29. For information on advanced calibration and simulation features such as editing profiles and creating custom profiles, see Chapter 4. A format for inputting color measurements from other densitometers is described in Appendix C.

The procedures described in Chapters 3 and 4 are fundamentally the same for Windows and Mac OS computers. The main differences are the interface cable and the port used to connect to the densitometer.

## Introduction

Calibration generates curves that adjust for the difference between the actual toner densities (measurements) and the response expected by the output profile.

- Measurements represent the actual color behavior of the printer.
- Calibration sets are sets of measurements.
- A calibration target that describes the expected behavior of the printer is contained in each output profile.

Once you have calibrated the Fiery 3850C with ColorWise Pro Tools or with VisualCal, a calibration set is stored on the Fiery 3850C. This calibration set is used when it is associated with an output profile. Every output profile has an associated calibration set. If you have not specified one, the calibration set associated with the default output profile is used.

**NOTE:** Changing calibration has the potential to affect *all* jobs for *all* users, so you may want to limit the number of people authorized to perform calibration. You can set an Administrator password from the Fiery 3850C Control Panel or in Setup from Command WorkStation to control access to calibration.

## **Understanding calibration**

Although most users' needs are met by the default calibration set, the Fiery 3850C allows you to choose a calibration set to customize calibration for specialized jobs.

#### Calibration allows you to:

- Maximize the color reproduction capabilities of the Fiery 3850C.
- Ensure consistent color quality over time.
- Produce consistent output across Fiery 3850C servers that are connected to the same print engine.
- Achieve better color matches when reproducing spot colors such as PANTONE colors or other named color systems.
- Optimize the Fiery 3850C for using ColorWise rendering styles (CRDs), CMYK simulations, and ICC profiles.

#### How calibration works

Success in obtaining satisfactory print quality from a color server, such as a Fiery 3850C, connected to a printer depends on many factors. Among the most important are establishing and maintaining optimal toner densities. Density is a measure of the light absorbed by a surface. By carefully regulating toner densities, you can obtain consistent printed color.

Even with a calibrated system, toner density is affected by service settings, humidity, and temperature; it also tends to drift over time. Regular measurement detects day-to-day variations in densities, and calibration corrects for them.

Calibration works by creating calibration curves on the Fiery 3850C that compensate for the difference between actual (measured) and desired (target) density values.

Calibration curves are the graphic equivalent of transfer functions, which are mathematical descriptions of changes that will be made to the data you start with. Transfer functions are often graphed as input or output curves.

The Fiery 3850C generates calibration curves after comparing measured values to the final target values for each of the four toner colors. The target values are based on the output profile specified.

#### Measurements

Measurement files contain numerical values that correspond to the toner density produced by the printer when it prints solid cyan, magenta, yellow, and black, and graduated tints of those colors.

To create a measurement file, first print a page of color patches from ColorWise Pro Tools. Then you measure the patches using the EFI Densitometer 100,the X-Rite DTP41 spectrophotometer, or an X-Rite DTP32 densitometer connected to a computer on the network or the printer's scanner. The new measurements are automatically downloaded to the Fiery 3850C.

#### Output profiles and calibration sets

Output profiles and calibration sets define desired calibration results. One or more output profiles and one or more calibration sets are provided with the Fiery 3850C. When you calibrate the Fiery 3850C, you can select the calibration set that corresponds to the typical printing jobs at your site. This same calibration set can be associated with one or more output profiles. (For more information on output profiles, see page 1-6.)

## Scheduling calibration

In general, you should calibrate the Fiery 3850C at least once a day, depending on the volume of print jobs. If it is very important to maintain consistent color, or if the printer is subject to wide fluctuations in temperature or humidity, calibrate every few hours. To get the best performance, calibrate whenever there is a noticeable change in print quality.

If you need to split a print job into two or more batches to be printed at different times, it is especially important to calibrate before printing each batch. You should also calibrate the Fiery 3850C after printer maintenance. However, because the printer may be less stable immediately after maintenance, wait until you have printed approximately 50 pages before you calibrate.

**NOTE:** Since printed output from the printer is very sensitive to changes in temperature and humidity, the printer should *not* be installed near a window, in direct sunlight, or near a heater or air conditioner. Paper is sensitive to climate changes as well. It should be stored in a cool, dry, stable environment, and reams should remain sealed until they are needed.

Print color reference pages, such as the Color Charts (from the Control Panel or Command WorkStation) and the color reference pages included with the user software (see *Getting Started*). All of these pages include fully saturated color patches and pale tints of cyan, magenta, yellow, and black. Images with skin tones offer a very good basis for comparison. You can save and compare pages you printed at different times. If there is a noticeable change in appearance, you should calibrate the Fiery 3850C.

When you examine the Test Page, keep in mind that all color patches should be visible, even though they may be very faint in the five percent and two percent range, and each color's patch set should show uniform gradation from patch to patch as the color lightens from 100 percent to zero percent.

If the solid density patches (100% cyan, magenta, yellow, or black) look less saturated with time, show the pages to your printer service technician to find out whether adjusting the printer can improve output.

# Checking calibration status

You can check whether the Fiery 3850C is calibrated, which calibration set and output profile were used, and when the printer was last calibrated:

 Print a Configuration page or Test Page from the Control Panel or the Command WorkStation.

For information about printing these pages, see the Configuration Guide.

 When you select a calibration set in Calibrator, the last calibration and the user who performed it are displayed.

# Calibrating from the Control Panel using VisualCal

VisualCal is a calibration method that allows you to calibrate your printer to a color output standard defined by the manufacturer. The calibration calculations performed by the controller software are based on a series of values entered on the control panel. The values used in the calculations are determined by evaluating toner densities and color combinations produced on two specially designed calibration pages printed from the control panel.

# Limits and 30% Match

The first VisualCal page, "Limits and 30% Match," provides the basis for calculating the most acceptable luminosity (brightness) of the toners. This page consists of rows of CMYK dots in a graduated range of toner densities.

The variables needed to recalculate the *density* of the colored toners are determined by identifying the leftmost dots that can be fully distinguished against their fields in each row, and sequentially entering their corresponding numeric values on the control

panel. The variable needed to recalculate the *luminosity* of the toners is determined in a slightly different way—you identify the black dot that best matches a 30% dot gain field. When all values have been entered, the printer's toner density and luminosity settings are recalculated.

# **Gray Balance**

The second VisualCal page, "Gray Balance," provides the basis for calculating a "neutral gray balance," that is, a CMY gray that as closely as possible matches a pure K (blacK) gray produced by the printer's engine. This page consists of rows of CMY gray patches on a field of gray produced solely from black. The variables needed to calculate the printer's most neutral gray balance are determined by identifying the CMY patch that best matches this field, and entering its row and column location on the control panel. When the values have been entered, the printer's gray balance is recalculated.

### TO PERFORM VISUAL CALIBRATION

- 1. At the Idle screen, press the Menu button to enter the Functions menu.
- Choose Calibration, and choose Set Up Calibration.

If a password is set on the Fiery 3850C, enter it and press OK.

3. For Calibration Mode, select Standard or Expert.

Expert Mode adds the option to print a Comparison Page (see page 3-35).

- 4. For Measurement Method, chose VisualCal.
- Back at the main calibration screen, select Calibrate.
- 6. Press Yes to print the Limits and 30% Match page.

To reset the printer's toner density and luminosity settings, follow the instructions provided on the Limits and 30% Match page. Use the touch screen to change numbers; do not use the numerical keypad.

**NOTE:** Zero (0) and 9 are unacceptable values for color calibration. If you select 0 for any of the colors, the resulting calibration will be inaccurate. If the entered value for any color is 9, the Limits and 30% Match page is reprinted automatically. Re-enter values for all color rows starting with Black Start.

When you have finished entering all values, the PRINT GRAYS screen appears.

# 7. Press Yes to print the Gray Balance page.

To reset the printer's gray balance, follow the instructions provided on the Gray Balance page. When you have finished entering all values, the PRINT COLOR TEST screen appears.

**NOTE:** If the Gray Balance page is printed after the Limits calculations have been made, the gray field on which the CMY patches appear on the Limits page will use the new density and luminosity calibration settings.

Select Yes to print a color test page that uses the original values (CURRENT COLOR TEST PAGE) and a Color test that uses the new values (NEW COLOR TEST PAGE), and use the up and down arrows to select YES. Press Enter to print the pages.

- 8. If you are satisfied with the printer's calibration based on the new values, select YES from the APPLY CHANGES screen that appears, and press OK to calibrate the printer based on the previously entered values.
- 9. Choose Exit Calibration to return to the Functions menu.

Use the following suggestions for adjusting VisualCal for your specific preferences:

- If your print seem to be color balanced but too dark, enter a lower value for the 30% Match entry on the Limits and 30% Match page, last row.
- If your print seems too light, enter a higher value.
- If light areas on your prints have a color cast, enter a lower value in the Start row for that toner.
- If dark areas on your prints have a color cast, enter a higher value in the End row for that toner.

# Using a spectrophotometer

ColorWise Pro Tools Calibrator is designed to work with the X-Rite DTP41 spectrophotometer, a device that measures density and color data. The DTP41 communicates directly with the Calibrator application in ColorWise Pro Tools, sending measurements to the Fiery 3850C automatically.

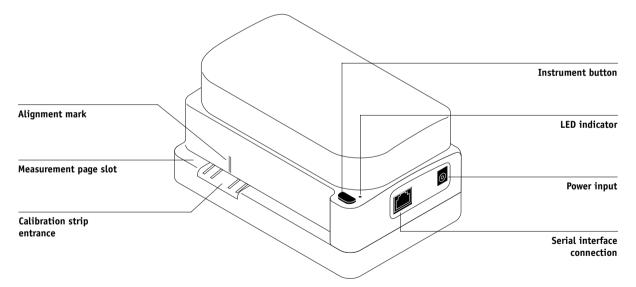


# Setting up the spectrophotometer

Before you calibrate the Fiery 3850C, you need to connect, configure, and calibrate the spectrophotometer to prepare for measuring the printed patches (see "Calibrating the X-Rite DTP32 densitometer" on page 3-28). For additional information about setting up and using the DPT41, see the *Instrument Operator's Manual* that came with it.

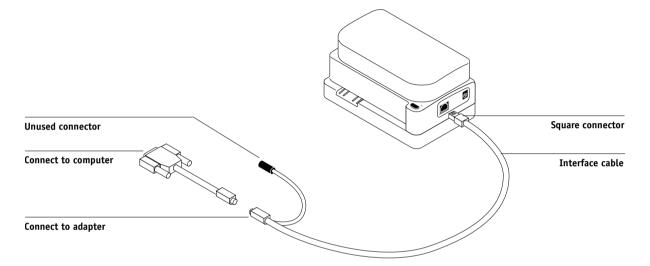
# TO CONNECT THE X-RITE DTP41 TO THE COMPUTER

- 1. Turn off the computer.
- 2. Unpack the X-Rite DTP41, and remove the spacer from the measurement page slot.
- Plug the square end of the interface cable (looks like a modular phone plug) into the serial interface connection on the side of the X-Rite DTP41.



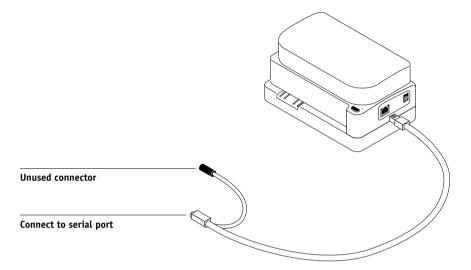
# 4. Attach the connector to the computer.

For a Windows computer, insert the 8-pin mini-DIN end of the interface cable into the 9-pin DB9 Connector cable adapter. Insert the 9-pin end into the COM1 or COM2 port on the computer and tighten the screws. If the available port on your computer is 25-pin, you must use the 8-pin-to-25-pin adapter.



3-10 Color Calibration

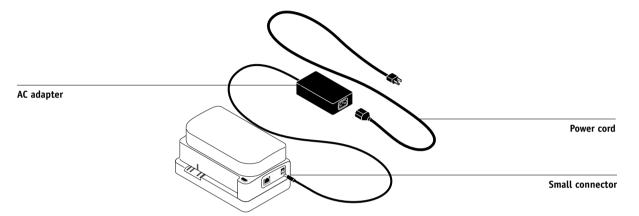
For a Mac OS computer, connect the 8-pin mini-DIN plug directly into the serial port of the computer.



**NOTE:** For Macintosh computers with a USB port (for example, an iMac) you need an adapter to connect the DTP41 to your computer. See the X-Rite, Inc. web site (www.x-rite.com) for information on supported adapters.

# 5. Use the AC adapter to provide power.

Plug the small connector on the adapter cable into the power input of the X-Rite DTP41 and plug the AC adapter into the power cord. Plug the power cord into a wall outlet.



- 6. Turn on the computer.
- 7. Use ColorWise Pro Tools to calibrate the X-Rite DTP41 (see page 3-28).
- 8. Use ColorWise Pro Tools and the DTP41 to calibrate the Fiery 3850C (see page 3-16).

# Calibrating the spectrophotometer

For the best color accuracy, you should calibrate the X-Rite DTP41 spectrophotometer every time you calibrate the Fiery 3850C. You can initiate the calibration sequence in ColorWise Pro Tools Calibrator as part of the process of Fiery 3850C calibration. The computer may also prompt you that it is necessary to calibrate the spectrophotometer.

Alternatively, you can initiate the DTP41 calibration process using the Instrument button on the DTP41. See the *Instrument Operator's Manual* that accompanied the X-Rite DTP41 for more information on this method.

Multiple users connect to one Fiery 3850C server with ColorWise Pro Tools, but only one user at a time can use the Calibrator module. An error message appears if you try to calibrate when another user is already using ColorWise Pro Tools to calibrate.

**NOTE:** ColorWise Pro Tools for Windows and Mac OS computers are fundamentally the same; differences are noted in this chapter. The screens and dialog boxes you see illustrated here are the Windows version.

You will need the Color Reflection Reference strip included with the spectrophotometer. Remove the strip from its protective envelope, handling it only by the edges. Keep the strip free of dust and smudges, and always store it in the protective envelope.

# TO CALIBRATE THE X-RITE DTP41

- Connect the spectrophotometer to the computer and turn on power (see page 3-8).
- 2. Launch ColorWise Pro Tools and connect to the Fiery 3850C.



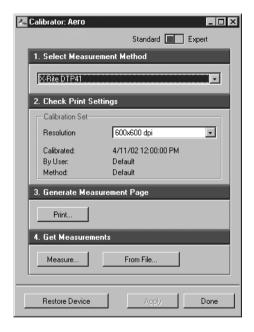
For instructions on configuring the connection to the Fiery 3850C, see Getting Started.

**NOTE:** If the connection to the Fiery 3850C from Command WorkStation that also allows for access to ColorWise Pro Tools is not established, you can directly launch ColorWise Pro Tools independently of Command WorkStation.

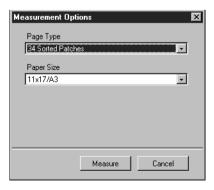
### 3. Click Calibrator.

### 4. Select DTP41 as the measurement method.

X-Rite DTP41 should appear as a measurement method. This information is provided to Calibrator by the Fiery 3850C. If this option does not appear, make sure you are connected to the Fiery 3850C.

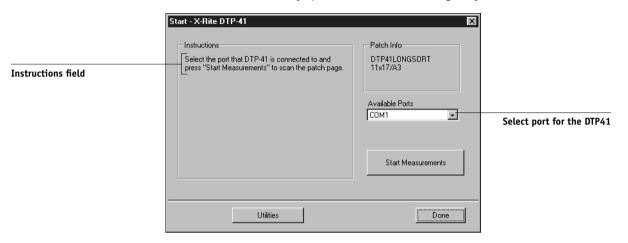


- 5. Under Get Measurements, click Measure.
- 6. In the Measurement Options dialog box, click Measure.

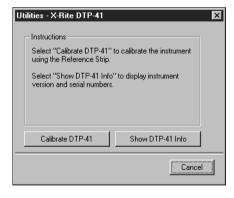


7. Select the appropriate COM port for the DTP41 from the Available Ports menu.

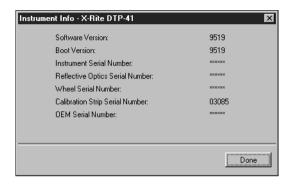
The Instructions field displays instructions for selecting the port.



- 8. Click Utilities.
- 9. Click Calibrate DTP-41.



**NOTE:** To view version and serial number information, click Show DTP-41 Info. When finished, click Done.

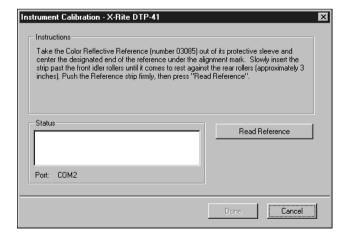


- Remove the shipping spacer from the measurement page slot, if you have not already done so.
- 11. Insert the end of the Color Reflection Reference strip with the arrow into the calibration strip entrance on the DTP41, centering it below the alignment mark (see the diagram on page 3-8).

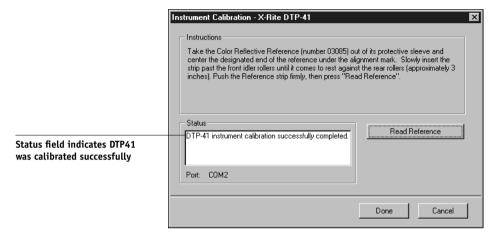
Insert the strip about 3 inches, past the front idler rollers, until it rests against the rear drive rollers.

# 12. Click Read Reference.

The DTP41 will pull the calibration strip through automatically.



### 13. Click Done.



### 14. Close the Utilities window.

This completes DTP41 calibration.

When the DTP41 requires calibration, your computer prompts you.



When this dialog box appears, click Calibrate Now and follow the instructions, starting with step 9 on page 3-14.

After calibrating the DTP41, calibrate the Fiery 3850C (see page 3-16).

# Calibrating with ColorWise Pro Tools and DTP41

Using the ColorWise Pro Tools Calibrator application and the DTP41

spectrophotometer, you can quickly measure color patches generated by the printer and automatically download these measurements to the Fiery 3850C.

Changing the calibration has the potential to affect *all* jobs for *all* users, so you may want to limit the number of people authorized to perform calibration. You can set an Administrator password from the Fiery 3850C Control Panel to control access to calibration.

Multiple users can connect to one Fiery 3850C server with ColorWise Pro Tools, but only one user at a time can use the Calibrator module. An error message appears if you try to calibrate when another user is already using ColorWise Pro Tools to calibrate.

**NOTE:** Before using ColorWise Pro Tools and the DTP41 to calibrate the Fiery 3850C, follow the instructions on page 3-28 for calibrating the DTP41 spectrophotometer.

### TO CALIBRATE THE FIERY 3850C USING THE DTP41

1. Launch ColorWise Pro Tools and connect to the Fiery 3850C.



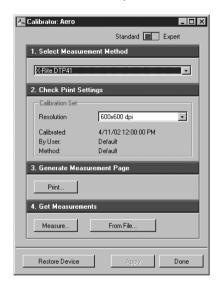
For instructions on configuring the connection to the Fiery 3850C, see Getting Started.

**NOTE:** If the connection to the Fiery 3850C from Command WorkStation that also allows for access to ColorWise Pro Tools is not established, you can directly launch ColorWise Pro Tools independently of Command WorkStation.

### 2. Click Calibrator.

### 3. Select DTP41 as the measurement method.

X-Rite DTP41 should appear as a measurement method. This information is provided to Calibrator by the Fiery 3850C. If this option does not appear, make sure you are connected to the Fiery 3850C.



# 4. Under Check Print Settings, choose the desired calibration set.

Choose the appropriate calibration set for the print resolution you will use most often.

**NOTE:** For this calibration to take effect, the calibration set must be associated with one or more output profiles. The default calibration set is already associated with the default output profile, so there is no need to make any new associations.

# 5. Under Generate Measurement Page, click Print.

# 6. In the Print Options dialog box, choose the Page Type, Paper Size, and Input Tray to use for the measurement page, and then click Print.

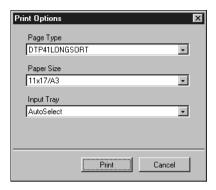
In the Page Type pop-up menu, select either 34 or 21 Sorted Patches.

In the Paper Size pop-up menu, the menu will automatically select LTR/A4 for 21 Sorted Patches or 11x17/A3 for 34 Sorted Patches.

3-19

In the Input Tray pop-up menu, specify the paper source.

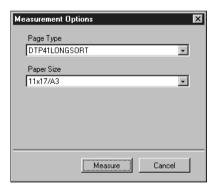
Print Options window for DTP41 calibration method



- 7. Retrieve the measurement page from the printer.
- 8. Under Get Measurements, click Measure.

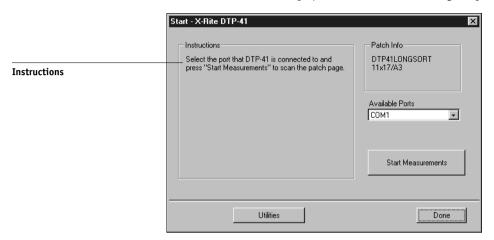
The selected Page Type and Paper Size options appear.

9. Click Measure.



10. If necessary, select the appropriate COM port for the DTP41 from the Available Ports pop-up menu.

The Instructions field displays instructions for selecting the port.



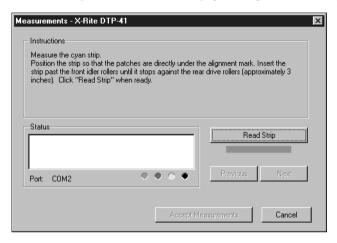
# 11. Feed the measurement page into the DTP41, starting with the cyan strip.

Align the page in the measurement page slot of the DTP41, so the appropriate color column is centered below the alignment mark (see the diagram on page 3-8). Insert the page about 3 inches, past the front idler rollers, until it rests against the rear drive rollers.

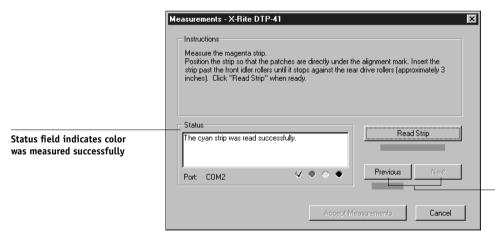
# 3-21

# 12. Click Read Strip.

The DTP41 pulls the measurement page through automatically.



13. Once the measurement page is read, Calibrator instructs you to insert and align the page again for the next color. Repeat the measurement process for the magenta, yellow, and black strips.

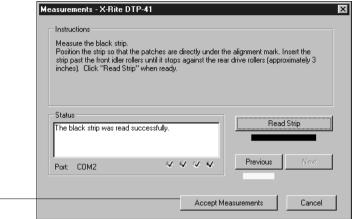


Previous and Next buttons let you advance or reverse to repeat a measurement

A check mark appears on the circle of the color just read, and the Status field indicates that color was measured successfully.

You can use the Previous and Next buttons on the Measurements window to reverse or advance to another step in the measurement sequence to repeat a measurement.

14. When the Status field indicates that all four color strips have been read successfully, click Accept Measurements.



**Click Accept Measurements** 

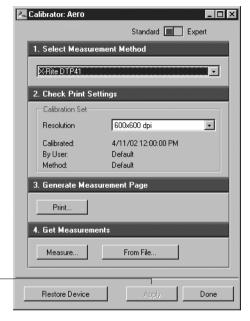
15. In the Measure dialog box, click OK.



3-23

Click Apply

16. In the Calibrator dialog box, click Apply to implement the new calibration set.



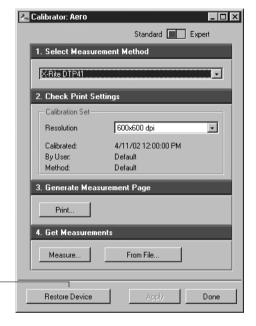
17. In the Information dialog box, click OK.



This completes the Fiery 3850C calibration process.

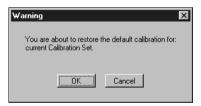
# TO RESTORE DEFAULT CALIBRATION MEASUREMENTS

- 1. Launch ColorWise Pro Tools and click Calibrator.
- 2. Click Restore Device.



**Click Restore Device** 

3. Click OK to restore the preset default calibration set (print resolution setting).



**Note:** Restore device applies only to the currently selected calibration set.

# Using a densitometer

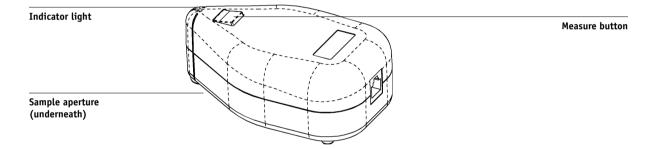
ColorWise Pro Tools are designed to work with the EFI Densitometer 100 and the X-Rite DTP32, both of which are reflection densitometers which feed color measurements to the Fiery 3850C automatically.

**NOTE:** Measurements from other densitometers can be input using a simple ASCII file format (see page C-1).

# Setting up the ED-100 densitometer

To use the ED-100 for calibration purposes, you must first set it up for use with your computer. For complete instructions on setting up the ED-100, see the documentation that is included with the instrument.

The following illustration shows the different components of the ED-100.

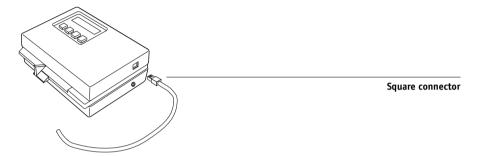


# Setting up the X-Rite DTP32 densitometer

Before you calibrate the Fiery 3850C using the X-Rite DTP32, you need to connect, configure, and calibrate the densitometer to prepare for measuring the printed patches (see "Calibrating the X-Rite DTP32 densitometer" on page 3-28). For additional information about setting up and using the DTP32, see the documentation included with it.

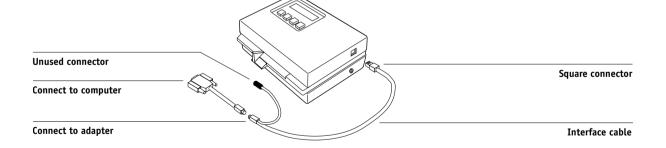
# TO CONNECT THE X-RITE DTP32 TO THE COMPUTER

- 1. Turn off the computer.
- Plug the square end of the interface cable (looks like a modular phone plug) into the I/O port on the side of the X-Rite DTP32.

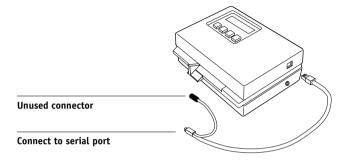


3. Attach the connector to the computer.

For a Windows computer, insert the 8-pin mini-DIN end of the interface cable into the 9-pin DB9 Connector cable adapter. Insert the 9-pin end into the COM1 or COM2 port on the computer and tighten the screws. If the available port on your computer is 25-pin, you must use the 8-pin-to-25-pin adapter.



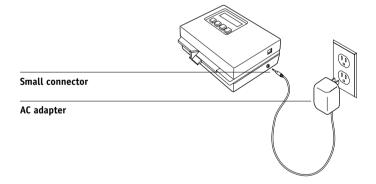
For a Mac OS computer, connect the 8-pin mini-DIN plug directly into the serial port of the computer.



**NOTE:** For Macintosh computers with a USB port (for example, an iMac) you need an adapter to connect the DTP32 to your computer. See the X-Rite, Inc. web site (www.x-rite.com) for information on supported adapters.

# 4. Use the AC adapter to provide power.

Plug the small connector on the adapter cable into the side of the X-Rite DTP32 and plug the adapter into a wall outlet.



- 5. Turn on the computer.
- 6. Calibrate the densitometer (see below).
- 7. Use ColorWise Pro Tools to calibrate the Fiery 3850C (see page 3-29).



# Calibrating the X-Rite DTP32 densitometer

You will need the black-and-white X-Rite Auto-Cal Strip included with the densitometer. Calibrating the densitometer does not require ColorWise Pro Tools.

### TO CALIBRATE THE X-RITE DTP32

- Connect the densitometer to the computer and supply power (see page 3-25).
- From the Main Menu on the X-Rite DTP32 display, press the p1 key once to reach p2.
- Press the cal key. 3.

Calibrating motor speed is displayed, followed by the words INSERT CAL STRIP.

4. Insert the arrow end of the X-Rite Auto-Cal Strip into the 35mm slot on the front of the X-Rite DTP32 until it stops or the roller starts pulling the strip.

Reading appears momentarily, followed by the density values and CALIBRATION OK. The densitometer automatically returns to the MAIN MENU.

If UNRECOGNIZABLE STRIP appears, repeat the process or try cleaning the strip (see the X-Rite DTP32 Operating Manual).

5. Start ColorWise Pro Tools and proceed to calibrate the Fiery 3850C (see the next section).

Recalibrate the densitometer at least once per month. For critical color, calibrate the densitometer every time you calibrate the Fiery 3850C. The densitometer may also warn periodically that it requires calibration.

# Calibrating with ColorWise Pro Tools and DTP32/ED-100

Using the densitometer, you can quickly measure color patches and download these measurements to the Fiery 3850C using ColorWise Pro Tools Calibrator.

**NOTE:** Multiple users can connect to one server with ColorWise Pro Tools, but only one user at a time can use Calibrator. An error message appears if you try to calibrate when another user is already using ColorWise Pro Tools to calibrate.

ColorWise Pro Tools for Windows and Mac OS computers are fundamentally the same; differences are noted in this chapter. The windows and dialog boxes you see illustrated are the Windows version.

**NOTE:** Changing the calibration has the potential to affect *all* jobs for *all* users, so you may want to limit the number of people authorized to perform calibration. An Administrator password can be set from the Fiery 3850C Control Panel to control access to calibration.

### TO CALIBRATE THE PRINTER USING CALIBRATOR

Launch ColorWise Pro Tools and connect to the Fiery 3850C.



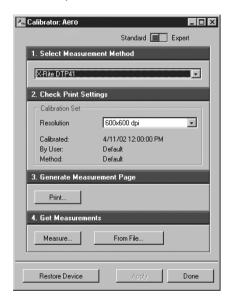
For instructions on configuring the connection to the Fiery 3850C, see Getting Started.

**NOTE:** If the connection to the Fiery 3850C from Command WorkStation that also allows for access to ColorWise Pro Tools is not established, you can directly launch ColorWise Pro Tools independently of Command WorkStation.

### 2. Click Calibrator.

### 3. Select a measurement method.

X-Rite DTP32, X-Rite DTP41, and EFI Densitometer ED-100 appear as the measurement methods. If none of these options appears, make sure you are connected to the Fiery 3850C.



# 4. Under Check Print Settings, choose the desired calibration set.

If there is more than one option, choose the appropriate calibration set for the print resolution you use most often.

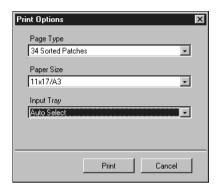
**NOTE:** For this calibration to take effect, the calibration set must be associated with one or more output profiles. The default calibration set is already associated with the default output profile, so there is no need to make any new associations.

# 5. Under Generate Measurement Page, click Print.

6. In the Print Options dialog box, choose the Page Type, Paper Size, and Input Tray to use for the measurement page, and then click Print.

For the densitometer method, select either 34 or 21 Sorted Patches.

In the Input Tray pop-up menu, specify the paper source.



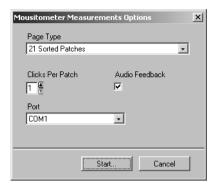
- 7. Retrieve the Measurement Page and click Cancel.
- 8. Under Get Measurements, click Measure.
- 9. If you chose the DTP32 method, proceed to step 13.
- If you chose the EFI Densitometer 100 method, select options in the options dialog box and click Start.

For Page Type, the previously selected page information appears.

For Clicks Per Patch, select how many measurements (clicks of the measurement button on the EFI Densitometer 100) you want to use for each color patch, up to three clicks per patch. The average measurement is returned to the Fiery 3850C. More than one measurement per patch results in a more accurate measurement of that patch, but it takes more time. If you select multiple clicks per patch, it is a good idea to move the EFI Densitometer 100 slightly after each measurement while keeping it within the patch circle.

Checking the Audio Feedback check box instructs the computer to signal you audibly after each patch measurement is completed. This allows you to take the measurements without having to see the computer screen. One tone indicates the patch was measured successfully, while another indicates a measurement error occurred.

For Port, select the COM port to which the EFI Densitometer 100 is connected.



# 11. Measure each color patch using the EFI Densitometer 100.

The Status field of the Mousitometer Measurements dialog box indicates whether the connection to the EFI Densitometer 100 was successful.

The EFI Densitometer 100 Measurements dialog box also provides a visual map of your progress.

Begin with Strip A, placing the EFI Densitometer 100 *directly on* the Measurement Page and *directly over* the first color patch. Click the measurement button on the EFI Densitometer 100 to take a reading. You must click the button the number of times that you selected for Clicks Per Patch. If you selected multiple clicks per patch, it is a good idea to move the EFI Densitometer 100 slightly after each measurement while keeping it within the patch circle.

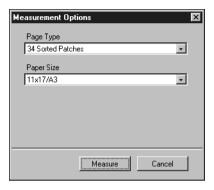
**NOTE:** For more accurate measurement, place a plain sheet of paper beneath the Measurement Page to block underlying colors from being read by the EFI Densitometer 100.

Continue measuring every color patch on the Measurement Page, being sure not to skip a single patch.

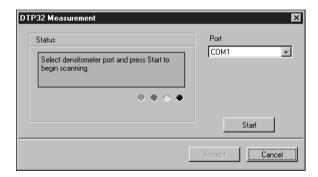
**NOTE:** It is critical that you take the measurements in the order outlined in the EFI Densitometer 100 Measurements dialog box and on the Measurement Page.

# 12. When all patches have been measured successfully, click Accept and skip to step 15.

13. If you chose the DTP32 method, select the Page Type and Paper Size options you selected for the measurements page, and click Measure.



Follow the directions in the dialog box that appears for feeding the measurement page through the X-Rite DTP32.



The Status field displays instructions for selecting the port and feeding the measurement page through the DTP32 four times, once for each color strip.

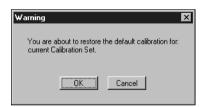
# 3-34 | Color Calibration

- 3-34
  - 14. When the Status field indicates that the measurements were read successfully, click Accept.
  - 15. In the Measure dialog box, click OK.
  - 16. In the Calibrator window, click Apply to implement the new calibration set.
  - 17. In the Information dialog box, click OK.

This completes the calibration process.

# TO RESTORE DEFAULT CALIBRATION MEASUREMENTS

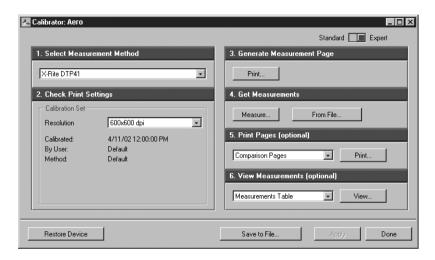
- 1. Launch ColorWise Pro Tools and click Calibrator.
- 2. Click Restore Device.
- 3. Click OK to restore the preset default calibration set.



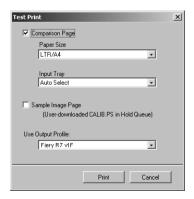
Note: Restore device applies only to the currently selected calibration set.

# **Expert Mode**

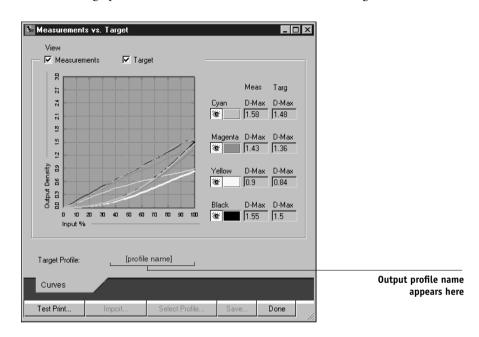
Expert Mode offers two additional options: Print Pages and View Measurements.



With the Print Pages option, you can print a calibration Comparison Page showing the results of the new measurements with any profile associated with the currently selected calibration set. You can also create a custom comparison page and save it as a PostScript or an Encapsulated PostScript (EPS) file called CALIB.PS. Then you can print the file to the Hold Queue of the Fiery 3850C from your application or download it to the Hold Queue with Command WorkStation. In addition, you can create the CALIB.PS file by renaming any job in the Hold Queue using Command WorkStation.



With the View Measurements option, you can view the current set of measurements as a table or as a graph that shows both the measurements and the target curves.



When more than one profile use the same target, an additional menu called Plot Against appears in the upper right of the window above. It lists all output profiles that use the same calibration set. Selecting an output profile from this menu displays the target curves associated with that profile. If each output profile contains a unique calibration target, when you switch profiles, the curves displayed also change.

# Chapter 4: ColorWise Pro Tools

ColorWise Pro Tools include the following color management tools that give you flexible control of color printing:

- Calibrator (see Chapter 3)
- Color Editor
- Profile Manager
- Color Setup



ColorWise Pro Tools for Windows and Mac OS computers are fundamentally the same; differences are noted in this chapter. The windows and dialog boxes illustrated are the Windows version. For information on installing and configuring a connection to ColorWise Pro Tools, see *Getting Started*.

**NOTE:** If the connection to the Fiery 3850C from Command WorkStation that also allows for access to ColorWise Pro Tools is not established, you can directly launch ColorWise Pro Tools independently of Command WorkStation.

# **Profile Manager**

Profile Manager allows you to manage and edit ICC profiles. In the case of the Fiery 3850C, these profiles are divided into RGB Source, Simulation, and Output profiles.

 RGB Source contains all monitor profiles resident on the Fiery 3850C. RGB Source profiles define the source color space for RGB colors processed by the Fiery 3850C.

**NOTE:** If you use Photoshop 5.x/6.0, you can upload the profile for your selected working space to the Fiery 3850C and choose that as your RGB Source profile.

- **Simulation** contains printer profiles used to simulate another device on the Fiery 3850C.
- **Output** contains printer profiles that describe the attached printer. For more information on output profiles, see page 1-6.

NOTE: Changing the Fiery 3850C default profiles affects all jobs for all users, so you might want to limit the number of people authorized to use ColorWise Pro Tools by setting an Administrator password.

Several profiles are provided with the Fiery 3850C, and you can create additional profiles as needed by modifying the existing ones. You can also download profiles listed below from any workstation to the Fiery 3850C.

### **RGB Source:**

- sRGB (PC)—source color space for a generic Windows computer monitor
- Apple Standard—standard source color space for Mac OS computer monitors with older versions of ColorSync
- **EFIRGB**—preset default setting for a Fiery 3850C

### Simulation:

- SWOP-Coated—United States press standard
- Euroscale—European press standard
- DIC—Japanese press standard

### Output:

- Fiery 3850C 600dpi v1F—profile that describes the printer
- Fiery 3850C 1200dpi v1F—profile that describes the printer at a higher print resolution

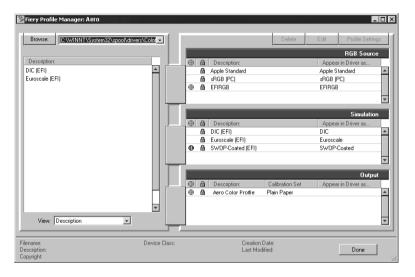
**Note:** For more information on output profiles, see page 1-6.

# Setting the default profiles

The default profiles are applied to all print jobs sent to the Fiery 3850C, unless you override them using print options. Therefore, the defaults should be the most commonly used profiles.

# TO SPECIFY A DEFAULT PROFILE

1. Launch ColorWise Pro Tools and click Profile Manager.



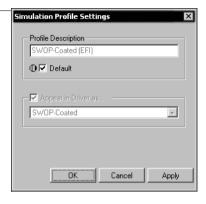
The left side of the screen lists the ICC profiles in the default directory of your computer. The right side lists each of the three types of profiles on the Fiery 3850C.

The lock icon ( ) to the left of a profile name indicates that the profiles cannot be deleted and can be edited only if it is saved under a new name. Only Simulation and Output profiles can be edited.

A small icon to the left of a profile name indicates the default profile for each category (RGB Source, Simulation, and Output). If you designate a different profile as the default, the icon appears next to your designated profile. The icon indicating the default RGB Source and Output profiles looks like a target (\*\*).

- 4-4
  - Select the profile you want as the default for a profile type, and click Profile Settings.
  - In the Profile Settings dialog box, click Default and click Apply.

Profile Settings dialog box for Simulation (left) and Output (right)





### 4. Click OK.

In the main Profile Manager window, the target icon appears next to the new default profile you specified.

# 5. Repeat steps 2 through 4 for each type of profile.

If no default is set for RGB Source, the RGB Source print option is set to None. If no default profile is set for Simulation, the CMYK Simulation print option is set to None. For more information on print options, see Chapter 1.

The Output profile always has a default profile. You can change the Output default by selecting a preset profile you want as the default and clicking Profile Settings. Or you can create a new default under a new name by selecting a preset profile and specifying your choice of the calibration set in the Use Calibration Set pop-up menu and a new name in the Profile Description menu.



### **Downloading profiles**

The Fiery 3850C comes with default profiles. You can download additional profiles from any computer connected to the Fiery 3850C.

#### TO DOWNLOAD A PROFILE

1. Launch ColorWise Pro Tools and click the Profile Manager.

The left side of the main Profile Manager windows lists the ICC profiles in the default directory of your workstation.

For Windows 9x/Me, the default directory is Windows:System:Color.

For Windows NT 4.0 and Windows 2000, the default directory is Winnt:System32: Color.

For Mac OS, the default directory is System Folder: Preferences: ColorSync Profiles for ColorSync 2.0, and System Folder: ColorSync Profiles for ColorSync 2.5 or later.

- If the profile you want does not appear, click Browse to go to a different directory.
- Browse to the directory containing the profile you want to download and click OK.



When the profile you want to download appears in the list in the main Profile Manager window, select it.

If the profile is compatible with the Fiery 3850C, a green arrow indicates that the profile is available for download. Only output device profiles are downloadable to Simulation and Output. Only input device profiles are downloadable to RGB Source.



**Note:** On Windows computers, the profiles must have an extension of .icc or .icm to be listed. On Mac OS computers, the profiles must have a file type of profile.

All ICC profiles in the selected directory on your computer are displayed in the list in the main Profile Manager window. However, because a profile is listed does not necessarily mean it can be downloaded to the Fiery 3850C.

Simulation profiles should be only profiles of devices for which you want the Fiery 3850C to match in terms of color output characteristics. Output profiles should be only profiles of the device to which your Fiery 3850C is connected. Although CMYK printer profiles can be downloaded as Simulation or Output, consider how they will be used. If you want the Fiery 3850C prints to look like another printer, download that profile as a Simulation. If you have a custom profile of the printer your Fiery 3850C is connected to, download that profile as an Output profile.

#### Click the arrow to download the profile, and click OK when the download is complete.

The new profile now appears on the list of profiles on the right side of the Profile Manager main window.

This profile must be associated with one of the predefined names (Source-1 through Source-10 for RGB Source, Simulation-1 through Simulation-10 for Simulation, or Output-1 through Ouput-10 for Output) or set as the default before it can be used. See "Defining profiles" on page 4-8.

**NOTE:** When an output profile is downloaded, it inherits the calibration target of the current default output profile.

## **Editing profiles**

You can customize the profiles on the Fiery 3850C to meet your specific needs and the characteristics of your printer using Color Editor, either directly or through Profile Manager. See "Color Editor" on page 4-11 for more information on editing profiles.

### Managing profiles

Profile Manager lets you back up profiles to ensure that no custom profiles are lost when the Fiery 3850C software is updated. You can also upload a copy of a built-in Fiery 3850C profile to your workstation in order to use it with an ICC-aware application, such as Photoshop. Profile Manager also lets you delete unwanted profiles.

**NOTE:** You can back up and delete only those profiles that appear in the main Profile Manager window *without* a lock icon next to them. Locked profiles cannot be deleted, but most can be backed up.

#### TO BACK UP PROFILES

- 1. Launch ColorWise Pro Tools and click Profile Manager.
- 2. Select the profile on the Fiery 3850C to upload.

The arrow in the middle of the Profile Manager window turns green and points to the left, indicating the profile is available for upload.

3. Click the green arrow, choose a name and location for the profile, and click Save.

The name will be the file name of the profile, but the profile description will be the original description, or the one you entered in the Profile Settings dialog box.

**NOTE:** When saving the profile on a Windows computer, be sure to include the extension .icm. If the extension is not included, additional dialog boxes appear.

4. Click OK when you are notified that the profile was successfully uploaded.

Delete profiles to make sure no one uses the wrong profile and to free up disk space on the Fiery 3850C (although profiles are small and do not take up much space).

#### TO DELETE PROFILES FROM THE FIERY 3850C HARD DISK

- 1. Launch ColorWise Pro Tools and click Profile Manager.
- 2. Select the profile you want to delete and click Delete.

A Warning dialog box asks you to confirm deletion.

**NOTE:** You cannot delete preset profiles, profiles that are currently set as default, or profiles that are linked to any of the predefined custom names, for example Simulation-1.

#### 3. Click Yes to delete the profile.

If you want to delete a profile currently set as the default or associated with a custom name, click Profile Settings and clear the default option.

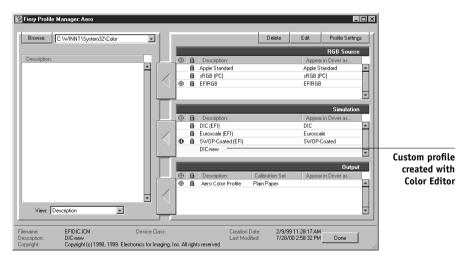
### **Defining profiles**

Before you can apply any downloaded or edited profile to a print job, that profile must be linked to one of the predefined custom names, or you can set the profile as the default for all print jobs (see setting default profiles, page 4-3). There are 10 names available for custom profiles—Source-1 through 10 for RGB Source, Simulation-1 through Simulation-10 for Simulation, or Output-1 through Output-10 for Output.

**NOTE:** A custom simulation profile is used to illustrate this procedure. The same steps apply for defining custom or downloaded output profiles.

#### TO DEFINE A PROFILE

1. Launch ColorWise Pro Tools and click Profile Manager.



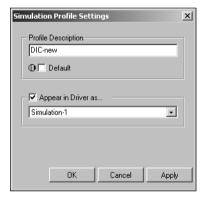
For the purposes of this example, assume DIC-new is a custom simulation profile created with Color Editor. As you can see, no information is displayed for DIC-new under the heading "Appear in Driver as."

- Select DIC-new in the Simulation list, and click Profile Settings or double-click DIC-new.
- 3. Select the "Appear in Driver as" checkbox, choose one of the predefined custom simulation names (Simulation-1 through Simulation-10) from the pop-up menu, and then click Apply.

Make sure to choose a name that is not already linked with another simulation. If you try to define two profiles with the same name, you will get an error message.

For an output profile, the predefined custom names would be Output-1 through Output-10.

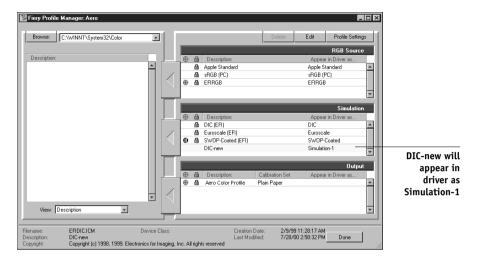
**NOTE:** While you cannot delete a preset profile, you can use the name of a preset profile name for your edited profile when you select the "Appear in Driver as" option. This replaces the preset profile with your own profile.



When you choose Profile Settings for an output profile, the Use Calibration Set option also appears. You must calibrate the Fiery 3850C with this calibration set before this option has any effect. If you have never measured for this calibration set, default measurements will be used. For more information about calibration sets, see page 3-2.

In Profile Settings, you can also change profile descriptions for all non-locked profiles.

#### 4. Click OK.



Simulation-1 now appears under the "Appear in Driver as" column for DIC-new. Choosing Simulation-1 from the CMYK Simulation option of the printer driver applies the DIC-new simulation to the print job.

If you do not define a custom simulation profile, your job will print with CMYK Simulation Profile set to None. If you do not define a custom RGB Source or Output profile, the default profile is used.

### **Color Editor**

Color Editor allows you to customize simulation and output profiles. You can access Color Editor directly by clicking its icon in the ColorWise Pro Tools main window, or indirectly, through the Profile Manager.

### **Editing profiles**

Color Editor allows you to create custom profiles by editing existing simulation or output profiles and saving the changes as a new profile. With Color Editor, you can fine-tune a profile on your Fiery 3850C to meet your exact specifications.

**Note:** You cannot edit source profiles; only simulation and output profiles can be customized.

Color Editor has two Edit Modes for editing output profiles.

- **Custom**—Edit output profiles and save customized versions of them.
- % Density—View the calibration target, which is one component of the output profile. You cannot make changes to the calibration target in this window, but you can import a new target (see page 3-2).

Color Editor also has these Edit Modes for editing simulations.

- Master—Create a custom master simulation that affects all print jobs to which it is applied, unless a linked simulation exists for the selected combination of simulation profile, simulation method, and output profile.
- With CRD—Create custom *linked* simulations. Linked simulations affect the print job only if the corresponding simulation profile and output profile are selected. If you choose an output profile for which you have created a custom linked simulation, that simulation is applied automatically to the job. If you choose a simulation method or output profile for which there is no custom linked simulation, then the master simulation is automatically applied. "With CRD" implies that the conversion is according to the CRD, or rendering style, that you select.

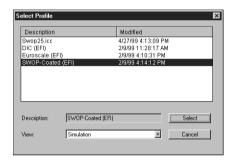
NOTE: If you made edits to a master simulation after you created a linked simulation, the edits are not applied to the linked simulation.



# TO EDIT A SIMULATION PROFILE IN MASTER MODE OR AN OUTPUT PROFILE IN CUSTOM MODE

- 1. Launch ColorWise Pro Tools and click Color Editor.
- 2. Choose Simulation or Output from the View pop-up menu.

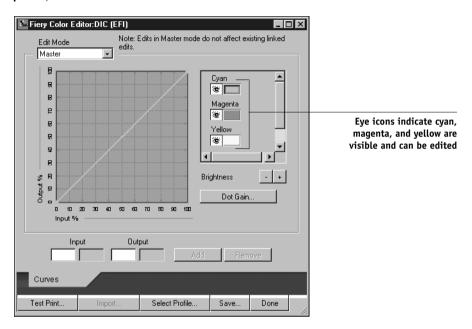
Simulation lists the simulation profiles resident on the Fiery 3850C, and Output lists the output profiles resident on the Fiery 3850C.



3. Choose a profile to edit and click Select.

NOTE: You can also open the Profile Manager, select a profile, and click Edit.

For a simulation profile, choose Master from the Edit Mode menu. For an output profile, choose Custom from the Edit Mode menu.



You can use this dialog box to view or edit profiles. The graph allows you to view and manipulate color output values.

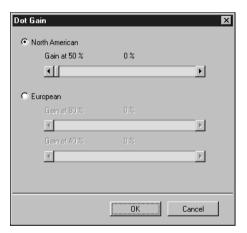
**NOTE:** When you edit an output profile in Custom mode, the Import button at the bottom of the Color Editor window lets you import a calibration target file (.trg) created on another Fiery using the previous version of ColorWise. The current version of ColorWise does not allow you to save a target separately; rather, it saves the target in conjunction with an output profile.

#### 5. Select the colors you want to edit by turning colors off and on.

The box with the eye icon to the left of each color indicates whether that color is visible on the graph and will be affected by changes to the curves, brightness, and dot gain controls. You can view and edit all four colors (cyan, magenta, yellow, and black) at once, or any combination thereof. Working with only one or two colors at a time helps you fine-tune your adjustments. To turn off a color, click its eye icon. In the example below, cyan and magenta are visible and can be edited.



6. Click Dot Gain to adjust the dot gain value for simulating press output.



Choose either the North American or European standard. Then use the sliders to select the desired Dot Gain:

- The range of values for North American at 50% input are from 0% to 50% gain on output.
- The range of values for European at 40% input are from 0% to 59% gain on output;
   the range of values for European at 80% input are from 0% to 20% gain on output.

If you use Dot Gain values, you should apply the settings first so that the curves are deflected from their straight-line positions. Then make edits to the new curves. When you adjust Dot Gain values, all existing points on the curve are removed. A warning dialog box gives you the chance to cancel Dot Gain settings before they are applied.

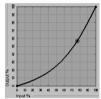
7. Use the plus and minus buttons to adjust brightness.

Changes to the brightness are reflected in the curve(s).

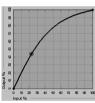
You can adjust the curves directly by clicking and dragging points on the curve or by entering numbers into the input and output boxes.

The graph maps the input percentage to the output percentage. (These percentages refer to the size of the CMYK halftone dots.) The curve you selected appears, and points along the curve are marked so you can adjust them.

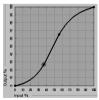
A curve with this shape makes a color appear lighter by reducing density in the midtones.



A curve with this shape makes a color appear darker by adding density in the midtones.



A curve with this shape increases contrast.



**Note:** You should adjust points in this way only *after* you have entered the Dot Gain and Brightness values.

For greater precision, you can key in percentages in the Input and Output boxes or use the arrow keys on the keyboard to adjust the curve. To use the arrow keys, you must first click on the curve to establish an anchor point that serves as a reference.

#### For an output profile, you can set maximum densities of the C, M, Y, and K channels.

You can enter the maximum densities, called D-Max values, of individual colors for profiles that support density settings. D-Max settings are not available when editing Simulation profiles in Master mode.

#### When you are finished, click Save and enter a name for the new profile.

The new custom profile is saved to the Fiery 3850C with the new name. If you edit one of the press standard targets (for example, SWOP-Coated, DIC, or Euroscale), you may want to include the original name as part of the new target name (for example, DIC-new) to help you remember the source of the new target.

**Note:** Preset default profiles are locked and *must* be saved with a new name.

Custom profiles must be linked to one of the 10 predefined custom profile names (Simulation-1 through Simulation-10 for Simulation or Output-1 through Output-10 for Output) in order to be accessible from the printer driver. You can create as many custom profiles as you want, but a maximum of 10 are available from the printer driver at any one time. See "Defining profiles" on page 4-8 for information on linking custom profiles to the predefined custom profile names.

If you set a custom profile as the default, you can access it from the printer driver without linking it to one of the predefined custom names. Select "Printer's default" from the printer driver.

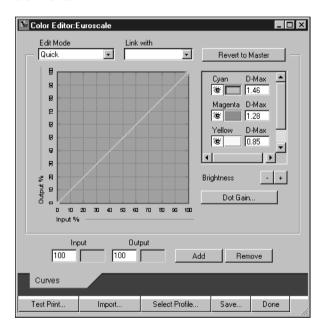
## Undoing simulation edits

You can undo the changes you made to simulations (master and linked) in these ways:

- If you have not yet saved your edits, click Done on the Color Editor menu bar, and do not save the changes.
- If you saved your edits under a new simulation name and want to delete all edits to the simulation, see page 4-7.
- If you saved your edits under a new simulation name and want to undo the edits to one or more linked simulation, use the following procedure.

#### TO UNDO EDITS MADE TO A CUSTOM LINKED SIMULATION

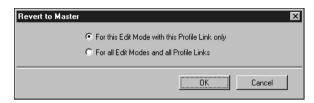
- 1. Launch ColorWise Pro Tools and click either Color Editor or Profile Manager.
- 2. Choose Simulation from the View pop-up menu, choose the simulation for which you want to undo edits, and click Select (Color Editor) or Edit (Profile Manager).
- Choose the output profile with which your unwanted edits are linked from the Link with menu.



#### 4. Click Revert to Master.

**NOTE:** Revert to Master makes the curves for one or more linked simulations match the last saved master simulation. If you have edited and saved changes to a master simulation, your linked simulations will revert to the changed master, *not* the original.

Indicate whether you want to revert the currently selected linked simulation only, or revert all links of this simulation profile, and click OK.



6. If you choose "For all Edit Modes and all Profile Links," a warning dialog box appears. Click OK.



The curves for the linked simulation(s) now match the last saved master simulation exactly.

## Checking edited profiles

You can view a printed sample of a profile before you save it to the Fiery 3850C. To do so, print one of the following:

- Comparison Page provided with ColorWise Pro Tools, which shows a comparison of images and colored patches with and without edits
- User-defined CALIB.PS in the Hold Queue

You can create a custom comparison page and save it as a PostScript or Encapsulated PostScript (EPS) file called CALIB.PS and then print the file to the Hold Queue of the Fiery 3850C from your application or download it to the Hold Queue with Fiery Downloader (see page 3-35).

#### TO CHECK A PROFILE

1. Click Test Print from the Color Editor window.



Select a page to print, specify the paper size and input tray (Comparison Page only), and click Print.

For Comparison Page, specify the paper size (LTR/A4 or 11 x 17/A3) in the Paper Size pop-up menu. In the Input Tray pop-up menu, specify the paper source.

## **Color Setup**

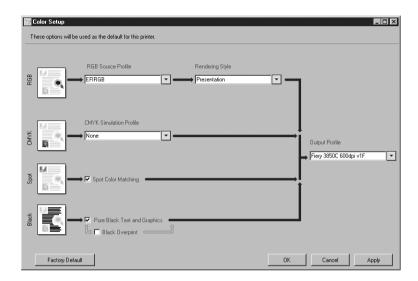
Color Setup is used to set the default ColorWise settings for the Fiery 3850C. To access Color Setup, click its icon in the ColorWise Pro Tools main window.

## Setting default ColorWise options

Color Setup allows you to configure the default color management settings for the Fiery 3850C. These settings are applied to all print jobs sent to the Fiery 3850C, unless a user overrides them for an individual job by changing settings in the printer driver. These default settings can also be overridden using Command WorkStation or Fiery WebSpooler. Color Setup maintains a connection to the Fiery 3850C, so changes made in Profile Manager appear automatically. In addition, the defaults set in Color Setup are automatically reflected in other Fiery 3850C tools that list default settings.

You can also reset the Fiery 3850C to its factory default settings by clicking the Factory Default button in the lower-left corner of the Color Setup window.

The options in Color Setup are arranged in a pattern representing the flow of color processing that takes place on the Fiery 3850C.



For those color options that offer multiple choices, click the down arrow and make your selection from the pop-up menu that appears. Other options are selected by selecting a checkbox next to the option name. Once you have made your changes, you must click OK or Apply for the changes to take effect. Clicking OK sets the new defaults and closes the Color Setup window. Clicking Apply sets the new defaults and keeps the Color Setup window open. Clicking Cancel closes the Color Setup window without applying any changes to the default settings.

For most users, the factory defaults result in optimal color output.

5-1 Working with color

## Chapter 5: Working with Color in Applications

This chapter provides guidelines for defining colors in your documents to produce the results you want. The following topics are covered:

- Factors affecting how you work with color
- Choosing colors in applications that rely on GDI or QuickDraw to communicate
  data to the printer driver, such as presentation and word processing applications
- Choosing colors in applications that have the ability to write their own PostScript, such as some page-layout, illustration, and pixel-editing applications

## Working with color

The two main factors that influence how you work with color in the creation of documents are the application you use and the final print device. Applications vary in the methods they provide for choosing colors and in the way they transmit color data to the print device.

- Office applications, such as presentation software, spreadsheets, and word processing
  programs, use the RGB color model. They typically transmit only RGB data to the
  print device.
- **Illustration applications** use both the RGB and CMYK color models but typically transmit only CMYK data to the print device.
- Pixel-editing applications use both the RGB and CMYK color models. They also transmit both RGB and CMYK data to the print device.

The type of printing you plan for the document—short-run color printing on the Fiery 3850C versus color proofing for eventual printing on an offset press—determines the way you define colors in addition to the print option settings you choose.

• For short-run color printing on the Fiery 3850C, use any application and define colors in either RGB or CMYK. If your application supports it, you can also choose colors from the PANTONE color library. Placed images may be limited to the RGB color space. Choose the appropriate settings for print options affecting color output (see page 1-1).

For color proofing, use an application that writes its own PostScript and define
colors in RGB, CMYK, or choose colors from the PANTONE color library. Placed
images can also be defined in RGB or CMYK. Choose the appropriate settings for
print options affecting color output (see page 1-1).

## Color reference pages

Fiery 3850C user software includes several types of color reference pages that let you see the range of colors that can be printed on your printer. For predictable color, use the color reference pages when defining the colors in your document.

- RGB Color Reference—a Microsoft Word file and a Microsoft PowerPoint file that
  let you view the colors available in the standard palettes of office applications and see
  how those colors print on the Fiery 3850C (see page 5-4).
- CMYK Color Reference—an 11-page downloadable PostScript file of CMYK color patches (see page 5-6).
- PANTONE Coated Color Reference—a 19-page downloadable PostScript file of color patches showing CMYK equivalents of PANTONE Coated colors. This file prints differently depending on the setting of the **Spot Color** Matching option (see page 5-6).

In addition, you can print RGB, CMY, and PANTONE color charts from the Fiery 3850C Control Panel.

## Office applications

The Fiery 3850C must receive PostScript instructions to print an image or a document. Many applications do not create these PostScript instructions, relying on the printer driver to create them. Included in this category are most word processors, spreadsheets, and presentation applications. These applications use Windows Graphics Device Interface GDI to display and print when running Windows, and Apple QuickDraw to display and print when running Mac OS. We refer to these GDI and QuickDraw applications as "office applications."

All office applications handle color similarly, using the same RGB color model used for the color monitor display. Most office applications allow you to choose colors from a palette of preselected colors; some allow you to add new colors to the palette using a color picker. Although some applications allow you to specify color using the CMY, HSL, and HSV color models, these applications always send RGB color data to the Fiery 3850C. (An exception to this is a CMYK EPS file placed in the document, which is sent as CMYK data.)

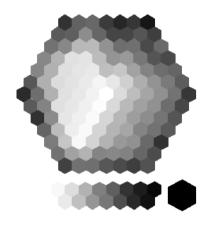
When working with color in office applications, keep in mind that:

- The range of colors that can be displayed in RGB on your monitor is much larger than the range of colors that can be printed on your printer. When you print the document, out-of-gamut RGB colors are mapped to colors your printer can produce.
- Office applications send only RGB data to the Fiery 3850C. You control the rendering style of the color conversion with your selection of a CRD.
  - Each CRD uses a different color rendering style, and therefore has a different way of mapping unprintable colors to the color gamut of your printer. Fiery 3850C color rendering styles are described on page 1-4.

### Choosing colors in office applications

Two RGB color reference pages, a Microsoft Word file and a Microsoft PowerPoint file, are provided with your Fiery 3850C user software. Print these files using different CRDs to see how the colors appear when printed to the Fiery 3850C. For best results, print the color reference page using the same print options you plan to use for your final document. Select the colors you want to use from the printed version of the RGB color reference page, and then use those colors in your document.

RGB Color Reference
Drint this page to use for reference when designing files for printing.



RGB Color Reference (Microsoft PowerPoint)

## PostScript applications

Most applications used for illustration, pixel editing, and page layout can create the PostScript information they send to PostScript printer or save in PostScript files. Illustrator, Photoshop, PageMaker, QuarkXPress, and Macromedia FreeHand are all PostScript applications.

PostScript applications work with color in many different ways. Most allow you to choose process colors (by entering percentages for cyan, magenta, yellow, and black), in addition to **named colors** from a custom color system, such as PANTONE. When you print composites, these applications send process-color equivalents for named **spot colors** to the printer. In some applications, you can also choose colors using the RGB, HSB, HSL, or other color models.

Generally, PostScript applications send color information to the Fiery 3850C as CMYK data. An exception to this is an RGB image placed in the document, which is sent directly to the Fiery 3850C (unless you specify special color management settings in the application.) In addition, some PostScript applications that allow you to define colors in RGB or other color models can also send data to the Fiery 3850C in those color spaces.

Color controls in PostScript applications are typically designed for printing on an offset press, and some adjustments are required for printing to the Fiery 3850C. Displayed versions of colors you choose in these applications may not match Fiery 3850C output exactly, and named colors may not print accurately on the Fiery 3850C, since these colors typically require custom inks.

### Choosing colors in PostScript applications

With PostScript applications, you can create colors using any of the color models supported by the application. All PostScript applications support CMYK; some also support RGB and other color models based on monitor display values. PostScript applications also allow you to choose named colors using one or more color libraries, such as PANTONE (see page 5-6).

You should use swatch color matching to ensure predictable color printing results with the Fiery 3850C or to match the Fiery 3850C color output to colors produced by other print devices.

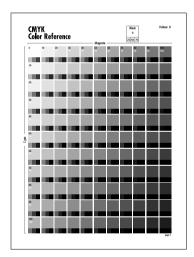
#### Swatch color matching

Fiery 3850C user software includes several color reference pages (see page 5-2). By choosing colors from these reference pages, you can ensure that you get the same color from your printer. For best results, calibrate the Fiery 3850C before printing the reference pages.

**NOTE:** Swatch color matching does not match *monitor* colors to printed colors. For this, you must use a color management system and calibrate your monitor.

#### Using the CMYK Color Reference

The CMYK Color Reference included with your Fiery 3850C user software lets you see how various cyan, magenta, yellow, and black combinations look when printed on your printer.



**CMYK Color Reference** 

To print the CMYK Color Reference, download the file to the Fiery 3850C. The printed pages display groups of color patches in graduated combinations of yellow, magenta, and cyan, and smaller patches that include 25%, 50%, and 75% black. Refer to these pages to pick colors and specify process color values in your application. For the location of the file on the User Software CD, see *Getting Started*.

#### **PANTONE Coated Color Reference**

The PANTONE Coated Color Reference included with your Fiery 3850C user

software can help ensure predictable results with colors chosen from the PANTONE color library.

The information printed by the PANTONE Coated Color Reference depends on the setting of the Spot Color Matching setting.

- On—Prints swatches of the closest equivalents of PANTONE colors your printer can produce. The equivalent PANTONE color name/number is printed below each swatch.
- Off—Prints swatches of the CMYK equivalents of PANTONE colors as defined by PANTONE. (These are the same CMYK values defined in applications that include PANTONE libraries.) The CMYK values used to produce the color, as well as the PANTONE color name/number, are printed below each swatch.

To print the PANTONE Coated Color Reference, download the file to the Fiery 3850C. (For the location of the file on the User Software CD, see *Getting Started*.) If the default Spot Color Matching setting on the Fiery 3850C is not the setting you want to use for printing the PANTONE colors, download the file to the Hold queue. Then use Fiery WebSpooler or Command WorkStation to override the Spot Color Matching setting.

## Default output profile

The default output profile consists of both a profile for your printer, <u>describing its</u> <u>color characteristics</u>, and a calibration target that describes the expected behavior of the printer at a particular print resolution (600x600 dpi or 1200x1200 dpi). For more information on output profiles, see page 1-6.

In certain cases, you may want to customize the default output profile to achieve particular color effects (see page 4-11). When you do so, the new customized output profile is applied to all data in the print job. You can also use ColorWise Pro Tools to download your own output profile to the Fiery 3850C (see page 4-5). Downloaded output profiles are at first associated with the default calibration target.

#### CMYK simulation

If you use the Fiery 3850C to print proofs for an offset press job or simulate another print device, choose the appropriate CMYK Simulation Profile and CMYK Simulation Method print option settings (see page 1-6).

## Chapter 6: Office Applications

The Fiery 3850C ColorWise color management system provides complete color management for jobs printed from office applications. This chapter provides instructions for printing color documents from **GDI** and **QuickDraw** applications such as presentation, spreadsheet, and word processing programs. You can use these instructions with the Microsoft Office applications.

## Working with office applications

Before printing from these applications, make sure the appropriate printer driver and the Fiery 3850C PPD are installed on your computer, as described in *Getting Started*.

### **Defining colors**

Office applications use the RGB color model. For instructions on defining colors, see "Choosing colors in office applications" on page 5-4.

The only way to use CMYK or PANTONE colors is to define them in EPS files with an illustration or page layout application, and then place these files into office documents. Colors in EPS files are preserved until they reach the Fiery 3850C (assuming no PostScript Color Management information was included.)

Office applications lack finesse when displaying EPS files, so use these files only if RGB colors are not practical in your specific workflow. EPS files are also useful when using large or complex images that need to be printed at full resolution or cannot fit some Microsoft Office configurations with limited memory.

### Working with imported files

Although your application may allow you to import a variety of file formats, EPS files are recommended for all raster images you want to import; some applications have printing problems when using file formats such as TIFF and PICT.

**NOTE:** You may have to perform a "custom install" of your office application if you are unable to import EPS elements.



Although there are no color management options within office applications, color conversions do occur when you import images or page elements that were not defined in RGB. To avoid such conversions with imported files, use the EPS file format for artwork that is to be imported into office applications.

All RGB images placed in a document are affected by RGB Source and Rendering Style settings.

#### Tip for advanced users

If you place multiple RGB images, mixed non-photographic and photographic, a single CRD may not be suitable for all the images. In this case, you may want the photographic images to bypass the CRD altogether. To accomplish this, save the image in CMYK mode with a pixel-editing application such, as Photoshop, and perform color correction. Save the image as a Photoshop EPS and import it into the document.

### Selecting options when printing

There are few differences among office applications with regard to Fiery 3850C printing. The instructions in this chapter apply to all office applications. Use the instructions in Chapter 1 to specify print options and color management settings. To specify these options, you must use a PostScript Level 2 (or later) printer driver, such as an Adobe PostScript Printer Driver.

Because office applications send RGB data to the Fiery 3850C, your choices of RGB Source and Rendering Style settings are important. Be sure to specify the appropriate CRD for the color effect you want (see "Rendering styles" on page 1-4).

## **Output profiles**

All color data in the job is affected by the output profile on the Fiery 3850C. This profile may be the one designed for your printer and shipped with the Fiery 3850C, or it may be a custom profile created at your site (see page 1-6). If necessary, print the Test Page to see which profile is currently resident on the Fiery 3850C.

7-1 Specifying color settings

## Chapter 7: Adobe Photoshop

This chapter covers features of Adobe Photoshop versions 6.x and 5.x for Windows and Mac OS. The illustrations show only Mac OS dialog boxes, but the information and instructions apply equally to the Windows version of Photoshop.

## Specifying color settings

The following sections outline the recommended color settings for Photoshop 6.x and 5.x in a Fiery 3850C workflow.

These color settings include:

**Working Spaces**—Default color spaces to use when working with RGB and CMYK documents. ICC color profiles describe the gamut and color characteristics of these working spaces.

Color Management Policies (Photoshop 6.x) or Profile Mismatch Handling (Photoshop 5.x)—Instructions that tell Photoshop what to do when it encounters color data from a color space other than the specified working space.

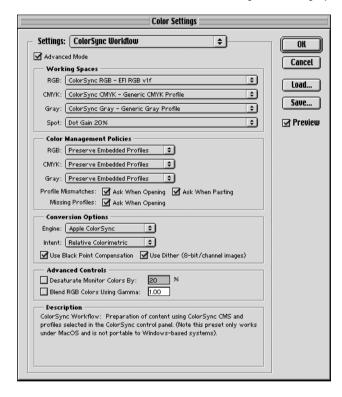
## Photoshop 6.x color settings

Photoshop 6.x uses a sophisticated color management system that handles document colors for a variety of color-managed workflows. By customizing color settings, you can specify the amount of color management you want to use while working in Photoshop 6.x.

#### TO SPECIFY COLOR SETTINGS FOR PHOTOSHOP 6.X

- 1. Choose Color Settings from the Edit menu.
- 2. Select Advanced Mode.

In Advanced Mode, a more extensive list of options is displayed.



### Choose the desired working space profile for each color mode in the Working Spaces area.

Use the following guidelines for specifying working spaces:

For RGB, choose the profile for the default RGB color space used by the
Fiery 3850C. In most cases, this is EFIRGB. Consider sRGB if you usually
view images on a generic PC monitor or rely on a Windows operating system
to manage color on your monitor. If you choose sRGB as a working space, you
must print with the ColorWise RGB Source option set to sRGB.

New RGB documents you create in Photoshop will use this working space.

**NOTE:** EFIRGB is set as the default RGB Source color space on the Fiery 3850C. No matter what RGB space you select, make sure it is available on the Fiery 3850C.

- •For CMYK, choose a profile that describes your target press (such as SWOP) if you are a prepress user. If you are an office user printing final output, choose an output profile that describes the printer connected to the Fiery 3850C. To use a device-specific output profile, you must first upload the profile from the Fiery 3850C to your computer. New CMYK documents you create in Photoshop will use the specified working space.
- For guidelines on specifying Gray and Spot working spaces, see your Photoshop 6.x documentation.

### 4. In the Color Management Policies area, choose policies for handling documents without embedded profiles or with embedded profiles that differ from the working space.

Unless you are an advanced color user, we recommend that you choose Off from the RGB, CMYK, and Gray menus. This option discards the original profile embedded in a document if it differs from the specified working space, while preserving the numeric color values in the document.

For Profile Mismatches, select Ask When Opening. This option displays an alert message that lest you override the specified policy behavior (Off) when opening documents or importing color data.

#### 5. In the Conversion Options area, specify settings for converting between color spaces.

Choose Adobe (ACE) from the Engine menu to use the built-in color management engine for Photoshop.

Choose a rendering intent from the Intent menu that will optimize the color quality of the conversion. For guidelines on choosing the rendering intent, see your Photoshop 6.x documentation.

Select Use Black Point Compensation and Use Dither (8-bit/channel images) to optimize the quality of color conversions.

# 6. Clear the Desaturate Monitor Colors By and Blend RGB Colors Using Gamma options in the Advanced Controls area.

Deselecting these options helps optimize the matching of the monitor display to printed output.

#### 7. Click Save to save the current group of color settings.

The Save dialog box appears.

#### 8. Name the settings file, accept the default saved location, and click Save.

You can switch to your saved settings at any time by choosing the group name from the Settings menu at the top of the Color Settings dialog box.

## Photoshop 5.x

Because Photoshop 5.x uses a sophisticated color management system, there are several setup steps you should take before you begin working. These steps include:

- Calibrating your monitor
- · Adjusting Photoshop color settings
- Setting ColorSync defaults (Mac OS only)

For information on monitor calibration and color setup in Photoshop (version 5.02 or later), open the Adobe Color Management Assistant (Mac OS) or Adobe Color Management Wizard (Windows) by choosing Help>Color Management. (See your Adobe Photoshop 5.x documentation or the Adobe Technical Guidelines for Photoshop at www.adobe.com.)

## Photoshop 5.x color settings

The settings you select in the Photoshop 5.x control panel and three setup dialog boxes control how color is managed when you open and save RGB and CMYK images. You

should calibrate your monitor using the Adobe Gamma control panel and specify settings in the Photoshop's Profile Setup, RGB Setup, and CMYK Setup dialog boxes before you begin working with images in Photoshop.

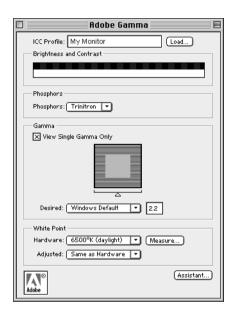
**NOTE:** The Adobe Gamma control panel performs similar functions on both Windows and Mac OS computers.

#### Adobe Gamma control panel

You can use the Adobe Gamma control panel to create and customize ICC profiles for your monitor. Photoshop properly displays images on your monitor by compensating between your chosen working space (see the following section on RGB Setup) and the description of your monitor defined by its profile. If you do not create a profile in the Adobe Gamma control panel that corresponds to your monitor, you may encounter poor monitor-to-print matching.

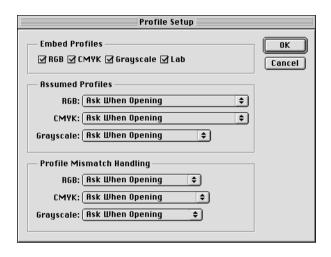
NOTE: If a profile for your particular monitor is not available, use the Adobe Gamma control panel setup Assistant (Wizard on Windows) to customize an available profile that at least has the same type of phosphors as your monitor.

Display the Adobe Gamma control panel by double-clicking its icon in either the Windows or Mac OS Control Panel. If you have not yet selected your monitor profile or want to customize your current profile, click the Assistant (Wizard on Windows) button.



#### **Profile Setup**

From the Photoshop 5.x File menu, choose Color Settings>Profile Setup.



In the Embed Profiles area, select all boxes to embed the appropriate ICC profile when saving a file. By embedding a profile during the saving process, Photoshop can link a color space (working space) definition with that file for future use. When you open an image that already contains a profile, Photoshop can alert you as to which color space the file was saved in. Be aware that you should avoid conversions between color spaces as much as possible (each conversion results in loss of color information).

In the Assumed Profiles area, choose Ask When Opening from the RGB and CMYK menus. When you open files that do not contain an ICC profile, you can convert the file to your current Photoshop working space setting or leave the file unconverted—the preferred choice, but make sure the current Photoshop working space setting matches the intended color space of the image.

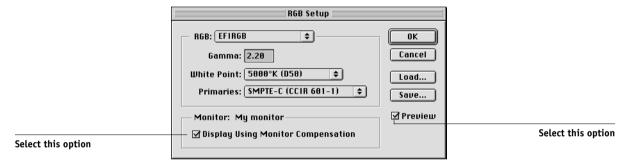
In the Profile Mismatch Handling area, choose Ask When Opening from the RGB and CMYK menus. When you open a file containing an ICC profile that does not match your current Photoshop working space setting, you have the choice to convert from the embedded profile or not. If you want to preserve the color integrity of the source image, do not convert. When you open the image, immediately go to RGB or CMYK Setup to specify the working space for the image. If your working space is set to your output device, you may want to convert.

7-8 Adobe Photoshop

#### **RGB Setup**

Photoshop 5.x allows you to simultaneously use two RGB spaces, one for the monitor and one for the Photoshop RGB working space. The monitor RGB space setting does not affect the image data in the file; it affects only the way the image is displayed on the monitor. Even if an RGB image has been prepared with different monitor settings, it is still correctly displayed on your monitor, without changes to the original values in the file.

From the Photoshop 5.x File menu, choose Color Settings>RGB Setup.



From the RGB menu, choose your current Photoshop RGB color space, which should reflect the color space of most RGB files you will be opening. If you create new RGB files or you want to standardize your RGB files, choose EFIRGB.

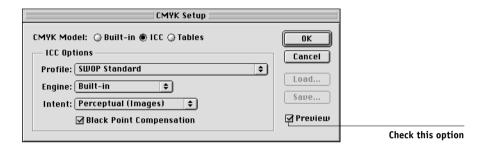
Click Load if the file is not visible in the RGB pop-up menu. You can load the Calibrated RGB setup file, EFIRGB ICC ColorSync file, or EFIRGB.ICM file. All describe the same RGB space and automatically set the Gamma, White Point, and Primaries. You may consider sRGB if you usually view images on a generic PC monitor, or if you rely on a Windows operating system to manage color on your monitor. If you choose sRGB as a working space, make sure to print with the Fiery 3850C RGB Source option set to sRGB.

**NOTE:** EFIRGB is set as the default RGB Source color space on the Fiery 3850C. No matter what RGB space you select, make sure it is available on the Fiery 3850C. For more information on downloading RGB Source profiles to the Fiery 3850C, see Chapter 4.

The Monitor area shows the currently selected profile in the Adobe Gamma control panel. Select both the Display Using Monitor Compensation and Preview options.

#### **CMYK Setup**

From the Photoshop 5.x File menu, choose Color Settings > CMYK Setup.



Select the Preview option. For CMYK Model, select ICC. Previous versions of Photoshop used Photoshop Separation Tables, and you can load them for Photoshop 5.x. However, you will get better results using ICC profiles and the built-in color management system.

In the ICC Options area, choose from the Profile, Engine, and Intent menus.

• For Profile, choose your final output printer ICC profile. Prepress users should choose an ICC describing their target press, such as SWOP. Office users should choose the ICC profile describing the printer connected to the Fiery 3850C. In this case, we recommend you leave images in RGB and allow the Fiery 3850C to convert them to CMYK. However, if you want to use Photoshop to convert RGB images to the CMYK color space of the Fiery 3850C, you must first upload one of the output profiles from the Fiery 3850C to your computer (see page 4-7), and then select it in Photoshop CMYK Setup. The output profile for the Fiery 3850C is also available on the User Software CD (see *Getting Started*).

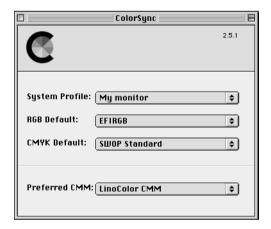
**Note:** For information about uploading and downloading profiles, see Chapter 4.

- For Engine, choose Built-in so the Photoshop engine will be used.
- From Intent, choose Perceptual (Images), which is appropriate for photographs normally edited in Photoshop. The Intent setting is used only when you convert between color spaces.

It is often better to select the Black Point Compensation option. With many ICC profiles, this check box has no effect. However, when it does, it has a dramatic effect on the dark areas of your image. If you want this effect, leave Black Point Compensation; if not, clear the selection.

## ColorSync defaults

You should have ColorSync 2.5.x or later installed on your Mac OS computer. The ICC profiles used by ColorSync are saved in System Folder:ColorSync Profiles. From the Apple menu, choose Control Panel>ColorSync.



Use the following settings:

- System Profile—choose the customized ICC profile for your monitor. Set up the Adobe Gamma profile to ensure that your monitor profile is present (Mac OS only).
- **RGB default**—choose the same RGB working color space you set in Photoshop 5.x.

**NOTE:** The System Profile is the same one used in your monitor calibration and your Monitors and Sounds control panel.

- CMYK default—choose the same CMYK color space you set in Photoshop 5.x.
- **Preferred CMM**—choose LinoColor CMM (both ColorSync 2.0 and Microsoft ICM 2.0 are based on this color management module).

## **Defining colors**

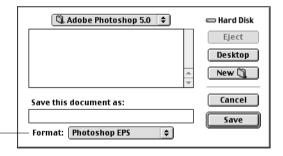
You can choose colors in Photoshop with various color models, including HSB, CIE Lab, RGB, and CMYK. You can also choose named colors from the PANTONE Coated color library. For best results, use the color definition methods described in Chapter 5.

## Saving files for importing into other documents

Before saving a file, perform any rotating, cropping, and resizing needed. This speeds processing when printing from the application in which the image is placed.

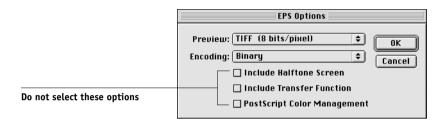
We recommend you use EPS or TIFF file formats to save RGB images that will be imported into other documents and printed to the Fiery 3850C. You can import EPS and TIFF files into virtually all page layout applications.

**NOTE:** Although TIFF files display better when imported into other applications, their color and resolution characteristics may be altered by the application into which they are imported. EPS files are unaffected.



Choose Photoshop EPS or TIFF

In the EPS Options dialog box, choose binary encoding and do *not* select PostScript Color Management (see the following section for more information on PostScript Color Management). Do *not* include transfer functions or halftone screens. A TIFF preview is compatible with both Windows and Mac OS computers.



**NOTE:** If you choose **JPEG** encoding, save a backup of the original image saved with binary encoding until you see the printed results of the JPEG file. Occasionally, the compression used for JPEG encoding produces unwanted artifacts. If you see unexpected results in the printed output of a JPEG file, revert to a binary version.

If you experience problems printing the document in which you place the image, substitute an ASCII version of the same image, and print the document again. Binary encoding is much more compact than ASCII encoding, but occasionally causes printing problems with some system configurations.

## Advanced tips for using PostScript color management

Use the following information to implement alternate, more complex, color workflows with Photoshop.

### Saving EPS Documents with PostScript Color Management

Selecting the PostScript Color Management option when saving either a CMYK or RGB EPS file prompts Photoshop to embed PostScript color information—which is independent of ICC profiles—in the resulting document. This information is intended for PostScript devices like the Fiery 3850C.

### Printing RGB EPS Files Saved with PostScript Color Management

When you print an RGB EPS file that contains an embedded profile to the Fiery 3850C, the working space information from the embedded RGB profile can be used as an RGB source definition for Fiery 3850C CRDs. To use the source color space information from the embedded profile with Fiery 3850C CRDs, choose None as the Fiery 3850C RGB Source when you print. This applies when you print directly from Photoshop, or when the same RGB EPS file is output from another application.

To override the embedded profile in an EPS file using an RGB Source definition made available by the Fiery 3850C, choose anything except None as the Fiery 3850C RGB Source Profile.

## Printing CMYK EPS files saved with PostScript Color Management

If you select the Photoshop PostScript Color Management option when you save a CMYK EPS image, Photoshop embeds PostScript color information that defines the CMYK source color space of the image. When you print a CMYK EPS file that contains PostScript color information to the Fiery 3850C, CRDs are used instead of ColorWise CMYK Simulation setting. Make sure to choose the appropriate setting for the Rendering Style option.

## Selecting options when printing

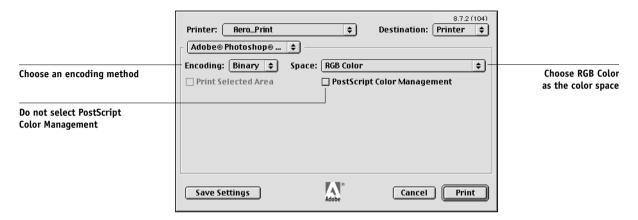
You can print RGB or CMYK images from Photoshop.

- When you print an RGB image, you choose whether the conversion to CMYK is performed by the Fiery 3850C (using a CRD), by PostScript (using PostScript Color Management), or by the Photoshop built-in color management engine (by choosing an Output profile from the Space menu).
- When you print a CMYK image, you can print composites or color separations.

**Note:** You cannot use the Combine Separations feature of the Fiery 3850C to recombine separations printed from Photoshop.

## **Printing RGB images**

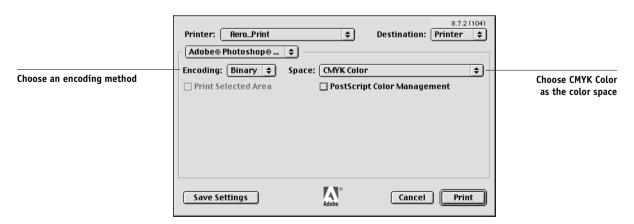
Use the following instructions to print RGB images.



Choose RGB Color from the Space pop-up menu. Any other setting causes Photoshop to convert image data to that color space before sending it to the Fiery 3850C. With the AdobePS printer driver for Mac OS, these options appear in the Adobe Photoshop pane of the Print dialog box.

### **Printing CMYK images**

Use the following instructions to print CMYK images.



Choose CMYK Color from the Space pop-up menu. Any other setting causes Photoshop to convert image data to that color space before sending it to the Fiery 3850C. (With the AdobePS printer driver for Mac OS, these options appear in the Adobe Photoshop pane of the Print dialog box.)

**NOTE:** If you choose JPEG encoding, save a backup of the original image with binary encoding until you see the printed results of the JPEG file. Occasionally, the compression used for IPEG encoding produces unwanted artifacts. If you see unexpected results in the printed output of a JPEG file, revert to the binary version.

## Advanced tips for printing with Photoshop PostScript color management

Use the following information to implement alternate, more complex, color workflows with Photoshop.

### Printing RGB images with Photoshop PostScript Color Management

If you select an RGB color space and decide to use PostScript Color Management from the Photoshop pane of the printer driver, Photoshop sends RGB data to the Fiery 3850C along with PostScript color information defining this RGB color space. Remember that when you select PostScript Color Management, a CRD will be used to perform color conversions to CMYK.

**Note:** The included RGB source color space information is overridden by the Fiery 3850C RGB Source option unless it is set to None. With Photoshop 5.x, the Fiery 3850C Rendering Style option specified will take effect if the Fiery 3850C RGB Source Profile option is set to None.

For fastest print times, choose JPEG encoding, but check printed output carefully for unwanted artifacts that can appear as a result of JPEG compression. If you see unexpected results in the printed output, print the job again using Binary or ASCII encoding.

Choose other print options you want to use (see Chapter 1).

### Printing CMYK images with Photoshop PostScript Color Management

If you select a CMYK color space and decide to use PostScript Color Management from the Photoshop pane of the printer driver, Photoshop sends CMYK data to the Fiery 3850C along with PostScript color information defining this CMYK color space. Remember that when you select PostScript Color Management, a CRD will be used to perform color conversions to the CMYK color space of the Fiery 3850C.

As for the destination color space for the CRDs, the CMYK image is converted to the CMYK color space of the selected output profile.

The Spot Color Matching setting has no effect because Photoshop converts PANTONE colors to CMYK values when you work in CMYK mode.

- If the image was separated for an offset press standard, apply the corresponding CMYK Simulation setting. For example, if the image is separated for SWOP, choose SWOP as the CMYK Simulation setting.
- If Photoshop is configured for a custom separation using ICC profiles, select the corresponding profile from the CMYK Simulation print option for the Fiery 3850C.

NOTE: The above custom simulation setting requires that the same profile used for separation in Photoshop also resides on the Fiery 3850C. For more information on downloading CMYK Simulation profiles to the Fiery 3850C with ColorWise Pro Tools, see page 4-5.

## Photoshop 4.x

A special feature of Photoshop allows you to save RGB EPS (PostScript) images that include independent source color space information. This feature is sometimes referred to as "PostScript Level 2 tagging" or "RGB tagging."

You define the source color space to apply to RGB EPS images by specifying a Monitor Setup in Photoshop. However, this Photoshop-specific source color space definition is overridden by the RGB Source print option setting located in the Print dialog box under Printer Specific Options, unless you set the latter to Off (see page 1-5).

## **Defining colors**

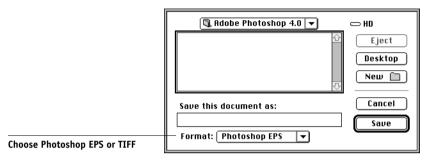
You can choose colors in Photoshop with various color models, including HSB, CIE Lab, RGB, and CMYK. You can also choose named colors from the PANTONE color library in Photoshop. For best results, use the color definition methods described in Chapter 5.

## Saving files for importing into other documents

Before saving an RGB EPS file, check the Photoshop Monitor Setup. This setting defines the RGB source color space information that will be included in the RGB EPS image. You can override this source color space with the RGB Source setting in the Print dialog box under Printer Specific Options (see page 1-5).

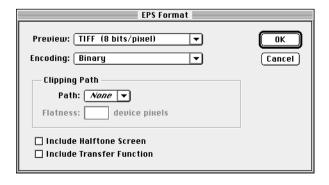
Before saving a file, perform any rotating, cropping, and resizing needed. This speeds processing when printing from the application in which the image is placed.

We recommend you use the EPS or TIFF file formats to save RGB images that will be imported into other documents and printed to the Fiery 3850C. EPS and TIFF files can be imported into virtually all page layout applications.



In the EPS Format dialog box, choose binary encoding and do not include transfer functions or halftone screens. A TIFF preview is compatible with both Mac OS and Windows computers.

NOTE: If you experience problems printing the document in which you place the image, substitute an ASCII-encoded version of the same image, and print the document again. Binary encoding is much more compact than ASCII encoding, but can cause printing problems with some system configurations. If you choose JPEG encoding, save a backup of the original image with binary encoding until you have seen the printed results of the JPEG-encoded file. Although not often, at times the compression used for IPEG encoding may produce unwanted artifacts in the file. If you see unexpected results in the printed output of a JPEG-encoded file, use a binaryencoded version instead.



## Selecting options when printing

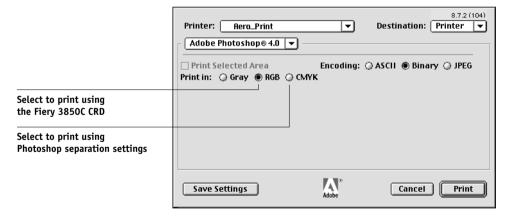
You can print RGB or CMYK images from Photoshop.

- When you print RGB images, you choose whether the conversion to CMYK data is performed by the Fiery 3850C (using a CRD), by PostScript (using PS Color Management), or by Photoshop (using Photoshop separation settings).
- When you print RGB images, you can choose whether a color conversion is performed by the Fiery 3850C using a CRD or by Photoshop using Photoshop's separation settings.
- When you print CMYK images, you can print **composites** or **color separations**.

**NOTE:** You can not use the Combine Separations feature of the Fiery 3850C to recombine separations printed from Photoshop.

### **Printing RGB images**

Use the following instructions to print RGB images.



Choose whether to print in RGB or CMYK. (With the AdobePS printer driver for Mac OS, these options appear in the Adobe Photoshop pane of the Print dialog box.)

 If you select Print in RGB, Photoshop sends RGB data to the Fiery 3850C and a CRD performs color conversion. Choose the appropriate print option settings for RGB data (see Chapter 1). Note: The Fiery 3850C Rendering Style option specified will take effect if the Fiery 3850C RGB Source Profile option is set to None.

• If you select **Print in CMYK**, Photoshop performs a color conversion and sends CMYK data to the Fiery 3850C. With this setting, RGB Source, Rendering Style, and Spot Color Matching settings have no effect.

For printing in CMYK, consider these Photoshop separation settings:

- If Photoshop is configured for separating to an offset press standard, apply the corresponding CMYK Simulation setting. For example, if Photoshop is configured for separating to SWOP, choose SWOP as the CMYK setting. If you apply a CMYK Simulation setting (other than None) to the job, choose Color Proofing (Photo) or Color Proofing (Solid) for the Rendering Style setting (see page 1-4).
- If Photoshop is configured for a custom separation (not a press standard), choose None as the CMYK Simulation setting, or choose the corresponding custom simulation profile on the Fiery 3850C if one has been downloaded with the Profile Manager. For more information on the Profile Manager and ColorWise Pro Tools, see Chapter 4.

**NOTE:** If you choose JPEG encoding, save a backup of the original image with binary encoding until you see the printed results of the JPEG-encoded file. At times, the compression used for IPEG encoding may produce unwanted artifacts in the file. If you see unexpected results in the printed output of a JPEG-encoded file, revert to the a binary-encoded version.

## **Printing CMYK images**

Choose an encoding method. (With the AdobePS printer driver for Mac OS, these options appear in the Adobe Photoshop pane of the Print dialog box.) For fastest print times, select JPEG encoding.

NOTE: Check the printed output carefully for unwanted artifacts that can appear as a result of JPEG compression. If you see unexpected results in the printed output when printing with JPEG encoding, print the job again using binary encoding.

RGB Source and Rendering Style settings have no effect on CMYK images. The Spot Color Matching setting is also irrelevant because Photoshop converts PANTONE colors to CMYK values when you work in CMYK mode.

- If the image was separated for an offset press standard, apply the corresponding CMYK Simulation setting. For example, if the image is separated for SWOP, choose SWOP as the CMYK Simulation setting. If you apply a CMYK Simulation setting (other than None) to the job, choose Color Proofing (Photo) or Color Proofing (Solid) for the Rendering Style setting (see page 1-4).
- If the image was separated using a custom separation (not a press standard), choose
  None as the CMYK Simulation setting, or choose the corresponding custom
  simulation profile on the Fiery 3850C if one has been downloaded with the Profile
  Manager. For more information on the Profile Manager and ColorWise Pro Tools,
  see Chapter 4.

# Chapter 8: Page Layout Applications

This chapter provides instructions for printing color documents from Adobe PageMaker 7.x and 6.5, QuarkXPress 4.02, and QuarkXPress 3.32.

Before printing from these applications, make sure the appropriate printer driver and the Fiery 3850C PPD are installed on your computer, as described in *Getting Started*.

# Working with page layout applications

The following sections apply to all page layout applications.

## **Defining colors**

Page layout applications generally use the CMYK color model. Some allow you to define colors with other color models and may be able to send that data to the Fiery 3850C in those other color models. However, CRDs (which affect only RGB data) usually do not affect colors defined in page layout applications. For predictable results with CMYK colors, use the CMYK Color Reference when defining colors in page layout applications. See "Choosing colors in PostScript applications" on page 5-5.

**NOTE:** If the application allows you to define colors in RGB, you should determine whether it converts the RGB data to CMYK before sending it to the Fiery 3850C. If it does, this will determine which Fiery 3850C print options affect your job. For example, if the application converts RGB black (defined in the document as R0%, G0%, B0%) to four-color CMYK black when it sends the job to the Fiery 3850C, the Pure Black Text/Graphics option will have no effect when you print the job.

You can also choose named colors from the PANTONE color library. See "PANTONE Coated Color Reference" on page 5-6.

## **Importing images**

EPS and TIFF are the recommended formats for images imported into page layout documents. Support for importing other file formats may be provided by individual applications.

All RGB images placed in a document are affected by the RGB Source and Rendering Style settings. The Fiery 3850C color management system applies the specified RGB Source setting to all RGB data and then uses the specified Rendering Style (CRD) to perform a color conversion. An exception to this occurs if you assign ICC profiles to RGB images using the application's color management tools (see "Tips for advanced users" below). In this case, the application performs the color conversion of the image and sends CMYK data to the Fiery 3850C.

**NOTE:** To take advantage of RGB Source and Rendering Style settings for images imported into QuarkXPress 4.02, either save images in the EPS format, or use the Quark PrintRGB XTension, which outputs RGB TIFF image files without converting them to CMYK.

## Tips for advanced users

If you place multiple RGB images, some non-photographic and some photographic, a single CRD may not be suitable for all the images. In this case, you may want the photographic images to bypass the CRD altogether. To accomplish this, separate the image to CMYK data with a pixel-editing application, such as Photoshop, and perform color correction. Save the file as EPS or TIFF and import it into the document.

If your application supports this feature, you can save the RGB image in TIFF format and assign it an ICC profile and rendering intent when you import it into the document.



### CMYK simulation

You can specify a CMYK Simulation profile for the job using the CMYK Simulation Profile print option (see page 1-6). The CMYK Simulation setting affects all CMYK color data sent by the page layout application.

- If the document contains CMYK images that were separated for an offset press standard, apply the corresponding CMYK Simulation setting. For example, for images separated for SWOP, choose SWOP as the CMYK Simulation setting.
- If the document contains CMYK images that were separated according to the color characteristics of a custom ICC profile (not a press standard profile), choose the corresponding profile as the CMYK Simulation Profile print option on the Fiery 3850C.

**NOTE:** To achieve the workflow described above, the profile used for the separation of CMYK images in the document should also reside on the Fiery 3850C. For more information on downloading CMYK Simulation profiles to the Fiery 3850C with ColorWise Pro Tools, see Chapter 4.

## Adobe PageMaker 7.x and 6.5 for Mac OS and Windows

The Mac OS and Windows versions of PageMaker 7.x and 6.5 are essentially the same. The illustrations in this section show only the Windows version, except where differences exist between the two versions.

## PageMaker color settings

We recommend you use ColorWise color management rather than the CMS options built into Adobe PageMaker.

**NOTE:** Do not use both systems for the same print job.

### TO DISABLE PAGEMAKER COLOR MANAGEMENT

- 1. Choose Preferences > General from the File menu.
- 2. Click CMS Setup.
- 3. Choose Off from the Color Management menu.
- 4. Click OK, and then click OK again to close the dialog boxes.

### TO DISABLE COLOR MANAGEMENT FOR A BITMAPPED IMAGE

- 1. Select the bitmapped image in the document.
- 2. Choose Image > CMS Source from the Element menu.
- 3. Choose None from the This Item Uses menu and click OK.

## Windows version requirement

For the Windows version of PageMaker 6.5, make sure a copy of the Fiery 3850C PPD file is in the following folders:

- PM65\RSRC\USENGLSH\PPD4
- Windows\System

## Importing images

All RGB images placed in a document are affected by your RGB Source and Rendering Style settings. For best results with placed images, use the instructions in "Importing images" on page 8-2 and "CMYK simulation" on page 8-3.

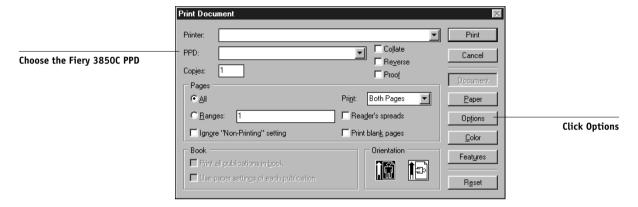
## Selecting options when printing

All print settings are specified from the Print dialog boxes in PageMaker 7.x or 6.5. The printer driver interface described in Chapter 1 is not used.

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## TO SET PRINT OPTIONS WHEN PRINTING FROM PAGEMAKER

1. Choose the Fiery 3850C PPD from the PPD menu in the Print Document dialog box.

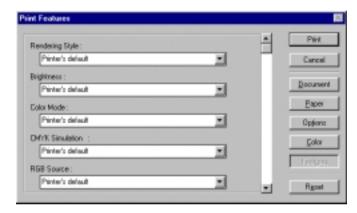


- 2. Click Options.
- Choose Normal from the "Send image data" menu in the Print Options dialog box and click Features.

To ensure that TIFF images print at their full resolution, do *not* choose the Optimized Subsampling default from the "Send image data" menu.

4. If a document contains RGB placed images or colors defined in RGB that will not be separated to process colors, choose RGB Source and Rendering Style settings in the Print Features dialog box.

If the document contains PANTONE colors, choose the appropriate Spot Color Matching setting.



5. Click Print from any of the PageMaker dialog boxes to send the job to the Fiery 3850C.

**Note:** The printer driver dialog boxes described in Chapter 1 do not appear.

## Optional Color Management from PageMaker

If you have additional color management requirements not offered by ColorWise, such as managing color on non-Fiery 3850C devices, consider using the PageMaker color management features. For more information, see your PageMaker documentation.

# QuarkXPress 4.x for Mac OS and Windows

If you have additional color management requirements not offered by ColorWise, consider using Quark CMS XTension for QuarkXPress 4.02. These features allow advanced users to control RGB to CMYK color conversions. If you plan to use these features, make sure the Quark CMS XTension is installed before starting QuarkXPress. If it is not, use the Quark XTensions Manager to install it. Refer to your QuarkXPress documentation for instructions.

**NOTE:** Quark CMS converts RGB TIFF, JPEG, and PICT images to CMYK before sending color data to the Fiery 3850C. RGB Source and Rendering Style settings have no effect on this data unless you use Quark PrintRGB XTension, which outputs RGB TIFF image files without converting them to CMYK.

## Importing images

With the exception of RGB images that are saved in EPS format or use Quark PrintRGB XTension, QuarkXPress 4.02 converts all RGB data into CMYK, even when Quark CMS XTension is disabled.

Only RGB images saved in EPS format are affected by RGB Source and Rendering Style settings. For best results with placed images, use the instructions in "Importing images" on page 8-2 and "CMYK simulation" on page 8-3.

## Selecting options when printing

You can select the print options that suit your print needs. Choose the Fiery 3850C PPD from the Printer Description menu in the Print dialog box.

Print Print Style: Document ▼ Copies: 1 Pages: All Range Separators... Document Setup Output Options Preview Profiles Choose the Fiery 3850C PPD **Printer Description:** Paper Size: Letter ▼ Choose an output paper size Paper Width: 8.5" Paper Offset: Paper Height: 11" Page Gap: Reduce or Enlarge: 100% Fit in Print Area Page Positioning: Left Edge ▼ Orientation: Click to specify printer settings Capture Settings Page Setup... Printer... Cancel Print

Mac OS

#### Windows Print -Printer: Choose the Fiery 3850C Click to specify printer settings Print Style: Document Pages: All ▼ Range Separators... Document Setup Output Options Preview Profiles Printer Description: • Choose the Fiery 3850C PPD Paper Size: Reduce or Enlarge: 100% Fit in Print Area Page Positioning: Portrait Left Edge Orientation: C Landscape Print Capture Settings

If the document contains PANTONE colors, choose the appropriate Spot Color Matching setting. For instructions on specifying print options, see Chapter 1.

Cancel

## Optional Color Management from QuarkXPress

If you have additional color management requirements not offered by ColorWise, such as managing color on non-Fiery 3850C devices, consider using the QuarkXPress color management features. For more information, see your QuarkXPress documentation.

# QuarkXPress 3.32 for Mac OS and Windows

Before starting QuarkXPress 3.32, make sure the EfiColor XTension is not loaded in the XTensions folder. EFICOLOR profiles are not currently provided with Fiery 3850C products. Without the correct EFICOLOR profile, the EfiColor XTension cannot perform color conversions on placed images.

## Windows version requirement

For the Windows version of QuarkXPress, make sure a copy of the Fiery 3850C PPD file is in the \XPRESS\PDF folder.



## **Importing images**

All RGB images placed in a document are affected by your RGB Source and Rendering Style settings. For best results with placed images, use the instructions in "Importing images" on page 8-2 and "CMYK simulation" on page 8-3.

## Selecting options when printing

Select the Fiery 3850C PPD from the Printer Type menu in the Page Setup (Mac OS) or Printer Setup (Windows) dialog box.

Mac OS

	Printer: Aero_Hold \$		8.7.2 (104)
	QuarkXPress™ \$	<u> </u>	
	Printer Type: [PPD r	name]	Paper Offset:
Choose the Fiery 3850C PPD	EfiColor Profile:		Paper Width:
	GCR:		Page Gap:
	Resolution: 600 (c	lpi)	Halftoning C: 150.918 lpi, 82.5°
Choose an output paper size	Paper Size: Letter		M: 150.918 lpi, 52.5°
	Data Format: Binary		Y: 150.918 lpi, 7.5° K: 150.918 lpi, 112.5°
Choose Binary	Halftone Screen: 60 (I	pi)	☑ Use EfiColor Screen Values
			Cancel OK

# 8-10

### Windows

	Printer Setup  Printer  Default Printer (currently  Specific Printer:  Detions  Network	
	Orientation  C Portrait  C Landscape  Size: Letter  Source: AutoSelect Tray  Landscape  Source: AutoSelect Tray  Adjusted Screen Values	Choose an output paper size
Choose the Fiery 3850C PPD	Halftone Freq.: 60 (Ipi)  Resolution: 400 (dpi)  Data: Binary	
Choose Binary	Image:     ☐ Flip Horizontal     ☐ Flip Yertical     ☐ Invert       Paper Width:     Paper Offset:     Page Gap:	

If a document contains RGB-placed images or RGB colors that QuarkXPress will print without converting to CMYK, choose RGB Source and Rendering Style settings. If the document contains PANTONE colors, choose the appropriate Spot Color Matching setting. For instructions on specifying print options, see Chapter 1.



# Chapter 9: Illustration Applications

This chapter provides instructions for using Illustrator for Windows and Mac OS, FreeHand for Windows and Mac OS, and CorelDRAW for Windows and Mac OS.

Before printing from these applications, make sure the appropriate PostScript printer driver and the Fiery 3850C PPD are installed on your computer, as described in *Getting Started*.

# Working with illustration applications

You can print directly from an illustration application or use it to create and save files that will be imported into a page layout document. To print from an illustration application, use the printer driver and the print settings recommended in Chapter 1.

**NOTE:** These application notes provide instructions for printing composites only. For instructions on printing color separations, refer to the documentation for your application.

As a general rule, use the EPS file format when saving files with an illustration application.

## **Defining colors**

All illustration applications use the CMYK color model. While some also allow you to define colors using other color models, they all send CMYK data to the Fiery 3850C. Consequently, the RGB Source and Rendering Style settings in the PPD do not affect all colors printed from illustration applications. For predictable results with CMYK colors, use the CMYK Color Reference pages when defining colors (see "Choosing colors in PostScript applications" on page 5-5).

**NOTE:** If you define colors in RGB and print directly from the application, the application converts the RGB data to CMYK before sending it to the Fiery 3850C. This conversion by the application will determine which Fiery 3850C print options affect your job. For example, if the application converts RGB black (defined in your document as R0%, G0%, B0%) to four-color CMYK black when it sends the job to the Fiery 3850C, the Pure Black Text/Graphics option in the PPD will have no effect when you print the job.

You can also choose named colors from the PANTONE color library. See page 5-6.

## **Importing images**

In general, all images placed into illustration applications should be in EPS file format.

All RGB images placed in a document are affected by the RGB Source and Rendering Style settings in the PPD. The Fiery 3850C color management system applies the specified RGB Source setting to all RGB data and then uses the specified Rendering Style (CRD) to perform a color conversion to CMYK. An exception to this occurs if you assign ICC profiles to RGB images using the application's color management tools (see "Tips for advanced users" below). In this case, the application performs the color conversion of the image and sends CMYK data to the Fiery 3850C.

### Tips for advanced users

If you place multiple RGB images, some non-photographic and some photographic, a single CRD may not be suitable for all the images. In this case, you may want the photographic images to bypass the CRD altogether. To accomplish this, separate the image to CMYK data with a pixel-editing application, such as Photoshop, and perform color correction. Save the image as an EPS or TIFF file and import it into the document. Or save the RGB image in TIFF format and assign it an ICC profile and rendering intent when you import it into the document (see the individual application notes in this chapter).

## **CMYK** simulation

You can specify a press simulation target and a press simulation method for the job with print options (see Chapter 1). The CMYK Simulation setting affects all CMYK color data sent by the illustration application.

- If the document contains CMYK images that were separated for an offset press standard, apply the corresponding CMYK Simulation setting. For example, for images separated for SWOP, choose SWOP-Coated as the CMYK Simulation setting.
- If the document contains CMYK images that were separated according to the color characteristics of a custom ICC profile (not a press standard profile), select the corresponding profile from the CMYK Simulation Profile print option on the Fiery 3850C.

**NOTE:** The workflow described above requires that the profile used for the separation of CMYK images in the document also resides on the Fiery 3850C. For more information on downloading CMYK Simulation profiles to the Fiery 3850C with ColorWise Pro Tools, see Chapter 4.

## Adobe Illustrator for Windows and Mac OS

The following sections provide guidelines for working with versions 9.x and 8.x of Adobe Illustrator.

## Illustrator 9.x color settings

Illustrator 9.x uses a sophisticated color management system that can handle both RGB and CMYK colors for a variety of color-managed workflows. By customizing color settings, you can specify the amount of color management you want to use while working in Illustrator 9.x. These color settings include:

**Working spaces**—Default color spaces to use when working with RGB and CMYK documents. ICC color profiles describe the gamut and color characteristics of these working spaces.

**Color management policies**—Instructions that tell Illustrator 9.x what to do when it encounters color data from a color space other than the specified working space.

## Specifying print options

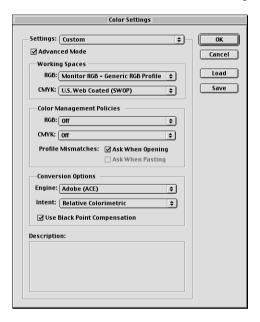
The following procedure outlines the recommended color settings for Illustrator 9.x in a Fiery 3850C workflow.

### TO SPECIFY COLOR SETTINGS

1. Choose Color Settings from the Edit menu.

#### 2. Select Advanced Mode.

In Advanced Mode, a more extensive list of options is displayed.



### 3. Choose the desired working space profile for each mode in the Working Spaces area.

Use the following guidelines for specifying working spaces:

- For RGB, choose EFIRGB. This profile represents the default RGB color space used by the Fiery 3850C. New RGB documents you create in Illustrator will use this working space.
- For CMYK, choose a profile that describes your target press (such as SWOP) if you
  are a prepress user. If you are an office user printing final output, choose an output
  profile that describes the printer connected to the Fiery 3850C. To use a devicespecific output profile, upload the profile from the Fiery 3850C to your computer.
  New CMYK documents you create in Illustrator will use the specified working
  space.

# 9-5 Adobe Illustrator for Windows and Mac OS



 Choose policies for handling documents without embedded profiles or with embedded profiles that differ from the working space in the Color Management Policies area.

Choose Off from the RGB and CMYK menus. This option discards the original profile embedded in a document if it differs from the specified working space.

In the Profile Mismatches area, select the Ask When Opening option. This option displays an alert message that allows you to override the specified policy behavior (Off) when opening documents or importing color data.

5. Choose settings for converting between color spaces in the Conversion Options area.

Choose Adobe (ACE) from the Engine menu to use the built-in color management engine for Photoshop.

Choose a rendering intent from the Intent menu that will optimize the color quality of the conversion. For guidelines on choosing the rendering intent, see your Photoshop 6.x documentation.

Select the Use Black Point Compensation option to optimize the quality of color conversions.

6. Click Save to save the current group of color settings.

The Save dialog box appears.

7. Name the settings file, accept the default saved location, and click Save.

You can switch to your saved settings at any time by choosing the group name from the Settings menu at the top of the Color Settings dialog box.

## Illustrator 8.x color settings

If you are using ColorWise color management, disable the Illustrator 8.x color management system by removing the Color Conversion and Color Conversion Utilities files from the Adobe Illustrator > Plug-ins > Extensions folder.

Consider the following points when working in Illustrator 8.x:

- Any colors defined in Illustrator are sent to the printer in CMYK—even those defined using other color models. For best results, use the color definition methods described on page 5-5.
- All RGB images placed in a document are affected by the RGB Source and Rendering Style settings you select in the PPD. For best results with placed images, use the instructions in "Importing images" on page 9-2 and "CMYK simulation" on page 9-2.

If you have additional color management requirements not offered by ColorWise, such as managing color on devices not controlled by the Fiery 3850C, you may want to consider using the Illustrator color management features. For more information, see your Illustrator documentation.

## Specifying print options

The following procedure explains how to set print options when printing a document from Illustrator 9.x or 8.x to the Fiery 3850C.

### TO SET PRINT OPTIONS IN ILLUSTRATOR

1. Choose Print from the File menu in Illustrator.

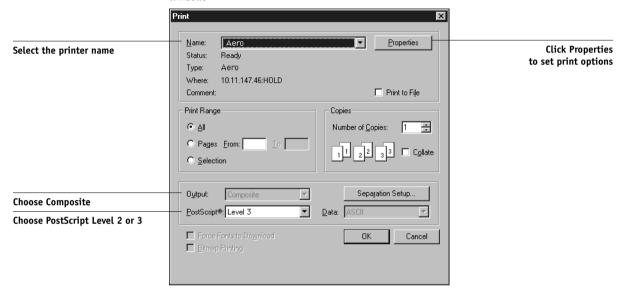
The Print dialog box appears.

- 2. For the Windows version of Illustrator, specify appropriate print options.
  - Choose the Fiery 3850C printer from the Name menu.
  - Choose Composite from the Output menu.

9-

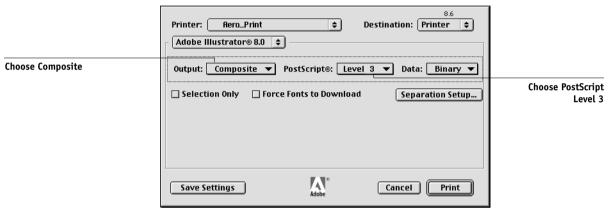
• Choose Level 2 or 3 from the PostScript menu.

### Windows



- 9-
  - 3. For the Mac OS version of Illustrator, specify appropriate print options.
    - Choose the Fiery 3850C printer from the Printer menu.
    - Choose Adobe Illustrator from the option menu below the Printer menu.
    - Choose Composite from the Output menu.
    - Choose Level 3 from the PostScript menu.

#### Mac OS



 If necessary, click Properties (Windows) or choose Printer Specific Options from the option menu (Mac OS) and choose RGB Source and Rendering Style settings for the Fiery 3850C.

You only need to specify these settings if you have a CMYK document containing placed RGB images, or an RGB document in Illustrator 9.x. In all other cases, colors remain unaffected by the settings.

If the document contains PANTONE-named colors, choose the appropriate Spot Color Matching setting.

# Saving files for importing into other documents

When saving files in Illustrator 9.x or 8.x for importing into other types of documents, use the EPS file format. Illustrator can save color information in both RGB and CMYK. The ColorWise RGB Source and Rendering Style settings affect color output of RGB artwork saved in Illustrator EPS and imported into other kinds of documents (even when both RGB and CMYK artwork exists in the same file). In the case of



Illustrator files imported into Photoshop, however, vector data from the Illustrator file is rasterized into bitmaps in Photoshop, and the final color space of the bitmap data is determined by the color mode you set in Photoshop.

## FreeHand 9.x and 8.x for Windows and Mac OS

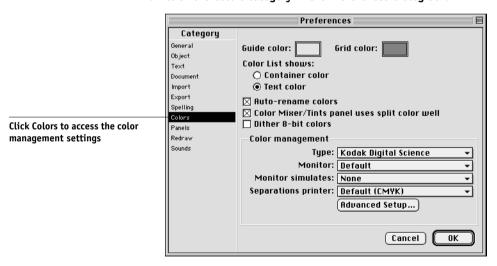
The information in this section applies to both the Windows and Mac OS versions of FreeHand 9.x and 8.x. Only Mac OS dialog boxes are shown, but the information and instructions are identical for the Windows version.

## FreeHand color settings

When using ColorWise color management, turn off FreeHand color management features.

### TO DISABLE COLOR MANAGEMENT IN FREEHAND 9.X OR 8.X

- Choose Preferences from the File menu.
- 2. Click the Colors category in the Preferences dialog box.



3. Choose None for the type of color management.

## **Defining colors**

Any colors defined in FreeHand are sent to the printer in CMYK—even those defined using other color models. For best results, use the color definition methods described on page 5-5.

You can control the conversion of RGB colors defined in FreeHand by specifying settings in the Preferences dialog box under the Colors category, or choosing Color Management from the FreeHand menu on the Print dialog box.

## Importing images

A number of file types can be imported into FreeHand, but once imported, all are treated as EPS images, TIFF images, or editable paths. For details, see your FreeHand documentation.

When you import an EPS image into a document, FreeHand inserts a link to the image rather than embedding the original file, resulting in a smaller file size. If the image is a CMYK EPS file, the colors print just as they would from the originating application.

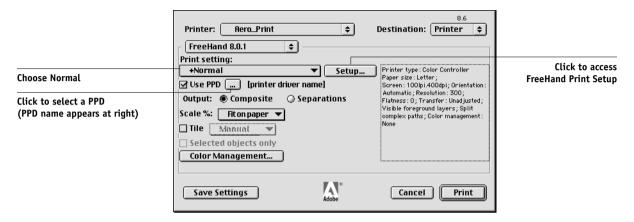
**NOTE:** Before placing a CMYK EPS file, be sure the file was saved with Desktop Color Separation (DCS) set to Off. If the file was saved with DCS activated, FreeHand prints composites of the image at the low resolution used for screen viewing.

All RGB images placed in a document are affected by your RGB Source and Rendering Style settings in the PPD. For best results with placed images, follow the instructions in "Importing images" on page 9-2 and "CMYK simulation" on page 9-2.



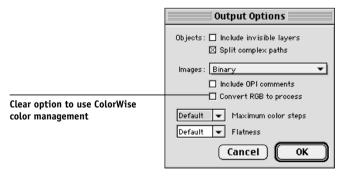
### TO SET OPTIONS WHEN PRINTING FROM FREEHAND

1. Select the Use PPD option in the Print dialog box.



- 2. Choose Normal from the Print setting menu.
  - If the Use PPD option is selected, a plus sign (+) appears in front of the word "Normal."
  - If the PPD name for your Fiery 3850C is not displayed, click the button labeled "..." and choose the appropriate PPD from the menu that appears.
- To use ColorWise color management features, clear the "Convert RGB to process" option in the File > Output Options dialog box.

If this option is selected, FreeHand color management settings are used to convert RGB colors and RGB TIFF, PICT, and JPEG images to CMYK.



## 4. If a document contains placed RGB images, choose RGB Source and Rendering Style settings in the PPD.

With the exception of placed RGB images, these settings have no effect on colors printed with FreeHand. If the document contains PANTONE-named colors, choose the appropriate Spot Color Matching setting in the PPD.

For information about other FreeHand print options, see your FreeHand documentation.

## Saving files for importing into other documents

When saving files in FreeHand 8.x for importing into other types of documents, use the EPS file format. FreeHand saves all color information in CMYK. The RGB Source and Rendering Style print options have no effect on the color output of RGB artwork saved in FreeHand 8.x and imported into other types of documents. In the case of FreeHand files imported into Photoshop, however, vector data from the FreeHand file is rasterized into bitmaps in Photoshop, and the final color space of the bitmap data is determined by the color mode you set in Photoshop.

## Optional color management in FreeHand

If you have additional color management requirements not offered by ColorWise, such as managing color on devices not controlled by the Fiery 3850C, you may want to consider using the FreeHand color management features. For more information, see your FreeHand documentation.

## CorelDRAW for Windows and Mac OS

## **Defining colors**

Any colors defined in CorelDRAW 9.x for Windows or CorelDRAW 8.x for Mac OS are sent to the printer in CMYK—even those defined using other color models. For the best results, use the color definition methods described in "Choosing colors in PostScript applications" on page 5-5.

You can control the conversion of RGB colors defined in CorelDRAW by specifying settings in the Color Management dialog boxes. On Windows machines, the Color Management dialog boxes are located in Tools>Color Management. On Mac OS computers, the Color Management functions are located in Edit: Preferences: Global.



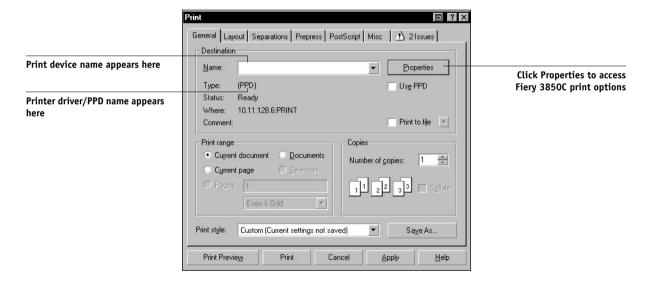
**NOTE:** If you do not want to use color management in CorelDraw, do not select options under Color Management and Color Management General, and select None from the Composite Printer pop-up menu under Color Management/Profiles.

## Importing images

All RGB images placed in a document are affected by your RGB Source and Rendering Style settings in the PPD. For best results with placed images, use the instructions in "Importing images" on page 9-2 and "CMYK simulation" on page 9-2.

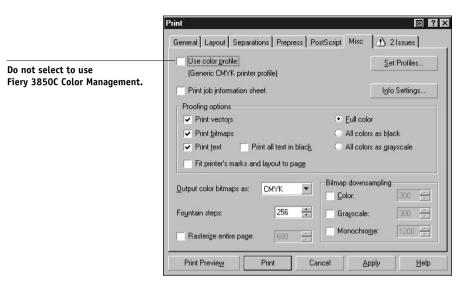
## Selecting options when printing

On Windows computers, in the Print dialog box under the General tab, make sure the correct printer and PPD are selected and select the Use PPD check box. Click Properties to specify Fiery 3850C print options.



On Mac OS computers, click the Printer button in the General Print dialog box to select the printer and print options.

To use Fiery 3850C color management, make sure the "Use color profile" option in the Misc tab of the Print dialog box is *not* selected. If this option is selected, CorelDRAW color management settings are used to convert RGB colors and images to CMYK.



If a document contains placed RGB images, choose RGB Source and Rendering Style settings for your printer. With the exception of placed RGB images, these settings have no effect on colors printed with CorelDRAW. If the document contains PANTONE named colors, choose the appropriate Spot Color Matching setting.

## Saving files for importing into other documents

When saving files in CorelDRAW for importing into other types of documents, use the EPS file format. CorelDRAW saves all color information in CMYK, so RGB Source and Rendering Style print options have no effect on color output of artwork saved with CorelDRAW and imported into other kinds of documents. In the case of CorelDRAW files imported into Photoshop, however, vector data from the CorelDRAW file is rasterized into bitmaps in Photoshop, and the final color space of the bitmap data is determined by the color mode you set in Photoshop.

## Optional Color Management in CorelDRAW

If you have additional color management requirements not offered by ColorWise, such as managing color on non-Fiery 3850C devices, consider using the CorelDRAW color management features. For more information, see your documentation.



# Appendix A: Desktop Color Primer

This appendix covers concepts basic to printing in color, including:

- Properties of color
- · Printing techniques
- Using color effectively
- Raster images and vector images
- Optimizing files for processing and printing

If you are already familiar with color theory and digital color printing, refer to the last section ("Optimizing files for processing and printing" on page A-10) for tips on optimizing files for printing.

# The properties of color

This section introduces concepts that are basic to color theory. You will encounter some of these concepts (such as hue, saturation, and brightness) when you work with color in applications; others provide useful background information. *Color is a complex topic, so consider this a starting point for experimentation and further research.* 

# The physics of color

The human eye can see electromagnetic radiation at wavelengths between 400 nanometers (purplish blue) and 700 nanometers (red). This range is called the visible spectrum of light. We see pure **spectral light** as intensely saturated or pure colors. Sunlight at midday, which we perceive as white or neutral light, is composed of light from across the visible spectrum in more or less equal proportions. Shining sunlight through a prism separates it into its spectral components, resulting in the familiar rainbow of colors (color example 1).

Like the sun, most light sources we encounter in our daily environment emit a mixture of light wavelengths, although the particular distribution of wavelengths can vary considerably. Light from a tungsten light bulb, for example, contains much less blue light than sunlight. Tungsten light appears white to the human eye, which, up to a point, can adjust to the different light sources. However, color objects appear different under tungsten light than they do in sunlight because of the different spectral makeup of the two light sources.

The mixture of light wavelengths emitted by a light source is reflected selectively by different objects. Different mixtures of reflected light appear as different colors. Some of these mixtures appear as relatively saturated colors, but most appear to us as grays or impure hues of a color.

# CIE color model

In the 1930s, the Commission Internationale de l'Eclairage (CIE) defined a standard color space, a way of defining colors in mathematical terms, to help in the communication of color information. This color space is based on research on the nature of color perception. The CIE chromaticity diagram (color example 2) is a two-dimensional model of color vision. The arc around the top of the horseshoe encompasses the pure, or spectral, colors from blue-violet to red. Although the CIE chromaticity diagram is not perceptually uniform—some areas of the diagram seem to compress color differences relative to others—it is a good tool for illustrating some interesting aspects of color vision.

By mixing any two spectral colors in different proportions, we can create all the colors found on the straight line drawn between them in the diagram. It is possible to create the same gray by mixing blue-green and red light or by mixing yellow-green and blue-violet light. This is possible because of a phenomenon peculiar to color vision called **metamerism**. The eye does not distinguish individual wavelengths of light. Therefore, different combinations of spectral light can produce the same perceived color.

Purple colors, which do not exist in the spectrum of pure light, are found at the bottom of the diagram. Purples are mixtures of red and blue light—the opposite ends of the spectrum.



# Hue, saturation, and brightness

A color can be described in terms of three varying characteristics, called the **HSB** color model:

- Hue—tint (the qualitative aspect of a color—red, green, or orange)
- Saturation—the purity of the color
- Brightness—relative position between white and black

While the CIE chromaticity diagram (color example 2) conveys hue and saturation, a three-dimensional color model is required to add the brightness component (color example 3).

Many computer applications include dialog boxes in which you choose colors by manipulating hue, saturation, and brightness. For example, some applications use a color picker (color example 4) which can be reconfigured according to your preference. Additive and subtractive color systems

Color devices used in desktop publishing and printing *simulate* the range of visible colors using a set of primary colors that are combined to create other colors. There are two methods for creating a range of colors from a set of primary colors. Computer monitors and scanners are based on the **additive color model**. Printing technologies, including the Fiery 3850C and offset presses, are based on the **subtractive color model**.

# Additive (RGB) color

Color devices that use the additive color model make a range of colors by combining varying amounts of red, green, and blue light. These colors are called the **additive primaries** (color example 5). White is created by adding the maximum amount of red, green, and blue light available. Black occurs wherever all three colors are absent. Grays are created by adding equal amounts of all three colors together. Combining varying amounts of any two of the additive primaries creates a third, saturated hue.

A familiar device based on this color model is the computer monitor (color example 6). Monitors have red, green, and blue **phosphors** that emit varying amounts of light to display a given color. Scanners create digital representations of colors by measuring their red, green, and blue components through colored filters.



# Subtractive (CMY and CMYK) color

The subtractive color model is the basis for color printing and for color photographic prints and transparencies. While the additive color model simulates the visible spectrum of color by adding light of three primary hues, the subtractive color model starts with a "white" or neutral light source containing light of many wavelengths. Inks, toners, or other **colorants** are used to selectively absorb (subtract) certain wavelengths of light that otherwise would be reflected or transmitted by the media in use.

The **subtractive primaries** are cyan, magenta, and yellow; they absorb red, green, and blue light, respectively (color example 7). Combining any two subtractive primaries creates a new color that is relatively pure or saturated. For example, you can make red by combining magenta and yellow, which absorb green and blue light, respectively. White occurs when no colorant is applied. Combining all three subtractive primaries in theory yields black, but due to deficiencies of cyan, magenta, and yellow colorants, combining these three primaries actually yields a muddy brown. Black colorant is added to compensate for the deficiencies of cyan, magenta, and yellow colorants. Consequently, color printing uses four **process colors**: **C**yan, **M**agenta, **Y**ellow, and blac**K** (CMYK). The use of black toner helps in producing rich, solid blacks and allows for improved rendering of black text.

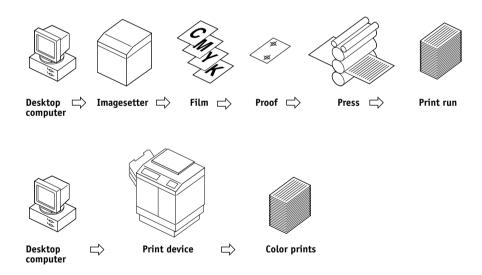
The CMYK colorants used in offset printing and by your printer toner are to some degree transparent. When one layer of colorant is applied on top of another, you see the effect of both. To create a range of intermediary colors, a method is required for varying the amount of each colorant that is applied. A technique called **halftoning** is used in offset printing, while color print devices typically use a proprietary system for applying ink or toner colors that is similar to halftoning.



# **Printing techniques**

Until recently, most color printing was done on printing presses using one of several printing techniques—offset lithography, flexography, and gravure, to name a few. All traditional printing techniques require lengthy preparation before a print run can take place. Short-run color printing, including Fiery 3850C printing, eliminates most of this preparation. By streamlining the process of color printing, the Fiery 3850C makes short print runs economically feasible.

In contemporary offset lithographic printing, digital files from desktop computers are output to an imagesetter, which creates film separations. The film is used to make a **prepress proof**, which is an accurate predictor of the final print job and allows you to make corrections before going to press. Once the proof is approved, the printer makes plates from the film and runs the print job on the press.



With a Fiery 3850C, you simply print the file. The Fiery 3850C processes the **PostScript** information in the file and sends four **bitmaps** (one each for cyan, magenta, yellow, and black) to the print engine. The ease of Fiery 3850C printing makes possible experimentation that would be too costly on press, allowing unlimited fine-tuning of color and design elements.



# Halftone and continuous tone devices

Halftoning is used in offset printing to print each process color at a different intensity, allowing millions of different colors to be reproduced using only the four process colors. Depending on the required intensity of a given color, toner is placed on paper in dots of different size. The grid of dots used for each toner color is called a screen. Halftone screens are aligned to unique angles designed to eliminate interference patterns called **moiré** that can arise with halftoning.

Some color print devices are commonly referred to as **continuous tone** (or "contone") devices. They do not use traditional halftone screen patterns and angles. Contone devices are capable of varying the intensity of individual dots.

Even if your color printing is done exclusively on the Fiery 3850C, you will encounter concepts from offset printing if you use high-end graphics applications. For example, color controls in illustration applications, such as Illustrator, are geared toward specifying color for offset printing using process and **spot colors**. Many applications allow you to specify the screening used for each printing plate.

# Using color effectively

The ability to print in color can greatly increase the effectiveness of your message, whether you are printing a presentation or a newsletter, or proofing an ad concept that will later be printed on press. Some potential benefits of using color include:

- · Conveying information rapidly by using color cues
- Making use of the emotive aspects of different colors
- Increasing impact and message retention

Color can also be a source of distraction and discord if it is used poorly. This section outlines some tips and concepts that will prove useful as you approach designing color materials.



## A few rules of thumb

Try some of the following strategies for creating successful color materials:

- Rather than applying colors indiscriminately, use color to aid comprehension.
   In presentations, graphs, and charts, use color to highlight patterns and emphasize differences.
- In general, fewer colors work better than many colors.
- Use red as an accent color. Red is particularly effective when used in otherwise monochromatic materials.
- Consider the tastes of your target audience when choosing colors.
- Keep a file of printed color pieces that appeal to you or strike you as effective.
   Refer to it for ideas when designing your own documents.

# Color wheel

A color wheel (color example 8) is a helpful tool for understanding the interrelation of colors. The colors on one side of the color wheel, from magenta to yellow, appear to most people to be warm colors, while those on the other side, from green to blue, appear to be cool. The distance between two colors on the color wheel can help predict how they will appear when seen side by side.

Colors opposite one another on the wheel are called complements (color example 9a), and create a striking contrast side by side. This can be the basis for a bold graphical design, but it is an effect you should use with discretion since it can be visually fatiguing. Other bold combinations to consider are split complements (a color and the two colors adjacent to its complement; color example 9b) and triads (three colors evenly spaced on the color wheel; color example 9c). Colors adjacent to one another on the color wheel result in subtle harmonies.

The color wheel simplifies color relationships for the purpose of clarity, showing only saturated or pure colors. Adding the myriad variations of each hue to the palette (more or less saturated, darker or lighter) creates a wealth of possibilities. Taking a pair of complements from the color wheel and varying the saturation and brightness of one or both colors produces a very different result from the pure complements. Combining a light tint of a warm color with a darker shade of its cooler complement often gives pleasing results. Combining a darker shade of a warm color with a light tint of its cooler complement produces an unusual effect you may like.



Once you have mastered the concept of the color wheel, you have a good framework for experimenting with color combinations. Many books targeted at graphic designers show groups of preselected color combinations. Some are organized by themes or moods, and some are based on a **custom color system**, such as PANTONE. The more you develop a critical facility for judging color combinations, the more you will be able to trust your own eye for color. The bibliography at the back of this manual includes books on design.

# Color and text

It is not a coincidence that the overwhelming majority of text you see is printed in black on white paper. Text in black on white is highly legible and is not fatiguing to read for extended periods. For many color materials, using black text on a white background and confining color to graphic elements and headings is a good choice.

Color text can add flair to documents printed on paper when used skillfully. This technique is widely used in presentations. When using color text, avoid dazzling text and background combinations created from primary complements, especially red and cyan or red and blue; they are visually fatiguing and hard to read. Color text is more legible when distinguished from its background by a difference in lightness—for example, dark blue text on a light beige background. In addition, using many different colors in a string of text makes for a confused appearance and is hard to read. However, using a single highlight color is an effective way to draw the reader's eye to selected words. See color example 10 for color text samples.

When using color text, keep in mind that small font sizes typically do not print in color with the same sharpness as in black. In most applications, black text prints exclusively in black toner, while color text usually prints with two or more toners. Any misregistration between the different toners on paper causes color text to lose definition. You can make test prints to find the smallest point size at which color text prints clearly. When using high-end graphics applications that allow you to specify color as percentages of cyan, magenta, yellow, and black, you can create pure cyan or pure magenta text that prints with the same sharpness as black text. (Pure yellow text is extremely hard to read on anything but a dark or complementary background.)



# Raster images and vector images

Two broad categories of artwork can be printed from a personal computer to a color printer: raster and vector images.

A **raster image**, also referred to as a bitmap, is composed of a grid of **pixels**, each assigned a particular color value (color example 11a). The grid, when sufficiently enlarged, resembles a mosaic made from square tiles. Examples of raster images include scans and images created in painting or pixel-editing applications, such as Photoshop and Painter.

The amount of data found in a raster image depends on its **resolution** and **bit depth**. The resolution of a raster describes the compactness of the pixels and is specified in pixels per inch (ppi). The bit depth is the number of bits of information assigned to each pixel. Black and white raster images require only one bit of information per pixel. Grayscale images require 8 bits per pixel. For photographic quality color, 24 bits of RGB color information are required per pixel, yielding 256 levels of red, green, and blue. For CMYK images, 32 bits per pixel are required.

When printing raster artwork, the quality of the output depends on the resolution of the source raster. If the raster resolution is too low, individual pixels become visible in the printed output as small squares. This effect is sometimes called "pixelation."

In vector images, picture objects are defined mathematically as lines or curves between points—hence the term "vector" (color example 11b). Picture elements can have solid, gradient, or patterned color fills. Vector artwork is created in illustration and drawing applications, such as Illustrator and CorelDRAW. Page layout applications, such as QuarkXPress, also allow you to create simple vector artwork with their drawing tools. PostScript fonts are vector-based as well.

Vector artwork is resolution-independent; it can be scaled to any size and resolution without danger of pixels becoming visible in printed output.

# Optimizing files for processing and printing

The following sections provide tips on how to create image files that produce the highest possible print quality while minimizing the processing time and disk space they require.

# Resolution of raster images

While a 72-ppi raster image appears sharp on a monitor, the same image would likely appear pixelated when printed to the Fiery 3850C. Color print devices are capable of much greater detail than monitors, and require correspondingly higher resolution image files. However, high-resolution files can be large, and therefore cumbersome to transmit over a network, process for printing, store on disk, and edit.

Beyond a certain threshold, a higher image resolution greatly increases file size while having a minimal effect on output quality. The optimal image resolution depends on the resolution of the final print device. Aim for the resolution that optimizes both file size and output quality.

The resolution of a raster image, along with its bit depth and physical dimensions, determine its file size. The following table shows the file sizes of color raster images at different dimensions and resolutions.

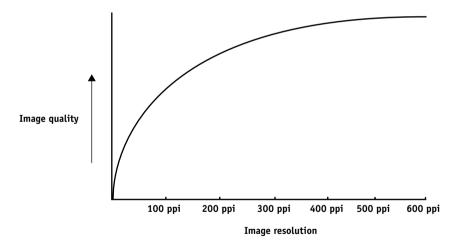
	File size at				
Image size (inches)	100 ppi	150 ppi	200 ppi	400 ppi	600 ppi
	RGB/CMYK	RGB/CMYK	RGB/CMYK	RGB/CMYK	RGB/CMYK
3"x4"	0.4/0.5 MB	0.8/1.0 MB	1.4/1.8 MB	5.5/7.3 MB	12.4/16.5 MB
5"x7"	1.0/1.3 MB	2.3/3.0 MB	4.0/5.3 MB	16.0/21.4 MB	36.1/48.1 MB
8.5"x 11"	2.7/3.6 MB	6.0/8.0 MB	10.7/14.3 MB	42.8/57.1 MB	96.4/128.5 MB
11"x 17"	5.4/7.1 MB	12.0/16.1 MB	21.4/28.5 MB	85.6/114.1 MB	192.7/256.9 MB

A-11

In this table, the shaded areas indicate that 200 ppi is typically the best trade-off between image quality and file size. However, higher resolutions (for example, 250 to 300 ppi) may be needed for offset printing, when quality is of the utmost importance, or for images containing sharp diagonal lines.

To find the best image resolution for your purposes, make test prints of some raster artwork at different resolutions. Start with a high-resolution image (400 ppi) and save versions at progressively lower resolutions, down to 100 ppi, using a pixel-editing application such as Photoshop. Always save a copy of the original high-resolution version in case you need to revert to it. The high-resolution data cannot be recreated from a lower resolution version.

Print the files and examine the output. You will likely begin to see a marked deterioration in output quality at resolutions below 200 ppi, while above 200 ppi the improvement may be very subtle.



Raster images prepared for offset printing may need to be at higher resolutions than needed for proofing on your Fiery 3850C.

# Scaling

Ideally, each raster image should be saved at the *actual* size, and it will be placed into the document at the *optimal resolution* for the print device. If the image resolution is correct for the print device, there is no quality advantage to be gained by scaling an image down to a percentage of its actual size. If you scale a large image down to a percentage of its actual size, you incur unnecessary file transfer time because the image data for the entire large image is sent to the printer. If an image is placed multiple times at markedly different sizes in a document, save a separate version of the image at the correct size for each placement.

If you need to place an image at greater than 100% in a document, remember that the output image resolution is affected. For example, if you scale a 200 ppi image to 200%, the image is printed at 100 ppi.

# Appendix B: Color Management

This appendix provides information on controlling and managing color output in order to achieve predictable color results. It also discusses the basics of color management.

# Controlling printed color

When working with color materials, whether they be presentations, illustrations, or complicated page designs, you make aesthetic decisions about the colors you use. Once you have decided on your goal, you then need to realize it in print. Your color printing system becomes an ally in this creative process to the extent that results are *predictable*.

- If you designed a poster to print on the Fiery 3850C, you want the printed colors to match the design specification.
- If you are printing presentations on the Fiery 3850C, you want to preserve the vivid colors you see on your monitor.
- If you are working with color that will be printed on an offset press, you want the Fiery 3850C output to match other prepress proofs or PANTONE color swatch books.

The type of print job and the final print device, Fiery 3850C or offset press, determine the methodology you use to achieve the best results.

No matter what your goals are, two factors always impact color print output: print device consistency and the range of colors the device can print, known as its gamut. These concepts are covered briefly in this chapter. Creating successful color documents and presentations also requires an understanding of color management software as it is implemented by the Fiery 3850C and on your desktop computer. Most of this chapter is devoted to discussing the various elements of color management that contribute to predictable color results.

# Maintaining printer consistency

The factors described below affect print device consistency, as well as color fidelity and overall output quality.

# Paper stock and toner

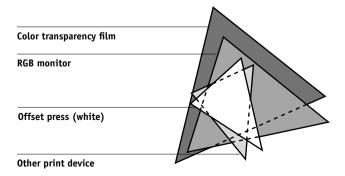
The paper and toner used by your printer can affect printed color. For best results, use the supplies recommended by the manufacturer of the printer.

#### Maintenance

Problems, such as streaking and insufficient or excessive amounts of one or more toners, arise when a printer does not receive periodic maintenance or needs major repairs. In addition to having it serviced regularly, monitor the condition of your printer by making standard test prints at regular intervals. You can do this easily by printing the Fiery 3850C Test Page. Save the prints and show them to the service technician whenever output densities vary from the norm or other problems appear.

# Print device gamut

Different color reproduction techniques have different color capabilities or **gamuts**. Color transparency films have comparatively large gamuts, as do color monitors. The color gamut that can be produced using process inks or CMYK toners on paper is smaller. This is why some colors that can be displayed on a color monitor, especially bright saturated colors, cannot be reproduced exactly by your Fiery 3850C printer, nor can they be reproduced on a press using process colors. Moreover, different print devices have different gamuts—some colors your printer can produce cannot be reproduced on an offset press, and vice versa. The following illustration provides a graphical representation of this concept.



You need to account for the gamut of your print device when designing on a color monitor. When printed, colors that fall outside the print device gamut are "mapped" to printable colors. This process, referred to as **gamut mapping**, takes place when color data is converted or adjusted to meet the gamut requirements of a print device.

The Fiery 3850C is specially designed to perform gamut mapping at high speed with high quality results. It provides these color management features automatically, using either built-in default settings or settings you specify for a particular print job. For added flexibility, the Fiery 3850C color management system can also be used in combination with color management systems on Windows and Mac OS computers.

# **Basics of color management**

The past several years have seen progress toward standardization in the field of digital color management systems. Both the Windows and Mac OS operating systems now support a standard format developed by the International Color Consortium (ICC). This ICC format is implemented on Windows 98/Me and Windows 2000 computers in Image Color Matching (ICM) and on Mac OS computers in ColorSync. More and more software developers are also incorporating color management systems into highend applications. The Fiery 3850C color management system, ColorWise, supports this industry standard profile format.

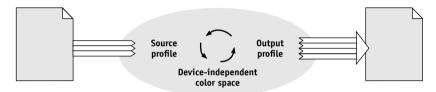
A color management system, or **CMS**, is a "translator" between the color space of the source image (the monitor, or a scanner, for example) and the color space of the output device. The CMS uses a device-independent color space, such as CIELAB, as its intermediate color space. To perform its translation, the CMS needs information about the color space of the source image and the gamut of the print device. This information is provided in the form of profiles, often created by the makers of the monitor or print device. The end product of a CMS conversion is a printed document or an image file in the gamut of a particular device.

**NOTE:** If color matching between computer display and printed output is critical, you should calibrate your monitor as well as your printer. For most users, predictability of printed color output is adequate and monitor calibration is not necessary. For information on monitor calibration, see your Photoshop or Illustrator documentation.

# Color conversion

Before a color document can be printed, the color data in it must be converted to the gamut of the print device. Whether performed by the Fiery 3850C or by a host-based CMS, the process of converting color data for a print device is the same: the CMS interprets RGB image data according to a specified source profile and adjusts both RGB and CMYK data according to a specified output profile, also called a destination profile by some color management systems.

#### Color management system



The **source profile** defines the RGB color space of the image's source—characteristics such as the white point, gamma, and type of phosphors used. The output profile defines the gamut of the output device. The Fiery 3850C (or the host-based CMS) uses a device-independent color space to translate between the source color space and the color space of the output device.

The Fiery 3850C allows you to specify default and override settings for the source color space information and the output profile information (see page 1-1). When you use these settings, you do not need to use the features of other color management systems. Your Fiery 3850C software includes ICC profiles for use with other color management systems, if you choose to use them, although conflicts may arise when the Fiery 3850C CMS is used in conjunction with a host CMS.

Color management systems can also be used to adjust color data to the gamut of a print device other than the one to which you are printing. This process of simulating another print device is commonly used for proofing jobs that will print on an offset press. The Fiery 3850C simulation feature is described on page 1-6.

# Appendix C: Importing Densitometer Measurements

This appendix describes Simple ASCII File Format, which can be used to import density measurements from measurement devices. To use your own measurement data from an alternate densitometer, record your individual readings in a text file and structure it as described below.

# Simple ASCII Import File Format (SAIFF)

This format describes **Status T** measurement data and is for import into the ColorWise Pro Tools Calibrator. There are three possible file formats:

- 1D Status T density for EFI 34 patch page
- 1D Status T density for EFI 21 patch page
- 1D Status T density for other pages (maximum of 256 patches per ink)

The file format is ASCII and has no tabs. A single space or multiple spaces are used as delimiters. Blank lines are not allowed. Each line in the file represents four patches (C, M, Y, K) of a specific ink value. Comments may be on any line in the file, and these lines start with a pound sign (#) followed by a space. A line with a pound sign followed by any character other than a space has been reserved. Comments must be on an entire line by themselves.

Each line of data contains five values. The first number is the sequential patch number (for EFI 34 and EFI 21 pages) or the ink value percentage (for other pages). The following four values are the density values of C, M, Y, and K of the corresponding patch. Lines are ordered either by increasing sequential patch numbers or by increasing the ink percentage.

For Windows computers, the file extension must be .cm1. For Mac OS computers, the file type must be 'TEXT'.

Measurement data in EFI 34 and EFI 21 are paper-relative. For other pages, if the first line corresponds to zero ink value, the Calibrator assumes that the measurement data is absolute and adjusts it to become paper-relative by subtracting the density values of the first line from the remaining patches.



# Example of 1D Status T density for EFI 34 patch page

This file format is used to specify the Status T density measurements of the EFI 34 patch page. The value in the first column is the patch number. The first patch must be 1 and the last must be 34.

```
#!EFI 3
# EFI ColorWise 2.0 Data
type: 1DST34
# Cyan Magent Yellow Black
1 0.0300 0.0400 0.0200 0.0400
2 0.0600 0.0700 0.0800 0.0700
3 0.1000 0.1000 0.1000 0.1000
(...more data...)
33 1.6700 1.3400 0.8900 1.6700
34 1.7200 1.4300 0.9300 1.7500
```

# Example of 1D Status T density for EFI 21 patch page

This file format is used to specify the Status T density measurements of the EFI 21 patch page. The value in the first column is the patch number. The first patch must be 1 and the last must be 21.

```
#!EFI 3
# EFI ColorWise 2.0 Data
type: 1DST21
# Cyan Magent Yellow Black
1 0.0300 0.0400 0.0200 0.0400
2 0.0600 0.0700 0.0800 0.0700
3 0.1000 0.1000 0.1000 0.1000
(...more data...)
20 1.6700 1.3400 0.8900 1.6700
21 1.7200 1.4300 0.9300 1.7500
```



# Example of 1D Status T density for an arbitrary page

This file format is used to specify the Status T density measurements of a user-defined patch page. The value in the first column is the ink/toner percentage of the patch. The first percentage must be 0 and the last percentage must be 100. The percentages must increase in between.

```
#!EFI 3
# EFI ColorWise 2.0 Data
type: 1DST
# percnt Cyan Magent Yellow Black
0.0000 0.0300 0.0400 0.0200 0.0400
0.3922 0.0600 0.0700 0.0800 0.0700
1.1765 0.1000 0.1000 0.1000 0.1000
(...more data...)
98.0000 1.6700 1.3400 0.8900 1.6700
100.0000 1.7200 1.4300 0.9300 1.7500
```

# Glossary

#### additive color model

A system in which colors are produced by combining red, green, and blue light (the additive primaries). An RGB video monitor is based on an additive color model.

## additive primaries

Red, green, and blue light that is used in additive color systems. When added together in proper amounts, these colors of light produce white.

#### artifact

A visible defect in an image, usually caused by limitations in the input or output process (hardware or software); a blemish or error.

# banding

Visible steps between shades in a color gradient.

## bit depth

Amount of information used for each pixel in a raster image. Black and white images require only one bit per pixel. Grayscale images with 256 shades of gray require 8 bits (or 1 byte) per pixel. Photographic quality color images can require 24 bits per pixel (RGB images) or 32 bits per pixel (CMYK images).

#### bitmap

An image comprised of small squares arranged in a grid. Each square in the grid is a pixel. The number of pixels per inch defines the resolution of a bitmap.

#### blasting

An undesirable effect that occurs when excess amounts of toner, possibly combined with certain types of paper stock, cause objects in an image to spread beyond its boundaries as defined in the file.

#### **BMP**

A graphics file format established by Microsoft and native to the Windows operating system.

#### calibration

The process of ensuring that a device behaves consistently with respect to a set of specifications.

#### **CMS**

See color management system.

#### **CMYK**

A subtractive color model that uses cyan, magenta, yellow, and black, or process colors, used in color printing; a color model used in the printing of colors in four-color process printing.

#### color channel

A single-color image that can be edited separately from the other color channels comprising a color space—for example, the red channel of an RGB image.

#### color gamut

See gamut.

## color management system (CMS)

System used to match color across different input, display, and output devices.

## color rendering dictionary

See CRD (color rendering dictionary).

### color separation

The process of separating a color image into the color components for printing-cyan, magenta, yellow, and black. Also used to refer to the four sheets of film that result from the process of separating a color image.

### color space

A model for representing color in terms of measurable values, such as the amount of red, green, and blue in an image. RGB and CMYK color spaces correspond to color devices-monitors and printers respectively. Other color spaces, such as CIE Lab, are based on mathematical models and are device-independent. They are not based on the color response of a particular device. See gamut.

#### colorant

An ink, dye, toner, paint, or other pigment that modifies the color of media to which it is applied.

#### ColorWise color management

Fiery 3850C ICC-open color management solution, which is an easyto-use system that addresses the needs of both casual and experienced color management users.

# composite printer

Any output device that can print directly in color without first creating color separations. A composite print can be used as an early proof of an offset print iob.

#### continuous tone (contone)

Describes a photographic image that contains gradient tones from black to white (such as a 35mm transparency or a photograph). Continuous tones cannot be reproduced in that form for printing, but must be screened to translate the image into dots.

# continuous tone (contone) image

An image containing fine gradations of tones, such as a photographic image.

### **CRD** (Color Rendering Dictionary)

A feature of color management systems and PostScript Level 2 and PostScript 3 color printers that maintains the best possible translation of color from one color device to another. A color rendering dictionary (CRD) is used by the color management system or the printer's PostScript interpreter when converting data between color spaces. The Fiery 3850C includes several CRDs, each of which provides a different color rendering style.

#### custom color system

A system of named color swatches that can be matched on press using process or spot colors. PANTONE and TruMatch are examples of custom color systems.

## DCS (Desktop Color Separation)

A data file standard defined by Quark, Inc., to assist in making color separations with desktop publishing system; five files are created, four color files (one each for C, M, Y, and K) and a composite color preview file of the color image. It allows an image-editing application to perform color separation and pass it through to final output with its integrity intact.

#### densitometer

An instrument commonly used in the graphic arts industry to measure density according to a specified standard.

## density

A measurement of the light-absorbing quality of a photographic or printed image.

# desktop color separation

See DCS.

#### DIC

A Japanese standard of specifications for separations, proofs, and color printing.

# EPS or EPSF (Encapsulated PostScript)

A PostScript file format designed to be embedded in another PostScript stream.

#### Euroscale

A European standard of specifications for separations, proofs, and color printing.

#### flexography

A printing technology that uses flexible raised-image plates. Flexography can be used to print on non-flat materials, such as cans.

## four-color printer

A printing device that uses cyan, magenta, yellow, and black ink or toner.

#### gamma

A numeric value representing the relationship (gamma curve) between the input and output values of a color device. If gamma equals 1, input values are mapped exactly to output values.

#### gamut

A range of colors. A device gamut is the range of colors that a device, such as a printer, can produce. An image gamut is the range of colors in a particular image.

# gamut mapping

The conversion of color coordinates from one device's gamut to another usually accomplished with algorithms or look-up tables.

# **GDI** (Graphics Device Interface)

Graphics and display technology used by computers running Windows. GDI applications rely on GDI (rather than the PostScript language) to send text and pictures to printers.

# GIF (Graphics Interchange Format)

A standard developed by CompuServe for bitmap graphics of up to 256 colors and used for posting photographic images on the Internet or intranet pages; rarely used for professional printing.

## gradient

A smooth transition between two different colors or between two shades of a color.

# **Graphics Device Interface** See GDL.

# **Graphics Interchange Format** See GIF.

#### gravure

A printing technology that uses an etched cylinder that has been immersed in ink. The ink that remains in the etched areas is applied to the paper. The non-etched surfaces of the cylinder are non-printing areas.

### halftoning

A method for representing an original continuous tone image using a pattern of dots, lines or other patterns.

#### **HSB**

A color model where each color is represented by its hue, saturation, and brightness components; supported by most color applications.

#### ICC profile

An industry standard color profile format developed by the International Color Consortium (ICC) that describes the color capabilities, including the gamut, of a color device based on the differences between an ideal and the current device. The ideal is often provided by the manufacturer as a color reference file. ICC profiles are implemented on Mac OS computers in ColorSync and on Windows 95/98, Windows NT 4.0, and Windows 2000 computers in Image Color Matching (ICM). The Fiery 3850C color management system, ColorWise, supports ICC profiles.

## imagesetter

Raster-based film output device; a highresolution laser output device that writes bitmapped data onto photosensitive paper or film.

#### JPFG.

A graphics file format defined by the Joint Photographic Experts Group committee of International Standards Organization (ISO); a standard for digital compression of still image graphic data.

#### metamerism

Phenomenon in which two colors composed of different combinations of light wavelengths appear identical under a specific light source, but may look different under other light sources. The colors are called "metamers."

#### moiré

An undesirable pattern in images made using halftone screens. Moiré can be caused by the improper line frequency of the screens, improper screen angles, improper alignment of halftone screens, or by the combination of a halftone screen with patterns in the image itself.

#### named color

A color that is defined according to a custom color system. For example, PANTONE 107 C is a named color.

#### office applications

Software applications commonly used for business purposes, including presentation applications, spreadsheets, and word processing programs.

# offset lithography

Printing in which ink is transferred from printing plates to a rubber blanket and then from the blanket to paper.

## output profile

The output profile describes the color characteristics of a printing device. It consists of both a profile for your printer and a calibration target that defines the expected density response of the printer.

## phosphor

Material used in making computer monitors; phosphors glow and emit red, green, and blue light when struck by an electron beam, thus creating an image.

# photographic rendering

A color rendering style that preserves tonal relationships in images. Unprintable colors are mapped to printable colors in a way that retains differences in lightness, sacrificing color accuracy as necessary.

#### pixel

The smallest distinct element of a raster image. The term is a combination of the words "picture" and "element."

## **PostScript**

A device-independent page description language developed by Adobe, which is used to print and display pictures and text. PostScript 3 includes many enhancements to older versions of Post-Script, including improved image quality and color with Enhanced Image Technology, faster performance with Advanced Page Processing, and ease of use and setup with NetWorks System.

# PPD (PostScript Printer Description file)

A file containing information about a particular PostScript print device's capabilities and restrictions. The information in the PPD is presented via the printer driver.

#### prepress proof

A print made from a set of film separations or other file to simulate the results of printing. A prepress proof is the last opportunity to catch problems before the print job goes to press.

# presentation graphics rendering

A color rendering style that creates saturated colors but does not match printed colors precisely to displayed colors. It is appropriate for bright saturated colors used in illustrations and graphs.

## process colors

The four colors used in printing to simulate full-spectrum color images: Cyan, Magenta, Yellow, black (CMYK).

#### **OuickDraw**

Graphics and display technology built into Mac OS computers. QuickDraw applications rely on QuickDraw (rather than the PostScript language) to send text and pictures to printers.

#### raster image

Electronic representation of a page or image using a grid of points called pixels.

### rendering intent

The style of color rendering, or gamut mapping, designed for a particular type of color job. An example of a rendering intent is Photographic rendering—also referred to as Image rendering or Contrast rendering—which is designed for photographic images.

#### resolution

The number of pixels per inch (ppi) in a bitmap image or the number of dots per inch (dpi) that a device can render.

#### **RGB**

An additive color model that makes a range of colors by combining red, green, and blue light, called the additive primaries. Commonly used to refer to the color space, mixing system, or monitor in color computer graphics.

## simulation profile

The simulation profile describes the color characteristics of another print device, such as a printing press, that you want the Fiery 3850C to simulate.

#### solid color rendering

A color rendering style intended for use when color accuracy is crucial. Unprintable colors are mapped to the closest printable colors. Solid color rendering does the best job of preserving the saturation of displayed colors.

#### source color space

The color environment of the originating source of an image, including scanners and color monitors.

#### source profile

A profile used by the color management system to determine the characteristics of the color values specified in a source digital image.

## spectral light

The wavelengths of electromagnetic radiation emitted by a given light source that can be seen by the human eye.

#### spot color

A color that is printed on its own separation plate when separations are specified. A spot color is printed using a custom ink for that color, in contrast to process colors that are printed using combinations of cyan, magenta, yellow, and black.

#### Status T

A spectral response for graphic arts reflection densitometers defined by ANSI (the American National Standards Institute).

#### subtractive color model

A system in which color is produced by combining colorants such as paint, inks, or dyes on media such as paper or transparent film or acetate. All printing devices use the subtractive color model.

#### subtractive primaries

Cyan, magenta, and yellow colorants used in subtractive color systems for color printing. Combining the subtractive primaries produces darker colors. Black is added to the subtractive primaries to compensate for deficiencies of the toners or inks, and for more efficient black printing.

#### substrate

In printing, the material upon which the job is printed.

#### **SWOP**

The abbreviation for Specifications for Web Offset Publications. A standard of specifications for separations, proofs, and color printing on a web offset press (*not* a sheet fed press).

#### undercolor removal

In areas where all three process colors (C, M, Y) overprint, the amounts of those colors are reduced and replaced by black. This improves wet ink trapping and reduces ink costs in process color printing.

# vector image

Graphic illustration created on computers where picture objects are defined mathematically as lines or curves between points. These mathematical definitions are interpreted by an image language such as PostScript. Vector images include artwork created with illustration applications (such as Illustrator or FreeHand) and page layout applications (such as PageMaker).

# white point

The color temperature of any white light source, typically expressed in degrees Kelvin (for example, 6500 K, typical for the white of a monitor).

# workflow

The path a print job follows from creation to destination. A workflow may originate with an RGB scan imported to the client workstation and opened on the desktop in an image processing application, such as Photoshop. After adjustments are made to the scanned image, it is evaluated on a color proofing device for eventual color printing on the same device or on press.

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Adobe Systems Incorporated: www.adobe.com

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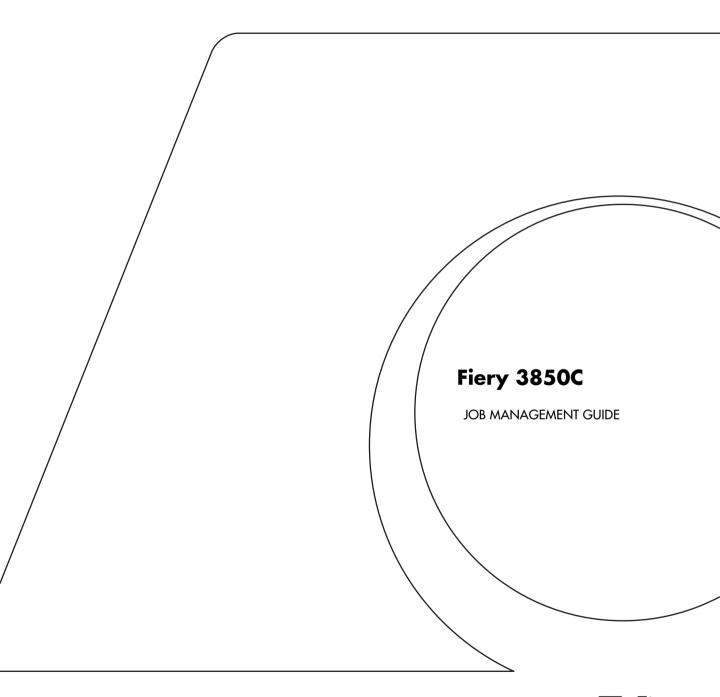
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If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

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## Index

## Preface

The Fiery 3850C<sup>™</sup> is a special-purpose controller board built into the printer. It enables you to use your printer as a high-speed networked color printer.

This manual is intended for Fiery 3850C operators or administrators, or users with the necessary access privileges, who monitor and manage job flow and troubleshoot problems that may arise. It describes the functions and features of Fiery™ utilities and Fiery WebTools™ for the purposes of print job management and color quality control.

Although it may not be the case at all sites, the documentation for this product assumes the presence of an operator who controls and manages jobs sent by users from remote workstations.

**NOTE:** The term "Fiery 3850C" is used in this manual to refer to the printer in which the Fiery 3850C is embedded. The name "Aero" is used in illustrations to represent the Fiery 3850C.

## About this manual

This manual is organized as follows:

- Chapter 1 describes the Fiery 3850C Control Panel. It explains the various messages
  and icons that you might see and describes how to print system information pages. It
  also explains how to properly start up and shut down the Fiery 3850C.
- Chapters 2 and 3 describe the Command WorkStation interface. The Command WorkStation application can be installed on networked Windows computers and used to view and manage virtually all aspects of Fiery 3850C activity. In addition to providing a graphic display of the job flow, the Command WorkStation allows you to reprint or hold jobs, view and override print option settings, download files, manage printer fonts, preview print jobs, calibrate the Fiery 3850C, and perform Setup (server configuration). The Command WorkStation also provides tools for archiving jobs and moving jobs between Fiery 3850C printers.
- Chapter 4 introduces Fiery WebTools, explains how to access them, and directs you
  to sources of more information (in this manual or in other manuals in the
  documentation set).

- Chapter 5 describes Fiery WebSpooler, which can be used to view and manage Fiery 3850C job activity. The interface and features of Fiery WebSpooler have identical counterparts in the Command WorkStation; therefore, this chapter refers you to Chapters 2 and 3 for details about Fiery WebSpooler.
- Appendix A lists error messages that you might see on the Fiery 3850C Control Panel, the Command WorkStation, Fiery WebSpooler, or the printer, and contains some troubleshooting information.

## Terminology

Specific terms are explained as they are introduced. However, the following general terms are used throughout:

- **PostScript (PS)**—A computer language designed as a page description language. The Fiery 3850C uses this language for imaging the page and for communication with applications and with the print engine.
- Printer Control Language (PCL)—A computer language designed as a page description language. The Fiery 3850C uses this language for imaging the page and for communication with applications and with the print engine.
- Job—A file consisting of PostScript or PCL commands and comments that describe the graphics, sampled images, and text that should appear on each page of a document, and the printer options that should be used in printing, such as media or color rendering style. The postscript or PCL files described include PDF files.
- Spool—Write to a disk. Usually used here to refer to a PostScript or PCL print job being saved to the Fiery 3850C hard disk in preparation for processing and printing.
- RIP—Acronym for raster image processing, which changes text and graphics commands into descriptions of each mark on a page. In common use as a noun, a "raster image processor" (RIP) is the computer processor that performs this function.
- **Print**—The process of rendering, or imaging, a page or a job on a printer.

These concepts can explain how the Fiery 3850C and the printer work together as a powerful printing system. The Fiery 3850C RIP changes text and graphics commands in PostScript or PCL into color specifications for each dot of toner deposited on a page by the printer.

## About the documentation

This manual is part of the set of Fiery 3850C documentation, which includes the following manuals for users and system administrators:

- The Configuration Guide explains basic configuration and administration of the Fiery 3850C for the supported platforms and network environments. It also includes guidelines for setting up UNIX, Windows 2000, Windows NT 4.0, and Novell NetWare servers to provide PostScript or PCL printing services to clients.
- Getting Started describes how to install software to enable users to print to the Fiery 3850C. Specifically, it describes installation of PostScript or PCL printer drivers, printer description files, and other user software provided on the User Software CD and Command WorkStation CD. It also explains how to connect each user to the network.
- The Printing Guide describes the printing features of the Fiery 3850C for users who send jobs via remote workstations on the network or via a direct parallel port connection.
- The Color Guide provides an introduction to the basics of color theory and printing to a Fiery 3850C printer. It also includes practical color printing tips and application notes that explain how to print to the Fiery 3850C from popular Windows and Mac OS applications.
- The Job Management Guide explains the functions of the Fiery 3850C client utilities, including the Command WorkStation, and how they can be used to manage jobs and maintain color quality. This book is intended for an operator or administrator, or a user with the necessary access privileges, who needs to monitor and manage job flow, perform color calibration, and troubleshoot problems that may arise.
- Release Notes provide last-minute product information and workarounds for some of the problems you may encounter.

## Fiery 3850C job environments

The Fiery 3850C supports several levels of control of printing, job management, and setup, and offers you the flexibility to choose the configuration that corresponds to the requirements of your site. Your situation may correspond to one of the descriptions outlined in the following section, or you may prefer an intermediate level of control.

At one extreme, an administrator or operator in a high-volume printing environment controls the entire job flow and all printing. Print jobs arriving from remote users are spooled to the server disk and stored until the operator decides it is time to print them. Additional functions (calibration, job overrides, prioritizing, font management) are reserved for the administrator or operator.

At the other extreme, anyone on the local network can control all printing and server functions; operator intervention is not necessary. Users can print from their workstations to any of the published print connections. Anyone can use the Command WorkStation or Fiery WebSpooler to control any print job.

The spectrum of control that an administrator can implement is described in the Configuration Guide.

#### **Permissions**

Support for these job environments is achieved by a combination of Fiery 3850C Setup options. By default, anyone can access Setup, but the administrator can limit access to Setup by specifying an Administrator password for the Fiery 3850C (see the Configuration Guide).

Also by default, anyone can log in to the Command WorkStation or Fiery WebSpooler and control job flow, but an administrator can restrict access to these functions by specifying an Operator password.

The three security levels from greatest to least control are:

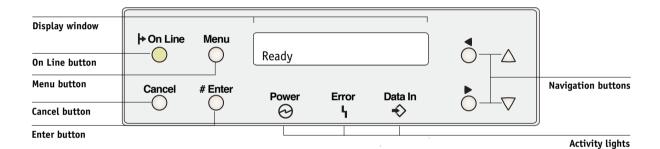
- Administrator—confers control of Setup and is the highest level of control. The person who has access to Setup can control the printing and job management environment by enabling print connections and setting passwords. The Administrator can also manage the fonts on the server, clear the server disk when necessary, and set a common web link for all users who log in to the Fiery 3850C using their web browser.
- Operator—includes control of print jobs that arrive at the server and the ability to perform calibration and reboot the server.
- Guest—allows users to view the status of active jobs and the list of stored jobs. They cannot make changes to jobs or change their printing instructions. A password is not needed to log in as Guest and view jobs from the Command WorkStation, or Fiery WebSpooler windows.

This manual describes the features of the Fiery client utilities, including the Command WorkStation, and all operator privileges, whether those privileges are available to everyone or are exclusive to only certain people. It also includes descriptions of administrator functions and provides references to other manuals for more information.

## Chapter 1: Operating the Fiery 3850C

You can use the Control Panel on the printer to access all basic functions of the Fiery 3850C, access special features, view status and information about jobs printed to the Fiery 3850C, view printer error messages, print system pages, run diagnostics, and configure Fiery 3850C Setup options. For information about Setup options and how to use them, see the *Configuration Guide*.

## **Using the Control Panel**



1-2 Operating the Fiery 3850C

The parts of the Control Panel that control functionality of the Fiery 3850C are:

Menu button — Enters the Functions menus. From a

Setup menu option, returns to the previous Setup

menu.

Activity lights Online light/Online Button—puts the Fiery 3850C

online or offline.

Light off—The Fiery 3850C is offline or the power is

off.

Solid green—The Fiery 3850C is online.

Power light

Off—The power is off.

Solid green—Indicates normal state.

Blinking green—The Fiery 3850C is warming up.

Error light

Blinking red—An error has occurred that may not interfere with printing. The Fiery 3850C requires

attention. Solid red—

Data in light

Blinking green—The Fiery 3850C is spooling or

RIPping a job.

menu to the next. When entering numbers or text, increment to the previous number or character.

Down arrow—In Setup menus, advances from one menu to the previous. When entering numbers or text, decrements to the next number or character.

Right arrow—Advances the cursor to the text-entry

position to the right.

Left arrow—When entering numbers or text,

backspaces and deletes.

**Using the Control Panel** 

Enter button Activates the currently selected option and, if

applicable, proceeds to the next menu.

While RIPping, Enter stops printing or processing the current job after the printer has finished printing

the current page.

If the correct page size is unavailable for the current job, Enter forces the Fiery 3850C to print the job on

the default paper size.

Cancel button In Setup menus, exits menus entirely, returning to

While printing, Cancel stops printing the current

job.

## Control Panel Fiery 3850C status messages

When the Fiery 3850C has control of the Control Panel, the LCD provides information about the current status of the Fiery 3850C.

Control Panel Fiery 3850C status messages are:

Ready The Fiery 3850C is in a normal state, ready to print.

<Message> Displays a warning message. An error has occurred that may (Error light not interfere with printing. The Fiery 3850C requires

blinking) attention.

<Message> Displays an error message. An error has occurred that

(Error light solid) prevents printing.

Processing Appears when the Fiery 3850C is processing a job. The

activity light flashes green.

Printing Appears when the Fiery 3850C is printing a page from the <Job Name>

Print menu. Job Name indicates the type of special page.

The activity light flashes green.

Printing Appears when the Fiery 3850C is printing a job. The

activity light flashes green.

1-4 Operating the Fiery 3850C

<User Name> Appears when the Fiery 3850C is printing a job. #C

Copies: #C/#T indicates the copy currently printing; #T indicates the total

number of copies in the job. The activity light flashes green.

Canceling Appears when the Cancel button has been pressed and the

currently printing or processing job is being canceled.

**NOTE:** If the Fiery 3850C is idle for more than the default time of two minutes, control of the Control Panel returns to the printer. Press the Menu button to return control to the Fiery 3850C.

**Using the Control Panel** 

Press the Menu key to display the Functions menu. The following options are available:

Check and Print Select to view pending jobs. Scroll through the list of

pending jobs with the up and down arrow keys. Press the

Enter button to print the selected job.:

Secure Print Select to view pending secure print jobs.:

Print Menu Select to print system pages from the Fiery 3850C. Scroll

through the submenu with the up and down arrow buttons.

Press the Enter button to print the selected page.

Print Config Page

Gives the current Fiery 3850C and device configuration. This page lists general information about the hardware and software configuration of the Fiery 3850C, the current options for all Setup settings, information about the current calibration, and if applicable, the Ethernet and Token Ring addresses of the Fiery 3850C.

Print Job Log

A list of the last 55 print jobs. For information on the fields in the Job Log and on printing it in other forms, see

page 2-30.

Print PCL Font List

A list of all PCL fonts resident on the Fiery 3850C hard

disk.

Print PS Font List

A list of all PostScript fonts resident on the Fiery 3850C

hard disk.

Print Test Page

Enables you to confirm that the Fiery 3850C is properly connected to the printer. The Test Page provides sample images and color samples. The following information is also listed: Server name, Printer model, color settings, calibration information, and date and time printed.

Tray Setup Menu Accesses Tray Setup menus. Use these menus to set the size,

paper type, and locking for each installed paper tray.

1-6 Operating the Fiery 3850C

#### Resets

Select reset system values on the Fiery 3850C.

#### Clear Log/Queues

Select Yes or No with the up and down arrow buttons. Press Enter to enact your selection.

#### Clear Fonts

Select Yes or No with the up and down arrow buttons. Press Enter to enact your selection.

#### Reset Color

Select Yes or No with the up and down arrow buttons. Press Enter to enact your selection.

#### **Restore Defaults**

Select Yes or No with the up and down arrow buttons. Press Enter to enact your selection.

#### Restart Printer

Select Yes or No with the up and down arrow buttons. Press Enter to enact your selection.

#### System Setup

Accesses the system setup menus

#### **Printer Name**

Use the up and down arrow buttons to select the character for each space. Use the left and right arrow buttons to move the cursor left or right.

#### Publish Printed Q

Select Yes or No with the up and down arrow buttons. Press Enter to enact your selection.

#### Jobs to Save

Use the up and down arrow buttons to select the number of jobs to save.

#### **Energy Saver 1**

Select On or Off with the up and down arrow buttons.

Press Enter to enact your selection.

#### **Energy Saver 2**

Select On or Off with the up and down arrow buttons.

Press Enter to enact your selection.

1-7 Using the Control Panel

#### E. Saver 2 Timer

Select a number of minutes with the up and down arrow buttons. Press Enter to enact your selection.

#### Time

Use the up and down arrow buttons to select the number for each space. Use the left and right arrow buttons to move the cursor left or right.

#### Date

Use the up and down arrow buttons to select the number for each space. Use the left and right arrow buttons to move the cursor left or right.

#### Change Password

Select Yes or No with the up and down arrow buttons. Press Enter to enact your selection.

If you select Yes, Enter the old password and then enter and confirm the new password: Use the up and down arrow buttons to select the character for each space. Use the left and right arrow buttons to move the cursor left or right. Press Enter to confirm your entry.

#### Printer Setup

Accesses the printer setup menus

#### Page Desc Lang

Use the up and down arrow buttons to select Auto, PCL, or PS.

#### Default Paper

Use the up and down arrow buttons to select a paper size.

#### **Auto Continue**

Use the up and down arrow buttons to select On or Off.

#### Def Output Tray

Use the up and down arrow buttons to select a tray.

#### **Job Separations**

Use the up and down arrow buttons to select On or Off.

#### **B&W Page Detect**

Use the up and down arrow buttons to select On or Off.

1-8 Operating the Fiery 3850C

1-8

Hex Dump Mode

Use the up and down arrow buttons to select On or Off.

PS Setup Accesses the PostScript setup menus

Error Page

Use the up and down arrow buttons to select Yes or No.

Def Resolution

Use the up and down arrow buttons to select a resolution.

PCL Setup Accesses the PCL setup menus

**Orientation** 

Use the up and down arrow buttons to select Portrait or

Landscape.

Form Length

Use the up and down arrow buttons to select a number of

lines.

Font Number

Use the up and down arrow buttons to select the number of

fonts, from 0 to 45.

Pitch

Use the up and down arrow buttons to select a size.

Symbol Set

Use the up and down arrow buttons to select the symbol

set.

Memory Overflow

Use the up and down arrow buttons to select Yes or No.

Colorwise Setup Accesses the Colorwise setup menus

Source Profile

Use the up and down arrow buttons to select a profile.

Rendering Style

Use the up and down arrow buttons to select a style.

CMYK Sim Profile

Use the up and down arrow buttons to select a simulation

profile.

1-9 Using the Control Panel

Spot Color Match

Use the up and down arrow buttons to select On or Off.

Pure Black Text

Use the up and down arrow buttons to select On or Off.

Black Overprint

Use the up and down arrow buttons to select On or Off.

Visual Cal Starts the Calibration process. When you see the message

Printer Warning, use the up and down arrow buttons to select Abort Calib or Start Calib. Visual Cal may requires a

password.

I/O Port Setup Accesses the Input/Output port setup menus

Ethernet

Use the up and down arrow buttons to select a On or Off.

Speed

Use the up and down arrow buttons to select a the network

connection speed, autodetect, 100, or 10.

Parallel Port

Use the up and down arrow buttons to select On or Off.

Port Timeout

Use the up and down arrow buttons to select a number of

seconds.



## Restarting the Fiery 3850C

Generally, you can leave the Fiery 3850C and the printer running all the time. This section describes how to restart when necessary.

## Turning the printer off

Use the procedure below to turn off power to the printer.

#### TO TURN OFF POWER TO THE PRINTER:

#### 1. Make sure the Online button light is steady and unblinking.

If the button light is blinking, wait until all jobs have finished printing, and proceed when the light becomes steady.

#### 2. Press the main power switch on the printer.

The power switch is located on the front panel, to the left of the top paper tray.

## Restarting the Fiery 3850C

When you restart the Fiery 3850C, fonts that have been downloaded to the hard disk drive are not deleted. Print jobs in the Hold queue, the Printed queue, and jobs that have been processed but not printed are not deleted; they will be available for printing when you restart the Fiery 3850C.

#### TO RESTART THE FIERY 3850C:

 When the Control Panel reads READY, press the Menu button to access the Resets menu.

When you restart the printer, make sure that the Fiery 3850C Control Panel reads READY. If the printer is turned off during RIPping/Printing, this may cause Fiery 3850C hard disk damages.

2. Use the Down arrow button to scroll to Restart Printer. Press the Enter button.

2-1 | About Command WorkStation

# 2-1

## Chapter 2: Introduction to Command WorkStation

This chapter introduces you to the graphical user interface of Command WorkStation. Select a user level and log in to the Fiery 3850C. Once you have logged in, you can tour the Command WorkStation windows. Your exploration will be more complete if you have some jobs in the Spool area (jobs printed to the Hold queue) and have the ability to send more jobs from a nearby computer.

Chapter 3 builds on the information in this chapter and describes job monitoring and control in more depth.

### **About Command WorkStation**

Command WorkStation provides a window on Fiery 3850C and printer functions, and an interface from which you can control those functions. The Command WorkStation application can be installed on a Windows computer with a TCP/IP or IPX network connection to the Fiery 3850C.

By default, no passwords are set on the Fiery 3850C—in this default state, anyone can perform Setup and use all Command WorkStation functions. Until Administrator and Operator passwords are defined in Fiery 3850C Setup, you can log in to Command WorkStation as an Administrator without entering a password, and you are given full privileges. For information about Setup and specifying passwords, see the *Configuration Guide*.

2-2 Introduction to Command WorkStation

After the Administrator has performed Setup and specified passwords, Command WorkStation user options depend on your login level. If you log in to the Command WorkStation as Guest, you have only the first option listed below. If you log in as Operator, you have the first two options. If you log in as Administrator, you have all four options.

Command WorkStation privileges include the following:

- A view of current printing jobs and jobs stored on the Fiery 3850C (Guest, Operator, Administrator)
- Control of printing jobs (Operator, Administrator)
- Ability to perform calibration (Administrator)
- Access to Setup, management of resident fonts, clearing of the Fiery 3850C disk and the Job Log (Administrator)

After you connect to a Fiery 3850C and log in, your first view of the Command WorkStation is the Queues window (as indicated by the tab at the bottom) which is divided into three regions by Spool, RIP, and Print status bars. The Queues window is surrounded by a frame that includes slider buttons and menus.

Once the Fiery 3850C receives print jobs, the Queues window becomes a dynamic display, filled with the names of jobs and their characteristics. Status bars animate in real time as new jobs are processed and printed, and jobs move to different display areas. An operator, who has complete job control, sets the process in motion for each job.

The Spool, RIP, and Print areas of the Queues window represent the stages of printing a job. Jobs come in at the top level (Spool) and drop down to the Print level, unless they are held along the way.

Spooled jobs

Jobs listed below the Spool status bar area are PostScript or PCL files stored on the Fiery 3850C disk. These jobs were sent to either the Print queue (white printer icons) or the Hold queue (yellow icons).

2-3 About Command WorkStation

- RIPped jobs—Jobs listed below the RIP status bar are ready to print. They have already been rasterized (RIPped, or processed for printing) and are waiting, in order, for access to the printer. Rasterized jobs can also be held; held jobs are displayed on a yellow background.
- **Printed jobs**—Jobs listed below the Print status bar have already been printed. Printed jobs can be stored on the Fiery 3850C disk. The number of jobs that can be stored (from 1 to 99) is defined in Setup.

Introduction to Command WorkStation

2-4

You can interact with jobs in the window by selecting them and choosing from Job menu commands or right-mouse menu commands, or by double-clicking them. (However, if passwords have been set and you log in as Guest, you can only view jobs; you cannot change or route them.) This chapter and the next explain the Command WorkStation interface in detail.

## Starting up and logging in

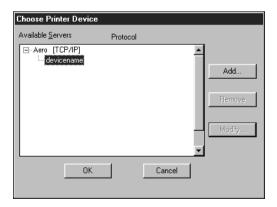
To start up the Command WorkStation application, click the Windows Start button and choose Command WorkStation from the Programs menu; or, if you have created a shortcut to the Command WorkStation application, double-click the Command WorkStation icon.

## Connecting to the Fiery 3850C

If the Command WorkStation was previously connected to the Fiery 3850C, you are prompted to choose it from a list of servers.

If Command WorkStation has never been connected to the Fiery 3850C, you are prompted to configure a new entry. Click OK and see *Getting Started* for instructions on how to configure a new connection.

**Note:** Connection information must be specified using TCP/IP, and the device name "3850C" used specifically.



With the Fiery 3850C device name selected, click OK. If the device name is not displayed, click the plus sign (+) to expand the Fiery 3850C entry.

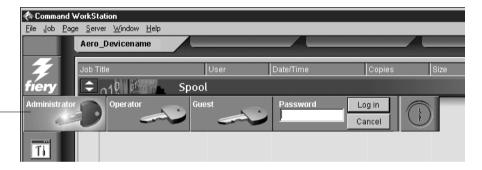
Starting up and logging in

2-5

The Command WorkStation connects to the Fiery 3850C and you are prompted to choose a login level and enter a password to log in (see below). If you have any difficulties connecting to the Fiery 3850C, see Appendix A for error messages and troubleshooting information.

## Logging in

When the Command WorkStation has connected to the Fiery 3850C, the log in/out slider appears, prompting you to select a login level and enter a password. Before you log in, the Administrator key is in the vertical position, and the Operator, Administrator, and Guest keys are in the flat (horizontal) position. When you click your login level, the corresponding key turns to the vertical position.



Log in/out slider

For Administrator or Operator access to the Fiery 3850C, click the corresponding key, enter the password, and click Log in or press Enter. For Guest access only, click the Guest key and then click Log in. No password is required for Guest access.

If you change your mind about logging in, or do not have the password you need, click Cancel.

If you forget your Administrator password, contact your authorized service representative.

2-6 Introduction to Command WorkStation



When you have entered the appropriate password and logged in, the log in/out slider retracts and the full Command WorkStation display appears. The color of the key in the lock indicates your login level. If the Fiery 3850C is handling a large number of jobs, it may take a few moments to display the entire job list.

When you reopen the slider after you have logged in, the Log in button will have changed to the Log out button.

#### Access levels

The three possible levels of access to Command WorkStation functions are Administrator, Operator, and Guest. To enable maximum password protection, Administrator and Operator passwords must be specified in Setup (see the *Configuration Guide*).

When both Administrator and Operator passwords have been specified, the access levels are as follows:

Access level:	Privileges and password requirements:
Administrator	Has full access to all Command WorkStation and Control Panel functions; Administrator password required.
Operator	Has access to all Command WorkStation functions <i>except</i> Setup, calibration, clearing the Fiery 3850C disk, clearing the Job Log, and font management; Operator password required.
Guest	Can view job status, but cannot make changes to jobs or Setup, and can view the Queues window only; no password required.

**Note:** Access privileges alone do not confer control of print jobs. If the operator is going to manage all print jobs, the Administrator must route all user jobs to the Hold queue (that is, all jobs are spooled and held on the Fiery 3850C). To accomplish this, only the Hold queue, and not the Direct connection or the Print queue, should be enabled in Setup. See the *Configuration Guide* for more information.

2-7 The Command WorkStation interface

## Logging out

There are two ways to log out from the Fiery 3850C:

- From the Server menu, choose Log out.
- Open the log in/out slider (click the key icon just below the Fiery logo) and click Log out.



### The Command WorkStation interface

The display illustrated below is the default Command WorkStation display in the middle of job processing. It shows the elements common to all Command WorkStation displays (1 through 4) and the Queues window elements (5 through 8). There are two other windows, Archive and Job Log, which you access via tabs at the bottom of the display (3). However, the Queues window is the one from which most Command WorkStation operations are performed. The elements numbered 1 through 4 are common to all Command WorkStation displays, those numbered 5 through 7 appear only in the Queues window, and element number 8 is common to the Queues and Archive windows.

Introduction to Command WorkStation



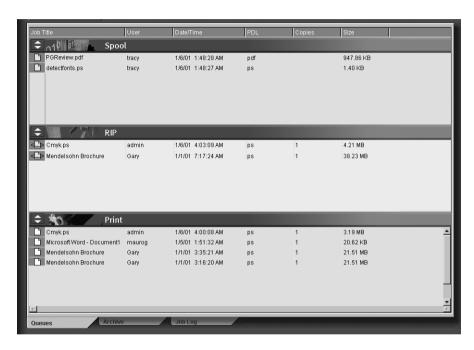


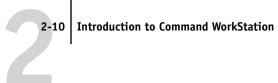
- 1 Server selection tabs
- 2 Sliders and system information
- 3 Window selection tabs
- 4 Job ticket information
- 5-7 Queues window display
- 8 Thumbnail A and B

The Command WorkStation provides access to a great deal of information and many features that are accessed in various ways—buttons, menus, double-clicking, and right-mouse commands. It is a powerful interface that allows for a great deal of interaction and flexibility in the production process. This section describes each of the elements that compose the Command WorkStation display.

## Window area (Queues, Archive, Job Log)

This area can display one of three windows: the Queues window (shown below), the Archive window, or the Job Log window (only the Queues window is available if you logged in as Guest). The Queues window is the default window; it shows spooled, processing, and printing jobs in a display that changes dynamically.





## Menu bar

For information on:	See:
Queues area	"Queues window" on page 2-17
Archive area	"Archive window" on page 2-27
Job Log area	"Job Log window" on page 2-30

The menu bar has six menus. When an action is not available in the current context, the command is dimmed.



Menu:	Choose this:	To do this:
File	Preferences	Set Command WorkStation preferences; see page 3-4.
	Print Pages	Print any or all of the following pages to the Fiery 3850C: Configuration page, Test Page, Help Map Font List, Color Charts, Job Log. You can also print the Configuration page to any printer you specify; see page 3-6.
	Exit	Log out from the Fiery 3850C, exit the Command WorkStation application, and return to the Windows desktop.



Menu:	Choose this:	To do this:
Job	Delete	Delete one or more selected jobs.
(For more information on these	Duplicate	Duplicate one or more selected PostScript data jobs in the Spool or Print areas; see page 2-21, page 2-23, and page 2-25.
commands, see page 2-24).	Rename	Rename a selected job.
1.8.	Hold	Hold the selected job(s); see page 2-19.
	RIP and Hold	RIP and then hold the selected job(s); see page 2-19.
	Print	Print the selected job(s); see page 2-23.
	Print and Hold	Print the selected job(s) and then hold it in the RIP area; see page 2-19.
	Process Next	Give top priority to this job (Spool area only).
	Remove Raster	Remove the raster information from the selected job(s); see page 2-25.
	Properties	View and edit print settings for the selected job(s) and print job(s) with new settings; see page 2-36.
	Thumbnail A	Open a selected <i>held</i> raster data job in the Thumbnail A window where you can view a full-screen preview of the job, edit the job, or merge it with raster data from other jobs; see page 2-38
	Thumbnail B	Open a selected raster data job (not necessarily a held job) in the Thumbnail B window for viewing a full-screen preview of the job, or for copying pages into a job in the Thumbnail A window; see page 2-38
	Download	Download files and fonts to the Fiery 3850C; see page 3-22. You can also choose this command by right-clicking on the Spool status bar.
	Archive	Archive one or more selected jobs; see page 2-27 and page 3-27.

Menu:	Choose this:	To do this:
Page	Delete	Delete the selected page(s)
(Job Merge and Edit	Duplicate	Duplicate the selected page(s)
commands for Thumbnail A)	Preview	View a full-screen preview of the selected page; see page 2-40
Thumbhan 71)	Undo	Undo previous Page menu commands (multiple undos available)
Server	Cancel RIPping	Stop RIPping the current job. You can also choose this command by right-clicking on the RIP status bar.
	Cancel Printing	Stop printing the current job. You can also choose this command by right-clicking on the Print status bar.
	Manage Fonts	View the fonts currently installed on the Fiery 3850C disk, download additional fonts, or delete fonts (requires Administrator privileges); see "Managing server fonts" on page 3-25.
	Manage Color	Start ColorWise Pro Tools; see the Color Guide.
	Clear Job Log	Clear all jobs from the Job Log (requires Administrator privileges); see "Other server management commands" on page 3-29.
	Reboot	Perform a soft reboot of the Fiery 3850C (requires Operator or Administrator privileges); see "Other server management commands" on page 3-29.
	Clear	Clear all jobs in all queues as well as all jobs archived on the Fiery 3850C hard disk, the index of archived jobs, and the Job Log (requires Administrator privileges); see "Other server management commands" on page 3-29.
	Setup	Start the Fiery Setup program (requires Administrator privileges); see "Other server management commands" on page 3-29 and the <i>Configuration Guide.</i>
	Log out	Log out of the Fiery 3850C.

Menu:	Choose this:	To do this:
Window	Filter	Open the Filter dialog box for the active window; see page 2-31.
	Export	Save the information in the active window as a tab-delimited text file; see page 2-29 and page 2-31.
	Print	Print the active window.
	View in Helper App	Open the active window in a particular application you specify; see page 3-4.
	Refresh	Update the Job Log window with the latest information.
	Revert to Default Settings	Restore default settings for the status areas, the column headings, and the column widths.
Help	About	View the Command WorkStation information screen.

### Server selection tabs



The Server selection tabs, just below the menu bar at the top of the display, can be used to log in to additional Fiery 3850C servers and to switch between Fiery 3850C servers currently connected to the Command WorkStation.

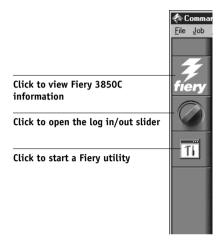
If you click a blank tab, you are prompted to connect to a Fiery 3850C in the list or configure a new Fiery 3850C entry (see "Connecting to the Fiery 3850C" on page 2-4). A limit of five Fiery 3850C servers can be connected to a single Command WorkStation.

You can access the Server selection tabs from all Command WorkStation windows (Queues, Archive, and Job Log).



### **Sliders**

Along the left side of the display are buttons you click to activate function sliders.



To retract any slider, click the icon at the far right of the slider.

#### Server information slider



The Server information slider displays name and version information about the currently connected Fiery 3850C and the Command WorkStation. To retract the slider, click the Fiery logo at the far right of the bar.

2-15 | The Command WorkStation interface



# Log in/out slider



This slider is described in "Logging in" on page 2-5 and "Logging out" on page 2-7. To retract the slider, click the lock icon at the far right of the bar.

#### **Utilities shortcut slider**



This slider can be used to access the Fiery Downloader and ColorWise Pro Tools utilities. These utilities can also be accessed from the Job menu and Server menu, respectively. To retract the slider, click the icon at the far right of the bar.

Introduction to Command WorkStation

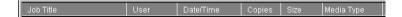


#### Job ticket information



All the jobs listed by name in the Queues and Archive windows can display the job ticket information specified by the person who originated the print job. The Command WorkStation can display this information because it parses the PostScript or PCL file before it is RIPped.

You have considerable flexibility in arranging this information in the display. For example, you can add Media Type to the display if you want to see which jobs call for special paper or other media.



You can choose not to display headers for options that are not used at your site, or you can display all possible options and scroll to see the ones that are less important to you. If you just want to experiment, when you are finished you can choose Default Settings from the Window menu.

For instructions on customizing the display in the Queues, and Archive windows, see page 3-3.

#### Window selection tabs



The Command WorkStation always starts out by displaying the Queues window, from which you view current job processes and control job flow and file storage. To go to another window, click the corresponding tab at the bottom of the Command WorkStation display.



## **Queues window**

Spooling



The Queues window is a dynamic display of the job staging area: jobs are lined up for processing and printing, some of them are being held waiting for directions, some are moving from one stage or queue to another and are finally dropped from the list, some are held for processing by the operator, and some are held in a different queue in case you need to reprint them.



One approach to understanding the dynamic display is to imagine the three parts of the Queues window corresponding to the three stages of printing, illustrated as a downhill flow.

**Spooling**—a PostScript or PCL file is saved on the Fiery 3850C hard disk. The file can come in packets from the network, or from another place on the Fiery 3850C hard disk. Jobs are added to a queue in the order in which they arrive, and they generally move to another queue in the same order unless an operator has intervened to change the order.

**Rasterizing (RIPping)**—PostScript or PCL commands are interpreted in the Fiery 3850C to allow the printer to print the file the way its originator intended. The result of this interpretation is a raster file associated with the original PostScript or PCL file. In this raster file (raster image), color data is associated with each dot that can be rendered by the print engine. The color data tells the print engine whether or not to apply cyan, magenta, yellow, or black toner to each position on the page.

**Printing**—The raster image is transferred from the Fiery 3850C to the print the print engine at high speed, freeing up RAM for the next job. While the PostScript or PCL file is usually saved to disk, raster images are held in RAM during and after each print job. However, both users and operators can request that the Fiery 3850C save the raster image to disk along with the PostScript or PCL file.

Saving the raster image to disk offers some advantages—raster files are already processed so they print quickly, and each part of the raster file is still identified with a page in the original document, which means that individual pages of a saved raster file can be accessed.



#### Status bars

Jobs actively involved in the three processes (spooling, rasterizing, and printing) are listed in the status bars that span the Queues window.

Status bars show the filename, and user name for the active process, and an indication of its progress. Each status bar heads the list of jobs that have completed the process. Thus, beneath the Spool status bar, you see a list of spooled files; beneath the RIP status bar, you see a list of rasterized (RIPped) files; beneath the Print status bar, you see a list of jobs that have already been printed.

**NOTE:** In the Spool status bar, the filename and user information always appear as "Unknown" (as shown below). This information is not available until the job has finished spooling to the Fiery 3850C disk.



Printed jobs (white); some include raster files in RAM

When a job is being processed, provided animation is enabled (see page 3-4), the corresponding status bar is animated, indicating that the process is active. Each status bar lists the filename of the active job, the user name, and an indication of its size or progress.

If an error occurs, the Print status bar alerts you by displaying a message on a red background instead of the normal blue background.

**Enlarging the status bars** Click the small arrows at the left of the status bar to expand the status bar display. Click the arrows again to collapse the status bar to its original size. To expand all the status bars at the same time, press Ctrl-E. To collapse them to their original size, click the arrows or press Ctrl-E again.



**Changing proportions** By default, the status bars divide the window area into three equal parts. You can drag the RIP and Print status bars up or down to change the proportion of the window devoted to each job area. For example, drag the RIP status bar down if you have a long list of spooled jobs that you want to see without scrolling.

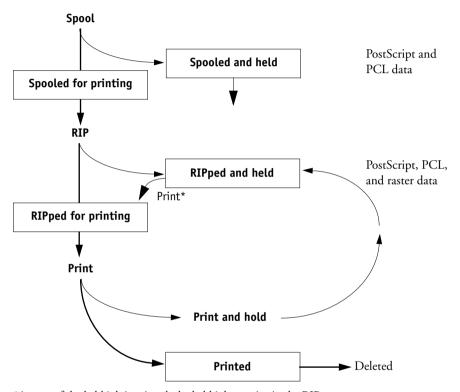
**Making space** If your workflow includes holding many jobs, and you don't want to view the held jobs all the time, consider moving some of them to the Archive window. You can move jobs back and forth between the Queues window and the Archive window with a single right-mouse command (see page 2-24).

#### Active jobs and held jobs

In the description that follows, assume that the operator has full control of jobs; that is, the administrator has disabled the Direct connection and the Print queue, and all user jobs come to the Hold queue. For more information about queues, see the *Configuration Guide*.

2-2

The operator's job management functions permit *holding* a job at any stage of the process we have described, as illustrated below. In the figure, boxes indicate types of job icons you would see in the Queues window.



<sup>\*</sup>A copy of the held job is printed; the held job remains in the RIP area.

Jobs that are held are shown with a yellow icon in a yellow row, just beneath the Spool or RIP status bar. Jobs that are held must be activated with a command in order to print.

Active jobs are shown in white with white icons; new jobs are added above older jobs.

# Job icons

Three types of icons are used for both active jobs and jobs on hold.

Icon:	Active jobs: (white icons and rows)	Jobs on Hold: (yellow icons and rows)		
Printer icons	PostScript, PCL, or raster data headed for printing (top) or after printing (bottom)	PostScript or PCL data headed for Print and Hold or job on Hold after printing (Hold)		

# Spool area

The job icons in the Spool area are described below:

	Spool area icon:	What it indicates:	How long you see the job:		
1	Yellow printer icon Yellow job row	PostScript or PCL data from a user on the network; no destination is defined	Until a destination is chosen		
2	White printer icon White job row	PostScript or PCL data headed for Print	Until the RIP is free		
3	Yellow raster icon White job row	PostScript or PCL data headed for RIP and Hold			



The Spool area is both the receiving area for jobs from users on the network (Hold queue) and the waiting area for jobs that will be RIPped (jobs in the Spool queue).

**Hold queue jobs** When printing requires an operator (because the Print queue and Direct connection are disabled), the operator must assign a destination to all jobs received from users on the network (icon 1 in the table above). Once assigned, jobs (icons 2 and 3) move down the Spool queue for processing. All jobs printed to the Hold queue require routing by an operator.

**Print queue jobs** When printing does not require an operator, network jobs sent to the Print queue appear in the Spool area where they are shown with a white printer icon (icon 2). When they reach the head of the queue, they are RIPped and printed without operator intervention.

**Direct connection jobs** Jobs printed to the Direct connection are not displayed in the Command WorkStation job lists. They are displayed briefly in the status bars (where they cannot be selected) and are included in the Job Log.

#### RIP area

The job icons in the RIP area are described below:

RIP area icon:		What it indicates:	How long you see the job:		
1	Yellow raster icon Yellow job row	Raster data, no destination defined; may have been printed before and held	Until it is deleted, moved to the Archive window, or stripped of its raster data and sent to the Spool area		
2	White printer icon White job row	Raster data headed for Print in its turn; no hold defined	Until printer is free to print the job		

After a job is rasterized, it goes into the RIP area. The RIP area holds only raster data (i.e., jobs that have been rasterized). Jobs in the RIP area are either waiting for the printer to be free (Print queue jobs, icon 2 in the above table), or they are being held. Held jobs in the RIP area have already been rasterized (RIP and Hold) or they have been printed and their raster data has been routed back to the RIP area (Print and Hold), where they are shown in yellow rows (icon 1).

**NOTE:** Raster jobs in the RIP area that are waiting to print (icon 2 in the previous table) cannot be manipulated by job commands.

Jobs held in the RIP area remain there until the operator moves them to the Archive window or deletes them. Printing these jobs does not remove them from the RIP area. Instead, a copy of the job is created and printed.

NOTE: For all rasterized jobs, the print option settings, in addition to the current calibration state of the Fiery 3850C, remain with the saved raster data each time the job is reprinted. To print the job with new print option settings and with new calibration data, you must remove the raster data and reRIP the job.

#### Print area

The job icons in the Print area are described below:

	Print area icon:	What it indicates:	How long you see the job:	
1	White printer icon White job row	PostScript or PCL data only—raster data has been deleted	Until the job limit is reached	

The Print area, also referred to as the Printed queue, contains jobs that have already been printed. These jobs were assigned the Print destination (white printer icon in the Spool or RIP areas) without any Hold instructions; therefore, they all have white icons and rows.



**Note:** A job row that appears in light red indicates that an error occurred while printing the job. To see the error, double-click anywhere in the row.

Newly printed jobs are added to the Printed queue, and are shown at the top of the list. Jobs are saved in the Printed queue until the job limit is reached. When the first job over the limit is printed, the oldest job is deleted from the disk. The value for Jobs Saved in Printed Queue can be changed in Fiery 3850C Setup by the administrator.

**NOTE:** If you reprint a job in the Printed queue, the job returns to its original position in the Printed queue after it is printed.

While it is printing, a job consists of PostScript or PCL and raster data. The raster data in RAM is not cleared until memory is needed to rasterize the next job. As long as the raster data is intact, the job can be reprinted from the Printed queue. Printed jobs that still have their raster data are represented by a white raster icon in the Printed queue (icon 2 in the previous table); jobs with only PostScript or PCL data remaining are represented by a white printer icon (icon 1). If the job was printed from a held raster job (in the RIP area), the raster data in the RIP area remains and can be used to reprint the job after the raster data has been cleared from the Printed queue.

#### Job commands

Job commands are used to assign a selected job to a new destination or process. These commands are available from the Job menu (see page 2-11). Many are also available as right-mouse commands (described following the list of commands below). The job commands available at a given time depend on the context; unavailable commands are dimmed. Job commands are available in the Queues and Archive windows.

The job commands available for selected jobs in the Queues and Archive windows are listed in the following table. The table also describes the effect of each command on raster data associated with the affected job(s).

Choose this: To do this:		Raster data is:		
Delete	Delete the job(s).	Deleted		
Duplicate	Duplicate one or more selected PostScript or PCL data jobs in the Spool or Print areas. You can use the duplicate job(s) for different print options or a different destination. (The Duplicate command actually creates a reference to the original job, with the same name.)	n/a (The Duplicate command is not available for raster jobs.)		
Rename	Rename the job (PostScript or PCL file with or without raster).	Unaffected, but associated with the new name		
Hold	Hold the job in the current place (except for a job in the Print area, which is moved to the Spool or RIP area, depending on whether it still has raster data associated with it).	Held in RIP area, if included with job		
RIP and Hold	RIP the job and hold it in the RIP area.	Held in RIP area indefinitely		
Print	Print the job in its turn (RIP it first if it does not have raster data).  After printing, keep the printed job in the Print area until the job limit is reached.	Temporarily held in RAM after printing until memory is needed for another job (If the job was printed from a held job in the RIP area, the raster data in the RIP area is kept indefinitely)		
Print and Hold (Like the user print option Save Fast Reprint)	Print the job in its turn (RIP it first if it does not have raster data).  After printing, hold the PostScript or PCL data and the raster in the RIP area.	Held in RIP area indefinitely (saved to disk)		
Process Next	Give top priority to this job. RIP (and then print) it as soon as the processor is free, before other waiting jobs. Option is dimmed if there are no other waiting jobs.	n/a  NOTE: This command is available only for jobs in the Spool area that are not currently held.		
Remove Raster	Remove the raster data from a job that has raster data (indicated by a raster icon); leave the PostScript or PCL data unaffected.	Deleted  NOTE: If you remove raster from a job in the RIP area, the job is sent to the Spool area.		



Choose this:	To do this:	Raster data is:
Properties	View, override print option settings, and print a selected job or a group of selected jobs.	Possibly deleted and regenerated, depending on whether you change any settings that require re-RIPping
Thumbnail A	Open the selected <i>held</i> raster data job in the Thumbnail A window where you can view a full-screen preview of the job, edit the job, or merge it with raster data from other jobs  Changed if job is edited, unaffected if job is of viewed	
Thumbnail B	Open the selected raster data job (not necessarily a held job) in the Thumbnail B window for viewing or for merging into a job in the Thumbnail A window	
Download	Download files and fonts to the Fiery 3850Cr; see page 3-22.	
Archive	Archive the selected held job(s) to the Fiery 3850C hard disk, a device on the network, or to the local Command WorkStation hard disk, and move the job icon to the Archive window; see page 2-27.	Archived with the job, if archiving of raster data is specified

#### Using right-mouse commands

Use the following instructions to activate job commands with a single right-mouse click.

#### TO ROUTE JOBS WITH RIGHT-MOUSE COMMANDS:

- 1. To route a single job in the job list, right-click the job.
- 2. Select one of the commands or destinations and release the mouse button.

The command is carried out or the job is routed to the destination you chose. Depending on your choice, the job line may reappear in a different part of the window or a different window, or the job line may be deleted.

To route multiple jobs at the same time, select the jobs first.
 Click the job line to select the first job. Shift-click to select adjacent jobs;
 Ctrl-click to select nonadjacent jobs.

**NOTE:** Select jobs with the same job icon; otherwise, the destination options may not be the same. For example, select multiple jobs in the Spool area, and choose Print.

- 4. With the cursor still in one of the selected job lines, press the right mouse button.
- 5. Select one of the commands or destinations and release the mouse button.

The command is carried out or the jobs are routed to the destination you chose.

### **Archive window**

If you want to store jobs before or after printing, you can archive them. The Fiery 3850C can archive jobs internally on the Fiery 3850C hard disk. For instructions on how to archive jobs, see page 3-27.

**Note:** The Archive window is not available if you logged in as Guest.

PostScript, PCL, and raster data jobs can be archived, but jobs must first be *held* in the Spool or RIP areas of the Queues window before they can be archived.

When you archive a job, the job is *moved*, not copied, to the archive destination. The Archive window shows a cumulative list of *all* jobs that have been archived. This list is cleared (along with all jobs on the Fiery 3850C) by choosing Clear Server on the Fiery 3850C Control Panel (see page 1-5) or by using the Clear command from the Command WorkStation (see page 2-12).



The job icons in the Archive window are described below:

Archive icon:	What it indicates:
Printer icon	PostScript or PCL data only—raster data not present or deleted  Job was archived from the Spool area
Raster icon	Raster and PostScript or PCL data  Job was archived from the RIP area

The job commands described on page 2-24 can also be used with jobs in the Archive window.

The icons that appear in the Archive window are always white, since they have no destination (as long as they are in the Archive window).

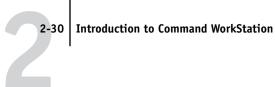
	Archive Log					
Sort order indicator	Job Title	√ User	Date/Time	Copies	Size	Volume
	KingTut.ps	lw	01/12/02 17:01:08	1	1.47 MB	
	999B&W.pmk	WK	01/12/02 18:38:44	1	1.10 MB	
	chess.ps	BF	01/12/02 18:59:26	1	3.04 KB	BF VOLUME\Co
External volume						

By default, the Archive window displays *all* archived jobs. Until they are deleted, archived jobs remain in the Archive window indefinitely. You can display a subset of archived jobs based on various selection criteria by using the Filter command (see page 2-31).

For jobs archived to external devices, the Volume column shows the volume and pathname of the device. For jobs that were archived to the Fiery 3850C hard disk, the Volume column is blank.

As with the Queues window, you can select the headings for the display and use Job menu or right-mouse commands; you can also sort jobs.

To:	Do this:		
Sort jobs in a category, such as by Date	Double-click the Date/Time heading. A small arrow indicates whether jobs are sorted in ascending or descending order. Double-click again to sort in the reverse order.		
Route a job to a destination in the Queues window  Use job commands from the Job menu or the right-mouse command men print a job, choose Print or Print and Hold. You can also select and route details, see page 2-26.  The other options, RIP and Hold or Hold, send a copy of the job to the RIP and Spool areas, respectively) without printing it; Remove Raster only to jobs with the raster icon) leaves only the PostScript or PCL data in Archive window.			
View only particular jobs	Choose Filter from the Window menu, and make entries in the Filter dialog box (see page 2-31).		
Delete a job	Select the job(s) and choose Delete from the Job menu or right-mouse command menu.		
Display or move job ticket information headers in the Archive window	Click the right mouse button on the appropriate column head; choose Add from the drop-down menu to list the columns that you can add to the display. The categories are the same as in the Queues window (see page 2-16) but you can arrange them differently. The column head arrangements you set in the Archive window are independent of those you set in the Queues window.		
Adjust the width of a column			
Export the currently displayed list of archived jobs to a tab-delimited text file	Choose Export from the Window menu. Specify a filename (the default name is archive.log) and a location for the file and click Save. You can then open the exported file with a spreadsheet, database, or word-processing application.		



# Job Log window

The Job Log is a list of processed and printed jobs, the date and time they were processed or printed, and the characteristics of the job. It includes downloaded files and fonts and RIP and Hold jobs.

**Note:** The Job Log window is not available if you logged in as Guest.

At any given time, the Job Log includes only those jobs processed or printed since the Job Log was last cleared. The Job Log can be cleared manually by choosing "Clear Job Log" from the Server menu, or automatically if the administrator has enabled autoclearing of the Job Log in Setup. You can also clear the Job Log using the printer's control panel, or the Clear command in Command WorkStation (see page 2-12).

You can adjust the column widths in the Job Log display by clicking the column border in the heading and dragging left or right. For more information, see Chapter 3.

Job Log								
Status	Document	User	Date	Start Time	End Time	Process Time	Size	Device
OK	settrue.ps	Administrator	1/06/02	10:07:45	10:07:45	00:00:00	5.40 KB	Unknown
ок	saveprms.2ps	Administrator	1/06/02	10:08:29	10:08:29	00:00:00	6.60 KB	Unknown
ок	prologue.ps	Administrator	1/06/02	10:08:34	10:08:34	00:00:00	89.94 KB	Unknown
ок	vi001005.2ps	Administrator	1/06/02	10:08:49	10:22:48	00:13:52	62.30 KB	Unknown
ок	restprms.2ps	Administrator	1/06/02	10:27:55	10:27:57	00:00:01	8.17 KB	Unknown
ок	settrue.ps	Administrator	1/06/02	10:30:29	10:30:29	00:00:00	5.40 KB	Unknown
ок	saveprms.2ps	Administrator	1/06/02	10:31:47	10:31:48	00:00:01	6.60 KB	Unknown

When you open the Job Log, you can choose to display all jobs in the current Job Log or only the jobs in a specified date range. By default, all jobs are displayed. To specify a date range, choose Filter from the Window menu, click Range, and enter dates in the From and To fields; or, click the calendar icons next to the From and To fields and select dates by clicking them in the calendars. Use the arrows at the upper corners of the calendars to display different months.

NOTE: In the Job Log window, "Start Time" reflects the time that the job began RIPping; "End Time" reflects the time that the job printed; and "Process Time" reflects the total RIP time for the job. These times do not correspond to the Date/Time values displayed in the Queues window.

**Updating the Job Log display** To update the Job Log window display after specifying a date range (or at any other time), choose Refresh from the Window menu.

**Exporting the Job Log** From the Job Log window, you can export the Job Log to a tab-delimited text file (the default name is job.log) by choosing Export from the Window menu. The exported file can be opened with a spreadsheet, database, or word processing application. The exported Job Log contains the jobs for the date range you specified.

Clearing the Job Log The Job Log is stored on the Fiery 3850C disk. When logged in as Administrator, you can clear the Job Log by choosing Clear Job Log from the Server menu. The Job Log is cleared whenever an Administrator clears the Fiery 3850C or installs new software. In addition, the Job Log can be cleared automatically after every 55 jobs.

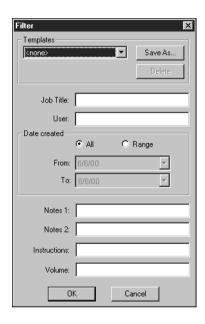
**Printing the Job Log** To print the Job Log, choose Print Pages from the File menu, select Job Log, click Print, and click OK. The Job Log is sent to the Print queue and then prints to the Fiery 3850C. You can use Job menu commands to manipulate the Job Log print job as you would any other job. The printed Job Log contains the jobs for the date range you specified. See "Using the Job Log" on page 3-27 for more information.

**Printing and clearing the Job Log automatically** You can decide how you want to handle the Job Log. If you have Administrator privileges, you can choose Setup from the Server menu and enter your preferences in Job Log Setup. You can choose to print the Job Log automatically every 55 jobs, or both print and clear the Job Log automatically every 55 jobs. You can also choose the Job Log page size.

# Filtering jobs

The Queues, Archive and Job Log windows displays a cumulative list of all jobs. If a large number of jobs are listed, it may be difficult to locate a particular job or a particular group of jobs. You can display a specified subset of jobs by filtering jobs in the Queues, Archive, and Job Log windows.

To open the Filter dialog box, choose Filter from the Window menu.



In the Queues window, you can filter jobs according to any or all of the following criteria:

- Job title
- User name
- Date created (or a date range)
- Notes 1 or Notes 2 (Group name)
- Instructions (Group password)

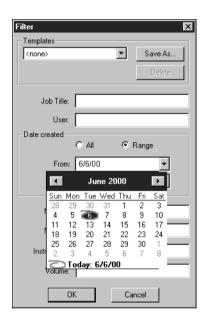
In the Archive window, you can filter jobs according to any or all of the following criteria:

- Job title
- User name
- Date created (or a date range)
- Notes 1 or Notes 2 (Group name)
- Instructions (Group password)
- Volume

In the Job Log window, you can filter jobs by date only.

The Filter command lets you perform a search based on any and all values you specify in the Filter dialog box. Enter values in all fields relevant to your filtering criteria. If you enter values in more than one field, only jobs that meet all the criteria are displayed. For example, if you enter 10 in the Job Title field and <UserName> in the User field, only those jobs whose titles somewhere contain "10" and whose User name somewhere contains "<UserName>" will be displayed.

To filter by date, select Range in the Date created area and enter dates in the From and To fields; or, click the calendar icons next to the From and To fields and select dates by clicking on them in the calendar that appears. Click the arrows at the upper corners of the calendar to display different months.



#### **Creating Filter templates**

If you often filter jobs according to specific criteria, you can create a filter template. In this way, you can filter jobs easily in one step and avoid the need to enter specific information each time you want to filter jobs.

#### TO CREATE A FILTER TEMPLATE:

- Open the Filter dialog box by choosing Filter from the Window menu.
- Enter specific job filter criteria in the appropriate fields.
- 3. Click Save As.
- Enter a name for the new template and click OK.



The new template is saved in the Templates pop-up menu in the Filter dialog box.

To view jobs in the Queues, Archive, and Job Log windows according to a filter template, open the Filter dialog box, choose the template by name from the Templates pop-up menu, and click OK.



To delete an existing template, open the Filter dialog box, choose the template by name from the Templates pop-up menu, and click Delete. Click OK to confirm that you want to delete the template.

# Job properties

When logged in as Operator or Administrator at the Command WorkStation, you can use the Properties command to check and override the print option settings (properties) of all jobs.

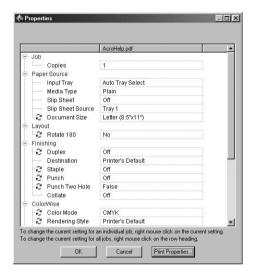
You can use this command to do the following:

- Override a setting based on printed output or other print device conditions
- Change settings for a duplicate of the original job
- Print a single copy of a job before printing the number of copies required by the user

# Viewing and editing job properties

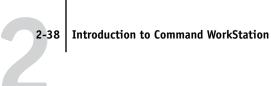
The Properties command lets you view, edit the print option settings of, and print multiple jobs simultaneously. You can use this feature to compare the properties of several jobs and thereby group together jobs with similar settings.

To view the properties of one or more jobs, select the job(s) and choose Properties from the Job menu or the right-mouse menu.



For information on using the Properties dialog box to change job settings, see "Viewing and overriding print settings" on page 3-20.

**NOTE:** Some print options that are available in the printer driver are not displayed in the Properties dialog box. For information on specific print options and settings, and where they can be set, see Appendix A of the *Printing Guide*.



# Thumbnails and full-screen previews (Job Merge and Edit)

The Command WorkStation includes a powerful Job Merge and Edit tool that allows you to preview and edit raster data. (For information on how to identify a raster data job, see page 2-21.) Job Merge and Edit consists of two thumbnail windows and several page-manipulation commands (listed in the Page menu).

The Job Merge and Edit tool can be used in the following ways:

- In the Thumbnail A window, you can see thumbnails of the currently RIPping job, as it is processed, or of any raster data job (see "Previewing print jobs" on page 3-12).
- From the Thumbnail A and Thumbnail B windows you can open a full-screen preview of a raster file (see "Full-screen previews" on page 2-40).
- Using the Thumbnail A and Thumbnail B windows together, you can merge raster data from more than one file, even if the files were printed from different applications on different computer platforms (see the next section and "Merging raster files with Job Merge and Edit" on page 3-14).

Job Merge and Edit's merge features eliminate the limitations of particular software applications. You can merge raster pages of documents of different types, even different computer operating systems. You can merge color pages from graphics programs with text pages from a word processor. An outline of Job Merge and Edit's features follows; for more information and applications, see "Merging raster files with Job Merge and Edit" on page 3-14.

# Editing and merging files with Job Merge and Edit

When you select a raster data job and choose the Thumbnail A or Thumbnail B command (from the Job menu or from the right-mouse commands), the corresponding Thumbnail slider opens automatically, displaying thumbnails of the file. To close the Thumbnail slider, click anywhere in the tab along the right edge of the Thumbnail window. When the Thumbnail window is open, the arrows in the tab point to the right, indicating that clicking the tab retracts the slider.

With the Thumbnail A window you can see thumbnail views of any raster data job that is, any file that is currently RIPping, or any file that has been RIPped and held to disk. You can also use the Thumbnail A window to edit a raster file—you can change

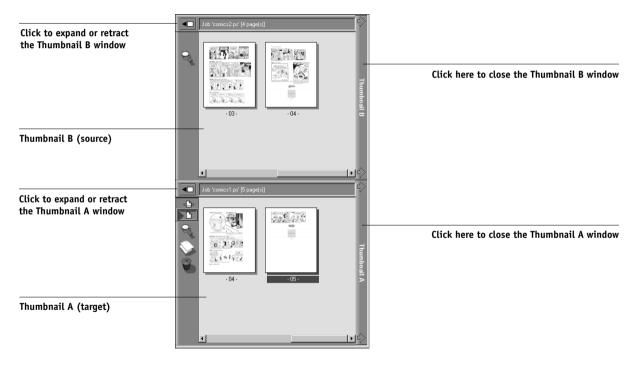
Thumbnails and full-screen previews (Job Merge and Edit)

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the sequence of pages, delete pages, duplicate pages, and copy pages from other raster files into the Thumbnail A window. You can save the edited raster file as a new printable document.

The Thumbnail B window can also display thumbnails of a raster job, and the document displayed in Thumbnail B can be used as a source for editing the document shown in Thumbnail A.

**NOTE:** Be careful not to delete all pages of a job in Thumbnail A without first saving a copy of the job.



You can merge documents by dragging (copying) one or more entire pages from Thumbnail B to Thumbnail A. This creates a new document in the Thumbnail A window. If you select one or more pages in the Thumbnail A window, the commands in the Page menu give you additional editing possibilities. (Most of the Page menu commands are also made available by right-clicking pages in Thumbnail A.) Multiple undos of Page menu commands are possible.



You can merge pages from multiple documents into the Thumbnail A document by opening documents one after another in the Thumbnail B window. Documents in the Thumbnail B window are view-only, and while you can copy pages from Thumbnail B to Thumbnail A, you cannot edit the Thumbnail B document. A merged document that you create in Thumbnail A can be saved (with a different name) as a new raster data file.

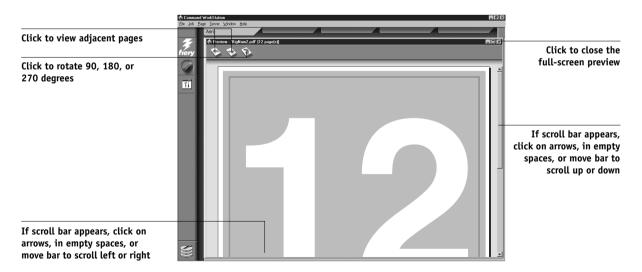
For more information, see "Merging raster files with Job Merge and Edit" on page 3-14.

# Full-screen previews

In the Thumbnail A or Thumbnail B window, right-click a page and choose Preview from the menu that appears, left-click a page and choose Preview from the Page menu, or double-click a page to open a full-screen preview of that page. The full-screen preview is a view-only display, and it takes time to retrieve the data. Once begun, the process cannot be canceled.

**NOTE:** If you have edited a raster job with Job Merge and Edit, you must save the edited file before you can view full-screen previews of all its pages.

Using the icons in the full-screen preview, you can display adjacent pages, rotate the page, or close the preview.



# Chapter 3: Managing Print Jobs

This chapter provides some general information about managing printing with the Fiery 3850C and the printer, and gives you some hints on using the Command WorkStation windows to monitor and manage print jobs. It suggests ways to guide users so that their jobs print correctly the first time. The chapter also follows the course of a print job and shows possible ways to expedite jobs and take advantage of the special capabilities provided by the Command WorkStation.

# Communicating with users

The Command WorkStation interface facilitates communication between users and operators. All the same, users who originate print jobs may need to become better informed about the Fiery 3850C and the printer so they can choose the appropriate options for their jobs.

#### What the user needs to know

You or the network administrator should consider supplying the following information to your users:

- The name of the printer on the network and the names of servers sharing the printer
- User's access status

Do all jobs require operator intervention because they go to the Hold queue? If not, which connections are published—Direct connection and/or Print queue?

- How long you will hold jobs on the server before you delete them
- List of default printer settings and other settings (from the Configuration page)
- List of installed fonts

Do the users' applications download fonts automatically? If not, should users embed fonts in documents, or should they supply fonts to the administrator so he or she can download them?

- Requirements for Notes fields (information which appears in the Job Log)
   For example, department name, department code, phone number or extension. Is some information mandatory at your site?
- Resident calibration target and date of current measurements
- Custom simulations

Are they available? What type of targets do they represent? Users see these print options (CMYK Simulation) and should not select them if there are no custom targets on the server.

- IP address or DNS name of printer so users can access Fiery WebTools to determine whether their jobs have printed
- Installed option(s)
- · Available media, alternative choices, standard tray/media configurations
- Suggestions for the Instructions field
- Information users might find in the WebLink web site
- Instructions for setting up the printer on client computers
- Sources of PostScript or PCL printer drivers, PPDs or PDDs, color reference files, and additional information
- Recommended PPD settings
- Conflicting settings and common PostScript or PCL errors



# **Customizing the Command WorkStation window**

You can customize the display of job ticket information in the Queues window by rearranging the column headings. You can tighten the columns, add new column headings, move columns, and delete column headings.

**NOTE:** The Job Title and User columns are always at the left and cannot be moved or deleted. You can only add column headings to the right of the User column.

#### TO CUSTOMIZE THE QUEUES WINDOW DISPLAY:

#### 1. Right-click the column heading.

A menu appears. The Add submenu lists the headings that are not already displayed.

#### Choose the options you want to display and the sequence in which you prefer to view them.

Add, delete, or move a column by holding down the right mouse button on the name of the appropriate column heading; release the button after choosing one of the menu options:

**Add** one of the listed columns to the display at your mouse position.

**Move Left, Move Right**—move the selected column left or right.

**Delete** the selected column.

The Job Title and User columns are required—all others are optional.

#### 3. Adjust the column widths.

Adjust the width of a column by clicking the column border in the heading and dragging to the left or right. You can change the column widths at any time.

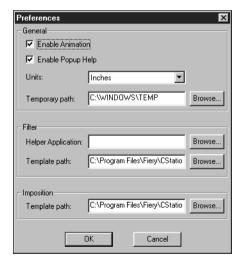
If you display the Instructions column, which shows information typed into the Instructions field by the user, you can reduce the width of the column so you can just see whether or not there are instructions in it.

With a narrow Instructions column, if you want to read detailed instructions, doubleclick the job and choose Notes from the Job Properties window.

This also allows you to read the notes. You can edit or annotate the information in the Instructions field if you wish. It remains with the job as long as the job is on the server. The operator cannot edit the Notes fields.

# **Setting Command WorkStation Preferences**

Choose Preferences from the File menu to access the Preferences dialog box.



# 3-5 Setting Command WorkStation Preferences

Menu:	Choose this:	To do this:		
Preferences\	Enable Animation	Turn on or off animation of the status bars		
General	Enable Popup Help	Turn on or off short captions that appear when you pause the mouse over window elements; the captions identify the main parts of the Command WorkStation window		
	Units	Specify the type of unit (Points, Inches, or Millimeters) to use in the display for custom page sizes		
	Temporary path	Specify a location for temporary files created by the Command WorkStation application		
Preferences\ Filter	Helper Application	Specify the path to a helper application from which to view data in the active window; this application opens automatically when "View in Helper App" is chosen from the Window menu		
	Template path	Specify the path to where Filter template files are saved; for more information on Filter templates, see page 2-35		
Preferences\ Imposition	This menu is not supported	n/a		



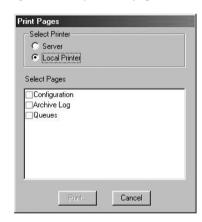
# **Printing Fiery 3850C information pages**

Using the Print Pages command, you can print system pages stored on the Fiery 3850C.

#### TO PRINT SERVER INFORMATION PAGES:

- 1. Choose Print Pages from the File menu.
- 2. In the Select Printer area, specify where you want to print the pages.





**Server**—The pages you specify are printed to the Fiery 3850C.

**Local Printer**—The pages you specify are printed to any selected printer installed on your Windows computer.

#### 3. If you specify Server, select from the following pages:

**PS Test Page/PCL Test Page**—A Test Page enables you to confirm that the Fiery 3850C is properly connected to the copier, and provides color and grayscale samples to troubleshoot problems with the copier or the Fiery 3850C. The following settings are among those listed on the Test Page: Server Name, Printer Model, color settings, calibration information, date and time the Test Page was printed.

**Configuration**—Prints the Configuration page, which gives the current server and device configuration. This page lists general information about the hardware and software configuration of the Fiery 3850C, the current settings for all Setup options, information about the current calibration, and the Ethernet address of the Fiery 3850C.

**Job Log**—Prints a log of the last 55 jobs processed or printed. For information on the fields in the Job Log and on printing it in other forms, see "Using the Job Log" on page 3-27.

**PS Font List/PCL Font List**—Prints a list of all fonts currently resident on the Fiery 3850C hard disk.

#### If you specify Local Printer, select from the following pages:

**Configuration**—Prints the Configuration page, which gives the current server and device configuration. This page lists general information about the hardware and software configuration of the Fiery 3850C, the current settings for all Setup options, information about the current calibration, and IP address of the Fiery 3850C.

**Archive Log**—Prints a log of all archived jobs.

Queues—Prints a log of all jobs in the Queues window.

**NOTE:** The number of jobs listed under the Print area of the Queues log is specified in Server Setup. For more information see the *Configuration Guide*.

#### 4. Click Print.

5. If you selected Server in step 2, specify the number of copies to print and click OK.

The page(s) are printed to the Fiery 3850C.

If you selected Local Printer in step 2, choose the desired printer in the Print dialog box, specify the number of copies to print, and click OK.

The page is printed to the printer you specified.

**NOTE:** Server information pages printed with the Print Pages command appear in the Fiery 3850C Job Log with a User Name of "Operator" even if you logged in as Administrator.

## **Workflow scenarios**

The workflow at your site will depend on the number and complexity of jobs and the amount of responsibility given to the operator. This section suggests some ways you might interact with a job.

**Scenario 1** At this site, the Print queue is enabled, and anyone using the Command WorkStation can view the progress of jobs. You watch the job progress from the top to the bottom of the Queues window.

Send a job to the controller, the green light on the operation panel flashes, the network icon blinks; on the Command WorkStation the Spool status bar is animated and the job title appears. As soon as spooling has finished, the Spool status bar is cleared and the RIP status bar animates. Almost immediately thereafter, the RIP status bar is cleared and the Print status bar animates. The printed job is listed below the Print status bar and the job pages emerge from the printer.

**Scenario 2** At this site, all jobs come to the Hold queue and therefore require operator intervention to proceed.

Again, the green light on the printer flashes, the Spool status bar is animated, and now in the Spool area (below the status bar) the job title comes into view. In a few moments the job is on the list, and you have time to scan the headings for the job ticket information—media type, special instructions, copies, and pages.

Are you ready for this job to print? Do other jobs have priority? What is the job for—is it final output or a test print? The first choice is whether to put the job in the print queue or hold it before processing it further. If you do nothing, the job remains in the Spool area, and the file remains on the server disk.

Perhaps this is a routine job and does not call for special handling. You right-click the job and choose Print. You notice the RIP status bar animate, and almost immediately, the Print status bar animates. The printed job is listed below the Print status bar and the job pages emerge from the printer.

The next job is a large job that you have not seen before. The Instructions field indicates that the originator of the job wants to check one printout of the job before you print another 50 copies. You make sure the Copies field is set to 1, right-click the job, and choose Print and Hold.

The RIP status bar animates and displays the job title, and then the Print status bar and copy 1 of the job emerges from the printer. You call the sender of the job for approval. When the job is approved, you set the number of copies to 50, right-click the job now being held in the RIP area and choose Print.

**Scenario 3** Everyone has discovered the printer on the network and jobs are coming in rapidly. You right-click several routine jobs in the Spool area and choose Print to let the server print them one after the other. You choose Print and Hold if you know you will be reprinting the job soon. You move jobs that have more detailed instructions (or need to be printed with similar jobs) to the Archive window (right-click Archive). You remove printed jobs from the output trays and replenish media.

While some jobs are flowing through the queues and printing, you are preparing for jobs that require more attention, such as obtaining special paper, or notifying the originator of a job that an error occurred.

Before you load special paper, you make sure all pending jobs are in holding areas. When an especially important job is spooled for RIPping, you right-click Process Next.

You flip back and forth between the Archive and Queues window. You use the Archive window to sort jobs into groups with similar requirements, such as media type, user name, or another setting, and print all the jobs of the same type in sequence.

## Using the printer

If you have a printer job that has priority over the spooled incoming print jobs you can temporarily close the Fiery 3850C connection to the printer and then reopen it when you have finished copying.

When there are no active printing jobs competing for the printer engine (no white job lines in the Spool or RIP area), you do not need to suspend printing to make copies.

#### TO GIVE THE PRINTER TOP PRIORITY AND LATER RESTORE FIERY 3850C PRIORITY:

1. From the Server menu, choose Suspend Printing, press the F5 key, or right-click the Print status bar and choose Suspend Printing.

This suspends printing temporarily. Jobs continue to spool and RIP on the server as long as disk space and RAM are available.

2. When you have finished with the printer job, choose Resume Printing from the Server menu, press the F6 key, or right-click the Print status bar and choose Resume Printing.

The printing connection between the Fiery 3850C and the printer is reopened and printing resumes.

## Canceling jobs

You may need to cancel a job after it has been routed for processing or printing. You can cancel a job only while it is being RIPped or while it is being printed. You cannot cancel a waiting job (white job row) that is routed for RIPping or printing.

Canceling jobs during processing—While a job is being RIPped, and its name
appears in the RIP status bar, choose the Cancel RIPping command from the Server
menu, press the F7 key, or right-click on the RIP status bar and choose Cancel
RIPping.

When the RIP job is canceled, the Canceling message appears in the RIP status bar and on the Fiery 3850C Control Panel. The name of the canceled job appears in the Job Log.

Canceling jobs during printing—While a job is printing, and its name appears in
the Print status bar, choose the Cancel Printing command from the Server menu,
press the F8 key, or right-click on the Print status bar and choose Cancel Printing.

When the print job is canceled, Canceling appears on the Fiery 3850C Control Panel. The name of the canceled job appears in the Job Log.

**NOTE:** Canceled jobs may be partially printed, and may include pages with one or more missing color planes, or pages that are completely blank.

Canceling at the Control Panel—If you are at the Fiery 3850C, the most direct way
to cancel a job is to press the Cancel button on the server Control Panel while you
can read the name of the job that is processing or printing. For more information on
the Control Panel, see Chapter 1.

## Previewing print jobs

You can use the Thumbnail A window to preview pages of the currently RIPping job. You can also use Thumbnail A, as well as Thumbnail B, to preview any raster data job in the RIP or Print areas.

The thumbnail windows also allow you to open an thumbnail view of a held raster job in the RIP area and perform electronic collation or document merging. This feature, called Job Merge and Edit, is described on page 3-14.

## Previewing the currently rasterizing job

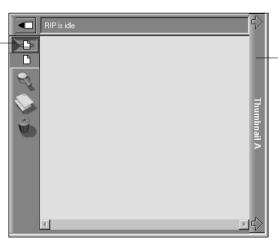
To see the progress of jobs as they are RIPped, you can leave the Thumbnail A window open in RIP preview mode.

#### TO VIEW THUMBNAILS OF THE CURRENTLY RIPPING FILE:

- 1. Click the Thumbnail A tab at the right of the Queues window to open the slider.
- 2. Click the RIP preview icon at the left side of the window.

In this mode, Thumbnail A displays each page of the currently processing job after it has been RIPped.

Click to display the currently rasterizing job



Click to close the thumbnail window

Choose a PS file in the Spool or Print area and select RIP and Hold, Print, or Print and Hold. As pages are RIPped, they are displayed in the Thumbnail A window. Each page is displayed for only a moment before the Thumbnail A window is cleared. Only one page is displayed at a time.

When you have finished viewing, click the Thumbnail A tab to close the thumbnail window.

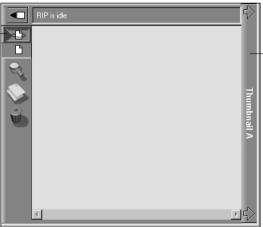
#### TO VIEW THUMBNAILS OF ANY RASTER DATA FILE:

- 1. Select any raster data job in the RIP area.
- 2. Choose Thumbnail A or Thumbnail B from the Job menu.

If you choose Thumbnail A, make sure the raster data preview icon (at the left side of the window) is selected.

**NOTE:** Wait until all pages have been displayed before opening another raster file with Thumbnail A. If the job contains many pages, it may take some time for the entire job to be displayed.





Click to close the thumbnail window

3. When you have finished viewing, click the Thumbnail A or Thumbnail B tab to close the thumbnail window.

## Merging raster files with Job Merge and Edit

The ability to work with raster files gives you new opportunities to combine documents from different sources into a single raster file. For example, you can combine full color covers and chapter head pages created in a page layout application with two-color text pages created in a document processing application. Or, you can customize a slide presentation by inserting slides from a different presentation.

You can display two raster files at once: a source file and a target file. The target file is displayed in the Thumbnail A window, the source in Thumbnail B. Both files must be held raster jobs in the RIP area.

**NOTE:** You cannot create a new PostScript or PCL file in this process; you must print the merged raster file, which has references to the original PostScript files. Before editing or merging files with Job Merge and Edit, make sure the source files were RIPped using the print option settings and the resident calibration you want for the final output. Raster files edited with Job Merge and Edit cannot be reRIPped.

#### TO VIEW AND EDIT RASTER DATA JOBS:

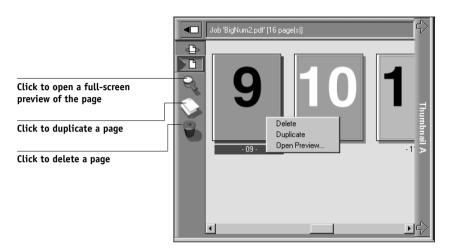
1. Select a raster data job and choose Thumbnail A from the Job menu.

The file must be a held raster job in the RIP area.

2. In the Thumbnail A window, right-click a thumbnail image to see the commands available for pages in Thumbnail A.

These commands can also be accessed from the Page menu (see page 2-12) as well as from buttons along the left side of the Thumbnail A window (see illustration on page 3-15).

To scroll through the pages in Thumbnail A, you can drag the slider bar at the bottom of the screen, click in the empty area to the left or right of the slider bar, or click on the arrows.



**Delete** deletes the currently selected page.

**Duplicate** duplicates the currently selected page.

**Open Preview** opens a full-screen preview of the currently selected page (see "Full-screen previews" on page 2-40).

**Undo** undoes the previous Job Merge and Edit command.

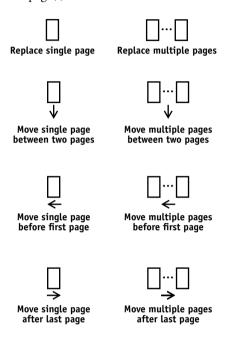
3. To move pages within Thumbnail A, left-click to select the page(s) and hold down the mouse button as you drag the selected page(s) to the new location.

Shift-click to select multiple, sequential pages; Ctrl-click to select multiple, non-sequential pages. Make sure to release the Shift or Ctrl key before moving the pages.

If you move the page(s) on top of existing page(s), the page(s) will be overwritten.

#### **Managing Print Jobs**

If the icon does not have an arrow, the page(s) will be replaced; if the icon has an arrow, the page(s) will be inserted.



#### 4. When you are finished editing, click the Thumbnail A tab.

If you have edited the job, you are prompted to save the job (click Yes) and enter a new name.

#### 5. Enter a new name and click OK.

The new raster file is now in the RIP area, ready to print. If you saved the edited file with a new name, the original source file remains held in the RIP area.

#### TO MERGE TWO RASTER DATA JOBS:

1. In the Thumbnail A window, display the document you wish to edit.

The file must be a held raster job in the RIP area.

Right-click another source document file (a held job with a raster icon) and select Thumbnail B.

The Thumbnail B tab opens a second thumbnail view which cannot be edited but can be a source for pages added to the document in Thumbnail A.

**NOTE:** To merge documents, *the page sizes of the source document and the target document must be the same.* Before editing or merging raster files with Job Merge and Edit, make sure the source files were RIPped using the print option settings and the resident calibration you want for the final output.

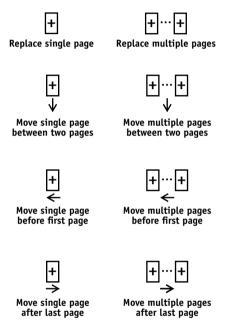
3. In the Thumbnail B window, left-click to select the page(s) and hold down the mouse button as you drag the selected page(s) to the new location in Thumbnail A.

Shift-click to select multiple, sequential pages; Ctrl-click to select multiple, non-sequential pages. Make sure to release the Shift or Ctrl key before moving the pages.

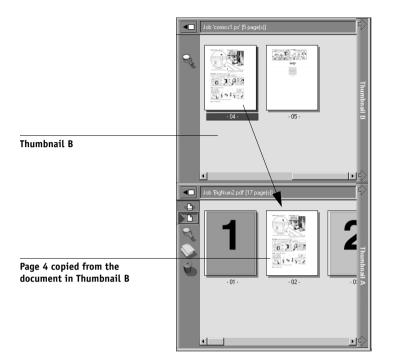
To scroll through the pages in Thumbnail A and Thumbnail B, you can drag the slider bar at the bottom of the screen, click in the empty area to the left or right of the slider bar, or click on the arrows.

#### **Managing Print Jobs**

To replace page(s), drag Thumbnail B page(s) on top of page(s) in Thumbnail A; to add page(s), drag the page(s) to a new position between pages, before the first page, or after the last page in Thumbnail A.



**Note:** To insert a Thumbnail B page directly after the last Thumbnail A page, drag the Thumbnail B page so that it is just to the right of the last Thumbnail A page and shows an arrow pointing to the right. If the Thumbnail B page is placed too far to the right of the last Thumbnail A page, the Thumbnail B page will replace the last Thumbnail A page.



Multiple undos are available; use Ctrl-Z or the Undo command (from the Page menu) to undo all the way back to your first edit. There is no Redo function.

**NOTE:** Make sure to save the merged job before deleting any of the jobs you used to create the merged job.

Thumbnail B pages moved into Thumbnail A adopt some specific attributes of the Thumbnail A job, such as the document and user name. However, many color-related print options that are set in the Thumbnail B page, such as CMYK Simulation and Rendering Style, remain with the specific page. This could result in a merged job being made up of pages with different attributes.

- 4. To close the Thumbnail view, click once on the same tab you used to open it (Thumbnail A or Thumbnail B tab).
- 5. If you have edited Thumbnail A, you are prompted to save the job (click Yes) and enter a new name. Enter a new name and click OK.

The new raster file is now in the RIP area, ready to print, together with the original source and target files.

**NOTE:** If you print the edited raster file, it appears in the Job Log with the name of the original job, *not* the new name you specified for the edited job.

**NOTE:** In cases where multiple users are connected to the Fiery 3850C via the Command WorkStation, Fiery WebSpooler, and/or Fiery Spooler, and one user makes changes to a Thumbnail A job, not all users may see the results of those changes. If you are unable to view changes in a job, or if selecting a Thumbnail window results in a message indicating zero pages, then close and relaunch the Command WorkStation, Fiery WebSpooler, or Fiery Spooler.

## 9

## Viewing and overriding print settings

When logged in as Operator or Administrator at the Command WorkStation, you can view override user job settings for, and print any job in the Queues window. Using the Properties dialog box, you can view and override job settings for a single job or for multiple jobs at once. When viewing multiple jobs, you can override settings for each job independently or override a setting for all the jobs at once.

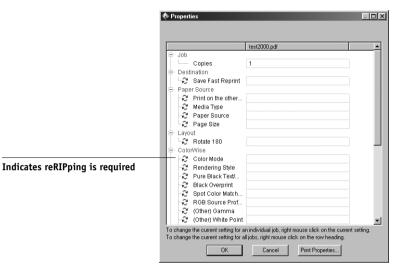
**NOTE:** For PCL files, you are only able to override the number of copies from the Properties dialog box.

- To view the properties for a single job, double-click the job line or select the job and choose Properties from the Job menu or right mouse menu.
- To view the properties for multiple jobs at once, shift-click to select contiguous jobs, or Ctrl-click to select non-contiguous jobs, and choose Properties from the Job menu or right mouse menu.

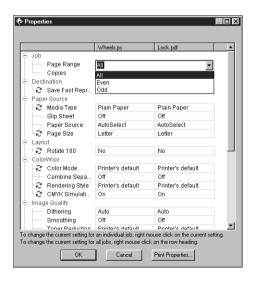
**NOTE:** If you want to retain a copy of the job with its original settings, duplicate the job and rename the duplicate before you change any settings (see "Job commands" on page 2-24).

To override a setting for a single job, right-click on the current setting and choose the override setting from the pop-up list.

**NOTE:** For some options, changing the setting requires that the job be reRIPped; these options show an icon to the left of the option name.



To override settings for all jobs listed in the Properties dialog box, right-click on the name of the print option (the row header) at the left of the dialog box and choose the override setting from the pop-up list.



The Properties dialog box displays all the job settings encoded by the PostScript or PCL printer driver that can be decoded by the Fiery 3850C. If you (as operator) have not changed anything, these are the settings a user entered before sending the job. There is an exception to this: Scale.

**NOTE:** Some print options that are available in the printer driver are not displayed in the Properties dialog box. For information on specific print options and settings, and where they can be set, see Appendix A of the *Printing Guide*.

When the Properties dialog box opens, the page range is always shown as All pages and the scale is always shown as 100%. All pages denotes all the pages specified by the user in printing the job; it may not include all the pages in the original document on the user's disk. Similarly, 100% scale indicates 100% of the magnification specified by the user.

The Properties dialog box does display all the remaining user settings, including user Instructions and Notes fields.

- Instructions fields are intended to be viewed and annotated by the operator, but their contents are associated with the job and are deleted when the job is deleted after printing.
- Notes fields can be viewed but cannot be changed by the operator; their contents are transcribed to the Job Log just as the user sent them.

## Downloading files and fonts

From the Command WorkStation you can download a variety of file types, as well as fonts, to the Fiery 3850C. These files and fonts can be located anywhere on the network or on an external device connected to the Command WorkStation computer. You browse to locate the files and fonts, select them, and add them to a list of items to be downloaded. You can specify a limited number of print option settings for files that you download (see page 3-24).

To download fonts, the Direct connection must be used. If the Direct connection is not currently published in Setup, see the Configuration Guide for instructions on how to publish it.

**NOTE:** You cannot download TrueType fonts. If you use TrueType fonts in Windows, you can print them by converting them to Adobe Type 1 fonts. To do this with the Adobe PS printer driver, click the Fonts tab and set up the Font Substitution Table as necessary.

The Manage Fonts command (in the Server menu) provides another way to download fonts to the Fiery 3850C (see page 3-25).

#### TO DOWNLOAD FILES OR FONTS:

1. Choose Download from the Job menu, right-click the Spool status bar and select Download, or open the utilities slider and click the Downloader icon.

The main Fiery Downloader window appears.

2. In the Files of type pop-up menu, choose the file types to display.

You can leave this at the default All Known Formats or choose All Files. All Known Formats lists all files in supported formats; All Files lists all files.

In the Connection Type pop-up menu, choose the queue to which you will download the files.

The options available in this menu depend on the print connections currently enabled in Setup. The potential choices are Print Queue, Hold Queue, or Direct Connection. If your administrator has not enabled one or more of these connections, you cannot choose it.

To download fonts, you must choose Direct Connection.

PDF files are always spooled to the Fiery 3850C hard disk before being printed. PDF files must be sent to the Print queue (or to the Hold queue if the Print queue is not enabled). Do not choose Direct Connection to download PDF files.

In the Look in pop-up menu, browse to the file(s) you want to download.

#### 5. Select the filename and click Add.

The File name field displays the name of the selected file before you click Add.

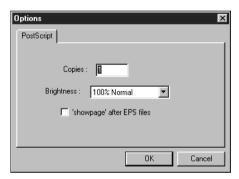
You can navigate to different drives and directories to select files and fonts to download.

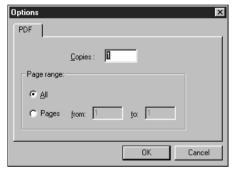
To select multiple sequential files, select the first file and then Shift-click the last file. Ctrl-click to select multiple non-sequential files.

If you change your mind about a file, select the filename in the Files to be Downloaded list and click Remove.

## 6. To change the attributes of a file, select it from the "Files to be Downloaded" list and click Options.

The Options dialog box for PostScript and EPS files is different from that for PDF files, as explained below.





PostScript options

PDF options

#### 7. Specify the following information in the dialog box and click OK.

The options you set apply only to the selected file. You can set different options, or leave the default settings, for each file.

**Copies**—Specify the number of copies.

**Brightness** (PostScript and EPS files only)—Change the Brightness setting if a file appears to be too dark or too light. Choose 85% for a substantially lighter image, 115% for a substantially darker image, or one of the options in between.

**NOTE:** Some applications, including Adobe Photoshop, provide transfer functions that let you specify density settings for an image. If the file you are printing includes transfer functions, the Brightness option has no effect. For more information on using transfer functions, see the documentation for your application.

'showpage' (after EPS files)—In most cases, you do not need to use this option. Select this option only if an EPS file fails to print without it. This option adds a 'showpage' PostScript language command at the end of the print job. Some applications omit this necessary PostScript language command when they generate EPS files. Select this option when printing EPS files generated by these applications. If you select this option unnecessarily, extra blank pages may print.

If you experience problems downloading EPS files, you can print the file directly from the application in which you created it.

Page Range (PDF files only)—Specify the page range you want to print.

#### Click Download.

To cancel downloading, click Cancel or press the <Esc> key.

## Managing server fonts

The Fiery 3850C includes a number of built-in printer fonts. You can download additional fonts to the Fiery 3850C using the Manage Fonts command (see page 3-26) or the Download command (see page 3-23). Downloading fonts requires that the Direct connection is published in Setup (see the *Configuration Guide*).

NOTE: The Manage Fonts command is available only if you logged in as Administrator.

Although no special privileges are necessary to download fonts, Administrator privileges are required to remove fonts from the server. The built-in printer fonts are locked and cannot be removed by anyone.

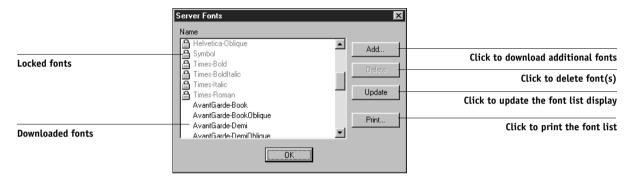
To print a list of fonts currently resident on the Fiery 3850C, use the Print Pages command (see page 3-6).



#### TO ADD OR DELETE FONTS:

1. Choose Manage Fonts from the Server menu.

The Server Fonts window displays Add, Delete, Update, and Print buttons.



- 2. To download additional fonts to the Fiery 3850C, click Add and refer to the instructions on page 3-22.
- 3. To delete a font, select it in the font list and click Delete. Shift-click or Ctrl-click to select multiple fonts.

**NOTE:** The printer fonts included with the Fiery 3850C (built-in fonts) are locked. These fonts appear with a lock icon next to the name and cannot be deleted.

- 4. To refresh the font list display, click Update.
- 5. To print the font list, click Print.

## **Archiving jobs**

PostScript or PCL and raster data jobs can be archived internally to the Fiery 3850C hard disk.

#### TO ARCHIVE A POSTSCRIPT OR RASTER JOB:

- 1. In the Queues window, select any held job in the Spool or RIP areas.
- 2. Choose Archive from the Job menu.

The job is moved to the Archive window.

3. To archive the job(s) internally to the Fiery 3850C hard disk, click OK.

The job(s) are archived internally.

## Using the Job Log

Chapter 2 introduced the Job Log, which is the list of all processed and printed jobs, including the date and time they were printed, and all the characteristics of the job. It explained that the Administrator can set Job Log preferences for clearing and printing the Job Log automatically, and for Job Log page size (page 2-30).

If you want to view the Job Log in a specific application, you can specify one in the Preferences dialog box (see page 3-4), then select View in Helper App from the Window menu.

After displaying the Job Log you can print it (use the Print Pages dialog box or choose Print from the Window menu), or export it to a tab-delimited text file (choose Export from the Window menu). The exported Job Log file can be imported into a spreadsheet, database, or word processing application for job accounting purposes. If the Filter command is used to display only a portion of the Job Log (such as jobs for the current day), only that portion of the Job Log is printed or exported.

To update the Job Log, choose Refresh from the Window menu.

After printing or exporting the entire Job Log, you may want to clear it; choose Clear Job Log from the Server menu.

The Job Log window displays a list of all the jobs and the following information about them: status, document name, user, date, start time, end time, process time, size, device, page size, media, number of originals, number of color pages, number of black and white pages, and total number of pages. Information in the Notes 1 and Notes 2 fields is displayed if users entered this information when they printed.

Job Log								
Status	Document	User	Date	Start Time	End Time	Process Time	Size	Device
ок	settrue.ps	Administrator	1/06/02	10:07:45	10:07:45	00:00:00	5.40 KB	Unknown
ок	saveprms.2ps	Administrator	1/06/02	10:08:29	10:08:29	00:00:00	6.60 KB	Unknown
ок	prologue.ps	Administrator	1/06/02	10:08:34	10:08:34	00:00:00	89.94 KB	Unknown
ок	vi001005.2ps	Administrator	1/06/02	10:08:49	10:22:48	00:13:52	62.30 KB	Unknown
ок	restprms.2ps	Administrator	1/06/02	10:27:55	10:27:57	00:00:01	8.17 KB	Unknown
ок	settrue.ps	Administrator	1/06/02	10:30:29	10:30:29	00:00:00	5.40 KB	Unknown

**NOTE:** If a raster job was saved with a new name and then printed, it appears in the Job Log with the name of the original job, not the new name you specified for the edited job.

The text in the Status column provides information about the job:

OK The job was printed normally.

Cancel The job was canceled before printing was completed.

Error An error occurred during processing or printing.

Use the scroll bar at the bottom of the window to view all the fields in the Job Log window.

## Other server management commands

These additional Server menu commands are used to manage server performance, configuration, and status. Some of these commands are available only when logged in as Administrator:

- Manage Fonts—Allows you to delete fonts from, as well as add fonts to, the Fiery 3850C (see page 3-25)
- Reboot—Causes the Fiery 3850C to be rebooted, just as if you had selected Restart Printer from the Control Panel (see page 1-10)
- Clear—Clears all jobs in all server queues as well as all jobs archived on the Fiery 3850C hard disk, the index of archived jobs (in the Archive window), and the Job Log
- Setup—Invokes Fiery Setup; for more information, see the Configuration Guide
- Log out—Closes the connection to the Fiery 3850C, just as if you had chosen Log out from the log in/out slider

3-30 Managing Print Jobs

## Chapter 4: Overview of Fiery WebTools

This chapter introduces Fiery WebTools and provides instructions on their usage. For more information on certain Fiery WebTools you are referred to other chapters in this book and to other manuals in the documentation set.

## Fiery WebTools

Fiery WebTools reside on the Fiery 3850C but can be accessed over the network from a variety of platforms. The Fiery 3850C has a home page that lets remote users view server functions and manipulate jobs.

Fiery WebTools can be used on Mac OS and Windows client computers with certain Internet browsers that support the Java language. For specific information on the browsers supported with Fiery WebTools, see *Getting Started*.

### Access privileges

The Fiery 3850C system allows the site administrator to choose and implement a level of access and control appropriate for your particular site. There is a spectrum of control which can be implemented; the levels of access allowed to remote users depend on whether the administrator has enabled use of Fiery WebTools, and whether or not a password is required to use the job management features of Fiery WebTools.

If you have been given the Operator password, you can manage job flow and override print settings of your jobs with Fiery WebSpooler. If not, you can still track the status of your jobs with the Status tool, and with Fiery WebSpooler as a Guest. Check with your site administrator for information on your Fiery WebTools access privileges.



## **Using Fiery WebTools**

Fiery WebTools are accessed from the Fiery 3850C home page.

WebTool:	Summary:	For more information:
Status	Shows you the jobs currently processing and printing.	See the Printing Guide.
WebSpooler	Allows you to view, manipulate, reorder, reprint, and delete jobs currently spooling, processing, or printing on the Fiery 3850C. It also allows you to view, print, and delete the Job Log.	See "Tracking and managing jobs with Fiery WebSpooler" on page 5-1.
WebLink	Provides a link to another web page, provided you have a valid Internet connection. The WebLink destination can be changed; this function requires the Administrator password, if one has been set.	See the Printing Guide and the Configuration Guide.
WebSetup  Allows you to modify the Command WorkStation configuration (Setup) remotely. This function requires the Administrator password, if one has been set. This utility is not available on Mac OS.		See the Configuration Guide.
WebDownloader	Allows you to download files or fonts to the Fiery 3850C.	See "Downloading files and fonts" on page 3-22.



#### TO ACCESS FIERY WEBTOOLS:

- 1. Start your Internet browser application.
- 2. Enter the IP address or the DNS name of the Fiery 3850C.

Check with the operator or administrator for this information.

The Fiery 3850C home page appears.



3. Click one of the buttons at the left to select one of the Fiery WebTools.

Move the cursor over the buttons to display information about the selections.

# Chapter 5: Fiery WebSpooler

Fiery WebSpooler is a job management tool that duplicates many of the functions and features of the Command WorkStation. Fiery WebSpooler is one of the Fiery WebTools, and is accessed with an Internet browser and the Fiery 3850C home page (see Chapter 4).

The interface of Fiery WebSpooler is so similar to that of the Command WorkStation that this chapter often refers you to Chapters 2 and 3 (on the Command WorkStation) for information about icons and commands that is common to both tools.

## Tracking and managing jobs with Fiery WebSpooler

You can use Fiery WebSpooler to perform the following functions from your workstation:

- Override current job option settings
- Delete jobs and cancel processing
- Duplicate or rename jobs
- RIP a job and hold the raster data
- · Hold jobs in the spooled area or the RIPped area
- Remove raster data from RIPped files
- Change the priority of jobs
- Display, print, or delete the Job Log

Most of these functions require the Administrator or Operator password. However, even without a password, you can log in to Fiery WebSpooler as Guest with view-only privileges.

**NOTE:** Most Fiery WebSpooler commands function identically to those of the Command WorkStation. For more information on specific commands, see Chapter 2 and 3.

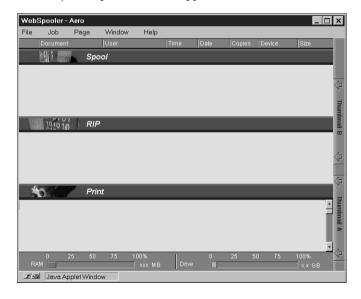
#### TO ACCESS THE FIERY WEBSPOOLER WINDOW:

1. From the Fiery 3850C home page window, click WebSpooler.

For instructions on how to access the Fiery 3850C home page window, see page 4-3.

To log in as Administrator, enter the Administrator password and click OK.
 To log in as Operator, enter the Operator password and click OK.
 To log in as Guest, click OK, without entering any password.

The Fiery WebSpooler window appears in a new browser window.





### About the Fiery WebSpooler window

Like Command WorkStation, Fiery WebSpooler is a window to view and control Fiery 3850C functions.

The Fiery WebSpooler window is divided into three areas by Spool, RIP, and Print status bars. When the Fiery 3850C receives print jobs, the Fiery WebSpooler window becomes a dynamic display, filled with the names of jobs and their characteristics.

The Spool, RIP, and Print areas of the Fiery WebSpooler window represent the stages of printing a job. Jobs come in at the top level (Spool) and drop down to the Print level, unless they are held along the way.

The job icons displayed in the Fiery WebSpooler window are explained in "Job icons" on page 2-21.

**NOTE:** In the Fiery WebSpooler window, the background color for the yellow and white printer icons is the same.

**Spooled jobs**—Jobs listed in the area below the Spool status bar are PostScript or PCL files stored on the Fiery 3850C disk. These jobs were sent to either the Print queue (white icons) or the Hold queue (yellow icons).

**RIPped jobs**—Jobs listed in the area below the RIP status bar are ready to print. They have already been rasterized (RIPped, or processed for printing) and are waiting, in order, for access to the printer. Rasterized jobs can also be held; held jobs are shown with a yellow icon.

**Printed jobs**—Jobs listed in the area below the Print status bar have already been printed. Printed jobs can be stored on the Fiery 3850C disk. The number of jobs that can be stored (from 1 to 99) is defined in Setup.

If you are logged in as Administrator or Operator, you can interact with a job wherever it appears in the window by selecting it and choosing a command from the Job menu, or by double-clicking the job and setting override options. See "Manipulating job options and job flow" on page 5-4 for information.

**Errors**—Jobs with an error are shown in red. To display the error, double-click the job line.

**NOTE:** If your job does not appear anywhere in the Fiery WebSpooler window, it may have already been printed; if so, it will appear in the Job Log. To view the Job Log, choose Show Job Log from the Window menu. (For more information on the Job Log, see page 5-9.)

If the job does not appear in the Job Log, it may have been moved to the Archive window by the operator. The Archive window cannot be viewed with Fiery WebSpooler; you must contact the operator or look at the Command WorkStation display to check this.

## Manipulating job options and job flow

Using the commands in the Job menu, you can alter the destinations, priorities and other characteristics of jobs that appear in the Fiery WebSpooler window.



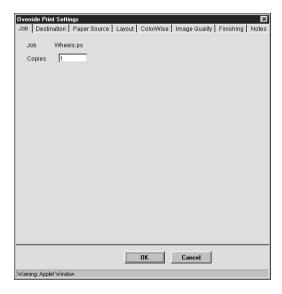
To understand the effect each of these commands has on a job, you need to understand the way the Fiery 3850C handles PostScript, PCL, and raster data, and how jobs are activated or held in the various stages of processing. See Chapter 2 for this background information before manipulating jobs with Fiery WebSpooler. Also, the commands in the Fiery WebSpooler Job menu have identical counterparts on the Command WorkStation. For background and information about these commands, see Chapters 2 and 3.

Choose this command from the Job menu:	To do this:	Raster data is:		
Delete Job(s)	Delete the job(s) from the list.	Deleted		
Duplicate Job(s)	Duplicate one or more selected PostScript or PCL data jobs in the Spool or Print areas (creates a reference to the original job, with the same name).	n/a (The Duplicate command is not available for raster jobs.)		
Rename	Rename the job (PostScript or PCL file with or without raster).	Unaffected, but associated with the new name  NOTE: If the renamed job is printed, the Job Log reflects the job's original name.		
Hold	Hold the job in the current place (except for a printed job, which is moved to the Spool or RIP area).	Held in RIP area indefinitely, if included with job		
RIP and Hold	RIP the job and hold it in the RIP area.	Held in RIP area indefinitely		
Print	Print the job in its turn (RIP it first if it does not have raster data). Keep the printed job in the Print area until the job limit is reached.	Temporarily held in RAM until memory is needed for another job		
Print and Hold (like the PPD option Save Fast Reprint)  Print the job in its turn (RIP it first if it not have raster data).  After printing, hold the PostScript or PC and the raster in the RIP area.		Held in the RIP area indefinitely (saved to disk)		

Choose this command from the Job menu:	To do this:	Raster data is:		
Process Next	Give top priority to this job. Print the job (or RIP and print) as soon as the processor and copier are free, before other waiting jobs.	Held in RAM after printing (can be selected in the Print area while it remains there), or Held in RIP area (saved to disk) if destination was RIP and Hold		
Remove Raster	Remove the raster from a job that has raster data; leave the PostScript or PCL job in place.	Deleted		
Override Print Settings	Change the print options for the job (see page 5-6).	Deleted and regenerated, if the newly selected options require reRIPping, or reprinted with the new settings, if none require reRIPping		
Thumbnail A	Open the selected <i>held</i> raster data job in the Thumbnail A window where you can view a full-screen preview of the job, edit the job, or merge it with raster data from other jobs	Changed if job is edited, unaffected if job is only viewed		
Thumbnail B	Open the selected raster data job (not necessarily a held job) in the Thumbnail B window for viewing or for merging into a job in the Thumbnail A window	Unchanged		

## Overriding job option settings

To change the job options of a job, double-click the job line or select the job and choose Override Print Settings from the Job menu. If necessary, scroll down to see all the various job options.



For PostScript files, you cannot override the Orientation option.

For PDF files printed using Fiery Downloader, you cannot override the following print options:

- Orientation
- Spot Color Matching

For PCL files, you can only override the Copies option.

The options you set here are the same ones you set from the Print dialog box when you print from an application. For information about setting and overriding these print options, see the *Printing Guide*.

**NOTE:** For some options, changing the setting requires that the job be reRIPped; these options show an icon to the left of the option name.

## Thumbnails and full-screen previews (Job Merge and Edit)

Like the Command WorkStation, Fiery WebSpooler includes a powerful Job Merge and Edit tool that allows you to preview and edit raster data. Job Merge and Edit

consists of two thumbnail windows and several page-manipulation commands (listed in the Page menu). The Job Merge and Edit tool can be used in the following ways:

- In the Thumbnail A window, you can see thumbnails of the currently printing job, as it is processed, or of any raster data job.
- From the Thumbnail A window you can open a full-screen preview of a raster file.
- Using the Thumbnail A and Thumbnail B windows together, you can merge raster data from more than one file, even if the files were printed from different applications on different computer platforms.

Job Merge and Edit's merge features eliminate the limitations of particular software applications. You can merge raster pages of documents of different types, and even different computer operating systems. You can merge color pages from graphics programs with text pages from a word processor.

**Note:** In cases where multiple users are connected to the Fiery 3850C via Fiery WebSpooler or Command WorkStation, and one user makes changes to a Thumbnail A job, not all users may see the results of those changes. If you are unable to view changes in a job, or if selecting a Thumbnail window results in a message indicating zero pages, then close and relaunch Fiery WebSpooler or Command WorkStation.

#### Job Merge and Edit differences in Fiery WebSpooler

The Job Merge and Edit tool in Fiery WebSpooler functions almost identically to that in the Command WorkStation. For detailed information on using Job Merge and Edit, see Chapters 2 and 3 (for instructions on editing and merging raster files, see "Merging raster files with Job Merge and Edit" on page 3-14). Though the interfaces are almost identical, there are some feature differences:

- You cannot scroll through the pages in Thumbnail A or Thumbnail B by dragging the slider bar at the bottom of the screen.
- Thumbnail A right-click commands are not available; instead click on a page to select it, and either click the appropriate button in the Thumbnail A window or choose the appropriate command from the Page menu.

- Page icons and arrows do not appear when moving page(s) from Thumbnail B to
  Thumbnail A. Instead, a blue outline appears around a Thumbnail A page that is to
  be replaced; and a blue bar appears adjacent to or between Thumbnail A page(s) to
  indicate where the Thumbnail B page(s) are to be inserted.
- The full-screen preview window has a status bar (the Command WorkStation does not), the "X" button used to close the full-screen preview is in a different location, there are no page advance arrows, and there is no rotate button.
- Multiple undos are not available.
- The Ctrl-Z keyboard shortcut for the Undo command is not available. To undo one
  or more Job Merge and Edit commands, choose Undo from the Page menu.

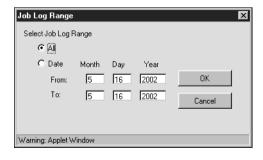
#### Using the Job Log

From Fiery WebSpooler, you can view and print a log of all jobs printed by the Fiery 3850C, including jobs downloaded with Fiery Downloader. You can also save the Job Log to a text file which you can then import into a spreadsheet or word processing application for job accounting purposes.

**NOTE:** If you logged in as Administrator, you can delete the Job Log from Fiery WebSpooler (see page 5-10). The Job Log is not available if you logged in as Guest.

#### TO DISPLAY, UPDATE, PRINT, DELETE, AND SAVE THE JOB LOG:

- 1. Choose Show Job Log from the Fiery WebSpooler Window menu.
- 2. Click All or specify a date range.



#### 3. Click OK.

The Job Log appears in a new browser window.

**Note:** The Delete button appears only if you logged in as Administrator.

The Job Log displays each job and the following information: status, document name, user name, date, start time, end time, process time, file size, device, paper size, media, number of originals, number of color pages, number of black-and-white pages, total number of pages, Note1, and Note2.

The Status column provides the following information about jobs:

OK The job was printed normally.

ERROR An error occurred during processing or printing.

CANCEL The job was canceled before printing was completed.

4. To update the Job Log, click the Update button.

To print the Job Log, choose Print Job Log from the File menu or click the Print button.

The information displayed in the Job Log window prints to the current Fiery 3850C. When you print the Job Log, totals are printed for all appropriate columns.

If you logged in as Administrator, you can choose Delete Job Log from the File menu or click the Delete button to clear the Job Log.

The system administrator can also print and clear the Job Log from the Control Panel.

To return to the job list, choose Show Job List from the Window menu.



# Appendix A: Troubleshooting

This section lists error messages you might see, and provides some troubleshooting guidelines should a problem arise with the Fiery 3850C or the Command WorkStation. If you are unable to resolve a problem after referring to this chapter, contact your authorized service/support center.

### **Error messages**

Error messages can result from problems with the print job, the Fiery 3850C, the Command WorkStation, or the printer. Some of the most common error conditions are listed here.

A printer error message sometimes remains displayed for a short time on the Command WorkStation even after you have resolved the error. However, printing will resume and the Command WorkStation display will be updated after a short delay.

When an error interferes with printing, you will see a message at the Command WorkStation. The status bar that displays the message indicates the process where the error occurred. Following are the messages (listed in alphabetical order), with the appropriate corrective action for each one. You can cancel the pending print job while you attend to the error condition. A few normal status messages are included in this list in case they cause concern.

Fiery 3850C message:	Corrective action/additional information:
<tray> Load <media type&gt; <media size=""></media></media </tray>	The paper currently loaded in the specified tray does not match the paper required, or there is no paper currently loaded in the tray. Please load the specified paper in the tray.
Tray 1 empty <media type=""> <media size&gt;</media </media>	Tray 1 has run out of the specified paper.
Tray 2 empty <media type=""> <media size&gt;</media </media>	Tray 2 has run out of the specified paper.



Fiery 3850C message:	Corrective action/additional information:
Load Paper Tray <number></number>	The specified tray is empty. Please load paper in the tray.
Reset Tray <number> Correctly</number>	The specified tray is open or not closed correctly. Please close the tray.
Replace Transfer Unit	Replace the Transfer Unit.
Replace Fuser Oil Unit soon	The fuser oil unit is near the end of its life span. Please replace the unit.
Add Staples	Add staples to the stapler unit, if installed.
Punch-hole Chips are Full	The punch-hole chip waste bin is full. Please empty it.
Remove Paper Inside Finisher	There is paper inside the finisher unit. Please remove it.
Reset Duplex Unit Correctly	The duplex unit is not aligned correctly. Please reset it.
Toner is Almost Empty: Yellow	The yellow toner is almost empty. Prepare to refill it.
Toner is Almost Empty: Magenta	The magenta toner is almost empty. Prepare to refill it
Toner is Almost Empty: Cyan	The cyan toner is almost empty. Prepare to refill it
Toner is Almost Empty: Black	The black toner is almost empty. Prepare to refill it
Add Toner: Black	The black toner is empty. Please refill it
Add Toner: Cyan	The cyan toner is empty. Please refill it
Add Toner: Magenta	The magenta toner is empty. Please refill it



Fiery 3850C message:	Corrective action/additional information:
Add Toner: Yellow	The yellow toner is empty. Please refill it
Waste Toner is Almost Full	The waste toner receptacle is almost full. Please empty it.
Hardware Problem Staple Unit	The stapler unit is not functioning properly. Please check it.
Hardware Problem Tray <number></number>	The specified tray is not functioning properly. Please check it or call service.
Hardware Problem Finisher	The finisher is not functioning properly. Please check it or call service.
Remove Paper Mailbox Tray <number>#</number>	The indicated mailbox tray is full. Please remove paper from it.
Remove Paper Finisher Tray <number></number>	The indicated finisher tray is full. Please remove paper from it.
Remove Paper Standard Tray	The standard tray is full. Please remove paper from it.
Remove Paper All Output Trays	Please clear all output trays.
Reset Toner Black	The Fiery 3850C cannot detect the black toner unit. Please reinsert it and close the cover.
Reset Toner Cyan	The Fiery 3850C cannot detect the cyan toner unit. Please reinsert it and close the cover.
Reset Toner Magenta	The Fiery 3850C cannot detect the magenta toner unit. Please reinsert it and close the cover.
Reset Toner Yellow	The Fiery 3850C cannot detect the yellow toner unit. Please reinsert it and close the cover.
Replace Fuser Oil Unit	Please replace the fuser oil unit.
Replace Waste Toner	The waste toner bottle is full. Please replace it.



Fiery 3850C message:	Corrective action/additional information:
Reset Waste Toner Correctly	The Fiery 3850C cannot detect the waste toner bottle. Please reinsert it and close the cover.
Reset Finisher Correctly	The Fiery 3850C cannot detect the finisher. Please reattach or reset it.
Close Lower Right Cover	The lower right cover is open. Please close it.
Close Mailbox Cover	The mailbox cover is open. Please close it.
Close Duplex Unit Cover	The duplex unit cover is open. Please close it.
Close Finisher Upper Cover	The upper cover of the finisher is open. Please close it.
Close Finisher Front Cover	The front cover of the finisher is open. Please close it.
Close Upper Right Cover	The upper right cover is open. Please close it.
Close Right Cover	The right cover is open. Please close it.
Close Upper Left Cover	The upper left cover is open. Please close it.
Close Front Cover	The front cover is open. Please close it.
Reset Develop. Unit Correctly Black	The Fiery 3850C cannot detect the black developer unit. Please reinsert it and close the cover.
Reset Develop. Unit Correctly Cyan	The Fiery 3850C cannot detect the cyan developer unit. Please reinsert it and close the cover.
Reset Develop. Unit Correctly Magenta	The Fiery 3850C cannot detect the magenta developer unit. Please reinsert it and close the cover.



Fiery 3850C message:	Corrective action/additional information:
Reset Develop. Unit Correctly Yellow	The Fiery 3850C cannot detect the yellow developer unit. Please reinsert it and close the cover.
Reset PCU Correctly Black	The Fiery 3850C cannot detect the black photo conducting unit. Please reinsert it and close the cover.
Reset PCU Correctly Cyan	The Fiery 3850C cannot detect the cyan photo conducting unit. Please reinsert it and close the cover.
Reset PCU Correctly Magenta	The Fiery 3850C cannot detect the magenta photo conducting unit. Please reinsert it and close the cover.
Reset PCU Correctly Yellow	The Fiery 3850C cannot detect the yellow photo conducting unit. Please reinsert it and close the cover.
Reset Fuser Oil Unit Correctly	The Fiery 3850C cannot detect the fuser oil unit. Please reinsert it and close the cover.
Reset Transfer Unit Correctly	The Fiery 3850C cannot detect the transfer unit. Please reinsert it and close the cover.
Reset Fusing Unit Correctly	The Fiery 3850C cannot detect the fusing unit. Please reinsert it and close the cover.
Remove Misfeed W: Mailbox Open Mailbox Cover	There is a paper misfeed in the mailbox. To remove the paper, open the mailbox front cover and follow the instructions inside the cover.
Remove Misfeed Z1:Duplex Unit See Instructions in Front Cover	There is a paper misfeed in the duplex unit. To remove the paper, open the front cover and follow the instructions inside the cover.
Remove Misfeed Z2:Dup.Feed Unit See Instructions in Front Cover	There is a paper misfeed in the duplex feed unit. To remove the paper, open the front cover and follow the instructions inside the cover.



Fiery 3850C message:	Corrective action/additional information:
Remove Misfeed R: Finisher Open Finisher Cover	There is a paper misfeed in the finisher unit. To remove the paper, open the finisher cover and follow the instructions inside the cover.
Remove Misfeed A: Internal Path See Instructions in Front Cover	There is a paper misfeed inside the Fiery 3850C. To remove the paper, open the front cover and follow the instructions inside the cover.
Remove Misfeed Y: Paper Tray See Instructions in Front Cover	There is a paper misfeed in a paper tray. To remove the paper, open the front cover and follow the instructions inside the cover.
Remove Misfeed B: Fusing Unit See Instructions in Front Cover	There is a paper misfeed in the fusing unit. To remove the paper, open the front cover and follow the instructions inside the cover.

### Maintaining optimal system performance

The Fiery 3850C does not require maintenance. Beyond the routine requirements of servicing and maintaining the print engine and replenishing consumables there are a few things you can do to improve the overall performance of your system:

- Schedule the printing workload by checking job ticket information before printing.
  Print jobs with the same output and paper specifications together to minimize paper
  changes. Also, print routine jobs while you prepare to print jobs with special
  instructions or special media.
- Reduce unnecessary Fiery 3850C connections at the Command WorkStation. If you use a second or third Fiery 3850C on an occasional basis, performance will be improved if you log off when you are not using it.
- Avoid printing when the Fiery 3850C displays the Disk full warning.
  - If you see this warning, delete jobs from the Queues window that have been held for a long time and are not likely to be needed. Avoid this condition by deleting old jobs on a regular basis. The date associated with a job is the original date it was sent.

As a last resort, you can use the Clear Server or the Clear command.



#### **Troubleshooting**

In case of problems, and before you call for service, check the guidelines in this section. If you are unable to resolve the problem, make a note of the error condition and contact your authorized service/support center.

#### **Command WorkStation hangs**

If the Command WorkStation windows do not update, try clicking the Log in/out slider and logging out, and then exiting the Command WorkStation. Restart the Command WorkStation application or restart the computer.

If the Command WorkStation windows do not update, or no jobs are displayed, and the mouse has no effect (you cannot select a job or a window, use a right mouse command, or select a menu item) the Fiery 3850C is down or communication over the network has failed.

To force an exit from the Command WorkStation application, press Ctrl-Alt-Delete, and with the Command WorkStation selected, click End Task. At the Fiery 3850C, disconnect and reconnect the network cable, and try printing a Test Page or Configuration page. If that fails, reboot the Fiery 3850C.

#### Command WorkStation fails to connect to the Fiery 3850C

If a remote Command WorkStation cannot connect to a Fiery 3850C that was connected previously, you may need to reconfigure the connection.

- 1. If you can, choose Exit from the Command WorkStation File menu.
- In the C:\Windows folder, find the Efinl.ini file and move it out of the C:\Windows folder to another folder.

If the Efinl.ini file contains a limited amount of configuration information that is easily recreated (i.e., information for only one or two servers), you can delete the file altogether. A new Efinl.ini file will be created in the C:\Windows folder when you reconfigure the connection.

If the Efinl.ini file contains configuration information for several servers, or information that is not readily recreated, keep the Efinl.ini file as a backup.

#### A-8 Troubleshooting



#### 3. Print a Configuration page.

You will use the information on this page to configure the connection to the Fiery 3850C.

Make sure that the printer is online. CWS cannot connect to the printer if it is not online.

- 4. Launch the Command WorkStation application.
- 5. When you are prompted to configure a server connection, click OK.

Use the instructions in Getting Started to configure the connection.

6. If you still cannot connect to the Fiery 3850C, the administrator should reinstall Command WorkStation software.

See Getting Started for details.



# Unexpected printing results

If this happens:	This is the problem:
A cover page is not printed when you reprint a saved raster job.	The cover page identifies the originator of the job and the time the job was sent. Time stamp and user information on the cover page of a reprinted job are not meaningful.
The job settings are not carried out as you expected.	If the user printed from Mac OS, there may be two conflicting print settings. You can check the job properties by double-clicking the job. See the <i>Printing Guide</i> for a table of job properties and conflicting properties. Notify the users of these conflicts so they can avoid them in the future.
The job does not print.	Some printing errors may be displayed in the Print status bar. When the job is in the Printed queue, jobs that had an error are displayed in a light red job row. Double-click anywhere in the row to see the error message.
There are font errors.	If user-specified fonts that are not resident on the Fiery 3850C are not printing correctly in PostScript or PCL files that are downloaded by users, request that they embed the fonts in the PostScript file or print directly from their application. When users print from their applications, if special fonts are not downloaded automatically, they should be downloaded directly to the Fiery 3850C with Command WorkStation. This can be done by the user or by the operator, provided the Direct connection is enabled. For information about downloading fonts, see the "Downloading files and fonts" on page 3-22.

#### Clearing the server

Clearing the server is an Administrator option that can be used as a last resort if a job persists in the system and prevents printing despite attempts to cancel or delete it. Clearing the server deletes all jobs currently saved on the server in any queue. It also clears the Job Log.

Before clearing the server, export the Job Log if you have not recorded the information in it. If you can, notify users that you will clear their jobs from the server so they can back them up and resend them when the server is back in operation.

You can clear the server from the Control Panel (see page 1-5) or by using the Clear command from the Command WorkStation).

#### Users are unable to connect to the Fiery 3850C

If users are unable to connect to the Fiery 3850C, or are unable to find the Fiery 3850C from their workstations, the network administrator may need to troubleshoot their network connections, and check settings on the servers they use for printing. If settings have changed, it may be necessary to reconfigure the Fiery 3850C.

For example, if print servers or print queues on a Novell server are renamed or deleted, or if accounts or permissions are changed, the Fiery 3850C administrator may have to edit settings or enter new settings in IPX (Novell) Setup to reflect the new configuration.

If users cannot connect to the Fiery 3850C from a Windows computer, you may need to reconfigure the utility's connection to the server. See *Getting Started* for details.



Mac OS users may fail to see the Fiery 3850C if a network administrator has assigned it to a different zone, or has added zones where previously there were none.

If you have configured the Fiery 3850C and set up client computers and network servers according to guidelines in the *Configuration Guide* and *Getting Started*, try printing a Test Page (at the Command WorkStation, choose Print Pages from the File menu).

If you are able to print the test page but still cannot print a file from a remote computer, contact the system administrator to troubleshoot the network connection.

If you are unable to connect, and you *cannot* print the Test Page, check the printer's touch panel display.

If this happens:	Try this:
It displays a diagnostic or error message	Take the appropriate corrective action, as described in the printer manual or in the section "Error messages" on page A-1.
The printer is not in Standby mode	The printer's Automatic Power-Off function may have shut down the printer.  Turn the printer on, and then try printing a Test Page again when the printer has warmed up.
You still cannot print a Test Page	Make a copy. If you can make a copy, restart the Fiery 3850C, and when you see Idle on the status line of the Fiery 3850C display, try printing a Test Page again. If the Test Page still fails to print, contact your authorized service/support center.

#### Setup error messages

For information on Setup error messages, see the Configuration Guide.

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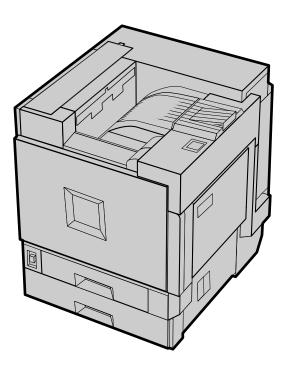
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# Operating Instructions Maintenance Guide



For safety, please read this manual carefully before you use this product and keep it handy for future reference.

#### Introduction

This manual describes detailed instructions on the operation and notes about the use of this machine. To get maximum versatility from this machine all operators are requested to read this manual carefully and follow the instructions. Please keep this manual in a handy place near the machine.

# **Trademarks**

Microsoft, Windows and Windows NT are registered trademarks of Microsoft Corporation in the United States and/or other countries.

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Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights in those marks.

#### Notes:

Some illustrations in this manual might be slightly different from the machine. Certain options might not be available in some countries. For details, please contact your local dealer.

#### Note

The proper names of the Windows operating systems are as follows:

- Microsoft® Windows® 95 operating system
- Microsoft® Windows® 98 operating system
- Microsoft<sup>®</sup> Windows<sup>®</sup> Millennium Edition (Windows Me)
- The product names of Windows<sup>®</sup> 2000 are as follows: Microsoft<sup>®</sup> Windows<sup>®</sup> 2000 Advanced Server Microsoft<sup>®</sup> Windows<sup>®</sup> 2000 Server Microsoft<sup>®</sup> Windows<sup>®</sup> 2000 Professional
- The product names of Windows<sup>®</sup> XP are as follows: Microsoft<sup>®</sup> Windows<sup>®</sup> XP Professional Microsoft<sup>®</sup> Windows<sup>®</sup> XP Home Edition
- The product names of Windows NT<sup>®</sup> 4.0 are as follows: Microsoft<sup>®</sup> Windows NT<sup>®</sup> Server 4.0 Microsoft<sup>®</sup> Windows NT<sup>®</sup> Workstation 4.0

# **Safety Information**

When using your printer, the following safety precautions should always be followed.

# **Safety During Operation**

In this manual, the following important symbols are used:

#### **⚠ WARNING:**

Indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.

#### **A CAUTION:**

Indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to property.

#### **MARNING:**

- Disconnect the power plug (by pulling the plug, not the cable) if the power cable or plug becomes frayed or otherwise damaged.
- To avoid hazardous electric shock or laser radiation exposure, do not remove any covers or screws other than those specified in this manual.
- Turn off the power and disconnect the power plug (by pulling the plug, not the cable) if any of the following conditions exists:
  - · You spill something into the equipment.
  - You suspect that your equipment needs service or repair.
  - Your equipment's cover has been damaged.
- Do not incinerate spilled toner or used toner. Toner dust might ignite when exposed to an open flame.
- Disposal can take place at our authorized dealer or at appropriate collection sites.
- Dispose of the used toner cartridge in accordance with the local regulation.

#### **A CAUTION:**

- Protect the machine from dampness or wet weather, such as rain and snow.
- Unplug the power cord from the wall outlet before you move the machine.
   While moving the machine, you should take care that the power cord will not be damaged under the machine.
- When you disconnect the power plug from the wall outlet, always pull the plug (not the cable).
- Do not allow paper clips, staples, or other small metallic objects to fall inside the machine.
- Keep toner (used or unused) and toner cartridge out of the reach of children.
- For environmental reasons, do not dispose of the machine or expended supply waste at household waste collection points. Disposal can take place at an authorized dealer.
- The inside of the machine could be very hot. Do not touch the parts with a label indicating the "hot surface". Otherwise an injury might occur.
- Our products are engineered to meet high standards of quality and functionality, and we recommend that you use only the expendable supplies available at an authorized dealer.

# **ENERGY STAR Program**



As an ENERGY STAR Partner, we have determined that this machine model meets the ENERGY STAR Guidelines for energy efficiency.

The ENERGY STAR Guidelines intend to establish an international energy-saving system for developing and introducing energy-efficient office equipment to deal with environmental issues, such as global warming.

When a product meets the ENERGY STAR Guidelines for energy efficiency, the Partner shall place the ENERGY STAR logo onto the machine model.

This product was designed to reduce the environmental impact associated with office equipment by means of energy-saving features, such as Low-power mode.

#### Low-power Mode (Energy Saver mode)

This printer automatically lowers its power consumption 60 minutes after the last operation has been completed. To exit Low-power (Energy Saver) mode, press any key on the control panel.

#### Specifications

Energy Saver mode	Power Consumption	45 W or less
	Default Time	60 minutes
	Recovery Time	120 seconds or less

# **How to Read This Manual**

#### **Symbols**

In this manual, the following symbols are used:

#### **⚠ WARNING:**

This symbol indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.

#### **↑** CAUTION:

This symbol indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to property.

\* The statements above are notes for your safety.

## **∰**Important

If this instruction is not followed, paper might be misfed or data might be lost. Be sure to read this.

## Preparation

This symbol indicates the prior knowledge or preparations required before operating.

#### Ø Note

This symbol indicates precautions for operation, or actions to take after misoperation.

## Limitation

This symbol indicates numerical limits, functions that cannot be used together, or conditions in which a particular function cannot be used.

## 

This symbol indicates a reference.

[ ]

Keys that appear on the machine's panel display.

Keys and buttons that appear on the computer's display.

Keys built into the machine's control panel

Keys on the computer's keyboard.

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# 1. Paper and Other Media

# Paper and Other Media Supported by This Printer

## **Paper Sizes**

This section describes the type, size, feed direction, and maximum amount of paper that can be loaded into each paper tray in this printer.

#### Ø Note

☐ The following symbols and terminology are used to represent the feed direction.

In this manual	On the panel display	Paper feed direction
$\square \leftarrow$ (Feed direction)	A4 (210 × 297) 8 1/2 × 11	Short-edge feed direction
$\square \leftarrow$ (Feed direction)	A4 (297 $\times$ 210) 11 $\times$ 8 1/2	Long-edge feed direction

 $\square$  Be careful of the paper feed direction. The direction is determined for each paper size.

## **❖** Input Paper Sizes (Metric version)

	Feed direction	Size (mm)	Bypass tray	Paper Tray (Tray 1)	Paper Feed Unit (Tray 2/3/4)	2000-sheet Large Capacity Tray
A3	₽	297 × 420	☆	×	0	×
B4 JIS	₽	257 × 364	☆	×	☆	×
A4	D .	210 × 297	☆	×	☆	×
	D	297 × 210	☆	•	0	•
B5 JIS	D	182 × 257	☆	×	☆	×
	D	257 × 182	☆	×	0	×
A5	D	148 × 210	☆	×	×	×
	D	210 × 148	☆	×	0	×
B6 JIS	┏	128 × 182	*	×	×	×

	Feed direction	Size (mm)	Bypass tray	Paper Tray (Tray 1)	Paper Feed Unit (Tray 2/3/4)	2000-sheet Large Capacity Tray
A6	┏	$105 \times 148$	☆	×	×	×
11"×17"	□	279 × 432	☆	×	0	×
Legal (LG, 8 <sup>1</sup> / <sub>2</sub> " × 14")	₽	216 × 356	☆	×	☆	×
Letter (LT, 8 <sup>1</sup> / <sub>2</sub> " × 11")	₽	216 × 279	☆	×	☆	×
	D	279 × 216	☆	×	0	×
$5^1/_2$ " × $8^1/_2$ "	D .	140 × 216	☆	×	×	×
Executive (Exec., $7^1/_4$ " × $10^1/_2$ ")	D	184 × 276	☆	×	☆	×
	D	276 × 184	☆	×	×	×
Folio (8 <sup>1</sup> / <sub>4</sub> " × 13")	D	210 × 330	☆	×	☆	×
Foolscap (F4, 8 <sup>1</sup> / <sub>2</sub> " × 13")	D	216 × 330	☆	×	☆	×
F/GL (8" × 13")	D	203 × 330	☆	×	☆	×
Com#10 Env $(9^1/2" \times 4^1/8")$	D	241.3 × 104.8	☆	×	×	×
C5 Env (9.02" × 6.38")	D	229 × 162	☆	×	×	×
C6 Env (6.38" × 4.49")	D	162 × 114	☆	×	×	×
DL Env (8.66" × 4.33")	D	220 × 110	☆	×	×	×
Monarch Env $(7^1/_2" \times 3^7/_8")$	D	190.5 × 98.4	☆	×	×	×
Custom Size	D	-	★*	×	×	×
$8K (10^1/2" \times 15.35")$	┏	267 × 390	☆	×	☆	×
$16K (7.68" \times 10^{1}/_{2}")$	┏	195 × 267	☆	×	☆	×
	D	267 × 195	☆	×	☆	×

- • means that the size is exclusive.
- © means that the size is supported and printer select the paper size automatically.
- ★ means that the size is supported but paper size should be selected with the control panel.
- \* means that the size is supported but paper size should be set with the control panel as a custom size.
- ★\* means that the supported size is approximately 90 304.8 mm in width, and approximately 148.2 457.2 mm in length. Set the custom size setting with the printer driver.
- × means that the size is not supported.

#### f

# Input Paper Sizes (Inch version)

	Feed direction	Size (inch)	Bypass Tray	Paper Tray (Tray 1)	Paper Feed Unit (Tray 2/3/4)	2000-sheet Large Capacity Tray
11"×17"	□	11"×17"	☆	×	0	×
Legal (LG)	┏	$8^1/_2$ " × 14"	☆	×	0	×
Letter (LT)	┏	$8^{1}/_{2}" \times 11"$	☆	×	0	×
	D	$11" \times 8^1/_2"$	☆	•	0	•
$5^1/_2$ " × $8^1/_2$ "	□	$5^1/_2$ " × $8^1/_2$ "	☆	×	×	×
Executive (Exec.)	┏	$7^1/_4$ " × $10^1/_2$ "	☆	×	☆	×
	D	$10^{1}/_{2}" \times 7^{1}/_{4}"$	☆	×	×	×
A3	┏	11.26" × 16.54"	☆	×	0	×
B4 JIS	┏	10.12" × 14.33"	☆	×	0	×
A4	┏	8.26" × 5.83"	☆	×	0	×
	D	5.83" × 8.26"	☆	×	0	×
B5 JIS	₽	7.17" × 10.12"	☆	×	☆	×
	D	10.12" × 7.17"	☆	×	0	×
A5	□	5.83" × 8.26"	☆	×	×	×
	D	8.26" × 5.83"	☆	×	0	×
B6 JIS	┏	5.04" × 7.17"	*	×	×	×
A6	┏	4.13" × 5.63"	☆	×	×	×
Folio	□	$8^1/4" \times 13"$	☆	×	☆	×
Foolscap F4	₽	$8^{1}/_{2}" \times 13"$	☆	×	☆	×
F/GL	┏	8"×13"	☆	×	☆	×
Com#10 Env	D	$9^1/_2 \times "4^1/_8"$	☆	×	×	×
C5 Env	D	9.02"×6.38"	☆	×	×	×
C6 Env	D	6.38" × 4.49"	☆	×	×	×
DL Env	D	8.66" × 4.33"	☆	×	×	×
Monarch Env	D	$7^1/_2$ " × $3^7/_8$ "	☆	×	×	×
Custom Size	D-	-	★*	×	×	×
8K	D-	$10^{1}/_{2}$ " × 15.35"	☆	×	☆	×
16K	D-	$7.68" \times 10^1/_2"$	☆	×	☆	×
	D	$10^1/_2$ " × 7.68"	☆	×	☆	×
-						

- means that the size is exclusive.
- © means that the size is supported and printer select the paper size automatically.
- ★ means that the size is supported but the paper size should be selected with the control panel.
- ★ means that the size is supported but the paper size should be set with the control panel as a custom size.
- ★\* means that the supported size is approximately 3.5 12 inch in width, and approximately 5.8 18 inch in length. Set the custom size setting with the printer driver.
- x means that the size is not supported.

#### Paper weight and number of sheets to be set

	Supported paper weight	Maximum number of sheets (plain paper) *1
Tray 1	60 - 105 g/m <sup>2</sup> (16 - 28 lb)	500 (80 g/m², 20 lb)
Tray 2	60 - 105 g/m <sup>2</sup> (16 - 28 lb)	500 (80 g/m², 20 lb)
Bypass Tray	52 - 162 g/m <sup>2</sup> (14 - 42 lb)	100 (80 g/m², 20 lb)
PAPER FEED UNIT Type 3800C (500 × 1)	60 - 105 g/m <sup>2</sup> (16 - 28 lb)	500 (80 g/m <sup>2</sup> , 20 lb)
PAPER FEED UNIT Type 3800C (500 × 2)	60 - 105 g/m <sup>2</sup> (16 - 28 lb)	1000 (80 g/m², 20 lb)
Paper Bank PS470 (2000-sheet Large Capacity Tray)	60 - 105 g/m <sup>2</sup> (16 - 28 lb)	2000 (80 g/m², 20 lb)
SR770 (2 Tray Finisher)	60 - 105 g/m <sup>2</sup> (16 - 28 lb)	2000 (80 g/m <sup>2</sup> , 20 lb)

 $<sup>^{*1}</sup>$  Confirm that the top of the stack is not higher than the limit mark inside the tray.

# Output Paper Sizes (Metric version)

	Feed direction	Size (mm)	Standard Tray	Output Tray	2 Tray Finisher	4-bin Mailbox
A3	□	297 × 420	0	0	0	0
B4 JIS	□	257 × 364	0	0	0	0
A4	□	210×297	0	0	0	0
	D	297 × 210	0	0	0	0
B5 JIS	□	182 × 257	0	0	0	0
	D	257 × 182	0	0	0	0
A5	□	148×210	0	0	×	0
	D	210 × 148	0	0	0	0
B6 JIS	□	128 × 182	0	0	×	×
A6	□	$105 \times 148$	0	0	×	×
11"×17"	□	279 × 432	0	0	0	0
Legal (LG, 8 <sup>1</sup> / <sub>2</sub> " × 14")		216 × 356	0	0	0	0
Letter (LT, $8^1/_2$ " × 11")	□	216×279	0	0	0	0
	D	279 × 216	0	0	0	0
$5^1/_2$ " × $8^1/_2$ "	□	140×216	0	0	×	0
Executive (Exec., $7^1/_4$ " × $10^1/_2$ ")	□	184×276	0	0	0	0
	D	276 × 184	0	0	×	×
Folio (8 <sup>1</sup> / <sub>4</sub> " × 13")	□	210 × 330	0	0	0	×
Foolscap (F4, 8 <sup>1</sup> / <sub>2</sub> " × 13")	□	216 × 330	0	0	0	×
F/GL (8" × 13")	□	203×330	0	0	0	0
Com#10 Env $(9^1/_2" \times 4^1/_8")$	D	241.3 × 104.8	×	0	×	×
C6 Env (9.02" × 6.38")	D	229 × 162	×	0	×	×
C6 Env (6.38" × 4.49")	D	162×114	×	0	×	×
DL Env (8.66" × 4.33")	D	220×110	×	0	×	×
Monarch Env $(7^{1}/_{2}" \times 3^{7}/_{8}")$	D	190.5 × 98.4	×	0	×	×
Custom Size		-	0	0	×	×
$8K (10^1/_2" \times 15.35")$		267 × 390	0	0	0	×
$16K (7.68" \times 10^{1}/_{2}")$	D'	195 × 267	0	0	0	0
	D	267 × 195	0	0	0	0

- O means that the size is supported.
- × means that the size is not supported.

## Output Paper Sizes (Inch version)

	Feed direction	Size (inch)	Standard Tray	Output Tray	2 Tray Finisher	4-bin Mailbox
11"×17"	₽	11"×17"	0	0	0	0
Legal (LG)	□	$8^1/_2$ " × 14"	0	0	0	0
Letter (LT)	□	$8^{1}/_{2}" \times 11"$	0	0	0	0
	D	$11" \times 8^1/_2"$	0	0	0	0
$5^1/_2$ " × $8^1/_2$ "	□	$5^1/_2$ " × $8^1/_2$ "	0	0	×	0
Executive (Exec.)	□	$7^{1}/_{4}$ " × $10^{1}/_{2}$ "	0	0	0	0
	D	$10^{1}/_{2}" \times 7^{1}/_{4}"$	0	0	×	×
A3	□	11.26" × 16.54"	0	0	0	0
B4 JIS	□	10.12" × 14.33"	0	0	0	0
A4	□	8.26" × 5.83"	0	0	0	0
	D	5.83" × 8.26"	0	0	0	0
B5 JIS	□	7.17" × 10.12"	0	0	0	0
	D	10.12" × 7.17"	0	0	0	0
A5	□	5.83" × 8.26"	0	0	×	0
	D	8.26" × 5.83"	0	0	0	0
B6 JIS	□	5.04" × 7.17"	0	0	×	×
A6	□	4.13" × 5.63"	0	0	×	×
Folio	₽	8 <sup>1</sup> / <sub>4</sub> "×13"	0	0	0	×
Foolscap F4	□	$8^1/_2$ " × 13"	0	0	0	×
F/GL	□	8" × 13"	0	0	0	0
Com#10 Env	D	$9^1/_2$ " × $4^1/_8$ "	×	0	×	×
C6 Env	D	6.38" × 4.49"	×	0	×	×
C5 Env	D	9.02" × 6.38"	×	0	×	×
DL Env	D	8.66" × 4.33"	×	0	×	×
Monarch Env	D	$7^1/_2$ " × $3^7/_8$ "	×	0	×	×
Custom Size	□	-	0	0	×	×
8K	₽	$10^{1}/_{2}$ " × 15.35"	0	0	0	×
16K	₽	$7.68" \times 10^1/_2"$	0	0	0	0
	D	$10^{1}/_{2}$ " × 7.68"	0	0	0	0

- O means that the size is supported and that the paper size should be set with the control panel. There is no dial in the tray.
- × means that the size is not supported.

# **Paper Recommendations**

# **Loading Paper**

# **∰**Important

- ☐ Do not use paper that is meant for an ink-jet printer or it may stick to the Fusing Unit and cause a paper misfeed.
- ☐ When printing on an OHP transparency that has a print side, load it with the print side over on the Bypass Tray. Not taking this precaution may cause it to stick to the Fusing Unit and cause a misfeed.
- ☐ Print quality cannot be guaranteed if recommended paper is not used. For details about recommended paper, contact your sales or service representative.
- ☐ Do not use paper that has already been printed onto by other printers.

# **Storing Paper**

- Paper should always be stored properly. Improperly stored paper might result in poor print quality, paper misfeeds, or printer damage. Recommendations are as follows:
  - Avoid storing paper in humid areas.
  - Avoid exposing paper to direct sunlight.
  - Store on a flat surface.
- Keep open reams of paper in the package in which the paper came.

# Types of Paper and Other Media

#### Plain Paper

- Tray 1/2 can hold up to 500 sheets.
   PAPER FEED UNIT Type 3800C (500x1) can hold up to 500 sheets.

   PAPER FEED UNIT Type 3800C (500x2) can hold up to 1000 sheets.
   Paper Bank PS470 can hold up to 2000 sheets.
   Confirm that the top of the stack is not higher than the limit mark inside the tray.
- Bypass Tray supports custom size, approximately 90 to 304.8 mm in width, and approximately 148.2 to 457.2 mm in length.
- When printing on the reverse side of plain paper that is already printed on, you should load it on the Bypass Tray and select [Plain(Duplex Backside)] from [Media Type] with the printer driver.

#### Thick Paper

- Use the Bypass Tray.
- The Bypass Tray can hold paper up to 135 kg (163 g/m²) in weight. The print quality on paper that is thicker cannot be guaranteed.
- Confirm that the top of the stack is not higher than the limit mark inside the tray.
- When printing on thick paper, select thick paper mode with the printer driver.
- When printing on the reverse side of plain paper that is already printed on, you should load it on the Bypass Tray and select [Thick(Duplex Backside)] from [Media Type] with the printer driver.

#### Note

☐ The number of sheets to be set may vary depending on the paper thickness and media type.

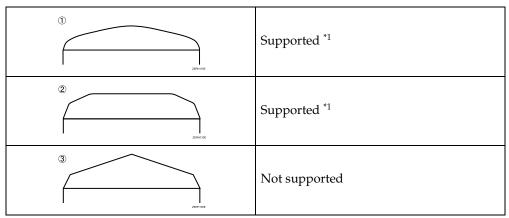
# OHP transparencies

- When printing on OHP transparencies, use the Bypass Tray.
- Load OHP transparencies on the tray with the print side over or they may stick to the Fusing Unit and cause a misfeed.
- Remove any unused OHP transparencies from the Bypass Tray after you finish printing. Leaving them in the tray may cause them to stick together.
- When printing on OHP transparencies, you should select the OHP transparency mode with the printer driver.
- Confirm that the top of the stack is not higher than the limit mark inside the tray.
- When you print OHP transparencies more than one copies, remove each sheet from the tray one by one before next sheet is printed out, or select "Slip Sheet" in the printer driver.

#### Envelopes

### #Important

☐ Only envelopes ① and ② as shown below are supported.

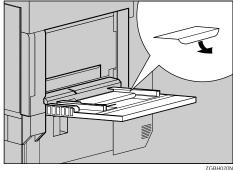


Misfeeds also might occur when using envelopes ① and ② depending on the length and shape of the flaps.

- When printing on envelopes, use the bypass tray, and select thick paper mode with the printer driver.
- Specifications of envelopes are as follows:

	Metric version	Inch version
Weight	72 - 90 g/m <sup>2</sup>	19 - 24 lb
Recommended weight and size	72 g/m <sup>2</sup> , 114 × 162 mm (C6 Env)	24 lb, $3^7/8$ " × $7^1/2$ "  (Monarch)

- You can load up to 10 envelopes  $(72 92 \text{ g/m}^2, 19 24 \text{ lb})$  in the Bypass Tray at the same time, without forcibly pressing them. Confirm that the envelopes are not damp, and that the top of the stack is not higher than the limit mark on the side guide.
- Confirm that the print side is facing up when loading onto the Bypass Tray.
- When loading envelopes, be sure to unfold the flaps and position them opposite to the paper feed direction.



- Confirm that there is no air in the envelopes before loading.
- To get better print quality, it is recommended that you set the right, left, top, and bottom print margin, to at least 15 mm (0.6") each.
- Do not print on both sides of envelopes.
- Load only one size and type of envelopes at the same time.
- Before loading envelopes, flatten the leading edges (the side being fed into the printer) of them by running a pencil or ruler across them.
- Before loading envelopes, confirm that they are rectangular in shape.
- Supported size of envelope is listed on p.1 "Paper and Other Media".

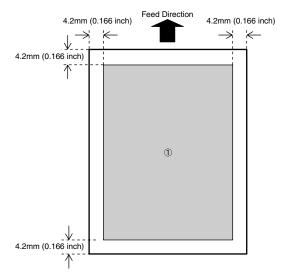
#### Paper not supported by this printer

Avoid using the following types of paper that are not supported by this printer:

- Paper meant for an ink-jet printer
- Bent, folded, or creased paper
- Curled or twisted paper
- Torn paper
- Wrinkled paper
- Damp paper
- Paper that is dry enough to emit static electricity
- Paper that has already been printed onto, except a preprinted letterhead
- Coated paper
- Special paper, such as thermal paper, aluminum foil, carbon paper and conductive paper
- Paper whose weight is heavier or lighter than the limitation.
- With windows, holes, perforations, cutouts, or embossing
- · Label paper on which glue or base paper is exposed
- Paper with clips or staples

# **Printable Area**

The following shows the printable area for this printer. Be sure to set the print margins correctly by the application.



①: printable area

### Note

☐ The printable area may vary depending on the paper size, printer language and printer driver settings.

# **Loading Paper**

Load paper and change the paper size in Tray 1, Tray 2 and the optional Paper Feed Unit by following the procedures below.

# **#Important**

- ☐ Tray 1 uses  $11 \times 8^1/_2$  ☐ paper exclusively. Load only  $11 \times 8^1/_2$  paper at all times.
- □ 2000-sheet Large Capacity Tray uses  $11 \times 8^1/_2$  □ paper exclusively. Load only  $11 \times 8^1/_2$  paper at all times.
- ☐ If you want to load A4 ☐ in Tray 1 and optional 2000-sheet Large Capacity Tray, contact your sales or service representative.

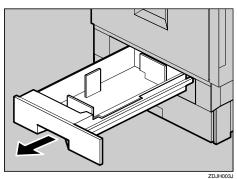
# 

See p.1 "Paper Sizes" concerning paper to be loaded in the Paper Tray and optional Paper Feed Unit.

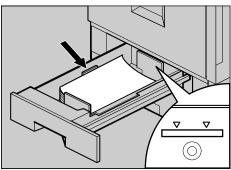
# **Loading Paper in Tray 1**

# **∰**Important

- ☐ Tray 1 uses  $11 \times 8^1/2$  ☐ paper exclusively. Load only  $11 \times 8^1/2$  paper at all times.
- ☐ If you want to load A4 ☐ in Tray 1, contact your sales or service representative.
- 1 Pull out the paper tray slowly until it stops.



2 Load paper into the tray with the print side down.



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### **∰**Important

- ☐ Confirm that the top of the stack is not higher than the limit mark inside the tray.
- **3** Carefully slide the paper tray into the printer until it stops.

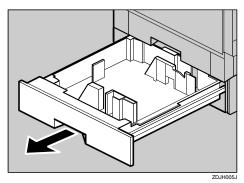
ľ

# 1

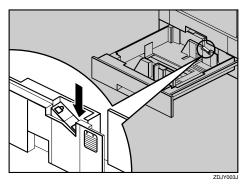
# Loading Paper in Tray 2 and the Optional Paper Feed Unit

This section describes loading paper which is different from default size in Tray 2.

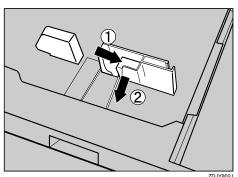
1 Pull out the Paper Tray slowly until it stops.



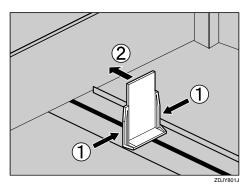
2 Set the paper guide lock to the "unlocked" position.



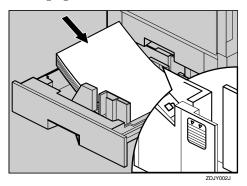
Pushing the green lever of the side guide (①), move the side guide toward you to open it (②).



Pinching both sides of the end guide (1), move the end guide in the direction of the arrow to open it.

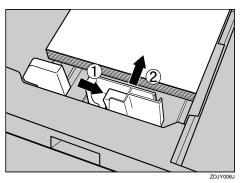


**5** Load paper in the same direction.

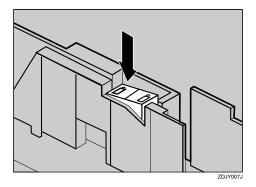


# **∰**Important

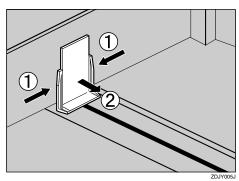
- ☐ Confirm that the top of the stack is not higher than the limit mark inside the tray.
- Pushing the green lever of the side guide (①), move the side guide toward the paper stack until it stops (②).



Make sure the paper is fixed in place, and then lock the side guide.



Pinching both sides of the end guide (①), move the end guide toward the paper stack until it stops (②).



2 Carefully slide the paper tray into the printer until it stops.

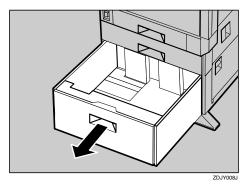
### **#Important**

☐ Do not slide the paper tray in with force. If you do, the front and side guides might move.

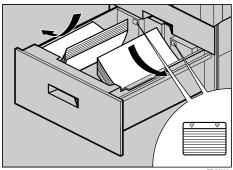
# Loading paper in Paper Bank PS470 (2000-sheet Large Capacity Tray)

# **∰**Important

- □ 2000-sheet Large Capacity Tray uses  $11 \times 8^1/2$  □ paper exclusively. Load only  $11 \times 8^1/2$  paper at all times.
- ☐ If you want to load A4 ☐ in the 2000-sheet Large Capacity Tray, contact your sales or service representative.
- 1 Pull out the Paper Tray slowly until it stops.



With the print side down, align all four sides of two paper stacks, and then load them next to each other in the tray. Each side has a limit of 1,000 sheets.



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# **∰**Important

- ☐ Align the paper and load them against the left and right walls, or a paper misfeed might occur.
- ☐ Confirm that the top of the stack is not higher than the limit mark inside the tray.
- Push in the Paper Tray slowly until it stops.

# **Load Paper in the Bypass Tray**

Besides regular paper, you can load thick paper, envelopes, OHP transparencies, and paper that is longer than A3 $\square$  onto the Bypass Tray, which cannot be loaded in the Paper Trays or Paper Feed Unit.

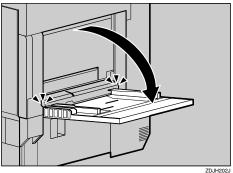
#### Note

- ☐ Paper sizes supported by the Bypass Tray are 90 - 304.8 mm in width, and 148.2 - 457.2 mm in length.
- ☐ If you load custom size paper, select [Custom Size] in the [Bypass Tray **Size]** with the control panel. And set the paper size with the printer driver.
- ☐ When you load custom-sized paper into the Bypass Tray, be sure to load it in the direction of short edge feed.
- ☐ The number of pages that can be loaded in the Bypass Tray differs depending on the media type. Confirm that the top of the stack is not higher than the limit mark inside the tray.

#### Limitation

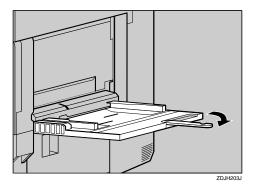
- ☐ You cannot use the following functions when printing on paper that is loaded in the Bypass Tray.
  - Duplex Print
  - Collate
  - Staple/Punch
  - **Auto Tray Select**

# 1 Open the bypass tray.



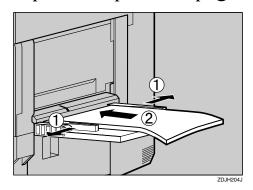
# Note

☐ If you load A4 or larger size paper, pull out the bypass tray extension, and then flip it open.

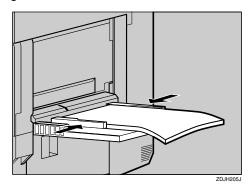


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Slide the side guides outward (1), and then load paper until it stops with the print side up (2).



Adjust the side guides to the paper width.



# ∰Important

- ☐ Confirm that the top of the stack is not higher than the limit mark inside the tray.
- ☐ Shuffle the paper before loading the stack onto the tray so multiple sheets are not fed in at one time.

### Setting the Paper Feed Direction

When using the Bypass Tray, you can set feed direction for the following sizes: A4, A5, B5, Executive, Letter and 16K.

1 Set feed direction and paper size using the control panel.

Use the printer driver to set the size of the paper loaded on the Bypass Tray.

# **Changing the Paper Tray Settings**

This section describes the settings of "Size", "Type", "Locking" and "Tray Priority" of the paper tray.

#### Size

You can set the paper size for Tray 2, optional Tray 3 and Tray 4.

#### 

□ Paper sizes that are not selected automatically are B5 JIS (182 × 257), 8  $1/2 \times 11$ , 8  $1/2 \times 14$ , 16k (267 × 195), 16k (195 × 267), 8k (267 × 390), 8  $1/4 \times 13$ , 8  $1/2 \times 13$ , 8 × 13 and 7  $1/4 \times 10$  1/2.

### Type

If you use different kinds of paper, you can set the media type for Tray 1, Tray 2, optional Tray 3 or optional Tray 4.

By selecting the media type you want to load, the printer can execute better printing. You can select from the following media types:

Tray 1 - 4
 Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Preprinted, Prepunched, Bond Paper, Card Stock

# N

#### Locking

If you use different kinds of paper, you can lock a tray to prevent printing on wrong paper such as letterhead or colored paper. When "Auto Tray Select" is selected in the Input Tray selections from the printer driver, the locked tray will not be used. You can select each tray set to on or off.

### Tray Priority

You can set which tray should be checked first when "Auto Tray Select" is selected in the Paper Source selections from the printer driver. However, Bypass Tray cannot be selected for Tray Priority.

# **∰**Important

☐ Tray 1 uses  $11 \times 8^1/_2$  ☐ paper exclusively. Load only  $11 \times 8^1/_2$  paper at all times.

Paper Bank PS470 uses  $11 \times 8^1/2$  paper exclusively. Load only  $11 \times 8^1/2$  paper at all times.

If you want to load A4  $\square$  in optional Paper Bank PS470, contact your sales or service representative.

1 Keep pressing [Menu] until "Tray Setup Menu" appears.

Tray Setup Menu

# Press [Enter #].

The following message appears on the panel display.

Tray 1 Type Plain Paper \* Press [▲] or [▼] until the media type you want to select appears on the panel display, and then press [Enter #].

The following message appears on the panel display.

Tray 1 Locking Off \*

Press [▲] or [▼] to select "On" or "Off", and then press [Enter #].

The following message appears on the panel display.

Tray 2 Size Auto \*

Press [▲] or [▼] until the paper size you want to select appears on the panel display, and then press [Enter #].

The following message appears on the panel display.

Tray 2 Type Plain Paper \*

Press [▲] or [▼] until the media type you want to select appears on the panel display, and then press [Enter #].

The following message appears on the panel display.

Tray 2 Lockins Off \*

Repeat from step **2** to set other trays in the same way.

And then following message appears on the panel display.

Tray Priority Tray 1 Press [▲] or [▼] until the paper tray you want to select appears on the panel display, and then press [Enter #].

### Note

☐ When sheets of mixed orientation are loaded, print appears in the direction of the long edge feed, regardless of the Tray Priority setting.

After a while, "Ready" appears on the panel display.

# 2. Cleaning and Adjusting the Printer

# Cautions to Take When Cleaning

#### **⚠ WARNING:**

- Do not remove any covers or screws other than those specified in this manual. Some parts of the machine are at a high voltage and could give you an electric shock. Also, if the machine has laser systems, direct (or indirect) reflected eye contact with the laser beam may cause serious eye damage. When the machine needs to be checked, adjusted, or repaired, contact your service representative.
- Do not take apart or attempt any modifications to this machine. There is a risk of fire, electric shock, explosion or loss of sight. If the machine has laser systems, there is a risk of serious eye damage.

#### **⚠** CAUTION:

• When removing misfed paper, do not touch the fusing unit because it could be very hot.

Clean the printer periodically to maintain fine printing.

Dry wipe the exterior with a soft cloth. If dry wiping is not enough, wipe with a soft, wet cloth that is wrung out well. If you still cannot remove the stain or grime, use a neutral detergent, then wipe over with a well-wrung wet cloth, dry wipe, and let it dry.

# **∰**Important

- ☐ To avoid deformation, discoloration, or cracking, do not use volatile chemicals, such as benzine and thinner, or spray insecticide on the printer.
- $\Box$  If there is dust or grime inside the printer, wipe with a clean, dry cloth.

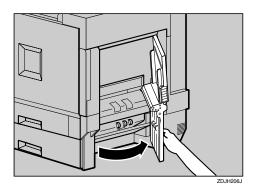
# Cleaning the Registration Roller

#### riangle CAUTION:

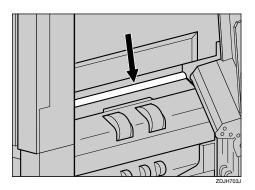
 The inside of the printer becomes very hot. Do not touch the parts with a label indicating the "hot surface", otherwise it could cause a burn.

Clean the roller when replacing the black Development Unit.

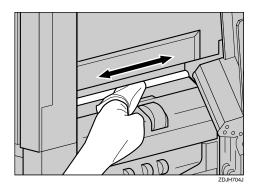
- 1 Turn off the power switch and unplug the power cable.
- 2 Open the right cover shown in the illustration.



The registration roller is set shown in the illustration.

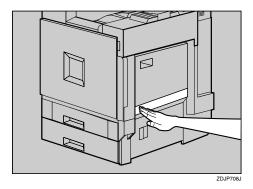


Wipe around the registration roller by turning with a soft damp cloth.



# ∰Important

- ☐ Do not use chemical cleaner or organic solvent such as thinner or benzene.
- 4 Close the right cover by pushing the area labeled "PUSH".

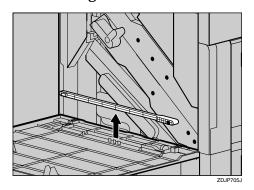


Plug in the power cable and turn on the power switch.

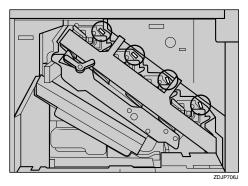
# **Cleaning the DustProof Glass**

The dustproof glass may require cleaning if white lines appear on the print side of the document.

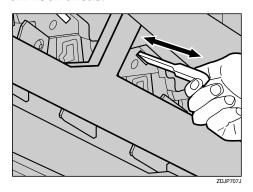
- 1 Turn off the power switch and unplug the power cable.
- 2 Open the front cover and remove the cleaning brush.



There are four holes for cleaning the dustproof glass.



Slide the cleaning brush in and out slowly 8 to 10 times to clean all four areas.



# **∰**Important

- ☐ Do not insert the brush roughly, or the printer might be damaged.
- 4 Return the cleaning brush to its original position.
- Plug in the power cable and turn on the power switch.

# Adjusting the Color Registration

When the printer is moved, when the Fusing Unit is replaced, or after printing repeatedly for some time, registration shifting might occur. By performing color registration adjustment, you can maintain optimum print results.

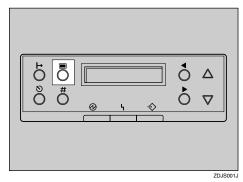
### Note

☐ Normally, do not perform manual color adjustment.

# **Auto Adjust**

If the color documents show registration shifting, perform automatic color adjustment.

1 Keep pressing [Menu] until "Maintenance" appears.



Maintenance

# Press [Enter #].

The following message appears on the panel display.



- Press [▲] or [▼] to select "Yes", and then press [Enter].
- Press [▲] or [▼] to display "Auto Adjust", and then press [Enter #].

Auto Adjust

# Press [Enter #].

The following message appears on the panel display.

Auto Adjust Now Yes \*

Press [▲] or [▼] to select "Yes", and then press [Enter #]. Automatic color adjustment begins, and the following message appears on the panel display.

Adjustins...

When it completes, a check message is displayed, and the display is returned to the "Auto Adjust" menu.

Completed

Auto Adjust Yes \*

After a while, "Ready" appears on the panel display.

#### **𝚱** Note

□ When the toner cartridge is almost empty or "Auto Adjust" is not completed, the following message appears on the panel display.

Failed. Press # To Exit

Press **[Enter #]** to return to "Maintenance", and then repeat the steps from **2**.

# **Fuser Adjust**

#### When replacing the fusing unit

#### Note

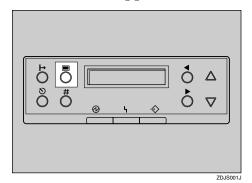
☐ When "Toner is Almost Empty" appears on the panel display, replace the toner cartridge and perform "Auto Adjust", and then perform the "Fuser Adjust".

# 

⇒ p.65 "Replacing the Toner Cartridge"

⇒ p.22 "Auto Adjust"

1 Keep pressing [Menu] until "Maintenance" appears.



Maintenance

# Press [Enter #].

The following message appears on the panel display.

Color Resist. No \*

- Press [▲] or [▼] to select "Yes", and then press [Enter #].
- Press [▲] or [▼] to display "Fuser Adjust At Unit Replace", and then press [Enter #].

Fuser Adjust At Unit Replace

The following message appears on the panel display.

Print Test Sheet No \*

# **#**Important

☐ When the toner cartridge is almost empty or "Auto Adjust" is not finished, the following message appears on the panel display and Fuser Adjust is not available.

Cannot Adjust See User's Guide

Confirm that the toner cartridge is installed. The toner cartridge must be installed. See p.65 "Replacing the Toner Cartridge".

If the toner cartridge is installed, perform "Auto Adjust". See p.22 "Auto Adjust".

Confirm that the A3 paper which comes with the Fusing Unit is in the Bypass Tray, and then press [▲] or [▼] to select "Yes", and then press [Enter #].

The printer prints 8 Test Sheet (A - H). For details about Test Sheet, see p.28 "Test Sheet Samples"

To make the offset settings, repeat steps 1 to 4 and select "No" when the following message appears on the panel display.

Print Test Sheet No \*

# Press [Enter #].

Check the test sheets and select the correction value for A through H.

- Select "1", if black and magenta square overlap sharply and you can see white slits as the sample.
- Select "0", if black and magenta square do not overlap sharply and you can not see white slits clearly.

A B C D E F G H 0 0 0 0 0 0 0 0

Press 【▲】 or 【▼】 to select "0" or "1" as the values for A - H. Press 【▶】 or 【◆】 to move to the next letter. After setting the value for "H", press 【Enter #】 and the printer returns to "Fuser Adjust At Unit Replace".

After a while, "Ready" appears on the panel display.

# **∰**Important

☐ If you select "0" for each alphabets or an invalid value is selected, an error message is displayed. In this case, press [Enter] to repeat steps from 7.

Invalid Value Cannot Adjust

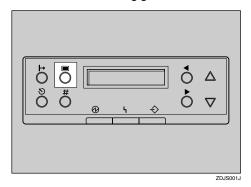
#### When color shifting occurs

Perform this procedure when color shifting occurs even after performing "Auto Adjust".

- 1 Load A4 or larger paper in the Bypass Tray.
  - Note
  - ☐ Be sure to select paper size in the "Tray Setup Menu".

For details about paper size and the procedure for loading paper in the Bypass Tray, see p.16 "Changing the Paper Tray Settings".

**2** Keep pressing [Menu] until "Maintenance" appears.



Maintenance

# Press [Enter #].

The following message appears on the panel display.

Color Re§ist. No \*

- Press [▲] or [▼] to select "Yes", and then press [Enter #].
- Press [▲] or [▼] to display "Fuser Adjust Custom Adjust", and then press [Enter #].

Fuser Adjust Custom Adjust

The following message appears on the panel display.

Custom Adjust Plain 600 dpi \*

# **∰**Important

☐ When the toner cartridge is almost empty or "Auto Adjust" is not finished, the following message appears on the panel display and Fuser Adjust is not available.

Cannot Adjust See User's Guide

Confirm that the toner cartridge is installed. The toner cartridge must be installed. See p.65 "Replacing the Toner Cartridge".

If the toner cartridge is installed, perform "Auto Adjust". See p.22 "Auto Adjust".

Press [▲] or [▼] to display the media types and resolution in which color shifting occurs, and then press [Enter #].

Select a value from "Plain 600 dpi", "Plain 1200 dpi" or "Thick 600 dpi".

#### Note

☐ To adjust the color registration on thick paper, select "Thick: 600dpi" regardless of the current resolution.

The following message appears on the panel display.

Print Test Sheet No \*

Press [▲] or [▼] to select "Yes", and then press [Enter #].

The following message appears on the panel display.

Set Sheet Bypass A3

After printing the test sheet, "Ready" appears on the panel display.

To make the offset settings, repeat steps 2 to 3 and select "No" when the following message appears on the panel display.

Print Test Sheet No \*

# 9 Press [Enter #].

The following message appears on the panel display.

Select Action 0:Exit

# Press [▲] or [▼] to make the offset settings, and then press [Enter #].

When such a clear (not smeared in red) square as the sample is:

- at its center position, select "0".
- shifted to the left, select "-1".
- shifted to the right, select "+1".

Select Action: 0: Exit

Select Action: -1: Re-adjust

Select Action: +1: Re-adjust

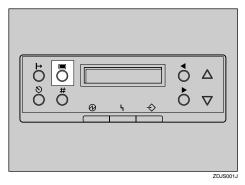
If you select "0: Exit", the printer returns to the previous menu.

If you select "-1" or "+1", the printer returns to step **6**. Keep adjusting until "0" is available.

# **Manual Adjust**

### #Important

- ☐ Normally, do not perform manual color adjustment.
- 1 Keep pressing [Menu] until "Maintenance" appears.



Maintenance

# Press [Enter #].

The following message appears on the panel display.

Color Re§ist. No \*

- Press [▲] or [▼] to select "Yes", and then press [Enter].
- Press [▲] or [▼] to display "Manual Adjust", and then press [Enter].

Manual Adjust

The following message appears on the panel display.

Print Test Sheet No \* Press [▲] or [▼] to select "Yes", and then press [Enter #].

The printer prints the test sheet. See p.28 "Test Sheet Samples".

To make the offset settings, repeat steps 1 to 2 and select "No" when the following message appears on the panel display.

Print Test Sheet No \*

Press [Enter #].

The following massage appears on the panel display.

Adjustment A 0.0 \*

- Enter the correct values for A through L on the test sheet in order.
  - Note
  - ☐ Confirm the printed Test Sheet to enter the correction values.
  - Use [▲] or [▼] to enter the value (-7.0 to +7.0) shown next to the whitest square, into box A of the Test Sheet.

Adjustment A +2.0

- Note
- ☐ Pressing (▲) or (▼) increases or decreases the value in 0.5 units.
- ☐ Sometimes, there are two of the whitest squares next to each other. For example, if the two squares of "+1" and "+2" are the whitest, enter "+1.5".

- ☐ You can adjust the color alignment for each color in the range of "-7.0 to +7.0".
- ☐ There is an area on the Test Sheet for you to put down the values of "A" through "L".
- 2 Press [Enter #].
- 3 Make the settings for "B" to "L" in the same manner, using steps 1 and 2.
- 4 When you finish the settings up to "L", press [Enter #].

The following message appears on the panel display.

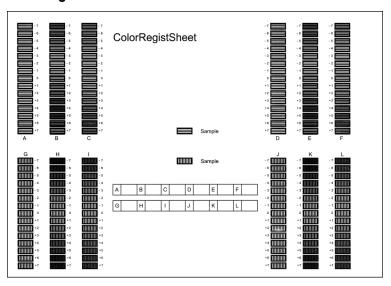
Maintenance

After a while, "Ready" appears on the panel display.

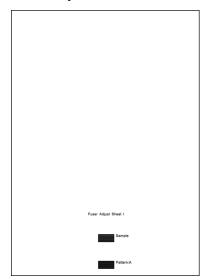
# **Test Sheet Samples**

Following images are samples for the test sheet.

# ❖ ColorRegistSheet



### **❖** Fuser Adjust Sheet I



# ❖ Fuser Adjust Sheet II



# **Adjusting the Image Density**

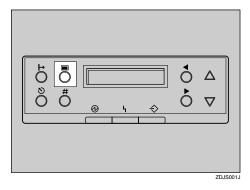
Adjust the image density when the print side of the page is a hazy gray or the print image looks patchy.

# ∰Important

- ☐ Extreme settings may create output that appears dirty.
- ☐ Image density settings should be made from the application or the printer driver whenever possible.

# Note

- ☐ Changing the image density setting might cause a deterioration of color balance. We recommend that you leave the image density at its factory default setting.
- 1 Keep pressing [Menu] until "Maintenance" appears.



Maintenance

**2** Keep pressing [Enter #] until "Image Density" appears.



# Press [▲] or [▼] to select "Yes", and then press [Enter #].

The following massage appears on the panel display.

Black Ø

Press [▲] or [▼] to set the image density value for each color, and then press [Enter #].

The display of the following color appears on the panel display.

#### **𝚱** Note

☐ You can adjust the image density in seven steps from -3 to +3. Increasing the value makes the printouts darker and decreasing the value makes the printouts lighter.

When the setting completes, "Maintenance" appears on the panel display.

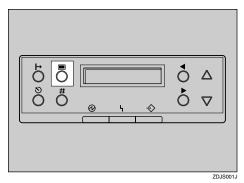
Ma intenance

After a while, "Ready" appears on the panel display.

# Adjusting the Registration of the Trays

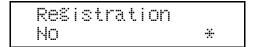
You can adjust the registration of each tray. The vertical adjustment is used for all trays. Normally, you need not update the registration. But when the optional Paper Feed Unit or the Duplex Unit is installed, updating the registration is useful in some cases. The following procedure describes how to adjust Tray 3. You can use the same procedure to adjust the other tray as well.

**1** Keep pressing [Menu] until "Maintenance" appears.



Maintenance

2 Keep pressing [Enter #] until "Registration" appears.



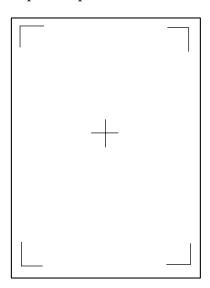
Press [▲] or [▼] to select "Yes", and then press [Enter #].

```
Print Test Sheet
No *
```

Print the test sheet to preview the settings.

- Press [▲] or [▼] to select "Yes", and then press [Enter #].
- Press [▲] or [▼] to select the tray to adjust, and then press [Enter #].

  The printer prints the test sheet.



Confirm the position of the image to test sheet, and then adjust the registration value.

To make adjustment, repeat steps
to and select "No" when the
following message appears on the
panel display.

Print Test Sheet No \*

Press [Enter #].

The following massage appears on the panel display.

Enter Adjustment Vertical

# 8 Press [Enter #].

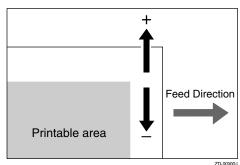
The following massage appears on the panel display.

Tray 3 0

Press [▲] or [▼] to set the registration value, and then press [Enter #].

The display of the following tray appears on the panel display.

- **𝒯** Note
- ☐ You can adjust the registration for each tray in the range of "-4 to +4".
- □ Pressing [♠] or [♥] makes the value increase or decrease by 1.0 mm step.
- ☐ Increase the value to shift the print area in a positive direction, and decrease to shift in a negative direction.



When the setting completes, "Maintenance" appears on the panel display.

Maintenance ReSistration

Print the test sheet to check the settings you have made.

# 3. Using SmartNetMonitor

# **SmartNetMonitor for Admin**

SmartNetMonitor for Admin is a software that uses the TCP/IP and IPX/SPX protocols to monitor the printers in a network. It can monitor multiple network printers having IP/IPX addresses. We recommend network administrators to use this software.

#### What can it do?

SmartNetMonitor for Admin is equipped with the following functions.

- Monitors multiple printers at the same time. When there are many printers, you can create groups and classify the printers to facilitate management.
- Checks the printer's network settings and detailed information of devices.
- Checks per print job the number of pages printed with the printer.
- Enables extra-router printer searching and non-local printer monitoring.

#### 

See the SmartNetMonitor for Admin Help file for more information about using SmartNetMonitor for Admin.

# Installing SmartNetMonitor for Admin

- 1 Close all applications that are running.
- **2** Insert the CD-ROM into the CD-ROM drive.
- Click [Start] on the task bar.
- 4 Click to select [Run].
- In the [Run] dialog box, click [Browse].
- **6** Select the CD-ROM drive.
- **7** Select the file titled [SSetup.exe].
- 8 Click [Open].
- 9 Click [0K].

# 10 Select a language to change the interface language, and then click [OK].

The following languages are available: ENGLISH (English), DEUTSCH (German), FRANCAIS (French), ITALIANO (Italian), ESPANOL (Spanish), SVENSKA (Swedish), NEDRLNDS (Dutch), NORSK (Norwegian), DANSK (Danish), SUOMI (Finnish), PORTUGUS (Portuguese), POLSKI (Polish), CHESKY (Czech), MAGYAR (Hungarian)

- Select the SmartNetMonitor for Admin, and then click [OK].
- **1** Follow the instructions on the screen.

#### Note

- ☐ If you require restarting the computer after the installation of SmartNet-Monitor for Admin is completed, restart the computer and continue the configuration.
- ☐ SmartNetMonitor for Admin is stored in the following folder on the CD-ROM

NETWORK\NETMON\ADMIN\DISK1

# Protocol Stack

OS	Protocol Stack	
Microsoft Windows 95/98/Me	TCP/IP provided with Windows 95/98/Me	
	IPX/SPX provided with Windows 95/98/Me	
	NetWare network client provided with Windows 95/98	
	Novell Client for Windows 95/98	
Microsoft Windows 2000	TCP/IP provided with Windows 2000	
	IPX/SPX provided with Windows 2000	
	NetWare Client provided with Windows 2000	
	Novell Client for Windows NT/2000	
Microsoft Windows XP	TCP/IP provided with Windows XP	
Microsoft Windows NT4.0	TCP/IP provided with Windows NT	
	IPX/SPX provided with Windows NT	
	Client Service for NetWare provided with Windows NT	
	Novell Client for Windows NT/2000	

# **SmartNetMonitor for Client**

SmartNetMonitor for Client is a software equipped with the following functions. We recommend all users of this printer to install this software.

- Provides the function to print in a Peer-to-Peer network, using the TCP/IP protocol and IPP from Windows 95/98/Me, Windows 2000, Windows XP and Windows NT 4.0.
- Uses the TCP/IP and IPX/SPX protocols to monitor the status of devices in a network constantly.

#### ♦ What can it do?

SmartNetMonitor for Client is equipped with the following functions.

- Peer-to-Peer print function
  - Prints directly on the network printer without a print server.
  - Prints on a substitute printer when there are too many jobs accumulated in the specified printer, or when an error disables printing (Recovery printing).
  - Allocates multiple printings to multiple printers (Parallel Printing).
  - Prior group registration of printers specified for Recovery/Parallel Printing.
- Simultaneously monitors multiple printers in use.
- Checks the printer's network settings and detailed information of devices.
- An error message warns when there is an error on the specified printer during transfer of data.
- Enables extra-router printer searching and non-local printer monitoring.

# Limitation

- ☐ Make similar settings for the option configuration of the printer for Recovery/Parallel Printing and the printer for giving print commands. If the required options necessary for printing, such as the Paper Feed Unit, are not installed on the substitute printer, that function is disabled.
- □ Load paper of the same size on both the printer for Recovery/Parallel Printing and the printer for giving print commands. When specifying a particular Paper Tray for printing, load paper of the same size into that tray.
- ☐ If the type and devices of the printer for Recovery/Parallel Printing and the printer for giving commands are different, the print results might not turn out identical.
- ☐ If you select Check and Print or Secure Print, you cannot execute Recovery/Parallel Printing.

# 

See the SmartNetMonitor for Client Help file for more information about using SmartNetMonitor for Client.

# **Installing SmartNetMonitor for Client**

- 1 Close all applications that are running.
- **2** Insert the CD-ROM into the CD-ROM drive.
- Click [Start] on the task bar.
- 4 Click to select [Run].
- In the [Run] dialog box, click [Browse].
- **6** Select the CD-ROM drive.
- **7** Select the file titled [SSetup.exe].
- 8 Click [Open].
- 9 Click [OK].
- f 0 Select a language to change the interface language, and then click [OK].

The following languages are available: ENGLISH (English), DEUTSCH (German), FRANCAIS (French), ITALIANO (Italian), ESPANOL (Spanish), SVENSKA (Swedish), NEDRLNDS (Dutch), NORSK (Norwegian), DANSK (Danish), SUOMI (Finnish), PORTUGUS (Portuguese), POLSKI (Polish), CHESKY (Czech), MAGYAR (Hungarian)

- Select the SmartNetMonitor for Client, and then click [OK].
- 12 Follow the instructions on the screen.

# **𝚱** Note

- ☐ If you require restarting the computer after the installation of SmartNet-Monitor for Client is completed, restart the computer and continue the configuration.
- ☐ SmartNetMonitor for Client is stored in the following folder on the CD-ROM

NETWORK\NETMON\CLIENT\DISK1



OS	Protocol Stack	
Microsoft Windows 95/98/Me	TCP/IP provided with Windows 95/98/Me IPX/SPX provided with Windows 95/98/Me NetWare network client provided with Windows 95/98 Novell Client for Windows 95/98	
Microsoft Windows 2000	TCP/IP provided with Windows 2000 IPX/SPX provided with Windows 2000 NetWare Client provided with Windows 2000 Novell Client for Windows NT/2000	
Microsoft Windows XP	TCP/IP provided with Windows XP	
Microsoft Windows NT4.0	TCP/IP provided with Windows NT IPX/SPX provided with Windows NT Client Service for NetWare provided with Windows NT Novell Client for Windows NT/2000	

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# Displaying the Status of Printer

You can view the status of printers using SmartNetMonitor for Admin and SmartNetMonitor for Client.

# SmartNetMonitor for Admin

- 1 Run SmartNetMonitor for Admin.
- Click the [Group] menu, point to [Open LAN], and select [TCP/IP] or [IPX/SPX]. The status of each printer is indicated with an icon in the list.
  - Ø Note
  - ☐ For more information about the status icons, see the Help file.
- To get further information, click the desired printer to select from the list, and then click [Open] on the [Device] menu.

The status of the printer is displayed on a dialog box.

- Note
- ☐ For more information about each item on the dialog box, see the Help file.

# SmartNetMonitor for Client

To view the status of printers using SmartNetMonitor for Client, you must, in advance, configure SmartNetMonitor for Client so it monitors the printer whose status you want to view.

# **Monitoring Printers**

1 Run SmartNetMonitor for Client.

The SmartNetMonitor for Client icon appears at the right end of the taskbar.

- 2 Right-click the SmartNetMonitor for Client icon, and check if the desired printer is configured on the pop-up menu that appears.
  - If it is configured, see p.39 "Displaying the Status of Printers".
- If the desired printer is not configured, click [Options] on the pop-up menu. The [SmartNetMonitor for Client Options] dialog box appears.

- 4 Click the printer to be monitored, and select the [To Be Monitored] check box from the [Monitoring Information Settings] group.
  - Note
  - ☐ Selecting the **[Displayed on Task Bar]** check box will bring up the status of a printer with an icon on the SmartNetMonitor for Client icon on the task tray.
- Click [OK].

The dialog box closes and the configured printer is monitored.

#### Displaying the Status of Printers

- **1** Run SmartNetMonitor for Client.
- **2** The status of each printer is displayed on the SmartNetMonitor for Client icon on the task tray.
  - Note
  - ☐ For more information about the status icons, see the Help file.
- To get further information on the status, right-click the SmartNetMonitor for Client icon and click the desired printer.

The status of the printer is displayed on a dialog box.

- **𝚱** Note
- ☐ For more information about each item on the dialog box, see the Help file.

# 4. Troubleshooting

# Error & Status Messages on the Control Panel

### Status Messages

Messages/Second messages	Description	Solution
Calibrating	The printer is calibrating the color.	Wait for a while.
Energy Save Mode	In Energy Save Mode Level 2.	No action required.
Hex Dump Mode	In Hex Dump Mode.	No action required.
Loading Toner	The printer is loading the toner.	Wait for a while.
Offline	The printer is offline and cannot print data.	Press [On Line].
Processing	Print data is being processed.	Wait for a while.
Ready	The default ready message. The printer is ready to use.	No action required.
Resetting Job	Job is being reset.	Wait for a while.
Warming Up	The printer is warming up and not ready.	Wait until the printer signals Ready.

# **♦** Alert Messages

Messages/Second messages	Description	Solution
Add Staples	The stapler is out of staples. Job is not stapled.	Replace new staples. See p.90 "Adding Staples".
Add Toner/Yellow/Magenta/Cyan/Black	The printer is out of the indicated toner(s).	Replace a new toner cartridge of the indicated color(s). See p.63 "Replacing Consum- ables and Maintenance Kit".
Close Duplex Unit Cover	The cover for the duplex unit is open.	Close the cover for the duplex unit.
Close Finisher Front Cover	The front cover for the finisher is open.	Close the front cover for finisher.
Close Upper Right Cover	The upper right cover (the cover for the toner cartridge) is open.	Close the upper right cover.
Close Finisher Upper Cover	The finisher upper cover is open.	Close the upper cover for the finisher.
	The paper entrance cover for the finisher is open.	Close the upper entrance cover for the finisher.

Messages/Second messages	Description	Solution
Close Front Cover	The front cover is open.	Close the front cover for the printer.
Close Lower Right Cover	The right cover for the paper feed table/large capacity tray is open.	Close the right cover for the paper feed table/large capacity tray.
Close Mailbox Cover	The cover for 4-bin Mailbox is open.	Close the cover for the 4-bin Mailbox tray.
Close Right Cover	The right cover is open.	Close the right cover.
Close Upper Left Cover	The upper left cover (the cover for the fusing unit) is open.	Close the upper left cover.
Hardware Problem Finisher	There is a problem with the finisher.	Turn the power switch off and then on. If the message ap- pears again, contact your sales or service representative.
Hardware Problem Staple Unit	There is misfeed in the finisher or there is a problem with the staple unit failure.	Remove the misfeed. If the message appears again, contact your sales or service representative.
Hardware Problem Tray 1	There is a problem with the paper lift motor of the Tray 1.	Turn the power switch off and then on. If the message ap- pears again, contact your sales or service representative.
Hardware Problem Tray 2	There is a problem with the paper lift motor of the Tray 2.	Turn the power switch off and then on. If the message ap- pears again, contact your sales or service representative.
Hardware Problem Tray 3	There is a problem with the paper lift motor of the paper tray 3.	Align paper and set them in the collect position in the paper tray 3.
		Turn the power switch off and then on. If the message appears again, contact your sales or service representative.
Hardware Problem Tray 4	There is a problem with the paper lift motor of the paper tray 4.	Turn the power switch off and then on. If the message ap- pears again, contact your sales or service representative.
Load Bypass Tray Paper Size Media Type	The paper size or media type set in the Bypass Tray differs from the setting made.	Load {paper size and media type} paper into the Bypass Tray, and then change the paper size and media type with the operation panel.  Or press [Enter #], and then select the tray with the control panel.
		Or press [Cancel] to cancel the print job.

Messages/Second messages	Description	Solution
Load Paper Tray #	The indicated tray is out of paper. #: tray number	Load paper into the indicated paper tray.
Load Tray # Paper Size Media Type	The paper size or media type set in the indicated tray differs from the setting made. #: tray number	Load {paper size and media type} paper into the tray, and then change the paper size and type with the operation panel.  Or press [Enter #], and then select the tray with the control panel.  Or press[Cancel] to cancel the print job.
Punch-Hole Chips Are Full	The punch waste box is full of punch chips.	Remove the punch chips from the punch waste box. See p.62 "Removing Punchhole Chips"
		When the message appears even if the punch waste box is not full, remove the Punchhole chips on the top of the punch waste box.
		See p.62 "When the message appears even after removing the Punch-hole chips"
Remove Misfeed A:Internal Path /See Instructions in Front	There is a misfeed in the printer.	Remove the misfed paper following the instructions inside the front cover.
Cover		For more information, see p.54 "When "Remove Misfeed A:Internal Path" Appears".
Remove Misfeed B: Fusing Unit /See Instructions in Front	There is a misfeed in the fusing unit.	Remove the misfed paper following the instructions inside the front cover.
Cover		For more information, see p.55 "When "Remove Misfeed B: Fusing Unit" Appears".
Remove Misfeed R: Finisher /Open Finisher Cover	There is a misfeed in the finisher.	Open the finisher cover and remove misfeed.  For more information, see p.56 "When "Remove Misfeed R: Finisher" Appears".

Messages/Second messages	Description	Solution
Remove Misfeed W: Mailbox /Open Mailbox Cover	There is a misfeed in the output 4-bin tray.	Open the mailbox cover and remove misfeed.
		For more information, see p.56 "When "Remove Misfeed W: Mailbox" Appears".
Remove Misfeed Y: Paper Tray /See Instructions in Front Cover	There is a misfeed in the specified input tray, or the printer is not feeding paper.	Remove the misfed paper following the instructions inside the front cover.
		For more information, see p.58 "When "Remove Misfeed Y: Paper Tray" Appears".
Remove Misfeed Z1: Duplex Unit /See Instructions in Front	There is a misfeed in the duplex unit.	Remove the misfed paper following the instructions inside the front cover.
Cover		For more information, see p.59 "When "Remove Misfeed :Duplex Unit " Appears".
Remove Misfeed Z2:	There is a misfeed in the du-	Remove the misfed paper.
Dup.Feed Unit /See Instructions in Front Cover	plex feed unit.	See p.96 "Removing Misfed Paper in the Duplex Feed Unit".
Remove Paper All Output Trays	All output trays are full.	Remove paper from all output trays.
Remove Paper Finisher Tray #	The indicated finisher shift tray is full. #:finisher shift tray number	Remove the paper from the indicated finisher shift tray.
Remove Paper Inside Finisher	There is still paper in the finisher.	Open the cover for the finisher and remove paper.
Remove Paper Mailbox Tray #	The output tray # of the optional 4-bin Mailbox is full. #:mailbox tray number	Remove paper from the indicated 4-bin Mailbox tray.
Remove Paper Standard Tray	The standard output tray is full	Remove paper from standard output trays.
Replace Black Dev. Unit(TypeD)	It is time to replace the black development unit.	Replace a new black development unit.
		Depending on your service contract, contact your sales or service representative.
		See p.63 "Replacing Consumables and Maintenance Kit".

Messages/Second messages	Description	Solution
Replace Black PCU (Type F)	It is time to replace the black PCU.	Replace a new black PCU.  Depending on your service contract, contact your sales or service representative.  See p.63 "Replacing Consumables and Maintenance Kit".
Replace Color Dev. Unit(TypeB)	It is time to replace the color development unit.	Replace a new color development unit.  Depending on your service contract, contact your sales or service representative.  See p.63 "Replacing Consumables and Maintenance Kit".
Replace Color PCU (Type A)	It is time to replace the color PCU.	Replace a new color PCU.  Depending on your service contract, contact your sales or service representative.  See p.63 "Replacing Consumables and Maintenance Kit".
Replace Feed Roller (Type H)	It is time to replace the paper feed roller.	Replace the paper feed rollers.  Depending on your service contract, contact your sales or service representative.  See p.87 "Replacing the Paper Feed Rollers".
Replace Fuser Oil Unit (TypeG)	It is time to replace the fuser oil unit.	Replace a new fuser oil unit.  Depending on your service contract, contact your sales or service representative.  See p.63 "Replacing Consumables and Maintenance Kit".
Replace FuserOil Unit soon (TypeG)	The fuser oil unit should be replaced soon.	Prepare a new fuser oil unit. Depending on your service contract, contact your sales or service representative. See p.63 "Replacing Consum- ables and Maintenance Kit".
Replace Fuser Unit (Type C)	It is time to replace the fusing unit.	Replace a new fusing unit.  Depending on your service contract, contact your sales or service representative.  See p.63 "Replacing Consumables and Maintenance Kit".

Messages/Second messages	Description	Solution
Replace Fusing Unit soon (TypeC)	The fusing unit should be replaced soon.	Prepare a new fusing unit. Depending on your service contract, contact your sales or service representative.
		See p.63 "Replacing Consumables and Maintenance Kit".
Replace Waste Toner (Type E)	It is time to replace the waste toner.	Replace a new fusing unit.  Depending on your service contract, contact your sales or service representative.  See p.63 "Replacing Consumables and Maintenance Kit".
Reset Develop. Unit Correctly /Yellow/Magenta Cyan/Black	The indicated development unit(s) is/are not set correctly, or is not set.	Set the indicated development unit(s) correctly. See p.63 "Re- placing Consumables and Maintenance Kit".
Reset Duplex Unit Correctly	The duplex paper feed unit is not set correctly or is not set.	Remove and reinstall the duplex paper feed unit. If the error continues, contact your sales or service representative.  See "Setting Up" in the Setup Guide.
Reset Finisher Correctly	Finisher is not set correctly, or is not set.	Set the finisher correctly. See "Setting Up" in the Setup Guide.
Reset Fuser Oil Unit Correctly	The fuser oil unit is not set correctly, or is not set.	Set the fuse oil unit correctly. See p.63 "Replacing Consumables and Maintenance Kit".
Reset Fusing Unit Correctly	There is no fusing unit, or the fusing unit is not installed correctly.	Set the fusing unit correctly. See p.63 "Replacing Consumables and Maintenance Kit".
Reset PCU Correctly /Yellow/Magenta Cyan/Black	The indicated Photoconductor Unit(s) is / are not set correctly, or is not set.	Set the indicated Photoconductor Unit(s) correctly. See p.63 "Replacing Consumables and Maintenance Kit".
Reset Toner Black	The indicated toner cartridge is not set correctly.	Set the indicated toner cartridge(s) correctly. See "Setting Up" in the Setup Guide.
Reset Toner Cyan	The indicated toner cartridge is not set correctly.	Set the indicated toner cartridge(s) correctly. See "Setting Up" in the Setup Guide.

Messages/Second messages	Description	Solution
Reset Toner Magenta	The indicated toner cartridge is not set correctly.	Set the indicated toner cartridge(s) correctly. See "Setting Up" in the Setup Guide.
Reset Toner Yellow	The indicated toner cartridge is not set correctly.	Set the indicated toner cartridge(s) correctly. See "Setting Up" in the Setup Guide.
Reset Tray # Correctly	The indicated paper input tray is not set correctly, or is not set. #: tray number	Set the indicated paper input tray correctly.
Reset Waste Toner Correctly	The waste toner bottle is not set correctly, or is not set.	Set the waste toner bottle correctly.
SC XXX-X Power Off On /If Error Reoccur Call Service	The Service Code or SC number indicates the problem.	Turn the power switch off and then on. If the message ap- pears again, contact your sales or service representative.
Toner is Almost Empty: Black	The printer is almost out of toner (K).	Prepare a new toner cartridge (K).
Toner is Almost Empty: Cyan	The printer is almost out of toner (C).	Prepare a new toner cartridge (C).
Toner is Almost Empty: Magenta	The printer is almost out of toner (M).	Prepare a new toner cartridge (M).
Toner is Almost Empty: Yellow	The printer is almost out of toner (Y).	Prepare a new toner cartridge (Y).
Tray Load /Paper Size Media Type	The paper size and media type set in the tray differs from the setting made.	Load {paper size and media type} paper with the selected feed direction into the tray, and then change the paper size and media type with the operation panel.  Or press [Enter #], and then select the tray with the control panel.  Or press[Cancel] to cancel the print job.
Waste Toner Is Almost Full (E)	The waste toner bottle is almost full of toner dust.	Prepare a new waste toner bottle or contact your sales or service representative.  See "Appendix" in the Setup Guide.

## **Printer Does Not Print**

Possible Cause	Solutions
Is the power on?	Confirm that the cable is securely plugged into the power outlet and the printer.
	Turn on the power switch.
Does the <b>Online</b> indicator stay on?	Press <b>(On Line)</b> so the indicator lights.
Does the <b>Error</b> indicator stay red?	Check the error message on the panel display and take the required action.
Is paper loaded?	Load paper into the paper tray or on the bypass tray.
	See p.15 "Load Paper in the Bypass Tray".
Can you print a configuration page?	If you cannot print a configuration page, it probably indicates a printer malfunction. You should contact your sales or service representative.
	See "Printing the Configuration Page" in Setup Guide.
Is the interface cable connecting the printer to the computer connected securely?	Connect the interface cable properly. If there are any connectors or screws, confirm that they are fastened securely.
Are you using the correct interface cable?	The type of interface cable you should use depends on the computer. Be sure to use the correct one.
	If the cable is damaged or worn, replace it with a new one.

Possible Cause	Solutions
Is the <b>Data In</b> indicator blinking or lit after starting	If not blinking or lit, the data is not being sent to the printer.
the print job?	♦ If the printer is connected to the computer using the in-
	terface cable
	Make sure the printer port settings are correct. For a parallel port connection, port LPT1 or LPT2 should be set.
	• Windows 95/98/Me
	① Click [Start], point to [Settings], and then click [Printers].
	② Click to select the icon of the printer. Next, on the [File] menu, click [Properties].
	③ Click the [Details] tab.
	④ Check the [Print to the following port] box to confirm that the correct port is selected.
	• Windows 2000
	① Click [Start], point to [Settings], and then click [Printers].
	② Click to select the icon of the printer. Next, on the [File] menu, click [Properties].
	③ Click the [Port] tab.
	④ Check the [Print to the following port] box to confirm that the correct port is selected.
	Windows XP
	<ol> <li>Access the [Printers and Faxes] window from [Start] on the taskbar.</li> </ol>
	② Click to select the icon of the printer. Next, on the [File] menu, click [Properties].
	③ Click the [Port] tab.
	4 Check the [Print to the following port(s).] box to confirm that the correct port is selected.
	Windows NT 4.0
	① Click [Start], point to [Settings], and then click [Printers].
	② Click to select the icon of the printer. Next, on the [File] menu, click [Properties].
	③ Click the [Port] tab.
	4 Check the [Print to the following port] box to confirm that the correct port is selected.
	♦ Network Connection
	Contact your network administrator.

## Other Printing Problems

Black gradation is not natural.  PCL 5c Adjust [Color Setting] setting under the [Fiery Printing] tab in the printer driver.  PostScript Adjust [Color Wise] setting under the [Fiery Printing] tab in the printer driver.  Color documents are printed in black and white.  PCL 5c Select "Color" for the Color Setting under the printer drivere's [Fiery Printing] tab.  PCL 5c Select "Standard Color" or "Expert Color" for the Color Wise under the printer drivere's [Fiery Printing] tab.  Some applications normally print color text as black and white.  Fine dot pattern does not print.  PCL 5c Adjust [Color Setting] setting under the [Fiery Printing] tab in the printer driver.  PostScript Adjust [Color Wise] setting under the [Fiery Printing] tab in the printer driver.  PostScript Adjust [Color Wise] setting under the [Fiery Printing] tab in the printer driver.  For more information, see the Color Guide.  You might be printing on paper smaller than the paper size selected in the application. Use paper the same size as that selected in the application. If you cannot load paper of the correct size, use the reduction function to reduce the image, and then print.  Photographs and other data intensive pages take a long time for the printer to process, so simply wait when printing such data.  Changing the following settings may help to speed up printing.  PCL 5c Reduce the size of data to be printed.  PostScript Select "600x600 dpi" for Resolution under the [Print Quality] tab in the printer driver's dialog box.  Select "Post Script(optimize for speed)" for PostScript output format under the [PostScript] tab in the printer driver's dialog box.  The data is so large or complex that it takes time to process it. If the Data in undicator is blinking, the data processing is being done. Just wait until it resumes.	Status	Possible Causes, Descriptions, and Solutions
black and white.  PCL 5c Select "Color" for the Color Setting under the printer driver's [Fiery Printing] tab.  PostScript Select "Standard Color" or "Expert Color" for the Color Wise under the printer driver's [Fiery Printing] tab.  Some applications normally print color text as black and white.  Fine dot pattern does not print.  PCL 5c Adjust [Color Setting] setting under the [Fiery Printing] tab in the printer driver.  PostScript Adjust [Color Wise] setting under the [Fiery Printing] tab in the printer driver.  For more information, see the Color Guide.  Images are cut off, or excess pages are printed.  You might be printing on paper smaller than the paper size selected in the application. Use paper the same size as that selected in the application. If you cannot load paper of the correct size, use the reduction function to reduce the image, and then print.  It takes too much time to complete the print job.  Photographs and other data intensive pages take a long time for the printer to process, so simply wait when printing such data.  Changing the following settings may help to speed up printing.  PCL 5c Reduce the size of data to be printed.  PostScript Select "600×600 dpi" for Resolution under the [Print Quality] tab in the printer driver's dialog box. Select "Post Script(optimize for speed)" for PostScript output format under the [PostScript] tab in the printer driver's dialog box.  The data is so large or complex that it takes time to process it. If the Data In indicator is blinking, the data processing is	Black gradation is not natural.	<ul> <li>Adjust [Color Setting] setting under the [Fiery Printing] tab in the printer driver.</li> <li>PostScript Adjust [Color Wise] setting under the [Fiery Printing] tab in</li> </ul>
white.  Fine dot pattern does not print.  • PCL 5c     Adjust [Color Setting] setting under the [Fiery Printing] tab in the printer driver.  • PostScript     Adjust [Color Wise] setting under the [Fiery Printing] tab in the printer driver.  For more information, see the Color Guide.  Images are cut off, or excess pages are printed.  You might be printing on paper smaller than the paper size selected in the application. Use paper the same size as that selected in the application. If you cannot load paper of the correct size, use the reduction function to reduce the image, and then print.  It takes too much time to complete the print job.  Photographs and other data intensive pages take a long time for the printer to process, so simply wait when printing such data.  Changing the following settings may help to speed up printing.  PCL 5c     Reduce the size of data to be printed.  PostScript     Select "600×600 dpi" for Resolution under the [Print Quality] tab in the printer driver's dialog box.  Select "Post Script(optimize for speed)" for PostScript output format under the [PostScript] tab in the printer driver's dialog box.  The data is so large or complex that it takes time to process it. If the Data In indicator is blinking, the data processing is		<ul> <li>PCL 5c         Select "Color" for the Color Setting under the printer driver's [Fiery Printing] tab.</li> <li>PostScript         Select "Standard Color" or "Expert Color" for the Color Wise under the printer driver's [Fiery Printing] tab.</li> </ul>
Adjust [Color Setting] setting under the [Fiery Printing] tab in the printer driver.  PostScript Adjust [Color Wise] setting under the [Fiery Printing] tab in the printer driver.  For more information, see the Color Guide.  You might be printing on paper smaller than the paper size selected in the application. Use paper the same size as that selected in the application. If you cannot load paper of the correct size, use the reduction function to reduce the image, and then print.  It takes too much time to complete the print job.  Photographs and other data intensive pages take a long time for the printer to process, so simply wait when printing such data.  Changing the following settings may help to speed up printing.  PCL 5c Reduce the size of data to be printed.  PostScript Select "600×600 dpi" for Resolution under the [Print Quality] tab in the printer driver's dialog box. Select "Post Script(optimize for speed)" for PostScript output format under the [PostScript] tab in the printer driver's dialog box.  The data is so large or complex that it takes time to process it. If the Data In indicator is blinking, the data processing is		, , ,
Images are cut off, or excess pages are printed.  You might be printing on paper smaller than the paper size selected in the application. Use paper the same size as that selected in the application. If you cannot load paper of the correct size, use the reduction function to reduce the image, and then print.  It takes too much time to complete the print job.  Photographs and other data intensive pages take a long time for the printer to process, so simply wait when printing such data.  Changing the following settings may help to speed up printing.  PCL 5c Reduce the size of data to be printed.  PostScript Select "600×600 dpi" for Resolution under the [Print Quality] tab in the printer driver's dialog box. Select "Post Script(optimize for speed)" for PostScript output format under the [PostScript] tab in the printer driver's dialog box.  The data is so large or complex that it takes time to process it. If the Data In indicator is blinking, the data processing is	Fine dot pattern does not print.	<ul> <li>Adjust [Color Setting] setting under the [Fiery Printing] tab in the printer driver.</li> <li>PostScript Adjust [Color Wise] setting under the [Fiery Printing] tab in the printer driver.</li> </ul>
selected in the application. Use paper the same size as that selected in the application. If you cannot load paper of the correct size, use the reduction function to reduce the image, and then print.  It takes too much time to complete the print job.  Photographs and other data intensive pages take a long time for the printer to process, so simply wait when printing such data.  Changing the following settings may help to speed up printing.  PCL 5c Reduce the size of data to be printed.  PostScript Select "600×600 dpi" for Resolution under the [Print Quality] tab in the printer driver's dialog box. Select "Post Script(optimize for speed)" for PostScript output format under the [PostScript] tab in the printer driver's dialog box.  The data is so large or complex that it takes time to process it. If the Data In indicator is blinking, the data processing is	T	
for the printer to process, so simply wait when printing such data.  Changing the following settings may help to speed up printing.  PCL 5c Reduce the size of data to be printed.  PostScript Select "600×600 dpi" for Resolution under the [Print Quality] tab in the printer driver's dialog box. Select "Post Script(optimize for speed)" for PostScript output format under the [PostScript] tab in the printer driver's dialog box.  The data is so large or complex that it takes time to process it. If the Data In indicator is blinking, the data processing is	-	selected in the application. Use paper the same size as that selected in the application. If you cannot load paper of the correct size, use the reduction function to reduce the image,
		for the printer to process, so simply wait when printing such data.  Changing the following settings may help to speed up printing.  PCL 5c Reduce the size of data to be printed.  PostScript Select "600×600 dpi" for Resolution under the [Print Quality] tab in the printer driver's dialog box. Select "Post Script(optimize for speed)" for PostScript output format under the [PostScript] tab in the printer driver's dialog box.  The data is so large or complex that it takes time to process it. If the Data In indicator is blinking, the data processing is

Status	Possible Causes, Descriptions, and Solutions
It takes too much time to complete the print job.	If "Warming Up" appears on the panel display, the printer is now warming up. Wait for a while.
	<ul> <li>✓ Note</li> <li>□ To maintain the best quality, color adjustment is executed regularly during printing or after printing. Even if printing is not specified, color adjustment is sometimes executed regularly when the power is on.</li> </ul>
It takes too much time to resume printing.	The data is so large or complex that it takes time to process it. If the <b>Data In</b> indicator is blinking, the data processing is being done. Just wait until it resumes.
	The printer might be warming up from the Energy Saver mode. It takes time until printing starts.
Multiple pages are fed through the printer at once.	Paper misfeeds easily when the Paper Feed Roller is dirty. Contact your sales or service representative to replace the Paper Feed Roller.
Output are not delivered to the selected tray you require.	When using the bypass tray, the size selected on the display panel might be different from actual paper size. Select the correct paper size.
	See p.1 "Paper and Other Media Supported by This Printer".
	When you are using a Windows operating system, the printer driver settings override those set using the control panel. Set the desired output tray using the printer driver.
Paper misfeeds occur frequently.	Check that the side guide of the Paper Tray is locked. See p.12 "Loading Paper".
	The paper size and feed direction of the paper in the Bypass Tray might not be the same as those you selected with the control panel. Check the settings on the control panel, and load paper of the correct paper size and feed direction.
	See p.15 "Load Paper in the Bypass Tray".
	Check that the paper guide of the Paper Tray is attached properly.
Solid areas, lines or text are shiny or glossy when created as a mixture of cyan, magenta, yel-	PCL 5c     Adjust [Color Setting] setting under the [Fiery Printing] tab in the printer driver.  Page 16. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
low.	PostScript     Adjust [Color Wise] setting under the [Fiery Printing] tab in the printer driver.
Solid lines are printed as broken lines.	PCL 5c     Adjust [Color Setting] setting under the [Fiery Printing] tab in the printer driver.
	<ul> <li>PostScript         Adjust [Color Wise] setting under the [Fiery Printing] tab in the printer driver.</li> </ul>

Status	Possible Causes, Descriptions, and Solutions
Some parts of the print image are not clear.	Make the image density darker.  To adjust the image density, press [Menu] on the control panel, and select Image Density from the Maintenance menu.
The color of the printout is dif- ferent from the color on the	The toner based color settings with the printer driver causes a drastic change in printout color.
computer's display.	Changing the color settings with the printer driver causes a drastic change in printout color.
The image is printed in the wrong orientation.	The feed direction you selected and the orientation selected in Layout of the printer driver might not be the same. Make the proper settings.
The control panel error message stays on after removing the misfed paper.	Open the front cover of the printer, and then close it.
The print image is not clear.	Due to a sudden change in temperature, condensation might appear inside the printer, reducing print quality. If this occurs, when you move the printer from a cold room to a warmer room, do not use the printer until it acclimatizes to the temperature.
The print side of the page is a hazy gray.	Adjust the image density.  To adjust the image density, press [Menu], and select Image Density from the Maintenance menu.
	See p.19 "Cleaning and Adjusting the Printer".
	If paper is curled, correct it.  Curled or folded paper might cause a hazy gray print. Curling often occurs on postcards, so be sure to correct it before printing.
The printed image is different from the image on the computer.	When you use some functions, such as enlargement and reduction, the layout of the image might be different from that displayed in the computer display.
	You might have selected to replace True Type fonts with printer fonts in the printing process.
	To print an image similar to the image on the computer, make the settings to print out True Type fonts as an image.
The printer does not print at 1200dpi, even if 1200dpi resolution is selected.	Printing at 1200dpi uses much memory. Therefore, depending on the memory capacity, you may not be able to print at 1200dpi. Either add memory to the printer, or reduce the size of data to be printed.
There are color differences in the color documents.	Press [Menu], and select "Color Regist." from the "Maintenance" menu.
	See p.19 "Cleaning and Adjusting the Printer".

#### Ø Note

 $\hfill \square$  If the problem cannot be solved, contact your sales or service representative.

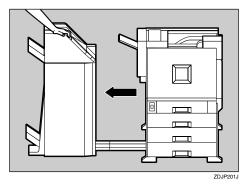
## **Removing Misfed Paper**

If a paper misfeed occurs, an error message appears indicating the location of the misfed paper on the panel display. This printer has the auto-recovery function, by which misfed paper is sent to the Standard Tray or Right Cover. Usually, you can remove the misfed paper easily with this function.

#### **Detaching the 2 Tray Finisher**

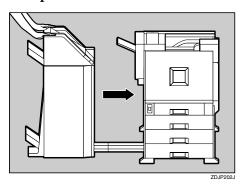
There are times when you might have to detach the 2 Tray Finisher from the printer to remove misfed paper. This section describes how to detach the 2 Tray Finisher.

1 Hold the handle at the top of the 2 Tray Finisher firmly with one hand, pull the 2 Tray Finisher straight out, and let go when it stops.



The 2 Tray Finisher is detached from the printer.

2 Use both hands to push it straight back in, and let go when it clicks into place.



The 2 Tray Finisher is reattached to the printer.

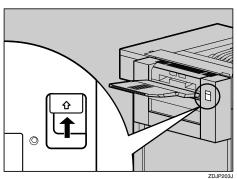
#### **#Important**

☐ Attach the 2 Tray Finisher to the printer after closing the Duplex Reversal Unit.

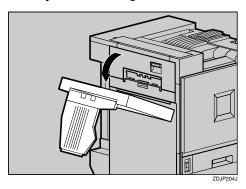
#### Opening and Closing the Duplex Reversal Unit

There are times when you might have to detach the Duplex Reversal Unit to remove misfed paper. This section describes how to detach the Duplex Reversal Unit.

1 Push up the lock release button and keep it in place.



#### 2 Lower the Duplex Reversal Unit slowly until it stops.



#### **#Important**

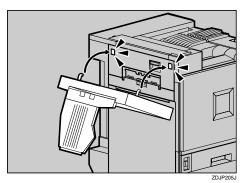
☐ Open the Duplex Reversal Unit after detaching the 2 Tray Finisher from the printer.

#### 

☐ You do not have to remove the output tray even if the 2 Tray Finisher is attached.

The Duplex Reversal Unit is opened.

3 Raise the Duplex Reversal Unit slowly with both hands, and push it in until it clicks into place.



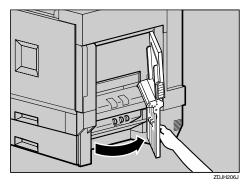
The Duplex Reversal Unit is closed.

#### **#Important**

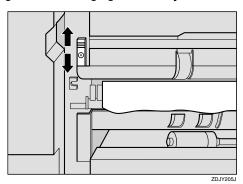
☐ Attach the Duplex Reversal Unit after closing the upper left cover for the printer.

### When "Remove Misfeed A:Internal Path" Appears

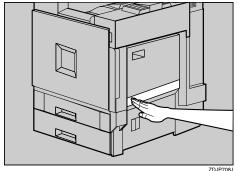
1 Open the right cover.



2 Move the blue lever up and down to feed the misfed paper, and then pull out the paper slowly.



Close the right cover by pushing the area labeled "PUSH".



## When "Remove Misfeed B: Fusing Unit" Appears

#### **↑** CAUTION:

- The inside of the machine becomes very hot. Do not touch the parts with a label indicating a "hot surface". Touching a "hot surface" could result in a burn.
- If the 2 Tray Finisher is installed, detach it from the printer.

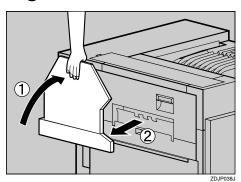
⇒ p.53 "Detaching the 2 Tray Finisher"

If the Duplex Unit is installed, open the Duplex Reversal Unit.

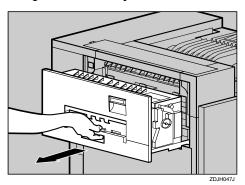
#### 

⇒ p.53 "Opening and Closing the Duplex Reversal Unit"

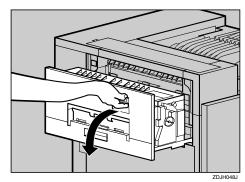
If the output tray is attached to the printer, raise it in the direction of the arrow (1), and remove it (2).



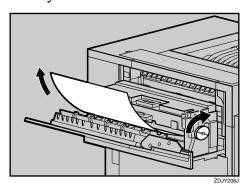
Pull out the upper left cover for the printer slowly.



**5** Open the upper left cover.

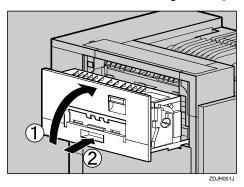


Turn the blue dial in the direction of the arrow to feed the misfed paper, and pull out the paper slowly.

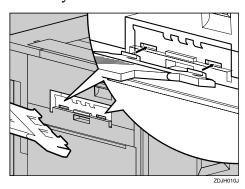


#### **#Important**

- ☐ Always turn the blue dial in the direction of the arrow. If you turn it in the reverse direction, the paper feeds into the printer, making it difficult for you to take out the paper.
- ☐ Do not pull out the misfed paper. Use the blue dial to feed misfed paper.
- Close the upper left cover (1) and push the handle slowly to the back until it clicks into place (②).



8 If you removed the output tray in step 3, reattach it to the printer. Insert the hooks of the output tray into the printer slits, and lower it toward you.



If the Duplex Unit is installed, close the Duplex Reversal Unit.

#### 

 $\Rightarrow$  p.53 "Opening and Closing the Duplex Reversal Unit"

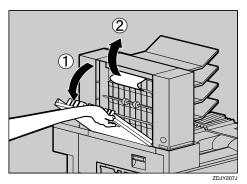
If the 2 Tray Finisher was installed, reattach the 2 Tray Finisher to the printer.

#### 

 $\Rightarrow$  p.53 "Detaching the 2 Tray Finisher"

### When "Remove Misfeed W: Mailbox" Appears

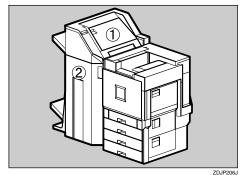
1 Open the Mailbox Cover slowly (1), pull out the misfed paper slowly (**2**).



**2** Close the Mailbox Cover.

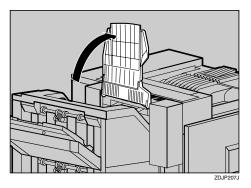
#### When "Remove Misfeed R: Finisher" Appears

Open the top cover (1) and front cover (2) of the 2 Tray Finisher, and remove the misfed paper.

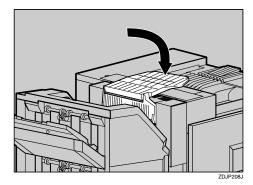


### **1** Fold the Output Tray.

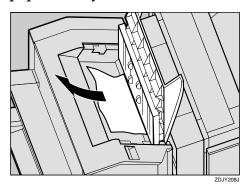
• Raise it vertically.



**2** Fold it along the printer body.



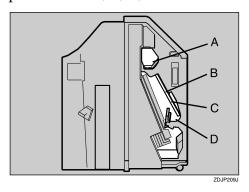
2 Open the top cover for the 2 Tray Finisher, and pull out the misfed paper slowly.



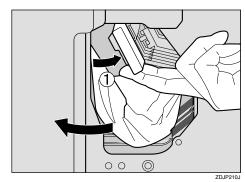
**3** Close the top cover slowly.

#### 4 Open the front cover for the 2 Tray Finisher.

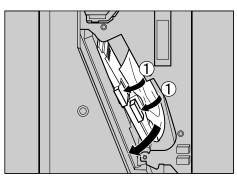
Check to see if there is a misfed paper in areas A, B, C, and D.



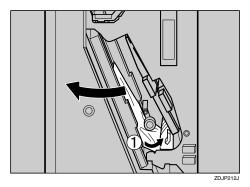
**5** Check area A of step **4**. Lift the lever (1), and while supporting it with your hand not to lower, pull out the misfed paper slowly.



- 6 Lower the lever slowly to return it into place.
- **7** Check areas B and C of step **4**. Lower the lever in the direction of the arrows (1), and pull out the misfed paper slowly.



- E Lift the lever slowly to return it into place.
- Oheck area D of step 4. Lift the lever in the direction of the arrow (1), and pull out the misfed paper slowly.



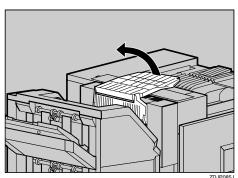
- Lower the lever slowly to return it into place.
- Close the front cover for the 2 Tray Finisher.

If the error message does not clear even after the misfed paper is removed, detach the 2 Tray Finisher from the printer to check for the misfed paper there.

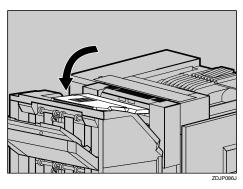
#### 

See p.53 "Detaching the 2 Tray Finisher" for details about how to detach/reattach the 2 Tray Finisher from/to the printer.

- Return the Output Tray back into place.
  - **1** Raise the tray.

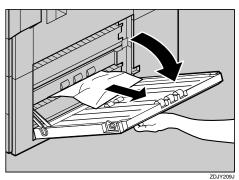


2 Lower it slowly.



## When "Remove Misfeed Y: Paper Tray" Appears

1 Open the Lower Right cover for the Paper Feed Unit, and pull out the misfed paper.



2 Close the Lower Right cover for the Paper Feed Unit.

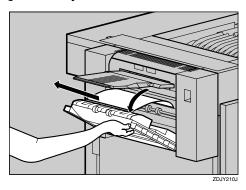
## When "Remove Misfeed :Duplex Unit " Appears

#### **CAUTION:**

- The inside of the machine becomes very hot. Do not touch the parts with a label indicating a "hot surface". Touching a "hot surface" could result in a burn.
- If the 2 Tray Finisher is installed, detach it from the printer.

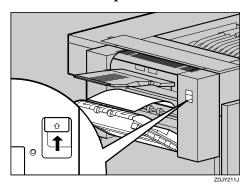
⇒ p.53 "Detaching the 2 Tray Finisher"

2 Open the left cover for the Duplex Reversal Unit, and remove the misfed paper. Do not pull the paper out by force.

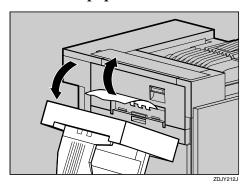


If you cannot remove the paper, proceed to step **3**.

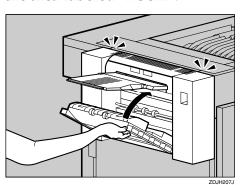
Push up the lock release button for the Duplex Reversal Unit, and then hold it in place.



4 Lower the Duplex Reversal Unit slowly until it stops, and remove the misfed paper.



Raise the Duplex Reversal Unit slowly and insert until it clicks into place. Raise the left cover, and close it securely by pushing the area labeled "PUSH".



#### 1

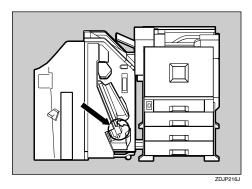
## **Removing Jammed Staples**

When "Add Staples " appears on the panel display, or when the printer does not staple even after it is instructed to, the staples might be jammed.

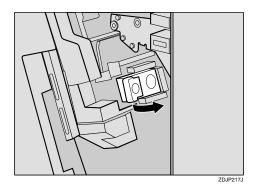
Add Staples

1 Open the front cover for the 2 Tray Finisher.

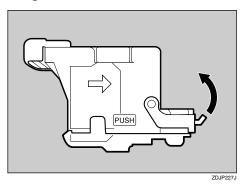
The stapler is attached to the position shown in the illustration.



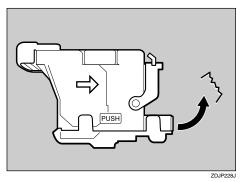
**2** Remove the cartridge by pulling the green knob in the direction of the arrow.



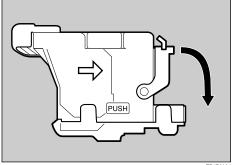
Open the face plate of the cartridge to unlock it.



4 Remove the jammed staples.

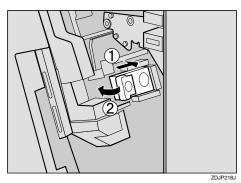


Close the face plate of the cartridge until it clicks into place.



ZDJP229

6 Slant and insert the cartridge (①), and push in until it clicks into place (②).



**7** Close the front cover for the 2 Tray Finisher.

#### 4

### **Removing Punch-hole Chips**

When "Punch-hole Chips are Full" appears on the panel display, the punch waste box is full. Follow these steps to remove paper chips.

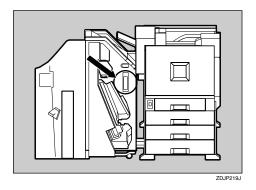
#### Note

☐ Same message appears when the punch waste box is not installed correctly.

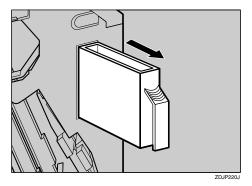
Punch-hole Chips are Full

1 Open the front cover for the 2 Tray Finisher.

The punch waste box is attached to the position shown in the illustration.



2 Pull out the punch waste box and remove the paper chips.

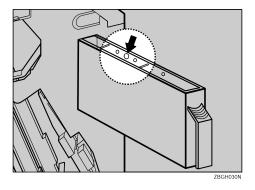


**3** Reinstall the punch waste box.

Close the front cover for the 2 Tray Finisher.

# When the message appears even after removing the Punch-hole chips

When the "Punch-hole Chips are Full" message appears on the control panel even the punch waste box is not full, punch-hole chips might be stuck around the punch waste box hole as shown in the illustration. Remove the punch-hole chips around the hole.

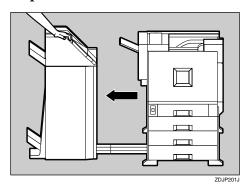


## Replacing Consumables and Maintenance Kit

## Detaching the SR770 (2 Tray Finisher)

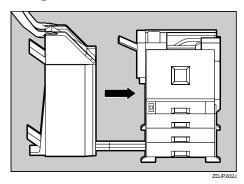
There are times when you might have to detach the 2 Tray Finisher from the printer to remove misfed paper. This section describes how to detach the 2 Tray Finisher.

1 Hold the handle at the top of the 2 Tray Finisher firmly with one hand, pull the 2 Tray Finisher straight out, and let go when it stops.



The 2 Tray Finisher is detached from the printer.

2 Use both hands to push it straight back in, and let go when it clicks into place.



The 2 Tray Finisher is reattached to the printer.

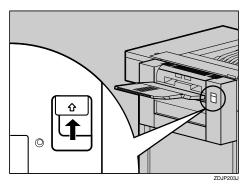
#### **∰**Important

☐ Be sure to attach the 2 Tray Finisher to the printer after closing the Duplex Reversal Unit. See p.64 "Opening and Closing the Duplex Reversal Unit".

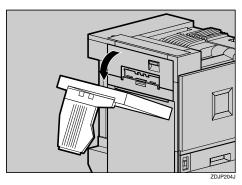
## Opening and Closing the Duplex Reversal Unit

There are times when you might have to detach the Duplex Reversal Unit to remove misfed paper. This section describes how to detach the Duplex Reversal Unit.

1 Push up the lock release button and keep it in place.



**2** Lower the Duplex Reversal Unit slowly until it stops.



#### ∰Important

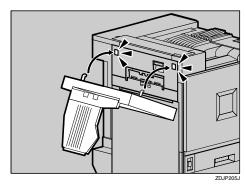
☐ Open the Duplex Reversal Unit after detaching the 2 Tray Finisher from the printer. See p.63 "Detaching the SR770 (2 Tray Finisher)".

#### Note

☐ You do not have to remove the External Tray even if the 2 Tray Finisher is attached.

The Duplex Reversal Unit is opened.

Raise the Duplex Reversal Unit slowly with both hands, and push it in until it clicks into place.



The Duplex Reversal Unit is closed.

#### **#Important**

☐ Attach the Duplex Reversal Unit after closing the upper left cover of the printer.

## Replacing the Toner Cartridge

#### riangle WARNING:

 Do not incinerate spilled toner or used toner. Toner dust is flammable and might ignite when exposed to an open flame. Disposal should take place at an authorized dealer or an appropriate collection site. If you dispose of the used toner cartridges yourself, dispose of them according to local regulations.

#### A CAUTION:

- The inside of the machine becomes very hot. Do not touch the parts with a label indicating a "hot surface". Touching a "hot surface" could result in a burn.
- Keep toner (used or unused) and the toner cartridge out of reach of children.
- Our products are engineered to meet the highest standards of quality and functionality. When purchasing expendable supplies, we recommend using only those provided by an authorized dealer.

#### **𝚱** Note

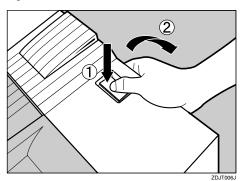
☐ The actual number of printed pages will differ depending on the media type, paper size, contents and settings. For more information, see p.101 "Toner cartridge".

If "Add Toner" appears on the panel display, replace the toner cartridge.

Add Toner XXX

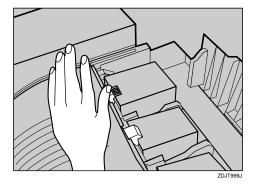
#### Note

- ☐ A combination of one to four colors, yellow, magenta, cyan, black, is displayed in "XXX".
- ☐ If cyan or magenta or yellow toner runs out, you can print in black and white mode using the black toner. Change the color mode setting to "Grayscale" from the printer driver.
- ☐ If black toner runs out, printing is not possible until the black toner cartridge is replaced.
- While pushing the lock button on the upper right cover of the printer (1), open the upper right cover (2).

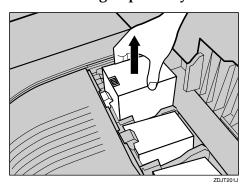


From the end, the toner cartridges are installed in the order of magenta (M), cyan (C), yellow (Y), and black (K).

- Remove the toner cartridge for the color you want to replace.
  - **1** Unhook the green hook on the toner cartridge with one hand.



2 Holding the toner cartridge with the other hand, pull out the cartridge up slowly.

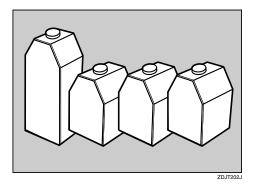


#### **#Important**

☐ Do not shake the removed toner cartridge. The remaining toner might scatter.

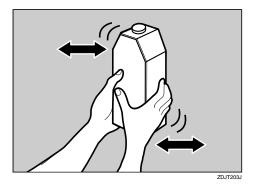
#### Note

☐ Depending on the setting up environment, toner might be left in a toner cartridge. In such case, reinstall the toner cartridge. Take out a new toner cartridge from the box.

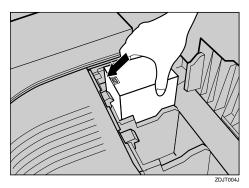


Note

- ☐ The black toner cartridge contains more than the other toner cartridges.
- 4 Shake the toner cartridge back and forth 5-6 times.



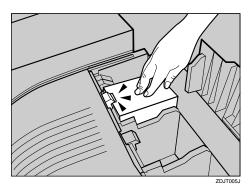
Holding the toner cartridge with the metal contact area in front, attach in the direction of the arrow.



#### **#**Important

☐ Do not touch the metal contact point with your fingers.

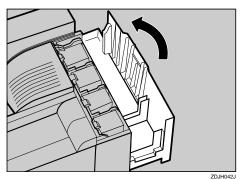
## Insert the toner cartridge slowly until the green hook snaps on the metal contact area.



#### ∰Important

☐ Do not install and remove the toner cartridges over and over. This could result in a toner leak.

## **7** Close the upper right cover.



The following message appears on the panel display. Please wait a while.

Loading Toner...

#### ∰Important

☐ Do not turn off the power switch during "Loading Toner..." appears on the panel display to avoid a printer malfunction.

### Replacing the Fuser Oil Unit

#### A CAUTION:

 The Fusing Unit becomes very hot. When installing the new Fuser Oil Unit, turn off the printer and wait about an hour. After that, install the new Fusing Unit. Not waiting for the unit to cool down can result in a burn.

If "Replace Fuser Oil Unit (TypeG)" appears on the panel display, replace the Fuser Oil Unit.

Replace Fuser Oil Unit (TypeG)

1 Turn off the power switch and unplug the power cable.

#### **∰**Important

- ☐ Be sure to wait about an hour to prevent a burn.
- 2 If 2 Tray Finisher is installed, detach it from the printer.
  - **₽** Reference

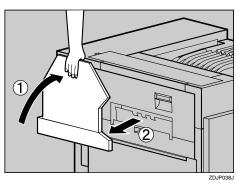
See p.63 "Detaching the SR770 (2 Tray Finisher)"

If the Duplex Unit is installed, open the Duplex Reversal Unit.

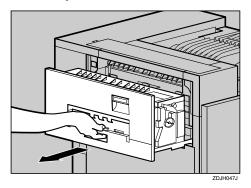
#### 

See p.64 "Opening and Closing the Duplex Reversal Unit"

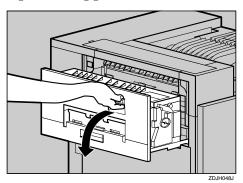
If the External Tray is attached to the printer, raise it in the direction of the arrow (1), and remove it (2).



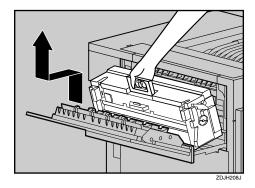
Pull out the left cover of the printer slowly.



6 Open the upper left cover.

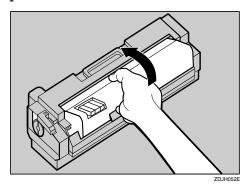


Holding the green handle, pull up the Fusing Unit slowly in the direction of the arrow.



#### ∰Important

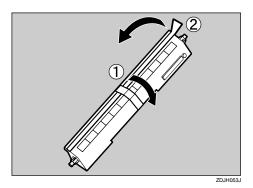
- ☐ Do not touch any areas other than the handle.
- Put the removed Fusing Unit in a stable and level place.
- Delift the Fuser Oil Unit in the direction of the arrow to remove it, and put it in a stable and level place.



#### ∰Important

- ☐ Do not touch inside of the Fusing Unit.
- ☐ Be careful not to touch the area other than the shown in the illustration.

Take out the Fuser Oil Unit from the bag, and remove seal (1), and then remove seal (2) as shown in the illustration.



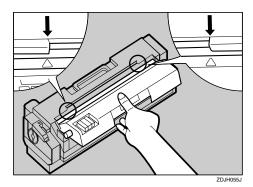
**𝚱** Note

☐ Be sure to remove seal (①), and then pull it out in a level manner.

#### **∰**Important

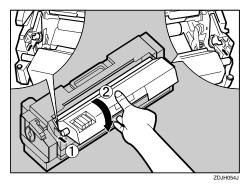
- ☐ Be sure to remove the seals to avoid printer malfunction.
- ☐ Be sure to remove seal (①) first, and then remove seal (②) to avoid oil leak.
- ☐ Be sure to put the Fuser Oil Unit in a stable and level place to avoid oil leak.
- ☐ There is oil on the removed seals and fuser oil roller. Be careful not to let them come in contact with your clothes.

Match (▲) on the front of the Fuser Oil Unit and the arrow on the Fusing Unit as shown in the illustration.

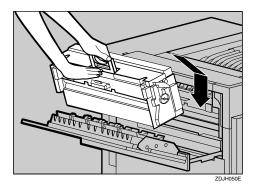


#### ∰Important

- Be careful not to get oil on the metal point of the left side of the Fuser Oil Unit.
- Insert the left and right protrusions of the Fuser Oil Unit into the white holders of the Fusing Unit (①), and then move the Fuser Oil Unit in the direction shown by the arrow (②) to attach the Fuser Oil Unit to the Fusing Unit.



Holding the green handle with one hand, use your other hand to push the front area of the handle to create a slight slant, and push the Fusing Unit slowly to the back.

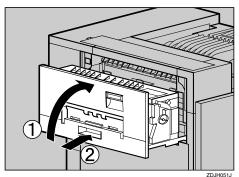


#### Note

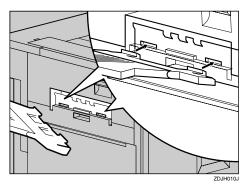
☐ Confirm that the Fuser Oil Unit is facing the inside of the printer.

At this point, make sure the Fusing Unit is on the stand properly.

Close the upper left cover (1) and push the handle slowly (2) to the back until it clicks into place.



Place the old Fuser Oil Unit into the bag which contained the new Fuser Oil Unit, and seal the bag. If you removed the External Tray in step [4], reattach it to the printer. Insert the hooks of the External Tray into the printer slits, and lower it toward you.



If the Duplex Unit is installed, close the Duplex Reversal Unit.

#### **₽** Reference

See p.64 "Opening and Closing the Duplex Reversal Unit"

If the 2 Tray Finisher was installed, reattach the 2 Tray Finisher to the printer.

#### 

See p.63 "Detaching the SR770 (2 Tray Finisher)"

Plug in the power cable and turn on the power switch.

#### Note

☐ If you dispose of the used toner cartridges by yourself, dispose of them according to local regulations.

## Replacing the Photoconductor Unit

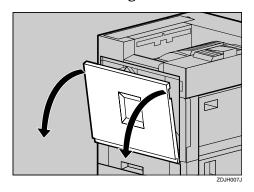
If "Replace Black PCU (Type F)" appears on the panel display, replace the black Photoconductor Unit.

Replace Black PCU (Type F)

If "Replace Color PCU (Type A)" appears on the panel display, replace the three color Photoconductor Units.

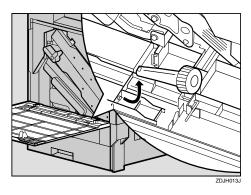
Replace Color PCU (Type A)

- 1 Turn off the power switch and unplug the power cable.
- 2 Open the front cover slowly by pulling down from the two areas on the left and right.

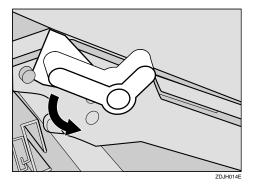


Take out the green screwdriver.

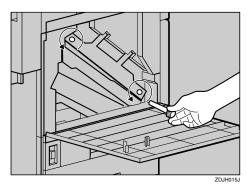
Use this screwdriver for all attachment and detachment of screws.



4 Turn the light brown lever counterclockwise.



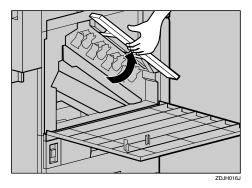
Loosen two screws that are fastening the inner cover using provided screwdriver.



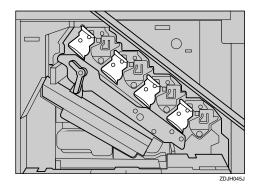
You cannot remove these two screws.

5

## 6 Lift the inner cover until it clicks into place and holds.



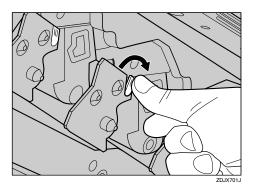
The Photoconductor Units are installed as shown in the illustration. The black Photoconductor Unit is at the upper left period. The other three are color Photoconductor Units.



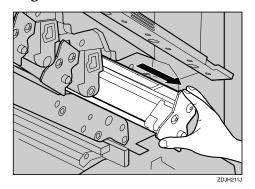
**7** Remove the Photoconductor Unit you want to replace.

For black, remove the upper left one, and for color, remove the three on the right.

• Move the green hook slowly to the right as shown in the illustration. The green hook is located on the upper right of the Photoconductor Unit.



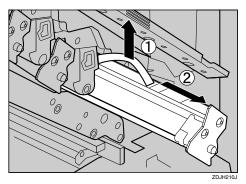
2 Grip the green areas at the top and bottom of the Photoconductor Unit, and pull slowly until you can see all of the green handle.



#### **#**Important

☐ Pulling out the Photoconductor Unit quickly might cause it to drop.

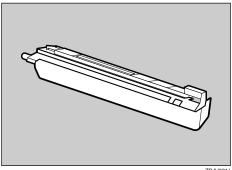
3 Lift and hold the green handle at the top (1), and pull out the unit slowly (2).



**8** Install a new Photoconductor Unit.

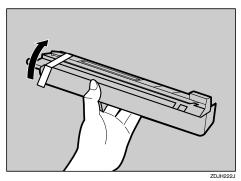
For black, install one, and for color, install three.

**1** Take the unit out from the bag.

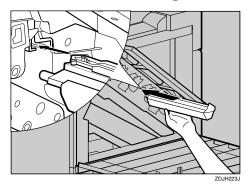


#### **∰**Important

- ☐ Do not remove the cover that is attached to the bottom of the Photoconductor Unit at this time.
- 2 Place the Photoconductor Unit, and remove the adhesive tape at the tip of the unit.

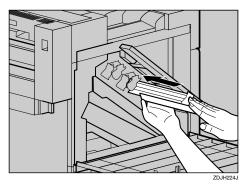


3 Match the green arrow at the tip of the Photoconductor Unit to the rail inside the printer.



#### **∰**Important

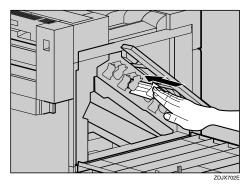
- ☐ Make sure the green arrow fits securely on the rail before proceeding to the next step.
- **4** Push the front of the Photoconductor Unit slowly, slide the unit on the cover, and push in until it stops.



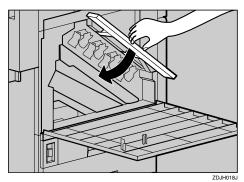
#### **#Important**

- ☐ If you do not attach the green arrow of the Photoconductor Unit securely to the rail, you might damage the Photoconductor Unit.
- ☐ Do not touch the light-sensitive area of the Photoconductor Unit.

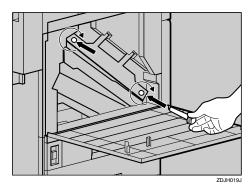
## **6** Remove the cover and push in the Photoconductor Unit until it stops.



**2** Lower the inner cover slowly.



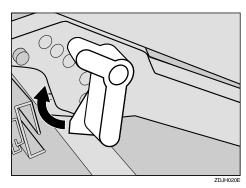
Tighten two screws using provided screwdriver.



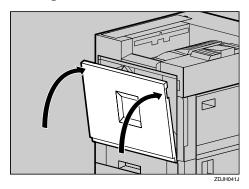
Note

☐ Be sure to return the provided screwdriver to its original position on the back of the front cover.

## Turn the light brown lever clockwise.



Close the front cover slowly by pushing the two areas on the left and right.



Plug in the power cable and turn on the power switch.

The following message appears on the panel display. The printer starts calibration. Please wait until it stops.

Calibrating...

#### **∰**Important

☐ Do not turn off the power switch during calibration to avoid a printer malfunction.

#### 5

## Replacing the Development Unit

If "Replace Black Dev. Unit(TypeD)" appears on the panel display, replace the black Development Unit.

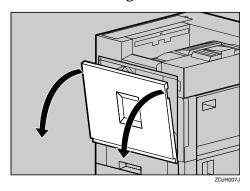
Replace Black Dev. Unit(TypeD)

If "Replace Color Dev. Unit(TypeB)" appears on the panel display, replace the three color (CMY) Development Units.

Replace Color Dev. Unit(TypeB)

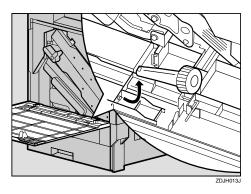
#### Note

- ☐ A dustproof filter is attached to the black Development Unit. When replacing the black Development Unit, also replace the dustproof filter. See p.83 "Replacing the Dustproof Filter".
- ☐ When replacing the black Development Unit, clean the registration roller. See p.20 "Cleaning the Registration Roller".
- 1 Turn off the power switch and unplug the power cable.
- 2 Open the front cover slowly by pulling down from the two areas on the left and right.

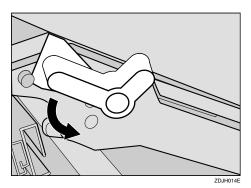


### Take out the green screwdriver.

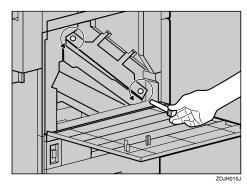
Use this screwdriver for all attachment and detachment of screws.



4 Turn the light brown lever counterclockwise.

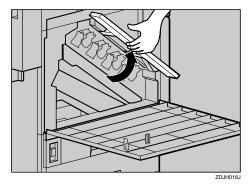


Loosen two screws that are fastening the inner cover using provided screwdriver.

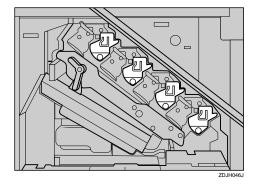


You cannot remove these two screws.

## 6 Lift the inner cover until it clicks into place and holds.



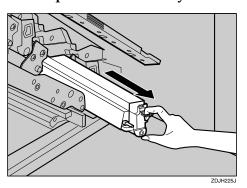
The Development Unit is installed shown in the illustration. Starting from the upper left, the units are attached in the order of black (K), yellow (Y), cyan (C), and magenta (M).



### **7** Remove the Development Unit.

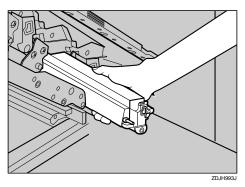
The procedure for removing the unit is the same for all four colors.

1 Hook your finger on the green tab in front of the Development Unit you want to replace, and pull it out halfway.



#### **∰**Important

- ☐ Pulling out the Development Unit quickly might cause it to drop.
- 2 Hold the right side of the Development Unit with your right hand, and pull out the unit slowly.



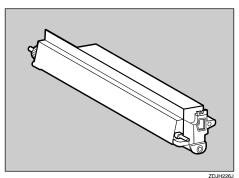
#### **∰**Important

- ☐ Be careful not to touch the right side of the Photoconductor Unit.
- ☐ Be careful not to let it get in contact with your hands or clothes.

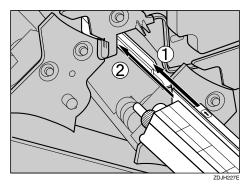
## 8 Install a new Development Unit.

The procedure for attaching the Development Unit is the same for all four colors.

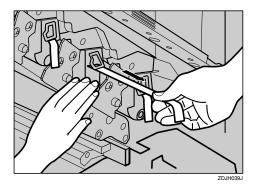
**1** Take the unit out from the bag.



2 Insert the Development Unit along the rail, and push in slowly until it stops.



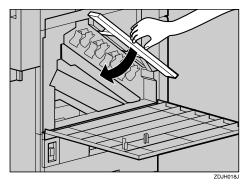
3 Holding the Development Unit, pull out the tape slowly in a level manner.



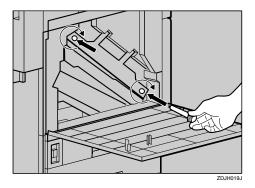
#### ∰Important

- ☐ Be sure to pull out the tape to avoid printer malfunction during operation.
- ☐ The removed tape is dirty. Be careful not to let it get in contact with your hands or clothes.

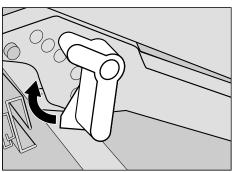
**9** Lower the inner cover slowly.



Tighten two screws using provided screwdriver.

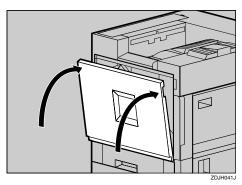


- Note
- ☐ Be sure to return the provided screwdriver to its original position on the inside of the front cover.
- Turn the light brown lever clockwise.



ZDJH020I

# Close the front cover slowly by pushing the two areas on the left and right.



# Plug in the power cable and turn on the power switch.

"Please Wait" appears on the panel display, and initial adjustments begin. Please wait until it stops.

Please Wait

#### ∰Important

☐ Do not turn off the power switch during adjustments to avoid a printer malfunction.

## Replacing the Fusing Unit

#### A CAUTION:

 The Fusing Unit becomes very hot. When installing the new Fusing Unit, turn off the printer and wait about an hour. After that, install the new Fusing Unit. Not waiting for the unit to cool down can result in a burn.

If "Replace Fusing Unit (Type C)" appears on the panel display, replace the Fusing Unit.

Replace Fusins Unit (Type C)

1 Turn off the power switch and unplug the power cable.

#### ∰Important

- ☐ Be sure to wait about an hour to prevent a burn.
- If the 2 Tray Finisher is installed, detach it from the printer.
  - **₽** Reference

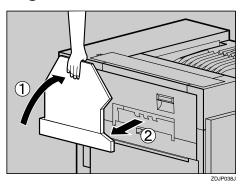
See p.63 "Detaching the SR770 (2 Tray Finisher)"

If the Duplex Unit is installed, open the Duplex Reversal Unit.

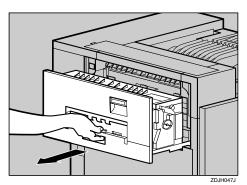
#### 

See p.64 "Opening and Closing the Duplex Reversal Unit"

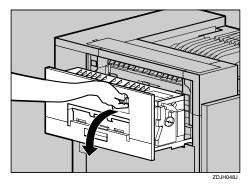
If the External Tray is attached to the printer, raise it in the direction of the arrow (1), and remove it (2).



Pull out the left cover of the printer.



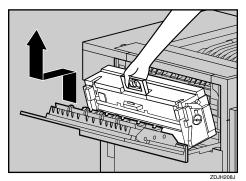
**6** Open the upper left cover.



#### **#Important**

☐ Do not touch any areas other than the handle.

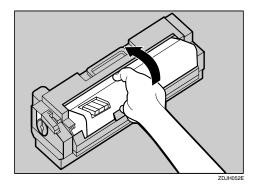
Holding the green handle, pull up the Fusing Unit slowly in the direction of the arrow, and then put it in a stable and level place.



Take out the new Fusing Unit from the bag and put it in a stable and level place.

#### **#Important**

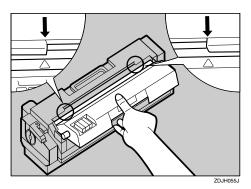
- ☐ The A3 paper which comes with the new Fusing Unit will be used in a later step, so be careful not to lose it.
- ☐ Do not turn the blue dial at the side of the new fusing unit when replacing it or before turning on the power switch.
- **9** Remove the Fuser Oil Unit in the direction of the arrow.



#### **∰**Important

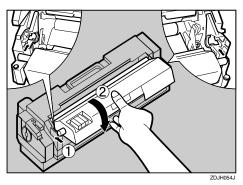
- ☐ Do not touch inside of the Fusing Unit.
- ☐ Be careful not to touch the oil.

Match (▲) on the front of the Fuser Oil Unit and the arrow on the Fusing Unit as shown in the illustration.



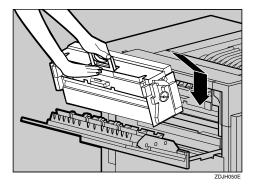
#### **#Important**

- ☐ Be careful not to get oil on the metal point of the left side of the Fuser Oil Unit.
- Insert the left and right protrusions of the Fuser Oil Unit into the white holders of the Fusing Unit (①), and then move the Fuser Oil Unit in the direction shown by the arrow (②) to attach the Fuser Oil Unit to the Fusing Unit.



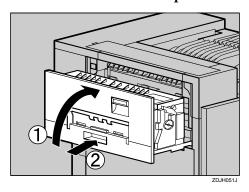
Put the removed Fuser Oil Unit in the bag that enclosed the new Fusing Unit, and then seal it.

Holding the green handle of the new Fusing Unit, use your other hand to push the area right in front of the handle to create a slight slant, and then push the Fusing Unit slowly to the back.

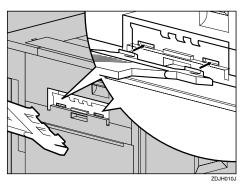


### **∰**Important

- ☐ Confirm that the Fuser Oil Unit is facing the inside of the printer.
- ☐ Confirm that the Fusing Unit is properly positioned in the machine.
- Close the upper left cover (1) and push the handle (2) slowly to the back until it clicks into place.



If you removed the External Tray in step 4, reattach it to the printer. Insert the hooks of the External Tray into the printer slits, and lower it toward you.



- If the Duplex Unit is installed, close the Duplex Reversal Unit.
  - Reference

See p.64 "Opening and Closing the Duplex Reversal Unit"

- If the 2 Tray Finisher was installed, reattach the 2 Tray Finisher to the printer.
  - **₽** Reference

See p.63 "Detaching the SR770 (2 Tray Finisher)"

- Plug in the power cable and turn on the power.
- 19 Perform fuser adjust.

After replacing the fusing unit, the following message appears on the panel display.

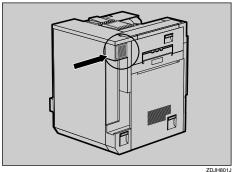
Adjust Fuser in Maintenance Menu

you need to perform fuser adjust. For more information, see p.23 "When replacing the fusing unit".

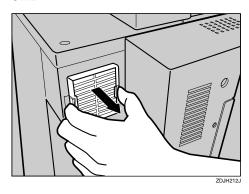
## Replacing the Dustproof Filter

The dustproof filter is attached to the black Development Unit. When replacing the black Development Unit, also replace the dustproof filter.

The dustproof filter is attached to the left side of the printer shown in the illustration.

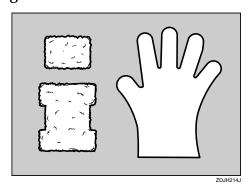


- 4 Wear the glove on either hand.
- 1 Turn off the power switch and unplug the power cable.
- **2** Push in the grips on both sides of the dustproof filter cover to pull it off.

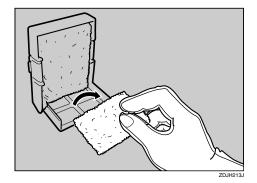


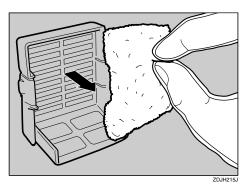
- **𝚱** Note
- ☐ Be sure to put the removed dustproof filter cover in a stable and level place.

From the box which contained the black Development Unit, take out the new dustproof filter and glove.



With the hand wearing the glove, take out the dustproof filter that is attached to the dustproof filter cover slowly, one by one, and put them into the box which contained the black Development Unit.

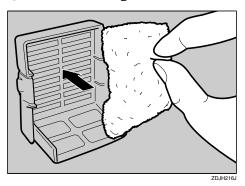




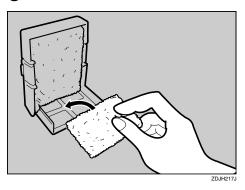
#### **∰**Important

- ☐ Handle the removed dustproof filters with care. If you shake them, the attached dust might scatter.
- ☐ Be sure to remove the gloves to attach the new dustproof filter.

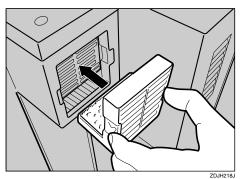
- 6 Attach the new dustproof filters to the dustproof filter cover one by one.
  - **1** Attach the large filter.



2 Attach the small filter.



Insert the dustproof filter cover into the upper left area of the printer.



Plug in the power cable and turn on the power switch.

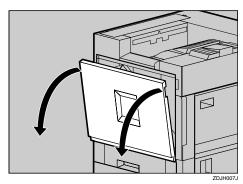
#### 5

## Replacing the Waste Toner Bottle

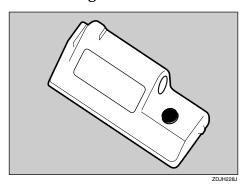
If "Replace Waste Toner (Type E)" appears on the panel display, replace the waste toner bottle.

Replace Waste Toner (Type E)

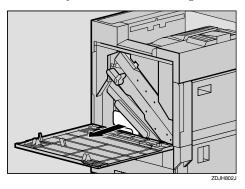
- 1 Turn off the power switch and unplug the power cable.
- 2 Open the front cover slowly by pulling down from the two areas on the left and right.



Take out a new waste toner bottle from the bag.

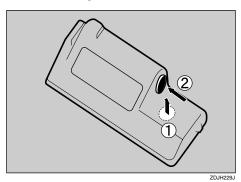


**A** Remove the used waste toner bottle slowly from inside the printer.



#### **∰**Important

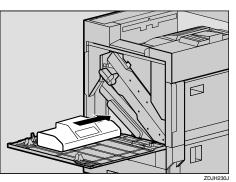
- ☐ Be sure to remove the waste toner bottle in a level manner.
- Remove the lid (①), and then put it on the position shown in the illustration (②).



Put the used waste toner bottle into the bag that contained the new waste toner bottle, and then seal the bag.

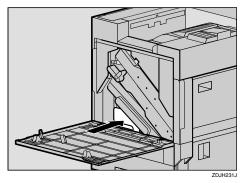
#### **#Important**

☐ Be sure to handle the bottle carefully so the waste toner does not spill.



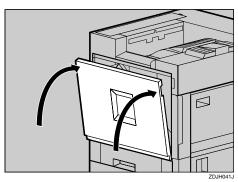
Plug in the power cable and turn on the power switch.

8 Push it in until it stops.



### ∰Important

- ☐ Be sure to insert the waste toner bottle firmly to avoid the toner from leaking inside the printer.
- 2 Close the front cover slowly by pushing the two areas on the left and right.



## Replacing the Paper Feed Rollers

#### Ø Note

- ☐ The following illustrations are the examples of replacing the paper feed rollers of Tray 1. The same procedure is followed with the other trays.
- **1** Check the contents of the box.
  - Paper Feed Roller A



Paper Feed Roller B



Paper Feed Roller C



Two Stoppers



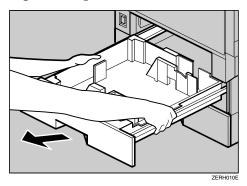


2 Turn off the power switch and unplug the power cable and interface cable.

#### **#Important**

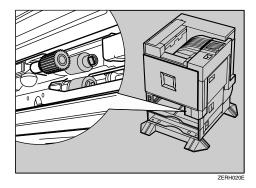
☐ If you replace the paper feed rollers of the optional 2000sheet Large Capacity Tray, remove all paper from the tray.

Pull out all trays slowly while lifting them up a little.

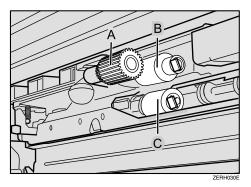


#### 

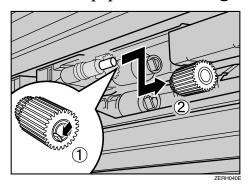
- ☐ If you replace the paper feed rollers of the optional Paper Feed Unit, or 2000-sheet Large Capacity Tray, pull out all the paper trays from each unit.
- 4 Confirm the position of the paper feed rollers.



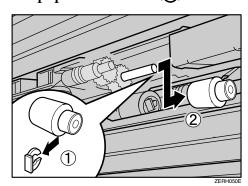
Confirm the positions and names of each roller.



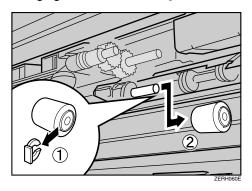
While pushing the pin of the paper feed roller A outwards (1), remove the paper feed roller (2).



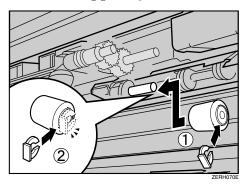
Remove the stopper from the paper feed roller B (1), and remove the paper feed roller (2).



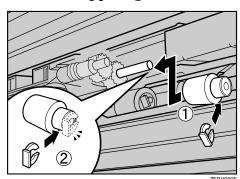
Remove the stopper from the paper feed roller C (1), and remove the paper feed roller (2).



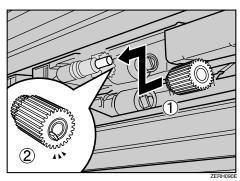
Hold the new paper feed roller C with its gear towards the shaft. Insert it into the rear shaft so that the roller gear is meshed with the shaft gear (1). Lock the roller with the stopper (2).



Hold the new paper feed roller B with its gear towards the shaft. Insert it into the rear shaft so that the roller gear is meshed with the shaft gear (1). Lock the roller with the stopper (2).



Hold the new paper feed roller A with its pin towards you (1). Insert the roller onto the front shaft until it clicks into place (2).



Slide all trays back into the printer slowly until they stop.

#### **𝚱** Note

☐ If you replaced the paper feed rollers of the optional 2000-sheet Large Capacity Tray, load stocks that you removed at step ☐ in the tray.

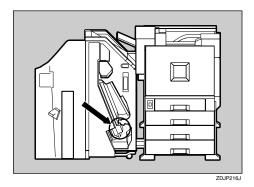
# Adding Staples

When "Add Staples " appears on the panel display, add a new staple refill.

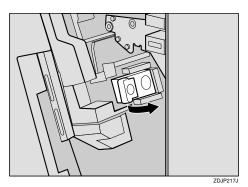
Add Staples

Open the front cover for the 2 Tray Finisher.

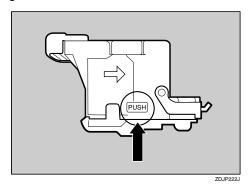
The stapler is attached to the position shown in the illustration.



Remove the cartridge by pulling the green knob in the direction of the arrow.

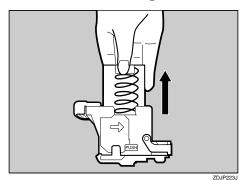


Push the areas labeled "PUSH", located on both sides of the stapler.

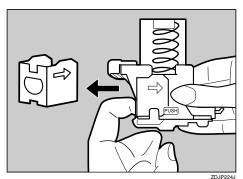


The case cover at top floats up.

4 Pull the case cover up.

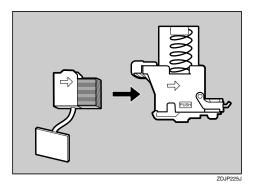


Hook your finger in the hole of the empty refill case to pull it out.

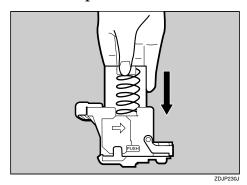


b

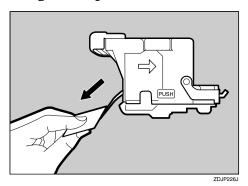
Push in until the arrow on the refill case lines up with the arrow on the refill case cover.



**7** Push the case cover down until it clicks into place.



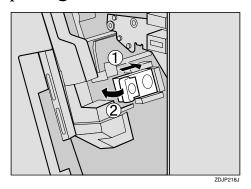
8 Pull out the ribbon used for bundling the staples.



Note

☐ Remove the entire length of the ribbon.

9 Slant and insert the cartridge (1), and push in until it clicks into place (2).



Close the front cover for the 2 Tray Finisher.

# 6. Appendix

## **Staple and Punch Position**

#### **Stapling**

By installing the 2 Tray Finisher, you can staple one printing at a time when printing multiple copies. See the Help files of the printer driver for details on the print methods.

#### Limitation

- ☐ The printer cannot staple paper that is fed from the Bypass Tray.
- ☐ The printer cannot sort "Thick", "Labels", or "OHP" media types in the Paper Tray.

#### **𝚱** Note

- ☐ If you cannot make the settings for stapling even when the 2 Tray Finisher is connected, the optional devices might not have been attached properly. Make the proper settings for the optional devices in the printer driver's dialog box.
- ☐ Outputs of staple depend on the print direction and feed direction. The following table shows the staple positions.

#### Staple Position

Feed Direction	Print direction	Staple Position
	Portrait	AAA
	Landscape	AAA
+	Portrait	AAAA
	Landscape	A A A

	m 1
М,	" /

- ☐ When double-sided printing is selected, adjust the staple position to the binding direction.
- ☐ If you are punching at the same time, specify the same side.
- ☐ The paper sizes and number of pages that can be stapled are displayed below.

Paper Size	Staple Capacity
A3, 11 × 17, B4, Legal, F/GL, Foolscap, Folio, 8K	30
A4, B5, Letter, Executive, 16K	50

### **Punching**

Used to punch holes in the printing.

#### Limitation

- ☐ The printer cannot punch paper that is fed from the Bypass Tray.
- ☐ To use this function, the 2 Tray Finisher must be installed on the printer.
- ☐ The printer cannot sort "Thick", "Labels", or "OHP" media types in the Paper Tray.

#### Note

☐ Outputs of punch depend on the print direction and feed direction. The following table shows the punch positions.

#### Punch Position

Feed	Print	Punch Position		
Direction	direction	2 holes	3 holes	4 holes
	Portrait	A A	A A	A
	Landscape	<b>A</b>	Ä	Ä
	Portrait	Ā	Ä	<b>A</b>
<b>—</b>	Landscape	A.	A A	A A

- ☐ If you cannot make the settings for punching even when the 2 Tray Finisher is connected, the optional devices might not have been attached properly. Make the proper settings for the optional devices in the printer driver's dialog box.
- ☐ When Duplex Print is selected, adjust the punch position to the binding direction.
- ☐ The paper sizes that can be punched are displayed below.

Туре	Feed Direction	Paper Size
	Ū	A4, B5, A5, 16K, Letter
2 holes	$\leftarrow$	
		A3, 11×17, B4, A4, B5, Legal,
	←	Letter, Executive, F/GL, Foolscap, Folio, 8K, 16K
NA 3 holes	Ū	A4, B5, 16K, Letter
	$\leftarrow$	
		A3, B4, 8K, 11×17
	$\leftarrow$	
	Ū	A4, 16K, Letter
EU 4 holes	$\leftarrow$	
LO 4 Holes	D	A3, 8K, 11×17
	$\leftarrow$	
	Ū	A4, B5, A5, 16K, Letter
	$\leftarrow$	
Northern EU 4 holes	D	A3, B4, A4, B5, 8K, 16K,
	←	11×17, Legal, Foolscap, Folio, F/GL, Letter, Executive

# Removing Misfed Paper in the Duplex Feed Unit

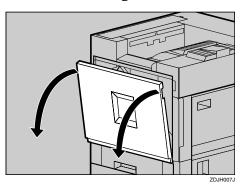
You can remove misfed paper from the Duplex Feed Unit following the procedure below.

#### Note

□ When a paper misfeed occurs in the Duplex Feed Unit, the printer usually sends the misfed paper to the right cover and there is no need to execute following procedure. See p.54 "When "Remove Misfeed A:Internal Path" Appears".

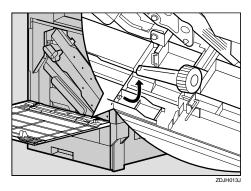
#### ∰Important

- ☐ Be sure to remove a misfed paper following the procedure below, only when "Remove Misfeed: Dup. Feed Unit" appears on the panel display.
- 1 Turn off the power switch and unplug the power cable.
- 2 Open the front cover slowly by pulling down from the two areas on the left and right.

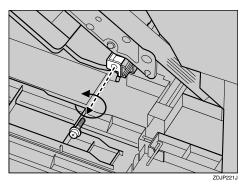


## Take out the green screwdriver.

Use this screwdriver for all attachment and detachment of screws.

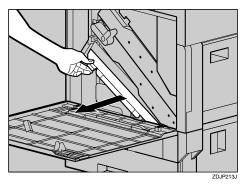


A Remove the screw that is fastening the Duplex Feed Unit using provided screwdriver.

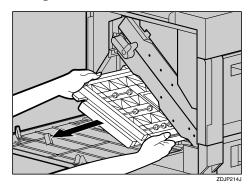


You will use this screw to refasten the Duplex Feed Unit later.

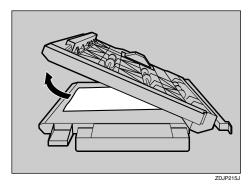
Pinch the upper left area of the Duplex Feed Unit, and pull it out slowly halfway.



6 Holding the Duplex Feed Unit firmly with both hands, pull it straight out.



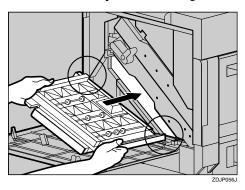
Place the Duplex Feed Unit on the floor slowly. Open it slowly, and remove the misfed paper.



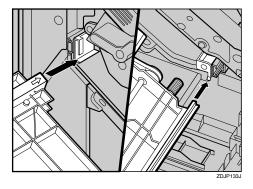
#### ∰Important

☐ Do not open the Duplex Feed Unit by force. It might damage the unit.

- 8 Close the Duplex Feed Unit.
- 9 Holding the Duplex Feed Unit with both hands, insert it along the rails slowly until it stops.

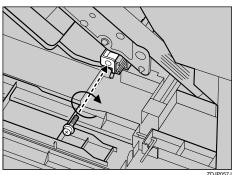


The top and bottom rails are located in the position shown in the illustration.



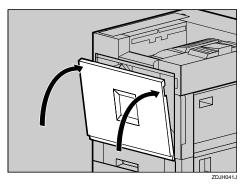
There are two arrows located on the left and right sides of the Duplex Feed Unit.

Refasten the Duplex Feed Unit using provided screwdriver. Use the screw that was removed in step 4.



#### Note

- ☐ Be sure to return the provided screwdriver to its original position on the inside of the front cover.
- Close the front cover slowly by pushing the two areas on the left and right.



Plug in the power cable and turn on the power switch.

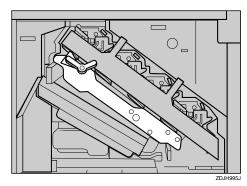
### When the Front Cover Does Not Close

When "Close Front Cover" appears on the panel display, even if the cover seems to be closed properly, it is not.

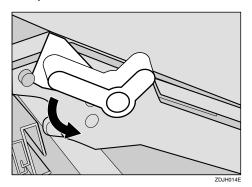
> Close Front Cover

When the front cover does not close, confirm that the Transfer Unit is attached firmly.

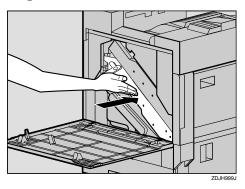
The Transfer Unit is attached to the position shown in the illustration.



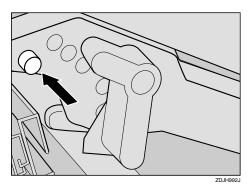
- 1 Turn off the power switch and unplug the power cable.
- 2 If the light brown lever is in the position shown in the illustration, turn it counterclockwise.



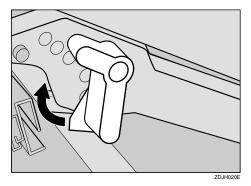
Push in the Transfer Unit until it stops.



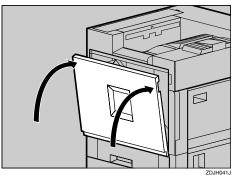
Confirm that the protrusion inside the printer is in the upper left hole of the Transfer Unit.



Turn the light brown lever clockwise.



99



6 Plug in the power cable and turn on the power switch.

6

### **Consumables**

#### riangle CAUTION:

• Our products are engineered to meet the highest standards of quality and functionality. When purchasing expendable supplies, we recommend using only those specified by an authorized dealer.

#### Toner cartridge

Toner cartridge	Average printable number of pages per cartridge *1
Cyan	10,000 pages
Magenta	10,000 pages
Yellow	10,000 pages
Black	20,000 pages

<sup>\*1</sup> A4 5% test chart, 5 pages/job

#### Note

- ☐ The actual number of printed pages you get from a particular toner cartridge depends on the type and size of paper you are using, the contents of your print images, and printing environment conditions. All this means that a toner cartridge might require replacement sooner than the normal life described above.
- ☐ Toner cartridges that come with the printer are for setup purposes, and will not provide the number of pages described above. The average number of printable pages that can be expected from the toner cartridges included in the printer are as follows:
  - Black toner cartridge: about 10,000 pages
  - Cyan, magenta and yellow toner cartridges: about 5,000 pages for each cartridge.

#### Staple Cartridge

Cartridge type	Number of shots
Staple cartridge	5000 shots $\times$ 1 with cartridge
Staple Refill cartridge	Refill 5000 shots × 3

#### Other consumables

#### Ø Note

☐ Actual life of consumables depends on the type and size of paper you are using, the contents of your print images, and printing environment conditions. All that means that consumables might require replacement sooner than the life indicated. Furthermore, the life of color consumables may considerably shorten as mixed printing of black & white pages and color pages frequently occurs.

Name	Consumables	Average printable number of pages *1
Printer Maintenance Kit Type 3800A	Color Photoconductor Unit × 3	50,000 pages *2
Printer Maintenance Kit Type 3800B	Color Development Unit × 3	100,000 pages *2
Printer Maintenance Kit Type 3800C	Fusing Unit × 1	100,000 pages *2
Printer Maintenance Kit Type 3800D	Black Development Unit × 1	100,000 pages *2
Printer Maintenance Kit Type 3800E	Waste Toner Bottle × 1	50,000 pages
Printer Maintenance Kit Type 3800F	Black Photoconductor Unit × 1	50,000 pages *2
Printer Maintenance Kit Type 3800G	Fuser Oil Unit × 1	20,000 pages *2
Printer Maintenance Kit Type 3800H	Paper Feed Rollers × 1	150,000 pages

<sup>\*1</sup> A4 5% test chart, 5 pages/job

When printing each page as a single job, the unit needs extra idling, thus reducing the unit's print life by half.

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