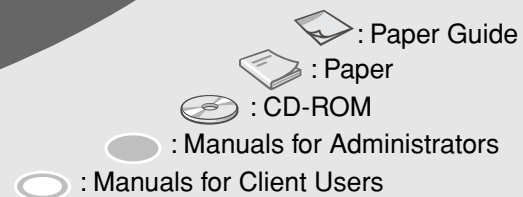


Manuals for This Printer



Manuals Provided

Printed Manuals

- Manuals for This Printer (this sheet)



- QUICK INSTALLATION GUIDE



- Option Setup Guide



- Maintenance Guide



CD-ROM Manuals



- Manuals for This Printer
- Administrator Reference
- Client Reference
- PostScript 3 Supplement

Note

If the manuals do not open automatically, double-click the following file on the CD-ROM.

Windows MANUAL.EXE
Macintosh manual

- Printed manuals are also included as PDF files on the CD-ROM.

Windows / Macintosh
[Language] setup
 mainte

Before you start

Printer Installation



QUICK INSTALLATION GUIDE

Provides information about the printer connections, installation, and other preparations.

Preparing the printer

Option Installation

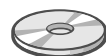


Option Setup Guide

Provides information about setting up the options.

- Options

Network Printer Configuration



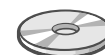
Administrator Reference

Provides information about server settings and using the control panel, and printer settings.

- Preparation before use
- Windows 2000 Print Server Configuration
- Windows XP, Windows Server 2003 Print Server Configuration
- Windows NT4.0 Print Server Configuration
- NetWare Configuration
- Using SmartDeviceMonitor for Admin
- Using a Web Browser
- Monitoring and Configuring the Printer
- Making Printer Settings with the Control Panel

Preparing the Client Computer

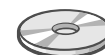
Printing from Windows, Macintosh, or NetWare



Client Reference

Provides information about setting up and using the printer in a Windows, Mac OS, or NetWare environment, and also about software and utilities included on the CD-ROM.

- Windows 95/98/Me Configuration
- Windows 2000 Configuration
- Windows XP, Windows Server 2003 Configuration
- Windows NT 4.0 Configuration
- Mac OS Configuration
- NetWare Configuration
- Software and Utilities Included on the CD-ROM
- Setting up the Printer Driver and Canceling a Print Job
- Uninstalling the Printer Driver
- Sample Print/Locked Print
- Troubleshooting



PostScript 3 Supplement

Provides information about the meaning and features for the PostScript 3 printer driver.

- Using PostScript 3
- Printer Utility for Mac

Maintenance

Maintenance and Troubleshooting



Maintenance Guide

Provides information about replacing supplies such as toner, and each unit, and making adjustments to this printer. Additional explanations are provided about safety precautions, information and warnings related to paper, and measures to take when error messages appear and paper is jammed.

- Safety Information
- Getting Started
- Paper and other Media
- Replacing Consumables and Maintenance Kit
- Cleaning and Adjusting the Printer
- Troubleshooting

QUICK INSTALLATION GUIDE <G108-8608>

Please read the Safety Information in the "Maintenance Guide" before using this printer. It contains important information related to USER SAFETY and PREVENTING EQUIPMENT PROBLEMS.

1

UNPACKING THE PRINTER AND CHECKING THE CONTENTS OF THE BOX

Caution

- The printer weighs approximately 31.5 kg (69.4 lb). When moving the printer, use the inset grips on both sides, and lift slowly. The printer will break or cause injury if dropped.

- Check the contents of the box according to the following list. If one or some items are missing, please contact your sales or service representative.

Important

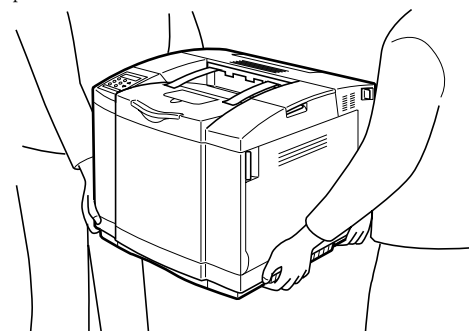
- The parallel cable is not included in the box. It is your responsibility to provide the parallel cable appropriate for the computer you are using.

- Quick Installation Guide (this sheet)
- Option Setup Guide
- Maintenance Guide
- CD-ROM
- Photo Conductor Unit
- Power Cord
- Ferrite Core
- Controller Board Screwdriver
- Color Calibration Sample Sheet

- Remove the plastic bag.

- Lift the printer and move it to the place where you want to install it.

When lifting the printer, use the inset grips on both sides of the printer.

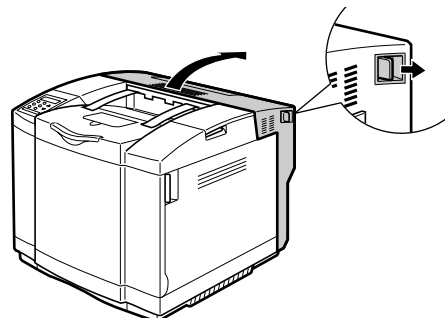


Important

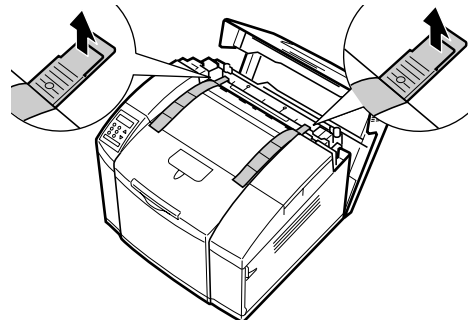
- The printer should always be lifted by at least two people.

- Remove all tape securing the printer's moving parts.

- Pull the rear cover open lever, and then open the rear cover.



- Pull out the two orange stop tags that have red cards attached to them.



Important

- If the printer is used with any of the stop tags still attached, poor fusing will occur. Be sure to remove all of the stop tags.

- Close the rear cover.

2

WHERE TO PUT THE PRINTER

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

Warning

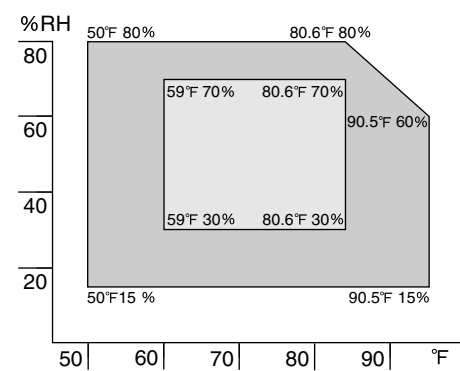
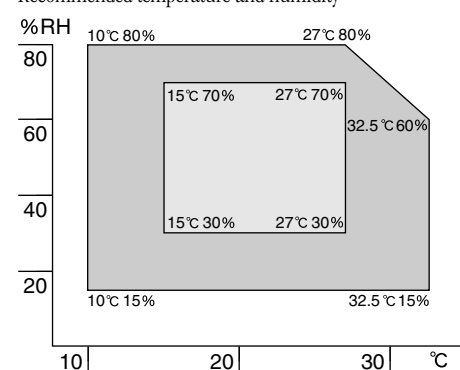
- Confirm that the wall outlet is near the printer and freely accessible, so that in event of an emergency, it can be unplugged easily.
- Only connect the printer to the power source described on this sheet.
- Avoid multi-wiring.
- Do not damage, break or make any modifications to the power cord. Do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

Caution

- Keep the printer away from humidity and dust. A fire or an electric shock might occur.
- Place the printer on a strong and level surface. Otherwise, the printer might fall and cause personal injury.
- If you use the printer in a confined space, confirm that there is a continuous flow of air.

1 Optimum Environmental Conditions

Recommended temperature and humidity



Possible operation range Recommended range

The printer must be level within 5 mm, 0.2" both front to rear and left to right.

To avoid possible build-up of ozone, place this printer in a large well ventilated room that has an air turnover of more than 30 m³ /hr/person.

If you use this printer in a cold area, leave the printer on or severe cold might damage sensitive components inside the printer.

2 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

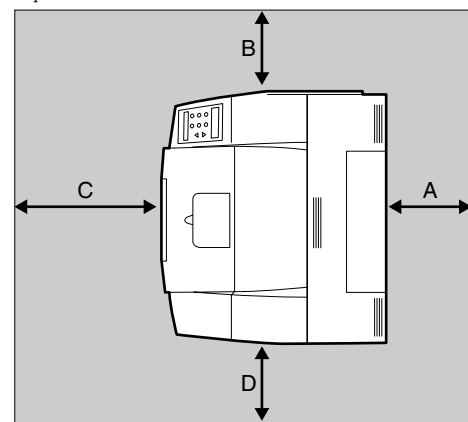
3 Power Connection

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

- 120 V, 60 Hz, 11 A or more

4 Space Required for Installing the Printer

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



A: more than 25 cm (9.9") (More than 35 cm (11.9") when the AD460 (duplex unit) is attached.)

B: more than 20 cm (7.9")

C: more than 70 cm (27.6")

D: more than 50 cm (19.7")

3

INSTALLING THE TONER CARTRIDGES

Warning

- 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 an appropriate collection site.
- If you dispose of the used toner containers yourself, dispose of them according to your local regulations.

Caution

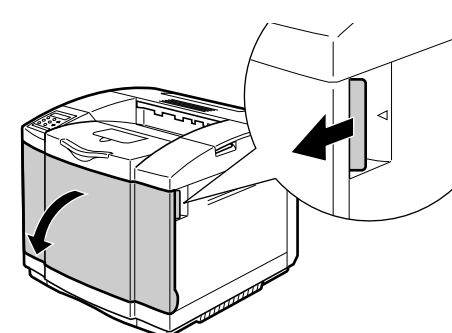
- Do not open the front cover when the paper tray is pulled out halfway. If you do, it might cause a personal injury.
- Do not eat or swallow toner.
- Keep toner (used or unused) and toner cartridges out of reach of children.
- Our products are engineered to meet the highest standards of quality and functionality. When purchasing expendable supplies, we recommend using only those provided by an authorized dealer.

Important

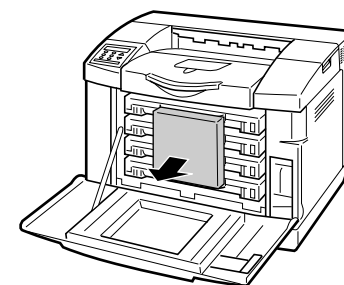
- The locations for the attachment of the toner cartridges are in order from the top: black (K), yellow (Y), magenta (M), and cyan (C).

The supplied toner cartridge is inside the machine. Here, the black (K) toner cartridge is used as an example to explain the procedure of preparing a toner cartridge. Prepare other toner cartridges following the same procedure.

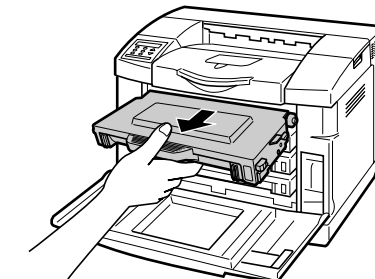
- Pull the front cover open lever, to open the front cover.



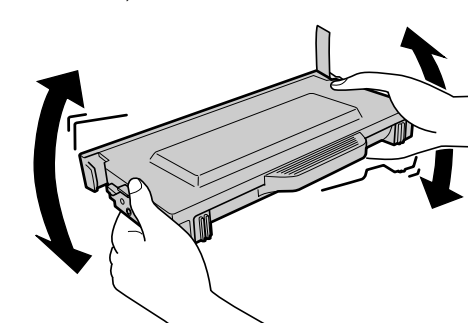
- Remove the packing material fastening the four toner cartridges.



- Remove the top toner cartridge (black).



- Hold the new toner cartridge and shake it well, about 3 to 4 times, as shown in the illustration.



Important

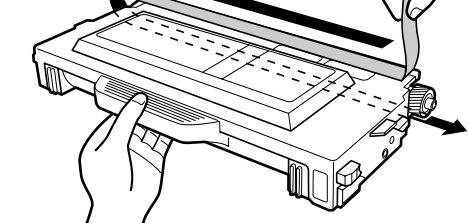
- Printing quality may decrease if the toner is unevenly distributed inside the toner cartridge.

- Remove the protective cover. Remove the tape securing the protective cover while holding the toner cartridge as shown.

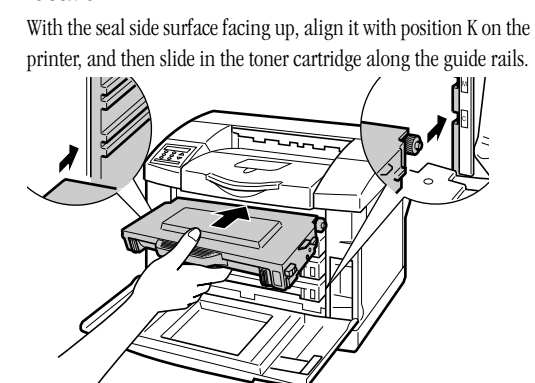
Important

- The tape is attached from the front to the back of the toner cartridge. Make sure to remove all of the tape.
- Do not touch the development roller which is exposed after removing the protection cover, as this may lead to a deterioration in the printing quality.
- Once the protective cover is removed, toner can spill from the cartridge easily. Take care to avoid subjecting the toner cartridge to vibration and impact after removing the protective cover.

- Insert the new toner cartridge (black) in the same location. With the seal side surface facing up, align it with position K on the printer, and then slide in the toner cartridge along the guide rails.



- Repeat the procedures 3 to 6 to prepare the other toner cartridges.

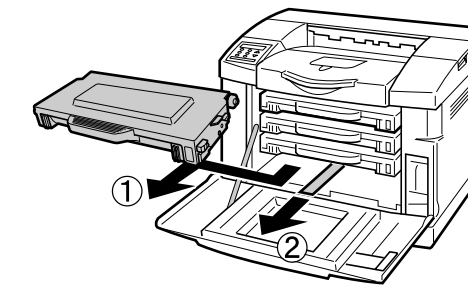


Important

- Do not use excessive force to slide the cartridge.
- Do not repeatedly install and remove the toner cartridges. Doing so will cause toner leakage.

- Repeat the procedures 3 to 6 to prepare the other toner cartridges.

- Remove the cyan toner cartridge at the bottom (1). Pull out the orange tape to remove the protective paper (2), and then install the cyan toner cartridge again.



- Close the front cover until the center of the front cover locks securely.

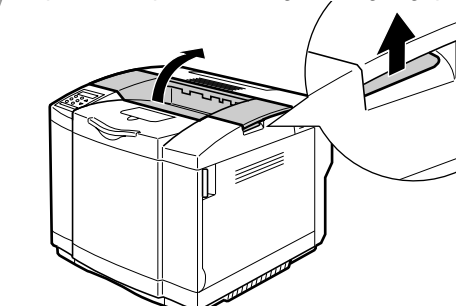
4

INSTALLING THE PHOTO CONDUCTOR UNIT

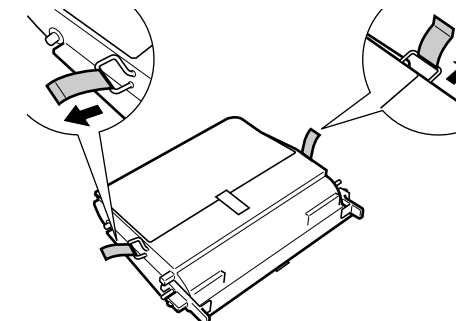
Important

- Exposing the photo conductor unit to light for too long can reduce its performance. Replace the unit as quickly as possible.

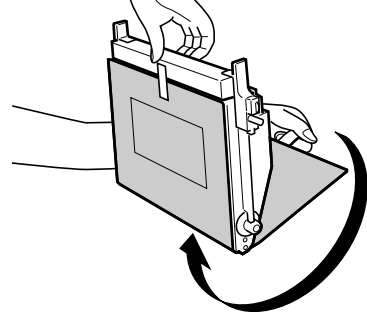
- Open the top cover using the finger grip.



- Remove the pins on both sides of the photo conductor unit.



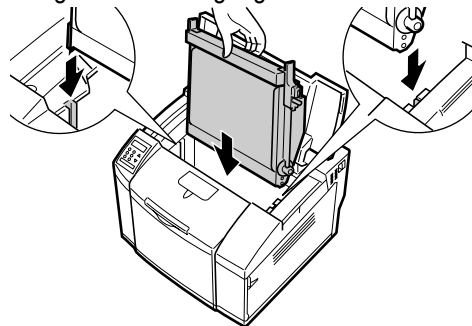
- 3** Remove the protective sheet while holding onto the new photo conductor unit as shown.



Important

- Do not touch the green surface of the photo conductor unit with bare hands or gloves. This could damage the photo conductor unit and reduce the print quality.
- A white powder has been intentionally adhered to the surface of the photo conductor unit. Do not attempt to wipe it off. Removal will prevent normal printing.

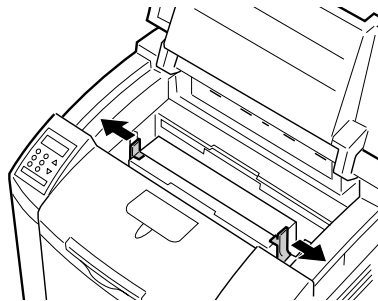
- 4** From the printer's front, insert the photo conductor unit with the green side facing you using the left and right guides.



Important

- When inserting the photo conductor unit, be careful not to touch or damage the surface.

- 5** Turn the left and right locking levers (green) to the outside to lock the photo conductor unit into position.



- 6** Press the center of the top cover firmly until it locks into position.

5

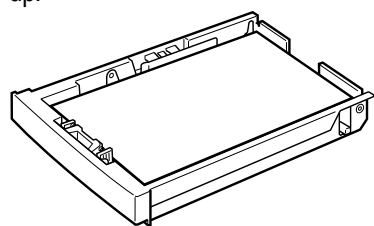
INSTALLING THE PAPER TRAY

Caution

- The paper tray does not have a stopper. When pulling it out, be careful not to pull it strongly. If you do, the tray might fall and cause personal injury.

The following procedure describes how to load paper. For more information about the paper sizes that can be set in the paper tray, see "Paper and Other Media Supported by This Printer", Maintenance Guide.

- 1** Pull the paper tray out slowly. Place it on a flat surface.



- 2** Load paper into the paper tray, with the print side up.

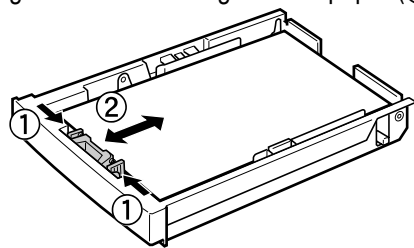
Important

- Make sure that the top of the stack is not higher than the limit mark inside the tray.
- Do not load different kinds of paper in the tray.

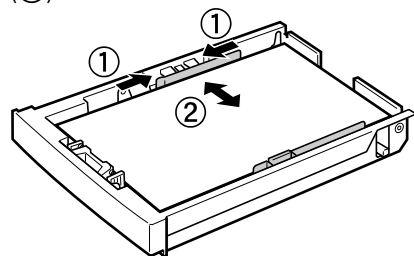
Note

- If you set a custom paper size, you should enter the paper size with the printer's control panel. For more information, see "Loading Paper in the Paper Tray", Maintenance Guide.

- 3** Make sure there is no space between the front guide and the paper. If there is a gap, pinch both front guide ends inward (1), and move the front guide till it is flush against the paper (2).



- 4** Make sure there is no space between the side guides and the paper. If there is a gap, pinch the levers on both ends inward (1), and move the side guides till they are flush against the paper (2).



- 5** Install the paper tray by pushing it in until it clicks into place.

Important

- Be sure to insert the paper tray completely. Otherwise, misfeeds might occur, or the front cover might touch the paper tray.

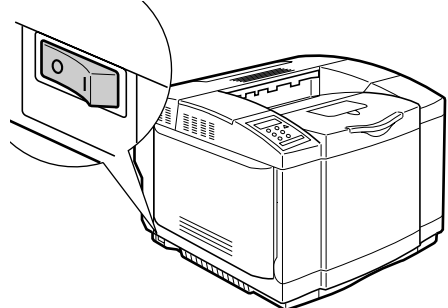
6

CONNECTING THE POWER CORD

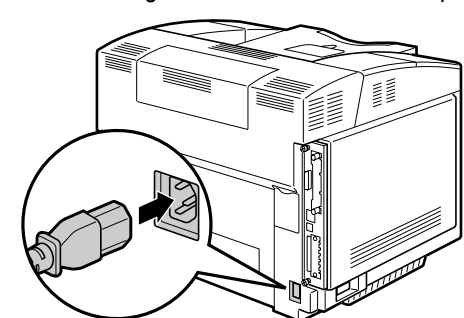
Caution

- When you pull the plug out of the socket, grip the plug to avoid damaging the cord and causing a fire or an electric shock.
- It is dangerous to handle the plug with wet hands. Doing this may result in receiving an electric shock.

- 1** Check that the power switch is turned off.



- 2** Connect the power cord to the power connector in the lower right corner on the back of the printer.



- 3** Plug the other end securely into the wall outlet.

7

SELECTING THE PANEL DISPLAY LANGUAGE

Follow the procedure below to select a language.

Note

- You can select one of the following languages: English, German, French, Italian, Dutch, Swedish, Norwegian, Danish, Spanish, Finnish, or Portuguese.
- The default setting is English.
- If you want to use the English panel display, it is not necessary for you to do the following procedures.

- 1** Turn on the printer.

The initial adjustment is executed in about 20 seconds. During the initial adjustment, the message "Warming Up..." is displayed. After the printer warms up, the ready message appears on the panel display.

- 2** Press the [Menu] key.

The following message appears on the panel display.

Menu:
Paper Input

- 3** Press the [▲] or [▼] key to display "Language".

Menu:
Language

- 4** Press the [# Enter] key.

The following message appears on the panel display.

Language:
*English

- 5** Press the [▲] or [▼] key until the language you want to select appears on the panel display.

- 6** Press the [# Enter] key.

- 7** Press the [On Line ↔] key. The On Line indicator is lit.

8

PRINTING THE TEST PAGE

You can check if the printer works properly by printing a test page such as the configuration page. However, you cannot check the connection between the printer and the computer by printing the test page.

- 1** Turn on the printer.

- 2** Press the [Menu] key.

The following message appears on the panel display.

Menu:
Paper Input

- 3** Press the [▼] or [▲] key to display "List/Test Print", and then press the [# Enter] key.

Menu:
List/Test Print

- 4** Press the [# Enter] key.

The following message appears on the panel display.

List/Test Print:
Config.P/Er.Log

- 5** Press the [▲] or [▼] key until the following message appears on the panel display.

List/Test Print:
Config. Page

- 6** Press the [# Enter] key.

The test printing will start.

Important

- When printing cannot be performed normally, paper misfeeds occur, or printing results are unsatisfactory, check whether an error message is displayed on the control panel. For more information about error messages, see "Troubleshooting", Maintenance Guide.

- 7** Press the [On Line ↔] key.

9

CONNECTING THE PRINTER TO A COMPUTER

- Network interface cable

See "Network connection"

- Parallel cable

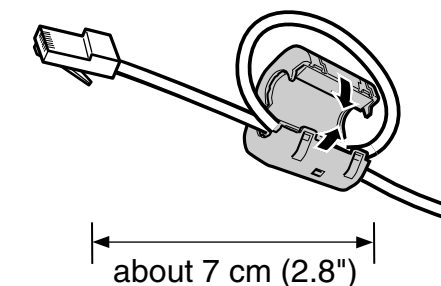
See "Parallel Connection"

- USB interface cable

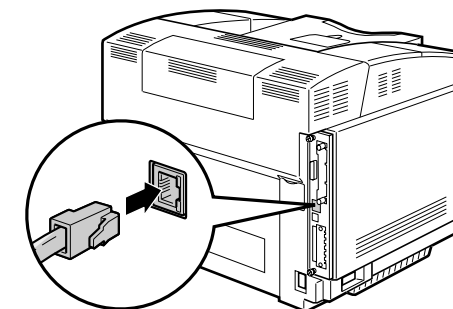
See "USB Connection"

❖ Network Connection

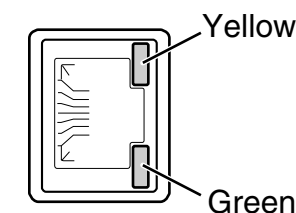
- 1** A core for the Ethernet cable is supplied with this machine. Make a loop about 7 cm (2.8") from one connector of the Ethernet cable, as shown below, and then attach the core.



- 2** Connect the core end of the Ethernet cable to the connector at the back of the printer and connect the other end to a network device, such as a hub.



- 3** Check the LEDs on the Ethernet port.



Note

- The LEDs yellow during 100BASE-TX operation, and unlit during 10BASE-T operation.
- The LEDs green when correctly connected to the network.

- 4** Make the printer network settings from the Control Panel.

See "Configuring the Printer for the Network", Administrator Reference.

❖ Parallel Connection

Important

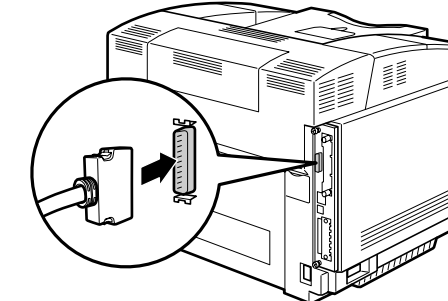
- The interface cable and a parallel interface adapter are not supplied separately, according to the computer being used.
- The printer's parallel connection is a standard bi-directional interface. It requires a standard IEEE compliant 36-pin parallel cable and an available parallel port on your computer.
- To avoid electrical interference, use a shielded cable.

Note

- Do not use a parallel cable longer than 2.5 meters (8.2 feet).

- 1** Turn off the printer and computer power.

- 2** Connect the parallel cable to the interface connector, and then connect the other end to the interface connector of the computer.



- 3** Turn on the printer and computer power.

- 4** Install the printer driver.

See Client Reference "Quick Install", in order to quickly install the printer driver.

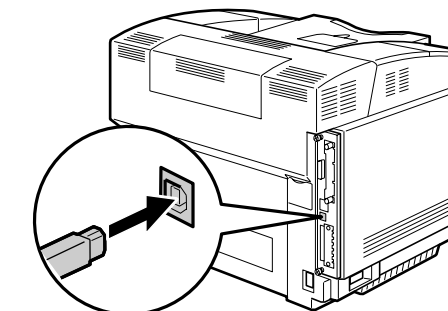
When you make detailed settings while installing the printer driver, use the Client Reference to refer to "Printing with Parallel Connection" listed in the chapter relating to the Windows version used.

❖ USB Connection

Important

- The USB interface cable is not supplied select it separately, according to the computer being used.
- USB connection is possible with Windows 98 SE/Me/2000/XP, Windows Server 2003, Mac OS 9.x and Mac OS X.
- USB connection with Macintosh is only possible via the printer's USB port. The support speed with Macintosh is equivalent to USB 1.1.

- 1** Connect the USB interface cable to the interface connector, and then connect the other end to the interface connector on the computer.



- 2** Install the printer driver.

When using Windows, see "Installing the Printer Driver Using USB", Client Reference listed in the chapter for the operating system used.

When using Mac OS or Mac OS X, see "Mac OS Configuration", Client Reference.

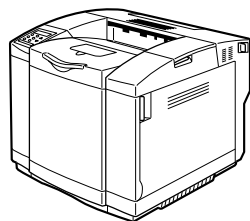
CL1000N

CLP831

P7431cn

LP031c

Option Setup Guide



Read this manual carefully before you use this product and keep it handy for future reference.
For safe and correct use, please be sure to read the Safety Information in the Maintenance
Guide before using the machine.

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.

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.

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.

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.

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

- The product name of Windows® 95 is Microsoft® Windows® 95.
- The product name of Windows® 98 is Microsoft® Windows® 98.
- The product name of Windows® Me is Microsoft® Windows® Millennium Edition (Windows Me).
- The product names of Windows® 2000 are as follows:
Microsoft® Windows® 2000 Advanced Server
Microsoft® Windows® 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 Server™ 2003 are as follows:
Microsoft® Windows Server™ 2003 Standard Edition
Microsoft® Windows Server™ 2003 Enterprise Edition
Microsoft® Windows Server™ 2003 Web Edition
- The product names of Windows NT® 4.0 are as follows:
Microsoft® Windows NT® Server 4.0
Microsoft® Windows NT® Workstation 4.0

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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.

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.

Reference

This symbol indicates a reference.

[]

Keys that appear on the machine's 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.

Available Options

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. For the specifications of each option, see *Administrator Reference*.

Option List

- PAPER FEED UNIT Type 1000
- Paper Cassette Type 1000 (Legal Tray)
- AD460 (Duplex Unit)
- Memory Unit Type C
- Hard Disk Drive Type 2600
- IEEE 802.11b Interface Unit Type D
- Bluetooth Interface Unit Type 2238
- Network Data Protection Unit Type A

Important

- The voltage rating of the connector for options is 24 V DC or less.

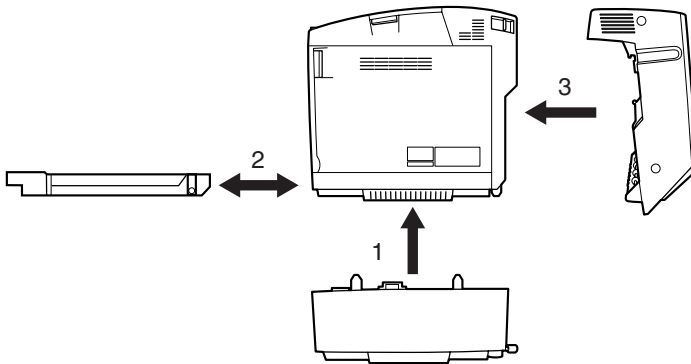
❖ Option Installation Flow Chart

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

1 Attach the paper feed unit. (PAPER FEED UNIT Type 1000) ▼	Attach the paper feed unit to the bottom of the printer. Up to 780 sheets of paper can be loaded when the optional paper feed unit is installed.
2 Install the Legal Tray. Paper Cassette Type 1000 ▼	Replace the Standard Tray (Tray 1) with the Legal Tray.
3 Attach the duplex unit. (AD460) ▼	Attach the duplex unit in the back of the printer.
4 Install the SDRAM module. (Memory Unit Type C) ▼	Install the module to the SDRAM module slot on the controller board. 64 MB, 128 MB, and 256 MB memory units are available.
5 Install the hard disk drive. (Hard Disk Drive Type 2600) ▼	Install the hard disk drive to the controller board.
6 Install the 802.11b interface unit (IEEE 802.11b Interface Unit Type D) ▼	Install the 802.11b interface unit to the slot on the controller board. If you choose to install the 802.11b interface unit, you cannot install the Bluetooth interface unit.
7 Install the Bluetooth interface unit (Bluetooth Interface Unit Type 2238) ▼	Install the Bluetooth interface unit to the slot on the controller board. If you choose to install the Bluetooth, you cannot install the 802.11b interface unit.
8 Install the network data protection unit. (Network Data Protection Unit Type A)	Insert the network data protection unit into the SD card slot on the controller board.

Install options in the positions as shown in the illustration.

❖ Exterior



1. PAPER FEED UNIT Type 1000

Loads up to 530 sheets of paper. Only one paper feed unit can be installed. The installed paper feed unit is designated as tray 2.

See p.7 "Attaching PAPER FEED UNIT Type 1000".

2. Paper Cassette Type 1000 (Legal Tray)

Replace the Standard Tray (Tray 1) with the Legal Tray.

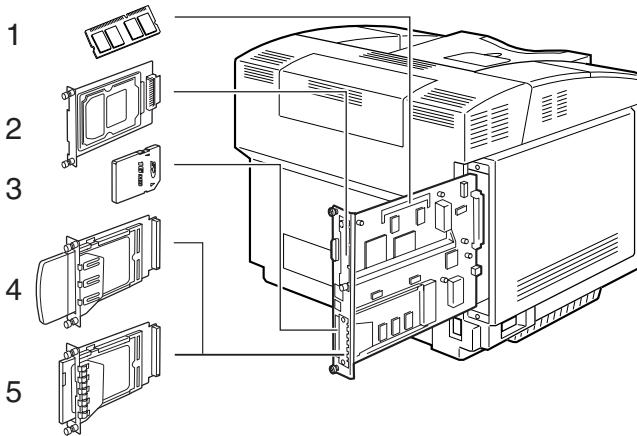
3. AD460 (duplex unit)

Attach to the back of the machine. Prints both sides of paper.

See p.12 "Attaching AD460 (Duplex Unit)".

◆ Interior

1



1. Memory Unit Type C (SDRAM module)

Install 64 MB, 128 MB, or 256 MB RAM into the slot on the controller board.

See p.16 “Installing Memory Unit Type C (SDRAM Module)”.

2. Hard Disk Drive Type 2600

See p.19 “Installing Hard Disk Drive Type 2600”.

3. Network Data Protection Unit Type A

See p.30 “Installing Network Data Protection Unit Type A”.

4. IEEE 802.11b Interface Unit Type D

See p.21 “Installing IEEE 802.11b Interface Unit Type D”.

5. Bluetooth Interface Unit Type 2238

See p.28 “Installing Bluetooth Interface Unit Type 2238”

Important

- ❑ 802.11b interface unit and Bluetooth interface unit cannot be installed in the printer at the same time.

Attaching PAPER FEED UNIT Type 1000

Preparation

When installing multiple options, install the paper feed unit first.

CAUTION:

- *The printer weighs approximately 31.5 kg (69.4 lb). When moving the printer, use the inset grips on both sides, and lift slowly. The printer will break or cause injury if dropped.*

CAUTION:

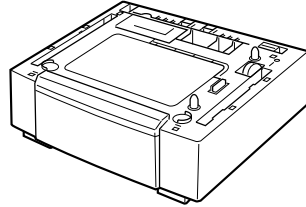
- *Lifting the paper feed unit carelessly or dropping it may cause injury.*

Note

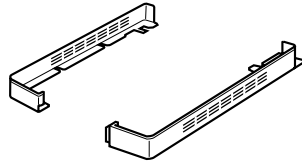
- The printer weighs approximately 31.5 kg (69.4 lb).
- The paper feed unit weighs approximately 6.0 kg (13.2 lb).
- The paper feed unit is displayed as tray 2.

1 Check the contents of the package for the following:

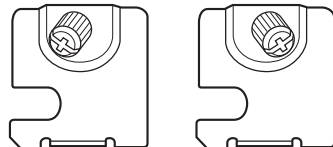
- ◆ Paper Feed Unit (including a paper tray)



- ◆ Side covers



- ◆ Mounting brackets (2)

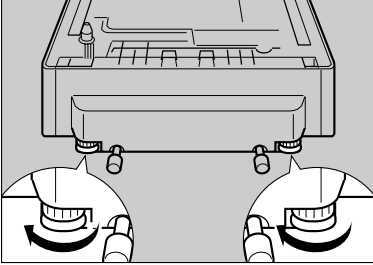


2 Turn off the power, and then unplug the power cable.

3 Remove the orange fastening tapes from the paper feed unit.

1

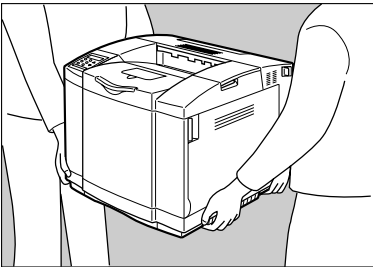
- 4** Place the paper feed unit where the printer is to be installed. Turn the adjusters on the back until they can turn no further.



 **Note**

- There are two metal stabilizers attached to the machine's rear. Do not remove them.

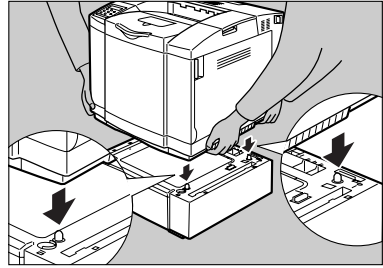
- 5** Lift the printer using the inset grips on both sides of the printer.



 **Important**

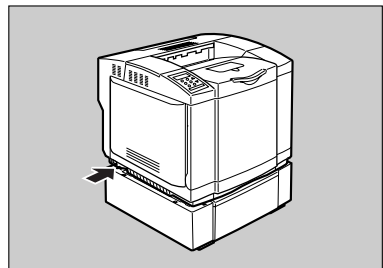
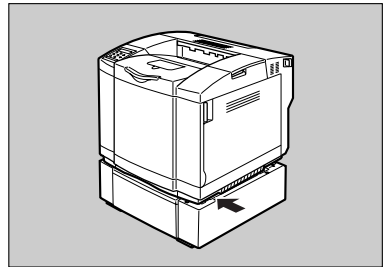
- The printer should always be lifted by at least two people.

- 6** Align the printer's main unit with the positioning tabs on the paper feed unit, and then lower it slowly.

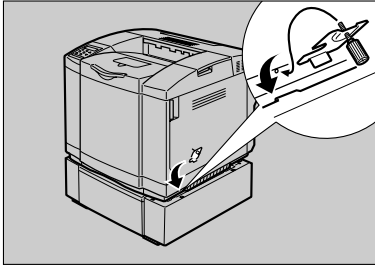


- 7** Fasten the printer and paper feed unit using the mounting brackets.

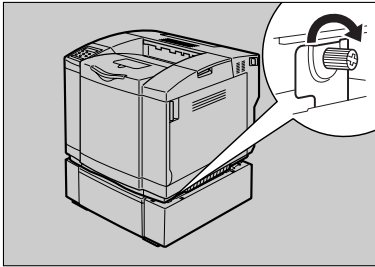
The printer and paper feed unit are fastened in two places: right front corner and left rear corner (as viewed from the front). The following explains fastening the printer and paper feed unit starting with the right front corner. For the left rear corner, they are fastened in the same manner.



- 1** Insert the pin end of the mounting bracket between the printer and paper feed unit.



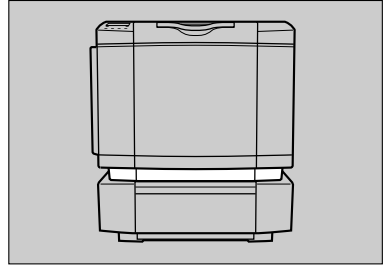
- 2** Tighten the knob of the mounting bracket.



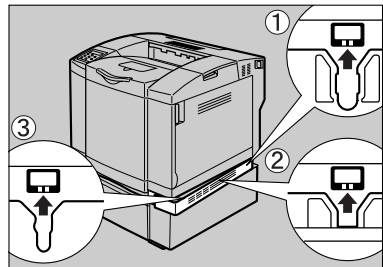
- 3** Attach the mounting bracket to the fastening site at the left rear corner using the same procedure described in steps **1** and **2**.

- 8** Attach the side covers between the printer and paper feed unit.

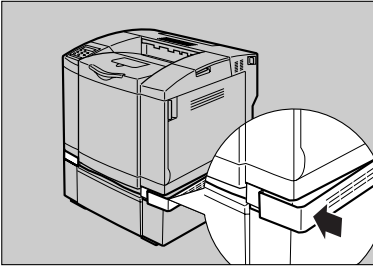
The side covers are attached at two places on the left and right sides (as viewed from the front). The following explains attaching the side cover on the right side. The left side cover is attached in the same manner.



- 1** Align the three tabs on the right side of the printer with those on the side cover, and then insert the side cover between the printer and paper feed unit. At that moment, push in the tabs — starting from the back.



- ② Push in the front ends of the side covers.



- ③ The left side cover is attached using the same procedure described in steps ① and ②.

Note

- When moving the printer, remove the paper feed unit.
- After finishing installation, you can check whether the paper feed unit is installed properly. Print the configuration page from the "List/Test Print" menu. If it is installed properly, you will see "Optional Paper Tray 2" under the "Options" list.

Configuration Page	
System Reference	
Printer ID	Not Defined
Total Memory	128 MB
Firmware Version	Firmware[0.22 / Z0000003
Controller Option	Accounting Module
Printer Language	RPCS (3.1.3), PCL 5c (0,
Options	Optional Paper Tray 2

- If the paper feed unit is not installed properly, reinstall it from step ②. If you cannot install it properly even after attempting reinstallation, contact your sales or service representative.

Reference

For printing the configuration page, see "Printing a Configuration Page", *Administrator Reference*.

See "Loading Paper", *Maintenance Guide*.

Important

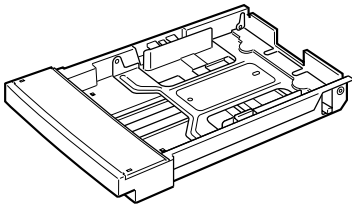
- Before use, adjust the printing position. For details, see "Adjusting the Tray Registration", *Maintenance Guide*.
- Before using the new paper feed unit, you must make settings in the printer driver.

Installing Paper Cassette Type 1000 (Legal Tray)

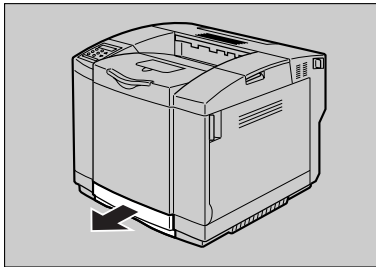
When using legal size paper, replace the Standard Tray (Tray 1) with the Legal Tray.

1 Check the contents of the package for the following:

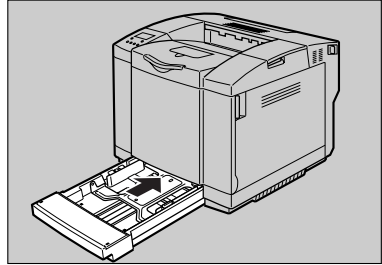
- ◆ Paper Cassette Type 1000



2 Pull the paper tray out slowly.



3 Install the Legal Tray.



Attaching AD460 (Duplex Unit)

1

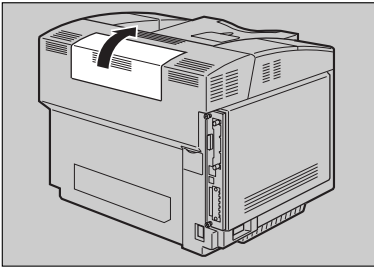
⚠ CAUTION:

- Lifting the duplex unit carelessly or dropping it may cause injury.

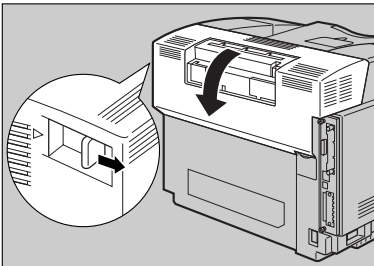
⚠ CAUTION:

- The inside of this machine gets very hot. Do not touch parts labeled "△" (hot surface). Doing so could result in a burn.

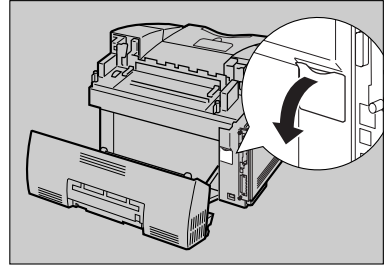
- 1 Turn off the power, and then unplug the power cable.
- 2 Remove the orange fastening tapes from the duplex unit.
- 3 Remove the three covers on the back of the printer.
 - 1 Remove the top cover first.



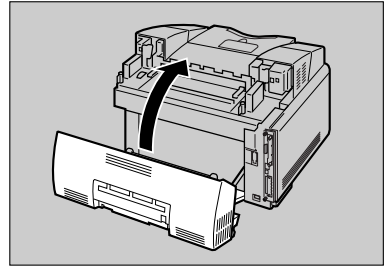
- 2 Pull the rear cover open lever, and then open the rear cover.



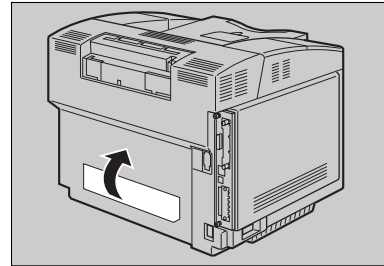
- 3 Remove the right side cover.



- 4 Close the rear cover slowly.



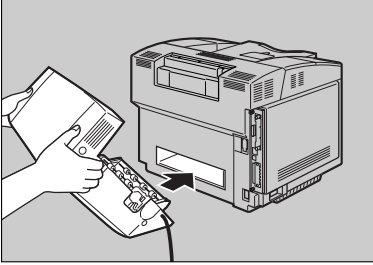
- 5 Remove the bottom cover.



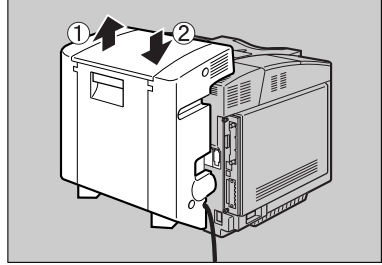
Note

- The covers removed in steps 1-5 are not used when the duplex unit is installed.

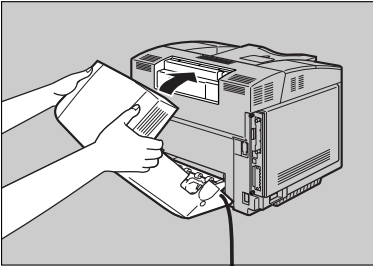
- 4** Align the bottom of the duplex unit with the bottom of the back of the printer, and then push it into position.



- 6** Lift the duplex unit slightly up holding its upper part (①), and then lower it on to the main unit (②).



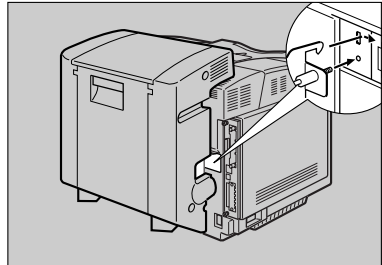
- 5** Put the upper part of the duplex unit on the upper part of the main unit.



Note

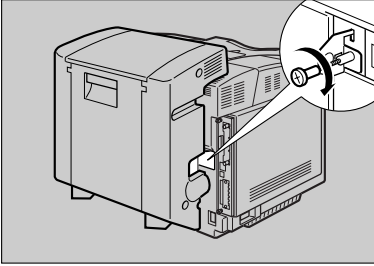
- Move the attached duplex unit gently left to right and back and forth to make sure it does not come off.

- 7** Insert the mounting bracket on the right side of the duplex unit into the hole in the right side on the back of the printer.

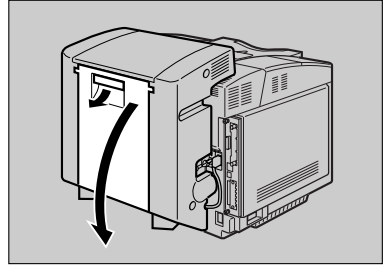


1

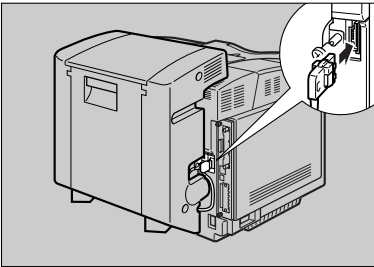
8 Tighten the mounting bracket screw.



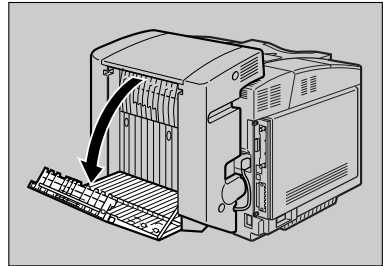
10 Pull the lever in the center of the duplex unit to open its rear cover.



9 Plug the duplex unit cable into the connector on the printer.



11 Open the duplex unit's inside cover.



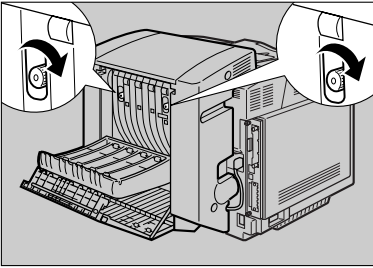
- 12** Tighten the green screws on the left and right sides at the top inside the duplex unit.

Important

- Tighten the green screws as far as possible. If the screws are not completely tightened, paper jams may occur.

Note

- Push against the screws to tighten them further. When the screw starts tightening, pull away the green part, and continue to tighten.



- 13** Close the duplex unit's inside cover.

- 14** Close the duplex unit's rear cover.

Note

- After finishing installation, you can check whether the duplex unit is installed properly. Print the configuration page from the "List/Test Print" menu. If it is installed properly, you will see "Duplex Unit" under the "Options" list.

Configuration Page	
System Reference	
Printer ID	Not Defined
Total Memory	128 MB
Firmware Version	Firmware 0.16 / Z
Controller Option	-
Printer Language	RPCS [5.0.9a], PC
Options	Duplex Unit

- If the duplex unit is not installed properly, reinstall it from step **11**. If you cannot install it properly even after attempting reinstallation, contact your sales or service representative.

Reference

For printing the configuration page, see "Printing a Configuration Page", *Administrator Reference*.

Important

- Before use, adjust the printing position. For details, see "Adjusting the Tray Registration", *Maintenance Guide*.
- Before using the duplex unit, you must make settings in the printer driver.

Installing Memory Unit Type C (SDRAM Module)

1

⚠ CAUTION:

- Do not touch the inside of the controller board compartment. It may cause a machine malfunction or a burn.

⚡ Important

- Before touching the memory unit, touch something metal to discharge any static electricity. Static electricity can damage the memory unit.
- Do not subject the memory unit to physical shocks.

🔧 Note

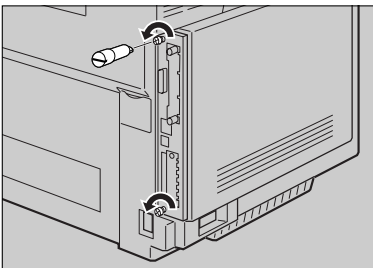
- If a hard disk drive is already attached, temporarily remove it and insert the SDRAM module. After inserting the SDRAM module, re-install the hard disk drive.

1 Turn off the power, and then unplug the power cable.

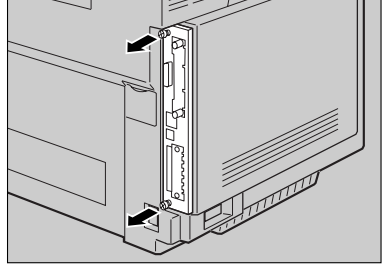
2 Loosen the two screws securing the controller board using the screwdriver provided.

🔧 Note

- The screws cannot be fully removed.

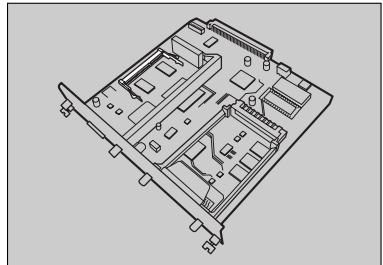


3 Remove the controller board holding the two screws loosened in step 2.

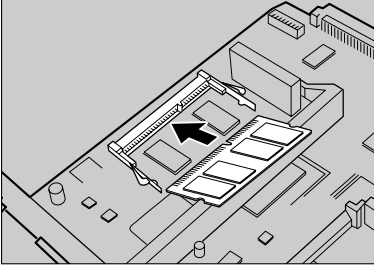


4 Place the controller board on a flat surface.

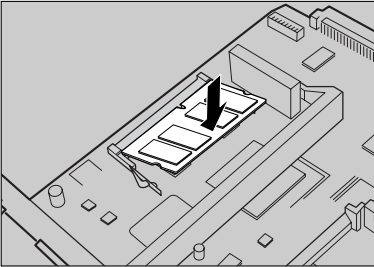
5 The memory unit is installed in the slot shown in the illustration below.



- 6** Align the notches in the SDRAM module terminal board with the slots, and then insert the SDRAM module at an angle.



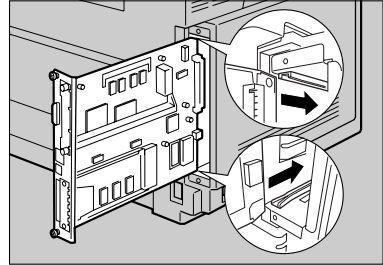
- 7** Push down the SDRAM module until it snaps into position.



- 8** Align the controller board to the top and bottom rails, and then push in slowly until it stops.

 **Note**

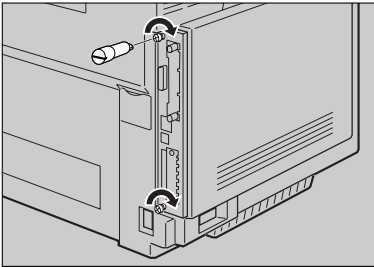
- When installing other options on the controller board, do not close the controller board, but go to the steps for installing the option.



 **Important**

- The printer may not work properly if the controller board is not set properly.

- 9** Secure the controller board to the machine by tightening the top and bottom screws using the screwdriver provided.



Note

- ❑ After finishing installation, you can check whether the memory unit is installed properly. Print the configuration page from the “List/Test Print” menu. If it is installed properly, you will see the memory capacity for “Total Memory”.

Configuration Page	
System Reference	
Printer ID	Not-Defined
Total Memory	384 MB
Firmware Version	Firmware 0.16 / Z
Controller Option	-
Printer Language	RPCS [3.0.9a], PC
Options	-

- ❑ The table below shows SDRAM module total memory capacities.

Standard	Extended	Total
128 MB	64 MB	192 MB
	128 MB	256 MB
	256 MB	384 MB

- ❑ If the memory unit is not installed properly, reinstall it from step **1**. If you cannot install it properly even after attempting reinstallation, contact your sales or service representative.

Reference

For printing the configuration page, see “Printing a Configuration Page”, *Administrator Reference*.

Important

- ❑ Before using the new memory unit, you must make settings in the printer driver.

Installing Hard Disk Drive Type 2600

⚠ CAUTION:

- Do not touch the inside of the controller board compartment. It may cause a machine malfunction or a burn.

⚡ Important

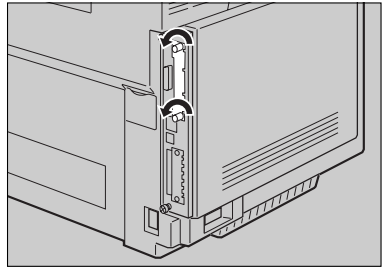
- Before touching the hard disk drive, touch something metal to discharge any static electricity. Static electricity can damage the hard disk drive.
- Do not subject the hard disk drive to physical shocks.

1 Turn off the power, and then unplug the power cable.

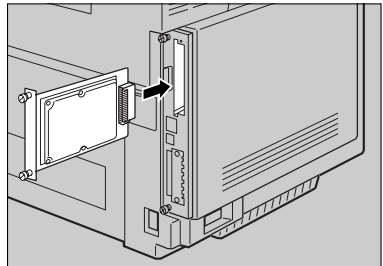
2 Remove the two screws, and then remove the cover of the hard disk drive installation unit.

🔩 Note

- The removed cover is not used when installing the hard disk drive.

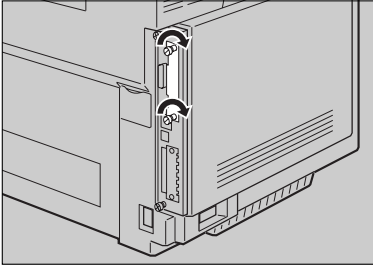


3 Fully insert the hard disk drive.



Push the hard disk drive fully in, and then check it is firmly connected to the controller board.

4 Fasten the hard disk drive using the screws



When the power is turned on, the hard disk drive will be formatted automatically.

Important

- ❑ Before using the new hard disk drive, you must make the settings in the printer driver.

Note

- ❑ After finishing installation, you can check whether the hard disk drive is installed properly. Print the configuration page from the “List/Test Print” menu. If it is installed properly, you will see “Printer Hard Disk Drive” for “Controller Option”.

Configuration Page	
System Reference	
Printer ID	Not Defined
Total Memory	128 MB
Firmware Version	Firmware(0.16 / Z0000003
Controller Option	Printer Hard Disk Drive
HDD:Font/Macro Download	Free Space 519029 KB
Printer Language	RPCS [3.0.9a], PCL 5c [0
Options	-

- ❑ If the hard disk drive is not installed properly, reinstall it from step 1. If you cannot install it properly even after attempting reinstallation, contact your sales or service representative.

Reference

For printing the configuration page, see “Printing a Configuration Page”, *Administrator Reference*.

Installing IEEE 802.11b Interface Unit Type D

⚠ CAUTION:

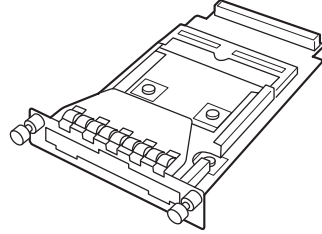
- Do not touch the inside of the controller board compartment. It may cause a machine malfunction or a burn.

⚡ Important

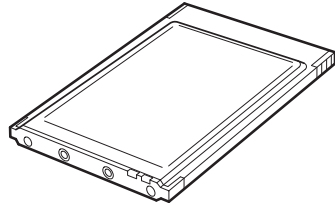
- ❑ Before touching the 802.11b interface unit, touch something metal to discharge any static electricity. Static electricity can damage the 802.11b interface unit
- ❑ Do not subject the 802.11b interface unit to physical shocks.

1 Check the contents of the package for the following:

- ❖ IEEE 802.11b Interface Unit Type D
 - Interface Unit



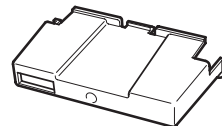
- Card



- Antenna



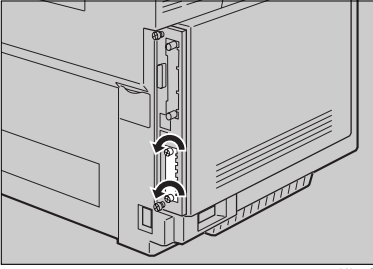
- Antenna Cap



2 Turn off the power, and then unplug the power cable.

1

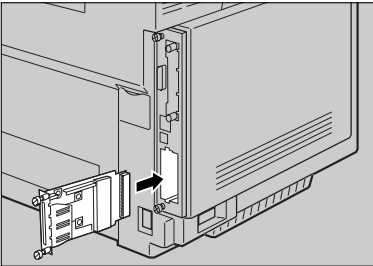
- 3** Loosen the two screws and remove the cover of the 802.11b interface unit installation unit.



 **Note**

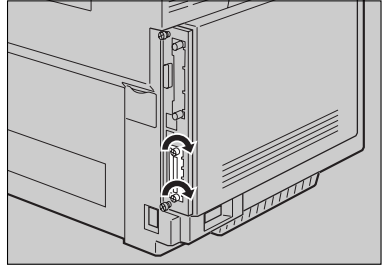
- The removed cover is not used when installing the interface unit.

- 4** Fully insert the 802.11b interface unit.

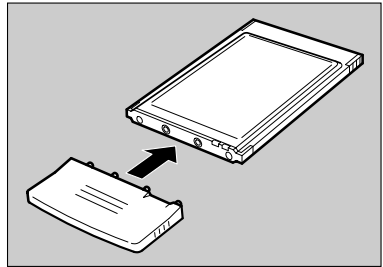


Confirm that the 802.11b interface unit is firmly connected to the controller board.

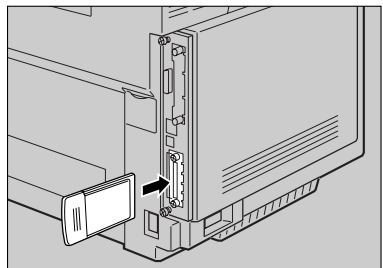
- 5** Tighten the two screws to secure the interface unit.



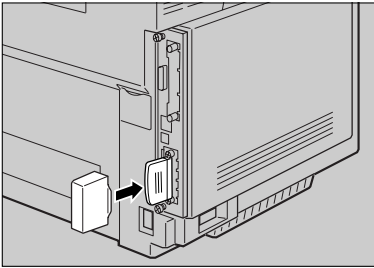
- 6** Attach the antenna to the card with the label facing down and the uneven side of the antenna facing up.



- 7** With the antenna and indented end toward you, slowly insert the card as far as possible into the interface unit.

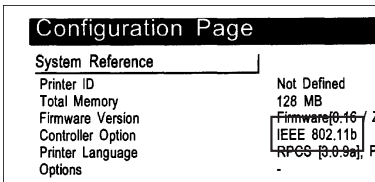


- 8** Hold the antenna cap with the cut off corners towards you and fit it over the card.



Note

- After finishing installation, you can check whether the 802.11b interface unit is installed properly. Print the configuration page from the “List/Test Print” menu. If it is installed properly, you will see “IEEE 802.11b” for “Controller Option”.



- If the 802.11b interface unit is not installed properly, reinstall it from step 2. If you cannot install it properly even after attempting reinstallation, contact your sales or service representative.

Reference

For printing the configuration page, see “Printing a Configuration Page”, *Administrator Reference*.

IEEE 802.11b (Wireless LAN) Configuration

Configure the printer for using the IEEE 802.11b (Wireless LAN). The following table shows the control panel settings and their default values. These items are included in the “Host Interface” menu.

Setting Name	Default Value
Comm. Mode	802.11 Ad hoc
Channel	<ul style="list-style-type: none"> • Inch version (1-11) 11 • Metric version (1-13) 13
Trans. Speed	Auto
SSID	ASSID
WEP Setting	Not Active

Note

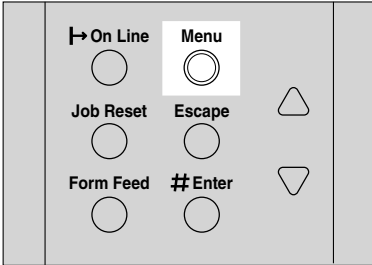
- In order to use the IEEE 802.11b (Wireless LAN), select “IEEE 802.11b” for “LAN Type” in “Network Setup” of the Host Interface menu, and then set “IP Address”, “Subnet Mask”, “Gateway Address”, “DHCP”, “Frame Type (NW)” and “Active Protocol” in the “Network Setup”. For more information about setting the items in the “Configuring the Printer for the Network”, see *Administrator Reference*.
- The IP address can be set using Web Image Monitor also. For details about using Web Image Monitor, see Web Image Monitor Help.
- It takes a while for the display to change after pressing the **[▲]** or **[▼]** key. To set a new IP address, press the **[▲]** or **[▼]** key - releasing immediately - and then make sure that the display changes.

1

Limitation

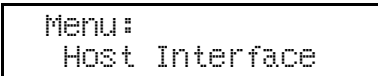
- The 802.11b interface unit cannot be used simultaneously with a standard ethernet interface.

1 Press **[Menu]** key.

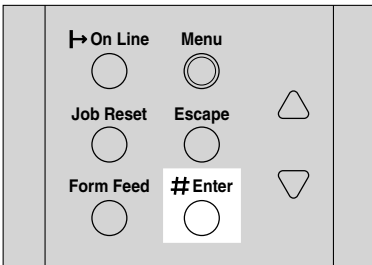


“Menu” appears on the panel display.

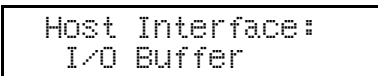
2 Press **[▲]** or **[▼]** key to display “Host Interface” menu.



3 Press **[# Enter]** key.



The following message appears on the panel display.



4 Press **[▲]** or **[▼]** key to display “IEEE 802.11b”.



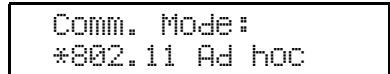
5 Press **[# Enter]** key.

Be sure that “Comm. Mode” appears on the panel display.



6 Press **[# Enter]** key.

The following message appears on the panel display.



7 Press **[▲]** or **[▼]** key to select the **[Comm. Mode]**.

Note

- The factory default is “802.11 Ad hoc”.
- To use an IEEE 802.11b card for which the SSID (Network Name) setting is not necessary, select “Ad hoc”.
- [Comm. Mode]** can also be set using a web browser. For details, see Web Image Monitor Help, and “Configuring the Network Interface Board Using Web Browser”, *Administrator Reference*.

8 Press **[# Enter]** key.

The display returns to the previous menu in a few seconds.

- 9** If “802.11 Ad hoc” or “Ad hoc” is selected for “Comm. Mode”, set the channel to use for transmission.

 **Note**

- Confirm the network administrator for the channel to use.

- 1** Press **[▲]** or **[▼]** key to display “Channel”.

```
IEEE 802.11b:
Channel
```

- 2** Press **[# Enter]** key.

The channel currently used appears on the panel display.

```
Channel:
(1-11)   11
```

- 3** Press **[▲]** or **[▼]** key to enter the channel.

```
Channel:
(1-11)   10
```

- 4** Press **[# Enter]** key.

- 10** Set “Trans. Speed” in the same way.

 **Note**

- The factory default is “Auto”. If you need to change the transmitting speed depending on environment you are using, select the appropriate transmitting speed.

- 11** If “Infrastructure” or “802.11 Ad hoc” is selected for “Comm. Mode”, set SSID to use for transmission.

 **Note**

- Confirm the network administrator for SSID to use.

- SSID can also be set using a web browser. For details, see the Web Image Monitor Help, and “Configuring the Network Interface Board Using Web Browser”, *Administrator Reference*.

- 1** Press the **[▲]** or **[▼]** key to display “SSID”, and then press the **[# Enter]** key.

```
IEEE 802.11b:
SSID
```

The following message appears on the panel display.

```
SSID:
Enter ID
```

 **Note**

- The factory default is “ASSID”.
- If an SSID has been set, you can check the set SSID. Press the **[▲]** or **[▼]** key to display “View”, and then press the **[# Enter]** key.
- If SSID is not set, “SSID not entered” appears.

1

2 Press the **[# Enter]** key.

The following message appears on the panel display.

```
SSID:
```

Note

- The value in brackets at the upper right is the number of characters entered.

3 Press the **[▲]** or **[▼]** key to select characters, and then press the **[# Enter]** key.

```
SSID:
A
```

You can now enter the next character.

```
SSID:
A
```

4 Continue entering the key.**Note**

- The characters that can be used are ASCII 0x20-0x7e (32 bytes).
- To display the previous character, press the **[Escape]** key.

5 After entering the key, press the **[# Enter]** key twice.

```
SSID:
AAAAAAAAAAAAAAAAAAAA
```

The screen returns to step **1-1**.

12 In the case of using a WEP key on a network, activate the WEP setting to be used for communication along with WEP.**Note**

- Confirm the network administrator for the WEP Key to use.
- WEP key can also be set using a web browser. For details, see Web Image Monitor Help.

1 Press the **[▲]** or **[▼]** key to display “WEP Setting”.

```
IEEE 802.11b:
WEP Setting
```

2 Press the **[# Enter]** key.

```
WEP Setting:
*Not Active
```

3 Press the **[▲]** or **[▼]** key to display “Active”, and then press the **[# Enter]** key.

```
WEP Setting:
Active
```

The following message appears on the panel display.

```
Change WEP Key:
Yes (HEX)
```

Note

- When setting the WEP Setting to “Active”, you will need to enter the WEP key. If you have not entered the key, be sure to enter it.
- If you have entered the WEP key and change the setting, press the **[▲]** or **[▼]** key to display “No”, and then press the **[# Enter]** key.

- 4 Press **[▲]** or **[▼]** key to display **[Yes (HEX)]** when inputting a hexadecimal WEP key or **[Yes (ASCII)]** when inputting an ASCII WEP key. Then press **[# Enter]** key.

```
WEP Key:      [ 0 ]
```

 **Note**

- The value in brackets at the upper right is the number of characters entered.

- 5 Press the **[▲]** or **[▼]** key to select characters, and then press the **[# Enter]** key.

```
WEP Key:      [ 1 ]
0
```

You can now enter the next character.

```
WEP Key:      [ 1 ]
0
```

- 6 Continue entering the key.

 **Note**

- When using 64 bit WEP, up to 10 characters can be used for hexadecimal and up to five characters for ASCII. When using 128 bit WEP, up to 26 characters can be used for hexadecimal and up to 13 characters for ASCII.
- The number of characters that can be entered is limited to 10 or 26 for hexadecimal and 5 or 13 for ASCII. If you try to enter too many characters, the following message appears:

- hexadecimal

```
Error: Enter 10
or 26 characters
```

- ASCII

```
Error: Enter 5
or 13 characters
```

- For ASCII character strings, each capital letter and lower-case letter is recognized respectively.
- To display the previous character, press the **[Escape]** key.

- 7 After entering the key, press the **[# Enter]** key.

```
WEP Key:      [26]
0000000000000000
```

The screen returns to step 12-1.

- 13 Press **[On Line]** key.

"Ready" appears on the panel display.

```
Ready
```

- 14 Print a configuration page to confirm the settings made.

 **Reference**

For printing the configuration page, see "Printing a Configuration Page", *Administrator Reference*.

Installing Bluetooth Interface Unit Type 2238

1

⚠ CAUTION:

- Do not touch inside the controller board compartment. It may cause a machine malfunction or a burn.

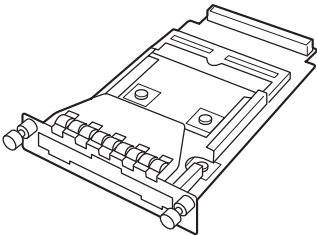
⚡ Important

- ❑ Before manipulating the Bluetooth interface unit, touch any metal thing to discharge static electricity. Static electricity thing damage the Bluetooth interface unit.
- ❑ Do not subject the Bluetooth interface unit to physical shocks.

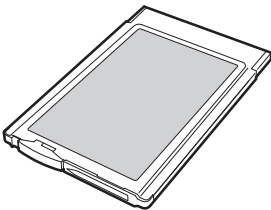
1 Check the contents of the package for the following:

◆ Bluetooth Interface Unit Type 2238

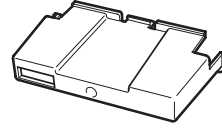
- Interface Unit



- Card

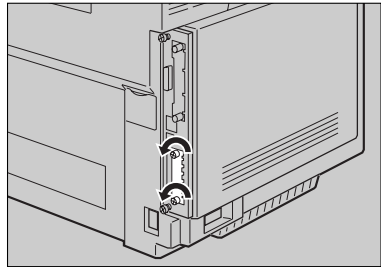


- Antenna Cap



2 Turn off the power, and then unplug the power cable.

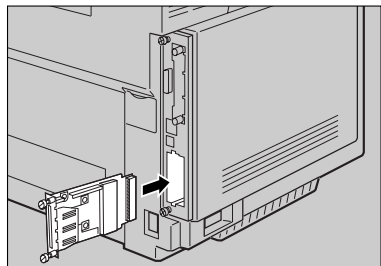
3 Loosen the two screws and remove the cover of the Bluetooth interface unit installation unit.



📌 Note

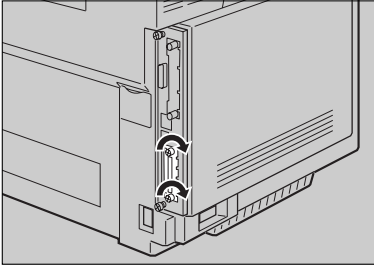
- ❑ The removed cover is not used when installing the interface unit.

4 Fully insert the Bluetooth interface unit.

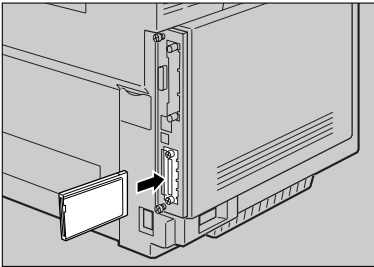


Confirm that the interface unit is firmly connected to the controller board.

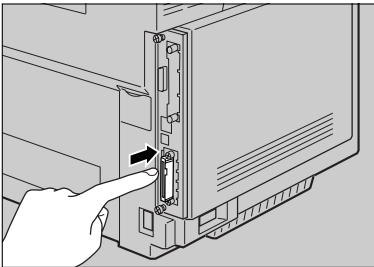
- 5** Tighten the two screws to secure the interface unit.



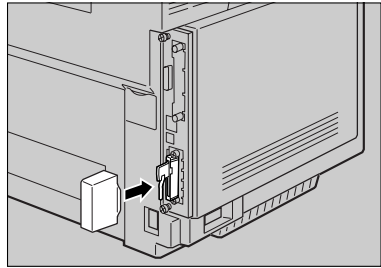
- 6** With the "INSERT" side facing you, slowly insert the card into the Bluetooth interface unit until it stops.



- 7** Press the antenna to extend it.



- 8** Hold the antenna cap with the cut off both corners towards you and fit it over the card.



Note

- After finishing installation, you can check whether the Bluetooth interface unit is installed properly. Print the configuration page from the "List/Test Print" menu. If it is installed properly, you will see "Bluetooth" for "Controller Option".

Configuration Page	
System Reference	
Printer ID	Not Defined
Total Memory	128 MB
Firmware Version	Firmware 1.16
Controller Option	Bluetooth
Printer Language	RPCS [3.0.9a]
Options	-

- If the Bluetooth interface unit is not installed properly, reinstall it from step 2. If you cannot install it properly even after attempting reinstallation, contact your sales or service representative.

Reference

For printing the configuration page, see "Printing a Configuration Page", *Administrator Reference*.

Installing Network Data Protection Unit Type A

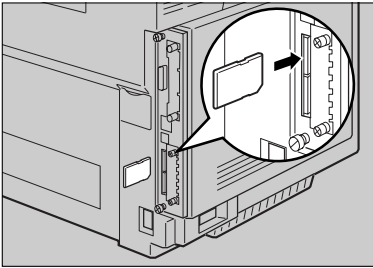
1

Important

- Protect the network data protection unit from physical shocks.

1 Turn off the power, and then unplug the power cable.

2 Insert the network data protection unit until it clicks into the card slot on the controller board at the back of the main unit.



Note

- Do not touch the network data protection unit while the machine is in use. It may come off even if pushed only slightly.

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MEMO

MEMO

MEMO

Model number: G108-17
Printed in Japan
EN (USA) G108-8614

Notes for Users

These notes provide additional information about using this product. To use SSL encryption, make the following settings after installing this product in the printer.

Note

- For details about installing this product, see *Option Setup Guide*.

Configuring SSL Encryption

This section describes how to configure SSL (secure sockets layer) encryption. Using SSL encryption, you can issue a server certificate to authorize use of the printer.

Self-Signed Certificates and Certificates Issued by a Certificate Authority

There are two types of server certificate: a self-signed certificate, which you simply install, and a certificate that is issued to you by a certificate authority after you apply for it, and that you then install.

Configuration flow (self-signed certificate)

- ① Creating and installing the server certificate
Using Web Image Monitor in Administrator mode, create the server certificate, and then install it.
- ② Enabling SSL
Enable the **[SSL/TLS]** setting to activate certification of the printer.
Using Web Image Monitor in Administrator mode, make the settings.

Configuration flow (certificate issued by a certificate authority)

- ① Creating the server certificate
Using Web Image Monitor in Administrator mode, create the server certificate.
The application procedure after creating the certificate depends on the certificate authority. Follow the procedure specified by the certificate authority.
- ② Installing the server certificate
Using Web Image Monitor in Administrator mode, install the server certificate.
- ③ Enabling SSL
Enable the **[SSL/TLS]** setting to activate certification of the printer.
Using Web Image Monitor in Administrator mode, make the settings.

Creating and Installing the Server Certificate (Self-Signed Certificate)

Using Web Image Monitor in Administrator mode, create the server certificate and install it.

This procedure is used for a self-signed certificate.

1 Open a Web browser.

2 Enter “http://(machine's-address)” in the address bar to access the printer.

3 Select Administrator mode.

 **Reference**

For details about selecting Administrator mode in Web Image Monitor, see “Access in Administrator Mode”, *Administrator Reference*.

4 Click [Configuration], click [Security], and then click [Certificates].

The [SSL Certificate] page appears.

5 Click [Create].

The [Certificate Information] page appears.

6 Make the necessary settings.

 **Reference**

For details about the displayed items and selectable items, see Web Image Monitor Help.

7 Click [OK].

The [SSL Certificate] page appears.

[Installed] appears under [Certificate Status] to show that a server certificate for the printer has been installed.

 **Note**

Click [Delete] to delete the server certificate from the machine.

Creating the Server Certificate (Certificate Issued by a Certificate Authority)

Using Web Image Monitor in Administrator mode, create the server certificate. This procedure is used for a certificate issued by a certificate authority.

1 Open a Web browser.

2 Enter “http://(machine's-address)/” in the address bar to access the printer.

3 Select Administrator mode.

 **Reference**

For details about selecting Administrator mode in Web Image Monitor, see “Access in Administrator Mode”, *Administrator Reference*.

4 Click [Configuration], click [Security], and then click [Certificates].

The [Certificate Information] page appears.

5 Click [Request].

The [Certificate Information] page appears.

6 Make the necessary settings.

 **Reference**

For details about the displayed items and selectable items, see Web Image Monitor Help.

7 Click [OK].

The [SSL Certificate] page appears.

[Requesting] appears under [Certificate Status].

 **Note**

Click [Cancel Request] to cancel the request for the server certificate.

8 Apply to the certificate authority for the server certificate.

The application procedure depends on the certificate authority. For details, contact the certificate authority.

When applying, use the data created with Web Image Monitor.

 **Note**

Using Web Image Monitor, you can create the contents of the server certificate but you cannot send the application.

Installing the Server Certificate (Certificate Issued by a Certificate Authority)

Using Web Image Monitor in Administrator mode, install the server certificate. This procedure is used for a certificate issued by a certificate authority. Enter the server certificate contents issued by the certificate authority.

1 Open a Web browser.

2 Enter “http://(machine's-address)/” in the address bar to access the printer.

3 Select Administrator mode.

 **Reference**

For details about selecting Administrator mode in Web Image Monitor, see “Access in Administrator Mode”, *Administrator Reference*.

4 Click **[Configuration]**, click **[Security]**, and then click **[Certificates]**.

The **[SSL Certificate]** page appears.

5 Click **[Install]**.

6 Enter the contents of the server certificate.

In the displayed field, enter the contents of the server certificate issued by the certificate authority.

 **Note**

Click **[Delete]** to delete the server certificate.

 **Reference**

For details about the displayed items and selectable items, see Web Image Monitor Help.

7 Click **[OK]**.

The **[SSL Certificate]** page appears.

[Installed] appears under **[Certificate Status]** to show that a server certificate for the printer has been installed.

Enabling SSL

After installing the server certificate in the printer, enable the SSL setting so that the user can certify the printer.

This procedure is used for a self-signed certificate or a certificate issued by a certificate authority.

Using Web Image Monitor in Administrator mode, make the settings.

1 Open a Web browser.

2 Enter "http://(machine's-address)/" in the address bar to access the printer.

3 Select Administrator mode.

Reference

For details about selecting Administrator mode in Web Image Monitor, see "Access in Administrator Mode", *Administrator Reference*.

4 Click [Configuration], click [Security], and then click [SSL/TLS].

The [SSL/TLS Settings] page appears.

5 Click [Enable] for [SSL/TLS].

6 Click [Apply].

The SSL setting is enabled.

Note

- When using SSL, enter "http://(machine's-address)/" to access the printer. For this to work, Internet Explorer 5.5 or later, or Netscape 7.0 or later must be installed on your computer.

Configuring SSL Encryption for the Client

This section describes how to configure the client after installing the server certificate in the printer and enabling the SSL (secure sockets layer) setting.

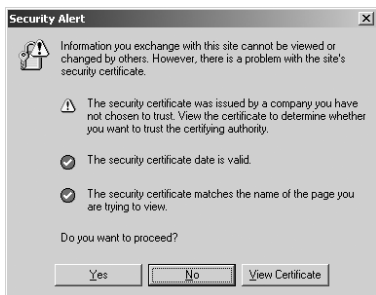
If a security alert dialog box appears when you access the printer using a Web browser or IPP, install the certificate in the client computer.

Installing the Certificate Using the Web Browser

Enter “http://(machine's-address)/” in the address bar to access the printer.

If a security alert dialog box appears, install the certificate.

As an example, this section describes procedures under Internet Explorer.



1 When the [Security Alert] dialog box appears, click [View Certificate].

The [Certificate] dialog box appears.

Check the contents of the certificate.

If there is a problem, such as the certificate having expired, contact the administrator.

2 On the [General] tab, click [Install Certificate...].

Certificate Import Wizard starts.

3 Install the certificate by following the Certificate Import Wizard instructions.

Note

- For details about how to install the certificate, see the Web browser Help.
- If a certificate issued by a certificate authority is installed in the printer, confirm the certificate store location with the certificate authority.

Installing the Certificate Using SmartDeviceMonitor for Client

If the **[Security Alert]** dialog box appears when accessing the printer using IPP to create or configure an IPP port, or when printing, install the certificate.



Important

- To select the certificate store location when using Certificate Import Wizard, click **[Place all certificates in the following store]**, and then click **[Local Computer]** under **[Trusted Root Certification Authorities]**.
- Internet Explorer must be installed on your computer. Use the latest version. Internet Explorer 6.0 or later is recommended.

1 When **[Security Alert]** appears, click **[View Certificate]**.

The **[Certificate]** dialog box appears.

2 On the **[General]** tab, click **[Install Certificate...]**.

Certificate Import Wizard starts.

3 Click **[Place all certificates in the following store]**, and then click **[Browse...]**.

The **[Select certificate store]** dialog box appears.

4 Click **[Next]**.

5 Select the **[Show physical stores]** check box, and then click **[Local Computer]** under **[Trusted Root Certification Authorities]**.

6 Click **[OK]**.

The certificate store location appears under **[Certificate store:]**.

7 Click **[Next]**.

8 Click **[Finish]**.

9 Click **[OK]**.

The certificate is installed.

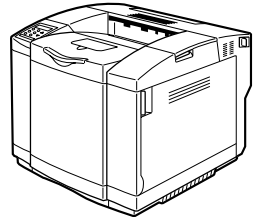
Note

- When you create or change an IPP port using SmartDeviceMonitor for Client, enter "http://(machine's-address)/ printer" in **[Printer URL]** to access the printer.

Aficio™

CL1000N

Operating Instructions Maintenance Guide



-
- 1 Getting Started
 - 2 Paper and Other Media
 - 3 Replacing Consumables and Maintenance Kit
 - 4 Cleaning and Adjusting the Printer
 - 5 Troubleshooting
 - 6 Appendix

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

220-240 V, 50/60 Hz, 6 A or more

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

Operator Safety:

This printer is considered a class 1 (3B) laser device, safe for office/ EDP use. The printer contains 5 milliwatt, 770 - 795 nanometer wavelength, AlGaAs 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.

The following label is attached on right side of the printer.



Laser Safety:

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 of 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 make copies of any item for which copying is prohibited by law.

Copying the following items is normally prohibited by local law:

Bank bills, revenue stamps, bonds, stock certificates, bank drafts, checks, passports, driver's licenses.

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 metric version.

For good copy quality, the supplier recommends that you use genuine toner, maintenance kits and parts from the supplier.

The supplier shall not be responsible for any damage or expense that might result from the use of consumables (toner, maintenance kits and parts) other than genuine consumables from the supplier with your office products.

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Trademarks

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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® Windows® 2000 Advanced Server
 - Microsoft® Windows® 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 Server™ 2003 are as follows:
 - Microsoft® Windows Server™ 2003 Standard Edition
 - Microsoft® Windows Server™ 2003 Enterprise Edition
 - Microsoft® Windows Server™ 2003 Web Edition
- The product names of Windows NT® 4.0 are as follows:
 - Microsoft® Windows NT® Server 4.0
 - Microsoft® Windows NT® Workstation 4.0

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.

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.

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

⚠ WARNING:

- *It is dangerous to handle the plug with wet hands. Doing this may result in receiving an electric shock.*
- *Connect the power cord directly into a wall outlet and never use an extension cord.*
- *Disconnect the power plug (by pulling the plug, not the cable) if the power cable or plug becomes frayed or otherwise damaged.*
- *Confirm that the wall outlet is near the machine and freely accessible, so that in event of an emergency, it can be unplugged easily.*
- *Only connect the machine to the power source described in the manual.*
- *Avoid multi-wiring.*
- *Do not damage, break or make any modifications to the power cord. Do not place heavy objects on it, pull it hard or bend it more than necessary. These actions could cause an electric shock or fire.*
- *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 should take place at an authorized dealer or an appropriate collection site. If you dispose of the used toner containers yourself, dispose of them according to local regulations.*
- *Dispose of the used toner cartridge in accordance with the local regulation.*
- *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.*
- *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.*
- *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.*

⚠ CAUTION:

- *Do not eat or swallow toner.*
- *Keep toner (used or unused) and toner cartridge out of reach of children.*
- *Do not put an object on the right cover when it is open.*
- *Protect the equipment from dampness or wet weather, such as rain, snow, and so on.*
- *Unplug the power cord from the wall outlet before you move the equipment. While moving the equipment, you should take care that the power cord 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.*
- *For environmental reasons, do not dispose of the equipment or expended supply waste at household waste collection points. Disposal can take place at an authorized dealer or at appropriate collection sites.*
- *The inside of the machine becomes very hot. Do not touch the parts with a “⚠” label (means hot surface). Touching a part with a “⚠” label (means hot surface) could result in a burn.*
- *The fusing unit becomes very hot. When installing the new fusing unit, turn off the printer and wait about 30 minutes. After that, install the new fusing unit. Not waiting for the unit to cool down can result in a burn.*
- *Do not pull out the fusing unit forcefully. It may cause the unit to fall and result in an injury.*
- *When touching the fusing unit, do not touch any areas other than the handle as it may cause a burn.*
- *When removing misfed paper, do not touch the fusing unit because it could be very hot.*
- *To prevent an injury, this printer should be lifted by at least two people.*
- *The printer weights approximately 31.5 kg (69.4 lb). When moving the printer, use the inset grips on both sides, and lift slowly. The printer will break or cause injury if dropped.*
- *Before installing options, the machine should be turned off and unplugged for at least half an hour. Components inside the machine become very hot, and can cause a burn if touched.*
- *Lifting the paper feed unit carelessly or dropping it may cause an injury.*
- *Lifting the duplex unit carelessly or dropping it may cause an injury.*
- *Do not touch the inside of the controller board compartment. It may cause a machine malfunction or a burn.*

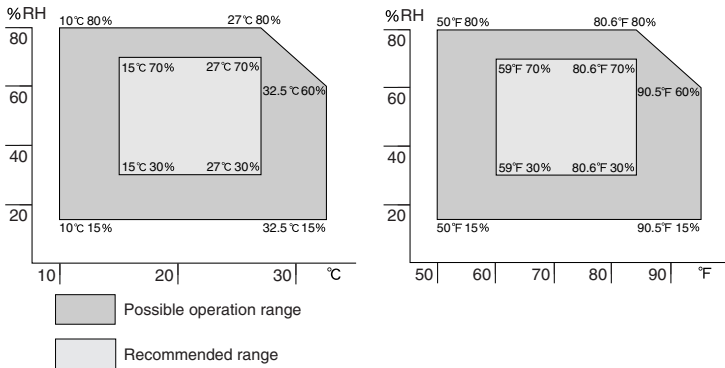
⚠ CAUTION:

- *Keep the machine away from humidity and dust. A fire or an electric shock might occur.*
- *Place the machine on a strong and level surface. Otherwise, the machine might fall and result in an injury.*
- *If you use the machine in a confined space, confirm that there is a continuous flow of air.*
- *When pulling the paper tray out, be careful not to pull it strongly. If you do, the tray might fall and cause an injury.*
- *This product uses low frequency electromagnetic fields and may cause harmful interference to sensitive medical implant devices. If you have a cardiac pacemaker or implantable defibrillator, please consult your doctor for additional suggestion or advice.*
- *When moving the machine, each person should hold the handles that are located on opposite sides, and then lift it slowly. Lifting it carelessly or dropping it may cause an injury.*
- *When you move the printer, remember to unplug the power cord from the wall outlet to avoid a fire or an electric shock.*
- *When you pull out the plug from the socket, grip the plug, not the cord, to avoid damaging the cord and causing a fire or an electric shock.*
- *When moving the printer after use, do not take out any of the Toners, Photo Conductor Units, nor the Waste Toner Bottle to prevent toner spill inside the machine.*
- *When lifting the machine, use the inset grips on both sides. Otherwise the printer could break or cause an injury if dropped.*
- *Before moving the machine, unplug the power cord from the wall outlet. If the cord is unplugged abruptly, it could become damaged. Damaged plugs or cords can cause an electrical or fire hazard.*
- *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.*

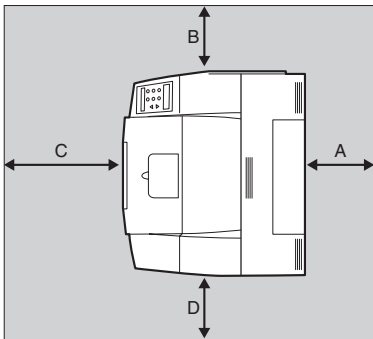
This machine has labels for ⚠WARNING and ⚠CAUTION at the positions shown below. For safety, please follow the instructions and handle the machine as indicated.

For Proper Operation

- Supplies and parts, including toner, and photo conductor unit have been evaluated for quality based on a benchmark for recommended products. Use recommended supplies and parts to maintain this standard and achieve high quality results.
- Place this printer on a level, stable table that is not curved. Do not place across two tables.
The machine must be level within 4.5 mm, 0.2" front to rear, and left to right.
- Recommended temperature and humidity.



- To load paper, replace consumables, and resolve paper jams, etc., leave a clearance as shown below.



A: more than 25 cm (9.9") (More than 35 cm when the AD460 (duplex unit) is attached.)


B: more than 20 cm (7.9")

C: more than 70 cm (27.6")

D: more than 50 cm (19.7")

- When moving from a cold to warm location, or if the local temperature rises suddenly, condensation may occur inside. If this occurs, leave the machine unused for at least one hour to let it acclimatize.
- Extreme temperature rise inside the machine may cause malfunctions. Do not place anything in the immediate area of the exhaust and intake vents.
- Always keep all covers closed.
- During printing, do not open the cover of any parts, and do not move the printer.
- Do not pull out the paper tray during printing. Printing will stop and paper will jam.
- Prevent foreign objects, such as paper clips, etc., from falling inside the printer.
- During printing, do not switch the power off and do not unplug the power cable. Sudden power interruptions can cause malfunctions.
- While printing, protect the printer from external shocks, such as arranging papers on top of the printer.
- Depending on temperature and humidity, during printing a while steam may come from the printing paper when it leaves the printer.
- The paper exit and nearby parts may become hot during printing. This is normal and no reason for concern.
- This unit is designed and manufactured to have a life expectancy of 5 years based on a monthly printing volume of 2,000 sheets (A4 with a 1:1 ratio of color printing and monochrome printing) when the power is on for a total of 8 hours per day). If the monthly number of printed pages exceeds 10,000 sheets or if the time the power is on exceeds 8 hours a day, life expectancy shortens. The 5 years figure is also based on a ratio of 1:1 of color printing and monochrome printing. Should the number of sheets of color printing exceed this ratio, the total number decreases.

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 30 minutes after the last operation has been completed. To exit Low-power (Energy Saver) mode, press any key on the control panel. For more information about how to configure Energy Saver mode, see “Making Printer Settings with Control Panel”, *Administrator Reference*.

❖ Specifications

Energy Saver mode	Power Consumption	15 W or less
	Default Time	30 minutes
	Recovery Time	45 seconds or less

German acoustic statement

The following measurements were made in accordance with ISO7779 and reported in conformance with ISO 9296.

◆ **Noise Emission:**

Sound Power Level

	Mainframe only
Stand-by	54 dB (A)
During Printing	66 dB (A)

Sound Pressure level

	Mainframe only
Stand-by	46 dB (A)
During Printing	60 dB (A)

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.

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.

Reference

This symbol indicates a reference.

[]

Keys that appear on the machine's panel display.

Keys and buttons that appear on the computer's display.

[]

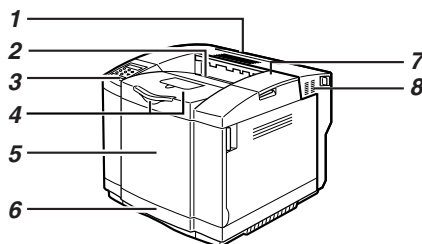
Keys built into the machine's control panel.

Keys on the computer's keyboard.

1. Getting Started

Guide to the Printer

Exterior-Front View



1. Rear Cover

Open this cover when replacing the fusing unit, or removing misfed paper.

2. Standard Tray

Output is stacked here with the print side down.

3. Control Panel

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

4. Extender and Paper Stand

When printing on A4 and letter ($8\frac{1}{2} \times 11$) size sheets, pull out the extender and use the internal stand to prevent the sheets from falling.

When printing on sheets that curl easily, raise up the paper stand to prevent them curling.

5. Front Cover

Open this cover when replacing the toner cartridge or waste toner bottle.

6. Tray 1

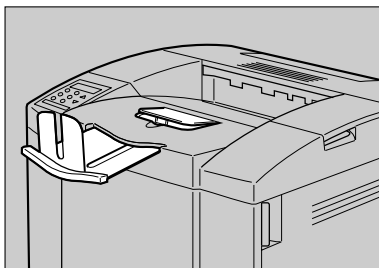
Up to 250 sheets of plain paper can be loaded.

7. Upper Cover

Open this cover when replacing the photo conductor unit (PCU).

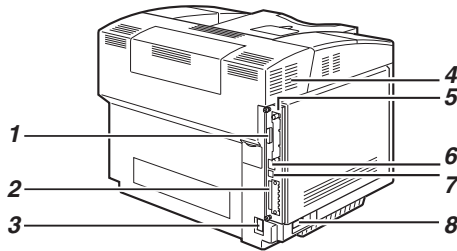
8. Ventilator

The ventilator helps to keep the components inside the printer from overheating. Do not block the ventilator as it may cause a printer malfunction due to overheating.



Exterior-Rear View

1



1. Parallel Port

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

2. Expansion Card Slots

Install expansion cards in these slots. There are two slots.

3. Power Port

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

4. Ventilator

The ventilator helps to keep the components inside the printer from overheating. Do not block the ventilator as it may cause a printer malfunction due to overheating.

5. Controller Board

Slide this out when installing option such as SDRAM module (memory unit). Two expansion card slots are included on this board.

6. Ethernet Port

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

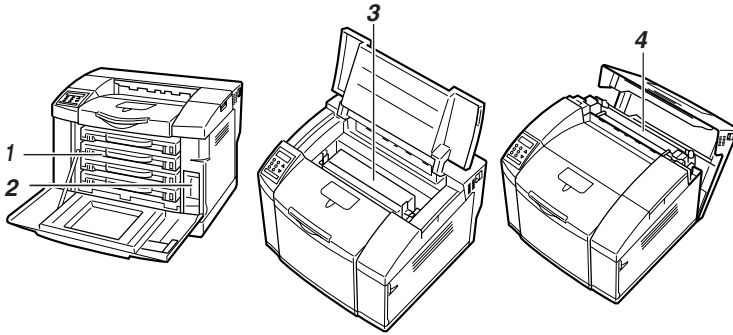
7. USB Port

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

8. Power Switch

Use this switch to turn the power on and off.

Inside



1. Toner Cartridges

When "Add Toner XXX" appears on the panel display, replace the indicated color of the toner cartridge.

Note

- The color is displayed for XXX.

2. Waste Toner Bottle

Collects waste toner. When "Check Waste Toner Bottle" appears on the panel display, replace this bottle.

3. Photo Conductor Unit

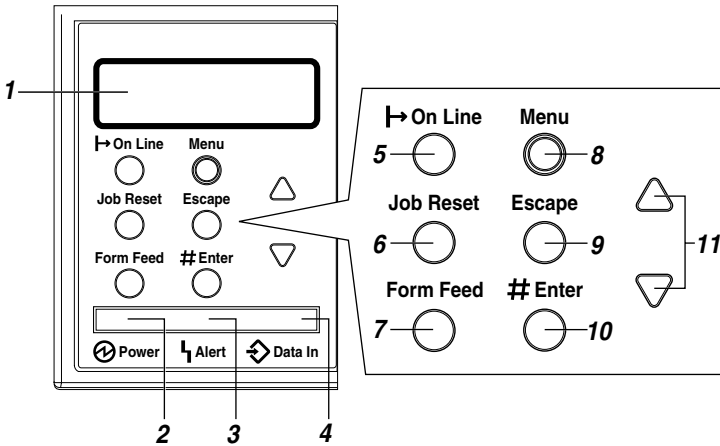
When "Replace PCU" appears on the panel display, replace the Photo Conductor Unit.

4. Fusing Unit

Fuses the image on paper.

When "Replace Fusing Unit" appears on the panel display, contact your sales or service representative.

Control Panel



1. Panel Display

Displays current printer status and error messages.

For details about error messages, see p.51 “Error & Status Messages on the Control Panel”.

2. Power indicator

Is on while the printer power is on.

Is off when the power is turned off or while the printer is in Energy Saver mode.

3. Alert indicator

Lights up whenever any printer error occurs. A red light indicates an error has occurred when printing is not possible; yellow indicates an error when printing is possible.

If any messages appear in red on the display, follow their instructions.

4. Data In indicator

Blinks while the printer is receiving data from a computer.

Is on if there is data to be printed.

5. **[On Line]** key

Press this key to switch the printer between online and offline.

6. **[Job Reset]** key

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

7. **[Form Feed]** key

If the printer is offline, press this key to print all the data left in the printer's input buffer.

Note

- This does not work if the printer is online.

8. **[Menu]** key

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

For details, See “Making Printer Settings with the Control Panel”, *Administrator Reference*.

9. **[Escape]** key

Press this key to return to the previous condition on the panel display.

10. [# Enter] key

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

Press this key to clear some errors.

For details, see p.51 "Troubleshooting".

11. [▲][▼] keys

Use these keys to increase or decrease values on the panel display when making settings.

Note

- ❑ It takes a while for the display to change after pressing the key. Press and release the key immediately, make sure that the display changes, and then proceed to the next step.

1

2. Paper and Other Media


Paper and Other Media Supported by This Printer

Paper Sizes

This section describes the paper size, feed direction, and the maximum amount of paper that can be loaded into each paper tray in this printer.






Note

- The following symbols and terminology are used to represent the feed direction.

In this manual	On the panel display	Paper feed direction
 ↑ (Feed direction)	A4 (210 × 297) 8 1/2 × 11	Short-edge feed direction

- Be careful of the paper feed direction. The direction is determined for each paper size.

◆ Input Paper Sizes (Metric version)

	Feed direction	Size (mm)	Tray 1	Paper Feed Unit (Tray 2)
A4		210 × 297	◎	◎
A5		148 × 210	☆	×
Letter (LT, 8 1/2 × 11 inches)		216 × 279	◎	◎
Half Letter (HLT, 5 1/2 × 8 1/2 inches)		140 × 216	☆	×
Executive (Exec., 7 1/4 × 10 1/2 inches)		184 × 276	◎	◎
Custom Size	-	-	☆	×

- ◎
Means that the size is supported and the printer selects the paper size automatically.
- ☆
Means that the supported size is approximately 104.8 - 215.9 mm in width, and approximately 210.0 - 297.0 mm in length. The supported size may differ depending on the printer language you use. Use the printer driver to set custom sizes. Set custom sizes with the control panel. See p.26 “Selecting paper size Making Printer Settings with the Control Panel”.
- ×
Means that the size is not supported.

◆ Input Paper Sizes (Inch version)

	Feed direction	Size (inch)	Tray 1	Paper Feed Unit (Tray 2)
Letter (LT)	☐	8 ¹ / ₂ × 11	◎	◎
Half Letter (HLT, 5 ¹ / ₂ × 8 ¹ / ₂ inches)	☐	5 ¹ / ₂ × 8 ¹ / ₂	☆	×
Executive (Exec.)	☐	7 ¹ / ₄ × 10 ¹ / ₂	◎	◎
A4	☐	8.26 × 5.83	◎	◎
A5	☐	5.83 × 8.26	☆	×
Custom Size	-	-	☆	×

- ◎
Means that the size is supported and the printer selects the paper size automatically.
- ☆
Means that the supported size is approximately 4.13 - 8.50 inches in width, and approximately 8.27 - 11.69 inches in length. The supported size may differ depending on the printer language you use. Use the printer driver to set custom sizes. Set custom sizes with the control panel. See p.26 "Selecting paper size Making Printer Settings with the Control Panel".
- ×
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 - 210 g/m ² (16 - 55 lb. Bond)	250 (80 g/m ² , 20 lb. Bond)
PAPER FEED UNIT Type 1000 (Tray 2)	60 - 105 g/m ² (16 - 28 lb. Bond)	530 (80 g/m ² , 20 lb. Bond)

*1 Confirm that the top of the stack is not higher than the limit mark inside the tray.

Paper Recommendations

Loading Paper

Important


- Do not use ink-jet printer paper. The sheets may curl around the fusing unit, causing a malfunction.
- Set the paper as described below
 - Tray 1: Print side facing up
 - Paper Feed Unit (Tray 2): Print side facing up
- Print quality cannot be guaranteed if paper other than the ones recommended is used. For more information about recommended paper, contact your sales or service representative.

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 paper in the package in which the paper came.

Types of Paper and Other Media


Plain Paper

Paper thickness	60 - 105 g/m ²
Printer setup	Make the following two settings using the control panel: <ul style="list-style-type: none"> • Press [Paper Input] menu, [Paper Type], and then [Plain Paper]. • press [Maintenance] menu, and then [PlainPaper Type] to select the regular paper thickness.
Printer driver setup	Click [Plain Paper] in the [Paper Type] list.
Enabled paper feeding tray	Tray 1, 2
Number of sheets that can be set	<ul style="list-style-type: none"> • Tray 1: 250 • Tray 2: 530 <p> Note</p> <ul style="list-style-type: none"> <input type="checkbox"/> Make sure paper is not stacked higher than the PAPER upper limit mark (▼) inside the tray.
Two-sided printing	Possible
Additional cautions	When printing on 91 - 105 g/m ² paper, print speed is slightly slower to when printing on paper of 60 - 91 g/m ² .


Thick Paper

Paper thickness	105 - 210 g/m ²
Printer setup	Make the following two settings using the control panel: <ul style="list-style-type: none"> Press [Paper Input] menu, [Paper Type] and then [Thick Paper]. Press [Maintenance] menu, and then [ThickPaper Type] to select the regular paper thickness.
Printer driver setup	Click [Thick Paper] in the [Paper Type] list.
Enabled paper feeding tray	Tray 1
Number of sheets that can be set	40  Note <input type="checkbox"/> Make sure paper is not stacked higher than the LABEL upper limit mark (▼) inside the tray.
Two-sided printing	Not possible
Additional cautions	Print speed is slightly slower compared to plain paper.


Envelopes

Printer setup	Make the following two settings using the control panel: <ul style="list-style-type: none"> Press [Paper Input] menu, [Paper Type], and then [Thick Paper]. Press [Maintenance] menu, and then [ThickPaper Type] to select [Thin Envelopes] or [Thick Envelopes].
Printer driver setup	Click [Thick Paper] in the [Paper Type] list.
Enabled paper feeding tray	Tray 1
Number of sheets that can be set	15  Note <input type="checkbox"/> Do not stack envelopes over the limit mark.
Two-sided printing	Not possible
Additional cautions	<ul style="list-style-type: none"> Check the print side is facing up. Check there is no air in the envelopes before loading. For better print quality, we recommend the right, left, top, and bottom print margins to at least 20 mm (0.8") each. Load only one size and type of envelope at a time. Before loading envelopes, flatten their leading edges (the edge going into the printer) by running a pencil or ruler across them. Some kinds of envelope might cause misfeeds, wrinkles or print poorly. Print quality on envelopes may be uneven if parts of an envelope have differing thicknesses. Print one or two envelopes to check print quality.


Adhesive labels

Printer setup	Press [Paper Input] menu, [Paper Type] , and then [Labels] on the control panel.
Printer driver setup	Click [Labels] in the [Paper Type] list.
Enabled paper feeding tray	Tray 1
Number of sheets that can be set	80  Note <input type="checkbox"/> Make sure paper is not stacked higher than the LABEL upper limit mark (▼) inside the tray.
Two-sided printing	Not possible
Additional cautions	Print speed is slightly slower compared to plain paper.

OHP transparencies

Printer setup	Press [Paper Input] menu, [Paper Type] , and then [Transparency] on the control panel.
Printer driver setup	Click [OHP Transparency] in the [Paper Type] list.
Enabled paper feeding tray	Tray 1
Number of sheets that can be set	50  Note <input type="checkbox"/> Make sure paper is not stacked higher than the TRANSPARENCY upper limit mark (▼) inside the tray.
Two-sided printing	Not possible
Additional cautions	<ul style="list-style-type: none"> • Print speed for OHP transparencies is slower than for plain paper. • Due to switching modes, the machine will be on standby for thirty or forty seconds after the job was received.

Glossy paper

Printer setup	Press [Paper Input] menu, [Paper Type] , and then [Glossy] on the control panel.
Printer driver setup	Click [Glossy] in the [Paper Type] list.
Enabled paper feeding tray	Tray 1
Number of sheets that can be set	40  Note <input type="checkbox"/> Make sure paper is not stacked higher than the CARDSTOCK upper limit mark (▼) inside the tray.
Two-sided printing	Not possible
Additional cautions	<ul style="list-style-type: none"> • Print speed for glossy papers is slower than for plain paper. • Due to switching modes, the machine will be on standby for thirty or forty seconds after the job was received.

Paper not supported by this printer

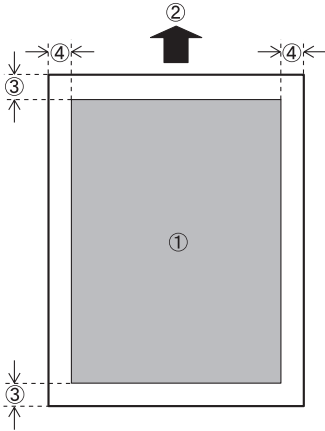
Avoid using the following paper as they are not supported by this printer.

- 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
Malfunctions are especially likely when using paper printed on by other than a laser printer (e.g. monochrome and color copiers, ink-jet printers, etc.).
- Special paper, such as thermal paper, aluminum foil, carbon paper and conductive paper
- Paper whose weight is heavier or lighter than the limitation.
- Paper with windows, holes, perforations, cutouts, or embossing
- Adhesive label paper on which glue or base paper is exposed
- Paper with clips or staples

Print Area

The following shows the print area for this printer. Be sure to set the print margins correctly by the application.

❖ **Paper**

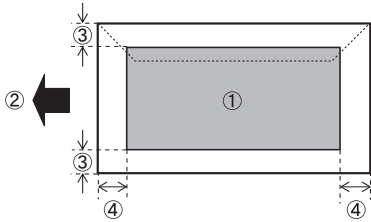


- ① Print area
- ② Feed direction
- ③ Approx. 5 mm (0.20 inch)
- ④ Approx. 4 mm (0.16 inch)

 **Note**

- The print area may vary depending on the paper size, printer language and printer driver settings.

◆ Envelope



- ① Print area
- ② Feed direction
- ③ Approx. 4 mm (0.16 inch)
- ④ Approx. 5 mm (0.20 inch)

 **Note**

- The print area may vary depending on the paper size, printer language and printer driver settings.

Loading Paper

⚠ CAUTION:

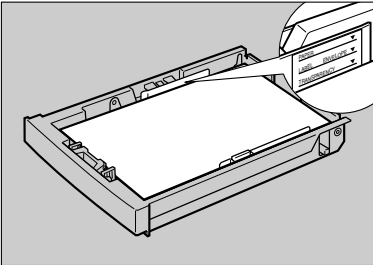
- When pulling the paper tray out, be careful not to pull it strongly. If you do, the tray might fall and cause an injury.

Load Paper into the Paper Tray on the Printer

- 1** Pull the paper tray out slowly.

Place it on a flat surface.

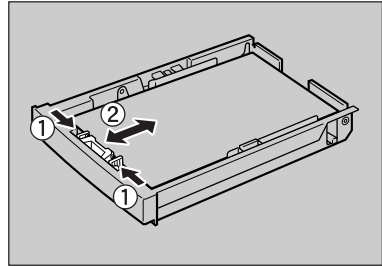
- 2** Load paper into the paper tray with the print side up.



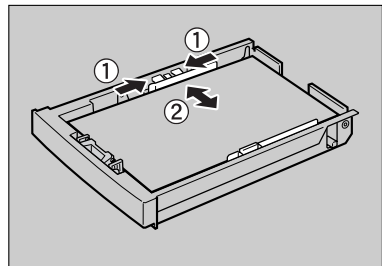
⚠ Important

- Make sure the top of the stack is not higher than the limit mark inside the tray. For details about maximum numbers of pages per paper type, see p.19 "Types of Paper and Other Media".
- The front guides should be set exactly to the paper size to avoid paper misfeeds.
- Do not load different kinds of paper in the tray.

- 3** Make sure there is no space between the front guide and the paper. If there is a gap, pinch both front guide ends inward (①), and move the front guide till it is flush against the paper (②).

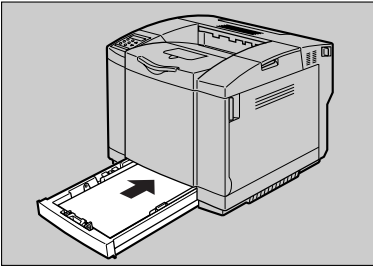


- 4** Make sure there is no space between the side guides and the paper. If there is a gap, pinch the levers on both ends inward (①), and move the front guide till they are flush against the paper (②).



2

- 5** Install the paper tray by pushing it in until it clicks into place.



Important

- Be sure to insert the paper tray completely. Otherwise, mis-feeds might occur.

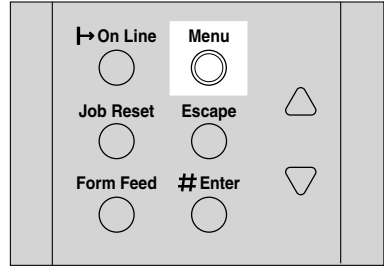
Selecting paper size Making Printer Settings with the Control Panel

Use the following procedure to specify the paper size from the printer's control panel after loading custom size paper into the standard paper tray.

Note

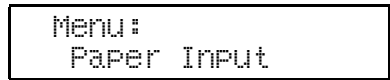
- You can set the custom size paper in the standard tray only.
- When custom size paper is set, the size set using the control panel is given priority, when **[Tray Locking]** is set to **[On]** in **[Paper Input]** menu. The size set by the printer driver is given priority when set to **[Off]**.

- 1** Press the **[Menu]** key.

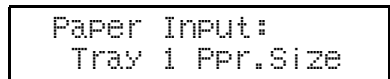


"Menu" appears on the panel display.

- 2** Press the **[▲]** or **[▼]** key to display "Paper Input", and then press the **[# Enter]** key.

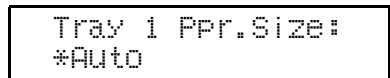


The screen for selecting paper settings appears.

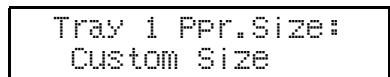


- 3** Press the **[# Enter]** key.

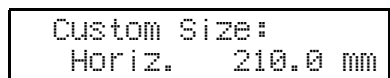
The following message appears:



- 4** Press the **[▲]** or **[▼]** key to display "Custom Size", and then press the **[# Enter]** key.



The screen for setting a custom size appears.



- 5** Press **[▲]** or **[▼]** key to specify the length of the side that is horizontal to the feed direction, and then press **[# Enter]** key.

 **Note**

- Press **[▼]** or **[▲]** key scrolls the value in increments of 0.1 mm. Pressing **[▼]** or **[▲]** key scrolls the value in increments of 1 mm.

```

Custom Size:
  Horiz.   210.0 mm
  
```

The screen for entering the length appears.

- 6** Press **[▲]** or **[▼]** key to specify the length of the side that is vertical to the feed direction, and then press **[# Enter]** key.

 **Note**

- Press **[▼]** or **[▲]** key scrolls the value in increments of 0.1 mm. Pressing **[▼]** or **[▲]** key scrolls the value in increments of 1 mm.

```

Custom Size:
  Vert.   297.0 mm
  
```

The screen returns to that of step **4** after a few seconds.

- 7** Press **[On Line]** key.

“Ready” appears on the panel display.

```

Ready
  
```

 **Note**

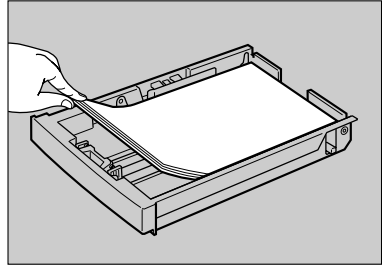
- To change from the “Custom Size” setting to automatic paper size detection, press **[▲]** and **[▼]** key in step **3** of the above procedure to scroll to “Auto Detect”, and then press **[# Enter]** key.

Loading Envelopes

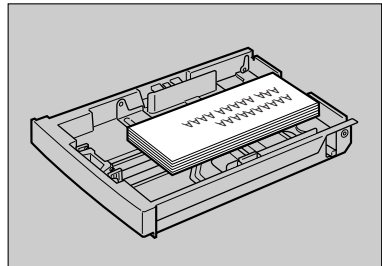
- 1** Pull the paper tray out slowly.

Place it on a flat surface.

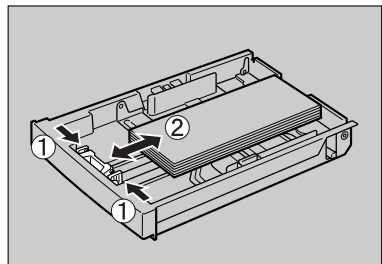
- 2** Remove the paper.



- 3** Load envelopes as shown below.

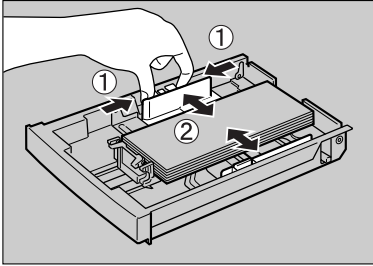


- 4** Make sure there is no space between the front guide and the envelope. If there is a gap, pinch both front guide ends inward (①), and move the front guide till it is flush against the envelope (②).

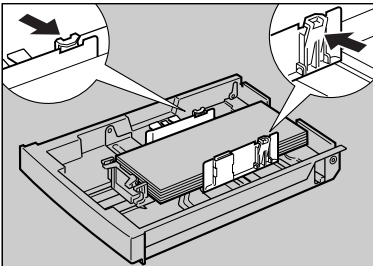


2

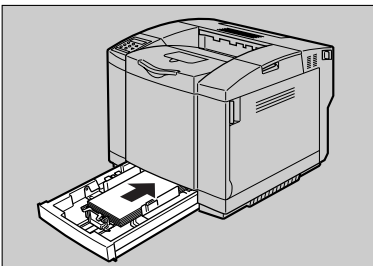
- 5** Make sure there is no space between the side guides and the envelope. If there is a gap, pinch the levers on both ends inward (①), and move the front guide till they are flush against the envelope (②).



- 6** Push in the side guide clamps to press down the envelopes.



- 7** Install the paper tray by pushing it in until it clicks into place.



Important

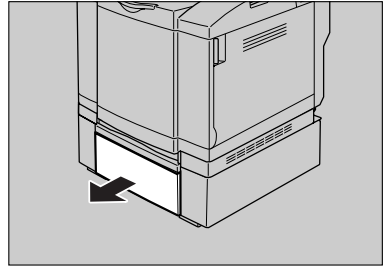
- Be sure to insert the paper tray completely. Otherwise, mis-feeds might occur.

Loading Paper in the PAPER FEED UNIT Type 1000

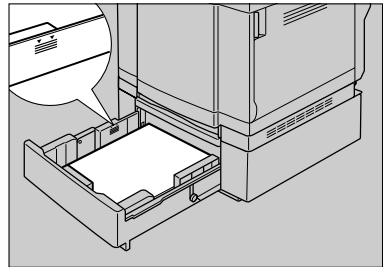
Note

- For more information about the size and feed direction of paper that can be loaded in the paper feed unit, see p.17 "Paper and Other Media Supported by This Printer".

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



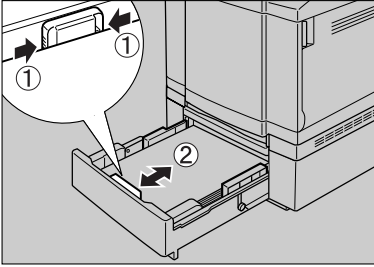
- 2** Load paper into the tray with the side to be printed facing up.



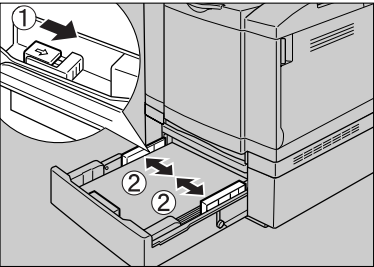
Important

- Confirm that the top of the stack is not higher than the limit mark (▼) inside the tray.
- The front and side guides should be set to the correct paper size to avoid paper feed problems.
- Load only plain paper in the paper feed unit. To print on thick paper, adhesive labels, OHP transparencies or envelopes, use the standard tray.

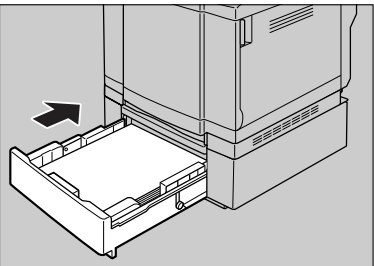
- 3** Make sure there is no space between the front guide and the paper. If there is a gap, pinch both front guide ends inward (①), and move the front guide till it is flush against the paper (②).



- 4** Make sure there is no space between the side guides and the paper. If there is a gap, pinch the levers on both ends inward (①), and move the front guide till they are flush against the paper (②).



- 5** Slide the paper tray into the paper feed unit until it stops.



Important

- ❑ Be sure to insert the paper tray completely, or paper misfeeds might occur.
- ❑ If the paper size shown on the panel display differs from the size of paper actually loaded, re-adjust the position of the paper guides.

Specifying a paper type

By selecting the paper type you want to load, the printer can perform printing better.

You can select from the following paper types:

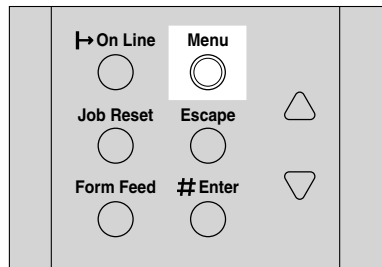
◆ Standard Tray (Tray 1)

Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Preprinted, Thick Paper, Labels, Cardstock, Transparency, Glossy

◆ PAPER FEED UNIT Type 1000 (Tray 2)

Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Preprinted

- 1** Press the **[Menu]** key.



“Menu” appears on the panel display.

- 2** Press the **[▲]** or **[▼]** key to display “Paper Input”, and then press the **[# Enter]** key.

```
Menu:
Paper Input
```

The screen for selecting paper settings appears.

- 3** Press the **[▲]** or **[▼]** key to display “Paper Type”, and then press the **[# Enter]** key.

```
Paper Input:
Paper Type
```

The screen for selecting the paper tray appears.

- 4** Press the **[▲]** or **[▼]** key to select a paper tray, and then press the **[# Enter]** key.

```
Paper Type:
Tray 1
```

The screen for selecting the paper type appears.

- 5** Press the **[▲]** or **[▼]** key to display the loaded paper type, and then press the **[# Enter]** key.

```
Tray 1:
Recycled Paper
```

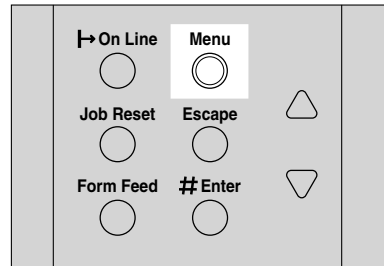
The screen returns to step **2** in a few seconds.

- 6** Press the **[On Line]** key.
“Ready” appears on the panel display.

Switching between Paper Trays

When paper of the same size is loaded in both the standard tray and the paper feed unit (option), and when “Auto Tray Select” is set with the printer driver, paper will be fed from the standard tray when you start printing. To print on paper loaded in the paper feed unit, switch the tray to be used to the paper feed unit using “Tray Priority” in the “Paper Input” Menu.

- 1** Press the **[Menu]** key.



“Menu” appears on the display.

- 2** Press the **[▲]** or **[▼]** key to display “Paper Input”, and then press the **[# Enter]** key.

```
Menu:
Paper Input
```

“Paper Input” menu appears on the display.

- 3** Press the **[▲]** or **[▼]** key to display “Tray Priority”, and then press the **[# Enter]** key.

```
Paper Input:
Tray Priority
```

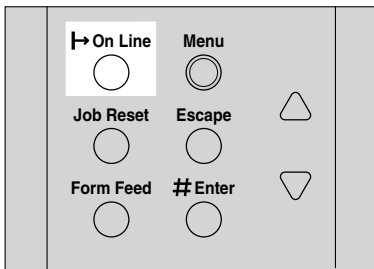
The screen for selecting the paper tray appears.

- 4** Press the [▲] or [▼] key to select the tray type you want to use, and then press the [# Enter] key.

```
Tray Priority:
*Tray 2
```

The screen returns to step **2** in a few seconds.

- 5** Press the [On Line] key.



"Ready" appears on the display.

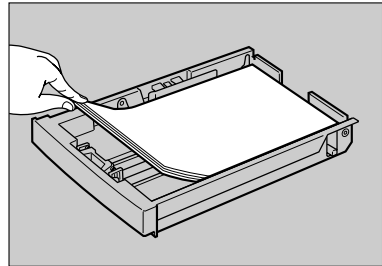
```
Ready
```

Changing paper size of the paper tray

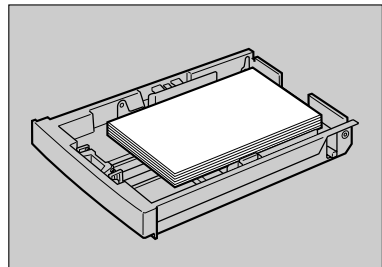
The procedure to change the paper size of a tray is explained using Tray 1 as an example. The procedure for the optional paper feed unit is the same.

- 1** Pull the paper tray out slowly.
Place it on a flat surface.

- 2** Remove the paper.



- 3** Load paper into the paper tray, with the print side up.

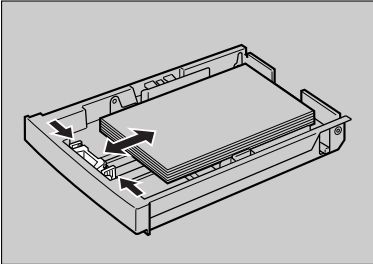


Important

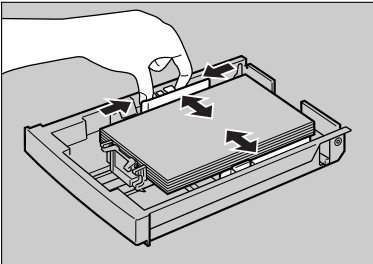
- Confirm that the top of the stack is not higher than the limit mark inside the tray.

2

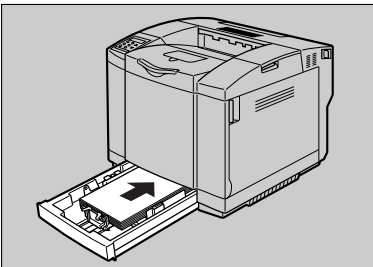
- 4** Set the paper size by pinching together both ends of the front guide, and then sliding it.



- 5** Adjust the side guides to the paper size you want to load.



- 6** Install the paper tray by pushing it in until it clicks into place.



Important

- Close the tray completely to prevent paper jamming.

3. Replacing Consumables and Maintenance Kit

Replacing Toner Cartridges

⚠ 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:

- ***Keep toner (used or unused) and the toner cartridge out of reach of children.***

🔧 Note

- When handling toner cartridges, never stand them up on either end or position them upside down.
- Store toner cartridges in a cool dark place.
- The actual printable numbers vary depending on the image volume and density, number of pages to be printed at a time, paper type and paper size used, and environmental conditions such as temperature and humidity. The quality of toner lowers in time. Because of this, the toner cartridge may require replacement earlier than expected. We recommend that you prepare a new toner cartridge beforehand.

Replace the toner cartridge of the indicated color when the following message appears on the panel display.

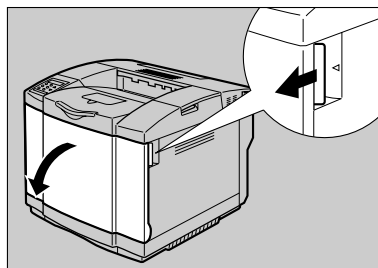
Add Toner
XX/XXX

🔧 Note

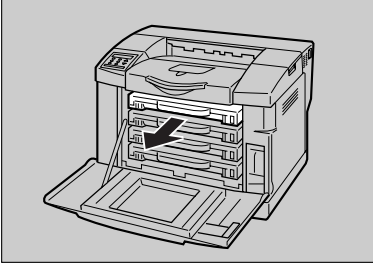
- The color is displayed for XXX.
- If cyan, magenta or yellow toner runs out, you can print in black and white using the black toner. Change the color mode setting to “Black and White” with the printer driver.
- If black toner runs out, you cannot print in black and white or color until the black toner cartridge is replaced.

The following explains replacing the black toner. Other toner cartridges can be replaced using the same procedure.

- 1** Pull the front cover open lever, to open the front cover.



- 2** Remove the toner cartridge for the color you want to replace.



Important

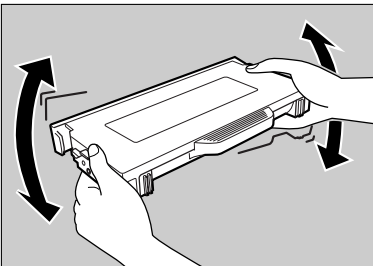
- Do not shake the removed toner cartridge. The remaining toner may spill.
- Pull the toner cartridge out slowly and carefully to prevent spilling of toner.

Note

- Place the old toner cartridge on paper or some other material to avoid making the area you are working dirty with toner.

- 3** Take out a new toner cartridge from the package.

- 4** Hold the new toner cartridge and shake it well, about 3 to 4 times, as shown in the illustration.



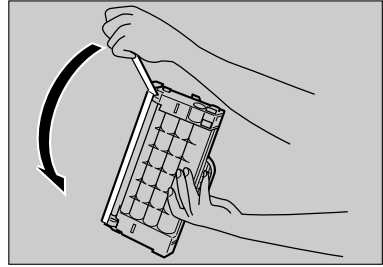
Important

- Print quality decreases if toner is unevenly distributed inside the cartridge.

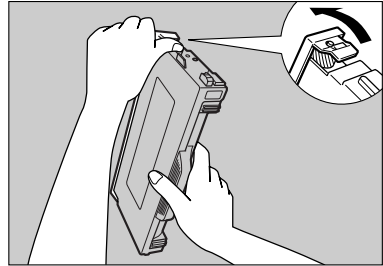
- 5** Remove the tape securing the protective cover while holding the toner cartridge as shown.

Important

- The tape is attached front to back of the toner cartridge. Be sure to remove all of it.



- 6** Remove the protective cover.

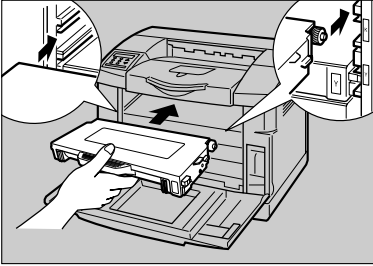


Important

- Do not touch the development roller, which is exposed after removing the protection cover. Doing so may cause a deterioration in print quality.
- Once the protective cover is removed, toner can spill from the cartridge easily. Take care to avoid subjecting the toner cartridge to vibration and impact after removing the protective cover.

7 Install the toner cartridge (black).

With the seal side surface facing up, align it with position K on the printer, and then slide in the toner cartridge along the guide rails.

**Important**

- Do not use excessive force to slide the cartridge.
- Do not repeatedly install and remove toner cartridges. Doing so will cause toner leakage.

8 Close the front cover.

The “Add Toner XXX” message clears from the panel display and the printer starts warming up.

Note

- The color is displayed for XXX.
- Please cooperate with the Toner Cartridge Recycling Program, whereby are collected used toner cartridges. For details, consult with the store where the printer was purchased or with a sales or service representative.

Replacing Waste Toner Bottle Type 140

3

⚠ 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 containers yourself, dispose of them according to local regulations.**

⚠ CAUTION:

- **Keep toner (used or unused) and the toner cartridge out of reach of children.**
- **Do not put an object on the right cover when it is open.**

Replace the waste toner bottle when the following message appears on the panel display.

Check Waste
Toner Bottle

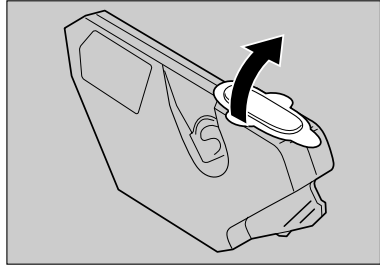
⚠ Important

- Waste toner bottles are consumable items and cannot be reused.
- We recommend that you purchase extra waste toner bottles and keep them on hand for replacement when necessary.

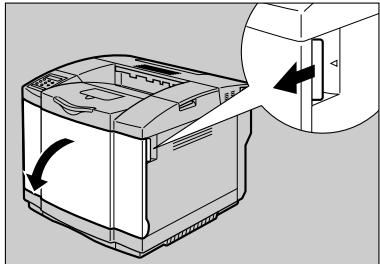
📌 Note

- Before removing the waste toner bottle from the printer, spread paper or some other material around the area you are working to keep the toner from making the floor dirty.

- 1** Prepare the new waste toner bottle by removing its bottle cap.



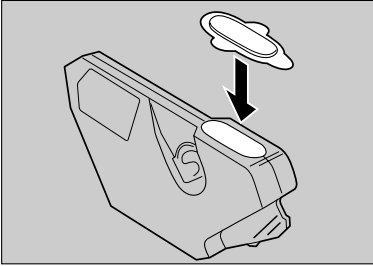
- 2** Pull the front cover open lever, to open the front cover.



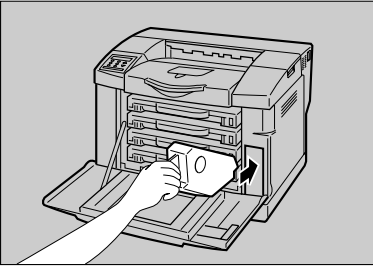
- 3** Slowly pull the waste toner bottle out from the waste toner holder.



- 4** Put the bottle cap removed in procedure **1** on the used waste toner bottle from procedure **3**.



- 5** Insert the new waste toner bottle.



- 6** Close the front cover.

Replacing Photo Conductor Unit Type 140

Replace the black or color photo conductor unit when the following message appears on the panel display.

REPLACE PCU

3

Important

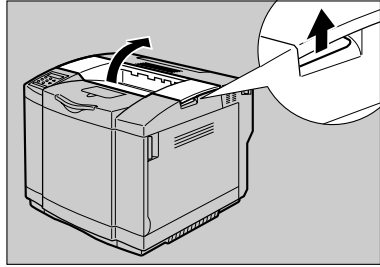
- ❑ Exposing the photo conductor unit to light for too long can reduce its performance. Replace the unit as quickly as possible.
- ❑ Be sure to make the setting from the control panel after replacing the photo conductor unit. Without it, the procedure is incomplete.

Note

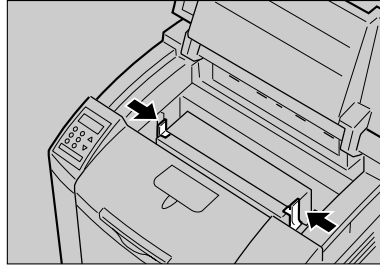
- ❑ Before removing the photo conductor unit from the printer, spread paper or some other material around the area you are working to keep the toner from making the floor dirty.
- ❑ The "Replace PCU" message is for reference only. This message appears after printer usage reaches a set amount. However, service life varies according to the conditions under which it is used.

Replacing the photo conductor unit

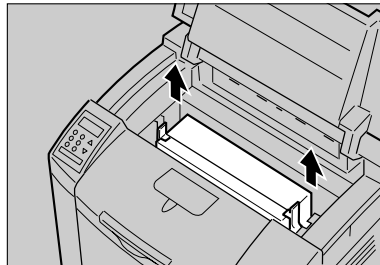
- 1** Lift the top cover open lever, and then open the top cover.



- 2** Turn the left and right locking levers securing the photo conductor unit inside.

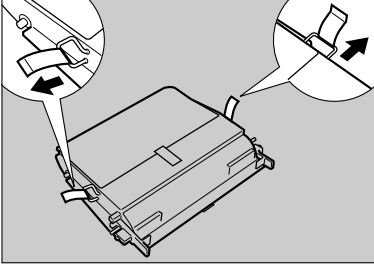


- 3** Hold the inset grip of the photo conductor unit, pull it straight up, and remove it from the printer.

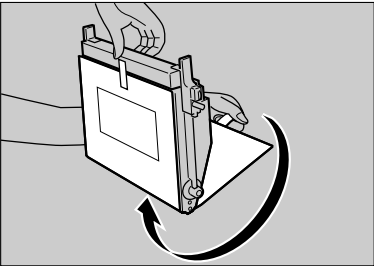


4 Remove the new photo conductor unit from the box.

5 Remove the left and right pins from the new photo conductor unit.



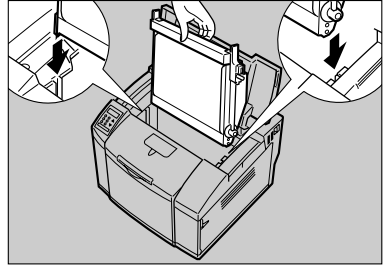
6 Remove the protective sheet while holding onto the new photo conductor unit, as shown.



Important

- Do not touch the green surface of the photo conductor unit with bare hands or gloves. This could damage the photo conductor unit and reduce the print quality.
- A white powder has been intentionally adhered to the surface of the photo conductor unit. Do not attempt to wipe it off. Removal will prevent normal printing.

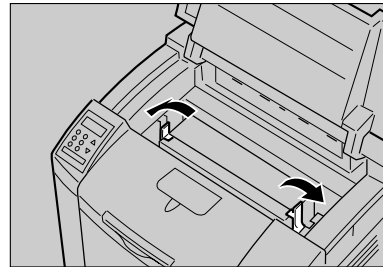
7 From the machine's front, insert the photo conductor unit with the green side facing you using the left and right guides.



Important

- When inserting the photo conductor unit, be careful not to damage the surface of it.

8 Turn the left and right locking levers (green) to the outside to lock the photo conductor unit into position.



9 Close the top cover.

Press firmly the center of the top cover until it locks into position.

10 Use the following procedure to, reset the maintenance counter.

Important

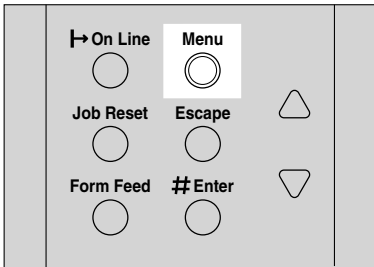
- After replacing the photo conductor unit, be sure to reset the maintenance counter.
- If the maintenance counter is not reset, the message will not disappear.

Reference

For details about resetting the maintenance counter, see p.40 “Resetting the maintenance counter”.

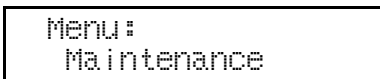
Resetting the maintenance counter

1 Press **[Menu]** key.

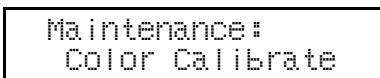


The following message appears on the panel display.

2 Press **[▼]** or **[▲]** key to display “Maintenance”, and then press **[#Enter]** key.



The “Maintenance” menu appears.

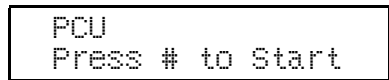


3 Press **[▼]** or **[▲]** key to display “Maint. Reset”, and then press **[#Enter]** key.



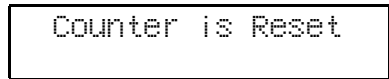
4 Check “PCU” is displayed, and then press the **[#Enter]** key.

The menu for resetting photo conductor unit maintenance appears.



5 Press **[#Enter]** key.

The maintenance counter is reset, and an ending message appears.



The display returns to the “Maintenance” menu after about two seconds.

6 Press **[On Line]** key.

The normal display screen appears.



4. 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, and 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.
- If there is dust or grime inside the printer, wipe with a clean, dry cloth.

Cleaning the Registration Roller

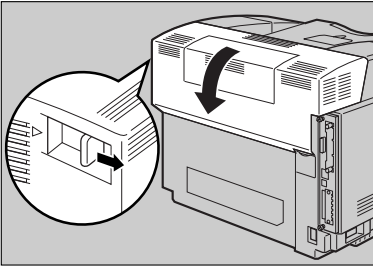
⚠ CAUTION:

- *The inside of the machine becomes very hot. Do not touch the parts with a “⚠” label (means hot surface). Touching a part with a “⚠” label (means hot surface) could result in a burn.*

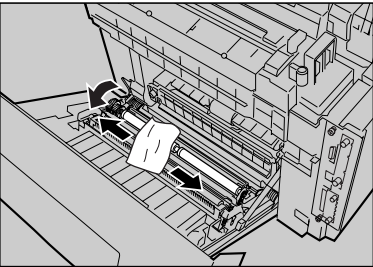
Clean the registration roller when black or white dots caused by bits of paper stuck to the roller become obvious on printed OHP transparencies

4

- 1** Pull the rear cover open lever, and then open the rear cover.



- 2** Wipe the registration roller with a dry cloth while slowly turning it.



- 3** Close the rear cover.

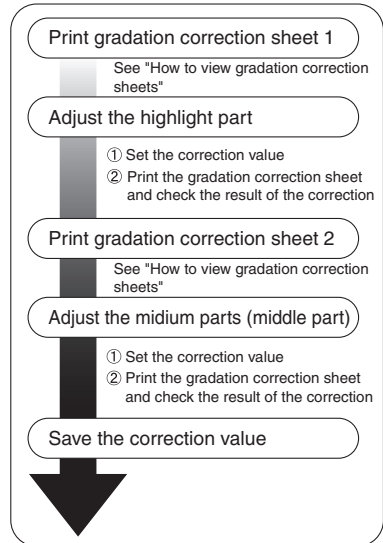
Correcting the Color Gradation

Color gradation during color printing changes slightly, depending on a number of factors. If you print the same file repeatedly or toner was recently replaced, changes may occur in color tones. When this happens, to obtain suitable print results, color gradation can be corrected, although it is not usually necessary to make any particular settings.

Note

- If suitable results cannot be obtained after a single operation, repeat the correction several times, as needed.
- Corrections to color gradation will be applied to all user jobs.
- Use the same paper when printing a run of gradation corrections. If a different type of paper is used, corrections may not be apparent.
- This requires the use of the supplied Color Calibration Sample Sheet.

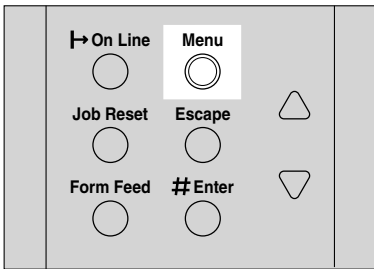
- Corrections to color gradation are performed in the following order:



Set the Gradation Correction Value

During printing, you can correct the gradation in two areas: bright part (highlight) and the medium (middle). The correction value for the highlight and the medium parts are set using "Calibr.1" and "Calibr.2" respectively.

- 1 Press the **[Menu]** key.



"Menu" appears on the panel display.

- 2 Press the **[▲]** or **[▼]** key to display "Maintenance", and then press the **[#Enter]** key.

```
Menu:
Maintenance
```

- 3 Press the **[▲]** or **[▼]** key to display "Color Calibrate", and then press the **[#Enter]** key.

```
Maintenance:
Color Calibrate
```

Note

- If you perform only correction 2, proceed to step 7.

- 4 Check "Start Calibr. 1" is displayed, and then press the **[#Enter]** key.

```
Color Calibrate
Start Calibr. 1
```

- 5 Check "Yes" is displayed, and press **[#Enter]** key to print gradation correction sheet 1.

```
Print Sheet 1?:
Yes
```

- 6 Set the gradation correction value of the highlighted part using correction 1.

Note

- Set the correction value using the supplied Color Calibration Sample Sheet and gradation correction sheet 1 printed in step 5. For details about gradation correction sheets, see p.46 "Viewing the Color Calibration Sample Sheet and Gradation Correction Sheet".

- 1 Set the K (black) gradation.

Hold the correction value (0-6) for "K" of the correction value setting sheet over the color sample (K) for gradation correction of the Color Calibration Sample Sheet and set the numerical value of a closer color using the **[▲]** or **[▼]** key.

```
Calibrate 1:
K:3 M:3 C/Y:3/3
```

Note

- In this example a setting value of 3 is used for K, M, C, and Y.
- Each time the **[▲]** or **[▼]** key is pressed, the value increases or decreases respectively, in increments of 1.
- The correction value can be set between 0 and 6.

- ② Press **[# Enter]** key.

```
Calibrate 1:
K:2 M:3 C/Y:3/3
```

 **Note**

- In this example, the setting value of K is changed to 2.

You can now enter the value of M.

- ③ Set M (magenta), C (cyan), and Y (yellow) using the same method as in steps ① and ②.

- ④ After completing all settings, and then press the **[# Enter]** key.

```
Calibrate 1:
K:2 M:2 C/Y:2/3
```

 **Note**

- In this example, the value of M is changed to 2 and the setting value of C to 2.

- ⑤ Check "Yes" is displayed, and press the **[# Enter]** key to print the correction result.

```
Print Result?:
Yes
```

- ⑥ Check gradation correction sheet 1. To save the correction values, check "Save and exit" is displayed and press the **[# Enter]** key. If you do not want to save the correction values after this procedure, press the **[▲]** or **[▼]** key to display "Exit don't save", and then press the **[# Enter]** key.

 **Note**

- If you complete this procedure without saving the correction values, the changes will not be applied to subsequent print jobs.

```
Calibrate 1:
Save and exit
```

```
Calibrate 1:
Exit don't save
```

Proceed to correction 2.

If you do not need to perform correction 2, proceed to step ⑩.

- ⑦ Press the **[▼]** key to display "Start Calibr. 2", and then press the **[# Enter]** key.

```
Color Calibrate:
Start Calibr. 2
```

- ⑧ Check "Yes" is displayed, and then press the **[# Enter]** key to print gradation correction sheet 2.

```
Print Sheet 2?:
Yes
```

- ⑨ Perform the same operations as in step ⑥ and set the gradation correction value of the middle part using correction 2.

- ⑩ After completing all settings, press the **[Online]** key.

"Ready" appears on the panel display.

```
Ready
```

Viewing the Color Calibration Sample Sheet and Gradation Correction Sheet

The color gradation correction value setting sheet contains two color sample columns “Sample 1” column for setting the highlight part, and “Sample 2” column for setting the medium part.

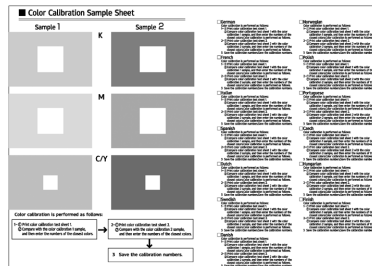
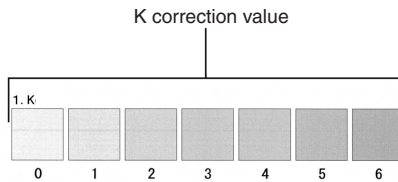
Similarly, the gradation correction sheet contains: “Gradation correction sheet 1” for setting the highlight part and “Gradation correction sheet 2” for setting the medium part. Gradation correction sheet 1 is used for correction 1, while Gradation correction sheet 2 is used for correction 2.

◆ Color sample and correction values

The following explains how to view the color sample of the Color Calibration Sample Sheet and the correction values of the gradation correction sheet. This explanation uses setting K (black) as an example. The setting method for M (magenta) is similar. For C/Y (cyan/yellow), the correction value is determined based on combinations of these two colors, although panel settings are made for each color.

📎 Note

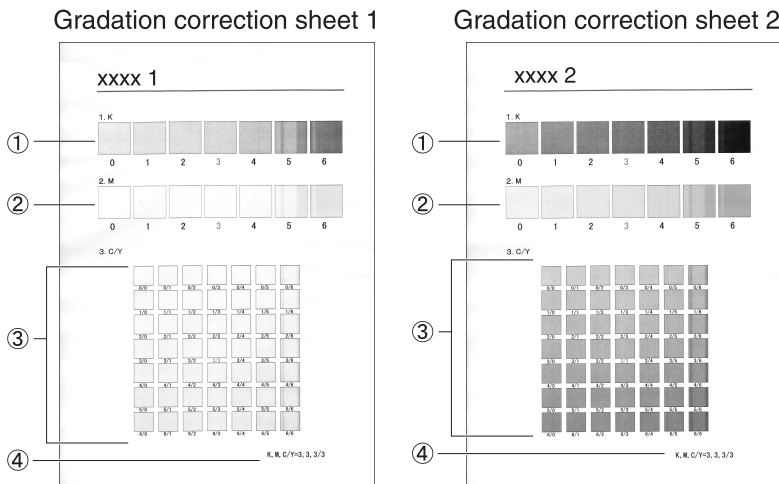
- ❑ Hold the correction value (0-6) for “K” of the correction value setting sheet over the color sample of gradation correction 1 of the Color Calibration Sample Sheet and search for a corrected color closest to that of the color sample, and then set its correction value using the operation panel. The currently set correction value is printed in red.



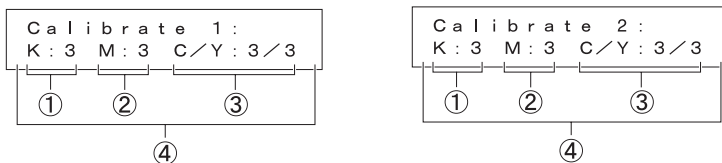
◆ Relationship between gradation correction sheet and panel display

The printed gradation correction sheet and panel display correspond as shown in the following diagram:

Comparing at the gradation correction sheet and correction value of each color, K (black), M (magenta), and C (cyan)/Y (yellow), determine the gradation correction and make settings using the control panel.



Panel display (correction value setting screen)



Note

□ XXXX means printer model name.

① K (black)

Adjust the printed color when only black toner is used. The currently set correction value is printed in red.

② M (magenta)

Adjust the printed color when only magenta toner is used. The currently set correction value is printed in red.

③ C (cyan)/Y (yellow)

Correct the color printed when cyan and yellow are used. For C/Y (cyan/yellow), the correction value is determined based on a combination of these two colors, although settings are made for separately each color.

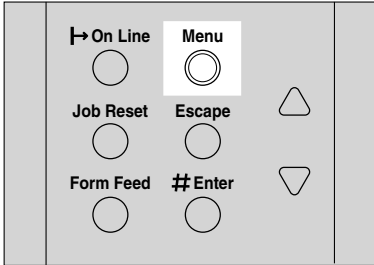
④ K, M, C/Y

The numerical value set at time of gradation correction sheet printing is displayed. This corresponds to the numerical value set using the operation panel.

Resetting the gradation correction value to the initial value

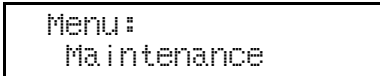
Reset the correction value default.

- 1 Press the **[Menu]** key.



"Menu" appears on the panel display.

- 2 Press the **[▲]** or **[▼]** key to display "Maintenance", and then press the **[# Enter]** key.



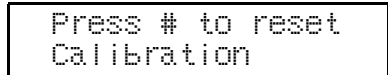
- 3 Press the **[▲]** or **[▼]** key to display "Color Calibrate", and then press the **[# Enter]** key.



- 4 Press the **[▲]** or **[▼]** key to display "Reset", and then press the **[# Enter]** key.

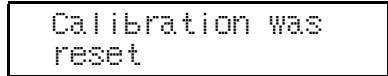


A confirmation message is displayed.



- 5 Press **[# Enter]** key.

A message indicating the gradation correction value has returned to default, is displayed.



After about 2 seconds, the display returns to the "Color Calibrate: Reset" menu.

- 6 Press **[Online]** key.

"Ready" appears on the panel display.

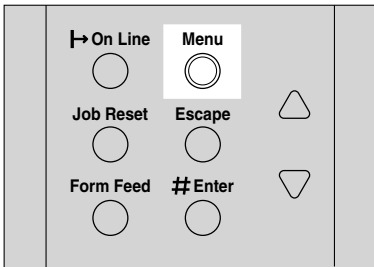


Adjusting the Tray Registration

The printing position needs adjustment when the optional paper feed unit or duplex unit is attached.

Normally, adjustment is not required. Adjust only when the printing area has shifted out of alignment.

- 1 Press the **[Menu]** key.



"Menu" appears on the panel display.

- 2 Press the **[▲]** or **[▼]** key to display "Maintenance", and then press the **[#Enter]** key.

```
Menu:
Maintenance
```

- 3 Press the **[▲]** or **[▼]** key to display "Registration", and then press the **[#Enter]** key.

```
Maintenance:
Registration
```

- 4 Confirm that "Prt. Test Sheet" is displayed, and then press the **[#Enter]** key.

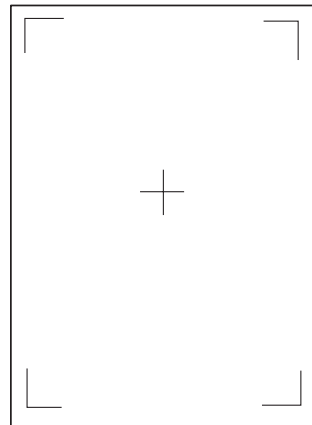
```
Registration
Prt. Test Sheet
```

- 5 Confirm that "Tray 2" is displayed, and then press the **[#Enter]** key.

```
Prt. Test Sheet
Tray 2
```

The test sheet prints out.

- 6 Check the test sheet and adjust to make the blank portions of the printout equal.



- 1 Press the **[Escape]** key.
- 2 Press the **[▲]** or **[▼]** key to display "Adjustment", and then press the **[#Enter]** key.

```
Registration:
Adjustment
```

- 3 Press the **[▲]** or **[▼]** key to display the parameter to be adjusted, and then press the **[#Enter]** key.

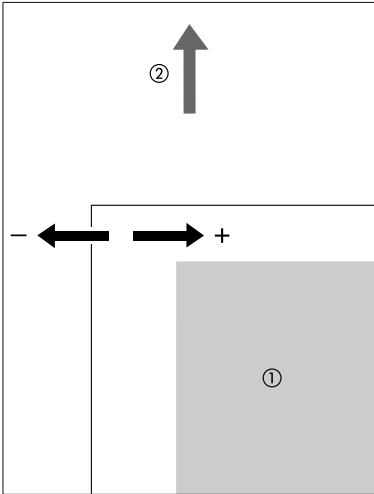
```
Adjustment
Horiz. #DUP.Back
```


- 4 Press the [▲] or [▼] key to set the registration value (mm).

```

Horiz.: Tray 2
(-3.5 +3.5) 0.0
    
```

Increase the value to shift the print area in the positive direction, and decrease to shift in the negative direction.



- ① : Print Area
 ② : Feed Direction

Note

- Pressing the [▲] or [▼] key makes the value increase or decrease by 0.5 mm steps.

- 5 Press the [# Enter] key.

The display returns to the print area “Adjustment” menu.

```

Registration:
Adjustment
    
```

- 7 Press the [▲] or [▼] key to display “Prt. Test Sheet”, and then press the [# Enter] key.

The test sheet prints out.

- 8 Print the test sheet to check the settings you have made.

- 9 Press the [On Line] key.

“Ready” appears on the panel display.

```

Ready
    
```

5. Troubleshooting

Error & Status Messages on the Control Panel

◆ Status Messages

Messages/Second messages	Status
Calibrating...	The printer is calibrating the color. Wait until "Ready" appears on the panel display.
Energy Save Mode	The printer is in Energy Saver (low-power) mode. No action is required.
Hex Dump Mode	The printer receives data in hexadecimal numbers in Hex Dump mode. Turn off the printer after printing, and then turn it back on.
Offline	The printer is offline. Make the printer online by pressing the 【On Line】 key to start printing.
Processing...	The printer is processing the print job. Wait for a while.
Ready	The default ready message. The printer is ready for use. No action is required.
Resetting Job...	The printer is resetting the print job. Wait until "Ready" appears on the panel display.
Setting change in process	During offline applications, setting change is currently in process.
Waiting...	The printer is waiting for the next data to print. Wait for a while.
Warming Up...	The printer is warming up and not ready. Wait until "Ready" appears on the panel display.

❖ **Alert Messages**

Messages/Second messages	Description	Solution
Add Toner: XXX	The printer is out of the indicated toner(s). XXX: Yellow/Magenta/Cyan/Black	Replace with a new toner cartridge of the indicated color(s). Even when yellow, magenta or cyan toner runs out, you can print in black and white using the black toner. See p.33 "Replacing Toner Cartridges".
Call Service: EC Power Off On	A communication error sent from the engine to the controller.	Turn the power switch off and on. If the message appears again, contact your sales or service representative.
Cannot Execute	In Sample Print or Locked Print, Printing/deletion cannot be performed from the Web.	
Check Toner Crtg XXX/XXX	The indicated toner cartridges are not set correctly or may be of a different type. (The colors of the toner appear on the second line of the first/second messages, up to two colors per line.) XXX: Yellow/Magenta/Cyan/Black	Set the indicated toner cartridges correctly, or set the correct toner cartridge type.
Check Waste Toner Bottle	The waste toner bottle is full.	Replace the waste toner bottle. See p.36 "Replacing Waste Toner Bottle Type 140"
Close Duplex Unit Cover	The cover of the duplex unit is open.	Close the cover of the duplex unit.
Close Front Cover	The front cover of the printer is open.	Close the front cover of the printer.
Close Rear Cover	The rear cover has been left open.	Close the rear cover.
Close Upper Cover	The upper cover has been left open.	Close the upper cover.
DHCP assigned Cannot change	The following addresses have already been assigned by DHCP: IP Address, Gateway Address, Subnet Mask.	Disable the default DHCP setting in Network in order to enter the addresses manually.

Messages/Second messages	Description	Solution
Error: Tray # Form Feed /Reset The Job Then Power OffOn	There is a problem with the indicated tray. #: tray number	Press the [Form Feed] key to select another tray and make a print, or turn the power switch off and on. If the message appears again, contact your sales or service representative.
File already deleted	In Sample Print or Locked Print, the user attempts to delete a file that has already been deleted.	
Hardware Problem Ethernet	The printer detected an Ethernet error.	Turn the power switch off and on. If the message appears again, contact your sales or service representative.
Hardware Problem HDD	The printer detected a HDD Board error.	Remove and reinstall the hard disk drive correctly. If the message appears again, contact your sales or service representative. <i>See Option Setup Guide.</i>
Hardware Problem Option RAM	There is a problem with the optional memory unit.	Remove and reinstall the optional memory unit. If the message appears again, contact your sales or service representative. <i>See Option Setup Guide.</i>
Hardware Problem Parallel I/F	There is a problem with the parallel interface.	Switch the power off and then back on again. If you are using a parallel interface, replace the faulty interface cable. If the message appears again, contact your sales or service representative.
Hardware Problem USB	There is a problem related to the Universal Serial Bus Connection and Hardware.	Remove and reinstall the USB board. If the message appears again, contact your sales or service representative.
Hardware Problem Wireless Board	An error has occurred in the optional 802.11b interface unit or Bluetooth™ interface unit.	Remove and reinstall the IEEE 802.11b interface unit or Bluetooth™ interface unit. If the message appears again, contact your sales or service representative.

Messages/Second messages	Description	Solution
Hardware Problem Wireless Card	An error has occurred in the optional 802.11b card or Bluetooth™ card.	Remove and reinstall the IEEE 802.11b card or Bluetooth™ card. If the message appears again, contact your sales or service representative.
Invalid Password Try Again	The entered password is not correct.	Enter the correct password.
Invalid Password File Protected	An incorrect password has been entered more than 10 times, the file is now protected until an administrator can unlock it.	The file is now protected until an administrator can unlock it.
Load Paper /Paper Size: Paper Type	The paper size set in the indicated tray differs from the setting made.	Load paper of the selected size in the tray, and then change the paper size setting with the control panel. Or press the [Form Feed] key several times until the tray with the desired paper type and paper size appears on the panel display. Or press the [Job Reset] key to cancel the print job. Load paper of the selected type in the tray, and then change the paper size setting with the control panel. Or press the [Form Feed] key several times until the tray with the desired paper type and paper size appears on the panel display. Or press the [Job Reset] key to cancel the print job.
Load Correct Size Paper /Press # To Continue	The printer detected the actual paper size is not the same as the dial setting. This error message appears at the second page of a job.	Load the correct paper, and then press [# Enter] key to resume printing. To ignore the error message and continue printing, press [# Enter] key.
Menu Protected Cannot Change	The control panel has been digitally locked, settings cannot be changed.	The printer displays this alert message for 2 seconds before returning to the previous panel display screen.
No Files Exist	There are no files available for Sample Print job or Locked Print job.	You can check the error files in the error log.

Messages/Second messages	Description	Solution
No Log Exists	The user has selected to print the error log in the List/Test Print Menu, however no errors have been detected and so a log has not been created.	
P=XX I=XXXXXXXXX Power Off On If Error Reoccur Call Service	A controller error. The SC number indicates the problem.	Turn the printer Off and then back On to restart. If the error continues, call your service provider.
Please Wait	WEP settings are being changed and updated in this status message. The printer device keys are unoperational during this period.	
	The user is urged to wait while emulation is switching.	
RC Gate connection error	Cannot communicate with RC Gate.	Check the device or the RC Gate network connection.
Remove Misfeed Duplex Unit	There is a misfeed in the fusing unit.	Remove the misfeed paper. For more information, see p.74 "When "Remove Misfeed Duplex Unit" Appears".
Remove Misfeed Internal Path	There is a misfeed in the printer.	Remove the misfeed paper. For more information, see p.71 "When "Remove Misfeed Internal Path" Appears".
Remove Misfeed Paper Tray	There is a misfeed in the input tray, or the printer is not feeding paper.	Remove the misfeed paper. For more information, see p.72 "When "Remove Misfeed Paper Tray" Appears".
Replace Fusing Unit	It is time to replace the fusing unit.	Replace the fusing unit. Although printing is still possible when this message appears, replace the fusing unit as soon as possible to ensure print quality. Contact your sales or service representative.
Replace Fusing Unit soon	The time to replace the fusing unit is soon.	Prepare the new fusing unit. Contact your sales or service representative.



Messages/Second messages	Description	Solution
Replace PCU	It is time to replace the PCU (Photo Conductor Unit).	Prepare the new PCU. Although printing is possible even if this message is displayed, in order to secure a stable quality, replace as soon as possible. See p.38 "Replacing Photo Conductor Unit Type 140".
Replace PCU soon	The time to replace the photo conductor unit is soon.	Prepare the new PCU.
Reset Charge Roller Correctly	The charge roller is not set or is not set correctly.	Contact your sales or service representative.
Reset Fusing Unit Correctly	The fusing unit is not set correctly or is not set.	Contact your sales or service representative.
Reset PCU Correctly	The PCU is not set correctly or is not set.	Check the PCU.
Reset Transfer Unit Correctly	The transfer unit is not set correctly or is not set.	Contact your sales or service representative.
Reset Tray # or Form Feed	The indicated paper input tray is not set correctly.	Reset the tray or press [Form Feed] key to print out.
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 on. If the message appears again, contact your sales or service representative.
SD authenticatn. failed	Authentication for the SD card has failed.	Turn the power switch off and then back on again. If the message appears again, contact your sales or service representative.
Setting error Reset the job	A setting error has occurred.	Contact your sales or service representative.
Supply order failed	Supply order has failed.	The use is required to reset the job.
Toner is Almost Empty: Black	The black toner is almost empty.	Prepare a new black toner cartridge. For details about the number of pages that can be printed after the message appears, see p.75 "Toner cartridge".

Messages/Second messages	Description	Solution
Toner is Almost Empty: Cyan	The cyan toner is almost empty.	Prepare a new cyan toner cartridge. For details about the number of pages that can be printed after the message appears, see p.75 "Toner cartridge".
Toner is Almost Empty: Magenta	The magenta toner is almost empty.	Prepare a new magenta toner cartridge. For details about the number of pages that can be printed after the message appears, see p.75 "Toner cartridge".
Toner is Almost Empty: Yellow	The yellow toner is almost empty.	Prepare a new yellow toner cartridge. For details about the number of pages that can be printed after the message appears, see p.75 "Toner cartridge".
Waste Toner is Almost Full	The waste toner is almost full.	Prepare a new waste toner.

Printer Does Not Print

5

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.
Does the On Line indicator stay on?	If not, press [On Line] key to light it.
Does the Alert indicator stay red?	If so, check the error message on the panel display and take the required action.
Is paper loaded?	Load paper into Tray 1. See p.25 "Loading Paper".
Can you print a configuration page?	If you cannot print a configuration page, it probably indicates a printer malfunction. Contact your sales or service representative. See "Printing a Configuration Page", <i>Administrator Reference</i> .
Is the interface cable connected securely to the printer and the computer?	Connect the interface cable securely. If it has a fastener, fasten it securely as well.
Are you using the correct interface cable?	The type of interface cable you should use depends on the computer you use. Be sure to use the correct one. If the cable is damaged or worn, replace it with a new one. See "Specifications", <i>Administrator Reference</i> .
Is the Data In indicator blinking or lit after starting the print job?	If not blinking or lit, the data is not being sent to the printer. ◆ If the printer is connected to the computer using the interface cable Check the port connection setting is correct. For details about checking the port connection, see p.60 "Checking the port connection". ◆ Network Connection Contact your network administrator.
How is the signal strength when using the wireless LAN?	◆ Ad hoc Mode or 802.11 Ad hoc Mode Either move to a location where the signal is good, or remove obstructions. ◆ Infrastructure Mode Check the signal status from the "Maintenance" menu on the control panel. If the signal is poor, either move to a location where it is good, or remove obstructions.
How is the signal strength when using Bluetooth™ ?	Try the following: <ul style="list-style-type: none"> • Check the Bluetooth™ interface unit is installed properly. • Check there are no obstructions between computer, printer and other devices. • Change the location of the computer. • Change the location of the printer.

Possible Cause	Solutions
When you use the optional Bluetooth™ interface unit.	<p>◆ SPP</p> <ol style="list-style-type: none"> ① Make sure the machine you want to use appears in the 3Com Bluetooth Connection Manager. ② Make sure “Bluetooth Serial Client (COMx)” appears under Client Ports in the 3Com Bluetooth Connection Manager. ③ Restart computer, this printer, and the other devices. ④ Make sure no IEEE 802.11b (wireless LAN) or other Bluetooth™ devices are in use. <p> Note</p> <ul style="list-style-type: none"> <input type="checkbox"/> Interference may occur with the IEEE 802.11b wireless LAN interface board. Such interference may affect the transmission speed and other functions. <ol style="list-style-type: none"> ⑤ Transmissions between computers, other devices, and this printer can be blocked by obstructions. Move this printer, computers, and other devices, if necessary. <p>◆ HCRP, BIP</p> <ol style="list-style-type: none"> ① Restart the computer, this printer, and other devices. ② Make sure no IEEE 802.11b (wireless LAN) or other Bluetooth™ devices are in use. <p> Note</p> <ul style="list-style-type: none"> <input type="checkbox"/> Interference may occur with the IEEE 802.11b wireless LAN interface board. Such interference may affect the transmission speed and other functions. <ol style="list-style-type: none"> ③ Transmissions between computers, other devices, and this printer can be blocked by obstructions. Move this printer, computers, other devices, if necessary.

If printing still does not start, contact your sales of service representative. Consult with the store where the printer was purchased for information about the location of sales of service representatives.

Checking the port connection

When the printer is directly connected via the PC cable and the data-in indicator does not flash or light up, the method of checking the port connection is as follows.

- For a parallel port connection, port LPT 1 or LPT 2 should be set.
- For a USB port connection, port USB00 (n)^{*1} should be set.

^{*1} (n) is the number of printers connected.

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 Professional, Windows Server 2003

- 1** Access the [Printers and Faxes] window from [Start] on the taskbar.
- 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 XP Home Edition

- 1** Access the [Control Panel] window from [Start] on the taskbar.
- 2** Click [Printers and Other Hardware].
- 3** Click [Printers and Faxes].
- 4** Click to select the icon of the printer. Next, on the [File] menu, click [Properties].
- 5** Click to select the icon of the printer. Next, on the [File] menu, click [Properties].
- 6** Click the [Port] tab.
- 7** 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.



Other Printing Problems





5

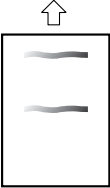

Status	Possible Causes, Descriptions, and Solutions
<p>Toner smears appear on the print side of the page.</p>	<p>The paper setting may not be correct. For example, although you are using thick paper, the setting for thick paper may not be set.</p> <ul style="list-style-type: none"> • Check the paper settings. See p.19 "Types of Paper and Other Media". • Check the printer driver's paper settings. See the printer driver's Help.
	<p>When "Replace PCU" appears on the panel display, replace the photo conductor unit. See p.38 "Replacing Photo Conductor Unit Type 140".</p>
	<p>Confirm that the paper is not curled or bent. Envelopes can be curled easily. Flatten paper before loading. See p.17 "Paper and Other Media".</p>
<p>Paper jams occur frequently.</p>	<p>Number of paper set in the tray exceeds the limit. Confirm that the top of the stack is not higher than the limit mark inside the tray. See p.25 "Loading Paper".</p>
	<p>There may be a gap between the front guide and the paper, or between the side guides and the paper in the paper tray. Make sure there are no gaps. See p.25 "Loading Paper".</p>
	<p>Paper is either too thick or too thin. See p.17 "Paper and Other Media".</p>
	<p>Paper is bent or wrinkled. Use paper that have no bents or wrinkles. See p.17 "Paper and Other Media".</p>
	<p>Paper has already been printed on. See p.17 "Paper and Other Media".</p>
	<p>Paper is damp. Use paper that has been stored properly. See p.17 "Paper and Other Media".</p>
	<p>When loading paper, separate paper from each other.</p>
<p>Paper jams occur repeatedly when using the duplex unit.</p>	<p>The two green screws inside the duplex unit may be loose. Open the duplex unit's back cover and tighten them.</p>




Status	Possible Causes, Descriptions, and Solutions
Multiple pages are fed at once.	There may be a gap between the front guide and the paper, or between the side guides and the paper in the paper tray. Make sure there are no gaps. See p.25 "Loading Paper".
	Paper is either too thick or too thin. See p.17 "Paper and Other Media".
	Paper has already been printed on. See p.17 "Paper and Other Media".
	Number of paper set in the tray exceeds the limit. Confirm that the top of the stack is not higher than the limit mark inside the tray. See p.17 "Paper and Other Media".
	Paper is static. Use paper that has been stored properly. See p.17 "Paper and Other Media".
	When loading paper, separate paper from each other.
Paper gets wrinkles.	Paper is damp. Use paper that has been stored properly. See p.17 "Paper and Other Media".
	Paper is too thin. See p.17 "Paper and Other Media".
	There may be a gap between the front guide and the paper, or between the side guides and the paper in the paper tray. Make sure there are no gaps. See p.25 "Loading Paper".
	The fusing unit is deteriorated or damaged. Replace the unit. Contact your sales or service representative.
Paper is not fed from the selected tray.	When you are using a Windows operating system, the printer driver settings override those set using the control panel. Set the desired input tray using the printer driver. See the printer driver's Help.
A printed image is different from the image on the computer's display.	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. See the printer driver's Help.

Status	Possible Causes, Descriptions, and Solutions
<p>It takes too much time to resume printing.</p>	<p>The data is so large or complex that it takes time to process it. If the Data In indicator is blinking, the data is being processed. Just wait until it resumes.</p>
	<p>If OHP transparencies or glossy paper is being used, printing takes more time to start.</p>
	<p>The printer was in the Energy Saver mode. To resume from the Energy Saver mode, the printer has to warm up, and this takes time until printing starts. To disable the Energy Saver mode, select [Off] for [Energy Saver 1] in the System menu.</p>
<p>It takes too much time to complete the print job.</p>	<p>Photographs and other data intensive pages take a long time for the printer to process, so simply wait when printing such data.</p>
	<p>Changing the settings with printer driver may help to speed up printing. See the printer driver's Help.</p>
	<p>The data is so large or complex that it takes time to process it. If the Data In indicator is blinking, the data is being processed. Just wait until it resumes.</p>
<p>If "Warming Up . . ." appears on the panel display, the printer is now warming up. Wait for a while.</p>	
<p>Images are cut off, or excess pages are printed.</p>	<p>If you are using paper smaller than the paper size selected in the application, use the same size paper 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. See the printer driver's Help.</p>
<p>The color of the printout is different from the color on the computer's display.</p>	<p>The colors made using color toner are different from colors displayed on the display in its production system. See "Appendix", <i>Client Reference</i>.</p>
	<p>When [Toner Saving] is checked under the [Print Quality] tab in the printer driver's dialog box, the color gradation may appear differently. See the printer driver's Help.</p>
<p>The color of the printout is different from the color specified.</p>	<p>If a specific color is missing, turn the power switch off and on. If this does not solve the problem, contact your sales or service representative.</p>
<p>Color changes extremely when adjusted with the printer driver.</p>	<p>Do not extreme settings for the color balance under the [Print Quality] tab in the printer driver's dialog box. See the printer driver's Help.</p>
<p>Photo images are coarse.</p>	<p>Some applications lower the resolution for making prints.</p>
<p>Color documents are printed in black and white.</p>	<p>The printer driver is not set up for color printing. See the printer driver's Help.</p>
	<p>Some applications print color files in black and white.</p>

Status	Possible Causes, Descriptions, and Solutions
Fine dot pattern does not print.	Change the [Dithering:] setting in the printer driver's dialog box. See the printer driver's Help.
Solid areas, lines or text are shiny or glossy when created as a mixture of cyan, magenta, yellow.	Select [K (Black)] for [Gray reproduction (Text/Line Art):] in the printer driver's dialog box. See the printer driver's Help.
Black gradation is not natural.	Select [CMY + K] for [Gray reproduction (Text/Line Art):] in the printer driver's dialog box. See the printer driver's Help.
Solid lines are printed as broken lines.	Change the [Dithering:] setting in the printer driver's dialog box. See the printer driver's Help.
<p>A color is missing or partially blurred.</p> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div>	Paper is damp. Use paper that has been stored properly. See p.17 "Paper and Other Media".
	Toner is almost depleted. When the "Add Toner XXX" or "Toner is Almost Empty: XXX" message appears on the display panel, replace the toner cartridge of the displayed color. See p.33 "Replacing Toner Cartridges".
	When "Replace PCU" appears on the panel display, replace the photo conductor unit. See p.38 "Replacing Photo Conductor Unit Type 140".
	Condensation may have collected. If rapid change in temperature or humidity occurs, use this printer only after it has acclimatized.




Status	Possible Causes, Descriptions, and Solutions
<p>The whole printout is blurred.</p> 	<p>Paper is damp. Use paper that has been stored properly. See p.17 "Paper and Other Media".</p> <p>If you select [Toner saving] on the [Print Quality] tab in the printer properties dialog box, printing is generally less dense. See the printer driver's Help.</p> <p>Toner is almost depleted. When the "Add Toner XXX" or "Toner is Almost Empty: XXX" message appears on the display panel, replace the toner cartridge of the displayed color. See p.33 "Replacing Toner Cartridges".</p> <p>When "Replace PCU" appears on the panel display, replace the photo conductor unit. See p.38 "Replacing Photo Conductor Unit Type 140".</p> <p>Condensation may have collected. If rapid change in temperature or humidity occurs, use this printer only after it has acclimatized.</p>
<p>White streaks or color streaks appear.</p>  	<p>Toner is almost depleted. When the "Add Toner XXX" or "Toner is Almost Empty: XXX" message appears on the display panel, replace the toner cartridge of the displayed color. See p.33 "Replacing Toner Cartridges".</p> <p>When "Replace PCU" appears on the panel display, replace the photo conductor unit. See p.38 "Replacing Photo Conductor Unit Type 140".</p>
<p>White or color rivers appear.</p> 	<p>When "Replace PCU" appears on the panel display, replace the photo conductor unit. See p.38 "Replacing Photo Conductor Unit Type 140".</p>



Status	Possible Causes, Descriptions, and Solutions
<p>The backs of printed sheets are blemished.</p> 	<p>When removing a jammed sheet, the inside of the printer may have become dirtied. Print several sheets until they come out clean.</p> <p>If document size is larger than paper size, e.g. A4 document on B5 paper, the back of the next printed sheet may be dirtied.</p>
<p>If rubbed with your finger, it smears out.</p> 	<p>The setting of the paper may not be correct. For example, although thick paper is used, the setting for thick paper may not be set.</p> <ul style="list-style-type: none"> • Check the paper settings of this machine. See p.19 "Types of Paper and Other Media". • Check the paper settings of the printer driver. See the printer driver's Help. <p>The fusing unit is deteriorated or damaged. Replace the unit. Contact your sales or service representative.</p>
<p>When printing on OHP transparencies, a color is missing or black or white dots are obvious.</p>	<p>The registration roller is dirty. Clean the registration roller. See p.42 "Cleaning the Registration Roller".</p>
<p>When printing, dots are obvious.</p>	<p>The registration roller is dirty. Clean the registration roller. See p.42 "Cleaning the Registration Roller".</p>

Status	Possible Causes, Descriptions, and Solutions
<p>PDF Direct Print is not executed (PDF file is not printed).</p>	<p>You must install an optional hard disk drive or set the value of the [RAM Disk] in the System Menu to 2 MB or higher.</p> <p> Reference See “Attaching the Hard Disk Drive Type 2600”, <i>Option Setup Guide</i> for optional hard disk drive installation. For [RAM Disk], see the “System” Menu, <i>Administrator Reference</i>.</p> <p>After adding a memory unit and set the value of the [RAM Disk] in the System Menu to 16 MB, value of the [RAM Disk] returns to 0 MB if the memory unit is removed. If this happens, reset the value of the [RAM Disk] to 2 MB or higher.</p> <p> Reference For [RAM Disk], see the “System” Menu, <i>Administrator Reference</i>.</p> <p>When printing a PDF with a password set, set the password of the PDF file using the [PDF: Change PW] menu in [PDF Menu] or Web Image Monitor.</p> <p> Reference For [PDF: Change PW], see the “PDF” Menu, <i>Administrator Reference</i>. For Web Image Monitor, see Help.</p> <p>PDF files not allowed to be printed by the PDF file security setting cannot be printed.</p>
<p>As a result of printing using PDF Direct Printing, characters are missing or misshapen.</p>	<p>Before printing, embed the font in the PDF file to be printed.</p>
<p>The paper size appears on the control panel and printing is not performed with PDF Direct Print.</p>	<p>When using PDF Direct Print, printout requires paper set within the PDF file. When a message indicating a paper size appears, either place the indicated size in the paper tray, or perform Form Feed.</p> <p>Also, if [Sub Paper Size] in the System Menu is set to [Auto], printing is performed assuming letter size and A4 size to be the same size. For example, When a PDF file set to A4 size paper is printed using PDF Direct Print and letter size paper is installed in the paper tray, the file will print out. This applies similarly to the opposite case.</p>

If the problem cannot be solved, contact your sales or service representative.

Additional Troubleshooting

Problems	Solutions
Strange noise is heard.	If a supply was recently replaced or an option attached in the area the strange noise is coming from, check the supply or option is properly attached. If the strange noise persists, contact your sales of service representative.
No e-mail is received when an Alert occurs, and after resolving an Alert.	Confirm [Notify by Email] is [On] using the System Menu on the Control Panel. See "System" Menu, <i>Administrator Reference</i> .
	<p>Access the printer through the Web Browser, log on as an Administrator on the Web Image Monitor, and then confirm the following settings in [Notification]:</p> <ul style="list-style-type: none"> • Device E-mail Address • Groups to Notify • Select Groups/Items to Notify <p> Reference For details about the settings, see Web Image Monitor Help.</p>
	<p>Access the printer through the Web Browser, log on as an Administrator on the Web Image Monitor, and then confirm the settings of the SMTP server in [E-mail].</p> <p> Reference For details about the settings, see Web Image Monitor Help.</p>
	<p>When the power is turned off before the e-mail is transmitted, the e-mail will not be received.</p> <p>Check the e-mail address set for the destination. Confirm the printer's operation history using the Web Image Monitor's System Log menu in [Network]. If the e-mail was sent but not received, it is possible the destination was incorrect. Also check the information concerning error mail from the e-mail server.</p>
The setting for [Notify by Email] on the System Menu was changed from [Off] to [On] , but e-mail is not arriving.	After changing the setting, turn the main unit's power off and then back on again.
Error notification e-mail was received, but no error-solved e-mail is received.	<p>Check e-mail is set for sending using the Web Image Monitor's [Notification] at the time the error was fixed. You must click the [Edit] button of [Detailed Settings of Each Item] in [Notification], and set [Notify when error:] to [Occurs & Fixed] on the displayed screen.</p> <p> Reference For details about the settings, see Web Image Monitor Help.</p>

Problems	Solutions
Alert Resolving is set for sending e-mail, but no Alert-resolved e-mail is sent.	If the power of the main unit is turned off after an Alert occurs, the Alert is resolved during the time the power is off; no Alert-resolved e-mail is sent.
Alert Occurrence and Alert Resolving are set for sending e-mail, but while no Alert Occurrence mail is received, Alert-resolved e-mail is received.	Alert-notification e-mail is not sent if the problem is resolved before sending. However, an Alert-resolved e-mail is sent.
Alert-notification level was changed, and e-mail stopped arriving.	If an Alert-notification e-mail, set with the earlier notification level, arrives, later e-mail will not be sent, even if the notification level is changed after.
When no date information is included in sent e-mail, the mail server has a malfunction.	Make the setting for obtaining time information from the SNTP server. Refer to the Web Image Monitor's Help to the settings.
Printing using Bluetooth™ is slow.	<p>When using the optional Bluetooth™ interface unit, do the following:</p> <ul style="list-style-type: none"> • Transmit fewer print jobs. • Make sure no IEEE 802.11b (wireless LAN) or other Bluetooth™ devices are in use. <p> Note</p> <ul style="list-style-type: none"> <input type="checkbox"/> Interference may occur with the IEEE 802.11b wireless LAN interface board. Such interference may affect the transmission speed and other functions. • Transmissions between the client computer and the machine can be blocked by obstructions. Move the machine or client computer if necessary. <p> Note</p> <ul style="list-style-type: none"> <input type="checkbox"/> When you use a Bluetooth™ connection, print jobs are transmitted relatively slowly.

If the machine is still not operating satisfactorily, contact your sales or service representative. Consult with the store where the printer was purchased for information about the location of sales or service representatives.

Removing Misfed Paper

When a paper misfeed occurs, an error message appears on the panel display. Remove the misfed paper from the location indicated.



Important

- Toner dust may be on the misfed paper after removal. Be careful not to get it on your hands or clothes.
- Toner dust may be on the paper printed after removing misfed paper. Make a few prints until smears do not appear any more.
- Forcefully removing misfed paper may cause paper to tear and leave scraps of paper in the printer. This might cause a misfeed and damage the printer.

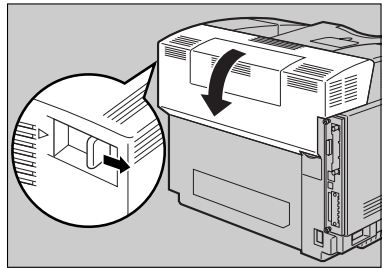
When “Remove Misfeed Internal Path” Appears

A misfeed has occurred in the output unit.

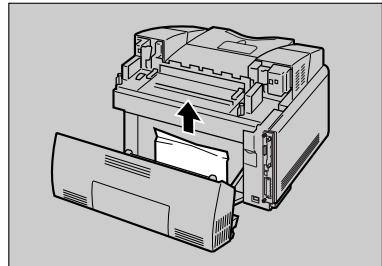
CAUTION:

- *The inside of the machine becomes very hot. Do not touch the parts with a “” label (means hot surface). Touching a part with a “” label (means hot surface) could result in a burn.*

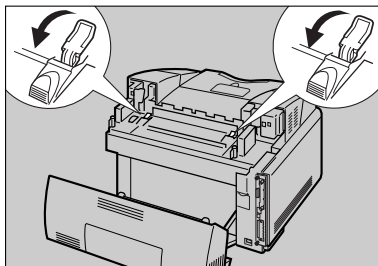
- 1** Pull the rear cover open lever, and then open the rear cover.



- 2** Remove the misfed paper slowly.



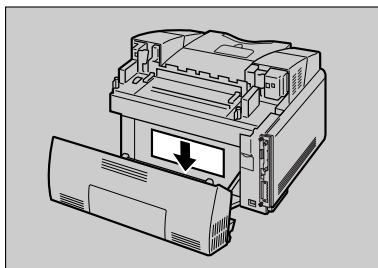
- 3** Lift up the left and right green release levers on the top of the fusing unit.



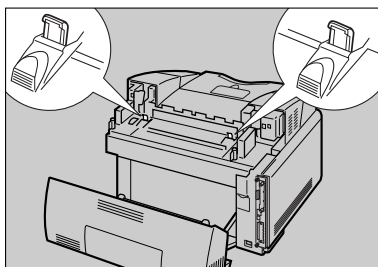
Note

- Lift the release levers firmly, since they are locked tightly into position.

- 4** Remove misfed paper slowly.



- 5** Turn the release levers.



- 6** Close the rear cover slowly.

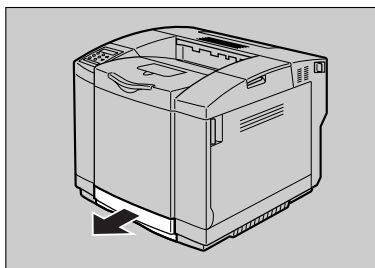
When “Remove Misfeed Paper Tray” Appears

CAUTION:

- When pulling the paper tray out, be careful not to pull it strongly. If you do, the tray might fall and cause an injury.

A misfeed has occurred in the paper tray.

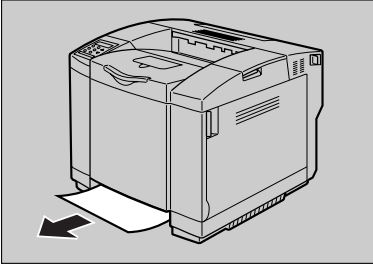
- 1** Pull the paper tray out slowly.



Important

- Do not pull out the paper tray with excessive force. This will cause it to fall out of the printer, possibly resulting in injury.

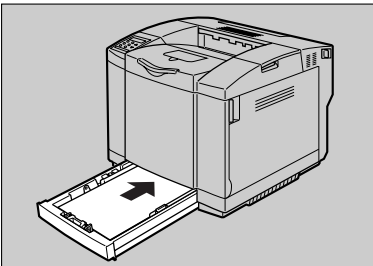
2 Remove misfed paper slowly.



Note

- A sheet may have jammed in the rear. If you cannot find the jammed sheet, try searching at the very back. OHP sheets are especially hard to find.

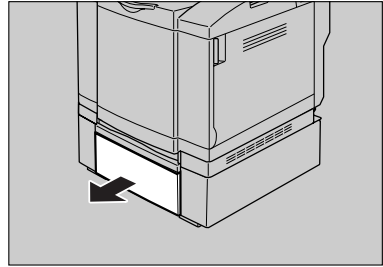
3 Slide the paper tray completely into the printer.



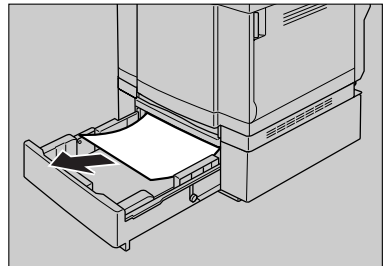
Important

- Be sure to insert the paper tray completely. Otherwise, misfeeds might occur.

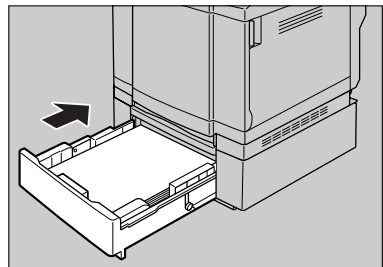
4 If the optional paper feed unit is installed, pull the paper tray out of the paper feed unit until it stops.



5 Remove the misfed paper slowly.



6 Slide the paper tray into the paper feed unit until it stops.



Important

- Be sure to insert the paper tray completely, or paper misfeeds might occur.

When “Remove Misfeed Duplex Unit” Appears

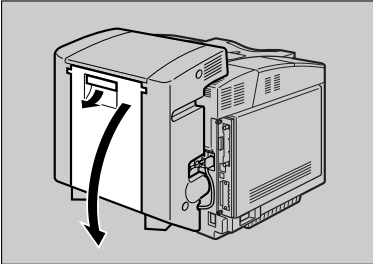
A misfeed has occurred in the optional duplex unit.

⚠ CAUTION:

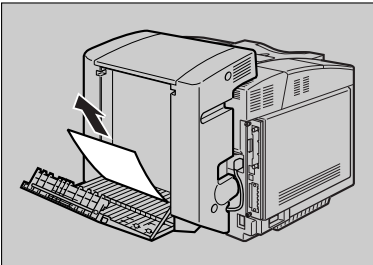
- *The inside of the machine becomes very hot. Do not touch the parts with a “⚠” label (means hot surface). Touching a part with a “⚠” label (means hot surface) could result in a burn.*

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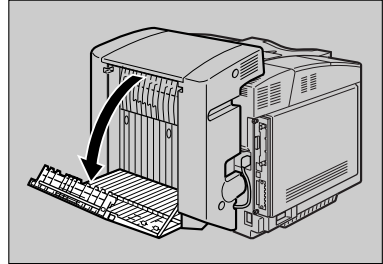
- 1** Pull the lever in the center of the duplex unit to open its rear cover.



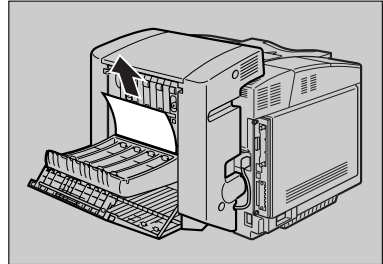
- 2** Remove the misfed paper slowly.



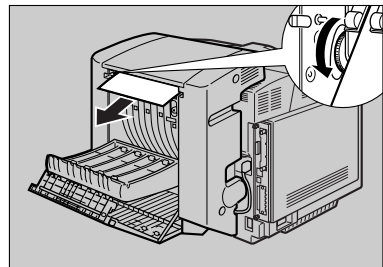
- 3** Open the inside cover of the duplex unit.



- 4** Remove the misfed paper slowly.



- 5** Turn the green dial located in the upper left corner of the inside of the duplex unit to push out misfed paper, and then remove it.



- 6** Close the inside cover of the duplex unit.

- 7** Close the rear cover of the duplex unit.

6. Appendix

Consumables

⚠ 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
Black	9,800 pages ^{*1} (8,200 pages ^{*2})
Cyan	6,500 pages ^{*3} (6,500 pages ^{*4})
Magenta	6,500 pages ^{*5} (6,500 pages ^{*6})
Yellow	6,500 pages ^{*7} (6,500 pages ^{*8})

^{*1} Based on a standard A4/letter 5% test chart when printing continuously in black and white.

^{*2} Based on a standard A4/letter 5% test chart when printing a series of two-page print jobs in black and white.

^{*3} Based on a standard A4/letter 5% test chart when printing continuously in cyan.

^{*4} Based on a standard A4/letter 5% test chart when printing a series of two-page print jobs in cyan.

^{*5} Based on a standard A4/letter 5% test chart when printing continuously in magenta.

^{*6} Based on a standard A4/letter 5% test chart when printing a series of two-page print jobs in magenta.

^{*7} Based on a standard A4/letter 5% test chart when printing continuously in yellow.

^{*8} Based on a standard A4/letter 5% test chart when printing a series of two-page print jobs in yellow.

 **Note**

- After the message “Toner is Almost Empty: XXX” appears where XXX stands for black, cyan, magenta or yellow, about 250 pages can still be printed (when continuously printing a 5% chart on A4/letter size paper). We recommend that you change the toner cartridge soon.
- If toner cartridges are not changed when necessary, printing will become impossible. We recommend keeping a stock of cartridges or purchasing them soon.
- The actual number of printable pages varies depending on the image volume and density, number of pages to be printed at a time, paper type and paper size used, and environmental conditions such as temperature and humidity.
- Toner cartridges may need to be changed sooner than indicated above due to deterioration over the period of use.
- Toner cartridges (consumables) are not covered by warranty. However, if there is problem, contact the store where they were purchased.
- Numbers of pages that can be printed using the toner cartridge supplied with this printer is as follows:

Toner cartridge	Average printable number of pages per cartridge
Black, Cyan, Magenta, Yellow	1,500 pages

Waste toner bottle

Name	Average printable number of pages
Waste Toner Bottle Type 140	11,000 pages ^{*1} (9,200 pages ^{*2}) 2,750 pages ^{*3} (2,300 pages ^{*4})

^{*1} Based on a standard A4/letter 5% test chart when printing continuously in black and white.

^{*2} Based on a standard A4/letter 5% test chart when printing a series of two-page print jobs in black and white.

^{*3} Based on a standard A4/letter 5% test chart when printing continuously in color.

^{*4} Based on a standard A4/letter 5% test chart when printing a series of two-page print jobs in color.

 **Note**

- After the message “Waste Toner is Almost Full” appears, about 200 pages can still be printed. (When continuously printing at 5% test chart on A4/letter in black and white).
- The actual number of printable pages varies depending on the image volume and density, number of pages to be printed at a time, paper type and paper size used, and environmental conditions such as temperature and humidity.
- If toner cartridges are not changed when necessary, printing will become impossible. We recommend keeping a stock of cartridges or purchasing them soon.

Photo conductor unit

Name	Average printable number of pages
Photo Conductor Unit Type 140	60,000 pages ^{*1} (27,000 pages ^{*2}) 15,000 pages ^{*3} (9,000 pages ^{*4})


^{*1} Based on a standard A4/letter 5% test chart when printing continuously in black and white.

^{*2} Based on a standard A4/letter 5% test chart when printing a series of two-page print jobs in black and white.

^{*3} Based on a standard A4/letter 5% test chart when printing continuously in color.

^{*4} Based on a standard A4/letter 5% test chart when printing a series of two-page print jobs in color.

Note

- After the message "Replace PCU soon" appears, about 750 pages can still be printed. (When continuously printing at 5% test chart on A4/letter  in black and white).
- The actual number of printable pages varies depending on the image volume and density, number of pages to be printed at a time, paper type and paper size used, and environmental conditions such as temperature and humidity.
- If the photo conductor unit is not changed when necessary, the quality of printing is not guaranteed. We recommend keeping a stock of photo conductor units or purchasing one soon.
- Photo conductor unit (consumables) are not covered by warranty. However, if there is problem, contact the store where they were purchased.

Moving and Transporting the Printer

CAUTION:

- *When moving the machine, each person should hold the handles that are located on opposite sides, and then lift it slowly. Lifting it carelessly or dropping it may cause an injury.*
- *When you move the printer, remember to unplug the power cord from the wall outlet to avoid a fire or an electric shock.*
- *When you pull out the plug from the socket, grip the plug, not the cord, to avoid damaging the cord and causing a fire or an electric shock.*
- *When moving the printer after use, do not take out any of the Toners, Photo Conductor Units, nor the Waste Toner Bottle to prevent toner spill inside the machine.*

Repack the printer in its original packing materials for transporting.

Note

- The printer weighs approximately 31.5 kg (69.4 lb.).

Important

- Be sure to disconnect all cables from the printer before transporting it.
- The printer is a precision piece of machinery. Take care to avoid damage during shipment.
- If the optional paper feed unit is installed, remove it from the printer, and then move them separately.

Moving the Printer

⚠ CAUTION:

- When lifting the machine, use the inset grips on both sides. Otherwise the printer could break or cause an injury if dropped.
- Before moving the machine, unplug the power cord from the wall outlet. If the cord is unplugged abruptly, it could become damaged. Damaged plugs or cords can cause an electrical or fire hazard.

Moving the printer in a short distance

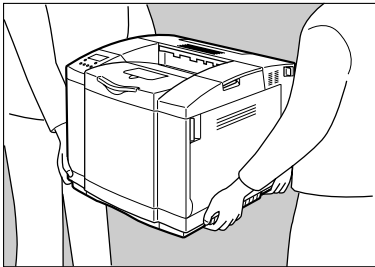
1 Be sure to check the following points:

- The power switch is turned off.
- The power cable is unplugged from the wall outlet.
- The interface cable is unplugged from the printer.

2 If the external options are installed, remove them.

See *Option Setup Guide* and follow the steps backwards for removing options.

3 Lift the printer with two people by using the inset grips on both side of the printer, and then move it horizontally to the place where you want to install it.



4 If you removed options in step 2, reinstall them.

Note

- See *Option Setup Guide* for installing options.

Important

- Be sure to move the printer horizontally. To prevent toner from scattering, move the printer slowly.
- If the optional paper feed unit is installed, remove it from the printer, and then move them separately.

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MEMO



Declaration of Conformity

“The Product complies with the requirements of the EMC Directive 89/336/EEC and its amending directives and the Low Voltage Directive 73/23/EEC and its amending directives.”



Notice to Users in EEA Countries

802.11b interface unit:

This product complies with the essential requirements and provisions of Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity.

This product is only for use in EEA or other authorized countries. Outdoor use of this product in Belgium, France, Germany, Italy, or the Netherlands is prohibited.

The CE Declaration of Conformity is available on the Internet at URL:

http://www.ricoh.co.jp/fax/ce_doc/.

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

I means **POWER ON**.

O means **POWER OFF**.



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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.

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.

Trademarks

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

- The product name of Windows[®] 95 is Microsoft[®] Windows 95.
- The product name of Windows[®] 98 is Microsoft[®] Windows 98.
- The product name of Windows[®] Me is Microsoft[®] Windows Millennium Edition (Windows Me).
- The product names of Windows[®] 2000 are as follows:
 - Microsoft[®] Windows[®] 2000 Advanced Server
 - Microsoft[®] Windows[®] 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 Server™ 2003 are as follows:
Microsoft® Windows Server™ 2003 Standard Edition
Microsoft® Windows Server™ 2003 Enterprise Edition
Microsoft® Windows Server™ 2003 Web Edition
- The product names of Windows NT® 4.0 are as follows:
Microsoft® Windows NT® Server 4.0
- Microsoft® Windows NT® Workstation 4.0

Notes:

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



Setting up Options

This documentation describes the specific printer functions and menus that are added by installing the PPD file. For more information about the functions and menus of the Windows 95/98/Me PostScript printer driver, see the printer driver's Help.

Preparation

On a Macintosh, Mac OS 8.6 or later (Mac OS X Classic environment is supported.) or Mac OS X 10.1 or later is required.

Limitation

- If you use Mac OS X, the following functions cannot be used:
 - Sample Print
 - Locked Print
 - User Code

Note

- “Mac OS X” in the tables below refers to Mac OS X 10.2.3. Depending on the version, **[Features x]** is displayed as **[Set x]** (x is a number). Make adjustments according to the version you use.

Job Type

Use this to select the type of print job.

The following table shows the tabs or menus where you can select this function.

Windows 95/ 98/ Me	[Job Type] on the [Setup] tab.
Windows 2000/XP, Windows Server 2003	[Job Type] on the [Job Log] tab in the Printing Preferences dialog box.
Windows NT 4. 0	[Job Type] on the [Job Log] tab in the Document Defaults dialog box.
Mac OS	[Job Type] on [Job Log] in the print dialog box.
Mac OS X	This function is not available.

You can select the following items:

❖ Normal

Select this for normal printing. The print job starts immediately after the print command is given.

Note

- Under Windows 95/98/Me, if you want to use an User ID, click the **[Detail]** button.

❖ Sample Print

Use this function to print only one set of a multiple print jobs.

The other sets are saved in the machine. The saved job can be printed from the machine's control panel. You can also delete the saved job.

Limitation

- To use this function, the optional Hard Disk Drive must be installed on the printer.

 **Note**

- The “User ID” can consist of up to eight alphanumeric (a- z, A- Z, 0- 9) characters.
- Entering the “User ID” helps you to distinguish the print job from others.

 **Reference**

For more information about how to use Sample Print, see [p.8 “How to Use Sample Print”](#).

 **Locked Print**

Use this function to save documents in the machine memory with a password, and then edit and print them as you want.

 **Limitation**

- To use this function, the optional Hard Disk Drive must be installed on the printer.

 **Note**

- The “User ID” can consist of up to eight alphanumeric (a-z, A-Z, 0-9) characters. The “Password” must be four digits.

 **Reference**

For more information about how to use Locked Print, see [p.11 “How to Use Locked Print”](#).



How to Use Sample Print

Follow the procedures to print a document using the “Sample Print” function.

 **Note**

- If the application has a collate option, make sure that it is not selected before sending a print job. By default, sample print jobs are automatically collated by the printer driver. If the collate option is selected in the application print dialog box, more prints than intended may be printed.

Windows 95/98/Me

1 From an application, select the menu command to print.

The print dialog box appears.

2 Open the Printer Properties to set Sample Print.

3 Click to select the [Setup] tab.

4 Select [Sample Print] in [Job Type].

5 Click [Details...].

6 Enter the “User ID” in [User ID]. This can consist of up to eight alphanumeric (a- z, A- Z, 0- 9) characters.

 **Note**

- Select this to identify the user associated with the job.

7 Click [OK].

Windows 2000/XP, Windows Server 2003, Windows NT 4.0

1 From an application, select the menu command to print.

The print dialog box appears.

2 Open the Printer Properties to set Sample Print.

3 Click to select the [Job Log] tab.

4 Select [Sample Print] in [Print Job].

5 Enter the “User ID” in [User ID]. This can consist of up to eight alphanumeric (a- z, A- Z, 0- 9) characters.

 **Note**

- Select this to identify the user associated with the job.

6 Click [OK] to close the Printer Properties.

7 Start printing from the application's print dialog box.

The Sample Print job is sent to the machine and one set is printed.

8 Check the sample print to confirm that the settings are correct.

If the settings are correct, see “Printing the Remaining Sets”, *Client Reference*.

If not, you can delete the saved job. See “Deleting a Sample Print File”, *Client Reference*.

Mac OS

1 From an application, select the menu command to print.

The print dialog box appears.

2 Click to select **[Job Log]** from the pop up menu.

3 Select **[Sample Print]** in **[Job Type]**, and then select the appropriate setting.

4 Enter the “User ID” in **[User ID]**. This can consist of up to eight alphanumeric (a-z, A-Z, 0-9) characters.

 **Note**

- This is used to identify the user associated with a job.
- The “User ID” can consist of up to eight alphanumeric (a-z, A-Z, 0-9) characters.


5 After making all of the settings you want, click **[Print]**.

The Sample Print job is sent to the machine and one set is printed.

6 Check the sample print to confirm that the settings are correct.

If the settings are correct, see “Printing the Remaining Sets”, *Client Reference*.

If not, you can delete the saved job. See “Deleting a Sample Print File”, *Client Reference*.



How to Use Locked Print

Follow the procedures to print a document using the “Locked Print” function.

 **Note**

- If the application has a collate option, make sure that it is not selected before sending a print job. By default, locked print jobs are automatically collated by the printer driver. If the collate option is selected in the application print dialog box, more prints than intended may be printed.

Windows 95/98/Me

1 From an application, select the menu command to print.

The print dialog box appears.

2 Open the Printer Properties to set Locked Print.

3 Click to select the [Setup] tab.

4 Select [Locked Print] in [Job Type].

5 Click [Details...].

6 Enter the “User ID” in [User ID]. This can consist of up to eight alphanumeric (a-z, A-Z, 0-9) characters. Then enter a password in [Password], up to four digits.

 **Note**

- Select this to identify the user associated with the job.

7 Click [OK].

Windows 2000/XP, Windows Server 2003, Windows NT 4.0

1 From an application, select the menu command to print.

The print dialog box appears.

2 Open the Printer Properties to set Locked Print.

3 Click to select the [Job Log] tab.

4 Select [Locked Print] in [Print Job].

5 Enter the “User ID” in [User ID]. This can consist of up to eight alphanumeric (a-z, A-Z, 0-9) characters. Then enter a password in [Password], up to four digits.

 **Note**

- Use this to identify the user associated with the job.

6 Click [OK] to close the Printer Properties.

7 Start printing from the application's print dialog box.

The Locked Print job is sent to the machine.


Mac OS

1 From an application, select the menu command to print.

The print dialog box appears.

2 Click to select [Job Log] from the pop up menu.

3 Select [Locked Print] in [Job Type], and then select the appropriate setting.



- 4** Enter the “User ID” in **[User ID]**. This can consist of up to eight alphanumeric (a-z, A-Z, 0-9) characters. Then enter a password in **[Password]**, up to four digits.

 **Note**

- This is used to identify the user associated with a job.

Collate

Use this function to enable collation. With this feature, the printer can efficiently print collated sets of multiple-page documents.

 **Limitation**

- To use this function, a Memory Unit of at least 192 MB or Hard Disk Drive must be installed on the printer.
- If you use Windows 2000, Windows XP, Mac OS or Mac OS X, make sure that the following check boxes have not been selected.
 - Windows 2000
The **[Collated]** check box on **[Printer Features]** on **[Advanced...]** on the **[Paper/ Quality]** tab in the Printing Preferences dialog box.
 - Windows XP
The **[Collated]** check box on **[Paper/Output]** on **[Advanced...]** on the **[Paper/ Quality]** tab in the Printing Preferences dialog box.
 - Mac OS
The **[Collate]** check box in the print dialog box.
 - Mac OS X
The **[Collate]** check box on **[Copies & Pages]** in the printer dialog box.

The following table shows the tabs or menus where you can select this function.

Windows 95/98/Me	The [Setup] tab.
Windows 2000, Windows XP	[Collate] on [Printer Features] on [Advanced...] on the [Paper/Quality] tab in the Printing Preferences dialog box.
Windows NT 4.0	[Collate] on [Document Options] on the [Advanced] tab in the Document Defaults dialog box.
Mac OS	[Collate:] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Collate] on the [Feature 1] tab on [Printer Feature] in the printer dialog box.

Duplex Printing

Use this function to select duplex printing.

Limitation

- To use this function, the optional Duplex Unit must be installed on the printer.
- You cannot perform duplex printing from the Bypass Tray.

The following table shows the tabs or menus where you can select this function.

Windows 95/98/Me	[Duplex] on the [Setup] tab.
Windows 2000/XP, Windows Server 2003	[Print on Both Sides (Duplex)] on the [Layout] tab in the Printing Preferences dialog box.
Windows NT 4.0	[Print on Both Sides (Duplex Printing)] on the [Page Setup] tab in the Document Defaults dialog box.
Mac OS	[Print on Both Sides] on [Layout] in the print dialog box.
Mac OS X	The [Print on both Sides] check box on [Duplex] in the print dialog box.

You can select the following items: The following items may vary depending on the operating system you are using.

Windows 95/98/Me

❖ Off

Disables Duplex Printing.

❖ Open to Left

Prints output so that you can open it to the left.

❖ Open to Top

Prints output so that you can open it to the top.

Windows 2000/XP, Windows Server 2003, Mac OS, Mac OS X

Note

If you use a Mac OS, click to select the button that means **[Flip on Long Edge]** or **[Flip on Short Edge]**.

❖ None


Disables Duplex Printing.

❖ Flip on Short Edge

Prints output so that you can open it to the short edge when bound along the short edge.

❖ Flip on Long Edge

Prints output so that you can open it to the long edge when bound along the long edge.



Windows NT 4.0

❖ None

Disables Duplex Printing.

❖ Short Side

Prints output so that you can open it to the short edge when bound along the short edge.

❖ Long Side

Prints output so that you can open it to the long edge when bound along the long edge.

Color Mode

Use this to select whether the document is printed in color or black and white.

The following table shows the tabs or menus where you can select this function.

Windows 95/98/Me	[Color/Black and White] on the [Setup] tab.
Windows 2000/XP, Windows Server 2003	[Color Mode] on [Printer Features] on [Advanced...] on the [Paper/Quality] tab in the Printing Preferences dialog box.
Windows NT 4.0	[Color Mode] on [Document Options] on the [Advanced] tab in the Document Defaults dialog box.
Mac OS	[Color Mode:] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Color Mode] on the [Features 1] tab on [Printer Features] in the print dialog box.

Note

- ❑ If you use Windows 95/98/Me, this mode is called “Color/Black and White”.

You can select the following items:

❖ **Color**

Prints color documents in full color.

Note

- Color images will be printed using CMYK toner, Cyan, Magenta, Yellow and Black. CMYK are three primary subtractive colors.
- If you want to adjust the print color, adjust the settings in the Advanced dialog box accessed from the Advanced button on the **[Paper/Quality]** tab.

❖ **Black and White**

Prints everything, including color documents, in black and white. Black and White printing is faster than Color printing. To stop black and white areas being printed with CMYK toner, select **[Black and White]** in the printer driver as well as in the application.

Paper Selection

All Pages and Destination Tabs

Use this to select the media type and input tray.

Limitation

- This function is for Windows 95/98/Me only.

Reference

For more information about the **[All Pages and Destination]** tabs. See the printer driver's Help.

Paper Size

Use this to select the size of paper you want to use.

The following table shows the tabs or menus where you can select this function.

Windows 95/98/Me	[Size:] on the [Paper] tab.
Windows 2000/XP, Windows Server 2003	[Paper Size:] on [Paper/Output] on [Advanced...] on the [Paper/Quality] tab in the Printing Preference dialog box.
Windows NT 4.0	[Paper Size:] on the [Page Setup] tab in the Document Defaults dialog box.
Mac OS	[Paper:] on the [Page Attributes] tab in the Page Setup dialog box.
Mac OS X	[Paper Size:] in the Page Setup dialog box.



Reference

For more information about the paper sizes supported by this printer, see “Paper and Other Media Supported by This Printer”, *Maintenance Guide*.



Fit to Paper

When the size of the document and paper size differ, set whether or not to print according to paper size.

Windows 95/98/Me	[Fit to Print Size] on the [Paper] tab.
Windows 2000/XP, Windows Server 2003	[Fit to Paper] on [Printer Features] on [Advanced...] on the [Paper/Quality] tab in the Printing Preferences dialog box.
Windows NT 4.0	[Fit to Paper] on [Document Options] on the [Advanced] tab in the Document Defaults dialog box.
Mac OS	[Gradation:] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Fit to Paper:] on the [Features 1] tab on [Printer Features] in the print dialog box.

❖ Prompt User

Print is performed with the size of document to be printed unchanged.


❖ Nearest Size and Scale

If the paper size is smaller than the selected papersize, the driver reduces the print size.

If the paper size is larger than the size of document to be printed, print is not to fit the paper size.

❖ Nearest Size and Crop

When the paper size is smaller than the size of document to be printed, print is adjusted to meet the paper size.



Media Type

Use this to select the paper type.

The following table shows the tabs or menus where you can select this function.

Windows 95/98/Me	[Type:] on [All Pages] on the [Paper] tab.
Windows 2000/XP, Windows Server 2003	[Media:] on the [Paper/Quality] tab in the Printing Preference dialog box.
Windows NT 4.0	[Paper/Output] on the [Advanced] tab in the Document Defaults dialog box.
Mac OS	[Paper Type:] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Paper Type] on the [Features 3] tab on [Printer Features] in the print dialog box.

Reference

For more information about the media type supported by this printer, see “Types of Paper and Other Media”, *Maintenance Guide*.



Paper Source

Use this to select the paper sources.

The following table shows the tabs or menus where you can select this function.

Windows 95/98/Me	[Input Tray:] on [All Pages] on the [Paper] tab.
Windows 2000/XP, Windows Server 2003	[Paper Source:] on the [Paper/Quality] tab in the Printing Preferences dialog box.
Windows NT 4.0	The [Page Setup] tab in the Document Defaults dialog box.
Mac OS	[Paper Source:] on [General] in the print dialog box.
Mac OS X	[Paper Feed] in the print dialog box.

Resolution

Use this to set the resolution to **[600 dpi]**.

The following table shows the tabs or menus where you can select this function.

Windows 95/98/Me	This function is not available.
Windows 2000/XP, Windows Server 2003	This function is not available.
Windows NT 4.0	[Graphic] on [Document Options] on the [Advanced] tab in the Document Defaults dialog box.
Mac OS	This function is not available.
Mac OS X	This function is not available.

Gradation

Use this to select a type of gradation based on your purpose.

The following table shows the tabs or menus where you can select this function.

Windows 95/98/Me	[Print Quality] tab.
Windows 2000/XP, Windows Server 2003	[Gradation] on [Printer Features] on [Advanced...] on the [Paper/Quality] tab in the Printing Preferences dialog box.
Windows NT 4.0	[Gradation] on [Document Options] on the [Advanced] tab in the Document Defaults dialog box.
Mac OS	[Gradation:] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Gradation] on the [Features 1] tab on [Printer Features] in the print dialog box.

You can select the following items:

❖ **Standard**

Prints with good quality of gradation.

❖ **Fast**

Prints quickly while gradation loses some smoothness.

Color Profile

Use this to select the color profile pattern.

The following table shows the tabs or menus where you can select this function.

Windows 95/98/Me	[Color Profile] in the [Advanced] dialog box displayed when you click [Advanced...] , after selecting [Manual] from [Color] on the [Print/Quality] tab
Windows 2000/XP, Windows Server 2003	[Color Profile] on [Printer Features] on [Advanced...] on the [Paper/Quality] tab in the Printing Preferences dialog box.
Windows NT 4.0	[Color Profile] on [Document Options] on the [Advanced] tab in the Document Defaults dialog box.
Mac OS	[Color Profile:] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Color Profile] on the [Features 2] tab on [Printer Features] in the print dialog box.

You can select the following items:

Important

- If you use Windows 95/98/Me, you can configure **[Color Profile]** in **[Advanced]** by selecting **[Manual]** from the **[Color]** setting. **[Automatic]** sets the printer to “Auto”.

❖ Auto

Use this setting to configure the best color profile pattern automatically depending on the appearance of the document to be printed.

❖ Photographic

Use this setting to enhance the reproduction of photos and graphics that include midtones.


❖ Presentation

Use this setting to enhance the reproduction of documents that contain text and graphics. This CRD is best for printing colored charts, graphs, presentation materials and so on. If you use this CRD for printing photographs, the color or gradations might not be reproduced well.

❖ Solid Color

Use this setting to print specific colors, logos and so on.

❖ User Setting

Use this setting to print images with downloaded CRD from your application.

❖ CLP Simulation

Simulates CLP.

 **Note**

- Use this to select a color rendering dictionary (CRD). The CRD is referred to color matching, so you should select the appropriate CRD for the document you are printing. The selected CRD is also referred to when **[Fine]** or **[Super Fine]** is selected for “Color Setting”. The following items are available: **[Auto]**, **[Photographic]**, **[Presentation]** and **[Solid Color]**.

Color Setting

Use this to select the correction method used for color conversion.

The following table shows the tabs or menus where you can select this function.

Windows 95/98/Me	[Color Setting] on the [Advanced] window displayed when clicking [Advanced...] after selecting [Manual] on [Color] on the [Print/Quality] tab
Windows 2000/XP, Windows Server 2003	[Color Setting] on [Printer Features] on [Advanced...] on the [Paper/Quality] tab in the Printing Preferences dialog box.
Windows NT 4.0	[Color Setting] on [Document Options] on the [Advanced] tab in the Document Defaults dialog box.
Mac OS	[Color Setting:] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Color Setting] on the [Features 2] tab on [Printer Features] in the print dialog box.

Important

- If you use Windows 95/98/Me, you can configure **[Color Setting]** in **[Advanced]** by selecting **[Manual]** from the **[Color]** setting. **[Automatic]** sets the printer to “Super Fine”.

Note

- The color rendering dictionary that is selected in the “Color Profile” setting is used.

You can select the following items:

Off

No modification to the color setting.


❖ **Fine**

Select this setting to perform color matching based on one of the printer's built-in color rendering dictionaries and perform CMYK conversion. This setting performs the printing which output target is Monitor $\gamma = 1.8$.

❖ **Super Fine**

Select this setting to use a color rendering dictionary as in the “Fine” setting but produce output that is more vivid. Use this setting to emphasize light colors. This setting performs the printing which output target is Monitor $\gamma = 2.2$.

 **Note**

- Use this to select a color rendering dictionary (CRD). The CRD is referred to color matching, so you should select the appropriate CRD for the document you are printing. The selected CRD is also referred to when [**Fine**] or [**Super Fine**] is selected for “Color Setting”. The following items are available: [**Auto**], [**Photographic**], [**Presentation**] and [**Solid Color**].

CMYK Simulation Profile

You can simulate the color tone of the printing ink. You can select the printing ink from SWOP, Euro-scale and JapanColor.

Windows 95/98/Me	[CMYK Simulation Profile] in the [Advanced] dialog box displayed when you click [Advanced...] , after selecting [Manual] from [Color] on the [Print/Quality] tab
Windows 2000/XP, Windows Server 2003	[CMYK Simulation Profile] on [Printer Features] on [Advanced...] on the [Paper/Quality] tab in the Printing Preferences dialog box.
Windows NT 4.0	[CMYK Simulation] on [Document Options] on the [Advanced] tab in the Document Defaults dialog box.
Mac OS	[CMYK Simulation:] on [Printer Specific Options] in the print dialog box.
Mac OS X	[CMYK Simulation] on the [Features 3] tab on [Printer Features] in the print dialog box.

Dithering

Use this to set the Image Rendering mode.

The following table shows the tabs or menus where you can select this function.

Windows 95/98/Me	[Dithering] in the [Advanced] dialog box displayed when you click [Advanced...] , after selecting [Manual] from [Color] on the [Print/Quality] tab
Windows 2000/XP, Windows Server 2003	[Dithering] on [Printer Features] on [Advanced...] on the [Paper/Quality] tab in the Printing Preferences dialog box.
Windows NT 4.0	[Dithering] on [Document Options] on the [Advanced] tab in the Document Defaults dialog box.
Mac OS	[Dithering] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Dithering] on the [Features 2] tab on [Printer Features] in the print dialog box.

Important

- If you use Windows 95/98/Me, you can configure **[Dithering]** in **[Advanced]** by selecting **[Manual]** from **[Color]** setting. **[Automatic]** sets the printer to “Auto”.

You can select the following items:

❖ Auto

Use this setting to configure the best dithering method automatically depending on the appearance of the document to be printed.

❖ Photographic

Performs dithering using an appropriate pattern for photographs.

❖ Text

Performs dithering using an appropriate pattern for text.

❖ User Setting

Use this setting to print images set in half tone in your application.

Gray Reproduction

Use this to select the Black Color mode for text and line art.

The following table shows the tabs or menus where you can select this function.

Windows 95/98/Me	[Gray Reproduction] in [Advanced] by selecting [Manual] from the [Color] setting. [Automatic] sets the printer to “Pure Black Text”.
Windows 2000/XP, Windows Server 2003	[Gray Reproduction] on [Printer Features] on [Advanced...] on the [Paper/Quality] tab in the Printing Preferences dialog box.
Windows NT 4.0	[Black Text/ Graphics] on [Document Options] on the [Advanced] tab in the Document Defaults dialog box.
Mac OS	[Black by K] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Black Text/Graphics] on the [Features 2] tab on [Printer Features] in the print dialog box.

You can select the following items:

❖ Black by K

Select this setting to use a black toner.

❖ Black/Gray by K

Black portions are printed in gray.

❖ CMY+K

Select this setting to use all toners.

Black Over Print

Select whether or not to apply a black color over any other colors when printing.

The following table shows the tabs or menus where you can select this function.

Windows 95/98/Me	[Black Over Print] in [Advanced] by selecting [Manual] from the [Color] setting.
Windows 2000/XP, Windows Server 2003	[Black Over Print] on [Printer Features] on [Advanced...] on the [Paper/Quality] tab in the Printing Preferences dialog box.
Windows NT 4.0	[Black Over Print] on [Document Options] on the [Advanced] tab in the Document Defaults dialog box.
Mac OS	[Black Over Print:] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Black Over Print] on the [Features 2] tab on [Printer Features] in the print dialog box.

Toner Saving

Use this function to reduce the amount of toner used when printing.

The following table shows the tabs or menus where you can select this function.

Windows 95/98/Me	[Toner Saving] on the [Print Quality] tab.
Windows 2000/XP, Windows Server 2003	[Toner Saver] on [Printer Features] on [Advanced...] on the [Paper/Quality] tab in the Printing Preferences dialog box.
Windows NT 4.0	[Toner Saver] on [Document Options] on the [Advanced] tab in the Document Defaults dialog box.
Mac OS	[Toner Saver:] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Toner Saving] on the [Features 1] tab on [Printer Features] in the print dialog box.

Color Control

Use this to select whether or not you want the colors in the documents to be adjusted before printing so that the printed page matches closer to the colors on the screen.

The following table shows the tabs or menus where you can select this function.

Windows 95/98/Me	The [Print Quality] tab.
Windows 2000/XP, Windows Server 2003	[Graphic] on [Advanced] on the [Paper/Quality] tab in the Printing Preferences dialog box.
Windows NT 4.0	This function is not available.
Mac OS	[Print Color] on the [Color Matching] tab in the print dialog box.
Mac OS X	This function is not available.

 **Note**

- If you use Windows 2000/XP or Windows Server 2003, this function is called “Image Color Management”.
- If you use Windows NT 4.0, this function can not be configured.
- If you use Mac OS, this function is called “Color Matching”.

 **Image Color Control**

Display the Image Color Matching dialog box, click this button to specify exactly how you want the colors on your screen adjusted before printing.

User Code

Use this to set a user code for print logging.

Enter a user code using up to eight digits. A user code identifies a group of users and allows you to check the number of sheets printed under each code with SmartDeviceMonitor for Admin.

The following table shows the tabs or menus where you can select this function.

Windows 95/98/Me	[User Code] on the [Statistics] tab.
Windows 2000/XP, Windows Server 2003	[User Code] on the [Job Log] tab in the Printing Preferences dialog box.
Windows NT 4.0	[User Code] on the [Job Log] tab in the Document Defaults dialog box.
Mac OS	[User Code] on [Job Log] in the print dialog box.
Mac OS X	This function is not available.

 **Reference**

For more information about using SmartDeviceMonitor for Admin, see Help.

Options

See “Setting Up Options” in the *Client Reference* or the *Administrator Reference* for the installation method appropriate to your printing environment.

The following table shows the tabs or menus where you can select this function.

Windows 95/98/Me	[Options] on the [Accessories] tab.
Windows 2000/XP, Windows Server 2003	[Installable Options] on the [Device Setting] tab.
Windows NT 4.0	[Installable Options] on the [Device Setting] tab in the Document Defaults dialog box.
Mac OS	For ethernet, [Chooser] on the Apple Menu. For USB, [Change Setup] from the [Printing] menu to open the Desktop printer
Mac OS X	This function is not available.

❖ Tray 2

- You can select the tray with the following menu for PAPER FEED UNIT Type 1000:
p.21 “Paper Source”

❖ Duplex Unit

- You can use the following function with AD460:
p.14 “Duplex Printing”

❖ Hard Disk

- You can use the following function with Hard Disk Drive Type 2600.
p.13 “Collate”
p.6 “Job Type”



Note

- This function is for Windows 95/98/Me only.

❖ Total Memory

- You can use the following function with SDRAM Module (Memory Unit Type C) (64/128/256 MB):
p.13 “Collate”



Note

- The optional Memory Unit of at least 192 MB must be installed on the printer.

2. Printer Utility for Mac

By using Printer Utility for Mac, you can download fonts, change the name of the printer and so on.

Limitation

- If a Macintosh and printer are connected by USB, you cannot use Printer Utility for Mac.

Note

- Printer Utility for Mac is included on the CD-ROM labeled “Printer Drivers and Utilities”.
- Printer Utility for Mac requires Mac OS 8.1 or later. (Mac OS X Classic environment is supported.)
- Printer Utility for Mac cannot use Mac OS X (native mode).

Installing Printer Utility for Mac

Follow these steps to install Printer Utility for Mac on the machine.

1 Start the Mac OS.

2 Insert the CD-ROM into the CD-ROM drive.

The CD-ROM icon appears.

3 Double-click the icon of hard disk to open it.

4 Double-click the CD-ROM icon.

The contents of the CD-ROM appear.

5 Double-click the [Mac OS] folder.

6 Double-click the [PS Utility] folder on the CD-ROM, and then drag the [Printer Utility for Mac] file, and then drop it into the Macintosh hard disk.

7 Drag the CD-ROM icon and drop it into [Trash] to eject the CD-ROM.

Printer Utility for Mac is installed.

Starting Printer Utility for Mac

The following instructions describe how to start Printer Utility for Mac.

Important

- Before starting Printer Utility for Mac, confirm that the printer is selected with **[Chooser]** on the Apple menu.

1 Double-click the **Printer Utility for Mac icon**.

The Printer Utility for Mac dialog box appears.

2 Click **[OK]**.

Printer Utility for Mac will take a few seconds to start.

Reference

For more information, see [“Printer Utility for Mac Functions”](#).

Printer Utility for Mac Functions

Printer Utility for Mac functions are described below.

❖ File menu

- **[Download PS Fonts...]**
Download fonts (PostScript Type 1) to the printer. See [p.38 “Downloading PS Fonts”](#).
- **[Display Printer's Fonts...]**
Display and delete the fonts in printer memory and the printer's hard disk drive. See [p.39 “Displaying Printer's Fonts”](#).
- **[Initialize Printer's Disk...]**
Initialize the printer's hard disk drive. See [p.41 “Initializing the Printer Disk”](#).
- **[Page Setup...]**
Set up the paper size to print “Printer Font Catalog” and “Printer Font Sample”. See [p.41 “Page Setup”](#).
- **[Print Font Catalog...]**
Print the names of available fonts. See [p.42 “Printing Font Catalog”](#).
- **[Print Font Sample...]**
Print a sample of fonts. See [p.42 “Printing Font Sample”](#).
- **[Rename Printer...]**
Change the printer's name when viewed via Appletalk. See [p.42 “Renaming the Printer”](#).
- **[Restart Printer]**
Restart the printer. See [p.43 “Restarting the Printer”](#).

❖ Utility menu

- **[Download PostScript File...]**
Download a PostScript File. See [p.44 “Downloading PostScript Files”](#).
- **[Select Zone...]**
Change the zone to which the printer belongs to via Appletalk. See [p.44 “Selecting the Zone”](#).
- **[Display Printer Status...]**
Display the status of the printer. See [p.45 “Displaying the Printer Status”](#).
- **[Launch Dialogue Console...]**
Create and edit a PostScript file, and then download it to the printer. See [p.46 “Launching the Dialogue Console”](#).

Downloading PS Fonts

You can download the PS fonts to the printer's memory or hard disk drive.

Important

- The following procedures to download the fonts assume that you are a system administrator. If you are not, be sure to consult your system administrator.
- If the printer restarts, all the printer settings return to their defaults.
- Confirm that a Mac OS and the printer are connected with Appletalk.


Note

- Some fonts cannot be downloaded.
- Before downloading, read the documentation about the fonts you want to use.

1 Select **[Download PS Fonts...]** on the **[File]** menu.

2 Click **[Add to list]**.

The dialog box to select fonts appears.



3 Click to select the desired font files, and then click [Open].

The list of selectable font names appears.

4 After adding all the fonts you want to download, click [OK].

The dialog box of selected fonts to download appears.

5 Click [Download].

The fonts begin to download, and the download status is shown.

Important

- During the download, do not turn off the power switch, operate the panel or open or close the cover.

6 When the completion message appears, click [OK].

7 Click [Cancel].

Displaying Printer's Fonts

You can display the available fonts currently downloaded to the printer. Fonts in the printer's memory and hard disk drive can be displayed.

Note

- The fonts displayed in italics are the default fonts.

1 Select [Display Printer's Fonts...] on the [File] menu.

A dialog box appears.

2 Select [Printer's memory] or [Printer's disk].

3 Click [OK].



Deleting Fonts

You can delete fonts from the printer's memory or hard disk drive.

1 Select **[Display Printer's fonts]** on the **[File]** menu.

A dialog box appears.

2 Select **[Printer's memory]** or **[Printer's disk]**.

3 Select the fonts you want to delete.

 **Limitation**

You cannot delete the fonts displayed in italic.

4 Click **[Delete]**.

A confirmation message appears.

5 Confirm the fonts you want to delete and the printer name from which you want to delete the fonts.

6 Click **[Continue]**, and then click **[OK]**.

7 Click **[OK]**.



Initializing the Printer Disk

When initializing the printer's hard disk, all the fonts downloaded to the printer's hard disk drive are deleted. Before initializing, be sure to check the fonts on the hard disk drive.

Important

- When initializing the printer's hard disk drive from the operation panel, all of the data on the printer's hard disk drive is deleted. Before initializing, be sure to check the data on the hard disk drive.

1 Select [Initialize Printer's Disk...] on the [File] menu.

The confirmation message appears.

Note

- To cancel initialization, click [Cancel].

2 Click [Execute].

Initializing starts.

Important

- Do not turn off the power switch until initializing is completed, otherwise the hard disk drive might be damaged.

3 When the completion message appears, click [OK].

Page Setup

You can set the paper size on which to print “Print Fonts Catalogue” and “Prints Fonts Sample”.

1 Select [Page Setup...] on the [File] menu.

2 Choose the paper size.

Printing Font Catalog

Print the names of fonts available on the printer.

 **Note**

The paper selected under **[Page Setup]** is used.

1 Select **[Print Fonts Catalogue]** on the **[File]** menu.

2 Click **[Print]**.

Printing Font Sample

You can print samples of fonts downloaded to the hard disk drive or memory.

 **Note**

Print by using the paper selected on **[Page Setup]**.

1 Select **[Print Fonts Sample...]** on the **[File]** menu.


2 Click **[Print]**.

Renaming the Printer

You can change the printer's name displayed under Appletalk. If you connect several printers on the network, assign different names so you can identify them. If several printers have the same name, a digit appears next to the printer name in **[Chooser]**.

1 Select **[Rename Printer...]** on the **[File]** menu.

2 Type a new name in the **[New Name:]** field.



 **Limitation**

- You can enter up to 31 digits and letters.
- Do not use symbols, for example “*”, “.”, “=”, “@”, “~”.

3 Click **[Rename]**.

The printer name is changed.

4 Press **[OK]**.**5** Select **[Chooser]** on the **Apple** menu.**6** Click the **[AdobePS]** icon.**7** Click to select the printer name renamed in step **2**, and then close **[Chooser]**. **Note**

- If there are several Appletalk zones, select the zone to which the printer belongs to.


Restarting the Printer

You can restart the printer.

1 Select **[Restart Printer]** on the **[File]** menu.**2** Confirm the message that appears on the screen, and then click **[Restart]**.

The printer restarts.

 **Note**

- The fonts that you downloaded in the printer's memory will be deleted.
 - If the printer restarts, all the printer settings return to their defaults.
- 

Downloading PostScript Files

You can download a Postscript file to the printer.

- 1** Select **[Download PostScript File...]** on the **[Utility]** menu.
- 2** Select the file name to download and click the file name, and then click **[Open]**.
- 3** Type the log file name, and then click **[Save]**.

The selected file is downloaded.

 **Note**

- Errors are recorded in the log file.

Selecting the Zone

You can change the zone to which the printer belongs to via Appletalk.

 **Important**

- Confirm that the printer and a Mac OS are connected in an Appletalk environment.

- 1** Select **[Select Zone...]** on the **[Utility]** menu.

The zone to which the printer belongs to and the available zone list appear.

- 2** Select the zone to which you want to switch the printer, and then click **[Change]**.

A confirmation message appears.

- 3** Click **[Continue]**.

A confirmation message appears.

- 4** Press **[OK]**.

- 5** Select **[Chooser]** on the **Apple** menu.
- 6** Click the **[AdobePS]** icon.
- 7** Select the zone selected in step **2** on the **[Appletalk zone:]** list.
- 8** Click to select the printer you want to use on the **[Select a PostScript Printer:]** list.
- 9** Close **[Chooser]**.

Displaying the Printer Status

You can display and confirm the current status of the printer.

- 1** Select **[Display Printer Status...]** on the **[Utility]** menu.

The current status of the printer appears.

- 2** Confirm the current status of the printer.

You can confirm the memory capacity, the VM (Virtual Memory) space, the hard disk drive status and available space on the hard disk drive. You can also confirm the zone to which the printer belongs to.

- 3** Click **[OK]**.

Launching the Dialogue Console

You can create and edit a PostScript file for printing, and then download it to the printer.

Important

- “Launch Dialogue Console” is recommended for users with an understanding of PostScript.
- Do not download any file other than PostScript files to the printer.
- “Launch Dialogue Console” must be used at your own responsibility.

1 Select **[Launch Dialogue Console...]** on the **[Utility]** menu.

Open the editing screen. The Dialogue Console menu bar appears.

2 Type the PostScript command in the editor screen.

Note

- To edit a PostScript file, select **[Open]** on the **[File]** menu to open it.
- You can search or replace a character string by using the **[Search]** menu.

3 After editing the PostScript file, select **[Download Top Window]** on **[Console]** menu to start printing.

The PostScript file is sent to the printer.

Note

- The **[Reply from Printer]** box opens, depending on the PostScript file you sent.

4 Select **[Return To Main Menu]** on the **[Console]** menu to close the PostScript file.



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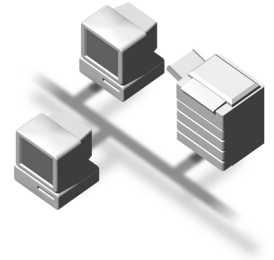




EN **USA**
GB **GB** G108-8618



UNIX Supplement



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.

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.

Notes

For use with the following machines

- Aficio CL1000N
- Gestetner P7429cn
- nashuatec P7429cn
- Rex-Rotary P7429cn
- LANIER LP031c
- Savin CLP831

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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 misfeed, originals might be damaged, or data might be lost. Be sure to read this.

 **Preparation**

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

 **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.

 **Reference**

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.

1. UNIX Configuration

This section explains how to setup a network printer and check the print status using UNIX.

Limitation

- To print from a UNIX workstation, use the file that the printer supports.

Before Setup

Setting up can vary depending on the printing commands. Make sure to make the settings accordingly.

Using the lp/lpr commands

- 1** Use the installation shell script to register the device option, as well as the printer host name and the IP address.

⇒ p.4 “Using the Installation Shell Script”

- 2** Start printing.

⇒ p.14 “Printing Method”

Using the rsh/rcp/ftp commands

- 1** Edit the host file to register the printer host name and the IP address.

- 2** Start printing.

⇒ p.14 “Printing Method”

Reference

See p.9 “After Executing Installation Shell Script” for host file editing.

Note

- If you cannot edit the host file, use the install shell script to register the host name.

Using the Installation Shell Script

1

The installation shell script helps with the setup process. The installation shell script automates some of the tasks in configuring `/etc/hosts`, `/etc/printcap`, and in creating the spool directory for BSD UNIX, and in running the `lpadmin` command for System V UNIX.

Preparation

The installation shell script can be used on the following three kinds of workstations. This installation shell script cannot be used with other types of workstations.

- Solaris 2.5.1, 2.6, 7, 8
- HP-UX
- Red Hat Linux

Depending on the security setting when installed, `rsh/rcp/% telnet` may not be usable with RedHat 7.1 or later. Change the security level to the level that allows use of `rsh/rcp/% telnet`. For more information about how to change the setting, see the operating instructions for RedHat.

When you use NIS (Network Information Service) or DNS, you should configure the server before running this installation shell script.

For more information about the configuration utility of your OS, see the manual that comes with the utility.

Assigning the IP Address

Preparation

Configure the machine to use the TCP/IP protocol.

- Make sure that the TCP/IP protocol on the machine is set to active. (The default is active.)
- Assign an IP address to the machine and configure the other settings required for using the TCP/IP protocol.

Reference

For more information about how to make the above settings, see *Administrator Reference*.

Checking the IP address configuration

Follow the procedure below to make sure that the IP address has been configured correctly.

- The following procedure uses the sample IP address: 192.168.15.16.

1 Enter the following:

```
# ping 192.168.15.16
```

If the address has been configured correctly, the following message appears.

```
192.168.15.16 is alive
```

If the address has been configured incorrectly, the following message appears.

```
no answer from 192.168.15.16
```

Note

- When you use NIS, the IP address and host name are written to `/etc/hosts` on the master server. When you use DNS, the information is written to a data file on the name server. After writing the host name and IP address to the file, make sure that the configuration is correct by pinging the host name.

```
# ping host_name
```

- If the host name is registered with an IP address, the server can access the printer using its host name instead of its IP address.

Executing the Installation Shell Script

After having configured the printer IP address, follow the procedure below to execute the installation shell script and setup the workstation printing environment.

Preparation

Before executing the installation shell script, the IP address, the host name and the printer name are required.

The following procedures use sample IP address: 192.168.15.16, sample host name: npghost and sample printer name: np.

Note

- Use ftp to get the installation shell script from the printer.

1 Log on to the workstation as root.

Note

- If you do not log on as root, the installation shell script will not run.

2 Get the installation shell script from the printer.

1 Move to the directory you want to copy the installation shell script to.

2 Use ftp to connect to the printer with the IP address that you just configured.

```
# ftp 192.168.15.16
Connected to 192.168.15.16
220 printer FTP server ready.
name (192.168.15.16:root:)
```

3 When a user name is requested, leave blank and press the **[RETURN]** key.

```
331 Password required for root.
On:
```

4 When a password is requested, leave blank and press the **[RETURN]** key.

```
230 User root logged in.
ftp>
```

5 Type the following to get the installation shell script.

```
ftp> get install
```

6 Close the ftp session.

```
ftp> bye
221 Goodbye.
#
```

3 Run the installation shell script.

```
# sh ./install
```

 **Note**

- Insert a period and slash before the current directory.

4 Enter a number to select the workstation OS that you are using.

```
Network printer install shell
Copyright RICOH CO.,LTD. 1994-2003
Select your workstation OS type.
 1. SunOS 4.x.x
 2. Solaris 2.x, Solaris 7-8 (SunOS5.x)
 3. HP-UX 8.x,9.x,10.x,11.x
 4. UnixWare
 5. Linux
 6. OpenServer
 7. Quit
Enter <1-7>:
2
```

 **Note**

- SunOS, UnixWare and OpenServer appear on the screen, but they are not supported. Use Solaris, HP-UX or Linux.
- If you select "7", the installation shell script exits.

5 Enter the IP address of the printer.

```
Enter Printer host IP address <xxx.xxx.xxx.xxx> [re-
turn=skip]:
192.168.15.16
```

 **Note**

- The IP address will be added to the /etc/hosts file.
- If the host name of the printer has already been configured, press the **[RETURN]** key. Nothing will be added to the /etc/hosts file.

6 Enter the host name of the printer.

```
Enter Printer host name : nphost
```

 **Note**

- The host name will be added to the /etc/hosts file.
- If no IP address was entered in step **5**, nothing is added to the /etc/hosts file.

7 Configure the printer name.

Enter logical printer name [default nphost_prn]

If you want to use the default name, press the **[RETURN]** key. Enter a new name, if you want to use a different one.

Note

The host name entered in step **6** followed by “_prn” appears in “default”.

8 Set the print option.

Enter remote printer name [default lp]:

- Press the **[RETURN]** key, and print with PCL or PostScript is enabled.
- If you want to set the device option, enter the option parameter.

Enter remote printer name [default lp]:tray=tray1

For more information about the device option, see p.19 “Specifying the Device Option”.

- If you enter “text”, text printing is enabled.
If you enter “text”, printing with PCL and PostScript is disabled.

Enter remote printer name [default lp]:text

Limitation

- You can enter up to 14 characters for HP-UX 11.0, 256 for Solaris 8 and Red Hat Linux 7.0, and 51 for Red Hat Linux 6.2.
- When printing with the lp command, use (_) instead of (=) and (;) instead of (,) for operating systems that cannot use (=) and (,) such as Solaris 2.5 or later.

After the installation shell script setup is complete, and if you enter the IP address in step **5**, the following message appears.

hosts file is modified

9 Perform a test print to make sure that the settings are correct.

```
# lpr -Pnp file_name
```

```
# lp -d np file_name
```

For more information about lpr and lp, see p.14 “Printing Method”.

Deleting the printer

To print using the `lp` or `lpr` command, the option specified when the installation shell script is executed is used. Change the option in accordance with the workstation you are using.

❖ BSD UNIX workstation, Linux

Delete the printer entry from `/etc/printcap`, and then execute the installation shell script again. Select options during the setup process.

Or, search the printer entry from `/etc/printcap`, and change its `rp` capability to option setting.

❖ Solaris, HP-UX

Delete the printer entry, and then execute the installation shell script again. Select options during the setup process. To delete the printer entry, follow the procedure below.

① Stop the scheduler.

```
# /usr/sbin/lpshut
```

② Delete the printer.

```
# /usr/sbin/lpadmin -x printer_name
```

③ Restart the scheduler.

```
# /usr/lib/lpsched
```

After Executing Installation Shell Script

The printing environment is setup automatically when the installation shell script is executed.

This section describes the setup contents when the installation shell script is executed under Red Hat Linux, Solaris and HP-UX.

Linux

❖ Adding the IP address and host name to the `/etc/hosts` file

The following line is added to the `/etc/hosts` file. The IP address and printer host name which you previously entered in the installation script will be used.

```
192.168.15.16 nphost # Network Printer
```

- **192.168.15.16** is the IP address, **nphost** is the host name, from **#** to the end of the line is a comment.

Note

- The `/etc/hosts` file contains a list of the IP addresses and host names of all of the hosts communicating on the network. Each entry is delimited with a space or a tab, and each line is separated with a return.
- If you do not use NIS or DNS, you must manually enter the IP address and host name of each workstation using the network printer in the `/etc/hosts` file.

❖ **Adding an entry to the /etc/printcap file**

The following entry is added to the /etc/printcap file, which is the configuration for printing with the lpr command. In order to use the lpr command to print, you need to edit the /etc/hosts file, add an entry for the network printer to the /etc/printcap file and create a spool directory.

```
###PRINTER3## REMOTE
np|Network Printer:\
    :rm=nphost:\
    :rp=option:\
    :sd=/var/spool/lpd/npd:\
    :lf=/var/log/npd-errs:\
    :sh:\
    :mx#0:
```

 **Note**

- The /etc/printcap file is used to register the name and attributes of a printer. You must make an entry for the network printer in the /etc/printcap file of all workstations using the network printer.
- Each entry is separated with colons into several fields. The syntax is to begin each entry with a colon, followed by the entry, and then end with a colon, a back slash, and then a return.
- The first line of the field is the name of the printer. You use this name when logging on to a network printer from a workstation. You can define several different names by separating each name with the “|” character.
- The second and following lines contain the printer's attributes. Attributes of the printer are represented by two character names referred to as capabilities. For more information about capabilities, see the following table.

Capability	Explanation	Value Required for the Network Printer.
rm	Host name of the printer	The host name that was registered with the /etc/hosts file
rp	Optional specification “lp” will be assigned, if the option is not used.	Select options for printing. For more information about available options, see p.19 “Specifying the Device Option”.
sd	Path name of the spool directory	Path name of the spool directory that is to be created
lf	Path name of the log file	Path name of the log file. For example /var/log/lpd-errs
mx	Maximum file size which the directory can copy. When the size is set to 0, the size is unlimited. If nothing is entered, the size is set to 1024 k.	None or something suitable

❖ Making the spool directory

Create a spool directory under `/var/spool/lpd`. The name of the spool directory should be the name of the printer followed by a “d”.

Note

- ❑ The spool directory is used to control the data used for a print job. For example, when a print job is created, a temporary copy of the file data used for printing is created in the spool directory. All workstations accessing the network printer require a spool directory for the network printer.
- ❑ A spool directory should be made for every network printer entry listed in the `/etc/printcap` file.
- ❑ The spool directory should normally be made under `/var/spool/lpd` and the name should match that listed under the `sd` capability in `/etc/printcap`. Change the owner and group of the directory to `root` and `lp`. The following examples show how to make a `/var/spool/lpd/npd` spool directory.

```
# cd /var/spool/lpd
# mkdir npd
# chown root npd
# chgrp lp npd
```

❖ Making the log file

Error messages are logged to a file created in the `/var/log` directory. The log file name is the printer name followed by “d-errs”.

Note

- ❑ The log file is used for logging some errors or warning messages by the UNIX workstation.
- ❑ The log file should be made for every network printer entry listed in the `/etc/printcap` file.
- ❑ The log file should normally be made under `/var/log` directory and the name should match that listed under the `lf` capability in `/etc/printcap`. Change the owner and group of the log file to `root` and `lp`. The following examples show how to make a `/var/log/npd-errs` file.

```
# cd /var/log
# touch npd-errs
# chown root npd-errs
# chgrp lp npd-errs
```

Solaris

1

❖ Adding the IP address and host name to the `/etc/hosts` file

The following line is added to the `/etc/hosts` file. The IP address and printer host name which you previously entered in the installation script will be used.

```
192.168.15.16 nphost # Network Printer
```

- **192.168.15.16** is the IP address, **nphost** is the host name, from # to the end of the line is a comment.

Note

- The `/etc/hosts` file contains a list of the IP addresses and their host names of all of the hosts communicating on the network. Each entry is delimited with a space or a tab, and each line is separated with a return.
- If you do not use NIS or DNS, you must manually enter the IP address and host name of each workstation using the network printer in the `/etc/hosts` file.

❖ Registering the printer

The installation shell script registers the printer as a remote printer.

- ① If your workstation is Solaris 2.5.1, register the print server and print client to the print service.

```
# lpsystem -t bsd -R 0 -y "Network Printer" nphost
```

- ② Register the printer as a remote printer.

```
# lpadmin -p np -s nphost!"option" -T dump -I any
```

- **np** is the printer name, **nphost** is the host name. For more information about "option", see p.19 "Specifying the Device Option".
"lp" will be assigned, if the option is not used.

When printing with the `lp` command, use (_) instead of (=) and (;) instead of (,) for operating systems that cannot use (=) and (,) such as Solaris 2.5 or later.

- ③ If your workstation is Solaris 2.5.1, set the print job to active so that it can be accepted by the print queue.

```
/usr/lib/accept np
```

- ④ If your workstation is Solaris 2.5.1, set the print job to active to print.

```
/usr/lib/enable np
```

HP-UX

❖ Adding the IP address and host name to the /etc/hosts file

The following line is added to the /etc/hosts file. The IP address and printer host name which you previously entered in the installation script will be used.

```
192.168.15.16 np # Network Printer
```

- 192.168.15.16 is the IP address, np is the host name, from # to the end of the line is a comment.

Note

- The /etc/hosts file contains a list of the IP addresses and their host names of all of the hosts communicating on the network. Each entry is delimited with a space or a tab, and each line is separated with a return.
- If you do not use NIS or DNS, you must manually enter the IP address and host name of each workstation using the network printer in the /etc/hosts file.

❖ Registering the printer

The installation shell script registers the printer as a remote printer by following the procedure below.

- ① Stop the scheduler.

```
/usr/lib/lpshut
```

- ② Register the printer.

```
/usr/lib/lpadmin -Pnp -v/dev/null -mrmode1  
-ormnphost -orp "option" -ob3
```

- np is the printer name, nphost is the host name.

For more information about "option", see p.19 "Specifying the Device Option".

"lp" will be assigned, if the option is not used.

- ③ Set the printer so that the print job is listed in the print queue.

```
/usr/lib/accept np
```

- ④ Set the printer to perform the print job.

```
/usr/lib/enable np
```

- ⑤ Restart the scheduler.

```
/usr/lib/lpsched
```

Printing Method

1

Printing with lpr, lp

Execute one of the following commands according to the type of workstation being used:

❖ BSD UNIX workstation, Linux

```
% lpr -Pprinter_name file_name [file_name...]
```

For example:

printer name is np, file names are file1 and file2

```
% lpr -Pnp file1 file2
```

❖ Solaris, HP-UX

```
% lp -d printer_name file_name [file_name...]
```

For example:

printer name is np, file names are file1 and file2

```
% lp -d np file1 file2
```

Note

- “printer_name” is the name that was entered when executing the installation shell script.
- You can use wild cards (* or ?) for the file name.
- The message “print session full” appears when the maximum number of print requests has been reached (Max. 5 sessions/ 10 sessions (Job Spool setting available)). You should try to print again when the number of requests is less than five. You can check the number of print requests using % telnet. For more information about using % telnet, see *Administrator Reference*.

Printing with rsh, rcp, ftp

You can also print using the rsh, rcp and ftp commands.

Note

- Print using the format that the printer can support.
- If the “print requests full” message appears, no more print requests can be accepted. Try printing again when the number of session has dropped below the value shown in the following table below.

rcp, rsh	5
ftp	3

rsh

```
% rsh host_name print < file_name
```

For example:

host name is nphost, file name is file1

```
% rsh nphost print < file1
```

Note

- “host_name” is the name entered when executing the installation shell script.
- If you use a HP-UX, use the remsh command instead of rsh.

rcp

❖ To specify and print the file

```
% rcp file_name [file_name...] host_name:
```

For example:

host name is nphost, file names are file1 and file2

```
% rcp file1 file2 nphost:
```

❖ To print all of the files in a directory

```
% rcp -r directory_name host_name:
```

For example:

host name is nphost, directory name is directory1

```
% rcp -r directory1 nphost:
```

Note

- “host_name” is the name entered when executing the installation shell script.
- You can use wild cards (* or ?) for the file name.

ftp

Depending on the number of files to be printed, use the put or mput commands.

! Limitation

- File names cannot contain "=" or ",".

❖ To print one file

```
ftp> put file_name
```

❖ To print several files

```
ftp> mput file_name [file_name...]
```

 Note

- You can use wild cards (* or ?) for the file name with the mput command.

The following procedure shows an example of how to print a file using ftp.

It is not possible to set options with the mput command.

1 Start ftp using the IP address or host name of the printer.

```
% ftp IP_address
```

2 Enter the user name. Skip the password, and then press the [RETURN] key.

```
Name:
```

```
Password:
```

3 Set the file transfer mode to binary.

```
ftp> bin
```

 Note

- If the file transfer mode is not set to binary, the image might not be printed correctly.

4 Print the file.** Note**

- For example, to print one file named file1:

```
ftp> put file1
```

- For example, to print two files named file1 and file2:

```
ftp> mput file1 file2
```

5 Exit ftp.

```
ftp> bye
```

Printer Status

You can use the following commands to have information and the printer status displayed or copied to a file.

Use the `lpq` or `lpstat` command to display the status of the printer or information about print jobs.

Use the `rsh`, `rcp` or `ftp` commands to get more detailed information from the printer.

Viewing the Print Job Status with `lpq` and `lpstat`

❖ BSD UNIX workstation, Linux

```
% lpq -Pprinter_name
For example: Printer name is np
% lpq -Pnp
```

❖ System V UNIX, Solaris, HP-UX

```
% lpstat -o printer_name
For example: Printer name is np
% lpstat -o np
```

Note

- In case of HP-UX, do not put a space between “-o” and “printer name”.

Viewing the Printer Status with `rsh` and `ftp`

Use the `rsh` or `ftp` command to display the status of the printer or information about print jobs using specified parameters.

You can use these command for BSD and System V UNIX.

Note

- If your workstation is HP-UX, use the `remsh` command instead of the `rsh` command.

```
% rsh host_name parameter
```

```
% ftp host_name
User user_name
password:
ftp> get parameter -
```

 **Note**

- Leave the user name and password blank, and then press the **[RETURN]** key.
- “-” indicates the standard output. It will be displayed on screen if the standard output has not been specified.

Parameters that can be used with rsh, rcp and ftp:

Parameter	Information returned
stat	Status of the printer Information about print jobs
info	Information about the paper tray, output tray and printer language
prnlog	Record of the last 16 jobs printed
syslog	Record of messages about the Network Interface Board

Copying Information to a File

Use the rcp or ftp command to copy information about the specified parameters to a file.

You can use these commands for BSD and System V UNIX.

 **Note**

- The same parameters are used as those above.

```
% rcp host_name:parameter file_name
```

```
% ftp host_name
```

```
User: user_name
```

```
password:
```

```
ftp> get parameter file_name
```

 **Note**

- Leave the user name and password blank, and then press the **[RETURN]** key.

Specifying the Device Option

With the following options, you can print with specific printer functions.

1

Configuring the Device Option

The configuration of the print option can vary depending on the printing commands.

- rsh

```
% rsh host_name print option1=value1,... < file_name
```
- rcp

```
% rcp file_name host_name:option1=value1,...
```
- ftp

```
ftp> put file_name option1=value1,...
```

Host_name is the printer host name. *File_name* is the file name you want to print. The device option is specified with the form of “*option=value*”. For more information about the types of device options and values, see the following explanations.

For example, the following settings are for printing with rsh, rcp, and ftp: switch to PostScript, feed paper from paper feed tray 1, set the printing amount to 3 sets, and print with the resolution set to 600 dpi (*host_name* : *nphost*, *file_name* : *file1*).

- rsh

```
% rsh nphost print filetype=postscript,tray=tray1,copies=3,resolution=600 < file1
```
- rcp

```
% rcp file1 nphost:filetype=postscript,tray=tray1,copies=3,resolution=600
```
- ftp

```
ftp> put file1 filetype=postscript,tray=tray1,copies=3,resolution=600
```

Limitation

- The optional character strings that the printer can recognize are maximum 512 bytes.
- The number of available characters used as options are limited, depending on their operating systems.

 **Note**

- Multiple options must be separated by commas (,). Do not use spaces.
- When the printing file contains the PCL, PJJ, PostScript commands to control the option, the command takes priority.
- Enter the option using the lp or lpr command, when the shell script is implemented. The option settings you made here have been configured as a default setting. You must create the other printer if you want to change the printer option settings. For more information about changing the configured option, see p.9 “Deleting the printer”.
- When printing with the lp command, use (_) instead of (=) and (;) instead of (,) for operating systems that cannot use (=) and (,) such as Solaris 2.5 or later.

 **Using the cd command with ftp**

For printing with ftp, if the option is specified using the cd command, the option is available whenever the put or mput command is used.

```
ftp> cd option
```

 **Note**

- The pwd command shows the current option settings.

```
ftp> pwd
```

List of the device options

Device Option	Value	Function Summary
filetype	PCL, postscript (rps), pdf	Specifies the printer language for printing
filter	text	Specifies the text printing
tray	tray1, tray2, all	Specifies the input tray
paper	a4, a5, letter, halfletter, legal, executive, custom	Specifies the paper size
mediatype	plain, recycled, special, thick, transparency, color, letter-head, preprinted, labels, card-stock, glossy, plainorrecycled	Specifies the paper type
copies	Number of copies (1-999)	Specifies the number of copies
qty	Number of collated sets (1-999)	Specifies the number to collate

Device Option	Value	Function Summary
duplex	on, off	Specifies whether duplex printing is on or off
binding	longedge, shortedge	Specifies the binding direction for duplex printing
resolution	value of resolution (300, 600, 1200)	Specifies the resolution for printing
symbol set	desktop, iso4, iso6, iso11, iso15, iso17, iso21, iso60, iso69, isol1, isol2, isol5, legal, math8, mspubl, pc8, pc850, pc852, pc8dn, pc8tk, pifont, psmath, pstext, roman8, vn-intl, vnmath, vnus, win30, winl1, winl2, winl5	Specify the set of print characters

Printer Language

Select a printer language to print in.

filetype=printer language

fil=printer language

Printer Language	Value
PCL5e	PCL
PostScript 3	postscript or rps
PDF Direct Print	pdf

The following samples show how to print with PostScript 3 (host name: nphost, file name: file1).

- rsh


```
% rsh nphost print filetype=postscript < file1
```
- rcp


```
% rcp file1 nphost:filetype=postscript
```
- ftp


```
ftp> put file1 filetype=postscript
```

Text Printing

Set this function when directly printing text files.

! Limitation

- Possible only when PDF is not selected as the printer language.

`filter=text`

`flt=text`

The following samples show how to print text files directly.

- rsh


```
% rsh nphost print filter=text < file1
```
- rcp


```
% rcp file1 nphost:filter=text
```
- ftp


```
ftp> put file1 filter=text
```

Input Tray

Select a default input tray.

! Limitation

- Only the installed input trays are available.
- Before printing a PostScript file, the input tray option must be set to on.

`tray=value of input tray`

Input tray	Value
Tray 1	tray1
Tray 2	tray2
Auto Tray Select	all

The following samples show how to print from tray 2 (host name: nphost, file name: file1).

- rsh


```
% rsh nphost print tray=tray2 < file1
```
- rcp


```
% rcp file1 nphost:tray=tray2
```
- ftp


```
ftp> put file1 tray=tray2
```

Paper Size

Select the paper size.

! Limitation

- Possible only when PDF is not selected as the printer language.
- Only the loaded paper sizes are available.

paper=value of paper size

Paper Size	Value
A4	a4
A5	a5
$8\frac{1}{2} \times 11$	letter
$5\frac{1}{2} \times 8\frac{1}{2}$	halfletter
$8\frac{1}{2} \times 14$	legal
$7\frac{1}{4} \times 10\frac{1}{2}$	executive

The following samples show how to print using A4 paper (host name: nphost, file name: file1).

- rsh


```
% rsh nphost print paper=a4 < file1
```
- rcp


```
% rcp file1 nphost:paper=a4
```
- ftp


```
ftp> put file1 paper=a4
```


Paper Type

Select the paper type.

! Limitation

- Only the loaded paper types are available.

mediatype=value of paper type

Paper Type	Value
Plain paper	plain
Recycled paper	recycled
Special paper	special
Thick paper	thick
Transparency	transparency
Color paper	color
Letterhead	letterhead
Preprinted paper	preprinted
Labels	labels
Card	cardstock
Gloss paper	glossy
Plain paper or Recycled paper	plainorrecycled

The following samples show how to print using recycled paper (host name: nphost, file name: file1).

- rsh
 - % `rsh nphost print mediatype=recycled < file1`
- rcp
 - % `rcp file1 nphost:mediatype=recycled`
- ftp
 - % `ftp> put file1 mediatype=recycled`

Copies

Specify the number of copies.

copies=number of copies (1 to 999)

! Limitation

Do not specify “copies” and “qty^{*1}” commands at the same time.

*1 “qty” is the function of collation.

The following samples show how to print 10 copies (host name: nphost, file name: file1).

- rsh

```
% rsh nphost print copies=10 < file1
```
- rcp

```
% rcp file1 nphost:copies=10
```
- ftp

```
ftp> put file1 copies=10
```

Collating

Specify the number of collated sets.

qty=number of collated sets (1 to 999)

! Limitation

Do not specify “qty” and “copies” commands at the same time.

You must either expand the SDRAM module or install the optional hard disk drive. When neither is present, only one part is printed when you specify “qty”.

The following samples show how to print 10 copies using the collate function (host name: nphost, file name: file1).

- rsh

```
% rsh nphost print qty=10 < file1
```
- rcp

```
% rcp file1 nphost:qty=10
```
- ftp

```
ftp> put file1 qty=10
```

Duplex Printing

This option enables duplex printing.

1

Note

- Before selecting the duplex option, the binding option must be set to on.
- The print data and paper size affect the completion of the print job.

duplex=value of duplex printing

Duplex Printing	Value
Enable	on
Disable	off

Reference

For more information about available paper size for duplex printing, see “Specifications”, *Administrator Reference*.

The following samples show how to set duplex printing (host name: nphost, file name: file1).

- rsh


```
% rsh nphost print duplex=on,binding=longedge < file1
```
- rcp


```
% rcp file1 nphost:duplex=on,binding=longedge
```
- ftp


```
ftp> put file1 duplex=on,binding=longedge
```

Reference

For more information about available paper size for duplex printing, see “Specifications”, *Administrator Reference*.

Binding

Select the binding direction of duplex printing.

Note

- Before selecting the binding option, the duplex option must be set to on.
- The print data and paper size affect the completion of the print job.

binding=value of binding

Binding Direction	Value
Long-edge	longedge
Short-edge	shortedge

The following samples show how to set duplex printing and longedge binding (host name: nphost, file name: file1).

- rsh


```
% rsh nphost print duplex=on,binding=longedge < file1
```
- rcp


```
% rcp file1 nphost:duplex=on,binding=longedge
```
- ftp


```
ftp> put file1 duplex=on,binding=longedge
```

Resolution

Select the printing resolution.

Limitation

- If you want to select the 300 dpi option, only the selected PCL5c from the printer language option is available.
- 300, 600, or 1200 dpi can be set when PDF is selected as the printer language.

resolution=value of resolution

Resolution	Value
300 dpi	300
600 dpi	600

The following samples show how to print with 600 dpi. (host name: nphost, file name: file1).

- rsh


```
% rsh nphost print resolution=600 < file1
```
- rcp


```
% rcp file1 nphost:resolution=600
```
- ftp


```
ftp> put file1 resolution=600
```

Symbol Set

Select the set of print characters for the selected font.

! Limitation

Only the selected PCL5c from the printer language option is available.

symset=value of font

Font	Value
Desktop	desktop
ISO 4	iso4
ISO 6	iso6
ISO 11	iso11
ISO 15	iso15
ISO 17	iso17
ISO 21	iso21
ISO 60	iso60
ISO 69	iso69
ISO L1	isol1
ISO L2	isol2
ISO L5	isol5
Legal	legal
Math-8	math8
MS Publ	mspubl
PC-8	pc8
PC-850	pc850
PC-852	pc852
PC-8 D/N	pc8dn
PC8-TK	pc8tk
Pifont	pifont
PS Math	psmath
PS Text	pstext
Roman-8	roman8
VN Intl	vnintl
VN Math	vnmath
VN US	vnus
Win 3.0	win30

Font	Value
Win L1	winl1
Win L2	winl2
Win L5	winl5

The following samples show how to print a set of ISO 4 (host name : nphost, file name : file1).

- rsh
 % `rsh nphost print symset=iso4 < file1`
- rcp
 % `rcp file1 nphost:symset=iso4`
- ftp
 `ftp > put file1 symset=iso4`

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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.

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.

Software Version Conventions Used in This Manual

- NetWare 3.x means NetWare 3.12 and 3.2.
- NetWare 4.x means NetWare 4.1, 4.11 and IntranetWare.

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

- The product name of Windows[®] 95 is Microsoft[®] Windows 95.
- The product name of Windows[®] 98 is Microsoft[®] Windows 98.
- The product name of Windows[®] Me is Microsoft[®] Windows Millennium Edition (Windows Me).
- The product names of Windows[®] 2000 are as follows:
 - Microsoft[®] Windows[®] 2000 Advanced Server
 - Microsoft[®] Windows[®] 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 Server[™] 2003 are as follows:
 - Microsoft[®] Windows Server[™] 2003 Standard Edition
 - Microsoft[®] Windows Server[™] 2003 Enterprise Edition
 - Microsoft[®] Windows Server[™] 2003 Web Edition
- The product names of Windows NT[®] 4.0 are as follows:
 - Microsoft[®] Windows NT[®] Server 4.0
 - Microsoft[®] Windows NT[®] Workstation 4.0





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.

 **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.

 **Reference**

This symbol indicates a reference.





[]

Keys that appear on the machine's panel display.

Keys and buttons that appear on the computer's display.

【 】

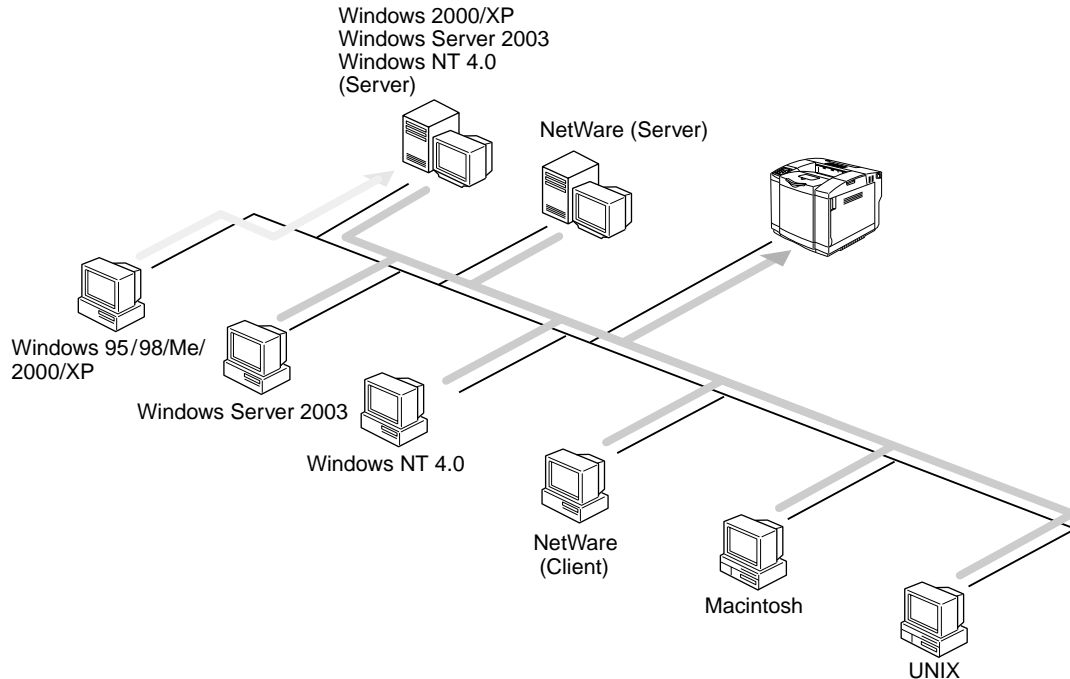
Keys built into the machine's control panel.

Keys on the computer's keyboard.





Confirming a Network Environment



❖ Connecting Printer and Computer

- Network connection (Ethernet cable)
- Network connection (IEEE 802.11b (Wireless LAN))
- Parallel connection (parallel cable)
- Bluetooth™

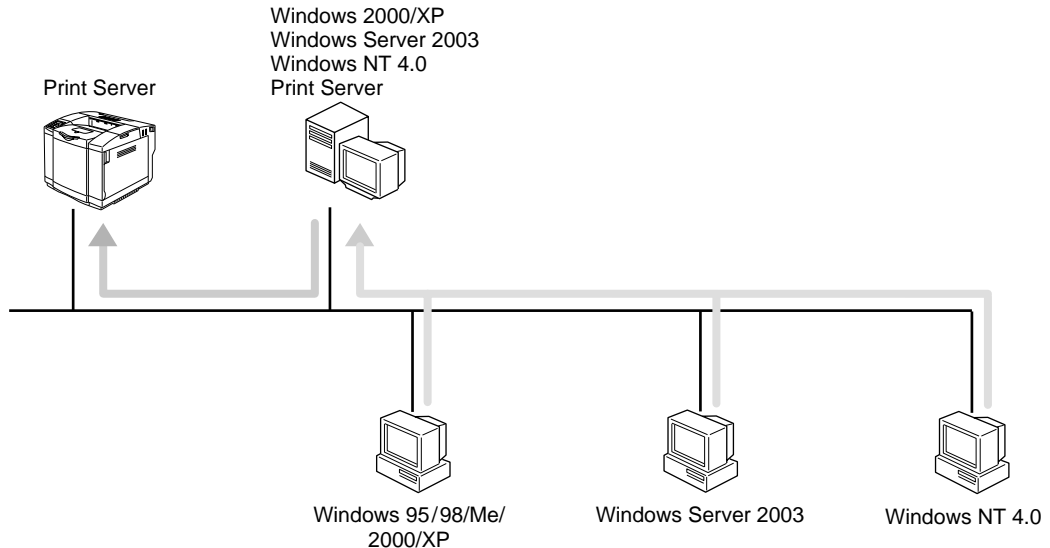




Print Server Configuration

Using a Windows 2000/XP, Windows Server 2003, or Windows NT 4.0 Print Server

You can use Windows 2000/XP, Windows Server 2003, or Windows NT 4.0 as a print server.



See [p.16 “Preparation before Use”](#) to set up the network environment, and then prepare the print server referring to the following topics in accordance with the operating system used.

- See [p.23 “Windows 2000 Print Server Configuration”](#).
- See [p.47 “Windows XP, Windows Server 2003 Print Server Configuration”](#).
- See [p.67 “Windows NT 4.0 Print Server Configuration”](#).

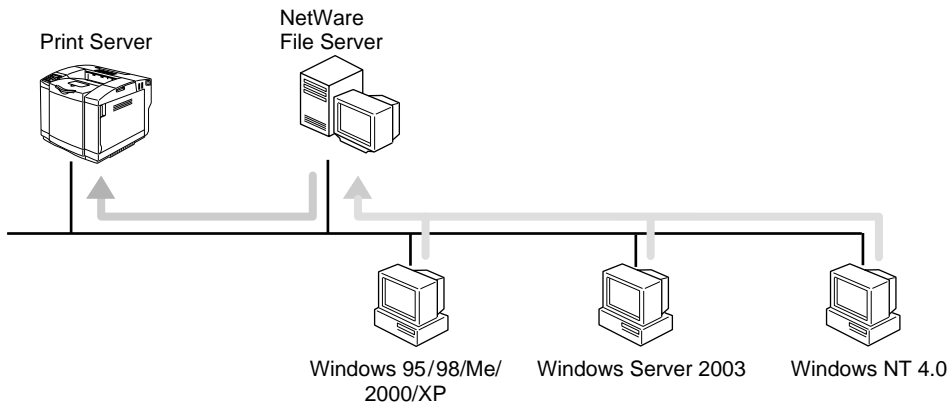


Using a NetWare Server

You can print out from a client using Windows 95/98/Me/2000/XP, Windows Server 2003 or Windows NT 4.0 by using NetWare 3.x, NetWare 4.x, NetWare 5/5.1, or NetWare 6/6.5 as the print server.

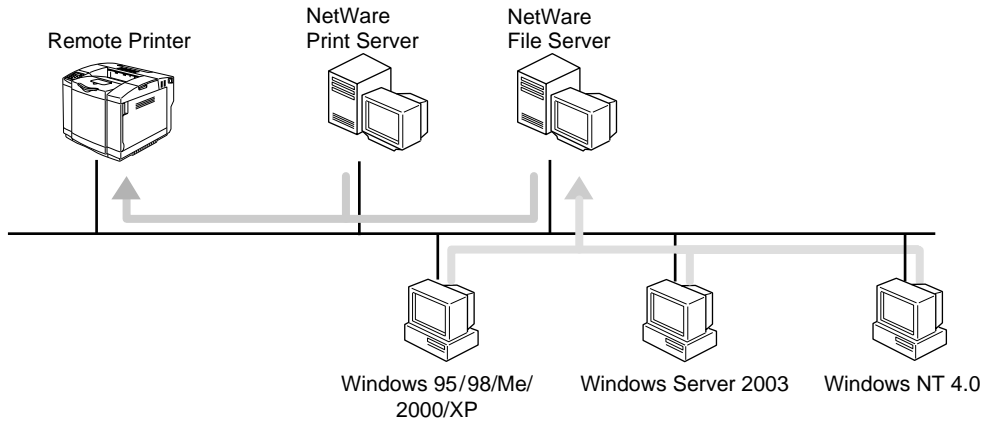
The network interface board allows you to use the machine as either a print server or a remote printer.

❖ Using as a Print Server





◆ Using as a Remote Printer



See [p.16 “Preparation before Use”](#) to set up the network environment, , and then see [p.89 “NetWare Configuration”](#) to prepare the NetWare server.



1. Preparation before Use

❖ Configuring the Printer for the Network

When connecting this printer to a network using an Ethernet cable or an optional 802.11b interface unit, relevant settings are required.

Configuring the Printer for the Network

Make the network settings below depending on the network interface you use.

You can also use SmartDeviceMonitor for Admin or Web Image Monitor to make IP address-related settings in a TCP/IP-capable environment. For details about using SmartDeviceMonitor for Admin, see SmartDeviceMonitor for Admin Help. For details about using Web Image Monitor, see Web Image Monitor Help.

Reference

For details about optional 802.11b interface unit settings, see *Option Setup Guide*

Configure the printer for the network using the printer's control panel.

The following table shows the control panel settings and their default values. These items are included in the “Host Interface” menu.

Setting Name	Value
DHCP	On
IP Address ^{*1}	011.022.033.044

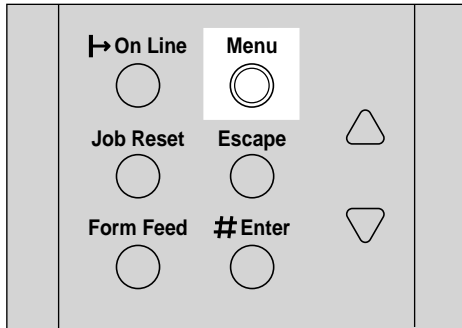
Setting Name	Value	
Subnet Mask ^{*1}	000.000.000.000	
Gateway Address ^{*1}	000.000.000.000	
Frame Type (NW)	Auto	
Active Protocol	TCP/IP	Active
	NetWare	Active
	SMB	Active
	AppleTalk	Active
Ethernet Speed ^{*2}	Auto	
LAN Type	Ethernet	

^{*1} If DHCP is in use, the IP address, subnet mask, and gateway address are all set automatically.

^{*2} Make this setting only when it is necessary. See [p.198 “Host Interface Parameters”](#)



- 1** Press **[Menu]** key.

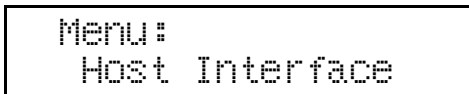


“Menu” appears on the panel display.

- 2** Press **[▲]** or **[▼]** key to display “Host Interface” menu, and then press **[# Enter]** key.

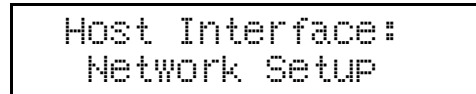
Note

- Press the **[▲]** or **[▼]** key once, and not longer than necessary.



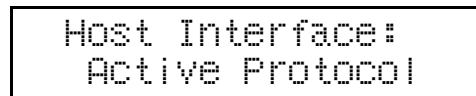
The following message appears on the panel display.

- 3** Press **[▲]** or **[▼]** key to display “Network Setup”, and then press **[# Enter]** key.



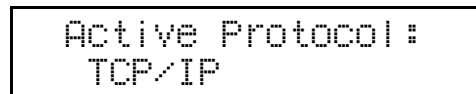
The following message appears on the panel display.

- 4** Press **[▲]** or **[▼]** key to display “Active Protocol”, and then press **[# Enter]** key.



The following message appears on the panel display.

- 5** Press **[▲]** or **[▼]** key to select **[Active Protocol]** , and then press **[# Enter]** key.



The following example explains activating TCP/IP.

The “Active/Not Active” selection screen appears.

- 1 Press **[▲]** or **[▼]** key to select “Active” or “Not Active”, and then press **[# Enter]** key.

```
TCP/IP:
#Active
```

After the settings are made, about two seconds later, the screen returns to that of step 5.

- 2 Set other protocols you need to set in the same way.
- 3 Press **[Escape]** key.

The screen of step 5 appears.

Note

- The default is “Active”.
- Leave unused protocols “Not Active”.
- Enable TCP/IP to use the Pure IP environment of NetWare 5/5.1, NetWare 6/6.5.

- 6 When you use this machine in DHCP environment, proceed to step 10. When you use this machine with a fixed IP address, you must make the setting for the required item after setting DHCP to Off. Proceed to step 7.

Important

- When DHCP is On, you cannot make settings for the following items:
 - IP Address
 - Subnet Mask
 - Gateway Address

Note

- Consult your network administrator for information about making network settings.

- 7 Set DHCP to Off.

- 1 Press **[▲]** or **[▼]** key to display “DHCP”, and then press **[# Enter]** key.

```
Network Setup:
DHCP
```

- ② Press **[▲]** or **[▼]** key to display “Off”, and then press **[# Enter]** key.

```
DHCP:
*Off
```

 **Note**

- * shows the current setting.
- After about two seconds, the display returns to the “Network Setup” setting screen.

- 8** If you use TCP/IP, assign the IP address to the printer.

 **Note**

- To get the IP address for the printer, contact your network administrator.
- 011.022.033.044 cannot be used.

- ① Press **[▲]** or **[▼]** key until the following message appears, and then press **[# Enter]** key.

```
Network Setup:
IP Address
```

The current IP address appears on the panel display.

- ② Press **[▲]** or **[▼]** key to enter the left most entry field of the IP address, and then press **[# Enter]** key.

```
IP Address:
192.000.000.000
```

The screen changes, and the next field can then be entered.

 **Note**

- It takes a while for the display to change after pressing **[▲]** or **[▼]** key. To set a new IP address, press **[▲]** or **[▼]** key - releasing immediately - and then make sure that the display changes. The value moves by 10 if **[▲]** or **[▼]** key is kept pressed.
- When **[# Enter]** key is pressed, the cursor moves to the next field.
- To display the previous field, press the **[Escape]** key.
- Press the **[Escape]** key when no value is entered and the screen will return to that of step **8-1**, without the IP address changing.

- 3 Make the other settings in the same way, and then press **[# Enter]** key.

```
IP Address :  
192.168.000.010
```

After the settings are made, about two seconds later, the screen returns to that of step

8-1.

- 9 If you use TCP/IP, assign “Subnet Mask” and “Gateway Address” following the same procedure for entering the IP address.

- 10 If you use NetWare, select the frame type for NetWare.

Select one of the items below if necessary.

- Auto (Default)
- Ethernet II
- Ethernet 802.2
- Ethernet 802.3
- Ethernet SNAP

 **Note**

- Usually, use the default setting (“Auto”). When you first select “Auto”, the frame type detected by the printer is adopted. If your network can use more than two frame types, the printer may fail to select the correct frame type if “Auto” is selected. In this case, select the appropriate frame type.

- 1 Press **[▲]** or **[▼]** key to display “Frame Type (NW)”, and then press **[# Enter]** key.

```
Network Setup :  
Frame Type (NW)
```

The current setting appears on the panel display.

- Press **[▲]** or **[▼]** key to display the frame type you want to use, and then press **[# Enter]** key.

```
Frame Type (NW) :
#Auto
```

After the settings are made, about two seconds later, the screen returns to that of step **10-1**.

11 Select the interface.

“IEEE 802.11b” appear only when the 802.11b interface unit are installed.

Select one of the items below.

- Ethernet
- IEEE 802.11b

- Press **[▲]** or **[▼]** key to display “LAN Type”, and then press **[# Enter]** key.

```
Network Setup :
LAN Type
```

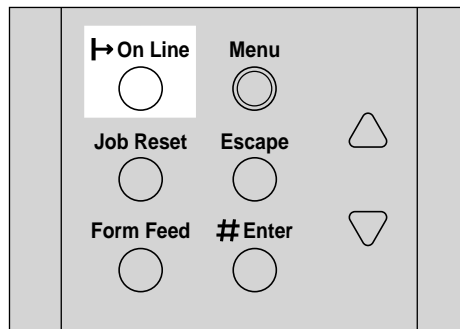
The current setting appears on the panel display.

- Press **[▲]** or **[▼]** key to display “Ethernet”, and then press **[# Enter]** key.

```
LAN Type :
#Ethernet
```

After the settings are made, about two seconds later, the screen returns to that of step **11-1** after about 2 seconds.

12 Press **[On Line]** key.



“Ready” appears on the panel display.

```
Ready
```



13 Print a configuration page to confirm the settings made.



Reference

See p.166 “Printing a Configuration Page”.

14 Prepare the print server or client computer.



Reference

- When you prepare the print server, see the following in correspondence with the OS used.
- When you prepare the client computer, see the *Client Reference*.





2. Windows 2000 Print Server Configuration

To use a printer connected to the Ethernet interface, select “SmartDeviceMonitor”, “Standard TCP/IP Port” or “LPR Port” when installing the printer driver.

- SmartDeviceMonitor
See p.24 “Configuring the Protocols” and p.27 “Installing SmartDeviceMonitor for Client” and p.28 “Installing the PCL 5c or RPCS Printer Driver” or p.36 “Installing the PostScript Printer Driver”.
- Standard TCP/IP Port, LPR Port
See p.24 “Configuring the Protocols” and p.28 “Installing the PCL 5c or RPCS Printer Driver” or p.36 “Installing the PostScript Printer Driver”.

Note

- If you want to use “LPR Port”, “Print Services for UNIX” must be installed. For more information about installing the “Print Services for UNIX”, see Windows 2000 Help.



Configuring the Protocols

Configuring TCP/IP and IPP for Printing

Follow these instructions to configure Windows 2000 to use the TCP/IP protocol and IPP.

Configuring the printer

Configure the printer to use the TCP/IP protocol.

- Confirm that the TCP/IP protocol is set to be active. (The factory default is active.)
- Assign an IP address and make other settings required for using the TCP/IP protocol.



Reference

For more information about how to make the above settings, see [p.16 “Configuring the Printer for the Network”](#) that comes with this printer.

If DHCP is used to assign IP addresses, see [p.307 “Using DHCP”](#).



Note

- After setting the IP address, use the ping command to confirm that it has been set correctly.

1 Click [Start], point to [Programs], point to [Accessories] and then click [Command Prompt].

2 Type the following: (Example IP address is 192.168.15.16)

```
C:> ping 192.168.15.16
```

If the address has been configured correctly, the following message appears.

```
Reply from 192.168.15.16
```

If the address has been configured incorrectly, the following message appears.

```
Request timed out.
```



Configuring a Windows 2000 computer

Follow these steps to configure a Windows 2000 computer to use the TCP/IP protocol.

- 1** Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Network and Dial-up Connections]**.
- 2** Click **[Local Area Connection]**. On the **[File]** menu, click **[Properties]**.
- 3** Confirm that “**Internet Protocol (TCP/IP)**” is selected in the **[Components checked are used by this connection:]** box under the **[General]** tab.

 **Note**

- If the check box for TCP/IP protocol is not selected, select the box.
 - If the TCP/IP protocol is not installed, click **[Install]** under the **[General]** tab and install it. For more information about installing the TCP/IP protocol, see Windows 2000 Help.
- 4** **Configure the TCP/IP protocols with an appropriate IP address, subnet mask and other settings.**
Confirm with the network administrator that the settings are correct.
 - 5** **To use LPR Port, Print Services for UNIX must be installed. When “Print Services for UNIX” is not installed, install it from [Optional Network Components] on the [Details] menu under [Network Dial-up Connection].**

 **Reference**

For more information about installing the “Print Services for UNIX”, see Windows 2000 Help.





Configuring NetBEUI for Printing

Follow these instructions to configure the network interface board and Windows 2000 to use the NetBEUI protocol.

Preparation

To use NetBEUI, use the SmartDeviceMonitor for Client port.

Configuring the printer

Enable SMB to print using NetBEUI (The default is active).

Reference

For more information about how to make the above settings, see [p.16 “Configuring the Printer for the Network”](#) that comes with this printer.

Configuring a Windows 2000 computer

Follow these steps to configure a Windows 2000 computer to use the NetBEUI protocol.

- 1** Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Network and Dial-up Connections]**.
- 2** Click **[Local Area Connection]**. On the **[File]** menu, click **[Properties]**.
- 3** Confirm that “NetBEUI Protocol” is selected in the **[Components checked are used by this connection:]** box under the **[General]** tab.

Note

- If the check box for the NetBEUI protocol is not selected, select the box.
- If the NetBEUI protocol is not installed, click **[Install]** under the **[General]** tab and install it. For more information about installing the NetBEUI protocol, see Windows 2000 Help.



Installing Software

Installing SmartDeviceMonitor for Client

- 1** Close all applications that are running.
- 2** Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

 **Note**

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

- 3** Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

- 4** Click [SmartDeviceMonitor for Client / Admin].
- 5** Click to select [SmartDeviceMonitor for Client], and then click [Next >].
- 6** Follow the instructions on the screen.

 **Note**

- If you are required to restart the computer after the installation of SmartDeviceMonitor for Client, restart the computer and continue with necessary configurations.





Installing the PCL 5c or RPCS Printer Driver

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

 **Important**

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

 **Note**

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

4 Select [PCL/RPCS Printer Drivers].

5 The software license agreement appears in the [License Agreement] dialog box.

After reading through all of the contents, click [I accept the agreement] to agree with the license agreement, and then click [Next >].





6 Select the printer drivers you want to use when the “Select Program” dialog box appears, and then click [Next >].

You can select more than one printer driver.

7 Select the printer model(s) you want to use.

To change the printer name, change it in the [Change settings for 'Printer Name'] box.

8 Double-click the printer name to display the printer settings.

 **Note**

- The details shown for [Comment:], [Driver:], and [Port:] vary depending on the operating system being used, the model of printer selected, and the port being used.

9 Click [Port:], and then select the port you want to use.

- SmartDeviceMonitor
- Standard TCP/IP Port
- LPR Port



SmartDeviceMonitor

- 1 Click **[Add]**.
- 2 Select **[SmartDeviceMonitor]**, and then click **[OK]**.
- 3 Select a printer you want to use.

❖ TCP/IP

- 1 Click **[TCP/IP]**.
- 2 Click **[Search]**.
Available printers will be listed.
- 3 Click the printer you want to use, and then click **[OK]**.

Note

- Printers that respond to an IP broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the IP address or host name.
- 4 Click **[OK]**.

❖ NetBEUI

- ① Click **[NetBEUI]**.
- ② Click **[Search]**.

A list of printers that can be used by the NetBEUI protocol appears.

- ③ Click the printer you want to use, and then click **[OK]**.

Note

- Printers that respond to a broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the NetBEUI address. Confirm the NetBEUI address on the network is on the configuration page. For more information about printing the configuration page, see [p.166 “Printing a Configuration Page”](#). NetBEUI address appears as “\RNPxxxxxxx” on the configuration page. Type the printer's network path name in the form of “%%Computer name\Share name”. Do not type “\” as head characters but “%%”.
 - You cannot print to printers beyond routers.
- ④ Click **[OK]**.

◆ **IPP**

- ① Click **[IPP]**.
The IPP setting dialog box appears.
- ② To specify the IP address of the printer, type “http://printer's-ip-address/printer” in the **[Printer URL]** field.

 **Note**

- If this machine has the optional network data protection unit installed and server authentication is issued, enter “https://printer's-ip-address/printer” (Internet Explorer 5.01 or a later version must be installed).

(Example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer

- ③ As necessary, type the names to distinguish the printer in **[IPP Port Name]**. Type a different name from those of any existing port name.
If you omit this, the address typed in **[Printer URL]** will be set as the IPP port name.
- ④ If a proxy server and IPP user name are used, click **[Detailed Settings]** and configure the necessary settings.

 **Note**

- For more information about these settings, see SmartDeviceMonitor for Client Help.

- ⑤ Click **[OK]**.



Standard TCP/IP Port

- 1 Select **[Standard TCP/IP]**, and then click **[OK]**.



Note

- If **[Standard TCP/IP Port]** is not displayed, set Windows 2000 help to enable the standard TCP/IP.

- 2 Click **[Next]** in the “Add Standard TCP/IP Printer Port Wizard” window.
- 3 Type the printer name or IP address in the “Printer Name or IP Address” box.



Note

- A port name is automatically entered in the **[Port]** box. Change this if necessary.

- 4 Click **[Finish]** in the “Add Standard TCP/IP Printer Port Wizard” window.
The printer driver installation screen returns.

LPR Port

- 1 Select **[LPR Port]**, and then click **[OK]**.

**Note**

- If **[LPR Port]** is not displayed, Print Services for UNIX is not properly installed. Install it from **[Optional Network Components]** on the **[Details]** menu under **[Network Dialup Connection]**. For more information about installing Print Services for UNIX, see Windows 2000 Help.

- 2 Type the printer's IP address in the “Name or address of server providing lpd” box.
- 3 Type “lp” in the “Name of printer or print queue on that server” box, and then click **[OK]**.

- 10 Click **[OK]**.

The port is added.

- 11 Make sure the location for the selected printer is shown after **[Port:]**.

- 12 Double-click **[Shared]** to display the shared settings.

- 13 To share the printer, check the left side of the **[Shared]** box.

- 14 Click the box under **[Shared name]** to install the alternative driver for the necessary system.

**Note**

- Check **[Shared]** to start installation of an alternative driver (**[Windows NT 4.0/2000]**, **[Windows 95/98]**) has already been selected.
- You can add an alternative driver after installation. See [p.46 “Setting the Printer Shared”](#).

15 Configure the default printer as necessary.**❖ User Code**

The procedure to specify the “User Code” may differ depending on the printer language.

• RPCS

You can specify the “User Code” when installing the printer driver. You cannot register or edit the “User Code” from the Printer Driver dialog box. To change the “User Code”, you must un-install the printer driver, and then register the new “User Code” during the re-install process.

• PCL 5c

You can specify the “User Code” with the Printer Driver Properties after installing the printer driver. See printer driver's Help.

❖ Default Printer

Check **[Default Printer]** to set the printer as the default printer.

16 Click **[Continue]** to start printer driver installation.**📌 Note**

- During installation, the **[Digital Signature Not Found]** dialog box may appear. In this case, click **[Yes]** to continue the installation.

17 When the **[Select Program]** dialog box appears, click **[Finish]**.**18** When the **[Installation completion.]** dialog box appears, click **[Finish]**.**19** Set up the options.**📌 Note**

- You must set up the options when bidirectional transmission is disabled. For more information about the status of bidirectional transmission, see [p.44 “Bidirectional transmission”](#).

🔍 Reference

For more information about option settings, see [p.43 “Setting Up Options”](#).

Installing the PostScript Printer Driver

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

 **Important**

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

 **Note**

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

 **Note**

- The printer driver with the selected language will be installed. The printer driver will be installed in English if you select the following languages: Portugues, Suomi

4 Click [PostScript 3 Printer Driver].

“Add Printer Wizard” starts.

5 Click [Next >].



6 Select the port you want to use.

- SmartDeviceMonitor
- Standard TCP/IP Port
- LPR Port

SmartDeviceMonitor

- 1** Click **[Create a new port:]**.
- 2** Select **[SmartDeviceMonitor]**, and then click **[Next >]**.
- 3** Select a printer you want to use.

❖ **TCP/IP**

- 1** Click **[TCP/IP]**, and then click **[Search]**.
Available printers will be listed.
- 2** Click the printer you want to use, and then click **[OK]**.

Note

- Printers that respond to an IP broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the IP address or host name.
- You cannot add an address partially similar to that already used. For example, when “192.168.0.2” is already used, “192.168.0.2xx” cannot be used. Similarly, when “192.168.0.20” is already used, “192.168.0.2” cannot be used.



❖ NetBEUI

- ① Click **[NetBEUI]**, and then click **[Search]**.
A list of printers that can be used by the NetBEUI protocol appears.
- ② Click the printer you want to use, and then click **[OK]**.

Note

- Printers that respond to a broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the NetBEUI address. Confirm the NetBEUI address on the network is on the configuration page. For more information about printing the configuration page, see [p.166 "Printing a Configuration Page"](#). NetBEUI address appears as "\RNPxxxxxx" on the configuration page. Type the printer's network path name in the form of "%Computer name\Share name". Do not type "\" as head characters but "%%".
- You cannot print to printers beyond routers.

❖ IPP

- ① Click **[IPP]**.
The IPP setting dialog box appears.
- ② To specify the IP address of the printer, type “http://printer's-ip-address/printer” in the **[Printer URL]** field.

Note

- If this machine has the optional network data protection unit installed and server authentication is issued, enter “https://printer's-ip-address/printer” (Internet Explorer 5.01 or a later version must be installed).

(Example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer

- ③ As necessary, type the names to distinguish the printer in **[IPP Port Name]**. Type a different name from those of any existing port name.
If you omit this, the address typed in **[Printer URL]** will be set as the IPP port name.
- ④ If a proxy server and IPP user name are used, click **[Detailed Settings]** and configure the necessary settings.

Note

- For more information about these settings, see SmartDeviceMonitor for Client Help.

- ⑤ Click **[OK]**.

Standard TCP/IP Port

- 1 Click **[Create a new port:]**.
- 2 Select **[Standard TCP/IP]** in **[Create a new Port]**, and then click **[Next]**.
- 3 Click **[Next]** in the “Add Standard TCP/IP Printer Port Wizard” window.
- 4 Type the printer name or IP address in the “Printer Name or IP Address” box, and then click **[Next>]**.
- 5 Click **[Finish]** in the “Add Standard TCP/IP Printer Port Wizard” window.

LPR Port

- 1 Click **[Create a new port:]**.
 - 2 Select **[LPR Port]** in **[Create a new Port]**, and then click **[Next]**.
 - 3 Type the printer's IP address in the “Name or address of server providing lpd” box.
 - 4 Type “lp” in the “Name of printer or print queue on that server” box, and then click **[OK]**.
 - 7 Confirm to select the name of the printer whose driver you want to install, and then click **[Next >]**.
 - 8 Change the name of the printer if you want, and then click **[Next >]**.
- Configure the default printer as necessary. Check **[Yes]** to set the printer as the default printer.
- 9 Check **[Share as:]**, and then click **[Next >]**.

To change the printer name, change it in the **[Share as:]** box.

 **Note**

- Check **[Shared]** to start installation of an alternative driver ([Windows NT 4.0/2000], [Windows 95/98]) has already been selected.
- You can add an alternative driver after installation. See [p.46 “Setting the Printer Shared”](#).



10 Select whether or not you want to print a test page, and then click **[Next>]**.

11 Click **[Finish]**.

Start printer driver installation.

 **Note**

- During installation, the **[Digital Signature Not Found]** dialog box may appear. In this case, click **[Yes]** to continue the installation.

12 Set up the options.

 **Reference**

For more information about option settings, see [p.43 “Setting Up Options”](#).





Changing Port Settings

Follow the steps to change SmartDeviceMonitor for Client settings, such as the proxy server settings or IPP URL.

 **Note**

- There are no settings for the NetBEUI protocol.

1 From the **[Printers]** window, click the icon of the printer you want to use. On the **[File]** menu, click **[Properties]**.

2 Click the **[Ports]** tab, and then click **[Configure Port]**.

The **[Port Settings]** dialog box appears.

- For TCP/IP protocol, you can configure Timeout Settings.

 **Note**

- If you cannot set items on the **[Recovery/Parallel Printing]** tab, follow the procedure below.

① Click **[Cancel]** to close the **[Port Configuration:]** dialog box.

② Start SmartDeviceMonitor for Client, and then right-click the SmartDeviceMonitor for Client icon on the taskbar.

③ Click **[Extended Features Settings]**, and then select the **[Set Recovery/Parallel Printing for each port]** check box.

④ Click **[OK]** to close the **[Extended Features Settings]** dialog box.

- For IPP, you can configure User Settings, Proxy Settings and Timeout Settings.

 **Note**

- For more information about these settings, see SmartDeviceMonitor for Client Help.





Setting Up Options

You must set up installed options, paper size and feed direction with the printer driver when bidirectional transmission is disabled.

Limitation

- To change the printer settings requires Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default. When you set up options, log on using an account that has Manage Printers permission.

1 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click the icon of the printer you want to use. On the **[File]** menu, click **[Properties]**.

Note

- When you open the Printer Properties dialog box for the first time after installing the RPCS printer driver, the confirmation window appears. After that, the initial display of the Printer Properties dialog box appears.

3 Click the **[Accessories]** tab.

Note

- If you use the RPCS printer driver, Click **[Change Accessories]** tab.
- If you use the PostScript 3 printer driver, Click **[Device Settings]** tab.

4 Select options you have installed from the **[Options]** group, and then make any settings you require.

5 Click **[OK]** .



Bidirectional transmission

When bidirectional transmission is enabled, the information about the paper size and feed direction setting is automatically sent to the printer by a computer. You can also confirm the printer status from your computer.

- Bidirectional transmission is supported by Windows 95/98/Me/2000/XP, Windows Server 2003 and Windows NT 4.0.
- If you use the RPCS printer driver and bidirectional transmission is enabled, the **[Change Accessories]** tab is shaded.

Note

- The RPCS printer driver supports bidirectional transmission and updates the printer status automatically.
- The PCL 5c printer driver supports bidirectional transmission, you can update the printer status manually.
- The PostScript 3 printer driver does not support bidirectional transmission.

To support bidirectional transmission, the following conditions are required:





❖ When connecting with a parallel cable

- The computer must support bidirectional transmission.
- The printer must be set to bidirectional transmission.
- The Interface cable must support bidirectional transmission.
- The machine must be connected to the computer using the standard parallel cable and parallel connector.
- Under Windows 2000, **[Enable bidirectional support]** must be selected and **[Enable printer pooling]** must not be selected on the **[port]** tab with RPCS printer driver.

❖ When connecting with the network

- The printer must be set to bidirectional transmission.
- SmartDeviceMonitor for Client included on the CD-ROM must be installed, and the TCP/IP protocol must be used.
- Under Windows 2000, **[Enable bidirectional support]** must be selected and **[Enable printer pooling]** must not be selected on the **[port]** tab with RPCS printer driver.





Setting the Printer Shared

Limitation

- To change the printer settings requires Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default. When you set up options, log on using an account that has Manage Printers permission.

1 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click the icon of the printer you want to use. On the **[File]** menu, click **[Properties]**.

3 Select **[Shared as:]** under the **[Sharing]** tab.

4 To share a printer with the users running a different version of Windows, click **[Additional Drivers...]**.

Note

- If you have installed an alternative driver by checking **[Shared]**, you do not have to follow this step.

5 Click **[OK]**.



3. Windows XP, Windows Server 2003 Print Server Configuration

To use a printer connected to the Ethernet interface, select “SmartDeviceMonitor”, “Standard TCP/IP Port” or “LPR Port” when installing the printer driver.

- SmartDeviceMonitor
See p.48 “Configuring the Protocols” and p.50 “Installing Software” and p.51 “Installing the PCL 5c or RPCS Printer Driver” or p.57 “Installing the PostScript Printer Driver”.
- Standard TCP/IP Port, LPR Port
See p.48 “Configuring the Protocols” and p.51 “Installing the PCL 5c or RPCS Printer Driver” or p.57 “Installing the PostScript Printer Driver”.

 **Note**

- If you want to use “LPR Port”, “Print Services for UNIX” must be installed. For more information about installing the “Print Services for UNIX”, see Windows XP or Windows Server 2003 Help.





Configuring the Protocols

Configuring TCP/IP and IPP for Printing

Follow these instructions to configure the network interface board and Windows XP or Windows Server 2003 to use the TCP/IP protocol and IPP.

Configuring the printer

Configure the printer to use the TCP/IP protocol.

- Confirm that the TCP/IP protocol is set to be active. (The factory default is active.)
- Assign an IP address and make other settings required for using the TCP/IP protocol.



Reference

For more information about how to make the above settings, see “Windows XP, Windows Server 2003 Configuration”, *Client Reference* that comes with this printer.

If DHCP is used to assign IP addresses, see [p.307 “Using DHCP”](#).



Note

- ❑ After setting the IP address, use the ping command to confirm that it has been set correctly.
 - ① Click **[Start]**, point to **[All Programs]**, point to **[Accessories]**, and then click **[Command Prompt]**.
 - ② Type the following: (Example IP address is 192.168.15.16)
C:> ping 192.168.15.16
If the address has been configured correctly, the following message appears.
Reply from 192.168.15.16
If the address has been configured incorrectly, the following message appears.
Request timed out.



Configuring a Windows XP or Windows Server 2003 computer

Follow these steps to configure a Windows XP or Windows Server 2003 computer to use the TCP/IP protocol.

- 1** Click **[Start]** on the taskbar, point to **[Control Panel]**, and then click **[Network and Internet Connections]**.
- 2** Click **[Local Area Connection]**. On the **[File]** menu, click **[Properties]**.
- 3** Confirm that “**Internet Protocol (TCP/IP)**” is selected in the **[This connection uses the following items:]** box under the **[General]** tab.

 **Note**

- If the check box for TCP/IP protocol is not selected, select the box.
 - If the TCP/IP protocol is not installed, click **[Install]** under the **[General]** tab and install it. For more information about installing the TCP/IP protocol, see Windows XP or Windows Server 2003 Help file.
- 4** **Configure the TCP/IP protocols with an appropriate IP address, subnet mask and other settings.**
Confirm with the network administrator that the settings are correct.





Installing Software

Installing SmartDeviceMonitor for Client

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

 **Note**

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

4 Click [SmartDeviceMonitor for Client / Admin].

5 Click to select [SmartDeviceMonitor for Client], and then click [Next >].

6 Follow the instructions on the screen.

 **Note**

- If you are required to restart the computer after the installation of SmartDeviceMonitor for Client, restart the computer and continue with necessary configurations.





Installing the PCL 5c or RPCS Printer Driver

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

 **Important**

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

 **Note**

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

4 Select [PCL/RPCS Printer Drivers].

5 The software license agreement appears in the [License Agreement] dialog box.

After reading through all of the contents, click [I accept the agreement] to agree with the license agreement, and then click [Next >].





6 Select the printer drivers you want to use when the “Select Program” dialog box appears, and then click **[Next >]**.

You can select more than one printer driver.

7 Select the printer model(s) you want to use.

To change the printer name, change it in the **[Change settings for 'Printer Name']** box.

8 Double-click the printer name to display the printer settings.

 **Note**

- The details shown for **[Comment:]**, **[Driver:]**, and **[Port:]** vary depending on the operating system being used, the model of printer selected, and the port being used.

9 Click **[Port:]**, and then select the port you want to use.

- SmartDeviceMonitor
- Standard TCP/IP Port
- LPR Port



SmartDeviceMonitor

- 1 Click **[Add]**.
- 2 Click **[OK]**.
- 3 Select a printer you want to use.

❖ TCP/IP

- 1 Click **[TCP/IP]**, and then click **[Search]**.
Available printers will be listed.
- 2 Click the printer you want to use, and then click **[OK]**.

Note

- Printers that respond to an IP broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the IP address or host name.

❖ IPP

- 1 Click **[IPP]**.
The IPP setting dialog box appears.
- 2 To specify the IP address of the printer, type “http://printer's-ip-address/printer” in the **[Printer URL]** field.

Note

- If this machine has the optional network data protection unit installed and server authentication is issued, enter “https://printer's-ip-address/printer” (Internet Explorer 5.01 or a later version must be installed).
(Example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer



- ③ As necessary, type the names to distinguish the printer in **[IPP Port Name]**. Type a different name from those of any existing port name.
If you omit this, the address typed in **[Printer URL]** will be set as the IPP port name.
- ④ If a proxy server and IPP user name are used, click **[Detailed Settings]** and configure the necessary settings.



 **Note**

- For more information about these settings, see SmartDeviceMonitor for Client Help.
- ⑤ Click **[OK]**.

Standard TCP/IP Port

- ① Click **[Add]**.
- ② Select **[Standard TCP/IP]**, and then click **[OK]**.
- ③ Click **[Next]** in the “Add Standard TCP/IP Printer Port Wizard” window.
- ④ Type the printer name or IP address in the “Printer Name or IP Address” box.
- ⑤ Click **[Finish]** in the “Add Standard TCP/IP Printer Port Wizard” window.

LPR Port

- ❶ Click **[Add]**.
 - ❷ Select **[LPR Port]**, and then click **[OK]**.
 - ❸ Type the printer's IP address in the “Name or address of server providing lpd” box.
 - ❹ Type “lp” in the “Name of printer or print queue on that server” box, and then click **[OK]**.
- ❩ Make sure the location for the selected printer is shown after **[Port:]**.
- ❪ Double-click **[Shared]** to display the shared settings.
- ❫ To share the printer, check the left side of the **[Shared]** box.
- ❬ Click the box under **[Shared name]** to install the alternative driver for the necessary system.
-  **Note**
- Check **[Shared]** to start installation of an alternative driver (**[Windows NT 4.0/2000]**, **[Windows 95/98]**) has already been selected.
 - You can add an alternative driver after installation. See [p.66 “Setting the Printer Shared”](#).
- ❭ Configure the default printer as necessary.
- ❖ **Default Printer**
Check **[Default Printer]** to set the printer as the default printer.
- ❮ Click **[Continue]** to start printer driver installation.
-  **Note**
- During installation, the **[Hardware Installation]** dialog box may appear. In this case, click **[Continue Anyway]** to continue the installation.



16 When the [Select Program] dialog box appears, click [Finish].

17 When the [Installation completion.] dialog box appears, click [Finish].

18 Set up the options.

 **Note**

- You must set up the options when bidirectional transmission is disabled. For more information about the status of bidirectional transmission, see [p.64 “Bidirectional transmission”](#).

 **Reference**

For more information about option settings, see [p.63 “Setting Up Options”](#).



Installing the PostScript Printer Driver

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

 **Important**

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

 **Note**

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

 **Note**

- The printer driver with the selected language will be installed. The printer driver will be installed in English if you select the following languages: Portugues, Suomi

4 Click [PostScript 3 Printer Driver].

“Add Printer Wizard” starts.

5 Click [Next >].





6 Select the port you want to use.

- SmartDeviceMonitor
- Standard TCP/IP Port
- LPR Port

SmartDeviceMonitor

- 1** Click **[Create a new port:]**.
- 2** Select **[SmartDeviceMonitor]**, and then **[Next >]**.
- 3** Select a printer you want to use.

❖ TCP/IP

- 1** Click **[TCP/IP]**, and then click **[Search]**.
Available printers will be listed.
- 2** Click the printer you want to use, and then click **[OK]**.

Note

- Printers that respond to an IP broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the IP address or host name.
- You cannot add an address partially similar to that already used. For example, when “192.168.0.2” is already used, “192.168.0.2xx” cannot be used. Similarly, when “192.168.0.20” is already used, “192.168.0.2” cannot be used.

❖ IPP

- ① Click **[IPP]**.
The IPP setting dialog box appears.
- ② To specify the IP address of the printer, type “http://printer's-ip-address/printer” in the **[Printer URL]** field.

 **Note**

- If this machine has the optional network data protection unit installed and server authentication is issued, enter “https://printer's-ip-address/printer” (Internet Explorer 5.01 or a later version must be installed).
(Example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer

- ③ As necessary, type the names to distinguish the printer in **[IPP Port Name]**. Type a different name from those of any existing port name.
If you omit this, the address typed in **[Printer URL]** will be set as the IPP port name.
- ④ If a proxy server and IPP user name are used, click **[Detailed Settings]** and configure the necessary settings.

 **Note**

- For more information about these settings, see SmartDeviceMonitor for Client Help.

- ⑤ Click **[OK]**.

Standard TCP/IP Port

- 1 Click **[Create a new port:]**.
- 2 Select **[Standard TCP/IP]** in **[Create a new Port]**, and then click **[Next]**.
- 3 Click **[Next]** in the “Add Standard TCP/IP Printer Port Wizard” window.
- 4 Type the printer name or IP address in the “Printer Name or IP Address” box, and then click **[Next>]**.
- 5 Click **[Finish]** in the “Add Standard TCP/IP Printer Port Wizard” window.

LPR Port

- 1 Click **[Create a new port:]**.
 - 2 Select **[LPR Port]** in **[Create a new Port]**, and then click **[Next]**.
 - 3 Type the printer's IP address in the “Name or address of server providing lpd” box.
 - 4 Type “lp” in the “Name of printer or print queue on that server” box, and then click **[OK]**.
 - 7 Confirm to select the name of the printer whose driver you want to install, and then click **[Next >]**.
 - 8 Change the name of the printer if you want, and then click **[Next >]**.
- Configure the default printer as necessary. Check **[Yes]** to set the printer as the default printer.
- 9 Check **[Share as:]**, and then click **[Next >]**.

To change the printer name, change it in the **[Share as:]** box.

Note

- Check **[Shared]** to start installation of an alternative driver ([Windows NT 4.0/2000], [Windows 95/98]) has already been selected.
- You can add an alternative driver after installation. See [p.66 “Setting the Printer Shared”](#).



10 Select whether or not you want to print a test page, and then click **[Next>]**.

11 Click **[Finish]**.

Start printer driver installation.

 **Note**

- During installation, the **[Hardware Installation]** dialog box may appear. In this case, click **[Continue Anyway]** to continue the installation.

12 Set up the options.

 **Reference**

For more information about option settings, see [p.63 “Setting Up Options”](#).





Changing Port Settings

Follow the steps to change SmartDeviceMonitor for Client settings, such as the proxy server settings or IPP URL.

1 From the **[Printers and Faxes]** window, click the icon of the printer you want to use. On the **[File]** menu, click **[Properties]**.

2 Click the **[Ports]** tab, and then click **[Configure Port]**.

The **[Port Settings]** dialog box appears.

- For TCP/IP protocol, you can configure Timeout Settings.

 **Note**

- If you cannot set items on the **[Recovery/Parallel Printing]** tab, follow the procedure below.

① Click **[Cancel]** to close the **[Port Configuration:]** dialog box.

② Start SmartDeviceMonitor for Client, and then right-click the SmartDeviceMonitor for Client icon on the taskbar.

③ Click **[Extended Features Settings]**, and then select the **[Set Recovery/Parallel Printing for each port]** check box.

④ Click **[OK]** to close the **[Extended Features Settings]** dialog box.

- For IPP, you can configure User Settings, Proxy Settings and Timeout Settings.

 **Note**

- For more information about these settings, see SmartDeviceMonitor for Client Help.





Setting Up Options

You must set up installed options, paper size and feed direction with the printer driver when bidirectional transmission is disabled.

Limitation

- To change the printer settings requires Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default. When you set up options, log on using an account that has Manage Printers permission.

1 Access the **[Printers and Faxes]** window from **[Start]** on the taskbar.

The **[Printers and Faxes]** window appears.

2 Click the icon of the printer you want to use. On the **[File]** menu, click **[Properties]**.

Note

- When you open the Printer Properties dialog box for the first time after installing the RPCS printer driver, the confirmation window appears. After that, the initial display of the Printer Properties dialog box appears.

3 Click the **[Accessories]** tab.

Note

- If you use the RPCS printer driver, click **[Change Accessories]** tab.
- If you use the PostScript 3 printer driver, click **[Device Settings]** tab.

4 Select options you have installed from the **[Options]** group, and then make any settings you require.

5 Click **[OK]** .





Bidirectional transmission

When bidirectional transmission is enabled, the information about the paper size and feed direction setting is automatically sent to the printer by a computer. You can also confirm the printer status from your computer.

- Bidirectional transmission is supported by Windows 95/98/Me/2000/XP, Windows Server 2003 and Windows NT 4.0.
- If you use the RPCS printer driver and bidirectional transmission is enabled, the **[Change Accessories]** tab is shaded.

Note

- The RPCS printer driver supports bidirectional transmission and updates the printer status automatically.
- The PCL 5c printer driver supports bidirectional transmission, you can update the printer status manually.
- The PostScript 3 printer driver does not support bidirectional transmission.

To support bidirectional transmission, the following conditions are required:





❖ When connecting with a parallel cable

- The computer must support bidirectional transmission.
- The printer must be set to bidirectional transmission.
- The Interface cable must support bidirectional transmission.
- The machine must be connected to the computer using the standard parallel cable and parallel connector.
- Under Windows XP or Windows Server 2003 **[Enable bidirectional support]** must be selected and **[Enable printer pooling]** must not be selected on the **[port]** tab with RPCS printer driver.

❖ When connecting with the network

- The printer must be set to bidirectional transmission.
- SmartDeviceMonitor for Client included on the CD-ROM must be installed, and the TCP/IP protocol must be used.
- Under Windows XP or Windows Server 2003 **[Enable bidirectional support]** must be selected and **[Enable printer pooling]** must not be selected on the **[port]** tab with RPCS printer driver.





Setting the Printer Shared

Limitation

- To change the printer settings requires Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default. When you set up options, log on using an account that has Manage Printers permission.

1 Access the **[Printers and Faxes]** window from **[Start]** on the taskbar.

The **[Printers and Faxes]** window appears.

2 Click the icon of the printer you want to use. On the **[File]** menu, click **[Properties]**.

3 Select **[share this printer]** on the **[Sharing]** tab.

4 Enter a shared name in **[Share Name]**.

5 To share a printer with the users running a different version of Windows, click **[Additional Drivers...]**.

Note

- If you have installed an alternative driver by checking **[Shared]**, you do not have to follow this step.

6 Click **[OK]**.





4. Windows NT 4.0 Print Server Configuration

To use a printer connected to the Ethernet interface, select “SmartDeviceMonitor” or “LPR Port” when installing the printer driver.

- SmartDeviceMonitor
See p.68 “Configuring the Protocols” and p.72 “Installing Software” and p.73 “Installing the PCL 5c or RPCS Printer Driver” or p.79 “Installing the PostScript Printer Driver”.
- LPR Port
See p.68 “Configuring the Protocols” and p.73 “Installing the PCL 5c or RPCS Printer Driver” or p.79 “Installing the PostScript Printer Driver”.

 **Note**

- If you want to use “LPR Port”, “Microsoft TCP/IP Printing” must be installed. For more information about installing the “Microsoft TCP/IP Printing”, see Windows NT 4.0 Help.





Configuring the Protocols

Configuring TCP/IP and IPP for Printing

Follow these instructions to configure the network interface board and Windows NT 4.0 to use the TCP/IP protocol and IPP.

Configuring the printer

Configure the printer to use the TCP/IP protocol.

- Confirm that the TCP/IP protocol is set to be active. (The factory default is active.)
- Assign an IP address and make other settings required for using the TCP/IP protocol.



Reference

For more information about how to make the above settings, see “Windows NT 4.0 Configuration”, *Client Reference* that comes with this printer.

If DHCP is used to assign IP addresses, see [p.307 “Using DHCP”](#).



Note

- ❑ After setting the IP address, use the ping command to confirm that it has been set correctly.

① Click **[Start]**, point to **[Programs]**, and then click **[Command Prompt]**.

② Type the following: (Example IP address is 192.168.15.16)

```
C:> ping 192.168.15.16
```

If the address has been configured correctly, the following message appears.

```
Reply from 192.168.15.16
```

If the address has been configured incorrectly, the following message appears.

```
Request timed out.
```



Configuring a Windows NT 4.0 computer

Follow these steps to configure a Windows NT 4.0 computer to use the TCP/IP protocol.

1 Open **[Control Panel]** and double-click the **[Network]** icon. Confirm that “TCP/IP Protocol” is listed in the **[Network protocols]** box under the **[Protocols]** tab.

 **Note**

If the TCP/IP protocol is not installed, click **[Add]** under the **[Protocols]** tab and install it. For more information about installing the TCP/IP protocol, see Windows NT 4.0 Help.

2 Configure the TCP/IP protocols with an appropriate IP address, subnet mask and other settings. Confirm that the settings are correct with the network administrator.

3 Click the **[Services]** tab, and confirm that “Microsoft TCP/IP Printing” is installed.

If “Microsoft TCP/IP Printing” is not installed, click **[Add]** under the **[Services]** tab, and install it. For more information about installing and configuring network services, see Windows NT 4.0 Help.





Configuring NetBEUI for Printing

Follow these instructions to configure the network interface board and Windows NT 4.0 to use the NetBEUI protocol.

Preparation

To use NetBEUI, use the SmartDeviceMonitor for Client port.

Configuring the printer

Configure the printer to use the NetBEUI protocol.

- Enable SMB to print using NetBEUI (The default is active).

Reference

For more information about how to make the above settings, see “Windows NT 4.0 Configuration”, *Client Reference* that comes with this printer.



Configuring a Windows NT 4.0 computer

Install the NetBEUI protocol on the Windows NT 4.0 computer, and change the LAN adapter number (Lana Number).

1 Open [Control Panel] and double-click the [Network] icon. Confirm that “NetBEUI Protocol” is listed in the [Network Protocols] box under the [Protocols] tab.

 **Note**

If the NetBEUI protocol is not installed, click [Add...] under the [Protocols] tab, and install it. For more information about installing the NetBEUI protocol, see Windows NT 4.0 Help.

2 Change the Lana Number. Click the [Services] tab, click “NetBIOS Interface” in the [Network Services:] box , and then click [Properties:].

3 Click the Lana Number corresponding the Nbf protocol of the [Network Route] headline, and then click [Edit].

4 Type “0” as the Lana Number.

 **Note**

If another protocol's Lana Number is configured at “0”, change it to another number other than “0”.

5 Click [OK].

6 Click [Close], and then close the [Network] dialog box.

7 After confirming the message to restart, click [Yes].

 **Note**

After you change the Lana Number, you must restart the computer.





Installing Software

Installing SmartDeviceMonitor for Client

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

 **Note**

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

4 Click [SmartDeviceMonitor for Client / Admin].

5 Click to select [SmartDeviceMonitor for Client], and then click [Next >].

6 Follow the instructions on the screen.

 **Note**

- If you are required to restart the computer after the installation of SmartDeviceMonitor for Admin, restart the computer and continue with necessary configurations.





Installing the PCL 5c or RPCS Printer Driver

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

 **Important**

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

 **Note**

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

4 Select [PCL/RPCS Printer Drivers].

5 The software license agreement appears in the [License Agreement] dialog box.

After reading through all of the contents, click [I accept the agreement] to agree with the license agreement, and then click [Next >].

6 Select the printer drivers you want to use when the “Select Program” dialog box appears.



7 Select the printer model(s) you want to use.

To change the printer name, change it in the **[Change settings for 'Printer Name']** box.

8 Double-click the printer name to display the printer settings.

Note

- The details shown for **[Comment:]**, **[Driver:]**, and **[Port:]** vary depending on the operating system being used, the model of printer selected, and the port being used.

9 Click **[Port:]**, and then select the port you want to use.

- SmartDeviceMonitor
- LPR Port

SmartDeviceMonitor

1 Click **[Add]**.

2 Select **[SmartDeviceMonitor]**, and then click **[OK]**.

3 Select a printer you want to use.

❖ **TCP/IP**

- 1** Click **[TCP/IP]**, and then click **[Search]**.
Available printers will be listed.
- 2** Click the printer you want to use, and then click **[OK]**.

Note

- Printers that respond to an IP broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the IP address or host name.



❖ NetBEUI

- ① Click **[NetBEUI]**, and then click **[Search]**.
A list of printers that can be used by the NetBEUI protocol appears.
- ② Click the printer you want to use, and then click **[OK]**.

Note

- Printers that respond to a broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the NetBEUI address. Confirm the NetBEUI address on the network is on the configuration page. For more information about the printing of configuration page, see [p.166 "Printing a Configuration Page"](#). NetBEUI address appears "\RNPxxxxxx" on a configuration page. Type the printer's network path name in form of "%Computer name \Share name". Do not type "\" as head characters but "%%".
- You cannot print to printers beyond routers.

❖ IPP

- ① Click **[IPP]**.
The IPP settings dialog box appears.
- ② To specify the IP address of the printer, type “http://printer's-ip-address/printer” in the **[Printer URL]** field.

Note

- If this machine has the optional network data protection unit installed and server authentication is issued, enter “https://printer's-ip-address/printer” (Internet Explorer 5.01 or a later version must be installed).

(Example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer

- ③ As necessary, type the names to distinguish the printer in **[IPP Port Name]**. Type a different name from those of any existing port name.
If you omit this, the address typed in **[Printer URL]** will be set as the IPP port name.
- ④ If a proxy server and IPP user name are used, click **[Detailed Settings]** and configure the necessary settings.

Note

- For more information about these settings, see SmartDeviceMonitor for Client Help.

- ⑤ Click **[OK]**.

LPR Port

- 1 Click **[Add]**.
- 2 Select **[LPR Port]**, and then click **[OK]**.



Note

- If **[LPR Port]** is not displayed, “Microsoft TCP/IP Printing” is not installed. Click **[Add]** on the **[Service]** tab to install “Microsoft TCP/IP Printing”. For more information about installing the “Microsoft TCP/IP Printing”, see Windows NT 4.0 Help.

- 3 Type the printer's IP address in the “Name or address of server providing lpd” box.
- 4 Type “lp” in the “Name of printer or print queue on that server” box, and then click **[OK]**.
- 10 Make sure the location for the selected printer is shown after **[Port:]**.
- 11 Double-click **[Shared]** to display the shared settings.
- 12 To share the printer, check the left side of the **[Shared]** box.
- 13 Click the box under **[Shared name]** to install the alternative driver for the necessary system.



Note

- Check **[Shared]** to start installation of an alternative driver ([Windows NT 4.0/2000], [Windows 95/98]) has already been selected.
- You can add an alternative driver after installation. See p.88 “Setting the Printer Shared”.

- 14 Configure the default printer as necessary.

❖ Default Printer

Check **[Default Printer]** to set the printer as the default printer.



- 15** Click **[Continue]** to start printer driver installation.
- 16** When the **[Select Program]** dialog box appears, click **[Finish]**.
- 17** When the **[Installation completion.]** dialog box appears, click **[Finish]**.
- 18** Set up the options.

 **Note**

- You must set up the options when bidirectional transmission is disabled. For more information about the status of bidirectional transmission, see [p.86 “Bidirectional transmission”](#).

 **Reference**

For more information about option settings, see [p.85 “Setting Up Options”](#).



Installing the PostScript Printer Driver

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

 **Important**

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

 **Note**

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

 **Note**

- The printer driver with the selected language will be installed. The printer driver will be installed in English if you select the following languages: Portugues, Suomi

4 Click [PostScript 3 Printer Driver].

“Add Printer Wizard” starts.





5 Click **[Next >]**.

6 Select the port you want to use.

- SmartDeviceMonitor
- LPR Port

SmartDeviceMonitor

1 Click **[Create a new port:]**.

2 Select **[SmartDeviceMonitor]**, and then **[New Port...]**.

3 Select a printer you want to use.

❖ TCP/IP

① Click **[TCP/IP]**, and then click **[Search]**.

Available printers will be listed.

② Click the printer you want to use, and then click **[OK]**.

Note

- Printers that respond to an IP broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the IP address or host name.
- You cannot add an address partially similar to that already used. For example, when “192.168.0.2” is already used, “192.168.0.2xx” cannot be used. Similarly, when “192.168.0.20” is already used, “192.168.0.2” cannot be used.



❖ NetBEUI

- ① Click **[NetBEUI]**, and then click **[Search]**.
A list of printers that can be used by the NetBEUI protocol appears.
- ② Click the printer you want to use, and then click **[OK]**.

Note

- Printers that respond to a broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the NetBEUI address. Confirm the NetBEUI address on the network is on the configuration page. For more information about printing the configuration page, see [p.166 “Printing a Configuration Page”](#). NetBEUI address appears as “\RNPxxxxxx” on the configuration page. Type the printer’s network path name in the form of “%%Computer name\Share name”. Do not type “\” as head characters but “%%”.
- You cannot print to printers beyond routers.



❖ IPP

- ① Click **[IPP]**.
The IPP setting dialog box appears.
- ② To specify the IP address of the printer, type “http://printer's-ip-address/printer” in the **[Printer URL]** field.

 **Note**

- If this machine has the optional network data protection unit installed and server authentication is issued, enter “https://printer's-ip-address/printer” (Internet Explorer 5.01 or a later version must be installed).
(Example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer

- ③ As necessary, type the names to distinguish the printer in **[IPP Port Name]**. Type a different name from those of any existing port name.
If you omit this, the address typed in **[Printer URL]** will be set as the IPP port name.
- ④ If a proxy server and IPP user name are used, click **[Detailed Settings]** and configure the necessary settings.

 **Note**

- For more information about these settings, see SmartDeviceMonitor for Client Help.

- ⑤ Click **[OK]**.

LPR Port

- ❶ Select **[Add Port:]**.
- ❷ Select **[LPR Port]** in **[Create a new Port]**, and then click **[Next]**.
- ❸ Type the printer's IP address in the “Name or address of server providing lpd” box.
- ❹ Type “lp” in the “Name of printer or print queue on that server” box, and then click **[OK]**.
- ❺ Confirm to select the name of the printer whose driver you want to install, and then click **[Next >]**.
- ❻ Change the name of the printer if you want, and then click **[Next >]**.
Configure the default printer as necessary. Check **[Yes]** to set the printer as the default printer.
- ❼ Check **[Shared]**, and then click **[Next >]**.
To change the printer name, change it in the **[Share Name:]** box.

 **Note**

- Check **[Shared]** to start installation of an alternative driver ([Windows NT 4.0/2000], [Windows 95/98]) has already been selected.
- You can add an alternative driver after installation. See [p.88 “Setting the Printer Shared”](#).

❽ Select whether or not you want to print a test page, and then click **[Next >]**.

❾ Click **[Finish]**.

Start printer driver installation.

❿ Set up the options.

 **Reference**

For more information about option settings, see [p.85 “Setting Up Options”](#).





Changing Port Settings

Follow the steps to change SmartDeviceMonitor for Client settings, such as the proxy server settings or IPP URL.

 **Note**

- There are no settings for the NetBEUI protocol.

1 From the **[Printers]** window, click the icon of the printer you want to use. On the **[File]** menu, click **[Properties]**.

2 Click the **[Ports]** tab, and then click **[Configure Port]**.

The **[Port Settings]** dialog box appears.

- For TCP/IP protocol, you can configure Timeout Settings.

 **Note**

- If you cannot set items on the **[Recovery/Parallel Printing]** tab, follow the procedure below.

① Click **[Cancel]** to close the **[Port Configuration:]** dialog box.

② Start SmartDeviceMonitor for Client, and then right-click the SmartDeviceMonitor for Client icon on the taskbar.

③ Click **[Extended Features Settings]**, and then select the **[Set Recovery/Parallel Printing for each port]** check box.

④ Click **[OK]** to close the **[Extended Features Settings]** dialog box.

- For IPP, you can configure User Settings, Proxy Settings and Timeout Settings.

 **Note**

- For more information about these settings, see SmartDeviceMonitor for Client Help.





Setting Up Options

You must set up installed options, paper size and feed direction with the printer driver when bidirectional transmission is disabled.

Limitation

- To change the printer settings requires Full Control Access permission. Members of the Administrators and Power Users groups have Full Control Access permission by default. When you set up options, log on using an account that has Full Control Access permission.

1 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click the icon of the printer you want to use. On the **[File]** menu, click **[Properties]**.

Note

- When you open the Printer Properties dialog box for the first time after installing the RPCS printer driver, the confirmation window appears. After that, the initial display of the Printer Properties dialog box appears.

3 Click the **[Accessories]** tab.

Note

- If you use the RPCS printer driver, click the **[Change Accessories]** tab.
- If you use the PostScript 3 printer driver, click the **[Device Settings]** tab.

4 Select options you have installed from the **[Options]** group, and then make any settings you require.

5 Click **[OK]**.





Bidirectional transmission

When bidirectional transmission is enabled, the information about the paper size and feed direction setting is automatically sent to the printer by a computer. You can also confirm the printer status from your computer.

- Bidirectional transmission is supported by Windows 95/98/Me/2000/XP, Windows Server 2003 and Windows NT 4.0.
- If you use the RPCS printer driver and bidirectional transmission is enabled, on Windows 95/98/Me, the unavailable functions are shaded.

Note

- The RPCS printer driver supports bidirectional transmission and updates the printer status automatically.
- The PCL 5c printer driver supports bidirectional transmission, you can update the printer status manually.
- The PostScript 3 printer driver does not support bidirectional transmission.

To support bidirectional transmission, the following conditions are required:





❖ When connecting with a parallel cable

- The computer must support bidirectional transmission.
- The printer must be set to bidirectional transmission.
- The Interface cable must support bidirectional transmission.
- The machine must be connected to the computer using the standard parallel cable and parallel connector.
- Under Windows NT 4.0 **[Enable bidirectional support]** must be selected and **[Enable printer pooling]** must not be selected on the **[port]** tab with RPCS printer driver.

❖ When connecting with the network

- The printer must be set to bidirectional transmission.
- SmartDeviceMonitor for Client included on the CD-ROM must be installed, and the TCP/IP protocol must be used.
- Under Windows NT 4.0 **[Enable bidirectional support]** must be selected and **[Enable printer pooling]** must not be selected on the **[port]** tab with RPCS printer driver.





Setting the Printer Shared

Limitation

- To change the printer settings requires Full Control Access permission. Members of the Administrators and Power Users groups have Full Control Access permission by default. When you set up options, log on using an account that has Full Control Access permission.

Use the **[Printers]** window to set up the printer.

1 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click the icon of the printer you want to use. On the **[File]** menu, click **[Properties]**.

3 Select **[Shared]** in the **[Sharing]** tab.

Note

- If you use alternate drivers for Windows 95/98/Me client, service pack 4 or more is required. And install the appropriate printer driver for each client.

4 To share a printer with the users running a different version of Windows, click **[Additional Drivers...]**.

Note

- If you have installed an alternative driver by checking **[Shared]**, you do not have to follow this step.

5 Click **[OK]**.

The printers attached to the network are displayed.





5. NetWare Configuration

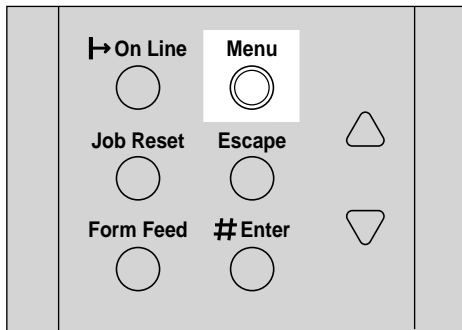
This chapter describes how to configure the printer to use as a print server or a remote printer in a NetWare environment.

Configuring the NetWare Protocol using the Control Panel

 **Note**

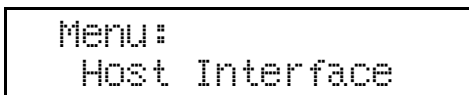
- The IPX/SPX protocol must be installed on your computer. If it is not, see Windows Help for instructions.

1 Press the **[Menu]** key.



“Menu” appears on the panel display.

2 Press the **[▲]** or **[▼]** key to display “Host Interface”.





- 3** Press the **[# Enter]** key.

The following message appears on the panel display.

```
Host Interface:  
I/O Buffer
```

- 4** Press the **[▲]** or **[▼]** key to display “Network Setup”.

```
Host Interface:  
Network Setup
```

- 5** Press the **[# Enter]** key.

The following message appears on the panel display.

```
Network Setup:  
IP Address
```



6 Select the NetWare protocol.

Note

- All protocols are active by the default.
- Do not select protocols that are not used on your network.
- If you use Pure IP on NetWare 5.1, configure the printer to active the TCP/IP protocol.

1 Press the **[▲]** or **[▼]** key to display “Active Protocol”, and then press the **[# Enter]** key.

```
Active Protocol :  
TCP/IP
```

2 Press the **[▲]** or **[▼]** key to display “NetWare”.

3 Press the **[# Enter]** key.

The current setting appears on the panel display.

```
NetWare :  
*Active
```

7 Select the frame type for NetWare.

Select one of the following items if necessary.

- Auto (Default)
- Ethernet II
- Ethernet 802.2
- Ethernet 802.3
- Ethernet SNAP

Note

- In most situations, use the default setting (“Auto”). When you first select “Auto”, the frame type first detected by the printer is adopted. If the network can use more than two frame types, the printer may fail to select the correct frame type if “Auto” is selected. In this case, select the appropriate frame type.

1 Press the **[▲]** or **[▼]** key to display “Frame Type (NW)”.

```
Network Setup:
  Frame Type (NW)
```

2 Press the **[# Enter]** key.

The current setting appears on the panel display.

```
Frame Type (NW):
*Auto
```

3 Press the **[▲]** or **[▼]** key to display the frame type you want to use.

4 Press the **[# Enter]** key.

In about two seconds, the display returns to “Network Setup”.

5 Press the [On Line] key.

“Ready” appears on the panel display.

**8 Print the configuration page to check settings you have made.**

For more information about how to print a configuration page, see [p.166 “Printing a Configuration Page”](#).

❖ SmartDeviceMonitor for Admin

Using a printer in a NetWare environment, configure the NetWare printing environment by using SmartDeviceMonitor for Admin.

 Note

- If you configure the NetWare printing environment by using SmartDeviceMonitor for Admin under the following environments, NetWare Client provided by Novell is required.
 - NDS mode in Windows 95/98/Me
 - NDS or Bindary mode in Windows 2000/XP, Windows Server 2003, Windows NT 4.0
- Use the version of Novell Client provided with your operating system or the latest version.

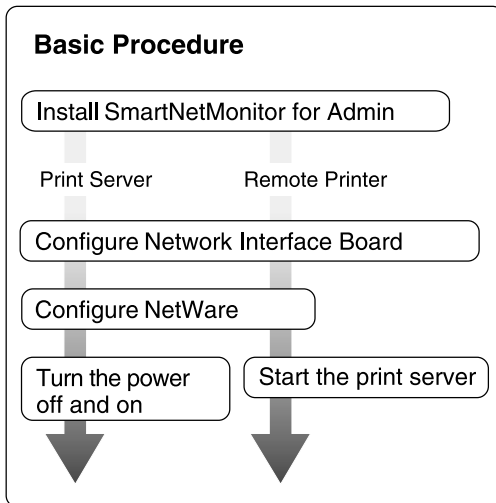
❖ Printers listed by SmartDeviceMonitor for Admin

SmartDeviceMonitor for Admin displays a list of printers, which are connected to the network. If you cannot find out the printer from the displayed list, see the configuration page printed from the printer. For more information about printing a configuration page, see [p.166 “Printing a Configuration Page”](#).



NetWare 3.x - Advanced Settings

The actual procedures for configuring the printer differ depending on whether the network interface board is configured as a print server or as a remote printer. This section describes how to configure it in the NetWare 3.x environment.



 **Note**

- This section assumes NetWare is functional and that the necessary environment for NetWare Print Service is available.





Installing SmartDeviceMonitor for Admin

Install SmartDeviceMonitor for Admin on your computer. For the installation procedure, see [p.114 “Installing SmartDeviceMonitor for Admin”](#).

After installing SmartDeviceMonitor for Admin, go to [p.95 “Setting Up as a Print Server”](#) to use this computer as a print server, or to [p.97 “Setting Up as a Remote Printer”](#) to use it as a remote printer.

Setting Up as a Print Server

- 1** Log on to the file server as Supervisor or a Supervisor equivalent.
- 2** Run SmartDeviceMonitor for Admin.
- 3** Click the **[Group]** menu, and click **[Search Device]**, and then select **[IPX/SPX]**.

A list of printers appears

 **Note**

- If you cannot identify which printer to configure from the list of printers, print Configuration Page from the printer and find the desired printer. For more information about printing the Configuration Page, see [p.166 “Printing a Configuration Page”](#).
- If no printer name appears on the list, match the frame types of the IPX/SPX protocol between the computer and printer. Use the **[Network]** dialog box of Windows to change the frame type of the computer. For more information about changing the frame type of equipment, see [p.89 “Configuring the NetWare Protocol using the Control Panel”](#).

- 4** Select a printer you want to configure, and then click **[NIB Setup Tool]** on the **[Tools]** menu.
- 5** Click to select **[Wizard]**, and then click **[OK]**.



6 Type the device name into the **[Device Name]** box and comment into the **[Comment]** box as necessary, and then click **[Next]**.

7 Select the **[NetWare]** check box, and then click **[Next]**.

8 Click to select **[Bindery mode]**, type the file server name into the **[File Server Name]** box, and then click **[Next]**.

In the **[File Server Name]** box, type the name of the file server in which a print server is to be created. You can also select a file server from the list that appears by clicking **[Browse]**.

9 Type the print server name into the **[Print Server Name]** box, and the printer name into the **[Printer Name]** box, and the print queue name into the **[Print Queue Name]** box, and then click **[Next]**.

- In the **[Print Server Name]** box, type the name of the NetWare print server within 47 characters.
- In the **[Printer Name]** box, type the name of the NetWare printer.
- In the **[Print Queue Name]** box, type the name of the print queue to be added to NetWare.

10 After confirming the settings, click **[Next]**.

The settings take effect, and the NIB Setup Tool exits.

11 Exit SmartDeviceMonitor for Admin.

12 Turn the printer power off and on.

 **Note**

- To confirm that the printer is configured correctly, type the following from the command prompt.

```
F:> USERLIST
```

- If the printer works as configured, the name of the print server appears as an attached user.



Setting Up as a Remote Printer

- 1** Log on to the file server as Supervisor or a Supervisor equivalent.
- 2** Run the SmartDeviceMonitor for Admin.
- 3** Click the **[Group]** menu, and click **[Search Device]**, and then select **[IPX/SPX]**.

A list of printers appears.

 **Note**

- If you cannot identify which printer to configure from the list of printers, print the Configuration Page from the printer and find the desired printer. For more information about printing the Configuration Page, see [p.166 “Printing a Configuration Page”](#).
- If no printer name appears on the list, match the frame types of the IPX/SPX protocol between the computer and printer. Use the **[Network]** dialog box of Windows to change the frame type of the computer. For more information about changing the frame type of equipment, see [p.89 “Configuring the NetWare Protocol using the Control Panel”](#).

- 4** Select a printer you want to configure, and then click **[NIB Setup Tool]** on the **[Tools]** menu.
- 5** Click to select **[Property Sheet]** and click **[OK]**.
- 6** Click the **[NetWare]** tab, and then make the following settings.
 - 1** In the **[Print Server Name]** box, type the name of the print server.
 - 2** In the **[File Server Name]** box, type the name of the file server in which a print server is to be created.

By clicking **[Browse]**, you can select a file server among those listed in the **[Browse]** dialog box.
 - 3** In the **[Print Server Operation Mode]** group, click **[As Remote Printer]**.



4 In the [Remote Printer No.] box, type the printer number.

 **Important**

- Use the same printer number as that to be created in the printer server.

5 Click [OK] to close the property sheet.

6 After a confirmation dialog box appears, click [OK].

7 On the [NIB] menu, click [Exit] to exit the NIB Setup Tool.

8 Type “PCONSOLE” from the command prompt.

```
F :> PCONSOLE
```

9 Create a print queue as follows:

 **Note**

- If you use a currently defined print queue, go to step [10](#).

1 From the [Available Options] menu, select [Print Queue Information], and then press Enter key.

2 Press Insert key, and then type a print queue name.

3 Press ESC key to return to the [Available Options] menu.

10 Create a printer as follows:

1 From the [Available Options] menu, select [Print Server Information], and then press Enter key.

2 To create a new print server, press Insert, and then type a print server name.

If you use a currently defined print server, select one of the print servers shown in the [Print Server] list.

 **Important**

- Use the same name as that specified in the NIB Setup Tool. (Step [6](#) - [1](#)).

- 3 From the [Print Server Information] menu, select [Print Server Configuration].
- 4 From the [Print Server Configuration] menu, select [Printer Configuration].
- 5 Select the printer which is indicated as “Not Installed”.

Important

- Use the same number as that specified as Remote Printer No. using the NIB Setup Tool. (Step 6 - 4).

- 6 If you change the name of the printer, type a new name.

A name “Printer x” is assigned to the printer. The “x” stands for the number of the selected printer.

- 7 As type, select [Remote Parallel, LPT1].

The IRQ, Buffer size, Starting form, and Queue service mode are automatically configured.

- 8 Press the ESC key, and then click [Yes] in the confirmation dialog box.

- 9 Press the ESC key to return to [Print Server Configuration Menu].

- 11 Assign print queues to the created printer as follows:

- 1 From [Print Server Configuration Menu], select [Queues Serviced By Printer].

- 2 Select the printer created in step 10.

- 3 Press the Insert key to select a queue serviced by the printer.

Note

- You can select more than one queue at a time.

- 4 Follow the instructions on the screen to make other necessary settings.

When you have finished the above steps, confirm that the queues are assigned.

- 12 Press the ESC key until “Exit?” appears, and then select [Yes] to exit PCONSOLE.



13 Start the print server by typing the following from the console of the NetWare Server.

If it is running, restart it after exiting it.

❖ **To exit**

```
CAREE: unload pserver
```

❖ **To start**

```
CAREE: load pserver print_server_name
```

 **Note**

- If the printer works as configured, “Waiting for job” appears.

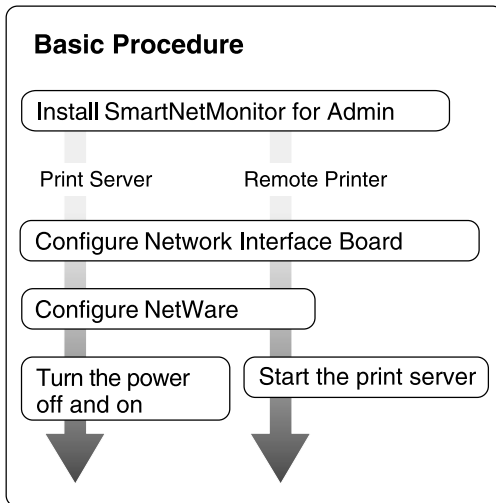


NetWare 4.x, 5/5.1, 6/6.5- Advanced Settings

The actual procedures for configuring the printer differ depending on whether the network interface board is configured as a print server or as a remote printer. This section describes how to configure it in the NetWare 4.x, 5/5.1, 6/6.5 environment.

❖ To use NetWare 5/5.1, 6/6.5

- If you use Pure IP, use the printer as a print server. You cannot use the printer as a remote printer when you use Pure IP.
- If you use Pure IP, configure the printer to use the TCP/IP protocol. For more information about how to make the settings, see [p.89 “Configuring the NetWare Protocol using the Control Panel”](#).





Installing SmartDeviceMonitor for Admin

Install SmartDeviceMonitor for Admin on your computer. For the installation procedure, see [p.114 “Installing SmartDeviceMonitor for Admin”](#).

After installing SmartDeviceMonitor for Admin, go to [p.102 “Setting Up as a Print Server”](#) to use this computer as a print server, or to [p.107 “Setting Up as a Remote Printer”](#) to use it as a remote printer.

Setting Up as a Print Server

- 1** Log on to the file server as Supervisor or a Supervisor equivalent.
- 2** Run SmartDeviceMonitor for Admin.
- 3** Click the **[Group]** menu, and click **[Search Device]**, and then select **[IPX/SPX]** or **[TCP/IP]**.

A list of printers appears.

 **Note**

- If you use Pure IP, select **[TCP/IP]**.
- If you cannot identify which printer to configure from the list of printers, print the Configuration Page from the printer and find the desired printer. For more information about printing the Configuration Page, see [p.166 “Printing a Configuration Page”](#).
- If no printer name appears in the list, match the frame types of the IPX/SPX protocol between the computer and printer. Use the **[Network]** dialog box of Windows to change the frame type of the computer. For more information about changing the frame type of equipment, see [p.89 “Configuring the NetWare Protocol using the Control Panel”](#).



4 Select a printer you want to configure, and then click **[NIB Setup Tool]** on the **[Tools]** menu.



Reference

If you use Pure IP, see [p.105 “Using Pure IP in the NetWare 5/5.1, 6/6.5 Environment”](#)

5 Click to select **[Wizard]**, and then click **[OK]**.

6 Type the device name into the **[Device Name]** box and comment into the **[Comment]** box as necessary, and then click **[Next]**.

7 Select the **[NetWare]** check box, and then click **[Next]**.

8 Click to select **[NDS Mode]**, type the file server name into the **[File Server Name]** box, the NDS tree name into the **[NDS Tree:]** box and the context into the **[NDS Context:]** box, and then click **[Next]**.

In the **[File Server Name]** box, type the name of the file server in which a print server is to be created. You can also select a file server from the list that appears by clicking **[Browse]**.

By clicking **[Browse]**, you can select a NDS context among those listed in the **[Browse]** dialog box.

As a context, object names are typed from a lower object and divided by a period. For example, if you want to create a print server into NET under DS, type “NET.DS”.



9 Type the print server name into the **[Print Server Name]** box, and the printer name into the **[Printer Name]** box, and the print queue name into the **[Print Queue Name]** box, and the print queue volume into the **[Print Queue Volume]**, and then click **[Next]**.

- In the **[Print Server Name]** box, type the name of the NetWare print server within 47 characters.
- In the **[Printer Name]** box, type the name of the NetWare printer.
- In the **[Print Queue Name]** box, type the name of the print queue to be added to NetWare.
- In **[Print Queue Volume]**, type the print queue volume. As a volume, object names are typed from a lower object and divided by a period. You can select a volume by clicking **[Browse]**.

10 After confirming the settings, click **[Next]**.

The settings take effect, and the NIB Setup Tool exits.

11 Exit SmartDeviceMonitor for Admin.

12 Turn the printer power off and on.

 **Note**

- To confirm that the printer is configured correctly, type the following from the command prompt.

```
F:> NLIST USER /A/B
```

- If the printer works as configured, the name of the print server appears as an attached user.



Using Pure IP in the NetWare 5/5.1, 6/6.5 Environment

1 Log on to the file server as Admin or an Admin equivalent.

2 Run SmartDeviceMonitor for Admin.

3 Click [Property Sheet], and then click [OK].

The [NIB Setup Tool] dialog box appears.

4 Click the [NetWare] tab, and make the following settings.

1 In the [Print Server Name] box, type the name of the print server.

2 In the [File Server Name] box, type the name of the file server in which a print server is to be created.

By clicking [Browse], you can select a file server among those listed in the [Browse File Server] dialog box.

3 In the [NDS Context:] box, type the context of the print server.

By clicking [Browse], you can select NDS tree and a NDS context among those listed in the [Browse Context] dialog box.

As context, object names are typed from a lower object and divided by a period. For example, if you want to create a print server into Net under DS, type “NET.DS”.





- ④ In the [Print Server Operation Mode] group, click [As Print Server].
 - ⑤ Click [OK] to close the property sheet.
 - ⑥ After a confirmation dialog box appears, click [OK].
- 5** Exit SmartDeviceMonitor for Admin.
- After this step, go to step **8** on [p.107](#) “Setting Up as a Remote Printer”.





Setting Up as a Remote Printer

- 1** Log on to the file server as Admin or an Admin equivalent.
- 2** Run the SmartDeviceMonitor for Admin.
- 3** Click the [Group] menu, and click [Search Device], and then select [IPX/SPX].

A list of printers appears.

 **Note**

- If you cannot identify which printer to configure from the list of printers, print the Configuration Page from the printer and find the desired printer. For more information about printing the Configuration Page, see [p.166 “Printing a Configuration Page”](#).
 - If no printer name appears on the list, match the frame types of the IPX/SPX protocol between the computer and printer. Use the [Network] dialog box of Windows to change the frame type of the computer. For more information about changing the frame type of equipment, see [p.89 “Configuring the NetWare Protocol using the Control Panel”](#).
- 4** Select a printer you want to configure, and then click [NIB Setup Tool] on the [Tools] menu.
 - 5** Click to select [Property Sheet], and then click [OK].



6 Click the [NetWare] tab, and make the following settings.

1 In the [Logon Mode] area, select [File Server Mode] or [NDS Mode].



Note

- If [File Server Mode] is selected, a connecting destination will be chosen based on the string entered in step **3**.
- If [NDS Mode] is selected, a connecting destination will be chosen based on the string entered in step **4**.

2 In the [Print Server Name(P):] box, enter the name of the print server.



Important

- Use the same name as that of the print server name to be set from NWadmin (**12-3**).



Limitation

- Enter up to 47 alphanumeric characters.

3 In the [File Server Name(F):] box, enter the name of the file server in which a print server is to be created.

By clicking [Browse(B)...], you can select a file server among those listed in the [Browse(B)...] dialog box.



Limitation

- Enter up to 47 alphanumeric characters.

4 In the [NDS Tree(T):] box, enter the NDS tree name in which to make the file server.

By clicking [Browse(B)...], you can select the NDS tree name and NDS context name from their lists.



Limitation

- Enter up to 32 alphanumeric characters (“-” and “_” can be used).

5 In the [NDS Context(C):] box, enter the context in which the print server is to be created.

 **Limitation**

- Enter up to 127 alphanumeric characters.

6 In the [Print Server Option Mode] area, click [As Remote Printer(R)].

7 In the [Remote Printer No.(N)] box, enter the number of the printer.

 **Important**

- Use the same number as that of the printer to be created in the print server (13-4).

8 Click [OK] to close the NIB Setup Tool - Network board list] dialog box.

7 On the [NIB] menu, click [Exit] to exit the NIB Setup Tool.

8 From Windows, run NWadmin.

 **Reference**

For more information about NWadmin, see the documentation that comes with the NetWare.

9 Create a print queue as follows:

1 Select the container object the print queue is located in among those in the directory tree, and then click [Create] on the [Object] menu.

2 In the [Class of new object] box, click “Print Queue”, and then click [OK].

3 In the [Print Queue name] box, type the name of the print queue.

4 In the [Print Queue Volume] box, click the [Browse] button.

5 In the [Available objects] box, click the volume in which the print queue is created, and then click [OK].

6 After confirming the settings, click [Create].

- 10** Create a printer as follows:
- 1 Select the container object the printer is located in, and then click [Create] in the [Object] menu.
 - 2 In the [Class of new object] box, click “Printer”, and then click [OK]. When you are using NetWare 5, click “Printer (Non NDPS)”.
 - 3 In the [Printer name] box, type the name of the printer.
 - 4 Click [Define additional properties] to check a box, and then click [Create].
- 11** Assign print queues to the created printer as follows:
- 1 Click [Assignments], and then click [Add] in the [Assignments] group.
 - 2 In the [Available objects] box, click the queue created in step 9, and then click [OK].
 - 3 Click [Configuration], and in the [Printer type] box, select [Parallel] using the drop-down menu, and then click [Communication].
 - 4 Click [Manual load] in the [Communication type] group, and then click [OK].
 - 5 After confirming the settings, click [OK].
- 12** Create a print server as follows:
- 1 Select the context specified using the NIB Setup Tool (Step 9 - 1), and on the [Object] menu, click [Create].
 - 2 In the [Class of new object] box, click “Print Server”, and then click [OK]. When you are using NetWare 5, click “Print Sever (Non NDPS)”.
 - 3 In the [Print Server name] box, type the name of the print server.
- Important**
- Use the same name as that specified using the NIB Setup Tool. (Step 6 - 2).
- 4 Click [Define additional properties] to check a box, and click [Create].



- 13** Assign the printer to the created print server as follows:
- 1 Click [Assignments], and then click [Add] in the [Assignments] group.
 - 2 In the [Available objects] box, click the queue created in the step 11, and then click [OK].
 - 3 In the [Printers] group, click the printer assigned in step 2, and then click [Printer Number].
 - 4 Type the printer number, and then click [OK].

 **Important**

- Use the same number as that specified as Remote Printer No. using the NIB Setup Tool. (Step 6 - 7).

- 5** After confirming the settings, click [OK].
- 14** Start the print server by typing the following from the console of the NetWare Server.
If it is running, restart it after exiting it.

❖ **To exit**

```
CAREE: unload pserver
```

❖ **To start**

```
CAREE: load pserver print_server_name
```




6. Using SmartDeviceMonitor for Admin

Using SmartDeviceMonitor for Admin, you can not only monitor the status of network printers, but also allows you to change the configurations of the network interface board using the TCP/IP protocol or IPX/SPX protocol.

SmartDeviceMonitor for Admin is equipped with the following functions.

- Device Information function
 - Checks the printer's network settings and detailed information of devices.
 - Checks the number of pages printed for each computer, using the user codes.
 - Checks the results of print jobs executed from the computer.
 - Enables you to change the printer's network settings.
- Device Settings function
 - Limits the settings to be done from the control panel, and disables changes to be made to some of the items.
 - Enables the selection of paper type loaded in the printer.
- Energy Saver function
 - Switches to the Energy Saver Mode, and wakes up from the Energy Saver Mode.
- System Status function
 - Checks the information on printing, paper exhaustion, and such, on the computer.
- Groups function
 - Monitors multiple printers at the same time. When there are many printers, you can create groups and classify the printers to facilitate management.



Operating system	Protocol stack
Microsoft Windows 95/98/Me	TCP/IP provided with Windows 95/98/Me IPX ^{*1} /SPX provided with Windows 95/98/Me NetWare network client provided with Windows 95/98/Me Novell Client for Windows 95/98/Me
Microsoft Windows 2000	TCP/IP provided with Windows 2000 IPX ^{*1} /SPX provided with Windows 2000 NetWare Client provided with Windows 2000 Novell Client for Windows NT/2000/XP
Microsoft Windows XP	TCP/IP provided with Windows XP IPX ^{*1} /SPX provided with Windows XP Novell Client for Windows NT/2000/XP
Microsoft Windows Server 2003	TCP/IP provided with Windows Server 2003 IPX ^{*1} /SPX provided with Windows Server 2003 NetWare Client provided with Windows Server 2003
Microsoft Windows NT 4.0	TCP/IP provided with Windows NT 4.0 IPX ^{*1} /SPX provided with Windows NT 4.0 Client Service for NetWare provided with Windows NT Novell Client for Windows NT/2000/XP

^{*1} IPX is used for monitoring the machines.

 **Note**

- Select the appropriate protocol stack for your operating system.





Installing SmartDeviceMonitor for Admin

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

 **Note**

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

4 Select [SmartDeviceMonitor for Client / Admin] installation, and then click [Next].

5 The software license agreement appears in the [License Agreement] dialog box.

After reading through all of the contents, click [I accept the agreement] to agree with the license agreement, and then click [Next >].


6 Follow the instructions on the screen.

 **Note**

- If you are required to restart the computer after the installation of SmartDeviceMonitor for Admin, restart the computer and continue with necessary configurations.



Changing the Network Interface Board Configuration

- 1** Run SmartDeviceMonitor for Admin.
- 2** Click the [Group] menu, point to [Search Device], and then select [TCP/IP] or [IPX/SPX]. A list of printers appears.
 -  **Note**
 - Select the protocol of the printer you want to change its configuration.
- 3** On the list, Select a printer you want to change its configuration.
- 4** From the [Tools] menu, select [NIB Setup Tool].

The NIB Setup Tool starts up.
- 5** Select [Wizard], [Property Sheet], or [Web browser], and then click [Next].
 - When configuring the network interface board for the first time, select [Wizard].
 - When changing the configuration of the network interface board or configuring it in detail, select [Property Sheet].
 - If you select [Web browser], the Web browser starts up and Web Image Monitor Administrator Mode user ID and password dialog box appears. Settings can be made using Web Image Monitor. See [p.125 “Using a Web Browser”](#) for details.



Selecting [Wizard]

- 1 **Fill in the necessary items, and then click [Next].**

Selecting [Property Sheet]

- 1 **A configuration list appears on the dialog box.**

For more information about each item on the dialog box, see SmartDeviceMonitor for Admin Help.





Locking the Menus on the Printer's Control Panel

1 Run SmartDeviceMonitor for Admin.

2 Click the [Group] menu, point to [Search Device], and then select [TCP/IP] or [IPX/SPX].

A list of printer appears.

 **Note**

- Select the protocol of the printer you want to change its configuration.

3 Select a desired printer.

4 From the [Tools] menu, point [Device Settings], select [Lock Printer Operation Panel].

The Web browser starts up, and the screen that prompts you to type the user name and a password appears.

5 Type the user name and the password, and then click [OK].

The general configuration window appears.

6 From the [Lock Printer Operation Panel] menu, select [Enable].

 **Note**

- The Panel Lock function that can be set here is the same as that on the control panel of this machine.

7 Click [Apply].

8 Exit the Web browser.



Changing the Paper Type

1 Run SmartDeviceMonitor for Admin.

2 Click the [Group] menu, point to [Search Device], and then select [TCP/IP] or [IPX/SPX].

A list of printer appears.

 **Note**

- Select the protocol of the printer you want to change its configuration.

3 On the list, Select a printer whose paper type you want to change.

4 From the [Tools] menu, point [Device Settings], select [Select Paper Type].

The Web browser starts up, and the screen that prompts you to type the user name and a password appears.

5 Type the user name and the password, and then click [OK].

The paper type configuration window appears.

6 From the [Paper Type] pull-down menu, select paper type.

7 Click [Apply].

8 Exit the Web browser.





Managing User Information

Print jobs under each user code can be managed, and functions can be restricted to certain users only.



Reference

For details about User Management Tool, see SmartDeviceMonitor for Admin Help.

Starting up the User Management Tool

- 1** Run SmartDeviceMonitor for Admin.
- 2** On the [Group] menu, point to [Search Device], and then click [TCP/IP] or [IPX/SPX].
A list of printers appears.
- 3** In the list, select the printer whose figures you want to manage.
- 4** From the [Tools] menu, select [User Management Tool].
A password screen appears.
- 5** Enter the password, and then click [OK].



Note

- The default password is “password”.
User Code Maintenance Tool starts up.



Displaying the Number of Sheets Printed

- 1** Click the **[User Page Count]** tab of **User Management Tool**.

Information about the number of sheets printed appears.

Saving Information about the Number of Sheets Printed

Numbers of printed sheets per user code can be saved as a csv file.

- 1** Click the **[User Page Count]** tab of **User Management Tool**.
- 2** Click the **[File]** menu, and then click **[Export User Statics List]**.
- 3** Specify the folder and file name to save it to, and then click **[Save]**.



Resetting Information about the Number of Sheets Printed

Numbers of printed sheets per user code can be reset (to 0).

- 1** Click the **[User Page Count]** tab of **User Management Tool**.
- 2** Click the user whose information is to be reset.
- 3** Click the **[Edit]** menu, and then click **[Reset User Counters]**.
- 4** Select the check box of the item to be reset, and then click **[OK]**.

The following message appears.

- 5** Click **[Yes]**.

The number is reset.

- 6** Click the **[Edit]** menu and click **[Apply Settings]**.

Changes to information are applied.

Setting Restrictions on Functions Use


Individual functions can be restricted.

- 1** Click the **[Edit]** menu of **User Management Tool**, and then click **[Restrict Access To Device]**.
- 2** Select the check boxes of the functions to restrict.
- 3** Click **[OK]**.

The following message appears.

- 4** Click **[Yes]**.

Changes to settings are applied.





Setting the Functions Available Individual Users

The following explains adding a user and setting the functions available to that user.

- 1** Click the **[Access Control List]** tab from **User Management Tool**.
- 2** Click the **[Edit]** menu, and then click **[Add New User]**.
- 3** Input the user code and user name.
- 4** Select the check box of the functions available to the new user.

 **Note**


- If a function's check box is gray, no restrictions are set. For details about setting these functions for use, see [p.121 "Setting Restrictions on Functions Use"](#), or SmartDeviceMonitor for Admin Help.

- 5** Click **[OK]**.
- 6** Click the **[Edit]** menu, and then click **[Apply Settings]**.

Changes to settings are applied.

 **Reference**

See SmartDeviceMonitor for Admin Help for details about for setting restrictions for use.





Configuring the Energy Save Mode

1 Run SmartDeviceMonitor for Admin.

2 Click the [Group] menu, point to [Search Device], and then select [TCP/IP] or [IPX/SPX].

A list of printer appears.

 **Note**

- Select the protocol of the printer you want to change its configuration.

3 Select the device you want to make a setting for.

You do not need to select anything if you want to make a setting for all the devices in the group.

4 Click [Group] and point to [Energy Save Mode].

5 To make a setting only for the device you have selected, click [Set Individually].

6 To make a setting for all the devices in the group, click [Set By Group].

7 Then select any energy saver mode from the menu that appears.





Setting a Password

1 Run SmartDeviceMonitor for Admin.

2 Click the [Group] menu, point to [Search Device], and then select [TCP/IP] or [IPX/SPX].

A list of printer appears.

 **Note**

- Select the protocol of the printer you want to change its configuration.

3 On the list, select a printer you want to change its configuration.

4 From the [Tools] menu, select [NIB Setup Tool].

The NIB Setup Tool starts up.

 **Note**

- To prevent the network interface board configuration from being changed accidentally by someone other than the network administrator, you can set a password in [NIB Setup Tool] that is different from the network password. Click [Option] to set a password in [NIB Setup Tool].

5 Select [Property Sheet], and then click [OK].

6 Click the [Password] tab.

7 Click [Change Password], and then enter a password.

8 Click [OK].





7. Using a Web Browser

You can check machine status and change settings using the web browser. This function is called Web Image Monitor.

❖ What can it do?

You can remotely check the status of a machine or specify its settings over the network using a computer's Web browser.

The following functions are available with Web Image Monitor:

- Displaying machine status/settings
- Checking print job status/history
- Interrupting a job that is currently printing
- Resetting
- Managing the Address Book
- Making machine settings
- Setting mail notification
- Setting the network protocol
- Setting security

❖ Configuring the machine

This requires TCP/IP to be installed. After the machine has been configured to use TCP/IP, it will be possible to adjust settings using a Web Image Monitor.



Reference

For more information about configuring the machine to use TCP/IP, see [p.16 “Configuring the Printer for the Network”](#).



❖ Web Browser

OS	Browser
Windows 95/98/Me/2000/XP	Microsoft Internet Explorer 5.5 or later Netscape Navigator 7.0 or later
Windows Server 2003	
Windows NT 4.0	
Mac OS 8.1 or later	Netscape Navigator 7.0 or later
Mac OS X 10.1 or later	Netscape Navigator 7.0 or later Safari 1.0 or later

📌 Limitation

- If the Web browser in use is older than the recommended version or **[Java Script]** and **[Cookie]** are not available, display and operation problems may occur.
- If you are using a proxy server, change the Web browser settings. Consult your network administrator about the settings.
- Sometimes after clicking **[Back]**, the previous page may not appear. In this case, click **[Refresh]** or **[Reload]**.
- This machine information cannot refresh automatically. Click **[Reload]** or **[Refresh]** on the Web browser, or click **[Refresh]** on the work area when you want to refresh.



Going to the Top Page

- 1** Access the machine by entering “`http: //(IP address of this machine)/`” in the web browser's address bar.

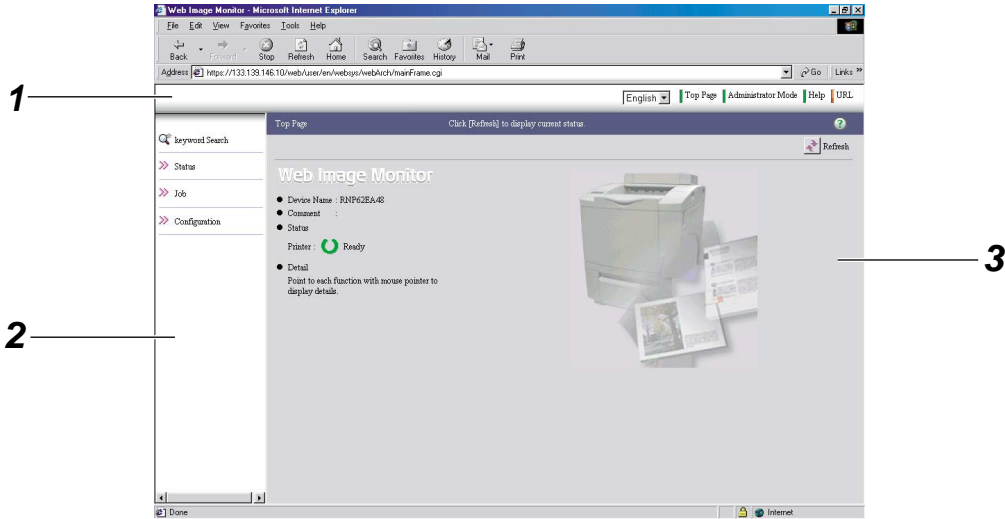
The Web Image Monitor Top Page appears.

Note

- If the machine's host name is registered on the DNS or WINS server, you can enter it. For details, see [p.307 “Using DHCP”](#).
- When this machine has the optional network data protection unit and server authentication is issued, a message appears indicating that encrypted communication is in effect. Click **[OK]** on the displayed message.

Using the frame function, Web Image Monitor is divided over the following areas:





1. Header area

You can register favorite URLs using **[URL]**. To view the Help section, click **[Help]**.

2. Menu area

These buttons are for configuring the network interface board and checking machine status.

3. Status

Displays machine status, network interface board name, and comments.



Types of Menu Configuration and Mode

Items that appear on the menu area differ between user mode and administrator mode.

The work area which appears under the selected menu displays machine status under user mode and machine setting under administrator mode.

 **Note**

- “○” indicates machine status can be displayed.
- “●” indicates machine settings can be changed.
- “—” indicates the menu is not displayed.

Menu		User Mode	Administrator Mode	
Reset Printer Job		—	●	
Reset Device		—	●	
Status	Input Tray	○	○	
	Output Tray	○	○	
	Toner	○	○	
	Function	○	○	
	System	○	○	
	Printer Language	○	○	
Job	Printer	Spool Printing *1	○	●
		Job History	○	●
		Error Log	○	●
		Locked & Sample Print *2	●	●



Menu			User Mode	Administrator Mode	
Address Book			—	●	
Configuration	Paper		—	●	
	System		—	●	
	Printer		○	●	
	User Code Management		—	●	
	Notification *3		—	●	
	E-mail *3		○	●	
	Interface		○	●	
	Network	Protocol	Protocol	○	●
			TCP/IP	○	●
			NetWare	○	●
			AppleTalk	○	●
			SMB	○	●
			SNMP	—	●
Rendezvous			○	●	
System Log		○	○		
Webpage		○	●		



Menu		User Mode	Administrator Mode
Configuration	Security	Password	●
		Access Control	●
		IPP Authentication	●
		SSL/TLS *4	●
		Certificates *4	●

- *1 The **[Spool Printing]** menu appears only when the optional hard disk drive is installed, and **[Spool Printing]** is set to **[On]** using the control panel's **[System]** Menu.
- *2 When the optional hard disk drive is attached.
- *3 When **[On]** is set for **[Notify by Email]** in the **[System]** menu of the control panel.
- *4 The **[SSL/TLS]** menu and **[Certificates]** menu appears only when the optional network data protection unit is installed.





Menu Summary

Displays a summary of each Web Image Monitor menu.



Reference

For details about displaying status and changing settings, see [p.135 “Using Help on the Web Image Monitor”](#).

Reset Printer Job

Click **[Reset Printer Job]** on the Top Page to reset current jobs and jobs on standby.

Reset Device

Click **[Reset Device]** on the Top Page to reboot when the current job is completed.

Status

Displays machine status, including remaining quantity of sheets in the paper tray and amount of remaining toner.

Job

- **Printer**
Allows display and deletion of lists, including those for spool printing jobs and error history, and Sample Print/Locked Print.



Note

- In user mode, Sample Print/Locked Print is possible, but spool printing jobs and error history cannot be deleted.

Address Book

User information can be registered, displayed, changed, and deleted.



Configuration

- Paper
Set the paper size and type for the paper tray.
- System
Make machine system settings, including machine name, spool printing ON/OFF, and SNTP server address.
- Printer
Settings can be made for certain items set using the control panel, including system setup and interface setup.
- User Code Management
Set whether to restrict usage by function.
- Notification
Specify what is to be notified by e-mail.
Settings can be made for this machine's mail address, notice destination group, notification per alert item, notice timing, etc.
- E-mail
Make required settings for the notice by e-mail function.
To send alert information using the notice by e-mail function, set the destination e-mail address, SMTP, etc.
- Interface
Make interface-related settings, including Ethernet and wireless LAN.
- Network
Make settings for each protocol, including TCP/IP and NetWare enabling/disabling, and displaying the system log.
- Webpage
Make settings Web Image Monitor Help, link destinations, and the display language.
- Security
Make security settings, including password changes for Web Image Monitor administrator mode access, access control, and issuance server authentication.
Server authentication can be realized by obtaining a certificate issued from a certification authority or issuing your own certificates. When a certificate is issued, encrypted communication becomes possible. The optional network data protection unit is necessary to use the server authentication function.





Access in Administrator Mode

- 1** On the Web Image Monitor Top Page, click **[Administrator Mode]**.

The password and user name dialog box appears.

- 2** Enter your user name and password, and then click **[OK]**.

To use the default account, enter no user name, and “password” for the password.





Using Help on the Web Image Monitor

When using Help for the first time, clicking either **[Help]** in the header area or the icon marked “?” in the work area makes the following screen appear. From there you can check Help in two different ways, as shown below:

❖ **Checking a Help Using the Internet**

You can check the latest Help updates.

❖ **Downloading and Checking Help**

You can download Help to your computer’s hard drive and view it. As the Help URL, you can specify the path to the local file to view the Help without connecting to the Internet.

Note

- By clicking **[Help]** in the header area, Help contents normally appear.
- By clicking “?”, the Help icon in the work area, Help for the items shown in the work area normally appears.

Downloading Help

- 1** In the **[OS]** list, select the operating system.
- 2** In the **[Language]** list, select the language.
- 3** Click **[Download]**.
- 4** Download Help by following the messages on screen.
- 5** Save the downloaded compressed file, and then decompress it.

Note

- To check the downloaded Help, specify the path where the file is decompressed.



Linking the Address (URL) to the [Help] Button

You can link the address (URL) of the **[Help]** button to the Help files on the computer or Web server.

- 1** Access Web Image Monitor in Administrator Mode.



Reference

p.134 "Access in Administrator Mode".

- 2** In a left area, click **[Configuration]**.
- 3** Click **[Webpage]**
- 4** In the **[Help URL]** box, enter the path to the Help files.

If you copied the Help files to "C:\HELP\EN", enter "file ://C:/HELP/". For example, if you copied the files to a Web server and the index URL is "http:// a.b.c.d/HELP/EN/index.html", enter "http://a.b.c.d/HELP/".

- 5** Click **[Apply]**.





8. Monitoring and Configuring the Printer

Changing Names and Comments

You can change printer names and make a comment on printers to easily identify the printers listed on SmartDeviceMonitor for Client.

The following utilities are used to change printer names and comments.

❖ SmartDeviceMonitor for Admin

Allows you to change names and comments when the TCP/IP protocol or IPX/SPX protocol is available. You can install SmartDeviceMonitor for Admin from the CD-ROM that comes with the printer. For more information about installing SmartDeviceMonitor for Admin, see [p.102 “Installing SmartDeviceMonitor for Admin”](#).

❖ Web Browser


Allows you to change names and comments when the TCP/IP protocol is available.

Note

- Each of the names, in a TCP/IP protocol form (printer name) and in a NetBEUI protocol form, is changed individually. Comments are, however, common to both of them.
- The factory default name consists of “RNP” and the last 3 bytes of the MAC address on the network interface board. For example, when the MAC address is 00:00:74:62:7D:D5, the factory default name is “RNP627DD5”. Comments are not configured.



SmartDeviceMonitor for Admin

- 1** Run SmartDeviceMonitor for Admin.
- 2** Click the [Group] menu, point to [Search Device], and select [TCP/IP] or [IPX/SPX]. A list of printers appears.
 -  **Note**
 - Select the protocol of the printer you want to change its configuration.
- 3** On the list, select a printer whose network interface board you want to change its configuration.
- 4** From the [Tools] menu, select [NIB Setup Tool].

The NIB Setup Tool starts up.
- 5** Select [Property Sheet], and then click [OK].

TCP/IP

- 1** Click the [General] tab, and then type the device name into the [Device Name] box and comment into the [Comment] box.
 - In the [Device Name] box, type the name of the printer within 15 characters. The factory default name consists of “RNP” and the last 3 bytes of the MAC address on the network interface board. For example, when the MAC address is 00:00:74:62:7D:D5, the factory default name is “RNP627DD5”. No name of 9 characters is permitted if the prefix is “RNP”. Also, when DHCP is selected as an IP address setting, the number of characters is limited to 13 characters.
 - In the [Comment] box, type any comment on printers within 31 characters.



NetBEUI

- 1 Click the **[General]** tab, and then type the comment into the **[Comment]** box.

In the **[Comment]** box, type any comment on printers within 31 characters.

- 2 Click the **[NetBEUI]** tab.

- 3 Type the computer name into the **[Computer Name]** box.

- In the **[Computer Name]** box, type the name that helps you to identify printers using the NetBEUI protocol. The factory default name consists of “RNP” and the last 3 bytes of the MAC address on the network interface board. For example, when the MAC address is 00:00:74:62:7D:D5, the factory default name is “RNP627DD5”. A maximum of 15 characters consisting of uppercase English letters, numeric, or symbols (except “*+./:;<=>?[\]|. and space) can be used. No name is permitted if the prefix is “RNP”. You must avoid the duplication of the same name on a network.

- 6 Click **[OK]**.

The NIB Setup Tool exits, and the setting is transmitted to the printer.

- 7 Exit **SmartDeviceMonitor for Admin**.



Web Browser

- 1** Run the Web browser.
- 2** Enter “**http: //(IP address of printer whose you want to change its settings)/**” in the address bar to access the printer whose settings you want to change.
The Web Image Monitor Top Page appears.
- 3** Click **[Administrator Mode]**.
A dialog box that prompts you to type the user name and a password appears.
- 4** Type the user name and the password, and then click **[OK]**.
Type only the password in this dialog box. The factory default password is “password”.
- 5** In the left area, click **[Configuration]**, and then click **[Network]**.
- 6** Change names and comments.

TCP/IP

- 1** Click **[TCP/IP]**.
- 2** If a name is used by Ethernet or wireless LAN, enter it in **[Host Name]** the **[Ethernet]** column.
In the **[Host Name]** box, type the name of the printer within 15 characters. The factory default name consists of “RNP” and the last 3 bytes of the MAC address on the network interface board. For example, when the MAC address is 00:00:74:62:7D:D5, the factory default name is “RNP627DD5”. No name of 9 characters is permitted if the prefix is “RNP”. Also, when DHCP is selected as an IP address setting, the number of characters is limited to within 13 characters.



SMB

1 Click **[SMB]**.

2 Type the name into the **[Computer Name]** box and comment into the **[Comment]** box.

- In the **[Computer Name]** box, type the name that helps you to identify printers using the SMB protocol. The factory default name consists of “RNP” and the last 3 bytes of the MAC address on the network interface board. For example, when the MAC address is 00:00:74:62:7D:D5, the factory default name is “RNP627DD5”. A maximum of 15 characters consisting of uppercase English letters, numeric, or symbols (except “*+,:;<=>?[\|]. and space) can be used. No name is permitted if the prefix is “RNP”. You must avoid the duplication of the same name on a network.

7 Click **[Apply]**.

The setting is transmitted to the printer.

8 Exit the Web browser.



Displaying the Status of Printer

You can view the status of printers using SmartDeviceMonitor for Admin, SmartDeviceMonitor for Client, or Web browser.

SmartDeviceMonitor for Admin

1 Run SmartDeviceMonitor for Admin.

2 Click the [Group] menu, point to [Search Device], and then select [TCP/IP] or [IPX/SPX].

The status of printers is indicated with an icon in the list.

 **Note**


For more information about the status icons, see SmartDeviceMonitor for Admin Help.

3 Getting further information, click the desired printer to select from the list, and then click [Open] on the [Device] menu.

The status of the printer appears on the dialog box.

 **Note**

For more information about each item on the dialog box, see Help.





SmartDeviceMonitor for Client

Viewing the status of printers using SmartDeviceMonitor for Client, you must, in advance, configure SmartDeviceMonitor for Client so it monitors the printer whose status you want to view.

Monitoring Printers

1 Run SmartDeviceMonitor for Client.

The SmartDeviceMonitor for Client icon appears at the right end of the taskbar.

2 Right-click the SmartDeviceMonitor for Client icon, and check if the desired printer is configured on the pop-up menu that appears.

If it is configured, see [p.144 “Displaying the Status of Printers”](#).

3 If the desired printer is not configured, click [Options] on the pop-up menu.

The [SmartDeviceMonitor 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 SmartDeviceMonitor for Client icon on the task tray.
- For more information about the status icons, see Help.

5 Click [OK].

The dialog box closes and the configured printer is monitored.





Displaying the Status of Printers

- 1** Run SmartDeviceMonitor for Client.
- 2** Getting further information on the status, right-click the SmartDeviceMonitor for Client icon, and then click the desired printer.

The status of the printer appears on the dialog box.

 **Note**

- For more information about each item on the dialog box, see Help.

Web Browser


- 1** Run the Web browser.
- 2** Enter “http://(IP address of the printer whose you want to display its status)” in the address bar to access the printer whose status you want to display.

The Web Image Monitor Top Page appears.

- 3** In the left area, click [Status].
- 4** Click the menu item you want to check.

The printer's status is displayed.

 **Note**

- For more information about each item, see Web Image Monitor Help.
- 



Machine Status Notification by E-mail

When alerts, such as paper tray empty or paper jam, occur, machine status notification can be generated using the notify by e-mail function.

A status notification e-mail is sent to a previously set e-mail address.

Notification timing and content, etc. can also be set.

1 Set **[Notify by Email]** on the **[System]** menu to **[On]** using control panel (it is set to **[On]** when shipped from the factory).

 **Reference**

For more information, see [p.186 "System Menu"](#)

2 Start web browser, and then access this machine by inputting “**http: //(IP address of this machine)/**” in the address bar of the web browser.

The top page of the Web Image Monitor appears.

3 At the top page of Web Image Monitor, click **[Administrator Mode]**.

The dialog box for entering the password and user name appears.

4 Enter your user name and password, and then click **[OK]**.

To use the factory default account, enter no user name and enter “password” for the password.

5 In a left frame, click **[Configuration]**.

6 Click **[E-mail]**.

7 Make settings for the following:

The dialog box for making e-mail notification settings appears.

- Key Operator's E-mail Address
- Items in the SMTP column
- Items in the POP before SMTP column



8 Click **[Apply]**.

9 In a left frame, click **[Notification]**.

The dialog box for making notification settings appears.

10 Make settings for the following:

- Device E-mail Address
- Notification Message
- Items in the Groups to Notify column
- Items in the Select Groups/Items to Notify column

To make detailed settings for items, click **[Edit]** next to **[Detailed Settings of Each Item]**, make settings in the dialog box that appears, and then click **[OK]**.

11 Click **[Apply]**.

12 Exit web browser.





9. Making Printer Settings with the Control Panel

Menu Chart

This section describes how to change the default settings of the printer and provides information about the parameters included in each menu.

Note

- It takes a while for the display to change after pressing the key. Press and release the key immediately, make sure that the display changes, and then proceed to the next step.

Category	Function Menu
Sample Print	Select Action / Error File(s) *1
Locked Print	Select Action / Error File(s) *1
Paper Input ⇒ p.155	Tray 1 Ppr.Size
	Paper Type
	Tray Locking
	Tray Priority
List/Test Print ⇒ p.162	Config.P/Er.Log
	Config. Page
	Error Log
	Menu List
	Color Demo Page
	PCL Config.Page
	PS Config. Page



Category	Function Menu
List/Test Print ⇒ p.162	PDF Config.Page
	Hex Dump
	Operations Test
Maintenance ⇒ p.171	Color Calibrate
	Registration
	PlainPaper Type
	ThickPaper Type
	A5/HLT Size
	Maint. Reset
	HD Format *1
	4C.Graphic Mode
	WL.LAN Signal *2
	WL.LAN Defaults *2
	Key Repeat
Menu Protect *3	



Category	Function Menu
System ⇒ p.186	Prt. Err Report
	Auto Continue
	Memory Overflow
	Copies
	Printer Lang.
	Sub Paper Size
	Page Size
	Def.Print Lang.
	Duplex *4
	Energy Saver 1
	Energy Saver 2
	Unit of Measure
	Spool Printing *1
	Letterhead Mode
	RAM Disk
Notify by Email	
Host Interface ⇒ p.197	I/O Buffer
	I/O Timeout
	Network Setup
	IEEE 802.11b *5
	USB Setting *3



Category	Function Menu
PCL Menu ⇒ p.208	Orientation
	Form Lines
	Font Source
	Font Number
	Point Size
	Font Pitch
	Symbol Set
	Courier Font
	Ext. A4 Width
	Append CR to LF
	Resolution
PS Menu ⇒ p.214	Data Format
	Resolution
	Color Setting
	Color Profile
PDF Menu ⇒ p.218	PDF: Change PW
	PDF Group PW
	Resolution
	Color Setting
	Color Profile
Language⇒ p.225	



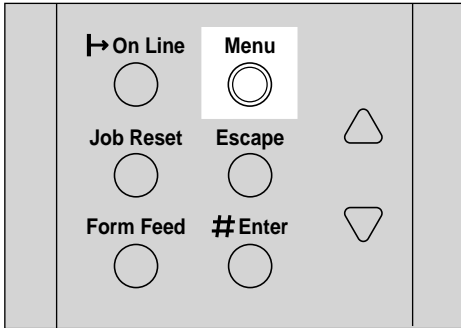
- *1 The “Sample Print” menu, the “Locked Print” menu, the “HD Format” menu, and the “Spool Printing” menu appear only when the optional hard disk drive is installed.
- *2 The “WLAN Signal” and the “WLAN Defaults” menu appears only when “IEEE 802.11b” is selected in “LAN Type” in the Host Interface menu.
- *3 While the printer is **On Line**, press the **【# Enter】** key, and then press the **【Escape】** key, finally press the **【Menu】** key. You can access the “Menu Protect”, “USB Setting” on the panel display.
- *4 The “Duplex” menu appears only when the optional duplex unit is installed.
- *5 The “IEEE 802.11b” menu appears only when the optional 802.11b interface unit is installed.





Accessing the Main Menu

Press the **[Menu]** key, and “Menu” appears on the panel display.



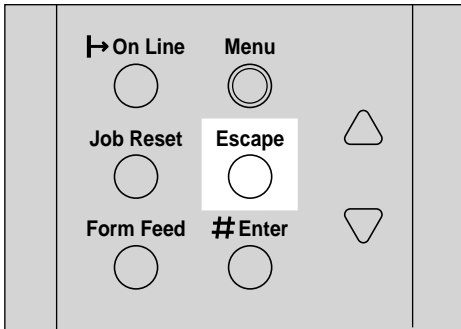
This menu shows the following 11 items which can be displayed one by one by pressing the **[▲]** or **[▼]** key.

- Sample Print
- Locked Print
- Paper Input
- List/Test Print
- Maintenance
- System
- Host Interface
- PCL Menu
- PS Menu
- PDF Menu
- Language



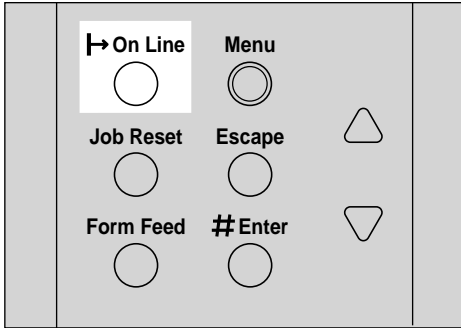
 **Note**

- If the optional hard disk drive is not installed, the “Sample Print” menu and the “Locked Print” menu cannot be displayed on the control panel.
- 【▼】** key: Press to go to the next page.
- 【▲】** key: Press to go back to the previous page.
- After making the printer settings, be sure to return to the previous menu by pressing the **【Escape】** key.





- ❑ After making the printer settings, press the **On Line** key to return to the “Ready” condition.



- ❑ The revised settings are not canceled even if the power switch is turned off.





Paper Input Menu

There are 4 menu items in the “Paper Input” menu.

- Tray 1 Ppr.Size
- Paper Type
- Tray Locking
- Tray Priority





Reference

For more information about loading paper in the tray, see *Maintenance Guide*.







Paper Input Parameters

Menu	Description
Tray 1 Ppr.Size	<p>The paper size for the tray 1.</p> <p>For more information about paper sizes that can be set in the bypass tray, see “Paper and Other Media Supported by This Printer”, <i>Maintenance Guide</i>.</p> <ul style="list-style-type: none">• Auto• Custom Size <p> Note</p> <p><input type="checkbox"/> Default: <i>Auto</i></p>
Paper Type	<p>If you use different kinds of paper, set the paper type for Tray 1, Tray 2.</p> <p>For more information about paper sizes that can be set in each tray, see <i>Maintenance Guide</i>.</p> <p>❖ Tray 1 Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Pre-printed, Thick Paper, Labels, Cardstock, Transparency, Glossy</p> <p>❖ Tray 2 Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Pre-printed, Labels</p> <p> Note</p> <p><input type="checkbox"/> Default : <i>Plain Paper</i></p> <p><input type="checkbox"/> Only the installed trays appear on the panel display.</p>



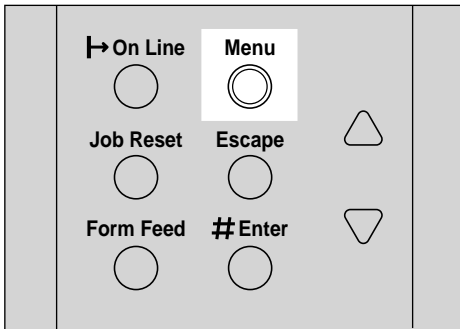
Menu	Description
Tray Locking	<p>If you use different kinds of paper, you can lock a tray to prevent printing on wrong paper such as letterhead or colored paper. When “Auto Select” is selected in the Paper Source selections from the printer driver, the locked tray will not be used. You can select each tray set to on or off.</p> <p>Tray 1, Tray 2</p> <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default : <i>Off</i><input type="checkbox"/> When using paper of an irregular size, if [Tray Locking] is specified as [On], the size specified by the operation panel is given priority, while if it is specified as [Off], the size specified by the printer driver is given priority.<input type="checkbox"/> Only the installed trays appear on the panel display.<input type="checkbox"/> You can lock multiple trays.<input type="checkbox"/> If you want to use the locked tray, you must select the tray from the printer driver and the control panel each.<input type="checkbox"/> When a locked tray is selected from the printer driver, the printer does not search for another tray.
Tray Priority	<p>You can set which tray should be checked first when “Auto Tray Select” is selected in the Paper Source selections from the printer driver. When printing from DOS, the tray selected here is used when no tray is selected for a print job.</p> <p>Tray 1, Tray 2</p> <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default : <i>Tray 1</i><input type="checkbox"/> Only the installed trays appear on the panel display.<input type="checkbox"/> It is recommended that you load paper of the size and direction you most frequently use in the tray selected with “Tray Priority”.



Changing the Paper Input Menu

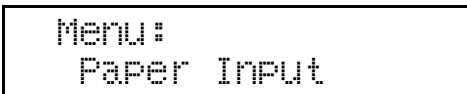
Tray Locking

1 Press the **[Menu]** key.

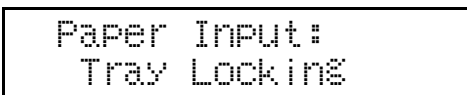


“Menu” appears on the panel display.

2 Press the **[▲]** or **[▼]** key to display “Paper Input”, and then press the **[# Enter]** key.



3 Press the **[▲]** or **[▼]** key to display “Tray Locking”, and then press the **[# Enter]** key.



- 4** Press the **[▲]** or **[▼]** key to display the tray to change the tray locking off, and then press the **[# Enter]** key.

```
Tray Locking:
Tray 1
```

- 5** Press the **[▲]** or **[▼]** key to display “Off”, and then press the **[# Enter]** key.

```
Tray 1:
*Off
```

Wait for two seconds.

“Paper Input” appears on the panel display.

- 6** Press the **[On Line]** key.

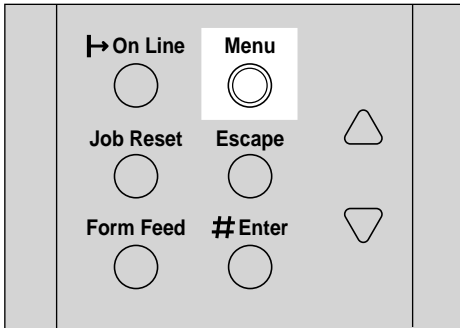
“Ready” appears on the panel display.

```
Ready
```



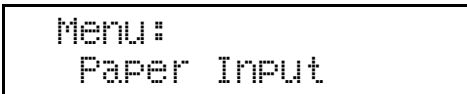

Tray Priority

1 Press the **[Menu]** key.

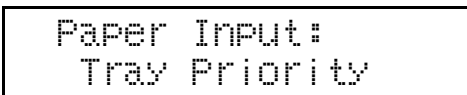


“Menu” appears on the panel display.

2 Press the **[▲]** or **[▼]** key to display “Paper Input”, and then press the **[# Enter]** key.



3 Press the **[▲]** or **[▼]** key to display “Tray Priority”, and then press the **[# Enter]** key.





- 4** Press the **[▲]** or **[▼]** key to select the tray type you want to use.
- 5** Press the **[# Enter]** key. Wait for two seconds.
“Menu” appears on the panel display.
- 6** Press the **[On Line]** key.
“Ready” appears on the panel display.



Ready



List/Test Print Menu

There are 10 menu items in the “List/Test Print” menu.

- Config.P/Er.Log
- Config. Page
- Error Log
- Menu List
- Color Demo Page
- PCL Config.Page
- PS Config. Page
- PDF Config.Page
- Hex Dump
- Operations Test





List/Test Print Parameters

Menu	Description
Config.P/Er.Log	You can print the configuration page and error log.
Config. Page	You can print the current configuration of the printer. See p.166 “ Printing a Configuration Page ”.
Error Log	You can print an error report.
Menu List	You can print the Menu List which shows the function menus of this printer.
Color Demo Page	You can print the Color Demo Page.
PCL Config.Page	You can print the current configuration of the PCL.
PS Config. Page	You can print a list of the installed PS Fonts.
PDF Config.Page	You can print the Adobe® PDF Reference, Memory/HDD status, Printing Configuration, and Resident Fonts.
Hex Dump	You can print the data sent by the computer using the Hex Dump mode.
Operations Test	You can confirm paper feeding, discharge and printing operation, including options. Options—related settings are only displayed for those options actually installed. When a specified function cannot be performed, a message appears and printing is interrupted. When the function operates properly, a border with black lines is printed out.



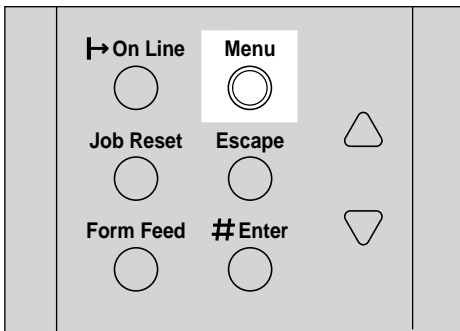
Printing the Configuration Page and Error Log

The configuration page and error log can be printed out together.

Important

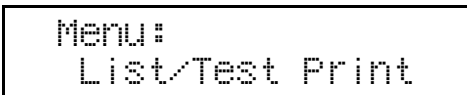
- The configuration page and error log print out on A4 or Letter (8 1/2 x 11) size paper, so place same A4 or Letter (8 1/2 x 11) size paper in the paper tray.

1 Press **[Menu]** key.



“Menu” appears on the panel display.

2 Press **[▼]** or **[▲]** key to display the “List/Test Print” menu, and then press **[# Enter]** key.



The following message appears on the panel display.



- 3** Press [▼] or [▲] key to display the “Config.P/Er.Log” menu, and then press [# Enter] key.



```
List/Test Print:
Config.P/Er.Log
```

The configuration page and error log print out. The test print menu screen returns on completion of printing.

 **Important**

- If you cannot print the configuration page and Error Log, check for an error message appears on the panel display. For more information about error messages, see “Troubleshooting”, *Maintenance Guide*.

- 4** Press [On Line] key.

“Ready” appears on the panel display.



```
Ready
```



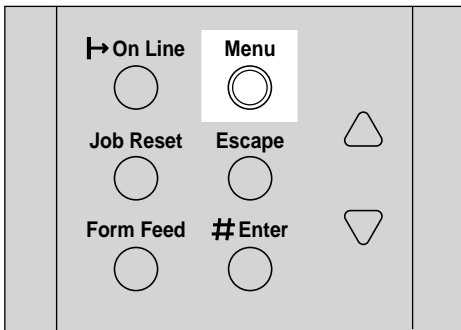
Printing a Configuration Page

The following example explains the procedure for printing out the configuration page. The procedure for printing out other lists is basically the same.

Important

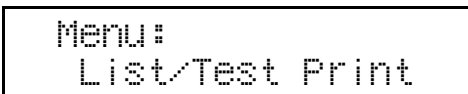
- The configuration page prints out on A4 or Letter (8 1/2 x 11) size paper, so place same A4 or Letter (8 1/2 x 11) size paper in the paper tray.

1 Press the **[Menu]** key.



“Menu” appears on the panel display.

2 Press the **[▼]** or **[▲]** key to display the “List/Test Print” menu. and then press **[# Enter]** key.



The following message appears on the panel display.



3 Press the [▼] or [▲] key to display the “Config. Page” menu. and then press [# Enter] key

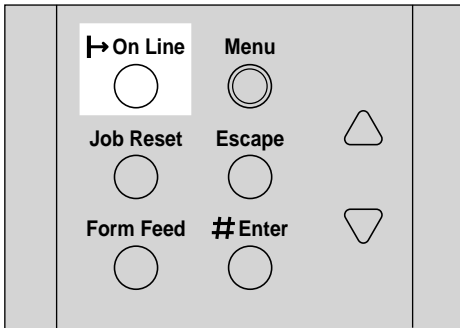
```
List/Test Print:
  Config. Page
```

The configuration page prints out. The test print menu screen returns on completion of printing.

 **Important**

- If you cannot print the configuration page, check for an error message appears on the panel display. For more information about error messages, see “Troubleshooting”, *Maintenance Guide*.

4 Press the [On Line] key.



“Ready” appears on the panel display.

```
Ready
```




Interpreting the Configuration Page

System Reference

❖ **Printer ID**

Shows the serial number assigned to the board by its manufacturer.

❖ **Firmware Version**

- **Firmware**
Shows the version number of the printer controller firmware.
- **Engine**
Shows the version number of the printer engine firmware.
- **NCS**
Shows the version number of the network interface board.

❖ **Pages Printed**

Shows the total number of pages printed by the printer to date.

❖ **Total Memory**

Shows the total amount of memory (SDRAM) installed on the printer.

❖ **Controller Option**


The item(s) appears when the controller option(s) is installed.

❖ **Printer Language**

Shows the version number of the printer language.

❖ **Options**

Shows the options that you installed.





Paper Input

Shows the settings made under the “Paper Input” menu.



Reference

For more information, see [p.155 “Paper Input Menu”](#).

Maintenance

Shows the settings made under the “Maintenance” menu.



Reference

For more information, see [p.171 “Maintenance Menu”](#).

System

Shows the settings made under the “System” menu.



Reference

For more information, see [p.186 “System Menu”](#).

Host Interface

Shows the settings made under the “Host Interface” menu.

When DHCP is active on the network, the actual IP Address, Subnet Mask and Gateway Address appear in parentheses on the configuration page.



Reference

For more information, see [p.197 “Host Interface Menu”](#).





PCL Menu

Shows the settings made under the “PCL Menu”.



Reference

For more information, see [p.208 “PCL Menu”](#).

PS Menu

Shows the settings made under the “PS Menu”.



Reference

For more information, see [p.214 “PS Menu”](#).

PDF Menu

Shows the settings made under the “PDF Menu”.



Reference

For more information, see [p.218 “PDF Menu”](#).

Interface Information

Shows the interface information.







Maintenance Menu

There are 12 menu items in the “Maintenance” menu.




- Color Calibrate
- Registration
- PlainPaper Type
- ThickPaper Type
- A5/HLT Size
- Maint. Reset
- HD Format
- 4C.Graphic Mode
- WL.LAN Signal
- WL.LAN Defaults
- Key Repeat
- Menu Protect






Maintenance Menu Parameters

Menu	Description
Color Calibrate	<p>Corrects the gradation of bright area (highlight parts) and medium areas (middle parts) when printing.</p> <ul style="list-style-type: none">❖ Start Calibr. 1 You can print the gradation correction sheet 1.❖ Start Calibr. 2 You can print the gradation correction sheet 2.❖ Reset You can reset the gradation correction value to the initial value <p> Reference For more information, see “Correcting the Color Gradation”, <i>Maintenance Guide</i>.</p>
Registration	<ul style="list-style-type: none">❖ Prt. Test Sheet You can print the registration test sheet.❖ Adjustment You can select the start position for printing on page.<ul style="list-style-type: none">• Horiz.: Tray 2• Horiz.:Dup.Back -3.5 to +3.5 (by 0.5 mm) <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> The registration values are not default.<input type="checkbox"/> Only the installed trays appear on the panel display.





Menu	Description
PlainPaper Type	<p>You can select the type of plain paper you wish to use as a default.</p> <p>❖ Tray 1, Tray 2</p> <ul style="list-style-type: none">• 60-74g/16-20lb• 74-90g/20-24lb• 90-105g/24-28lb <p> Note</p> <p><input type="checkbox"/> Default: <i>74-90g/20-24lb</i></p>
ThickPaper Type	<p>You can select the type of thick paper you wish to use as a default.</p> <p> Limitation</p> <p><input type="checkbox"/> Tray 1 can be used for thick paper printing. Thick paper cannot be used if it is placed in the optional paper feed unit tray (tray 2).</p> <ul style="list-style-type: none">• 105-163g28-43lb• 163-210g43-55lb• Postcard(Japan)• Thin Envelopes• Thick Envelopes <p> Note</p> <p><input type="checkbox"/> Default: <i>105-163g28-43lb</i></p>




Menu	Description
A5/HLT Size	<p>[A5/HLT Size] can be selected when A5 vertical or HLT (5¹/₂ x 8¹/₂) vertical paper is placed in tray 1.</p> <p> Limitation</p> <ul style="list-style-type: none"><input type="checkbox"/> A5 vertical or HLT (5¹/₂ x 8¹/₂) vertical paper cannot be used if it is placed in the optional paper feed unit tray (tray 2).• Tray 1 HLT• Tray 1 A5 <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default:<ul style="list-style-type: none">• Metric: <i>Tray 1 A5</i>• Inch: <i>Tray 1 HLT</i>
Maint. Reset	<p>Maintenance Reset allows the user to reset each internal unit counters such as the PCU and fusing unit. These counters can be reset at anytime, but are necessary at the time of unit reinstallation.</p> <p>For more information, see “Replacing Consumables and Maintenance Kit”, <i>Maintenance Guide</i>.</p>
HD Format	<p>You can format the hard disk drive.</p> <p>Available when the optional hard disk drive is installed.</p> <p> Reference</p> <p>For more information about formatting the hard disk drive, see “Attaching the Hard Disk Drive Type 2600”, <i>Option Setup Guide</i>.</p>



Menu	Description
4C.Graphic Mode	<p>This setting adjusts how much each color of toner overlaps when printing. If characters or lines are blurred, selecting [Text Priority] may make them clearer. Select [Photo Priority] for normal use.</p> <p> Note <input type="checkbox"/> Default: <i>Photo Priority</i></p>
WL.LAN Signal	<p>You can check the signal strength when using the wireless LAN.</p> <p> Reference For more information about displaying the signal strength. See p.181 “Displaying the Signal Strength”.</p>
WL.LAN Defaults	<p>You can reset the wireless LAN settings to the default.</p>
Key Repeat	<p>The default setting [On] enables the user to scroll through menu items and settings by holding the key down continuously, the [Off] setting requires the user to press the key for each Cursor/Scroll movement.</p>





Menu	Description
Menu Protect ^{*1}	<p>This procedure lets you protect menu settings against accidental changes. It makes it impossible to change the menu settings you make with the normal procedure unless you perform the required key operation. In a network environment, protecting settings restricts changes to menu settings to network administrators.</p> <ul style="list-style-type: none">• Level 1• Level 2• Off <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> While the printer is On Line, press the 【# Enter】 key, and then press the 【Escape】 key, finally press the 【Menu】 key. You can access the “Menu Protect” menu on the panel display.<input type="checkbox"/> You can protect the “Maintenance”, “System”, “Host Interface” and “Language” menu on Level 1.<input type="checkbox"/> You can protect the “Paper Input”, “Maintenance”, “System”, “Host Interface” and “Language” menu on Level 2.

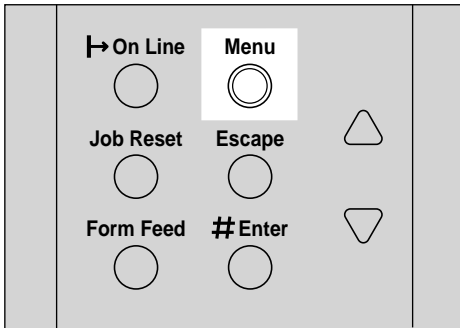
^{*1} While the printer is On Line, press the **【# Enter】** key, and then press the **【Escape】** key. Finally, press the **【Menu】** key. You can access the “Menu Protect” menu on the panel display.



Changing the Maintenance Menu

Protecting the menus

- 1** Check if the On Line indicator is on. If not, press the **[On Line]** key to enter the “Ready” condition.
- 2** Press the **[# Enter]** key, then the **[Escape]** key, and then the **[Menu]** key.



“Menu” appears on the panel display.

- 3** Press the **[▲]** or **[▼]** key to display the “Maintenance” menu, and then press the **[# Enter]** key. The following message appears on the panel display.

```
Maintenance:
Color Calibrate
```



- 4** Press the **[▲]** or **[▼]** key to display “Menu Protect”.

```
Maintenance:  
Menu Protect
```

- 5** Press the **[# Enter]** key.

The following message appears on the panel display.

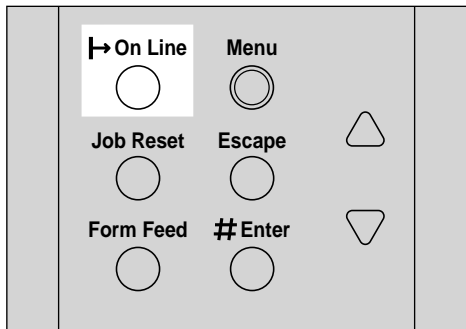
```
Menu Protect:  
*Off
```

- 6** Press the **[▲]** or **[▼]** key to select the levels desired, and then press the **[# Enter]** key. Wait for two seconds.

“Maintenance” appears on the panel display.



7 Press the **[On Line]** key.



“Ready” appears on the panel display.





Removing Protect

- 1** Check if the On Line indicator is on. If not, press the **[On Line]** key to enter the “Ready” condition.
- 2** Press the **[# Enter]** key, then the **[Escape]** key, and then the **[Menu]** key.
“Menu” appears on the panel display.
- 3** Press the **[▲]** or **[▼]** key to display “Maintenance” menu, and then press the **[# Enter]** key.
The following message appears on the panel display.

```
Maintenance:
Color Calibrate
```

- 4** Press the **[▲]** or **[▼]** key to display “Menu Protect”, and then press the **[# Enter]** key.
- 5** Press the **[▲]** or **[▼]** key to display “Off”, and then press the **[# Enter]** key. Wait for two seconds.
“Maintenance” appears on the panel display.
- 6** Press the **[On Line]** key.
“Ready” appears on the panel display.

```
Ready
```

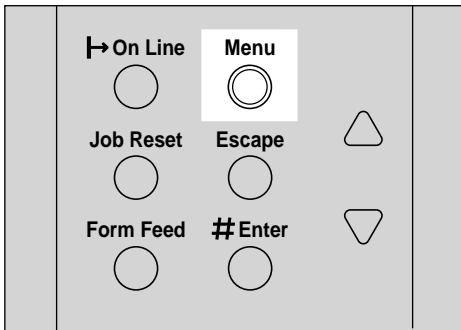




Displaying the Signal Strength

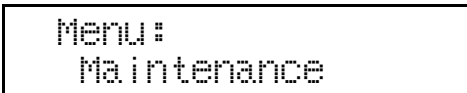
If you need to check the IEEE 802.11b (Wireless LAN) signal, select “WL.LAN Signal” in the “Maintenance” menu.

1 Press the **[Menu]** key.



“Menu” appears on the panel display.

2 Press the **[▼]** or **[▲]** key to display the “Maintenance” menu, and then press **[# Enter]** key.



The following message appears on the panel display.





3 Press the [▼] or [▲] key to display “WL.LAN Signal”, and then press [# Enter] key

```
Maintenance:  
WL.LAN Signal
```

One of the following messages appears on the panel display.

```
WL.LAN Signal  
Good          100%
```

```
WL.LAN Signal  
Fair          80%
```

```
WL.LAN Signal  
Poor          60%
```

```
WL.LAN Signal  
Unavailable   30%
```



 **Note**

- If “WL.LAN Signal” is not displayed, “IEEE 802.11b” has not been selected for “LAN Type” in “Network Setup” of the Host Interface menu. Select “IEEE 802.11b” for “LAN Type”, and then check the “WL.LAN Signal” in the Maintenance menu again.
- Signal status can be measured in the **[Infrastructure]** mode of the wireless LAN's “Comm. Mode”. If the “Comm. Mode” is set to **[Ad hoc]** or **[802.11 Ad hoc]**, signal status can not be measured. To measure signal status, select **[Infrastructure]** as the **[Comm. Mode]** from **[IEEE 802.11b]** on the **[Host Interface]** menu.
- Every time you press the **[# Enter]** key, the signal is updated.
- The signal is indicated as “Good” if the signal strength is 86-100%, “Fair” if the strength is 61-85%, “Poor” if the strength is 31-60%, and “Unavailable” if the strength is 0-30%. If the signal is unstable or unavailable, remove obstacles or move the printer to a place where the signal can be received.
- Using wireless devices or microwave sources near the printer might affect the signal.

4 Press the **[Escape]** key.

5 Press the **[On Line]** key.

“Ready” appears on the panel display.



Ready



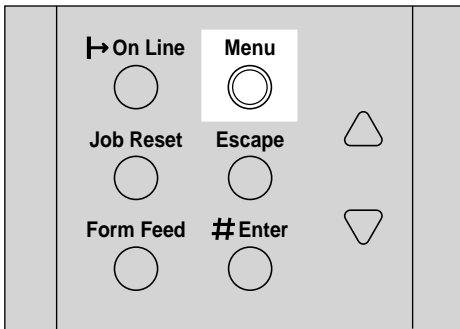
Resetting the IEEE 802.11b (Wireless LAN) Settings

If you need to reset the wireless LAN setting, select “WL.LAN Defaults” in the Maintenance menu.

 **Note**

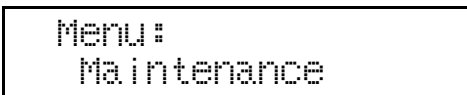
- The five items that can be reset in “IEEE 802.11b” of the Host Interface menu are “Comm. Mode”, “Channel”, “Trans. Speed”, “WEP Setting”, and “SSID”.

1 Press the **[Menu]** key.



“Menu” appears on the panel display.

2 Press the **[▼]** or **[▲]** key to display the “Maintenance” menu, and then press **[# Enter]** key.



The following message appears on the panel display.



- 3** Press the [▼] or [▲] key to display “WL.LAN Defaults”, and then press [# Enter] key.

```
Maintenance:
WL.LAN Defaults
```

The following message appears on the panel display.

```
WL.LAN Defaults:
Reset->Defaults?
```

- 4** Press the [# Enter] key.

```
Defaults reset
Press # to exit
```

The wireless LAN setting value is reset.

After about three seconds, “Ready” appears on the panel display.

```
Ready
```



System Menu



There are 16 menu items in the “System” menu.

- Prt. Err Report
- Auto Continue
- Memory Overflow
- Copies
- Printer Lang.
- Sub Paper Size
- Page Size
- Def.Print Lang.
- Duplex
- Energy Saver 1
- Energy Saver 2
- Unit of Measure
- Spool Printing
- Letterhead Mode
- RAM Disk
- Notify by Email










System Parameters

Menu	Description
Prt. Err Report	<p>You can select whether or not to have an error report printed when a printer error or memory error occurs.</p> <ul style="list-style-type: none">• Off• On <p> Note</p> <p><input type="checkbox"/> Default: <i>Off</i></p>
Auto Continue	<p>You can set whether Auto Continue is enabled. When it is on, printing continues after a system error occurs.</p> <ul style="list-style-type: none">• Off• Immediate• 1 minute• 5 minutes• 10 minutes• 15 minutes <p> Note</p> <p><input type="checkbox"/> Default: <i>Off</i></p> <p><input type="checkbox"/> When it is on, and certain types of error occur, the current job might be canceled, and the machine automatically resumes the next job.</p>





Menu	Description
Memory Overflow	<p>You can select whether the memory overflow error report should be printed.</p> <ul style="list-style-type: none">• Do not Print• Error Info. <p> Note</p> <p><input type="checkbox"/> Default: <i>Do not Print</i></p>
Copies	<p>You can specify how many pages to print.</p> <p>This setting is disabled if the number of pages to print has been specified with the printer driver or a command.</p> <ul style="list-style-type: none">• 1-999
Printer Lang.	<p>You can specify the printer language.</p> <ul style="list-style-type: none">• Auto Detect• PCL• PS• PDF• XPDL_0• XPDL_1 <p> Note</p> <p><input type="checkbox"/> Default: <i>Auto Detect</i></p>





Menu	Description
Sub Paper Size	<p>You can enable the Sub Paper Size feature. When you select “Auto”, the printer substitutes the paper of a certain size which is to be an alternative if the paper currently specified is not loaded. When you select “Off”, the printer uses the paper in the current specified paper input tray regardless of its size.</p> <ul style="list-style-type: none">• Off• Auto <p> Note</p> <p><input type="checkbox"/> Default: <i>Off</i></p>
Page Size	<p>You can specify the default paper size.</p> <p>8 1/2 x 14, 8 1/2 x 11, 7 1/4 x 10 1/2, 5 1/2 x A4, A5, Custom Size</p> <p> Note</p> <p><input type="checkbox"/> Default:</p> <ul style="list-style-type: none">• Metric version: <i>A4</i>• Inch version: <i>8 1/2 x 11</i> <p><input type="checkbox"/> The value set for page size is applied when the paper size is not specified in the print data.</p>
Def.Print Lang.	<p>You can specify the default printer language.</p> <ul style="list-style-type: none">• PCL• PS• PDF• XPDL_0• XPDL_1 <p> Note</p> <p><input type="checkbox"/> Default: <i>PCL</i></p>






Menu	Description
Duplex	<p>You can select whether you want to print on both sides of each page.</p> <ul style="list-style-type: none">• Off• Short Edge Bind• Long Edge Bind <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: <i>Off</i><input type="checkbox"/> This menu appears only when the optional duplex unit is installed.
Energy Saver 1	<p>You can set On/Off for the Energy Save Mode level 1. This is Preheat mode.</p> <ul style="list-style-type: none">• On• Off <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: <i>Off</i><input type="checkbox"/> When the printer switches to Energy Saver mode, the Power indicator turns off, while the On Line indicator stays on.






Menu	Description
Energy Saver 2	<p>❖ Switching Setting</p> <p>You can select whether to switch to Energy Saver mode. Select [On] to Energy Saver mode, or [Off] if you do not want to switch to Energy Saver mode.</p> <ul style="list-style-type: none">• On• Off <p> Note</p> <p><input type="checkbox"/> Default: <i>On</i></p> <p>❖ Switching Time</p> <p>You can select how many minutes the printer waits before switching to Energy Saver mode. Energy Saver mode reduces electric power consumption.</p> <ul style="list-style-type: none">• 5 minutes• 15 minutes• 30 minutes• 45 minutes• 60 minutes <p> Note</p> <p><input type="checkbox"/> Default: <i>30 minutes</i></p> <p><input type="checkbox"/> When the printer switches to Energy Saver mode, the Power indicator turns off, while the On Line indicator stays on and “Energy Save Mode” appears on the panel display.</p>





Menu	Description
Unit of Measure	<p>You can select “mm” or “inch” for the custom paper size.</p> <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default:<ul style="list-style-type: none">• Metric version: <i>mm</i>• Inch version: <i>inch</i>
Spool Printing	<p>You can select whether all of the print data is spooled to the hard disk drive before printing.</p> <ul style="list-style-type: none">• Off• On <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: <i>Off</i><input type="checkbox"/> Spooling stores the print job sent by a computer temporarily in the printer, transfers the print job, and then prints it.<input type="checkbox"/> This menu appears Only when the optional hard disk drive is installed.
Letterhead Mode	<p>You can select the letterhead printing mode.</p> <ul style="list-style-type: none">• Off• Auto Detect• On (Always) <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: <i>Off</i>





Menu	Description
RAM Disk	<p>If the optional hard disk drive is not installed, when executing PDF Direct Print set a value of 2 MB or higher.</p> <p>This menu appears only when the optional hard disk drive is not installed.</p> <ul style="list-style-type: none">• 0 MB• 2 MB• 4 MB• 8 MB• 16 MB <p> Note</p> <p><input type="checkbox"/> Default: 4 MB</p> <p> Important</p> <p><input type="checkbox"/> When SDRAM is not increased and RAM Disk set to 16 MB, depending on the print job, printing may not be possible and duplex printing canceled. If this happens, increase SDRAM, or set RAM Disk to 8 MB or less.</p> <p> Reference</p> <p>For more information about the optional SDRAM module, see <i>Option Setup Guide</i>.</p>



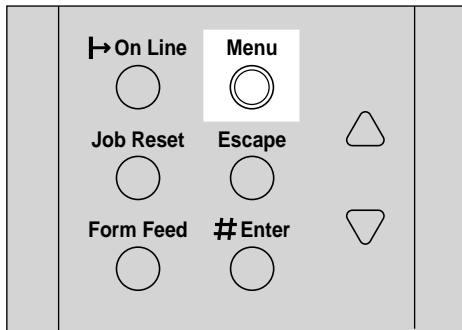
Menu	Description
Notify by Email	<p>You can have error details sent to a preset e-mail address when an error occurs in the printer.</p> <ul style="list-style-type: none">• Off• On <p> Important</p> <p><input type="checkbox"/> After changing the setting, turn off the power of the main unit briefly, and then back on again.</p> <p> Note</p> <p><input type="checkbox"/> Default: <i>On</i></p>



Changing the System Menu

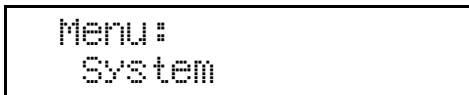
The following example describes how to change the settings for “E. Saver2 Timer”.

- 1** Press **[Menu]** key.



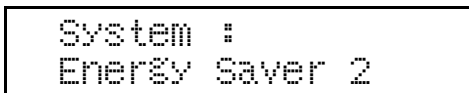
“Menu” appears on the panel display.

- 2** Press **[▲]** or **[▼]** key to display “System”, and then press **[# Enter]** key.



The following message appears on the panel display.

- 3** Press **[▲]** or **[▼]** key to display “Energy Saver 2”, and then press **[# Enter]** key.



The following message appears on the panel display.

- 4** Press **[▲]** or **[▼]** key to display “E. Saver2 Timer”, and then press **[# Enter]** key.

```
Energy Saver 2:  
E. Saver2 Timer
```

The following message appears on the panel display.

- 5** Press **[▲]** or **[▼]** key to select how many minutes the printer waits before switching to Energy Saver mode.

The following message appears on the panel display.

```
E. Saver2 Timer  
*30 minutes
```

- 6** Press **[# Enter]** key. Wait for two seconds.

“Menu” appears on the panel display.

- 7** Press **[On Line]** key.

“Ready” appears on the panel display.

```
Ready
```



Host Interface Menu

There are 5 menu items in the “Host Interface” menu.

- I/O Buffer
- I/O Timeout
- Network Setup
- IEEE 802.11b
- USB Setting





Note







- For more information about the “Network Setup”, see [p.16 “Configuring the Printer for the Network”](#)



Host Interface Parameters

Menu	Description
I/O Buffer	<p>You can set the size of the I/O Buffer. Normally it is not necessary to change this setting.</p> <p>128 KB, 256 KB, 512 KB</p> <p> Note</p> <p><input type="checkbox"/> Default: <i>128 KB</i></p>
I/O Timeout	<p>You can set how many seconds the printer should wait before ending a print job. If data from another port often appears in the middle of the print job, you should increase the timeout value.</p> <ul style="list-style-type: none">• 10 seconds• 15 seconds• 20 seconds• 25 seconds• 60 seconds <p> Note</p> <p><input type="checkbox"/> Default: <i>15 seconds</i></p>





Menu	Description
Network Setup	<p>Network-Related Settings</p> <p> Reference For more information, see p.16 “Configuring the Printer for the Network”.</p> <p> DHCP You can select whether to use DHCP with TCP/IP.</p> <ul style="list-style-type: none">• On• Off <p> Note <input type="checkbox"/> Default: <i>On</i></p> <p> IP Address You can set the IP address.</p> <p> Limitation <input type="checkbox"/> When DHCP is On, its setting cannot be changed. If you want to change the setting, Make the setting for DHCP Off. Consult the network administrator for information about how to make the setting for the network.</p> <p> Note <input type="checkbox"/> Default: <i>011.022.033.044</i></p>



Menu	Description
Network Setup	<p>❖ Subnet Mask You can set the Subnet mask.</p> <p>🚫 Limitation</p> <p><input type="checkbox"/> When DHCP is On, its setting cannot be changed. If you want to change the setting, Make the setting for DHCP Off. Consult the network administrator for information about how to make the setting for the network.</p> <p>📝 Note</p> <p><input type="checkbox"/> Default: <i>000.000.000.000</i></p>
	<p>❖ Gateway Address You can set the gateway address.</p> <p>🚫 Limitation</p> <p><input type="checkbox"/> When DHCP is On, its setting cannot be changed. If you want to change the setting, Make the setting for DHCP Off. Consult the network administrator for information about how to make the setting for the network.</p> <p>📝 Note</p> <p><input type="checkbox"/> Default: <i>000.000.000.000</i></p>







Menu	Description
Network Setup	<p>❖ Frame Type (NW) You can set the Frame type for NetWare.</p> <ul style="list-style-type: none">• Auto• Ethernet II• Ethernet 802.2• Ethernet 802.3• Ethernet SNAP <p> Note <input type="checkbox"/> Default: <i>Auto</i></p> <p>❖ Active Protocol You can set the active protocol.</p> <ul style="list-style-type: none">• TCP/IP• NetWare• SMB• AppleTalk <p> Note <input type="checkbox"/> Default: <i>All Active</i></p>








Menu	Description
Network Setup	<p>❖ Ethernet Speed</p> <p>You can select the speed of the network that the printer is connected to.</p> <ul style="list-style-type: none">• Auto• 10Mbps Half D.• 10Mbps Full D.• 100Mbps Half D.• 100Mbps Full D. <p> Note</p> <p><input type="checkbox"/> Default: <i>Auto</i></p> <p>❖ LAN Type</p> <p>You can select Ethernet or IEEE 802.11b for the LAN Type. This menu appears only when the optional 802.11 interface unit is installed.</p> <ul style="list-style-type: none">• Ethernet• IEEE 802.11b <p> Note</p> <p><input type="checkbox"/> Default: <i>Ethernet</i></p>







Menu	Description
IEEE 802.11b	<p>You can make settings for using the wireless LAN. This menu appears only when the optional 802.11b interface unit is installed.</p> <p>❖ Comm. Mode You can set the transmission mode for IEEE 802.11b.</p> <ul style="list-style-type: none">• 802.11 Ad hoc• Infrastructure• Ad hoc <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: <i>802.11 Ad hoc</i><input type="checkbox"/> Comm.Mode can also be set using a web browser. For details, see Web Image Monitor Help, and p.125 “Using a Web Browser”. <p>❖ Channel The selectable channels are 1-11 (Inch version) and 1-13 (Metric version).</p> <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: <i>11</i> <p>❖ Trans. Speed You can set the transmission speed for IEEE 802.11b.</p> <ul style="list-style-type: none">• Auto• 11 Mbps• 5.5 Mbps• 2 Mbps• 1 Mbps <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: <i>Auto</i>



Menu	Description
IEEE 802.11b	<p>❖ SSID</p> <p>You can set for SSID in Infrastructure mode and 802.11 Ad hoc mode. Select [View] to confirm the set SSID. Select [Enter ID] to set the SSID.</p> <ul style="list-style-type: none">• View• Enter ID <p>! Limitation</p> <p><input type="checkbox"/> Select “¥” if you want to enter “/” in the SSID. Also, “¥” appears when printing the configuration page, read it as “/”.</p> <p>✎ Note</p> <ul style="list-style-type: none"><input type="checkbox"/> The characters that can be used are ASCII 0x20-0x7e (32 bytes).<input type="checkbox"/> A SSID value is set automatically to the nearest access point if the setting has not been made.<input type="checkbox"/> If the setting has not been made for 802.11 Ad hoc mode, the same value as for Infrastructure mode or an “ASSID” value is set automatically.<input type="checkbox"/> SSID can also be set using a web browser. For details, see Web Image Monitor Help, and p.125 “Using a Web Browser”.



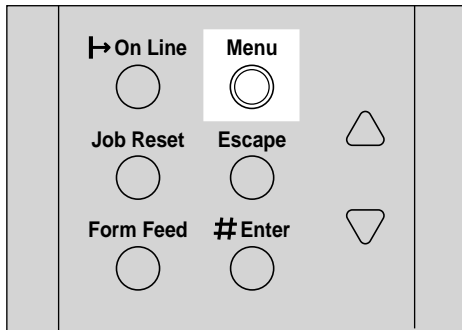
Menu	Description
IEEE 802.11b	<p>❖ WEP Setting</p> <p>You can set the code for IEEE 802.11b.</p> <ul style="list-style-type: none">• Active• Not Active <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: <i>Not Active</i><input type="checkbox"/> The WEP key is input as a hexadecimal number or an ASCII character sequence.<input type="checkbox"/> When using 64 bit WEP, up to 10 characters can be used for hexadecimal, or up to five characters for ASCII. When using 128 bit WEP, up to 26 characters can be used for hexadecimal, or up to 13 characters for ASCII.<input type="checkbox"/> WEP Key can also be set using a web browser. For details, see Web Image Monitor Help, and p.125 “Using a Web Browser”.
USB Setting	<p>You can set the transmission speed for USB.</p> <ul style="list-style-type: none">• Full Speed• Auto <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: <i>Auto</i>



Changing the Host Interface Menu

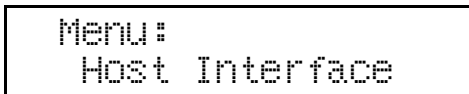
The following example describes how to change the setting for “I/O Timeout”.

- 1** Press the **[Menu]** key.



“Menu” appears on the panel display.

- 2** Press the **[▲]** or **[▼]** key to display the “Host Interface” menu. and then press **[# Enter]** key.



The following message appears on the panel display.

- 3** Press the **[▲]** or **[▼]** key to display “I/O Timeout”, and then press **[# Enter]** key.

```
Host Interface:  
I/O Timeout
```

The following message appears on the panel display.

- 4** Press the **[▲]** or **[▼]** key to select how many minutes the printer waits before ending a print job, and then press **[# Enter]** key.

```
I/O Timeout:  
*15 seconds
```

Wait for two seconds. “Host Interface” appears on the panel display.

- 5** Press the **[On Line]** key.

“Ready” appears on the panel display.

```
Ready
```




PCL Menu




There are 11 menu items in the “PCL Menu”.

- Orientation
- Form Lines
- Font Source
- Font Number
- Point Size
- Font Pitch
- Symbol Set
- Courier Font
- Ext. A4 Width
- Append CR to LF
- Resolution













PCL Parameters

Menu	Description
Orientation	<p>You can set the page orientation.</p> <ul style="list-style-type: none">• Portrait• Landscape <p> Note</p> <p><input type="checkbox"/> Default: <i>Portrait</i></p>
Form Lines	<p>You can set the number of lines per page.</p> <p>5-128</p> <p> Note</p> <p><input type="checkbox"/> Default:</p> <ul style="list-style-type: none">• Metric version: <i>60</i>• Inch version: <i>64</i>
Font Source	<p>You can set the location of the default font.</p> <ul style="list-style-type: none">• Resident• RAM• HDD <p> Note</p> <p><input type="checkbox"/> Default: <i>Resident</i></p> <p><input type="checkbox"/> When you select “RAM”, you can select only fonts downloaded to the printer RAM.</p> <p><input type="checkbox"/> When you select “HDD”, you can select only fonts downloaded to the optional hard disk drive.</p>



Menu	Description
Font Number	<p>You can set the ID of the default font you want to use.</p> <ul style="list-style-type: none">• 0 to 50 (for Resident)• 0 to 44 (for RAM)• 1 to 32767 (for HDD) <p> Note</p> <p><input type="checkbox"/> Default: 0</p>
Point Size	<p>You can set the point size you want to use for the default font.</p> <p>4 to 999.75 by 0.25</p> <p> Note</p> <p><input type="checkbox"/> Default: <i>12.00 points</i></p> <p><input type="checkbox"/> This setting is effective only for a variable-space font.</p>
Font Pitch	<p>You can set the number of characters per inch you want to use for the default font.</p> <p>0.44 to 99.99 by 0.01</p> <p> Note</p> <p><input type="checkbox"/> Default: <i>10.00 pitch</i></p> <p><input type="checkbox"/> This setting is effective only for a fixed-space font.</p>
Symbol Set	<p>You can specify the set of print characters for the default font. The available options are as follows:</p> <p>Roman-8, ISO L1, ISO L2, ISO L5, PC-8, PC-8 D/N, PC-850, PC-852, PC8-TK, Win L1, Win L2, Win L5, Desktop, PS Text, VN Intl, VN US, MS Publ, Math-8, PS Math, VN Math, Pifont, Legal, ISO 4, ISO 6, ISO 11, ISO 15, ISO 17, ISO 21, ISO 60, ISO 69, Win 3.0</p> <p> Note</p> <p><input type="checkbox"/> Default: <i>Roman-8</i></p>



Menu	Description
Courier Font	<p>You can select a courier font type.</p> <ul style="list-style-type: none">• Regular• Dark <p> Note <input type="checkbox"/> Default: <i>Regular</i></p>
Ext. A4 Width	<p>You can extend the width of the printable area for an A4 sheet leaving a narrow margin on the sides.</p> <ul style="list-style-type: none">• Off• On <p> Note <input type="checkbox"/> Default: <i>Off</i></p>
Append CR to LF	<p>By adding a CR code to each LF code, you can print text data clearly.</p> <ul style="list-style-type: none">• Off• On <p> Note <input type="checkbox"/> Default: <i>Off</i></p>
Resolution	<p>You can set the print resolution in dots per inch.</p> <ul style="list-style-type: none">• 300 dpi• 600 dpi <p> Note <input type="checkbox"/> Default: <i>300 dpi</i></p>

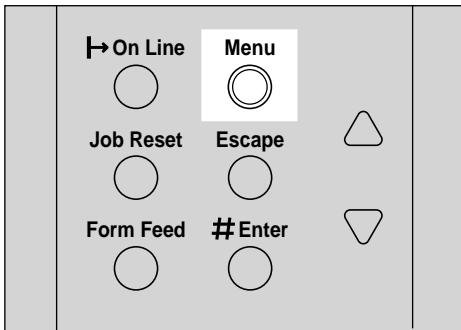




Changing the PCL Menu

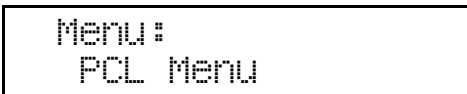
The following example describes how to change the setting for “Orientation”.

- 1** Press the **[Menu]** key.

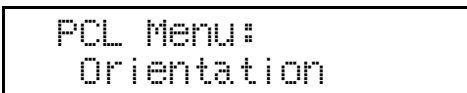


“Menu” appears on the panel display.

- 2** Press the **[▲]** or **[▼]** key to display “PCL Menu”, and then press the **[# Enter]** key.



The following message appears on the panel display.





3 Press the **[# Enter]** key.

4 Press the **[▲]** or **[▼]** key to select the orientation desired, and then press the **[# Enter]** key.

```
Orientation#  
*Landscape
```

Wait for two seconds. “PCL Menu” appears on the panel display.

5 Press the **[On Line]** key.

“Ready” appears on the panel display.

```
Ready
```





PS Menu




There are 4 menu items in the “PS Menu” .

- Data Format
- Resolution
- Color Setting
- Color Profile

PS Parameters

Menu	Description
Data Format	<p>You can select the data format.</p> <ul style="list-style-type: none">• Binary Data• TBCP <p> Limitation</p> <ul style="list-style-type: none"><input type="checkbox"/> This setting is effective when operating the machine with a parallel, USB or EtherTalk connection.<input type="checkbox"/> When operating the machine with a parallel or USB connection, if binary data is sent from the printer driver, the print job is canceled.<input type="checkbox"/> When operating the machine with an Ethernet connection, the print job is canceled under the following conditions;<ul style="list-style-type: none">• The printer driver data format is TBCP and the data format selected on the control panel is Binary Data.• The printer driver data format is binary and the data format selected on the control panel is TBCP. <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: <i>Binary Data</i>



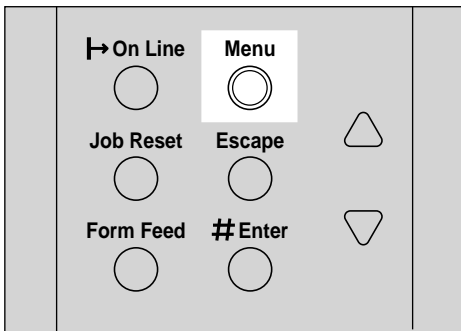
Menu	Description
Resolution	<p>You can select the resolution.</p> <ul style="list-style-type: none">• 600 dpi Fast• 600 dpi Std. <p> Note</p> <p><input type="checkbox"/> Default: <i>600 dpi Fast</i></p>
Color Setting	<p>You can make an RGB setting.</p> <ul style="list-style-type: none">• None• Fine• Super Fine <p> Note</p> <p><input type="checkbox"/> Default: <i>Super Fine</i></p>
Color Profile	<p>You can set the color profile.</p> <ul style="list-style-type: none">• Auto• Solid Color• Presentation• Photographic• User Setting <p> Note</p> <p><input type="checkbox"/> Default: <i>Auto</i></p>



Changing the PS Menu

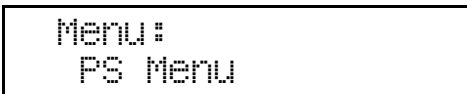
The following example describes how to change the setting for “TBCP”:

- 1** Press the **[Menu]** key.

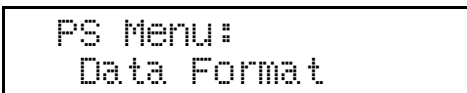


“Menu” appears on the display.

- 2** Press the **[▲]** or **[▼]** key to display “PS Menu”, and then press the **[# Enter]** key.



The following message appears on the display:





- 3** Press the **[▲]** or **[▼]** key to select the TBCP desired, and then press the **[# Enter]** key.

```
Data Format:  
*TBCP
```

Wait for two seconds. “PS Menu” appears on the display.

- 4** Press the **[On Line]** key.

“Ready” appears on the display.

```
Ready
```





PDF Menu






There are 5 menu items in the “PDF Menu” .

- PDF: Change PW
- PDF Group PW
- Resolution
- Color Setting
- Color Profile


PDF Parameters

Menu	Description
PDF: Change PW	<p>Set [Password to Open the Text File] for the PDF file executing PDF Direct Print.</p> <ul style="list-style-type: none">• Current PW• PDF: New PW <p> Important</p> <p><input type="checkbox"/> A password can be set using on the Web Image Monitor, but in this case the password information is sent through the network. If security is a priority, set the password using this menu from the Control Panel.</p> <p> Note</p> <p><input type="checkbox"/> Default: <i>no password set</i></p>



Menu	Description
PDF Group PW	<p>Set the group password already specified with DeskTopBinder V2 Lite.</p> <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> When using a group password, this machine requires the optional network data protection unit.<ul style="list-style-type: none">• Current PW <p> Important</p> <ul style="list-style-type: none"><input type="checkbox"/> A password can be set using on the Web Image Monitor, but in this case the password information is sent through the network. If security is a priority, set the password using this menu from the Control Panel. <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: <i>no password set</i>
Resolution	<p>You can select the resolution for the PDF file executing PDF Direct Print.</p> <ul style="list-style-type: none">• 600 dpi Fast• 600 dpi Std. <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: <i>600 dpi Fast</i>
Color Setting	<p>You can make an RGB setting for the PDF file executing PDF Direct Print.</p> <ul style="list-style-type: none">• None• Fine• Super Fine <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: <i>Super Fine</i>



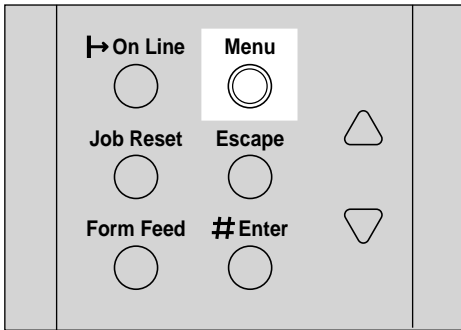
Menu	Description
Color Profile	<p>You can set the color profile for the PDF file executing PDF Direct Print.</p> <ul style="list-style-type: none">• Auto• Solid Color• Presentation• Photographic• User Setting <p> Note</p> <p><input type="checkbox"/> Default: <i>Auto</i></p>





Changing the PDF Menu

1 Press **[Menu]** key.

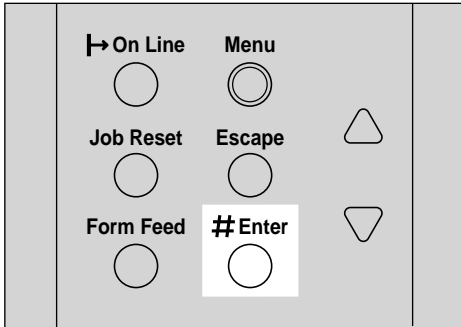


“Menu” appears on the panel display.

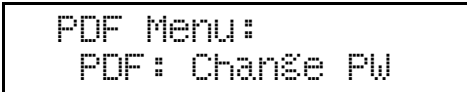




2 Press **[▲]** or **[▼]** key to display “PDF Menu”, and then press **[# Enter]** key.

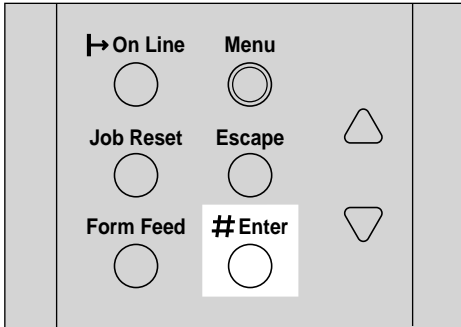


The following message appears on the panel display.

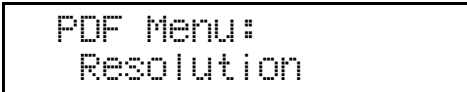




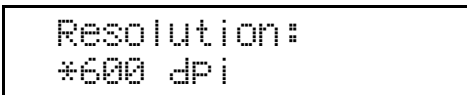
- 3** Press **[▲]** or **[▼]** key to display “Resolution”, and then press **[# Enter]** key.



The following message appears on the panel display.



- 4** Press **[# Enter]** key.

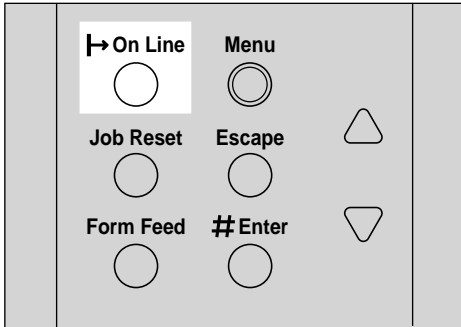


- 5** Press **[▲]** or **[▼]** key to select the resolution desired, and then press **[# Enter]** key.

The screen returns to step **3** in a few seconds.



6 Press **[On Line]** key.



“Ready” appears on the panel display.





Language Menu

You can select the languages you use. Available language are as follows:

English, German, French, Italian, Spanish, Dutch, Swedish, Norwegian, Danish, Finnish, Portuguese, Czech, Polish and Hungarian.

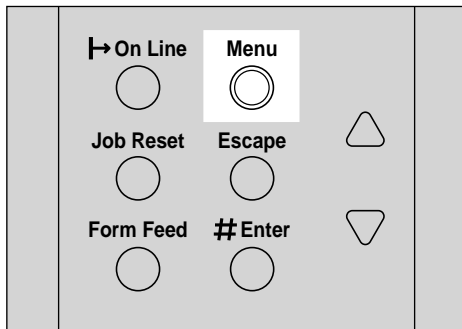
 **Note**

Default: *English*

Changing the Language Menu

You can change the language by the following procedures.

1 Press the **[Menu]** key.



“Menu” appears on the panel display.



- 2** Press the **[▲]** or **[▼]** key to display “Language”, and then press **[# Enter]** key.

```
Menu:  
Language
```

The following message appears on the panel display.

```
Language:  
*English
```

- 3** Press the **[▲]** or **[▼]** key until the language you want to select appears on the panel display and then press **[# Enter]** key.

Wait for two seconds. “Menu” appears on the panel display.

- 4** Press the **[On Line]** key.

“Ready” appears on the panel display.

```
Ready
```



10. Appendix

Printing Files Directly from Windows

You can print files directly using Windows commands. For example, you can print postscript files for PostScript 3. Commands that can be used are as follows:

OS	lpr	rcp	ftp
Windows 95/98/Me			✓
Windows 2000/XP, Windows Server 2003	✓	✓	✓
Windows NT 4.0	✓	✓	✓

The following explains setup and printing.

Setup

1 Setup the printer's network environment.

- Enable the TCP/IP protocol (enabled as default).
- Set TCP/IP-related items, including IP address.

Reference

[p.16 “Configuring the Printer for the Network”](#) for the setup method.

[p.307 “Using DHCP”](#), when setting the IP address of the printer using DHCP.

2 Install the TCP/IP protocol in Windows to set the network environment.

Note

- Make sure network settings are checked by a network administrator.



3 When printing with Windows 2000/XP, Windows Server 2003 or Windows NT 4.0, install “Printing service for UNIX” as the network software. When printing with Windows NT 4.0, install “Microsoft TCP/IP printing” as the network software.

 **Note**

- When using Windows 95/98/Me, lpr cannot be used to print.
- This completes the setup for specifying a printer using an IP address when printing. When using a host name to specify a printer, proceed to [p.228 “Using a Host Name Instead of an IP Address”](#) and continue the setup.

Using a Host Name Instead of an IP Address

When the host name is defined, you can specify a printer by host name instead of IP address. The host name used differs depending on the network environment.

When using DNS

Use the host name set to the data file on the DNS server.

When setting the IP address of a printer using DHCP

Use the “Printer name” on the Configuration Page as the host name. See [p.166 “Printing a Configuration Page”](#) for printing the Configuration Page.



In other cases

Add the IP address and host name of the network printer to the hosts file on the computer used for printing. Methods of addition vary according to OS.

Windows 95/98/Me

- 1** Copy to the same `\WINDOWS\HOSTS.SAM` directory and name it “HOSTS” (no extension required).
- 2** Open the `\WINDOWS\HOSTS` file you created using memo pad, etc.
- 3** Add an IP address and a host name to the hosts file in the following format:
`192.168.15.16 host # NP`
192.168.15.16 is the IP address, “host” is the printer's host name, and “#” to the end are comments. Divide each item with a space or tab, and use only one line.
- 4** Save the file.

Windows 2000/XP, Windows Server 2003, Windows NT 4.0

- 1** Open the hosts file using memo pad, etc.
The hosts file is in the following folder:
`\WINNT\SYSTEM32\DRIVERS\ETC\HOSTS`
`\WINNT` is the directory of the installation destination for Windows 2000/XP, Windows Server 2003, Windows NT 4.0.
- 2** Add an IP address and a host name to the hosts file in the following format:
`192.168.15.16 host # NP`
192.168.15.16 is the IP address, “host” is the printer's host name, and “#” to the end are comments. Divide each item with a space or tab, and use only one line.
- 3** Save the file.



Printing Method

The following explains printing using the “lpr”, “rcp”, and “ftp” commands.

Preparation

Enter commands using the commands prompt window. The location of the commands prompt in each operating system is as follows:

- Windows 95/98
[Start]-[Programs]-[MS-DOS Prompt]
- Windows Me
[Start]-[Programs]-[Accessories]-[MS-DOS Prompt]
- Windows 2000
[Start]-[Programs]-[Accessories]-[Command Prompt]
- Windows XP, Windows Server 2003
[Start]-[All Programs]-[Accessories]-[Command Prompt]
- Windows NT 4.0
[Start]-[Programs]-[Command Prompt]

Note

- ❑ If the “print requests full” message appears, no more print requests can be accepted. Try printing again when the number of session has dropped below the value shown in the following table below.

rcp, rsh	5
ftp	3

- ❑ Enter the file name in a format including the path from the directory executing the commands.

Reference

The “option” specified in the command is an intrinsic printer option and its syntax is similar to printing from UNIX. For details, see *UNIX Supplement*.



lpr

❖ When specifying a printer by IP address

```
c:> lpr -Sprinter's IP address  
[-Poption] [-ol] \pass  
name\file name
```

❖ When using a host name instead of an IP address

```
c:> lpr -Sprinter's host name  
[-Poption] [-ol] \pass  
name\file name
```

Note

- When printing a binary file, add the “-ol” option (lower case O, and lower case L). When using a printer with the host name “host”, to print a PostScript file named “file1” located in the C:PRINT directory, the command line is as follows:

```
c:> lpr -Shost -Pfiletype=RPS  
-ol C:PRINT\file1
```

rcp

Register the printer's host name in the hosts file beforehand. See [p.228 “Using a Host Name Instead of an IP Address”](#).

```
c:> rcp [-b] \pass name\file name  
[pass name\file name...] print-  
er's host name:[option]
```

Note

- In the file names, “*” and “?” can be used as wild cards.
- When printing a binary file, add the “-b” option. When using a printer with the host name “host”, to print a PostScript file named “file1” or “file2” located in the C:PRINT directory, the command line is as follows.

```
c:> rcp -b C:\PRINT\file1  
C:PRINT\file2 host:filetype=RPS
```

ftp

Use the put or mput command according to the number of files to be printed.

❖ **When the number of files to be printed is one**

```
ftp> put \pass name\file name  
[option]
```

❖ **When the number of files to be printed is two or more**

```
ftp> put \pass name\file name  
[\pass name\file name...] [option]
```

 **Note**

- For the mput command, "*" and "?" can be used as wild cards in the file name.

 **Limitation**

- If these symbols are used, the file name will be read as an option string.

The procedure from starting ftp to printing is as follows.

- 1** Formulate the printer's IP address (or host name of the hosts file printer) as an argument and use the "ftp" command.

```
% ftp printer's IP address
```

- 2** Enter user names and passwords as needed, and then press the [# Enter] key.

There is no default user name when the default password is "password".

User:

Password:

- 3** When printing a binary file, set binary as the file mode.

```
ftp> bin
```

 **Note**

- When a binary file is printed in ASCII mode, print data may change and may not print out correctly.

- 4** Specify the file to be printed.

The following are examples of printing a PostScript file named "file1" in the C:PRINT directory, and printing file1 and file2.

```
ftp> put C:\PRINT\file1 file-  
type=RPS  
ftp> mput C:\PRINT\file1  
C:PRINT\file2
```

- 5** Quit ftp.

```
ftp> bye
```



SNMP

The SNMP (Simple Network Management Protocol) agent operating on UDP and IPX, is incorporated into the built-in Ethernet board and 802.11b interface unit (option) of this machine.

Using the SNMP manager, you can get information about the printer.

The factory default community names are “public” and “admin”. You can get MIB information using these community names.

Note

- The community name can be using with the following procedure.
 - You can configure SNMP from the command line using telnet. See [p.247 “SNMP”](#).
 - You can configure SNMP from SmartDeviceMonitor for Admin using the NIB Setup Tool. See SmartDeviceMonitor for Admin Help.
 - You can configure SNMP from your Web browser. See Web Image Monitor Help.

Limitation

- The kinds of supported MIBs differ depending on the printer.

Supported MIBs

- MIB-II
- PrinterMIB
- HostResourceMIB
- RicohPrivateMIB



Remote Maintenance by telnet

You can view the printer status and configure the network interface board using telnet.

Note

- You should specify a password so that only the network administrator, or a person having network administrator privileges, can use remote maintenance.
- The password is the same as that used for Web browser (Web Image Monitor) settings. When the password is changed on “mshell”, the other passwords change also.

Using telnet

The following is a sample procedure in using telnet.

Limitation

- Only one person at a time can be logged on to do remote maintenance.

1 Use the IP address or the host name of the printer to start telnet.

```
% telnet IP_address
```

2 Type the password.

Note

- The factory default is “password”.

3 Type a command.

Reference

For more information about telnet commands, see [p.236 “Commands List”](#).





4 Exit telnet.

```
msh> logout
```

When the configuration is changed, a confirmation message requests whether or not the changes should be saved.

5 Type “yes” to save the changes, and then press **[# Enter]** key.

If you do not want to save the changes, type “no”, and then press **[# Enter]** key. If you want to make additional changes, type “return” at the command line, and then press **[# Enter]** key.

Note

- If the “Can not write NVRAM information” message appears, the changes are not saved. Repeat the steps above.
- The network interface board is reset automatically when the settings are changed.
- When the network interface board is reset, the active print job which has already been sent to the printer will finish printing. However, jobs that have not been sent yet will be canceled.



Commands List

This is a list of commands that can be used via remote maintenance.

Note

- Type “help” to see a list of commands that can be used.

```
msh> help
```

- Type “help command_name” to display information about the syntax of that command.

```
msh> help command_name
```

TCP/IP address

Use the “ifconfig” command to configure TCP/IP (IP address, subnet mask, broadcast address, default gateway address) for the machine.

◆ Reference

```
msh> ifconfig
```



❖ Configuration

msh> ifconfig interface_name parameter address

Interface name	Interface to be configured
ether	Ethernet Interface *1
wlan *2	IEEE 802.11b Interface

*1 If you did not enter the interface name, it will be automatically set to the Ethernet interface.

*2 You can specify an interface when installing the optional 802.11b interface unit.

Parameter	Meaning
(no parameter)	IP address
netmask	subnet mask
broadcast	broadcast address

❖ Changing the Interface

You can specify either the ethernet interface or IEEE 802.11b interface when using the optional 802.11b interface unit.

msh> ifconfig interface up

The following is an example for configuring an IP address of 192.168.15.16 on ethernet interface.

msh> ifconfig ether 192.168.15.16

The following is an example for configuring a subnet mask of 255.255.255.0 on ethernet interface.

msh> ifconfig ether netmask 255.255.255.0


Note

- This affects the configuration of the network interface board of the IP address that is used.
- The TCP/IP setting is the same as that for the ethernet interface and IEEE 802.11b interface.
- To type an address using hexadecimal, prefix it by "0x".


 **Address****❖ Subnet Mask**

A number used to mathematically “mask” or hide the IP address on the network by eliminating those parts of the address that are alike for all the machines on the network.

 **Note**

- To get the above addresses, contact your network administrator.
 - The subnet mask is the same as that for the ethernet interface and IEEE 802.11b interface.
- 



Access Control

Use the “access” command to view and configure access control. You can also specify two or more access ranges.

❖ Reference

```
msh> access
```

❖ Configuration

```
msh> access ☆ range start-address end-address
```

- ☆ represents a target number between 1 and 5. (Up to five access ranges can be registered and selected.)

Example: To specify accessible IP addresses between 192.168.0.10 and 192.168.0.20:

```
msh> access 1 range 192.168.0.10 192.168.0.20
```

Note

- The access range restricts the workstations from which printing is possible by means of an address. If you do not need to restrict printing, make the setting “0.0.0.0”.
- The entry is invalid if the start address is greater than the end address.
- Up to five access ranges can be specified. The entry is invalid if the target number is omitted.
- You cannot access Web Image Monitor and telnet from a restricted IP address.

❖ Access Control Initialization

```
msh> access flush
```

Note

- This restores the factory-default settings so that all access ranges become “0.0.0.0”.





DHCP

Use the “dhcp” command to configure the DHCP settings.



Reference

For more information about DHCP, see [p.307 “Using DHCP”](#).

❖ Reference

The following command displays the current DHCP settings.

```
msh> dhcp
```

❖ Configuration

You can configure the DHCP settings.

```
msh> dhcp interface_name {on|off}
```



Note

- Select **[on]** to enable DHCP. Select **[off]** to disable DHCP.
- When the DNS server address and domain name are acquired from DHCP, be sure to select “on”.



❖ Interface Priority Configuration

You can assign priorities governing which interface obtains DHCP parameters.

```
msh> dhcp priority interface_name
```

Note

- Priority assignment is useful when connecting more than one interface to the machine.
- If an interface is not selected, it appears according to the currently set priority regardless of multiple interface connections.

Interface name	Interface to be configured
ether	Ethernet interface
wlan ^{*1}	IEEE 802.11b interface

*1 Available when the optional 802.11b interface Unit is installed.

❖ DNS Server Address Selection

You can specify whether to acquire the DNS server address from the DHCP server or to use it as a user setting.

```
msh> dhcp dnsaddr [dhcp/static]
```

Note

- Specify “dhcp” when acquiring the DNS server address from the DHCP server, or specify “static” when using it as a user setting.

Reference

For more information about setting the DNS server address, see [p.266 “DNS”](#).



❖ Domain Name Selection

You can specify whether to acquire the domain name from the DHCP server or to use it as a user setting.

```
msh> dhcp domainname [dhcp/static]
```

Note

- Specify “dhcp” when acquiring the domain name from the DHCP server, or specify “static” when using it as a user setting.

Reference

For more information about setting the domain name, see [p.268 “Domain name”](#).



Protocol

Use the “set” command to set protocol information display to active or inactive.

❖ Reference

Protocol information (active/inactive) appears.

```
msh> set protocol
```

Protocol
tcpip
appletalk
netware
smb
protocol * ¹
lpr
ftp
rsh
diprint
web
snmp
ssl
ipp
http
rendezvous

*¹ Information about tcpip, appletalk, netware, and smb appears.





❖ Configuration

You can set the protocol to active or inactive.

```
msmsh> set protocol {up | down}
```

Protocol	
tcpip	“up” means active and “down” means inactive.
appletalk	
netware	
smb	
lpr	
ftp	
rsh	
diprint	
web	
snmp	
ssl	
ipp	
http	
rendezvous	

Note

- If you prohibit remote access using TCP/IP and then log out, you cannot use remote access. If this was a mistake, you can use the control panel to allow access by TCP/IP.
- When you prevent access via TCP/IP, you are also prevented from using lpr, ftp, rsh, diprint, web, snmp, ssl, ipp, http, and rendezvous.





Printer status

The following commands can be used to get information about the current status of the printer.

msh> *command*

Command	Information that is displayed
status	Status of printer. Information about the print jobs.
info	Information about the paper tray, output tray, and printer language.
prnlog [ID]	Lists the last 16 print jobs.

 **Note**

- More information about any print job is displayed when the ID number is added after the prnlog command.

 **Reference**

For more information about the meaning of the data returned with these commands, see [p.284 “Understanding the Displayed Information”](#).





Network interface board configuration settings information

Use the “show” command to display the network interface board configuration settings.

```
msh> show [-p]
```

Note

- Add “-p” to the show command to have information displayed on screen at one time.

Reference

For more information about the meaning of the data returned with this command, see [p.286 “Configuring the Network Interface Board”](#).


System log information

Use the “syslog” command to display information stored in the printer's system log.

```
msh> syslog
```

Reference

For more information about the displayed information, see [p.293 “System Log Information”](#).





SNMP

Use the “snmp” command to display and edit SNMP configuration settings such as the community name.

 **Note**

- You can configure from ten SNMP access settings numbered 1–10.
- The printer cannot be accessed from SmartDeviceMonitor for Admin or SmartDeviceMonitor for Client if “public” is not registered in numbers 1-10. When changing the community name, use SmartDeviceMonitor for Admin and the installed “SNMP Setup Tool” to change a computer’s community name to correspond with printer settings.
- Default access settings 1 and 2 are as follows:

Number	1	2
Community name	public	admin
IP address	0.0.0.0	0.0.0.0
Access type	read-only trap off	read-write trap off

 **Display**

Shows the SNMP information and available protocols.

```
msh> snmp ?  
msh> snmp [-p] [registered_number]
```

 **Note**

- If the -p option is added, you can view the settings one by one.
- Omitting the number displays all access settings.





❖ Community name configuration

You can set the community name of the network interface board.

```
msh> snmp number name community_name
```

Note

- ❑ The community name must be within 15 characters.

❖ Access type configuration

You can select the access type from those listed below.

```
msh> snmp number type access_type
```

Access type	Type of access which is permitted
no	All access is denied.
read	Read only
write	Read and write
trap	User is notified of trap messages.

❖ Protocol configuration

You should use the following command to set the protocols to active or inactive. If you set a protocol to inactive, all access settings set to use that protocol are disabled.

```
msh> snmp {ip | ipx} {on | off}
```

- Specify “ip” for TCP/IP, or specify “ipx” for IPX/SPX.
- “on” means active and “off” means inactive

To change the protocol of access settings, use the following command. However, if you disabled a protocol with the above command, making it active here will have no effect.

```
msh> snmp number active {ip | ipx} {on | off}
```





❖ Access configuration

You can configure an address of a host depending on the protocols used.

The network interface board accepts requests only from hosts having addresses with access types of “read-only” or “read-write”. Type “0” to have network interface board accept requests from any host without requiring a specific type of access.

- Specifying a TCP/IP address
msh> snmp number ip/addr address
- Specifying an IPX/SPX address
msh> snmp number ipx address

Note

- To specify the TCP/IP protocol, type ip followed by a space, and then the IP address.
- To specify the IPX/SPX protocol, type ipx followed by a space and then the IPX address followed by a decimal and then the MAC address of the network interface board.

The following is an example of how to configure registration number 3 with the IP address 192.168.15.16.

```
msh> snmp 3 ip 192.168.15.16
```

The following is an example of how to configure registration number 3 with the IPX address 7390A448, and the MAC address 00:00:74:62:5C:65.

```
msh> snmp 3 ipx 7390A448:000074625C65
```



IPP

Use the “ipp” command to configure the IPP settings.

❖ Viewing setting

The following command displays the current IPP settings.

```
msh> ipp
```

Example output:

```
timeout=900(sec)
```

```
auth basic
```

- The “timeout” setting specifies how many seconds the computer keeps trying to access the network printer to send print jobs when no connection could be made.
- The “auth” setting indicates the user authorization mode.

❖ IPP timeout configuration

Specifies how many seconds to wait before canceling a print job if it has been interrupted for some reason. The range of time can be changed between 30 to 65535 seconds.

```
msh> ipp timeout {30 - 65535}
```


❖ IPP user authorization configuration

Use the IPP user authorization to restrict users to print with IPP. The factory default is “off”.

```
msh> ipp auth {basic|digest|off}
```

- The setting of user authorization are “basic” and “digest”.
- Use “off” to remove a user's authorization.

Note

- ❑ If you select “basic” or “digest”, see next section “Configuring IPP user authorization” for more information about how to configure the user name.
- 



❖ Configuring IPP user authorization

Use the following command:

```
msh> ipp user
```

The following message appears.

```
msh> Input user number (1 to 10):
```

Type the number, user name and password.

```
msh> IPP user name:user1
```

```
msh> IPP password:*****
```

After configuring the settings, the following message appears.

```
User configuration changed.
```



Direct Printing Port

The direct printing port allows printing directly from a computer, connected to the network, to the printer. Use the “diprint” command to change the direct printing port settings.

❖ View settings

The following command displays the current direct printing port settings.

```
msh> diprint
```

Example output:

```
port 9100
timeout=300(sec)
bidirect off
```

- The “Port” specifies the port number of the direct printing port.
- The “bidirect” setting indicates whether the direct printing port is bidirectional.

❖ Setting timeout

You can specify the timeout interval to use when receiving data from the network.

```
msh> diprint timeout [30~65535]
```

Note

- The factory default is 300 seconds.

❖ Bidirectional configuration for the direct printing port

Use this setting to configure whether the direct printing port is bidirectional. The factory default is “off”.

```
msh> diprint bidirect {on|off}
```



SMB

Use the “smb” command to configure or delete the computer name or workgroup name for NetBEUI.

❖ Settings of NetBEUI related items

msh >smb *parameter*

Parameter	Settings
comp	Your computer name consisting of up to 15 characters
group	Workgroup name consisting of up to 15 characters
comment	Comment consisting of up to 31 characters
notif {on off}	To notify print job completion, specify “on”. Otherwise, specify “off”
clear comp	Clears complete name
clear group	Clears Workgroup name
clear comment	Clears comment

❖ Protocol settings

Enable/disable NetBEUI and TCP/IP. Select “up” to enable, and “down” to disable.

msh> smb protocol [netbeui {up | down} | tcpip {up | down}]



ROUTE

Use the “route” command to control the routing table.

This command allows you to configure and display routing information. You can change the network configuration from a remote computer using this command.

 **Note**

- The maximum number of routing tables are 16.

Parameter	Topics of setting
route add [host net] destination * ¹ gateway * ¹	Adds a host/network route to “destination”, and a gateway address to “gateway” in the table. Host becomes the default setting.
route delete [host net] destination * ¹	Deletes a host/network route from the table. Host becomes the default setting.
route get [destination] * ¹	Displays only route information corresponding to a specified destination. When the destination is unspecified, all routing information is displayed.
route active {host net} destination * ¹ on/off	You can turn the specified destination on or off. Host becomes the default setting.
route add default gateway * ¹	You can set the default gateway address.
route flush	Deletes all routing information.

*¹ IP address

 **Note**

- Set the gateway address when communicating with devices on a different network beyond the router.
- The same gateway address is shared by all interfaces.





SLP

Use this command to configure SLP settings.

You can search the NetWare server using SLP in the PureIP environment of NetWare 5/5.1, Netware 6/6.5. Using the `slp` command, you can configure the value of TTL which can be used by SLP multi-cast-packet.

Note

- The default value of TTL is “1”. A search is executed only within a local segment. If the router does not support multi-cast, the settings are not available even if the TTL value is increased.
- The acceptable TTL value is 1 - 255.

```
msh> slp ttl {1 -255}
```

Setting IEEE 802.11b

To make setting for IEEE 802.11b, use the “wiconfig” command.

Limitation

- You can make settings when installing the optional 802.11b interface unit.

View settings

The following command displays the current IEEE 802.11b settings.

```
msh> wiconfig
```

The IEEE 802.11b information is displayed.

```
msh> wiconfig cardinfo
```

Note

- If the IEEE 802.11b is not working correctly, the IEEE 802.11b information is not displayed.



❖ Configuration

msh> wiconfig *parameter*

Parameter	Value to be configured
mode [ap adhoc 802.11adhoc]	You can set infrastructure mode (ap) , 802.11 ad hoc mode (802.11adhoc) or ad hoc mode (adhoc). The default is ad hoc mode.
ssid <i>ID value</i>	You can set for SSID in infrastructure mode. The characters that can be used are ASCII 0x20-0x7e (32 bytes). A SSID value is set automatically to the nearest access point if the setting has not been made. If the setting has not been made for ad hoc mode, the same value as for infrastructure mode or an “ASSID” value is set automatically if the setting has not been made.
channel frequency <i>channel no.</i>	You can set the channel. You can specify from following channel. <ul style="list-style-type: none">• Metric Version :1-13• Inch Version :1-11 Set the same channel for all the machines you are using.
enc [on off]	You can enable or disable the WEP function. To enable the WEP function, specify [on]; to disable it, specify [off]. To start the WEP function, enter the correct WEP key.

Parameter	Value to be configured
key [<i>key value</i>] val [1 2 3 4]	<p>You can specify the WEP key when entering in hexadecimal.</p> <p>With a 64-bit WEP, you can use 10 digit hexadecimal. With a 128-bit WEP, you can use 26 digit hexadecimal.</p> <p>Up to four WEP keys can be registered. Specify the number to be registered with “val”.</p> <p>When a WEP is specified with the key, the WEP specified with the keyphrase is overwritten.</p> <p>To use this function, set the same key number and WEP key for all ports that transmit to each other.</p> <p>You can omit the numbers with “val”. The key number is set to 1 when making these omissions.</p>
keyphrase [<i>phrase</i>] val [1 2 3 4]	<p>You can specify the WEP key when entering in ASCII.</p> <p>With a 64-bit WEP, you can use 10 digit hexadecimal. With a 128-bit WEP, you can use 26 digit hexadecimal.</p> <p>Up to four WEP can be registered. Specify the number to be registered with “val”.</p> <p>When a WEP is specified with the keyphrase, the WEP specified with the key is overwritten.</p> <p>To use this function, set the same key number and WEP key for all ports that transmit to each other.</p> <p>You can omit the numbers with “val”. The key number is set to 1 when making these omissions.</p>
encval [1 2 3 4]	<p>You can specify which of the four WEP keys is used for packet encoding. “1” is set if a number is not specified.</p>



Parameter	Value to be configured
auth [open shared]	You can set the authorized mode when using WEP. The specified value and the authorized mode are as follows: open: Open system authorized (default) shared: Shared key authorized
rate [auto 11m 5.5m 2m 1m]	You can set the IEEE 802.11b transmitting speed. The transmitting speed you specify here is the speed at which data is sent. You can receive data at any speed. auto: automatically set (default) 11m: 11 Mbps fixed 5.5m: 5.5 Mbps fixed 2m: 2 Mbps fixed 1m: 1 Mbps fixed





Job Spool

Use the “spoolsw” command to configure Job Spool settings.

Limitation

- You can only specify diprint, LPR, IPP, and SMB protocol.

Reference

The Job Spool setting appears.

```
msh> spoolsw
```

Job Spool setting

```
msh> spoolsw spool {on | off}
```

Note

- Select **[on]** to enable Job Spool or **[off]** to disable it.

Protocol configuration

To change protocol settings, use the following command. You can specify the setting for diprint, LPR, IPP, and SMB protocol.

- diprint

```
msh> spoolsw diprint {on | off}
```
- lpr

```
msh> spoolsw lpr {on | off}
```
- ipp

```
msh> spoolsw ipp {on | off}
```
- SMB

```
msh> spoolsw smb {on | off}
```



Changing the Host Name

Use the “hostname” command to change the printer name.

❖ Configuration

```
msh> hostname [interface_name ] printer_name
```

interface name	Interface to be configured
ether	Ethernet interface * ¹
wlan * ²	IEEE 802.11b interface

*¹ If you did not enter the interface name, it will be automatically set to the Ethernet interface.

*² If you install the optional 802.11b interface unit, you can set the command.

Note

- Enter the printer name using up to 15 characters.
- You cannot use a printer name starting with RNP or rnp.
- The Ethernet interface and IEEE 802.11b interface will have the same printer name.





WINS

Use the “wins” command to configure the WINS server settings

Reference

For more information about WINS server settings, see [p.311 “Configuring a WINS Server”](#).
The specified values of the interfaces used in each of the following settings are shown below.

interface name	Interface to be configured
ether	Ethernet interface
wlan ^{*1}	IEEE 802.11b interface

^{*1} If you install the optional 802.11b interface unit, you can set the command.

❖ Viewing setting

The following command displays the WINS server IP address.

```
msh> wins
```

Example out put:

```
wins: primary server 0.0.0.0 secondary server 0.0.0.0
DHCP current config:
primary server 192.168.10.1 secondary server 192.168.10.2
hostname RNP620B47 ScopeID
```

Note

- If DHCP is used to start from the network, the current WINS server address is displayed. This address, however, is not displayed if DHCP is not used.
- If the IP address obtained from DHCP differs from the WINS IP address, the DHCP address is the valid address.



❖ Configuration

Use the set command to make WINS active or inactive.

```
msh> wins interface_name {on | off}
```

- “on” means active and “off” means inactive.

❖ Address configuration

Use this command to configure a WINS server IP address.

```
msh> wins ifname {primary|secondary} IP address
```

- Use the “primary” to configure a primary WINS server IP address.
- Use the “secondary” to configure a secondary WINS server IP address.
- You cannot use “255.255.255.255” as the IP address.

❖ NBT (NetBIOS over TCP/IP) Scope ID Selection

You can specify the NBT scope ID.

```
msh> wins interface_name scope scope ID
```

- The scope ID is specified using up to 31 alphanumeric characters.





AutoNet

Use the “autonet” command to configure AutoNet settings.

Reference

For more information about AutoNet, see [p.310 “Using AutoNet”](#).

Display

The following command displays the current AutoNet settings.

```
msh> autonet
```

Configuration

You can configure the AutoNet settings.

```
msh> autonet [on|off]
```

- “on” means active and “off” means inactive.

Interface Priority Configuration

You can assign priorities governing which interface obtains AutoNet parameters.


```
msh> autonet priority interface_name
```

Note

- Priority assignment is useful when connecting more than one interface to the machine.
- If an interface is not selected, the interface appears according to the currently set priority, regardless of multiple interface connections.

Interface name	Interface to be configured
ether	Ethernet interface
wlan *1	IEEE 802.11b interface

*1 Available when the optional 802.11b interface unit is installed.





SNTP

The printer clock can be synchronized with a NTP server clock using the Simple Network Time Protocol (SNTP). To change the SNTP settings, use the “sntp” command.

Limitation

- SNTP supports the NTP servers running xnptd V3 and V4.

Reference

```
msh> sntp
```

NTP Server Address Configuration

You can specify the IP address of the NTP server.

```
msh> sntp server IP_address
```

Interval Configuration

You can specify the interval at which the printer synchronizes with the operator-specified NTP server.

```
msh> sntp interval polling_time
```

Note

- The factory default setting is 3,600 seconds.
- You can set the interval from 16 to 16,384 seconds.
- If you set 0, the printer synchronizes with the NTP server only when you turn the printer on. After that, the printer does not synchronize with the NTP server.

Time-zone Configuration


You can specify the time difference between the printer clock and the NTP server clock.

```
msh> sntp timezone +/-hour_time
```

Example: To set the time-zone difference to +8 hours:

```
msh> sntp timezone +08:00
```

Note

- The time is in 24-hour notation.
- 



Changing the Password

Use the “passwd” command to change the remote maintenance password.

Important

- Be sure not to forget or lose the password.

Note

- The default factory password is “password”.

1 Type “passwd”.

```
msh> passwd
```

2 Type the current password.

```
Old password:
```

3 Type the new password.

```
New password:
```

Note

- The password must consist of 3 to 8 alphanumeric characters and symbols. Upper and lower case characters are considered unique. For example, R is different from r.
- The password is the same as that used for Web browser (Web Image Monitor) settings. When the password is changed on “mshell”, the other passwords change also. If you change a password from telnet, change other passwords also.

4 Type the new password once again.

```
Retype new password:
```





DNS

Use the “dns” command to configure or display DNS (Domain Name System) settings.

❖ View setting

The following command displays current DNS settings:

```
msh> dns
```

❖ DNS server configuration

The following command enables/disables use of the DNS server address:

```
msh> dns number server server address
```

The following is a sample configuration using an IP address of 192.168.15.16 on DNS 1 server:

```
msh> dns 1 server 192.168.15.16
```

- You can register up to three DNS server numbers.
- You cannot use “255.255.255.255” as the DNS server address.

❖ Dynamic DNS Function Setting

You can set the dynamic DNS function to active or inactive.

```
msh> dns ifname ddns {on|off}
```

- “on” means active and “off” means inactive.

Interface name	Interface to be configured
ether	Ethernet interface
wlan *1	IEEE 802.11b interface

*1 Available when the optional 802.11b interface unit is installed.

❖ Specifying the record overlap operation

You can specify the operation performed when records overlap.

```
msh> dns overlap {update|add}
```

- update
To delete the old record and register a new record.
- add
To add a new record while allowing the old record to remain.

Note

- When CNAME overlaps, it is always changed, irrespective of the setting.

❖ CNAME Registration

You can specify whether to register CNAME.

```
msh> dns cname [on|off]
```

- “on” means active and “off” means inactive.

Note

- The CNAME registered is the default name beginning from RNP. CNAME cannot be changed.

❖ A Records Registration

You can specify the method of registering an A record when the dynamic DNS function is active and DHCP is used.

```
msh> dns arecord [dhcp|own]
```

- dhcp
To register an A record while using the DHCP server as the DNS client instead of the printer.
- own
To register an A record using the printer as the DNS client.

Note

- The DNS server address and domain name already designated on [p.240](#) “DHCP” are used for the registration.



❖ Record Updating Interval Setting

You can specify the interval at which records are updated when using the dynamic DNS function.

```
msh> dns interval time
```

- The updating interval is specified in units of one hour. It can be specified over a range of 1 to 255 hours.
- The default is 24.

Domain name

Use the “domainname” command to display or configure domain name settings.

You can configure the Ethernet interface or IEEE 802.11b interface.

❖ View setting

The following command displays the current domain name:

```
msh> domainname
```

❖ Interface domain configuration

The following command displays or sets the Ethernet interface domain name or IEEE 802.11b interface.

- Setting the domain name

```
msh> domainname interface_name domain name
```

- A domain name can consist of up to 63 alphanumeric characters.
- The Ethernet interface and IEEE 802.11b interface will have the same domain name.

- Deleting the domain name

```
msh> domainname interface_name clear
```

Interface	Interface that can be set
ether	Ethernet interface
wlan *1	IEEE 802.11b interface

*1 Available when the optional 802.11b interface unit is installed.



Netware

Use the “netware” command to configure the NetWare settings such as the print server name or file server name.

msh> netware *parameter*

Parameter	Settings
pname	Enter the NetWare print server name using up to 47 characters.
fname	Enter the NetWare file server name using up to 47 characters.
encap [802.3/802.2/snap/ ethernet2/ auto]	Select the encap type.
rnum	Specify the remote printer number.
timeout	Set the timeout.
mode pserver mode ps	Select the print server mode.
mode rprinter mode rp	Select the remote printer mode.
context	Specify the NDS context name.
sap_interval	Specify the SAP intervals. Each interval can be set to between 0 and 3600 seconds in one-second increments.
login server	Specify “login with a selected file server” as the login mode.
login tree	Specify “login with a selected NDS tree” as the login mode.
tree <i>NDS tree name</i>	Select the NDS tree to log on to.



web

Use the “web” command to display and configure the parameters on the Web Image Monitor.

❖ View Settings

```
msh> web
```

❖ URL Configuration

The link address reached by pressing **[URL]** on the Web Image Monitor can be set.

```
msh> web url http://The URL or IP address you want to register/
```

❖ Link Name Configuration


You can enter the name for **[URL]** that appears on the Web browser.

```
msh> web name Name you want to display
```

❖ Help URL Configuration

The link address reached by pressing **[Help]** or “?” on the Web Image Monitor can be set.

```
msh> web help http://Help URL or IP address/help/
```





Rendezvous

The “rendezvous” commands are used for rendezvous-related displays and settings.

❖ View settings

This displays a list of rendezvous settings.

```
msh> rendezvous
```

❖ Rendezvous Service Name Setting

You can specify the rendezvous service name.


```
msh> rendezvous cname "service name"
```

- The service name is specified using up to 63 alphanumeric characters.
- The current service name appears if a service name is not specified.

❖ Rendezvous Installation Location Information Setting

You can enter information related to the location where the printer is installed.

```
msh> rendezvous location "location"
```

- Information related to installation location can be entered using up to 32 alphanumeric characters.
 - The current installation location information appears if installation location information is not entered.
- 



❖ Setting Order of Priority for Each Protocol

You can specify the order of priority for “diprint”, “lpr”, and “ipp”. Smaller numbers indicate higher priority.

- diprint

```
msh> rendezvous diprint [0-99]
```

- lpr

```
msh> rendezvous lpr [0-99]
```

- ipp

```
msh> rendezvous ipp [0-99]
```

❖ IP TTL setting

You can specify the IP TTL (the number of routers a packet can pass through).

```
msh> rendezvous ipttl {1-255}
```

Note

- The factory default setting is 255.

❖ Resetting the computer name and location information

You can reset the computer name and location information.

```
msh> rendezvous clear {cname | location}
```

- cname

Reset the computer name. The default for the computer name will be displayed when the computer is restarted.

- location

Reset the location information. The location information will be deleted.



Bluetooth™

To make setting for Bluetooth™, use the “btconfig” command.

❖ View settings

The Bluetooth™ settings are displayed.

```
msh> btconfig
```

❖ Mode settings

You can set Bluetooth™ operation mode to either **[private]** or **[public]**.

```
msh> btconfig [private | public]
```

Note

- The default is **[public]**.

Terminology

Terms used in the explanations are explained.

Important

- If a protocol is disabled or inactive, functions provided by that protocol cannot be used.


❖ TCP/IP

All functions that use “ftp”, “lpr”, “rsh”/“rcp”, “diprint”, http, ipp, web, wins, snmp^{*1}, smb^{*2}, and rendezvous.^{*1 *2}

*1 SNMP using TCP/IP

*2 SMB using TCP/IP

Note

- You cannot switch protocol functions, but you can disable smtp and dns by switching off or disabling TCP/IP.
- 



❖ SMB

- Printer function using SmartDeviceMonitor for Client
- Printer function using Microsoft Windows Network
- Printer function using NetBEUI protocol

❖ AppleTalk

- Printer function using Appletalk with Macintosh

Note

- This function can be selected when a module supporting PostScript 3 is attached.

❖ NetWare

- Printer function using NetWare server (remote printer/printer server)

Note

- If protocols are disabled or inactive under PureIP environment, only the print server can be used.
- If this protocol is switched off or disabled, the SNMP session using IPX/SPX is also disabled.

❖ LPR

- Printer function using Standard TCP/IP
- Printer function using command line

❖ FTP

- Printer function using command line
- Function to obtain device information by command line

❖ RSH/RCP

- Printer function using command line
- Function to obtain device information by command line





❖ **DIPRINT**

- Printer function using SmartDeviceMonitor for Client

❖ **WEB**

- Web Image Monitor function

❖ **SNMP**

- Bidirectional configuration for the printer driver
- Function to obtain device information by SmartDeviceMonitor for Admin/Client

❖ **IPP**

- Printer function using SmartDeviceMonitor for Client

❖ **HTTP**

- Web Image Monitor function
- Function to obtain device information by SmartDeviceMonitor for Admin/Client

❖ **HTTPS**

The following functions assume encrypted communication:

- Web Image Monitor function
- Function to obtain device information by SmartDeviceMonitor for Admin/Client

❖ **Wireless LAN**

Wireless network interface based on the IEEE 802.11b standard

❖ **NBT (WINS)**

- Function to register a NetBIOS name (computer name)
- Function to resolve a NetBIOS name (computer name)





❖ **Bluetooth™**

Printing function using Bluetooth™ interface

❖ **DHCP/Autonet**

Function for automatically assigning IP addresses

❖ **SMTP**

Function for sending and receiving e-mail to and from an SMTP server

❖ **DNS**

- Function to register a host name (dynamic DNS)
- Function to resolve a host name

❖ **Rendezvous**

Printer function that can be used with Mac OS 10.2.3 or later when using TCP/IP





Getting Printer Information over the Network

Details of each item when displaying printer status and information.

Printer current status

This gives the status of the printer. Status can be checked using the following method:

- UNIX: uses the “lpq” command and “rsh”, “rcp”, and “ftp” parameters. For details, see *UNIX Supplement*.
- mshell: uses the “status” command. For details, see [p.245 “Printer status”](#).

Messages	Description
Adjusting...	Adjusting color.
Call Service Center	There is a malfunction.
Canceling Job...	An error has occurred in the engine part or controller part.
Configuring...	The job is being cancelled.
Cover Open: Duplex Unit Rear	The optional duplex unit cover is open.
Cover Open: Front	The front cover is open.
Cover Open: Rear	The rear cover is open.
Cover Open: Upper	The upper cover is open.
Empty: Black Toner	The toner cartridge is empty.
Empty: Cyan Toner	The toner cartridge is empty.
Empty: Magenta Toner	The toner cartridge is empty.
Empty: Yellow Toner	The toner cartridge is empty.



Messages	Description
Energy Saver Mode	The printer is in Energy Saver Mode.
Error: Ethernet Board	An error has occurred in the Ethernet interface.
Error: HDD Board	An error has occurred in the optional hard disk drive.
Error: Optional Font	An error has occurred in the optional font.
Error: Optional RAM	An error has occurred in the optional Memory Unit.
Error: Parallel I/F Board	An error has occurred in the parallel interface.
Error: USB I/F	An error has occurred in the USB interface.
Error: Wireless Card	The IEEE 802.11 b or Bluetooth™ card shows irregularity.
Error: Wireless Card or Board	The IEEE802.11 b or Bluetooth™ card or board shows irregularity.
Full: Standard Tray	The standard tray is full.
Waste Toner Bottle Full/Not Set	The waste toner bottle is full.
Hex Dump Mode	The printer is in Hex Dump Mode.
Low: Black Toner	The toner cartridge is not set correctly, or toner is almost running out.
Low: Cyan Toner	The toner cartridge is not set correctly, or toner is almost running out.
Low: Magenta Toner	The toner cartridge is not set correctly, or toner is almost running out.
Low: Yellow Toner	The toner cartridge is not set correctly, or toner is almost running out.
Miscellaneous Error	An unspecifiable error has occurred.
Mismatch: Paper Size	The tray's paper type setting differs from that of the actual size in the tray.
Mismatch: Paper Size and Type	The tray's paper type setting differs from that of the actual size and type in the tray.



Messages	Description
Mismatch: Paper Type	The paper type setting of the tray differs from that of the actual type in the tray.
Nearly Full: Waste Toner Bottle	The waste toner bottle will soon be full.
No Paper: Selected Tray	There is no paper in the selected tray.
No Paper: Tray 1	There is no paper in tray 1.
No Paper: Tray 2	There is no paper in tray 2.
Not Detected: Black Toner	The black toner is not correctly set.
Not Detected: Charge Roller	The charger Roller is not correctly set.
Not Detected: Cleaning Blade	The cleaning blade is not correctly set.
Not Detected: Cyan Toner	The cyan toner is not correctly set.
Not Detected: Fusing Unit	The fusing unit is not correctly set.
Not Detected: Input Tray	The input tray is not correctly set.
Not Detected: Magenta Toner	The magenta toner is not correctly set.
Not Detected: PCU	The PCU is not correctly set.
Not Detected: Transfer Unit	The transfer unit is not correctly set.
Not Detected: Tray 1	The tray 1 is not correctly set.
Not Detected: Tray 2	The tray 2 is not correctly set.
Not Detected: WasteToner Bottle	The waste toner bottle is not correctly set.
Not Detected: Yellow Toner	The yellow toner is not correctly set.
Offline	The printer is offline and cannot print data.
Paper Misfeed: Duplex Unit	There is misfeed in the duplex unit.



Messages	Description
Paper Misfeed: Input Tray	There is misfeed in the input tray.
Paper Misfeed: Internal Path	There is a misfeed inside the machine.
Paper Misfeed: Output Tray	There is misfeed in the output tray.
Printing...	Busy printing.
Ready	Printing is available.
Replace Fusing Unit	It is time to replace the fusing unit.
Replace PCU	It is time to replace the photo conductor unit.
Warming Up...	The printer is warming up.
Waste Toner Bottle Full/Not Set	The waste toner bottle is full, or not set properly.



Printer configuration

You can check the printer configuration using telnet.

❖ telnet

Use the “info” command.

Note

- “*” (asterisk) appears with the current setting.
- Regarding *1 - *5, see the following table.

Item	Description
Input Tray	
No.	ID number of the paper tray
Name	Name of the paper tray* ¹
PaperSize	Paper size loaded in the paper tray* ²
Status	Current status of the paper tray* ³
Output Tray	
No.	ID number of the output tray
Name	Name of the output tray* ⁴
Status	Current status of the output tray* ⁵
Printer Language	
No.	ID number of the printer language used by the printer
Name	Name of the printer language used in the printer
Version	Version of the printer language



❖ *1 Input Tray: Name

Name	Description
Tray X	Name of installed paper tray (X is the number of tray).

❖ *2 Input Tray: PaperSize

Paper Size	Description
A4 (210 × 297 mm)	A4 (210 × 297)
A5 (148 × 210 mm)	A5 (148 × 210)
8 1/2 × 14	LG (8 1/2 × 14)
8 1/2 × 11	LT (8 1/2 × 11)
5 1/2 × 8 1/2	5 1/2 × 8 1/2
7 1/4 × 10 1/2	7 1/4 × 10 1/2
Custom(XXXxYYY mm)	Custom Size
NCS	There is no tray.
**	The paper size is not selected.

❖ *3 Input Tray: Status

Status	Description
Normal	—
NoTray	There is no paper tray
PaperEnd	There is no paper in the paper tray



❖ *4 Output Tray: Name

Name	Description
Internal Tray	Output Tray

❖ *5 Output Tray: Status

Status	Description
Normal	----
Error	Other errors





Understanding the Displayed Information

This section describes how to read the status information returned by the network interface board.

Print Job Information

The status of the print job can be viewed using the following commands.

- telnet : Use the “status” command. See [p.245 “Printer status”](#).

Item name	Meaning
Rank	Print job status. <ul style="list-style-type: none">• Active Printing or preparing for printing.• Waiting Waiting to be transferred to the printer.
Owner	Print request user name.
Job	Print request number.
Files	The name of the document.
Total Size	The size of the data (spooled). The default is “0 bytes”.





Print Log Information


This is a record of the most recent 16 jobs that have been printed.

This log can be displayed with the following commands.

- telnet : Use the “prnlog” command. See p.245 “Printer status” .

Name	Meaning
ID	Print request ID.
User	Print request user name.
Page	The number of pages that is printed.
Result	The result of the print request.
Time	The time when the print request was received
User ID ^{*1}	User ID that is to be configured in the printer driver.
JobName ^{*1}	The name of the document for printing.

^{*1} Appears the UserID and JobName information when entering the info command with the ID.





Configuring the Network Interface Board

The network interface board settings can be displayed by using the commands below.

- telnet : Use the “show” command. See [p.246 “Network interface board configuration settings information”](#) .

Item name	Meaning
Common	
Mode	
Protocol Up/Down	Up means active, Down means inactive.
AppleTalk	
TCP/IP	
NetWare	
SMB	
Ethernet interface	Internal version number
Syslog priority	
NVRAM version	Internal version number
Device name	Printer name.
Comment	Comment.
Location	Location of the printer in the SNMP and Rendezvous information
Contact	Person who maintains the printer and contact information in the SNMP information
Soft switch	



Item name	Meaning
AppleTalk Mode Net Object Type Zone	AppleTalk protocol in selection. Network number. Macintosh printer name. The type of printer. Name of the zone that the printer belongs to.
TCP/IP Mode ftp lpr rsh telnet diprint web http ftpc snmp ipp autonet rendezvous ssl	Up means active, Down means inactive.



Item name	Meaning
EncapType	Frame type.
DHCP	Dynamic Host Configuration Protocol (on/off)
Address	IP address.
Netmask	Subnet mask.
Broadcast	Broadcast address.
DNS Domain	DNS domain type
Gateway	Default gateway address.
Access Range[☆] *1	Access Control Range.
Time server	NTP server address
Time Zone	NTP server time difference
Time server polling time	Synchronizes interval
SYSLOG server	
Home page URL	URL of homepage.
Home page link name	URL name of homepage.
Help page URL	URL of help page.
SNMP protocol	Protocol used with SNMP.





Item name	Meaning
<p>NetWare</p> <ul style="list-style-type: none">EncapTypeRPRINTER numberPrint server nameFile server nameContext nameSwitch<ul style="list-style-type: none">ModeNDS/BinderyPacket negotiationLogin ModePrint job timeoutProtocolSAP interval timeNDS Tree Name	<p>Frame type.</p> <p>Remote printer number.</p> <p>Print server name.</p> <p>Name of the connect file server.</p> <p>Context of print server.</p> <p>Active mode.</p> <p>(this value is fixed)</p> <p>Login mode.</p> <p>Time of the job timeout.</p> <p>Protocol used.</p> <p>NDS tree name.</p>
<p>SMB</p> <ul style="list-style-type: none">Switch<ul style="list-style-type: none">ModeDirect printNotificationWorkgroup name	<p>(this value is fixed)</p> <p>(this value is fixed)</p> <p>Notification of print job completion.</p> <p>Name of the workgroup.</p>



Item name	Meaning
Computer name	Name of the computer.
Comment	Comment.
Share name[1]	Share name (name of the printer type).
Protocol	
IEEE 802.11b *2	
Device Name	Printer name.
DHCP	DHCP (on/off)
Address	IP address.
Netmask	Subnet mask.
Broadcast	Broadcast address.
DNS Domain	DNS domain type
SSID	SSID being used.
Channel range	Channels available for use.
Channel	Channel being used.
Communication mode	IEEE 802.11b interface transmitting mode.
Authentication	
TX Rate	IEEE 802.11b interface speed.
WEP encryption	Whether WEP is enabled or disabled.
Encryption key	WEP key.





Item name	Meaning
Bluetooth *3 Bluetooth mode	Bluetooth™ connection mode
DNS Server[X *4]: Selected DNS Server	IP address of the DNS server Selected DNS server
Domain Name ether wlan	Domain name on an Ethernet connection Domain name on a wireless LAN connection
Rendezvous Computer Name Rendezvous Name (ether) Rendezvous Name (wlan) Location Priority (diprint) Priority (lpr) Priority (ipp) IP TTL	Printer name. Printer name displayed with Rendezvous on an Ethernet connection Printer name displayed with Rendezvous on a wireless LAN connection Location of the printer diprint priority number lpr priority number ipp priority number IP TTL value
DDNS ether wlan	Dynamic DNS function on an Ethernet connection (on/off) Dynamic DNS function on a wireless LAN connection (on/off)



Item name	Meaning
WINS ether Primary WINS Secondary WINS Shell mode	IP address of the primary WINS server on an Ethernet connection IP address of the secondary WINS server on an Ethernet connection Mode of the remote maintenance tool.

*1 ☆ represents a target number between 1 and 3.

*2 You can display the item names when installing the optional 802.11b interface unit.

*3 You can display the item names when installing the optional Bluetooth™ interface unit.

*4 ☆ represents a target number between 1 and 3.





Message List

This is a list of messages written in the printer's system log. The system log can be viewed using the syslog command.

System Log Information

You can use the following methods to view the system log.

- telnet : Use the “syslog” command. See [p.236 “Commands List”](#) .

Message	Description and Solutions
Access to NetWare server <file server name> denied. Either there is no account for this print server on the NetWare server or the password was incorrect.	(In print server mode) Cannot log in to the file server. Make sure that the print server is registered on the file server. If a password is specified for the print server, delete it.
add_sess: bad trap addr:<IpAddress>, community:<community name>	The IP address (0.0.0.0) is unavailable when the community access type is TRAP. Specify the host IP address for the TRAP destination.
add_sess: community<community name> already defined.	The same community name already exists. Use another community name.
add_sess_ipx: bad trap addr: <IPXaddress>, community:<community name>	The IPX address (00:00:00:00:00:00) is unavailable when the community access type is TRAP. Specify the host IPX address for the TRAP destination.
add_sess_ipx: community <community name> already defined.	The same community name already exists. Use another community name.
ANONYMOUS FTP LOGIN FROM <IP address>, <password>	An anonymous login has been made with a password <password> from the host <IP address>.



Message	Description and Solutions
anpd start. (AppleTalk)	An anpd (AppleTalk Network Package Daemon) has started.
Attach FileServer =<file server name>	Attached to the file server as a nearest server.
Attach to print queue <print queue name>	(In print server mode) Attached to the print queue name.
Cannot create service connection	(In remote printer mode) Cannot establish a connection with the file server. The number of file server users may exceed the maximum number that the file server can handle.
Cannot find rprinter (<print server name>/<printer number>)	The printer having the number displayed on the print server does not exist. Make sure that the number of the printer is registered in the print server.
Change IP address from DHCP Server.	The IP address changes when DHCP LEASE is renewed. To always assign the same IP address, set a static IP address to the DHCP server.
child process exec error! (process name)	Failed to start the network service. Turn the printer off and then on. If this does not work, contact your service or sales representatives.
Connected DHCP Server(<DHCP server address>).	The IP address was successfully received from the DHCP server.
connection from <IP address>	Logged on from the host <IP address>.
Could not attach to FileServer<error number>	(In remote printer mode) Cannot attach to the file server. For some reason, the file server refuses the connection. Check the file server configuration.
Could not attach to PServer<print server>	(In remote printer mode) Cannot attach to the print server. For some reason, the print server refuses the connection. Check the print server configuration.
Current Interface Speed:xxxMbps	The speed of the network (10 Mbps or 100 Mbps).



Message	Description and Solutions
Current IP address <current IP address>	The IP address <current IP address> was received from the DHCP server.
Current IPX address<IPX address>	The current IPX address.
DHCP lease time expired.	DHCP lease time has expired. The printer tries to discover the DHCP server again. The IP address used up to now becomes invalid.
DHCP server not found.	The DHCP server cannot be found. Make sure the DHCP server is running on the network.
dhcpcd start.	A dhcpcd (DHCP client service) has started.
Duplicate IP=<IP address>(from <MAC address>).	The same IP address is used. An IP address must be unique. Check the address of the device indicated in <MAC address>.
Established SPX Connection with PServer, (RPSocket=<socket number>, connID= <connection ID>)	(In remote printer mode) A connection with the print server has been established.
exiting	lpd service has ended and the system is exiting the process.
Exit pserver	(In print server mode) Exits the print server because the necessary print server settings have not been made.
Frametype =<frame type name>	The <frame type name> is configured to be used on NetWare.
httpd start.	An httpd has started.
inetd start.	An inetd has started.
IPP cancel-job: permission denied.	The printer could not authenticate the name of the user attempting to cancel a job.



Message	Description and Solutions
ipp disable.	Printing with ipp is disabled.
ipp enable.	Printing with ipp is enabled.
IPP job canceled. jobid=%d.	The spooled job has been canceled due to an error or by user request.
LeaseTime=<lease time>(sec), RenewTime=<renew time>(sec).	The resource lease time that was received from the DHCP server is <lease time> in seconds. The renewal time is also <renew time> in seconds.
Login to fileserver <file server name> (<IPX IP>,<NDS BINDERY NDS BINDERY>)	(In print server mode) Logged in to the file server with NDS or BINDERY mode.
multid start.	Data transmission service for multiprotocols has started.
nbstart start. (NetBEUI)	The service for NetBEUI protocol stack setting has started.
NBT Registration Broadcast(<NetBIOS name>)	Use a local broadcast to map <NetBIOS name> with the IP address.
nbtstart start.	A nbtstart (NetBIOS over TCP/IP Daemon) has started. (Available only in DHCP mode)
NetBEUI Computer Name =<computer name>	The NetBEUI Computer Name is defined as <computer name>.
nmsd start. (NetBEUI)	A nmsd (Name Server Daemon) has started.
nprinter start. (NetWare)	(In remote printer mode) NetWare service has started.
nwstart start. (NetWare)	The service for NetWare protocol stack setting has started.
Open log file <file name>	(In print server mode) The specified log file has been opened.
ppd start. (AppleTalk)	AppleTalk print service has started.



Message	Description and Solutions
phy release file open failed.	Replacing the Network Interface Board is required. Contact your sales or service representatives.
Print queue <print queue name> cannot be serviced by printer 0, <print server name>	(In print server mode) The print queue name cannot be serviced. Make sure that print queue volume exists on the specified file server.
Print server <print server name> has no printer.	(In print server mode) The printer object is not assigned to the print server <print server name>. Using NWadmin, assign the printer object, and then restart the printer device.
print session full	Cannot accept the print session.
Printer <printer name> has no queue	(In print server mode) The print queue is not assigned to the printer. Using NWadmin, assign the print queue to the printer, and then restart it.
pserver start. (NetWare)	(In print server mode) NetWare service has started.
Required computer name (<Computer name>) is duplicated name	The same computer name is detected on the network. The start job determines the computer name by adding the computer name to the suffix (0,1....). Configure a new computer name that is unique.
Required file server (<file server name>) not found	Cannot find the required file server.
restarted.	LPD has started.
sap enable, sapttype=<SAP type>, sapname=<SAP name>	The SAP function has started. The SAP (SAP type and SAP name) packet is issued to advertise the service on the SAP table on the NetWare server.
session<community name>already defined.	A requested community name is not defined.
session_ipx<community name> not defined.	A requested community name is not defined.
Set context to <NDS context name>	A <NDS context name> has been set.



Message	Description and Solutions
shutdown signal received. network service rebooting...	Rebooting the network service.
smbd start. (NetBEUI)	An smbd (SMB (Server Message Block) service) has started.
SMTPC: failed to get smtp server ip-address.	Failed to get the SMTP server IP address. This could be because: <ul style="list-style-type: none">• The DNS server could not be found.• There is no connection to the network.• The specified DNS server could not be connected to.• Incorrect DNS server is specified.• No specified SMTP server IP address in the DNS server.
SMTPC: failed to connect smtp server. timeout.	Failed to connect the SMTP server due to timeout. This could be because: <ul style="list-style-type: none">• The SMTP server name is incorrect.• There is no connection to the network.• The network configuration is incorrect, so there is no response from the SMTP server.
SMTPC: refused connect by smtp server.	The connection to the SMTP server is denied. This could be because: <ul style="list-style-type: none">• Another server other than the SMTP server has been specified.• The SMTP server port number is incorrect.





Message	Description and Solutions
SMTPC: no smtp server. connection close.	No response from the SMTP protocol. Cannot connect to the SMTP server. This could be because: <ul style="list-style-type: none">• Another server other than the SMTP server has been specified.• The SMTP server port number is incorrect.
SMTPC: failed to connect smtp server.	Failed to connect the SMTP server. This could be because: <ul style="list-style-type: none">• There is no connection to the network.• The network configuration is incorrect, so there is no response from the SMTP server.• The SMTP server name is incorrect.• The specified SMTP server is incorrect.• There is no specified SMTP server IP address in the DNS server.• Another server other than the SMTP server has been specified.• The SMTP server port number is incorrect.
SMTPC: username or password wasn't correct.	Failed to connect the SMTP server. This could be because: <ul style="list-style-type: none">• The specified SMTP user name is incorrect.• The specified SMTP password is incorrect. Check the SMTP user name and password.
Snmp over ip is ready.	Communication over TCP/IP with SNMP is available.
Snmp over ipx is ready.	Communication over IPX with SNMP is available.
snmpd start.	SNMP service has started.
started.	Direct print service has started.
Started.	The Rendezvous function is enabled.



Message	Description and Solutions
Terminated.	The Rendezvous function is disabled.
The print server received error <error number> during attempt to log in to the network. Access to the network was denied. Verify that the print server name and password are correct.	Cannot log in to the file server. The print server is not registered or the password is specified. Register the print server without specifying a password.
WINS name refresh :Server No Response	There has been no response to the update request from the server. Confirm that the WINS server address is correct and the WINS server is working properly.
WINS name registration/refresh error code(error number)	Set NetBIOS names those do not overlap with each other. Confirm that the WINS server address is correct and the WINS server is working properly.
WINS name registration:Server No Response	There has been no response to the registration request from the server. Confirm that the WINS server address is correct and the WINS server is working properly.
WINS server address 0.0.0.0	The WINS server address has not been specified. Specify the WINS server address to match the printer name with WINS.
WINS Server=<WINS server address> NetBIOS Name=<NetBIOS name>	The printer name has been successfully registered in <WINS server address>.
WINS wrong scopeID	The scope ID is wrong. Specify the correct scope ID.



When Using Windows Terminal Service/MetaFrame

Operating Environment

The following combinations of operating system and MetaFrame are supported:

- ❖ **Windows NT Server 4.0 Terminal Server Edition**
 - MetaFrame 1.8 SP3/FR1 SP3/SP4
 - MetaFrame XP 1.0 SP1/SP2/FR1
- ❖ **Windows 2000 Server /Advanced Server**
 - MetaFrame 1.8 SP3/FR1 SP3/SP4
 - MetaFrame XP 1.0 SP1/SP2/FR1/FR2

Supported Printer Drivers

- ❖ **When Windows Terminal Service is operating**
 - PCL5c
 - PostScript 3

 **Note**

- The RPCS printer driver is not supported.
- Some RPCS printer driver functions do not work if Windows Terminal Service is installed, even if it is not operating.

Limitation

The following restrictions apply in the Windows Terminal Service environment.

These restrictions are due to the way Windows Terminal Service or MetaFrame works.

- ❖ **When printing (Windows Terminal Service)**

When printing a file containing a large number of bitmap images or fonts, some images or font settings may be lost. We strongly recommend testing this function under your network environment before applying it to actual jobs.





❖ When using [Auto-creating client printers] (MetaFrame)

[Auto-creating client printers] can select a logical printer created by copying the client's local printer data to the MetaFrame server. We strongly recommend testing this function under your network environment before applying it to actual jobs.

- The settings for optional equipment will not be stored in the server after the equipment is disconnected. The settings for optional items will return to default values each time the client computer logs on to the server.
- When printing a large number of bitmap images or using the server in a WAN environment over dial-up lines such as ISDN, depending on the data rate, printing may be disabled or errors may occur.
- When using MetaFrame XP 1.0 or later versions, we recommend configuring [Client Printer bandwidth] available from [Citrix Management Console], according to the environment.

- If a printing error occurs on the server and the print job or [Auto-creating client printers] cannot be deleted, we recommend doing the following:

- MetaFrame 1.8 SP3, MetaFrame XP 1.0 SP1/FR1

Configure the [Delete unfinished print jobs] settings in the registry. For more information, see the Readme file provided with MetaFrame.

- MetaFrame XP 1.0 FR2
Configure the [Delete pending print jobs at logout] settings in [Printer Properties Management] of the Citrix Management Console.

❖ When using [Printer driver replication] (MetaFrame)

[Printer driver replication] is designed to distribute printer drivers across all servers in a server farm. We strongly recommend testing this function under your network environment before applying it to actual jobs.

- If the printer drivers are not properly copied, we recommend installing them directly onto each server.



Cautions when using Bluetooth™ Interface Unit

This machine's optional Bluetooth™ interface unit operation mode, is set to **[public]** as default.

If the setting is changed to **[private]**, only registered computers can use this machine via Bluetooth™ interface unit.

Make sure settings to the operation mode using Web Image Monitor or telnet.



Reference

See [p.125 “Using a Web Browser”](#) for Web Image Monitor. See Web Image Monitor Help for details about setting items.

See [p.273 “Bluetooth™”](#) for details about making operation mode settings using telnet.





Precautions

Please pay attention to the following when using the network interface board. When configuration is necessary, follow the appropriate procedures below.

Connecting a Dial Up Router to a Network

When the NetWare file server and the printer are on the opposite side of a router, packets are continuously sent back and forth, possibly causing communication charges to increase. Because the packet transmission is a specification of NetWare, you need to change the configuration of the router. If the network you are using does not allow you to configure the router, configure the printer.

Configuring the router

Filter the packets so that they do not pass over the dial-up router.

 **Note**

- The MAC address of the printer doing the filtering is printed on the printer configuration page. For more information about printing a configuration page, see [p.166 "Printing a Configuration Page"](#).
- For more information about configuring the printer if the router cannot be configured, see the instructions below.



Configuring the printer with NetWare

- 1** Follow the setup method in this manual, configure the file server.
- 2** Set the Frame type for a NetWare environment.

 **Reference**

For more information about selecting a Frame type, see [p.89 “Configuring the NetWare Protocol using the Control Panel”](#).

Configuring the printer without NetWare

- 1** While not printing, the network interface board sends packets on the network. Set the NetWare to inactive.

 **Reference**

For more information about selecting a protocol, see [p.89 “Configuring the NetWare Protocol using the Control Panel”](#).

PostScript Printing from Windows

When printing PostScript from Windows, see the PostScript 3 Supplement.



NetWare Printing


Form Feed

You should not configure the form feed on NetWare. The form feed is controlled by the printer driver on Windows. If the NetWare form feed is configured, the printer might not print properly. If you want to change the form feed setting, always configure it on Windows.

- With Windows 95/98/Me, clear the **[Form feed]** check box under the **[Printer Settings]** tab in the Printer Properties dialog box.
- With Windows 2000/XP, Windows Server 2003, Windows NT 4.0, clear the **[Form feed]** check box under the **[NetWare Settings]** tab in the Printer Properties dialog box.

Banner Page

You should not configure a banner page on NetWare. If you want to change the banner page setting, always configure it on Windows.

- With Windows 95/98/Me, clear the **[Enable banner]** check box under the **[Printer Settings]** tab in the Printer Properties dialog box.
 - With Windows 2000/XP, Windows Server 2003, Windows NT 4.0, clear the **[Enable banner]** check box under the **[NetWare Settings]** tab in the Printer Properties dialog box.
- 



Printing after resetting the printer

After resetting the remote printer, it will be cut off from the print server for about 30-40 seconds before connecting again. Due to the NetWare specification, print jobs may be accepted, but they will not be printed during this interval.

When using the printer as a remote printer, wait about 2 minutes after resetting the printer before attempting to print.

Using DHCP

This machine can be used in DHCP environment. In a WINS server environment, the printer name can simultaneously be registered with a WINS server.

❖ When static IP addresses are set for each interface

- IP address: When set at the same value, the Ethernet interface is used.
- Subnet mask: When a value overlaps, the Ethernet interface is used.
- Gateway address: The value set is used. For the gateway address, set the gateway address located in the subnetwork set by the interface. If a value is outside the subnet range set by the interface, it operates as “0.0.0.0”.



❖ When each setting is acquired from the DHCP server

- IP address, subnet mask: set for each value leased by the DHCP server operating on a connected interface. When overlapping IP addresses or identical IP addresses in the subnetwork are set at this time, only the highest priority active value is set for the interface.



Note

- The default priority interface is Ethernet.
- AutoNet: An automatic private address (169.254. xxx.xxx) is set for high priority interfaces.
- Gateway address, DNS server address, domain name: Settings are made for the DHCP-acquired values that have the highest interface priority.
If the gateway address is outside the subnetwork range set by the interface, it operates as “0.0.0.0”.



Note

- The default priority interface is Ethernet.

❖ When the settings of the static IP addresses and the DHCP acquired value overlap

- IP address, subnet mask: When the static IP address and DHCP-acquired value (IP address) are the same, or the static subnet mask value and DHCP-acquired subnet mask value overlap, the interface (~~setting~~) set by the static IP (~~use the~~) address is available using its value set. The interface set by DHCP is reset to the default.
- Gateway address: Uses the manually set value.
- When a gateway address is set outside the interface subnetwork range, it operates as “0.0.0.0”.



Note

- When the static IP address is not set, or is set as “0.0.0.0”, the interface setting the DHCP acquisition value is activated.



Note

- Supported DHCP server operating systems are: Windows 2000 Server, Windows NT 4.0 Server Service Pack 4 or later, NetWare, and UNIX standard.
- The IP address acquired from DHCP can be checked on the configuration page. See [p.166 “Printing a Configuration Page”](#) printing the configuration page.
- When using WINS server, set the WINS server as shown on [p.311 “Configuring a WINS Server”](#).
- Under WINS server, host names can be used for remote network printer ports.
- If you do not use the WINS server, reserve the printer's IP address in the DHCP server so the same IP address is assigned every time.
- When there are multiple DHCP servers, make the same reservation for all. This machine operates on the information from the DHCP server that answered first.
- DHCP relay-agent is not supported. If you use DHCP relay-agent on an ISDN line network, it will incur expensive line charges. This is because your computer connects to the ISDN line whenever a packet is transferred from the printer.



Using AutoNet

If the printer IP address is not assigned by a DHCP server automatically, a temporary IP address starting with 169.254 which is not used on the network can be selected automatically by the printer.

You must change the setting to “on” to use AutoNet.



Reference

See [p.263 “AutoNet”](#).



Note

- The DHCP-assigned IP address for priority over that selected by AutoNet. As this machine reboots at this time, it is temporarily not able to print.
- You can confirm the current IP address on the configuration page. For more information about the configuration page, see [p.166 “Printing a Configuration Page”](#).
- When AutoNet is running, the printer name is not registered on the WINS server.
- No communication can take place except between units started up using AutoNet. However, communication can take place Macintosh machines running Mac OS X 10.2.3 or later versions.



Configuring a WINS Server

The printer can be configured to register its NetBIOS name with a WINS server when power is turned on. This enables the NetBIOS name of the printer to be specified from SmartDeviceMonitor for Admin even under a DHCP environment.

This section describes how to configure the WINS server.

 **Note**

- The WINS Server is supported with Windows NT 4.0 Server Service Pack 4 or later, and Windows 2000 Servers WINS Manager.
- For more information about the WINS Server settings, see Windows Help.
- If there is no reply from the WINS Server, the NetBIOS name will be registered by broadcast.
- The NetBIOS name consists of up to 13 alphanumeric characters.



Using a Web browser

- 1** Start the Web browser.
- 2** Enter “**http://(IP address of printer whose settings you want to change)/**” in the address bar to access the printer whose settings you want to change.
The Web Image Monitor Top Page appears.
- 3** Click **[Administrator Mode]**.
The dialog box for entering the password and user name appears.
- 4** Enter your user name and password, and then click **[OK]**.
To use the factory default account, enter no user name and type “password” for the password.
- 5** In the left area, click **[Configuration]**, and then click **[Network]**.
- 6** Click **[TCP/IP]**.
- 7** Check **[WINS]** in the **[Ethernet]** column is **[Active]**, and then enter the WINS server's IP address for both **[Primary WINS Server]** and **[Secondary WINS Server]**.
- 8** Click **[Apply]**.
- 9** Exit the Web browser.

Using telnet

See p.261 “WINS”



Using the Dynamic DNS Function

Dynamic DNS is a function which dynamically updates (registers and deletes) records (A record and PTR record) managed by the DNS server. When a DNS server is part of the network environment to which this machine is connected and this machine is a DNS client, records can be dynamically updated using this function.

About processing updates

Updating procedure differs depending on whether the machine's IP address is static or acquired by DHCP.

 **Note**

- When the dynamic DNS function is not used, if the IP address of this machine is changed, records managed by DNS server must be updated manually.
- To update the record with this machine, the DNS server has to have either of the following:
 - No security settings made.
 - If security settings are made, an IP-specified client (this machine), that permits updating.

❖ **In the case of a static IP setting**

If the IP address or host name is changed, this machine updates the A and PTR record.

If the A record is registered, CNAME is registered also. CNAMEs that can be registered are as follows.

- Ethernet and IEEE 802.11b
RNPXXXXXX (XXXXXX represents the last 3 hexadecimal bytes of the MAC address)





❖ For DHCP settings

As a substituting for this machine, the DHCP server updates the record, and one of the following occurs:

- When this machine acquires the IP address from the DHCP server, the DHCP server updates the A and PTR record.
- When this machine acquires the IP address from the DHCP server, this machine updates the A record, and the DHCP server updates the PTR record.

If the A record is registered, CNAME is registered also. CNAMEs that can be registered are as follows:

- Ethernet and IEEE 802.11b
RNPXXXXXX (XXXXXX represents the last 3 hexadecimal bytes of the MAC address)

⚠ Limitation

- Dynamic update using message authentication (TSIG, SIG(0)) is not supported.

DNS servers targeted for operation


❖ For static IP setting

- Microsoft DNS server with standard Windows 2000 Server features
- BIND 8.2.3 or later

❖ For DHCP setup, when this machine updates the A record

- Microsoft DNS server with standard Windows 2000 Server features
- BIND 8.2.3 or later

❖ In the case of the DHCP setup, when the DHCP server updates records

- Microsoft DNS server with standard Windows 2000 Server features
 - BIND 8.2.3 or later
 - DNS server with standard NetWare 5 (or a later version) features
- 



DHCP servers targeted for operation

As a substitute for this machine, DHCP servers capable of updating the A record are as follows:

- Microsoft DHCP server with standard Windows 2000 Server (Service Pack 3 or later versions) features
- ISC DHCP 3.0 or later
- DHCP server with standard NetWare 5 features

Setting method of the dynamic DNS function

Make settings with telnet using the “dns” command. For details, see [p.266 “DNS”](#).



Spool Printing

With Spool Printing, the whole data of a print job is saved in the hard disk drive before printing. To use this function, set it from the menu. See [p.186 “System Menu”](#).

Important

- Do not turn off the printer or the computer when a print job is being spooled and the **Data In** indicator is blinking. If you do, the print job will remain in the hard disk drive and be printed when the printer is turned on.

Limitation

- Spool Printing does not appear unless the optional hard disk drive is installed.
- Data that has been received in the protocol other than “diprint”, “lpr”, “IPP”, or “SMB” cannot be spooled.
- With “diprint”, spool printing cannot take place using bi-directional communication.
- A maximum number of 150 jobs can be spooled.
- The capacity of the domain reserved for spool printing is about 1 GB.
- When Spool Printing is on, the size of a single print job cannot exceed 500 MB.
- When sending spooled print jobs from more than one computer at the same time, up to one diprint job, 10 LPR jobs, one IPP job, and one SMB job can be spooled. Jobs exceeding the maximum number cannot be spooled. Wait until the number of spooled print jobs falls below the maximum before adding jobs.

Note

- When “On” is selected, the first print will take time.
- With spool printing, the computer is freed from print processing earlier, even when processing a large amount of data.
- Spool jobs stored in the machine can be viewed or deleted using a Web browser.



Setting Spool Printing

Spool Printing can be set using telnet or a Web browser.

- Using a Web browser
In **[System]** on the **[Configuration]** menu, set **[Spool Printing]** to **[Enable]**.
For details, See Web Image Monitor Help.
- Using telnet
Type in “spoolsw spool on” to set Spool Printing.
For more information, See [p.259 “Job Spool”](#).





Confirm or delete the spooled job from a Web browser

The spooled job can be viewed or deleted from a Web browser.

1 Start the Web browser.

2 Enter “**http: //(IP address of printer whose settings you want to change)/”** in the address bar to access the printer whose settings you want to change.

The Web Image Monitor Top Page appears.

3 Click **[Administrator Mode]**.

The dialog box for entering the password and user name appears.

4 Enter your user name and password, and then click **[OK]**.

To use the factory default account, enter no user name and type “password” for the password.

5 Click **[Job]** on the menu displayed in the left frame.

A submenu will then appear.

6 Click **[Spool Printing]** on the **[Printer]** menu.

A list of spooled jobs appears.

7 To delete a job, select the check box of the job you want to delete, and then click **[Delete]**.

The checked job is deleted.

8 Exit the Web browser.

 **Reference**

For more information, see Web Image Monitor Help.





When Using IPP with SmartDeviceMonitor for Client

When using IPP with SmartDeviceMonitor for Client, note the following:

- The network printer can only receive one print job from SmartDeviceMonitor for Client at a time. While the network printer is printing, another user cannot access it until the job is finished. In this case, SmartDeviceMonitor for Client tries to access the network printer until the retry interval expires.
- If SmartDeviceMonitor for Client cannot access the network printer and times out, it will stop sending the print job. In this case, you should cancel the paused status from the print queue window. SmartDeviceMonitor for Client will resume access to the network printer. You can delete the print job from the print queue window, but canceling a print job printed by the network printer might cause the next job sent from another user to be incorrectly printed.
- If a print job sent from SmartDeviceMonitor for Client is interrupted and the network printer cancels the job because something went wrong, send the print job again.
- Print jobs sent from another computer do not appear in the print queue window, regardless of protocol.
- If various users send print jobs using SmartDeviceMonitor for Client to network printers, the printing order might not be the same as that in which the jobs were sent.
- An IP address cannot be used for the IPP port name because the IP address is used for the SmartDeviceMonitor for Client port name.

Memory Capacity and Paper Size

Print Quality	Paper Size	Non-Duplex Printing		Duplex Printing	
		Can be printed	Guaranteed	Can be printed	Guaranteed
600×600 dpi *1	A4	128 MB (Standard)		128 MB (Standard)	
	A5			—	—
	Letter			128 MB (Standard)	
1,200×600 dpi *2	A4	128 MB (Standard)		128 MB (Standard)	192 MB (Standard + 64 MB)
	A5			—	—
	Letter			128 MB (Standard)	192 MB (Standard + 64 MB)

*1 To set resolution from each printer driver is as follows:

- RPCS: **[600 x 600 dpi]** on **[Resolution]**
- PCL 5c: **[600 dpi]** on **[Resolution]**
- PostScript 3: **[600 dpi]** on **[Resolution]** and **[Fast]** on **[Gradation]**

Reference

For more information about how to set the printer driver, see printer driver's Help.

*2 To set resolution from each printer driver is as follows:

- RPCS: **[1200 x 600 dpi]** on **[Resolution]**
- PostScript 3: **[600 dpi]** on **[Resolution]** and **[Standard]** on **[Gradation]**

Reference

For more information about how to set the printer driver, see printer driver's Help.

Important

- In duplex printing, do not use A5 paper size.



Specifications

Mainframe

❖ **Configuration:**


Desktop


❖ **Print Process:**

Semiconductor laser beam scanning method


Photo conductor 1 drum method


❖ **First Print Speed:**

Monochrome: 14 sec or less (A4 )

Monochrome: 20 sec or less (A4 )

❖ **Printing Speed:**

Monochrome: Maximum 31 pages per minute (A4 )

Color: Maximum 8 pages per minute (A4 )

❖ **Resolution:**

600 × 600 dpi

❖ **Paper size:**

See “Paper and Other Media”, *Maintenance Guide*.

❖ **Paper Weight:**

See “Paper and Other Media”, *Maintenance Guide*.



❖ **Media Type:**

See “Paper and Other Media”, *Maintenance Guide*.

❖ **Paper Output Capacity:**

Standard 250 sheets (80 g/m² (20 lb.bond))

❖ **Paper Input Capacity:**

Standard Paper Tray	250 sheet tray * ¹
Optional Paper Feed Units	530 sheet paper tray * ¹

*¹ Paper weight: 80 g/m² (20 lb. bond)

❖ **Power Source:**

220 - 240 V, 6A or less, 50 Hz

❖ **Power Consumption:**

Printing	1,300 W or less (No power is used during power off.)
Energy Saver	15 W or less

❖ **Warm-up Time:**

Less than 45 seconds (22°C, 71.6 F) *¹

*¹ When no error.

❖ **Dimensions:**

	Width	Depth	Height
Printer only (tray not extended)	480 mm (18.9 inches)	420 mm (16.5 inches)	385 mm (15.2 inches)



❖ **Weight:**

Approximately 31.5 kg (69.4 lb) (toner cartridge and power cord included)

❖ **Noise Emission ^{*1} :
Sound Power Level**

	Mainframe only
Stand-by	54 dB (A)
During Printing	66 dB (A)

Sound Pressure level ^{*2}

	Mainframe only
Stand by	46 dB (A)
During Printing	60 dB (A)

*1 The preceding measurements made in accordance with ISO7779 are actual values.

*2 Measured at the position of a bystander.

❖ **Memory:**

Standard 128 MB, up to 384 MB (with the optional Memory Unit)

❖ **Interface:**

Standard:

- Parallel (Bidirectional IEEE1284)
- Ethernet (10/100Base-TX)
- USB2.0 ^{*1}

^{*1} It requires a USB computer port and cable that support USB 2.0.

Optional:

- IEEE 802.11b (Wireless LAN)
- Bluetooth™



❖ **Printer Language:**

PCL 5c, RPCS, Adobe PostScript Level 3, PDF

❖ **Fonts:**

PCL 5c

Agfa Font 35 Manager Intellifonts, 10 TrueType fonts, and 1 Bitmap font Agfa Font Manager available, 31 fonts

PostScript 3



136 fonts





Options

PAPER FEED UNIT Type 1000

- ❖ **Paper size:**
A4 , Letter (8¹/₂×11) 
- ❖ **Dimensions (W × D × H):**
460 × 466.5 × 185 mm (18.1 × 18.4 × 7.3 inches)
- ❖ **Paper weight:**
60 - 105 g/m², (16 - 28 lb. bond)
- ❖ **Weight:**
Less than 6.0 kg (13.2 lb)





AD460

❖ Dimensions (W × D × H):

345 × 185 × 406 mm (13.6 × 7.3 × 16.0 inches)

Note

This option is built into the machine.

❖ Paper size:

A4 , Letter (8¹/₂×11)

❖ Paper weight:

60 - 105 g/m² (16 - 28 lb. bond)

❖ Weight:

Less than 5.2 kg (11.5 lb. bond)

Hard Disk Drive Type 2600

❖ Storage Capacity (Formatted):


20 GB

❖ Specifications:

- Spool print data to collate
- Spool Sample Print/Locked Print data
- Store PostScript fonts
- Store log data

Note

You can install PostScript fonts with this optional hard disk drive. With Mac OS, types of fonts supported are PostScript Type 1 and PostScript Type 2. To download them, use Printer Utility for Mac.





Memory Unit Type C (64/128/256 MB)

- ❖ **Module Type:**
SO-DIMM (Small Outline Dual-in-line Memory Module)
- ❖ **Memory Type:**
SDRAM (Synchronous Dynamic RAM)
- ❖ **Number of Pins:**
144 pins

IEEE 802.11b Interface Unit Type D

- ❖ **Transmission Spec.:**
Based on IEEE 802.11b (Wireless LAN)
- ❖ **Protocol:**
TCP/IP, NetBEUI, IPX/SPX, AppleTalk
- ❖ **Note**
 SmartDeviceMonitor and Web Image Monitor are supported.
- ❖ **Data Transfer Speed:**
Auto select from below speed
1 Mbps, 2 Mbps, 5.5 Mbps, 11 Mbps





❖ Frequency Range:

- Inch version:
2412-2462 MHz (1-11 channels)
- Metric version:
2412-2472 MHz (1-13 channels)

❖ Transmittable Distance:

- 1 Mbps 400 m ^{*1}
- 2 Mbps 270 m ^{*1}
- 5.5 Mbps 200 m ^{*1}
- 11 Mbps 140 m ^{*1}

^{*1} These figures are a guideline for outdoor use. In general, the transmittable distance indoors is 10-100 m, depending on the environment.

❖ Transmission Mode:

ad hoc mode and infrastructure mode





Bluetooth Interface Unit Type 2238

❖ Supported Profiles:

- SPP (Serial Port Profile)
- HCRP (Hardcopy Cable Replacement Profile)
- BIP (Basic Imaging Profile)

❖ Frequency Range:

2 GHz ISM band

❖ Data Transmission Speed:

732 kbps

Note

- The transmission speed is adjusted according to factors such as the distance and obstacles between the devices, radio signal condition and Bluetooth™ adaptor.

❖ Maximum Range:

10 m



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expat

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Note

- Information on expat 1.95.2 is available at:
<http://expat.sourceforge.net/>



JPEG LIBRARY

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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.

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- The product name of Windows[®] 95 is Microsoft[®] Windows 95.
- The product name of Windows[®] 98 is Microsoft[®] Windows 98.
- The product name of Windows[®] Me is Microsoft[®] Windows Millennium Edition (Windows Me).
- The product names of Windows[®] 2000 are as follows:
Microsoft[®] Windows[®] 2000 Advanced Server
Microsoft[®] Windows[®] 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 Server[™] 2003 are as follows:
Microsoft[®] Windows Server[™] 2003 Standard Edition
Microsoft[®] Windows Server[™] 2003 Enterprise Edition
Microsoft[®] Windows Server[™] 2003 Web Edition
- The product names of Windows NT[®] 4.0 are as follows:
Microsoft[®] Windows NT[®] Server 4.0
- Microsoft[®] Windows NT[®] Workstation 4.0



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.

 **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.

 **Reference**

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.

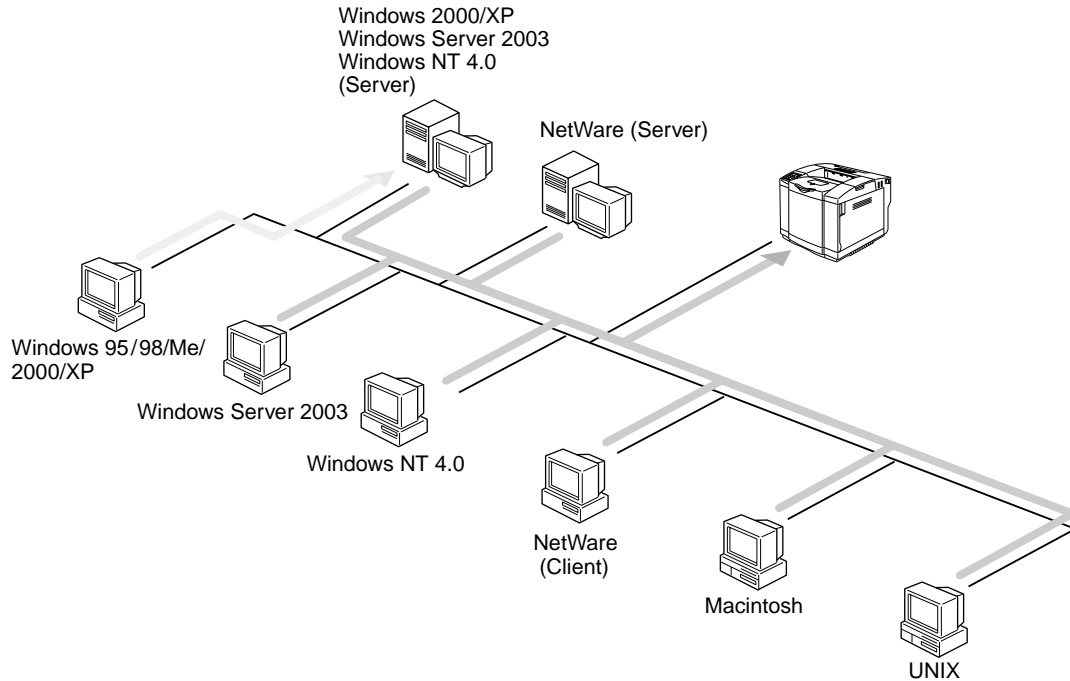
Keys on the computer's keyboard.





Confirming a Network Environment

Check the environment in which the printer is to be used.





❖ Connecting Printer and Computer

- Network connection (Ethernet cable, IEEE 802.11b (Wireless LAN))
- Parallel connection (parallel cable)
- USB connection (USB cable)
- Bluetooth™ Connection

❖ Print Server

- Using Windows 2000/XP, Windows Server 2003, or Windows NT 4.0 Server
- Using NetWare

Windows Configuration

Using a Print Server

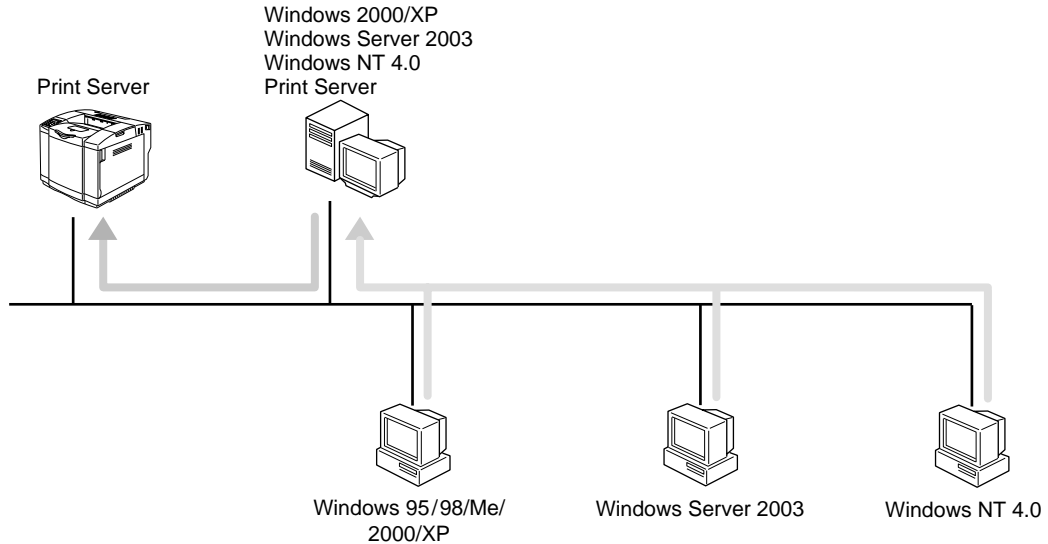
This section explains the setup procedure for printing by connecting the printer to a print server network. There are two procedures: when using a Windows 2000/XP, Windows Server 2003, or Windows NT 4.0 print server, and when using a NetWare server.





❖ Using Windows 2000/XP, Windows Server 2003, or Windows NT 4.0 Print Server

You can print using Windows 95/98/Me/2000/XP, Windows Server 2003, or Windows NT 4.0 as a client when using Windows 2000/XP, Windows Server 2003, or Windows NT 4.0 as a print server.



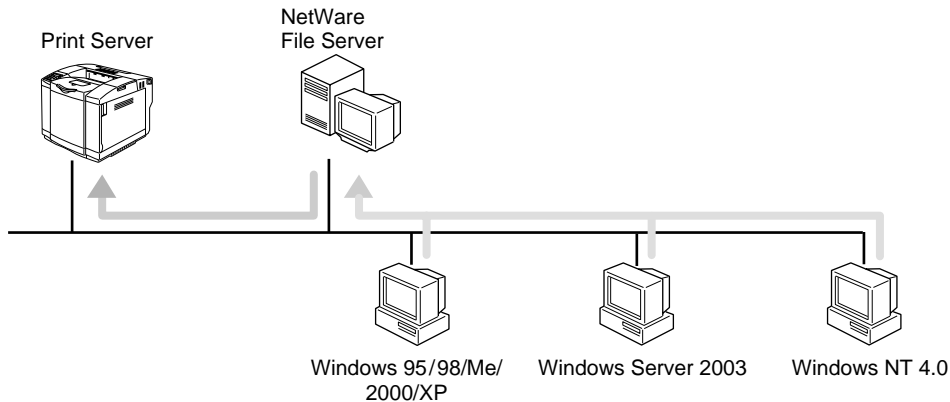
- See p.22 “Printing with a Print Server” in “Windows 95/98/Me Configuration”.
- See p.57 “Printing with a Print Server” in “Windows 2000 Configuration”.
- See p.91 “Printing with a Print Server” in “Windows XP, Windows Server 2003 Configuration”.
- See p.123 “Printing with a Print Server” in “Windows NT 4.0 Configuration”



❖ Connecting a NetWare Server

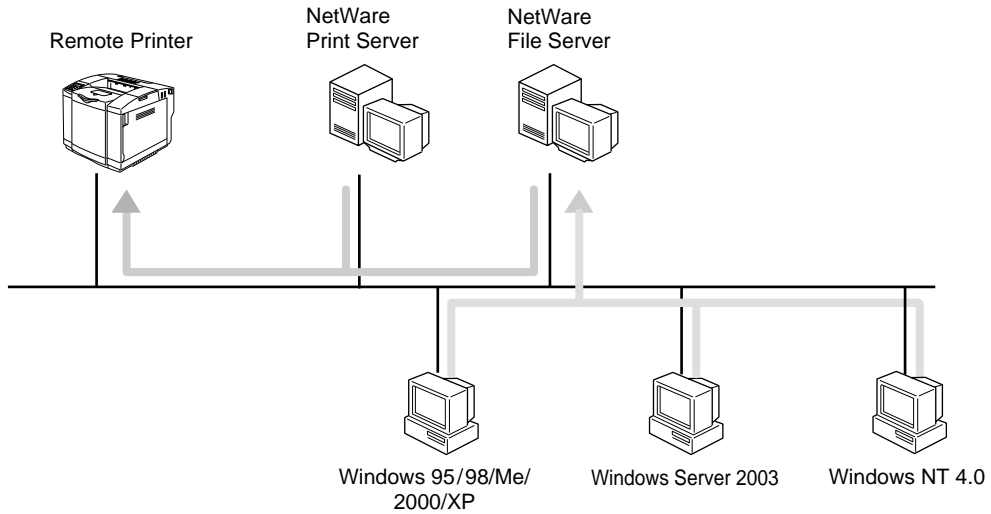
You can print using Windows 95/98/Me/2000/XP, Windows Server 2003, or Windows NT 4.0 as a client with using NetWare 3.x, NetWare 4.x, NetWare 5/5.1, or NetWare 6/6.5 as a print server. There are two types of connections: when using the printer as a print server, and when using the printer as a remote printer.

❖ Using as a Print Server





❖ Using as a Remote Printer



See [p.173 “NetWare Configuration”](#).

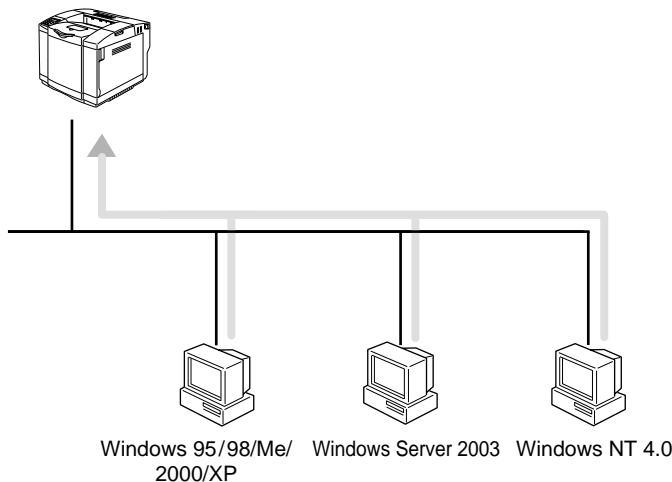




Not Using a Print Server

This section explains the setup procedure for printing by connecting the printer to a network without a server. You can print using a Windows 95/98/Me/2000/XP, Windows Server 2003, or Windows NT 4.0.

❖ Network Connection (Ethernet)



- To install the printer driver and required software quickly, refer to [p.20 “Quick Install”](#).
- When you make detailed settings while installing the printer driver and required software, refer to the following.
 - See [p.28 “Printing without Using a Print Server”](#) in “Windows 95/98/Me Configuration”.
 - See [p.64 “Printing without Using a Print Server”](#) in “Windows 2000 Configuration”.
 - See [p.97 “Printing without Using a Print Server”](#) in “Windows XP, Windows Server 2003 Configuration”.
 - See [p.129 “Printing without Using a Print Server”](#) in “Windows NT 4.0 Configuration”.

❖ Network Connection (IEEE 802.11b)

❖ Ad hoc Mode (802.11 Ad hoc/Ad hoc)

This is a communication mode used between computers installed with wireless LAN. This is the most basic form of communication that does not require a relay (access point) between computers installed with wireless LAN. The computers must be set to the same frequency band (channel) SSID ^{*1} to enable them to communicate.

It may not be necessary to set SSID ^{*1} depending on the settings of the computers installed with wireless LAN.



Reference

For details, see about “IEEE 802.11b (Wireless LAN) Configuration”, *Option Setup Guide*.

❖ Infrastructure Mode

This mode is used to communicate through an access point. If SSID ^{*1} and WEP ^{*2} are set at the access point, it is necessary to make the same settings. Also, the access point can be incorporated into an existing network environment by connecting it to a wired LAN (Ethernet).



Reference

For details, see about “IEEE 802.11b (Wireless LAN) Configuration”, *Option Setup Guide*.

^{*1} This identifier is referred to as the Service Set ID, and is used when connecting between an access point and wireless LAN client. Communication is only possible between a wireless LAN client and an access point sharing the same SSID. Characters can be set using up to 32 alphanumeric characters and symbols (a distinction between upper and lower case letters is made by ASCII 0x20 - 0x7e).

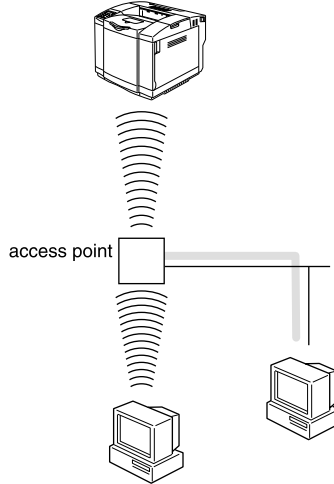
^{*2} This is used to protect wireless data communication by encryption. To communicate between an encrypting access point and a wireless LAN client, the same WEP key must be set for the printer as well. When using 64 bit WEP, up to 10 characters can be used for hexadecimal, or up to five characters for ASCII. When using 128 bit WEP, up to 26 characters can be used for hexadecimal, or up to 13 characters for ASCII.



❖ Ad hoc mode



❖ Infrastructure mode



- See p.28 “Printing without Using a Print Server” in “Windows 95/98/Me Configuration”.
- See p.64 “Printing without Using a Print Server” in “Windows 2000 Configuration”.
- See p.97 “Printing without Using a Print Server” in “Windows XP, Windows Server 2003 Configuration”.
- See p.129 “Printing without Using a Print Server” in “Windows NT 4.0 Configuration”.

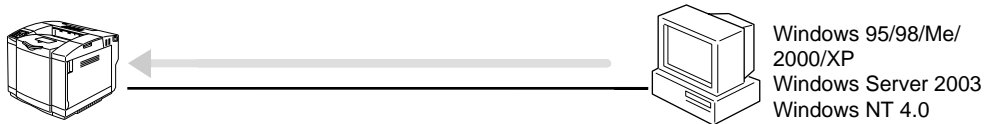




Parallel Connection

This section explains the setup procedure for printing by connecting the printer to a computer using a parallel cable.

You can print using Windows 95/98/Me/2000/XP, Windows Server 2003, or Windows NT 4.0.



- See [p.44 “Printing with Parallel Connection”](#) in “Windows 95/ 98/ Me Configuration”.
- See [p.80 “Printing with Parallel Connection”](#) in “Windows 2000 Configuration”.
- See [p.113 “Printing with Parallel Connection”](#) in “Windows XP, Windows Server 2003 Configuration”.
- See [p.148 “Printing with Parallel Connection”](#) in “Windows NT 4.0 Configuration”.



USB Connection

- See [p.49](#) “Installing the Printer Driver Using USB” in “Windows 95/ 98/ Me Configuration”.
- See [p.85](#) “Installing the Printer Driver Using USB” in “Windows 2000 Configuration”.
- See [p.118](#) “Installing the Printer Driver Using USB” in “Windows XP, Windows Server 2003 Configuration”.

Bluetooth™ Connection

[p.263](#) “Printing with Bluetooth™ Connection”

Mac OS Configuration

See [p.156](#) “Mac OS Configuration”.

UNIX Configuration

Concerning UNIX printing information, please visit our Web site or consult your authorized reseller.



1. Quick Install

You can easily install the software from the CD-ROM enclosed with the printer.

When **[Quick Install]** is clicked, the RPCS and PCL 5c printer drivers are installed in the computer allowing the printer to be used by the computer.

In the case of TCP/IP, the software, SmartDeviceMonitor for Client, is also installed.

Limitation

- The OS requirements for the software are as indicated below.
 - Windows 95/98/Me/2000/XP, Windows Server 2003 or Windows NT 4.0
- The following requirements must be satisfied in the case of TCP/IP.
 - The printer and network must be connected with an ethernet cable.
 - A TCP/IP protocol must be set.
 - IP address must be set for the printer and the computer.

Quick Install

Limitation

- If your system is Windows 2000/Windows XP/Server 2003 or Windows NT 4.0, installing a printer driver by Auto Run requires Administrators permission. When you install a printer driver by Auto Run, log on using an account that has Administrators permission.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch "Setup.exe" located on the CD-ROM root directory.

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

3 Select a language to change the interface language, and then click **[OK]**.

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

Default interface language is English.

4 Select **[Quick Install]**.

The software license agreement appears in the **[License Agreement]** dialog box.

5 After reading through all of the contents, click **[I accept the agreement]** to agree with the license agreement, and then click **[Next]**.

6 Click to select a model name you want to use when the “Select Printer” dialog box appears.

 **Note**

- For a network connection with TCP/IP, select the printer whose IP address is displayed in **[Connect To]**.
- For parallel connection, select the printer whose printer port is displayed in **[Connect To]**.

7 Click **[Install]**.

8 Follow the instructions on the screen.

 **Note**

- During installation in Windows 2000, the **[Digital Signature Not Found]** dialog box may appear. In this case, click **[Yes]** to continue the installation.
- During installation in Windows XP/Server 2003, the **[Hardware Installation]** dialog box may appear. In this case, click **[Continue Anyway]** to continue the installation.

A message prompting you to restart your computer may appear. To complete the installation, restart your computer.



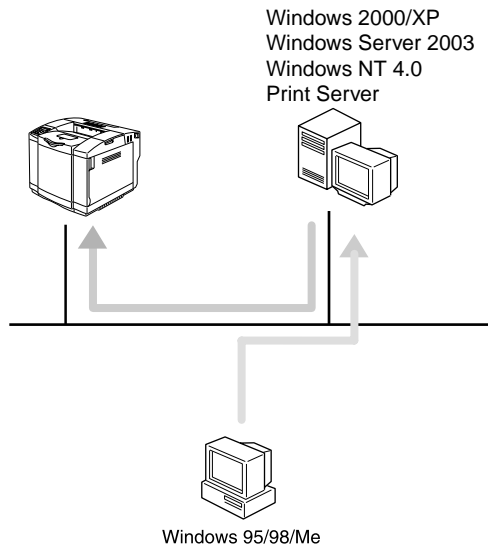
2. Windows 95/98/Me Configuration

Printing with a Print Server

Printing with a Windows 2000/XP, Windows Server 2003, or Windows NT 4.0 Print Server

This section describes the procedures for setting up a client on a network that uses Windows 2000/XP, Windows Server 2003, Windows NT 4.0 as a print server.

To print from Windows 95/98/Me, you must install the printer driver and change the printer port to the print server.





Installing the PCL 5c or RPCS Printer Driver

Preparation

To use the print server, install the printer driver by selecting “Network printer server”, and then select the Windows 2000/XP, Windows Server 2003, or Windows NT 4.0 shared printer. For more information about how to install and setting, see *Administrator Reference*.

This section assumes that the client has already been configured to communicate with a Windows 2000/XP, Windows Server 2003, or Windows NT 4.0 print server. Do not begin the following procedure until the client has been set up and configured correctly.

Limitation

- If you print with a print server connected to the machine using the SmartDeviceMonitor port, Recovery Printing and Parallel Printing cannot be used from the client.
- If you print with a Windows XP or Windows Server 2003 print server, notification functions of Smart-DeviceMonitor may not be used with the client.

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

Important

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click **[OK]**.

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

4 Select **[PCL/RPCS Printer Drivers]**.**5** The software license agreement appears in the **[License Agreement]** dialog box.

After reading through all of the contents, click **[I accept the agreement]** to agree with the license agreement, and then click **[Next]**.

6 Select a printer drivers you want to use when the “Printer Program” dialog box appears.

You can select more than one printer driver.

7 Check **[Printer Name]** to select the model(s) of printer you want to use.

To change the printer name, change it in the **[Change settings for 'Printer Name']** box.

8 Double-click the printer name to display the printer settings. **Note**

- The details shown for **[Comment:]**, **[Driver:]**, and **[Port:]** vary depending on the operating system being used, the model of printer selected, and the port being used.

9 Select **[Port:]**, and then click **[Add]**.**10** Select **[Network Printer]**, and then click **[OK]**.**11** Double-click the computer name you want to use as a print server in the “Browse for Printer” window.**12** Select the printer you want to use, and then click **[OK]**.

13 Make sure the location for the selected printer is shown after [Port:].

14 Configure the User Code and default printer as necessary.

❖ User Code

The procedure to specify the “User Code” may differ depending on the printer language.

- **RPCS**

You can specify the “User Code” when installing the printer driver. You cannot register or edit the “User Code” from the Printer Driver dialog box. To change the “User Code”, you must uninstall the printer driver, and then register the new “User Code” during the re-install process.

- **PCL 5c**

You can specify the “User Code” with the Printer Driver Properties after installing the printer driver. See printer driver's Help.

❖ Default Printer

Check [Default Printer] to set the printer as the default printer.

15 Click [Continue] to start printer driver installation.

16 When the [Select Program] dialog box appears, click [Finish].

17 When the installation completion dialog box appears, click [Finish].

18 Set up the options.

Note

- You must set up the options when the bidirectional transmission is disabled. For more information about the status of the bidirectional transmission, see [p.55 “Bidirectional transmission”](#).

Reference

For more information about option settings, see [p.54 “Setting Up Options”](#).

Installing the PostScript Printer Driver

- 1** Close all applications that are running.
- 2** Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

Important

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

- 3** Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)



Note

- The printer driver with the selected language will be installed. The printer driver will be installed in English if you select the following languages: Portugues, Suomi

- 4** Click [PostScript 3 Printer Driver].

“Add Printer Wizard” starts.



- 5** Click **[Next]**.
- 6** Click **[Network Printer]**, and then click **[Next]**.
- 7** Click **[Browse]**.
- 8** Double-click the computer name you want to use as a print server in the “Browse for Printer” window.
- 9** Select the printer you want to use, and then click **[OK]**.
- 10** After confirming that the location for the selected printer shown, click **[Next]**.
- 11** Change the name of the printer if you want, and then click **[Next]**.
Configure the default printer as necessary. Check **[Yes]** to set the printer as the default printer.
- 12** Select whether or not you want to print a test page, and then click **[Finish]**.
The installation is complete.
 -  **Note**
 - You can specify the “User Code” with the Printer Driver Properties after installing the printer driver. See printer driver’s Help.
 -  **Reference**
For more information about option settings, see [p.54 “Setting Up Options”](#).
- 13** Restart the computer.



Printing without Using a Print Server

Preparation

To use a printer connected to the Ethernet interface or IEEE 802.11b (Wireless LAN) interface, select “SmartDeviceMonitor” when installing the printer driver.

Configuring the Protocols

Configuring TCP/IP and IPP for Printing

Follow these instructions to configure the printer and Windows 95/98/Me to use the TCP/IP protocol and IPP.

❖ Configuring the printer

Configure the printer to use the TCP/IP protocol.

- Confirm that the TCP/IP protocol is set to be active. (The factory default is active.)
- Assign an IP address and make other settings required for using the TCP/IP protocol.

Reference

For more information about how to make the above settings, see “Configuring the printer for the Network”, *Administrator Reference*.

If DHCP is used to assign IP addresses, see “Using DHCP”, *Administrator Reference*.

 **Note**

- After setting the IP address, use the ping command to confirm that it has been set correctly.

- ① Windows 95/98

Click **[Start]**, point to **[Programs]**, and then click **[MS-DOS Prompt]**.

- ② Windows Me

Click **[Start]**, point to **[Programs]**, point to **[Accessories]**, and then click **[MS-DOS Prompt]**.

- ③ Type the following: (Example IP address is 192.168.15.16)

```
C:> ping 192.168.15.16
```

If the address has been configured correctly, the following message appears.

```
Reply from 192.168.15.16 : bytes=32 time<10ms TTL=32
```

If the address has been configured incorrectly, the following message appears.

```
Request timed out.
```

❖ Configuring a Windows 95/98/Me computer

Follow these steps to configure a Windows 95/98/Me computer to use the TCP/IP protocol.

- ① Open **[Control Panel]** and double-click the **[Network]** icon. Confirm that “TCP/IP” is listed in the **[The following network components are installed:]** box under the **[Configuration]** tab.

 **Note**

- If the TCP/IP protocol is not installed, click **[Add]** under the **[Configuration]** tab and install it. For more information about installing the TCP/IP protocol, see Windows 95/98/Me Help.
- ② Configure the TCP/IP protocol with the appropriate IP address, subnet mask and other settings. Confirm that the settings are correct with the network administrator.



Configuring NetBEUI for Printing

Follow these instructions to configure the printer and Windows 95/98/Me to use the NetBEUI protocol.

Limitation

- To use NetBEUI, use the SmartDeviceMonitor for Client port.

Configuring the printer

Enable SMB to print using NetBEUI (The default is active).

- Confirm that the NetBEUI protocol is set to be active. (The default is active.)

Reference

For more information about how to make the above settings, see “Configuring the printer for the Network”, *Administrator Reference*.

Configuring a Windows 95/98/Me computer

Install the NetBEUI protocol on the Windows 95/98/Me computer and set it as the default protocol.

- ① Open **[Control Panel]** and double-click the **[Network]** icon. Confirm that “NetBEUI” is listed in the **[The following network components are installed:]** box under the **[Configuration]** tab.

Note

- If the NetBEUI protocol is not installed, click **[Add]** under the **[Configuration]** tab and install it. For more information about installing the NetBEUI protocol, see Windows 95/98/Me Help.
 - If “NetBEUI ->Dial-Up Adaptor” is listed in the **[The following network components are installed:]** box, select it, and then click **[Remove]** to remove the binding.
- ② Set the NetBEUI protocol as the default protocol. Click the **[Configuration]** tab, select “NetBEUI” in the **[The following network components are installed:]** box, and then click **[Properties]**.
 - ③ Click the **[Advanced]** tab, select **[Set this protocol to be the default protocol]**, and then click **[OK]**.
 - ④ Click **[OK]** to close the **[Network]** dialog box.
 - ⑤ When the message to restart appears, click **[Yes]**.



Installing Software

Preparation

If you are not using the print server, install SmartDeviceMonitor for Client, and then install the printer driver by selecting “SmartDeviceMonitor for Client”. This enables peer-to-peer network printing with the TCP/IP, NetBEUI, or IPP protocol.

Installing SmartDeviceMonitor for Client

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

Important

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)



- 4** Click [SmartDeviceMonitor for Client / Admin].
- 5** Click to select [SmartDeviceMonitor for Client], and then click [Next >].
- 6** Follow the instructions on the screen.

 **Note**

- If you are required to restart the computer after the installation of SmartDeviceMonitor for Client, restart the computer and continue with necessary configurations.

Installing the PCL 5c or RPCS Printer Driver

- 1 Close all applications that are running.**
- 2 Insert the CD-ROM into the CD-ROM drive.**

Auto Run will start the installer.

Important

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

- 3 Select a language to change the interface language, and then click [OK].**


The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

- 4 Select [PCL/RPCS Printer Drivers].**
- 5 The software license agreement appears in the [License Agreement] dialog box.**

After reading through all of the contents, click **[I accept the agreement]** to agree with the license agreement, and then click **[Next]**.

- 6 Select a printer drivers you want to use when the “Printer Program” dialog box appears.**

You can select more than one printer driver.



7 Check **[Printer Name]** to select the model(s) of printer you want to use.

To change the printer name, change it in the **[Change settings for 'Printer Name']** box.

8 Double-click the printer name to display the printer settings. **Note**

- The details shown for **[Comment:]**, **[Driver:]**, and **[Port:]** vary depending on the operating system being used, the model of printer selected, and the port being used.

9 Select **SmartDeviceMonitor**.

SmartDeviceMonitor

- 1** Select **[Port:]**, and then click **[Add]**.
- 2** Select **[SmartDeviceMonitor]**, and then click **[OK]**.
- 3** Select a printer you want to use.

❖ TCP/IP

- 1** Click **[TCP/IP]**, and then click **[Search]**.
Available printers will be listed.
- 2** Click the printer you want to use, and then click **[OK]**.

 **Note**

- Printers that respond to an IP broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the IP address or host name.
- You cannot add an address partially similar to that already used. For example, when "192.168.0.2" is already used, "192.168.0.2xx" cannot be used. Similarly, when "192.168.0.20" is already used, "192.168.0.2" cannot be used.

❖ NetBEUI

- ① Click **[NetBEUI]**, and then click **[Search]**.
A list of printers that can be used by the NetBEUI protocol appears.
- ② Click the printer you want to use, and then click **[OK]**.

Note

- Printers that respond to a broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the NetBEUI address. Confirm the NetBEUI address on the network is on the configuration page. For more information about printing the configuration page, see “Printing a Configuration Page”, *Administrator Reference*. NetBEUI address appears as “\RNPxxxxxx” on the configuration page. Type the printer's network path name in the form of “%%Computer name\Share name”. Do not type “\” as head characters but “%%”.
- You cannot print to printers beyond routers.

❖ IPP

- ① Click **[IPP]**.
The IPP setting dialog box appears.
- ② To specify the IP address of the printer, type “http://printer's-ip-address/printer” in the **[Printer URL]** field.

Note

- If this machine has the optional network data protection unit installed and server authentication is issued, enter “https://printer's-ip-address/printer” (Internet Explorer 5.01 or a later version must be installed).
(Example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer

- ③ As necessary, type the names to distinguish the printer in **[IPP Port Name]**. Type a different name from those of any existing port name.
If you omit this, the address typed in **[Printer URL]** will be set as the IPP port name.
- ④ If a proxy server and IPP user name are used, click **[Detailed Settings]**, and then configure the necessary settings.

 **Note**

- For more information about these settings, see SmartDeviceMonitor for Client Help.
- ⑤ Click **[OK]**.

10 Make sure the location for the selected printer is shown after **[Port:]**.

11 Configure the User Code and default printer as necessary.

❖ **User Code**

The procedure to specify the “User Code” may differ depending on the printer language.

- **RPCS**

You can specify the “User Code” when installing the printer driver. You cannot register or edit the “User Code” from the Printer Driver dialog box. To change the “User Code”, you must uninstall the printer driver, and then register the new “User Code” during the re-install process.

- **PCL 5c**

You can specify the “User Code” with the Printer Driver Properties after installing the printer driver. See printer driver's Help.

❖ **Default Printer**

Check **[Default Printer]** to set the printer as the default printer.

12 Click **[Continue]** to start printer driver installation.



13 When the [Select Program] dialog box appears, click [Finish].

14 When the installation completion dialog box appears, click [Finish].

15 Set up the options.

 **Note**

- You must set up the options when the bidirectional transmission is disabled. For more information about the status of the bidirectional transmission, see [p.55 “Bidirectional transmission”](#).

 **Reference**

For more information about option settings, see [p.54 “Setting Up Options”](#).



Installing the PostScript Printer Driver

- 1 Close all applications that are running.**
- 2 Insert the CD-ROM into the CD-ROM drive.**

Auto Run will start the installer.

Important

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

- 3 Select a language to change the interface language, and then click [OK].**

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

Note

- The printer driver with the selected language will be installed. The printer driver will be installed in English if you select the following languages: Portugues, Suomi

- 4 Click [PostScript 3 Printer Driver].**

“Add Printer Wizard” starts.



- 5** Click **[Next]**.
- 6** Click **[Local Printer]**, and then click **[Next]**.
A dialog box for selecting the printer manufacturer and model name appears.
- 7** Click to select the name of the printer whose driver you want to install, and then click **[Next]**.
- 8** In the **[Available ports:]** box, click to select **[Printer Port]**, and then click **[Next]**.
- 9** Change the name of the printer if you want, and then click **[Next]**.
Configure the default printer as necessary. Check **[Yes]** to set the printer as the default printer.
- 10** Select whether or not you want to print a test page, and then click **[Finish]**.
- 11** Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.
The **[Printers]** window appears.
- 12** Click the icon of the printer you want to use. On the **[File]** menu, click **[Properties]**.
- 13** Select **[Details]**, and then click **[Add Port...]**.
- 14** In the **[Other]** box, click to select **[SmartDeviceMonitor]**, and then click **[OK]**.
- 15** Select a printer you want to use.

TCP/IP

1 Click [TCP/IP], and then click [Search].

Available printers will be listed.

2 Click the printer you want to use, and then click [OK].

 **Note**

- Printers that respond to an IP broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the IP address or host name.
- You cannot add an address partially similar to that already used. For example, when “192.168.0.2” is already used, “192.168.0.2xx” cannot be used. Similarly, when “192.168.0.20” is already used, “192.168.0.2” cannot be used.

NetBEUI

1 Click [NetBEUI], and then click [Search].

A list of printers that can be used by the NetBEUI protocol appears.

2 Click the printer you want to use, and then click [OK].

 **Note**

- Printers that respond to a broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the NetBEUI address. Confirm the NetBEUI address on the network is on the configuration page. For more information about printing the configuration page, see “Printing a Configuration Page”, *Administrator Reference*. NetBEUI address appears as “\RNPxxxxxxx” on the configuration page. Type the printer's network path name in the form of “%%Computer name\Share name”. Do not type “\” as head characters but “%%”.
- You cannot print to printers beyond routers.

IPP

1 Click [IPP].

The IPP setting dialog box appears.

2 In [Printer URL], type “**http://(printer's IP address)/printer**” as the printer's IP address.**Note**

- If this machine has the optional network data protection unit installed and server authentication is issued, enter “https://printer's-ip-address/printer” (Internet Explorer 5.01 or a later version must be installed).

(Example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer

3 As necessary, type the names to distinguish the printer in [IPP Port Name]. Type a different name from those of any existing port name.

If you omit this, the address typed in [Printer URL] will be set as the IPP port name.

4 If a proxy server and IPP user name are used, click [Detailed Settings], and then configure the necessary settings.**Note**

- For more information about these settings, see SmartDeviceMonitor for Client Help.

5 Click [OK].**16** Click [OK].



17 Confirm that the selected port is highlighted in [Printer to the following port], and then click [OK].

 **Note**

- You can specify the “User Code” with the Printer Driver Properties after installing the printer driver. See printer driver's Help.

 **Reference**

For more information about option settings, see [p.54 “Setting Up Options”](#).

18 Restart the computer.





Changing Port Settings

Follow the steps to change SmartDeviceMonitor for Client settings, such as the proxy server settings or IPP URL.

 **Note**

- There are no settings for the NetBEUI protocol.

1 From the **[Printers]** window, click the icon of the printer you want to use. On the **[File]** menu, click **[Properties]**.

2 Click the **[Details]** tab, and then click **[Port Settings...]**.

The **[Port Settings]** dialog box appears.

- For TCP/IP protocol, you can configure Timeout Settings.

 **Note**

- If you cannot set items on the **[Recovery/Parallel Printing]** tab, follow the procedure below.

① Click **[Cancel]** to close the **[Port Settings]** dialog box.

② Start SmartDeviceMonitor for Client, and then right-click the SmartDeviceMonitor for Client icon on the taskbar.

③ Click **[Extended Features Settings]**, and then select the **[Set Recovery/Parallel Printing for each port]** check box.

④ Click **[OK]** to close the **[Extended Features Settings]** dialog box.

- For IPP, you can configure User Settings, Proxy Settings and Timeout Settings.

 **Note**

- For more information about these settings, see SmartDeviceMonitor for Client Help.





Printing with Parallel Connection

To use a printer connected to the parallel interface, select “LPT1:” when installing the printer driver.

Installing the PCL 5c or RPCS Printer Driver

- 1** Close all applications that are running.
- 2** Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

Important

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

- 3** Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

- 4** Select [PCL/RPCS Printer Drivers].

5 The software license agreement appears in the **[License Agreement]** dialog box.

After reading through all of the contents, click **[I accept the agreement]** to agree with the license agreement, and then click **[Next]**.

6 Select a printer drivers you want to use when the “Printer Program” dialog box appears.

You can select more than one printer driver.

7 Check **[Printer Name]** to select the model(s) of printer you want to use.

To change the printer name, change it in the **[Change settings for 'Printer Name']** box.

8 Double-click the printer name to display the printer settings.

 **Note**

- The details shown for **[Comment:]**, **[Driver:]**, and **[Port:]** vary depending on the operating system being used, the model of printer selected, and the port being used.

9 After confirming **[Port:]** that the location for **[LPT1:]** shown.

10 Configure the User Code and default printer as necessary.

❖ **User Code**

The procedure to specify the “User Code” may differ depending on the printer language.

- **RPCS**

You can specify the “User Code” when installing the printer driver. You cannot register or edit the “User Code” from the Printer Driver dialog box. To change the “User Code”, you must un-install the printer driver, and then register the new “User Code” during the re-install process.

- **PCL 5c/PostScript 3**

You can specify the “User Code” with the Printer Driver Properties after installing the printer driver. See printer driver's Help.

❖ **Default Printer**

Check **[Default Printer]** to set the printer as the default printer.



- 11** Click **[Continue]** to start printer driver installation.
- 12** When the **[Select Program]** dialog box appears, click **[Finish]**.
- 13** When the installation completion dialog box appears, click **[Finish]**.
- 14** Set up the options.

 **Note**

- You must set up the options when the bidirectional transmission is disabled. For more information about the status of the bidirectional transmission, see [p.55 "Bidirectional transmission"](#).

 **Reference**

For more information about option settings, see [p.54 "Setting Up Options"](#).



Installing the PostScript Printer Driver

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

 **Important**

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

 **Note**

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

 **Note**

- The printer driver with the selected language will be installed. The printer driver will be installed in English if you select the following languages: Portugues, Suomi

4 Click [PostScript 3 Printer Driver].

“Add Printer Wizard” starts.





5 Click **[Next]**.

6 Click **[Local Printer]**, and then click **[Next]**.

A dialog box for selecting the printer manufacturer and model name appears.

7 Click to select the name of the printer whose driver you want to install, and then click **[Next]**.

8 In the **[Available ports:]** box, click to select **[Printer Port]**, and then click **[Next]**.

9 Change the name of the printer if you want, and then click **[Next]**.

Configure the default printer as necessary. Check **[Yes]** to set the printer as the default printer.

10 Select whether or not you want to print a test page, and then click **[Finish]**.



Reference

For more information about option settings, see [p.54 "Setting Up Options"](#).

11 Restart the computer.





Installing the Printer Driver Using USB

This section describes basic instructions for installing the printer drivers using USB. The printer drivers can be installed from the provided CD-ROM.

Preparation

Installation is not possible under Windows 95/98. Upgrade to Windows 98 SE/Me.

Before installation, check the status of the computer to which the USB cable is connected is as described below.

- Only the operating system should be running.
- Printing should not be in progress.

The procedure below takes Windows 98 as an example. The procedure for Windows Me may be slightly different.



Windows 98 SE/Me-Installing the Printer Driver Using USB

When the USB cable is used for the first time, the “plug and play” function starts and **[New Hardware Found]**, **[Device Driver Wizard]** or **[Add New Hardware Wizard]** dialog box appears depending on the system used.

If the printer driver is already installed, the “plug and play” is displayed, and the printer with its port directed to the USB cable is added to the “Printers” folder.

- 1** Click **[Next>]**.
- 2** Select **[Search for the best driver for your device. {Recommended}]**, and then click **[Next>]**.
- 3** Check **[Specify a location:]**, and then click **[Browse...]**.
The **[Browse for Folder]** dialog box appears.
- 4** Insert the CD-ROM provided into the CD-ROM drive.

 **Note**

- When Auto Run starts, click **[Exit]**.
 - If you want to inactivate Auto Run, press **[Shift]** key when inserting the CD-ROM into the drive and keep it pressed until the computer completes transmission to the drive.
- 5** Select the drive where the USB Printing Support is located according to the operating system used, and then click **[Next>]**.

If the CD-ROM drive is D, the folder will be “D:\Drivers\USBPRINT\WIN98ME”.



6 Confirm the printer driver location, and then click **[Next>]**.

“USB Printing Support” will be installed.

7 Click **[Finish]**.

If the printer driver is already installed, the Plug and Play is activated, and an icon of the printer for which **[USB001]** is specified for **[Printing Port]** is created in the **[Printer]** window.

 **Note**

- The number after “USB” varies depending on the number of printers connected.
- It is not necessary to reinstall USB Printing Support when connecting a different printer with the USB interface after USB Printing Support is installed.





Installing the Printer Driver (USB Connection)

If the printer driver is not installed, install it by following the instructions on the printer's Plug and Play menu after installing USB Printing Support.

Install the printer driver from the CD-ROM provided with the printer.

- 1** Click **[Next>]**.
- 2** Select **[Search for the best driver for your device. {Recommended}]**, and then click **[Next>]**.
- 3** Check **[Specify a location:]**, and then click **[Browse...]**.
The **[Browse for Folder]** dialog box appears.
- 4** Insert the CD-ROM provided into the CD-ROM drive.

Note

- When Auto Run starts, click **[Exit]**.
 - If you want to inactivate Auto Run, press **[Shift]** key when inserting the CD-ROM into the drive and keep it pressed until the computer completes transmission to the drive.
- 5** Select the drive where the printer driver is located according to the operating system used, and then click **[Next>]**.

If the CD-ROM drive is D, the locations where each printer driver is stored are as indicated below.

- RPCS
D:\DRIVES\RPCS\WIN98_ME\(\Language)\DISK1
- PCL 5c
D:\DRIVES\PCL5c\WIN98_ME\(\Language)\DISK1
- PostScript 3
D:\DRIVES\PS3\WIN98_ME\(\Language)\DISK1



6 Confirm the printer driver location, and then click **[Next>]**.

The **[Add Printer Wizard]** dialog box appears.

7 Click **[Finish]**.

The printer driver is installed. If installation is successful, an icon of the printer for which **[USB001]** is specified for **[Printing Port]** is created in the **[Printer]** window.

 **Note**

- The number after “USB” varies depending on the number of printers connected.





Setting Up Options

You must set up the options when the bidirectional transmission is disabled.

1 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click the icon of the printer you want to use.

3 On the **[File]** menu, click **[Properties]**.

4 Click the **[Accessories]** tab.

 **Note**

If you use the RPCS printer driver, Click **[Printer Configuration...]** under the Print Settings tab.

5 Select options you have installed from the **[Option]** group. And make any settings you require.

6 Click **[OK]**.

 **Bidirectional transmission**

When bidirectional transmission is enabled, the information about the paper size and feed direction setting is automatically sent to the printer by a computer. You can also confirm the printer status from your computer.

- Bidirectional transmission is supported by Windows 95/98/Me/2000/XP, Windows Server 2003, and Windows NT 4.0.
- If you use the RPCS printer driver and bidirectional transmission is enabled, on Windows 95/98/Me, the unavailable functions are shaded in the **[Change Accessories]** dialog box of the printer properties. The **[Change Accessories]** dialog box is displayed by clicking the **[Change Accessories...]** button under the **[Printer Configuration]** tab.

 **Note**

- The RPCS printer driver supports bidirectional transmission and updates the printer status automatically.
- The PCL 5c printer driver supports bidirectional transmission, you can update the printer status manually.
- The PostScript 3 printer driver does not support bidirectional transmission.

To support bidirectional transmission, the following conditions are required:



❖ When connecting with a parallel cable

- The computer must support bidirectional transmission.
- The printer must be set to bidirectional transmission.
- The Interface cable must support bidirectional transmission.
- The machine must be connected to the computer using the standard parallel cable and parallel connector.
- Under Windows 95/98/Me, **[Enable bidirectional support for this printer]** must be selected in **[Spool Settings...]** on the **[Details]** tab with RPCS printer driver.

❖ When connecting with the network

- The printer must be set to bidirectional transmission.
- SmartDeviceMonitor for Client included on the CD-ROM must be installed, and the TCP/IP protocol must be used.
- Under Windows 95/98/Me, **[Enable bidirectional support for this printer]** must be selected in **[Spool Settings...]** on the **[Details]** tab with RPCS printer driver.

❖ When connecting with USB

The printer must be connected to the USB connector of a computer using the USB interface cable.





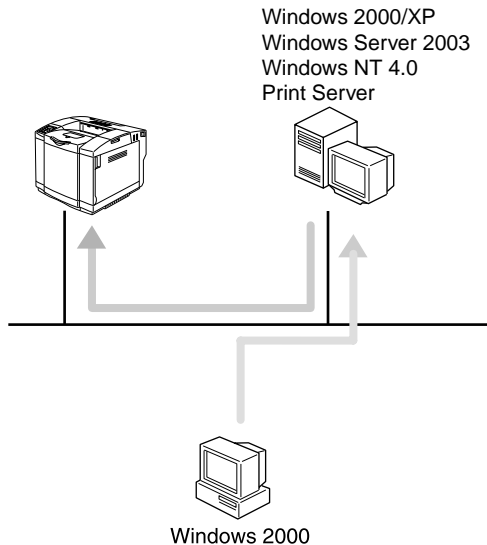
3. Windows 2000 Configuration

Printing with a Print Server

Printing with a Windows 2000/XP, Windows Server 2003, or Windows NT 4.0 Print Server

This section describes the procedures for setting up a client in a network that uses Windows 2000/XP, Windows Server 2003, Windows NT 4.0.

To print from Windows 2000, you must install the printer driver and change the printer port to the print server.





Installing the PCL 5c or RPCS Printer Driver

Preparation

To use the print server, install the printer driver by selecting “Network printer server”, and then select the Windows 2000/XP, Windows Server 2003, or Windows NT 4.0 shared printer. For more information about how to install and setting, see *Administrator Reference*.

This section assumes that the client has already been configured to communicate with a Windows 2000/XP, Windows Server 2003, or Windows NT 4.0 print server. Do not begin the following procedure until the client has been set up and configured correctly.

Limitation

- If you print with a print server connected to the machine using the SmartDeviceMonitor port, Recovery Printing and Parallel Printing cannot be used from the client.
- If you print with a Windows XP or Windows Server 2003 print server, notification functions of Smart-DeviceMonitor may not be used with the client.

Note

- If you print with a Windows NT 4.0 print server, install the printer driver before you connect the print server to the machine.





1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

 **Important**

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

 **Note**

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

4 Select [PCL/RPCS Printer Drivers].

5 The software license agreement appears in the [License Agreement] dialog box.

After reading through all of the contents, click [I accept the agreement] to agree with the license agreement, and then click [Next].

6 Select a printer drivers you want to use when the “Printer Program” dialog box appears.

You can select more than one printer driver.

7 Check [Printer Name] to select the model(s) of printer you want to use.

To change the printer name, change it in the [Change settings for 'Printer Name'] box.



8 Double-click the printer name to display the printer settings.

 **Note**

- The details shown for **[Comment:]**, **[Driver:]**, and **[Port:]** vary depending on the operating system being used, the model of printer selected, and the port being used.

9 Select **[Port:]**, and then click **[Add]**.

10 Select **[Network Printer]**, and then click **[OK]**.

11 Double-click the computer name you want to use as a print server in the “Browse for Printer” window.

12 Select the printer you want to use, and then click **[OK]**.

13 Make sure the location for the selected printer is shown after **[Port:]**.

14 Configure the User Code and default printer as necessary.

❖ **User Code**

When using RPCS, you can specify the “User Code” with the Printer Driver Properties after installing the printer driver. See printer driver's Help.

❖ **Default Printer**

Check **[Default Printer]** to set the printer as the default printer.

15 Click **[Continue]** to start printer driver installation.

 **Note**

- During installation, the **[Digital Signature Not Found]** dialog box may appear. In this case, click **[Yes]** to continue the installation.



16 When the [Select Program] dialog box appears, click [Finish].

17 When the installation completion dialog box appears, click [Finish].

18 Set up the options.

 **Note**

- You must set up the options when the bidirectional transmission is disabled. For more information about the status of the bidirectional transmission, see [p.89 “Bidirectional transmission”](#).

 **Reference**

For more information about option settings, see [p.88 “Setting Up Options”](#).





Installing the PostScript Printer Driver

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

 **Important**

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

 **Note**

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

 **Note**

- The printer driver with the selected language will be installed. The printer driver will be installed in English if you select the following languages: Portugues, Suomi

4 Click [PostScript 3 Printer Driver].

“Add Printer Wizard” starts.





- 5** Click **[Next]**.
- 6** Click **[Network printer]**, and then click **[Next]**.
- 7** Click **[Next]**.
- 8** Double-click the computer name you want to use as a print server in the “Shared printers” window.
- 9** Select the printer you want to use, and then click **[Next]**.
- 10** Start printer driver installation.
- 11** Click **[Next>]**.
Configure the default printer as necessary. Check **[Yes]** to set the printer as the default printer.
- 12** Click **[Finish]**.
The installation is complete.
Note
 You can specify the “User Code” with the Printer Driver Properties after installing the printer driver. See printer driver’s Help.
Reference
For more information about option settings, see [p.88 “Setting Up Options”](#).
- 13** Restart the computer.





Printing without Using a Print Server

Preparation

To use a printer connected to the Ethernet interface or IEEE 802.11b (Wireless LAN) interface, select “SmartDeviceMonitor”, “Standard TCP/IP Port”, “LPR Port” when installing the printer driver.

- SmartDeviceMonitor See [p.65 “Configuring the Protocols”](#) and [p.68 “Installing Software”](#) and [p.69 “Installing the PCL 5c or RPCS Printer Driver”](#) or [p.74 “Installing the PostScript Printer Driver”](#).
- Standard TCP/IP Port, LPR Port See [p.65 “Configuring the Protocols”](#) and [p.69 “Installing the PCL 5c or RPCS Printer Driver”](#) or [p.74 “Installing the PostScript Printer Driver”](#).

Note

- If you want to use “LPR Port”, “Print Services for UNIX” must be installed.





Configuring the Protocols

Configuring TCP/IP and IPP for Printing

Follow these instructions to configure the printer and Windows 2000 to use the TCP/IP protocol and IPP.

❖ **Configuring the printer**

Configure the printer to use the TCP/IP protocol.

- Confirm that the TCP/IP protocol is set to be active. (The factory default is active.)
- Assign an IP address and make other settings required for using the TCP/IP protocol.



Reference

For more information about how to make the above settings, see “Configuring the printer for the Network”, *Administrator Reference*.

If DHCP is used to assign IP addresses, see “Using DHCP”, *Administrator Reference*.



Note

- ❑ After setting the IP address, use the ping command to confirm that it has been set correctly.

① Click **[Start]**, point to **[Programs]**, point to **[Accessories]**, and then click **[Command Prompt]**.

② Type the following: (Example IP address is 192.168.15.16)

```
C:> ping 192.168.15.16
```

If the address has been configured correctly, the following message appears.

```
Reply from 192.168.15.16 : bytes=32 time<10ms TTL=32
```

If the address has been configured incorrectly, the following message appears.

```
Request timed out.
```

❖ Configuring a Windows 2000 computer

Follow these steps to configure a Windows 2000 computer to use the TCP/IP protocol.

- ① Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Network and Dial-up Connections]**.
- ② Click **[Local Area Connection]**.
- ③ On the **[File]** menu, click **[Properties]**.
- ④ Confirm that “Internet Protocol (TCP/IP)” is selected in the **[Components checked are used by this connection:]** box on the **[General]** tab.



Note

- If the check box for TCP/IP protocol is not selected, select the box.
 - If the TCP/IP protocol is not installed, click **[Install...]** on the **[General]** tab and install it. For more information about installing the TCP/IP protocol, see Windows 2000 Help.
- ⑤ Configure the TCP/IP protocols with the appropriate IP address, subnet mask and other settings. Confirm that the settings are correct with the network administrator.

Configuring NetBEUI for Printing

Follow these instructions to configure network interface board and Windows 2000 to use the NetBEUI protocol.

Preparation

To use NetBEUI, use the SmartDeviceMonitor for Client port.

❖ Configuring the printer

Enable SMB to print using NetBEUI (The default is active).

Reference

For more information about how to make the above settings, see “Configuring the printer for the Network”, *Administrator Reference*.

❖ Configuring a Windows 2000 computer

Follow these steps to configure a Windows 2000 computer to use the NetBEUI protocol.

- ① Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Network and Dial-up Connections]**.
- ② Click **[Local Area Connection]**.
- ③ On the **[File]** menu, click **[Properties]**.
- ④ Confirm that “NetBEUI Protocol” is selected in the **[Components checked are used by this connection:]** box on the **[General]** tab.

Note

- If the check box of the NetBEUI protocol is not selected, select the box.
- If the NetBEUI protocol is not installed, click **[Install...]** on the **[General]** tab and install it. For more information about installing the NetBEUI protocol, see Windows 2000 Help.



Installing Software

Preparation

If you are not using the print server, install SmartDeviceMonitor for Client, and then install the printer driver by selecting “SmartDeviceMonitor for Client”. This enables peer-to-peer network printing with the TCP/IP, NetBEUI, or IPP protocol.

Installing SmartDeviceMonitor for Client

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].


The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

4 Click [SmartDeviceMonitor for Client / Admin].

5 Click to select [SmartDeviceMonitor for Client], and then click [Next >].

6 Follow the instructions on the screen.

Note

- If you are required to restart the computer after the installation of SmartDeviceMonitor for Client, restart the computer and continue with necessary configurations.
- 

Installing the PCL 5c or RPCS Printer Driver

- 1 Close all applications that are running.**
- 2 Insert the CD-ROM into the CD-ROM drive.**

Auto Run will start the installer.

Important

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

- 3 Select a language to change the interface language, and then click [OK].**


The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

- 4 Select [PCL/RPCS Printer Drivers].**
- 5 The software license agreement appears in the [License Agreement] dialog box.**

After reading through all of the contents, click **[I accept the agreement]** to agree with the license agreement, and then click **[Next]**.

- 6 Select a printer drivers you want to use when the “Printer Program” dialog box appears.**

You can select more than one printer driver.





7 Select the printer model(s) you want to use.

To change the printer name, change it in the **[Change settings for 'Printer Name']** box.

8 Double-click the printer name to display the printer settings.

Note

- The details shown for **[Comment:]**, **[Driver:]**, and **[Port:]** vary depending on the operating system being used, the model of printer selected, and the port being used.

9 Click **[Port:]**, and then select the port you want to use.

- SmartDeviceMonitor
- Standard TCP/IP Port
- LPR Port

SmartDeviceMonitor

1 Click **[Add Port...]**.

2 Select **[SmartDeviceMonitor]**, and then click **[New Port...]**.

3 Select a printer you want to use.

❖ TCP/IP

- 1 Click **[TCP/IP]**, and then click **[Search]**.
Available printers will be listed.
- 2 Click the printer you want to use, and then click **[OK]**.

Note

- Printers that respond to an IP broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the IP address or host name.
- You cannot add an address partially similar to that already used. For example, when "192.168.0.2" is already used, "192.168.0.2xx" cannot be used. Similarly, when "192.168.0.20" is already used, "192.168.0.2" cannot be used.

❖ NetBEUI

- ① Click **[NetBEUI]**, and then click **[Search]**.
A list of printers that can be used by the NetBEUI protocol appears.
- ② Click the printer you want to use, and then click **[OK]**.

Note

- Printers that respond to a broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the NetBEUI address. Confirm the NetBEUI address on the network is on the configuration page. For more information about printing the configuration page, see “Printing a Configuration Page”, *Administrator Reference*. NetBEUI address appears as “\RNPxxxxxx” on the configuration page. Type the printer's network path name in the form of “%%Computer name\Share name”. Do not type “\” as head characters but “%%”.
- You cannot print to printers beyond routers.

❖ IPP

- ① Click **[IPP]**.
The IPP setting dialog box appears.
- ② To specify the IP address of the printer, type “http://printer's-ip-address/printer” in the **[Printer URL]** field.

Note

- If this machine has the optional network data protection unit installed and server authentication is issued, enter “https://printer's-ip-address/printer” (Internet Explorer 5.01 or a later version must be installed).
(Example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer

- ③ As necessary, type the names to distinguish the printer in **[IPP Port Name]**. Type a different name from those of any existing port name.
If you omit this, the address typed in **[Printer URL]** will be set as the IPP port name.
- ④ If a proxy server and IPP user name are used, click **[Detailed Settings]**, and then configure the necessary settings.

 **Note**

- For more information about these settings, see SmartDeviceMonitor for Client Help.
- ⑤ Click **[OK]**.

Standard TCP/IP Port

- ① Click **[Add Port...]**.
- ② Select **[Standard TCP/IP]**, and then click **[New Port...]**.
- ③ Click **[Next]** in the “Add Standard TCP/IP Printer Port Wizard” window.
- ④ Type the printer name or IP address in the “Printer Name or IP Address” box.
- ⑤ Click **[Finish]** in the “Add Standard TCP/IP Printer Port Wizard” window.

LPR Port

- ❶ Click **[Add Port...]**.
 - ❷ Select **[LPR Port]**, and then click **[New Port...]**.
 - ❸ Type the printer's IP address in the “Name or address of server providing lpd” box.
 - ❹ Type “lp” in the “Name of printer or print queue on that server” box, and then click **[OK]**.
- ❩ Make sure the location for the selected printer is shown after **[Port:]**.
- ❪ Configure the default printer as necessary.

❖ **Default Printer**

Check **[Default Printer]** to set the printer as the default printer.

- ❫ Click **[Continue]** to start printer driver installation.
- ❬ When the **[Select Program]** dialog box appears, click **[Finish]**.

 **Note**

- During installation, the **[Digital Signature Not Found]** dialog box may appear. In this case, click **[Yes]** to continue the installation.

- ❭ When the installation completion dialog box appears, click **[Finish]**.

- ❮ Set up the options.

 **Note**

- You must set up the options when the bidirectional transmission is disabled. For more information about the status of the bidirectional transmission, see [p.89 “Bidirectional transmission”](#).

 **Reference**

For more information about option settings, see [p.88 “Setting Up Options”](#).



Installing the PostScript Printer Driver

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

 **Important**

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

 **Note**

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

 **Note**

- The printer driver with the selected language will be installed. The printer driver will be installed in English if you select the following languages: Portugues, Suomi

4 Click [PostScript 3 Printer Driver].

“Add Printer Wizard” starts.

5 Click [Next >].



6 Select **[Local printer]**, and then click **[Next>]**.

7 Select the port you want to use.

- SmartDeviceMonitor
- Standard TCP/IP Port
- LPR Port

SmartDeviceMonitor

1 Click **[Add Port...]**.

2 Select **[SmartDeviceMonitor]**, and then click **[Next >]**.

3 Select a printer you want to use.

❖ TCP/IP

1 Click **[TCP/IP]**, and then click **[Search]**.

Available printers will be listed.

2 Click the printer you want to use, and then click **[OK]**.

Note

- Printers that respond to an IP broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the IP address or host name.
- You cannot add an address partially similar to that already used. For example, when “192.168.0.2” is already used, “192.168.0.2xx” cannot be used. Similarly, when “192.168.0.20” is already used, “192.168.0.2” cannot be used.

❖ NetBEUI

- ① Click **[NetBEUI]**, and then click **[Search]**.
A list of printers that can be used by the NetBEUI protocol appears.
- ② Click the printer you want to use, and then click **[OK]**.

Note

- Printers that respond to a broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the NetBEUI address. Confirm the NetBEUI address on the network is on the configuration page. For more information about printing the configuration page, see “Printing a Configuration Page”, *Administrator Reference*. NetBEUI address appears as “\RNPxxxxxx” on the configuration page. Type the printer's network path name in the form of “%%Computer name\Share name”. Do not type “\” as head characters but “%%”.
- You cannot print to printers beyond routers.

❖ IPP

- ① Click **[IPP]**.
The IPP setting dialog box appears.
- ② To specify the IP address of the printer, type “http://printer's-ip-address/printer” in the **[Printer URL]** field.

Note

- If this machine has the optional network data protection unit installed and server authentication is issued, enter “https://printer's-ip-address/printer” (Internet Explorer 5.01 or a later version must be installed).
(Example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer



- ③ As necessary, type the names to distinguish the printer in **[IPP Port Name]**. Type a different name from those of any existing port name.
If you omit this, the address typed in **[Printer URL]** will be set as the IPP port name.
- ④ If a proxy server and IPP user name are used, click **[Detailed Settings]**, and then configure the necessary settings.

 **Note**

- For more information about these settings, see SmartDeviceMonitor for Client Help.
- ⑤ Click **[OK]**.

Standard TCP/IP Port

- ① Click **[Add Port...]**.
- ② Select **[Standard TCP/IP]**, and then click **[New Port...]**.
- ③ Click **[Next]** in the “Add Standard TCP/IP Printer Port Wizard” window.
- ④ Type the printer name or IP address in the “Printer Name or IP Address” box, and then click **[Next>]**.
- ⑤ Click **[Finish]** in the “Add Standard TCP/IP Printer Port Wizard” window.

LPR Port

- 1 Click **[Add Port...]**.
- 2 Select **[LPR Port]**, and then click **[New Port...]**.
- 3 Type the printer's IP address in the “Name or address of server providing lpd” box.
- 4 Type “lp” in the “Name of printer or print queue on that server” box, and then click **[OK]**.
- 8 Confirm to select the name of the printer whose driver you want to install, and then click **[Next >]**.
- 9 Change the name of the printer if you want, and then click **[Next >]**.
Configure the default printer as necessary. Check **[Yes]** to set the printer as the default printer.
- 10 Click **[Next >]**.
- 11 Select whether or not you want to print a test page, and then click **[Next>]**.
- 12 Click **[Finish]**.
Start printer driver installation.

 **Note**

- During installation, the **[Digital Signature Not Found]** dialog box may appear. In this case, click **[Yes]** to continue the installation.

- 13 Set up the options.

 **Note**

- You can specify the “User Code” with the printer properties after installing the printer driver. See printer driver's Help.

 **Reference**

For more information about option settings, see [p.88 “Setting Up Options”](#).





Changing Port Settings

Follow the steps to change SmartDeviceMonitor for Client settings, such as the proxy server settings or IPP URL.

 **Note**

- There are no settings for the NetBEUI protocol.

1 From the **[Printers]** window, click the icon of the printer you want to use. On the **[File]** menu, click **[Properties]**.

2 Click the **[Ports]** tab, and then click **[Configure Port]**.

The **[Port Settings]** dialog box appears.

- For TCP/IP protocol, you can configure Timeout Settings.

 **Note**

- If you cannot set items on the **[Recovery/Parallel Printing]** tab, follow the procedure below.

① Click **[Cancel]** to close the **[Port Configuration:]** dialog box.

② Start SmartDeviceMonitor for Client, and then right-click the SmartDeviceMonitor for Client icon on the taskbar.

③ Click **[Extended Features Settings]**, and then select the **[Set Recovery/Parallel Printing for each port]** check box.

④ Click **[OK]** to close the **[Extended Features Settings]** dialog box.

- For IPP, you can configure User Settings, Proxy Settings and Timeout Settings.

 **Note**

- For more information about these settings, see SmartDeviceMonitor for Client Help file.



Printing with Parallel Connection

Preparation

To use a printer connected to the parallel interface, select “LPT1:” when installing the printer driver.

Installing the PCL 5c or RPCS Printer Driver

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

Important

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

4 Select [PCL/RPCS Printer Drivers].



5 The software license agreement appears in the **[License Agreement]** dialog box.

After reading through all of the contents, click **[I accept the agreement]** to agree with the license agreement, and then click **[Next]**.

6 Select a printer drivers you want to use when the “Printer Program” dialog box appears.

You can select more than one printer driver.

7 Check **[Printer Name]** to select the model(s) of printer you want to use.

To change the printer name, change it in the **[Change settings for 'Printer Name']** box.

8 Double-click the printer name to display the printer settings.

 **Note**

- The details shown for **[Comment:]**, **[Driver:]**, and **[Port:]** vary depending on the operating system being used, the model of printer selected, and the port being used.

9 After confirming **[Port:]** that the location for **[LPT1:]** shown.

10 Configure the default printer as necessary.

❖ **Default Printer**

Check **[Default Printer]** to set the printer as the default printer.

11 Click **[Continue]** to start printer driver installation.

 **Note**

- During installation, the **[Digital Signature Not Found]** dialog box may appear. In this case, click **[Yes]** to continue the installation.





12 When the [Select Program] dialog box appears, click [Finish].

13 When the installation completion dialog box appears, click [Finish].

14 Set up the options.

 **Note**

- You must set up the options when the bidirectional transmission is disabled.
- For more information about the status of the bidirectional transmission, see [p.89 “Bidirectional transmission”](#).

 **Reference**

For more information about option settings, see [p.88 “Setting Up Options”](#).

Installing the PostScript Printer Driver

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

 **Important**

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

 **Note**

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

 **Note**

- The printer driver with the selected language will be installed. The printer driver will be installed in English if you select the following languages: Portugues, Suomi

4 Click [PostScript 3 Printer Driver].

“Add Printer Wizard” starts.



5 Click **[Next]**.

6 Click **[Local Printer]**, and then click **[Next]**.

A dialog box for selecting the printer manufacturer and model name appears.

7 Click to select the name of the printer whose driver you want to install, and then click **[Next]**.

8 Change the name of the printer if you want, and then click **[Next]**.

9 Select whether or not you want to print a test page, and then click **[Finish]**.

Start printer driver installation.

 **Note**

- During installation, the **[Digital Signature Not Found]** dialog box may appear. In this case, click **[Yes]** to continue the installation.

10 Set up the options.

 **Reference**

For more information about option settings, see [p.88 "Setting Up Options"](#).

11 Restart the computer.





Installing the Printer Driver Using USB

This section describes basic instructions for installing the printer drivers using USB.

Preparation

Before installation, check the status of the computer to which the USB cable is connected is as described below.

- Only the operating system should be running.
- Printing should not be in progress.

Limitation

- Installing a printer driver requires the Administrators permission. When you install a printer driver, log on using an account that has the Administrators permission.

Note

- When the USB cable is used for the first time, the **[Found New Hardware Wizard]** dialog box appears, and Windows 2000's **[USB Printing Support]** will be installed automatically.
- If the printer driver is already installed, the “plug and play” is displayed, and the printer with its port directed to the USB cable is added to the “Printers” folder.



Windows 2000-Installing the Printer Driver Using USB

The printer drivers can be installed from the provided CD-ROM.

- 1** Click **[Next]** in the **[Found New Hardware Wizard]** dialog box.
- 2** Select the **[Search for a suitable driver for my device (recommended)]** check box, and then click **[Next]**.
- 3** Select the **[Specify location]** check box, and then click **[Next]**.
- 4** Insert the CD-ROM provided into the CD-ROM drive.

 **Note**

- When Auto Run starts, click **[Exit]**.
 - If you want to inactivate Auto Run, press **[Shift]** key when inserting the CD-ROM into the drive and keep it pressed until the computer completes transmission to the drive.
- 5** Click **[Browse]** to select the printer driver location.

If the CD-ROM drive is D, the locations where each printer driver is stored are as indicated below.

- RPCS
D:\DRIVES\RPCS\WIN2K_XP\(\Language)\DISK1
 - PCL 5c
D:\DRIVES\PCL5c\WIN2K_XP\(\Language)\DISK1
 - PostScript 3
D:\DRIVES\PS3\WIN2K_XP\(\Language)\DISK1
- 6** Check the printer driver location is displayed in **[Copy manufacture's files from]**, and then click **[OK]**.



7 Click **[Next]**.

8 During installation, the **[Digital Signature Not Found]** dialog box may appear. In this case, click **[Yes]** to continue the installation.

9 Click **[Finish]**.

If the printer driver is already installed, the Plug and Play is activated, and an icon of the printer for which **[USB001]** is specified for **[Printing Port]** is created in the **[Printer]** window.

 **Note**

- The number after “USB” varies depending on the number of printers connected.



Setting Up Options

You must set up the options when bidirectional transmission is disabled.

1 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click the icon of the printer you want to use.

3 On the **[File]** menu, click **[Properties]**.

4 Click the **[Accessories]** tab.

 **Note**

If you use the RPCS printer driver, Click the **[Change Accessories]** tab.

If you use the PS printer driver, Click the **[Device Settings]** tab.

5 Select options you have installed from the **[Option]** group. And make any settings you require.

6 Click **[OK]**.


 **Bidirectional transmission**

When bidirectional transmission is enabled, the information about the paper size and feed direction setting is automatically sent to the printer by a computer. You can also confirm the printer status from your computer.

- Bidirectional transmission is supported by Windows 95/98/Me/2000/XP, Windows Server 2003, and Windows NT 4.0.
- If you use the RPCS printer driver and bidirectional transmission is enabled, on Windows 2000, the **[Change Accessories]** tab is shaded.

 **Note**

- The RPCS printer driver supports bidirectional transmission and updates the printer status automatically.
- The PCL 5c printer driver supports bidirectional transmission, you can update the printer status manually.
- The PostScript 3 printer driver does not support bidirectional transmission.

To support bidirectional transmission, the following conditions are required:



❖ When connecting with a parallel cable

- The computer must support bidirectional transmission.
- The printer must be set to bidirectional transmission.
- The Interface cable must support bidirectional transmission.
- The machine must be connected to the computer using the standard parallel cable and parallel connector.
- Under Windows 2000, **[Enable bidirectional support]** must be selected and **[Enable printer pooling]** must not be selected on the **[port]** tab with RPCS printer driver.

❖ When connecting with the network

- The printer must be set to bidirectional transmission.
- SmartDeviceMonitor for Client included on the CD-ROM must be installed, and the TCP/IP protocol must be used.
- Under Windows 2000, **[Enable bidirectional support]** must be selected and **[Enable printer pooling]** must not be selected on the **[port]** tab with RPCS printer driver.

❖ When connecting with USB

The printer must be connected to the USB connector of a computer using the USB interface cable.





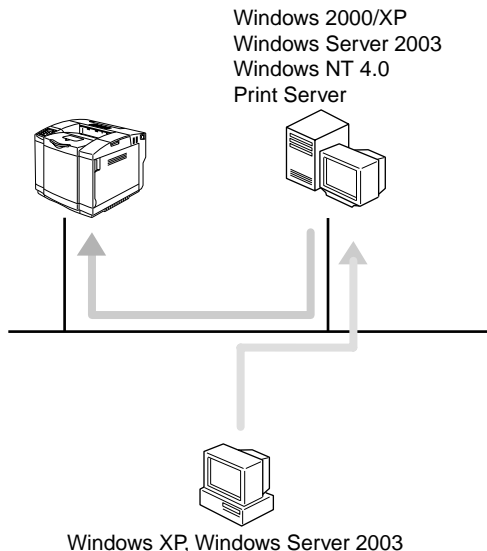
4. Windows XP, Windows Server 2003 Configuration

Printing with a Print Server

Printing with a Windows 2000/XP, Windows Server 2003, or Windows NT 4.0 Print Server

This section describes the procedures for setting up a client in a network that uses Windows 2000/XP, Windows Server 2003, Windows NT 4.0.

To print from Windows XP or Windows Server 2003, you must install the printer driver and change the printer port to the print server.





Installing the PCL 5c or RPCS Printer Driver

Preparation

To use the print server, install the printer driver by selecting “Network printer server”, and then select the Windows 2000/XP, Windows Server 2003, or Windows NT 4.0 shared printer. For more information about how to install and setting, see *Administrator Reference*.

This section assumes that the client has already been configured to communicate with a Windows 2000/XP, Windows Server 2003, or Windows NT 4.0 print server. Do not begin the following procedure until the client has been set up and configured correctly.

Limitation

- If you print with a print server connected to the machine using the SmartDeviceMonitor port, Recovery Printing and Parallel Printing cannot be used from the client.
- If you print with a Windows XP or Windows Server 2003 print server, notification functions of SmartDeviceMonitor may not be used with the client.

Note

- If you print with a Windows NT 4.0 print server, install the printer driver before you connect the print server to the machine.

1 Close all applications that are running.


2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

Important

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.
- 

3 Select a language to change the interface language, and then click **[OK]**.

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

4 Select **[PCL/RPCS Printer Drivers]**.**5** The software license agreement appears in the **[License Agreement]** dialog box.

After reading through all of the contents, click **[I accept the agreement]** to agree with the license agreement, and then click **[Next]**.

6 Select a printer drivers you want to use when the “Printer Program” dialog box appears.

You can select more than one printer driver.

7 Check **[Printer Name]** to select the model(s) of printer you want to use.

To change the printer name, change it in the **[Change settings for 'Printer Name']** box.

8 Double-click the printer name to display the printer settings. **Note**

- The details shown for **[Comment:]**, **[Driver:]**, and **[Port:]** vary depending on the operating system being used, the model of printer selected, and the port being used.

9 Select **[Port:]**, and then click **[Add]**.**10** Select **[Network Printer]**, and then click **[OK]**.**11** Double-click the computer name you want to use as a print server in the “Browse for Printer” window.

- 12** Select the printer you want to use, and then click **[OK]**.
- 13** Make sure the location for the selected printer is shown after **[Port:]**.
- 14** Configure the default printer as necessary.

❖ **Default Printer**

Check **[Default Printer]** to set the printer as the default printer.

- 15** Click **[Continue]** to start printer driver installation.

 **Note**

- During installation, the **[Hardware Installation]** dialog box may appear. In this case, click **[Continue Anyway]** to continue the installation.

- 16** When the **[Select Program]** dialog box appears, click **[Finish]**.

- 17** When the installation completion dialog box appears, click **[Finish]**.

- 18** Set up the options.

 **Note**

- You must set up the options when the bidirectional transmission is disabled. For more information about the status of the bidirectional transmission, see [p.121 “Bidirectional transmission”](#).

 **Reference**

For more information about option settings, see [p.120 “Setting Up Options”](#).

Installing the PostScript Printer Driver

- 1** Close all applications that are running.
- 2** Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

Important

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

- 3** Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

Note


- The printer driver with the selected language will be installed. The printer driver will be installed in English if you select the following languages: Portugues, Suomi

- 4** Click [PostScript 3 Printer Driver].

“Add Printer Wizard” starts.



- 5** Click [Next].



- 6** Click **[Network printer]**, and then click **[Next]**.
- 7** Click **[Next]**.
- 8** Double-click the computer name you want to use as a print server in the “**Shared printers:**” window.
- 9** Select the printer you want to use, and then click **[Next]**.
- 10** Start printer driver installation.
 -  **Note**
 - During installation, the **[Hardware Installation]** dialog box may appear. In this case, click **[Continue Anyway]** to continue the installation.
- 11** Click **[Next>]**.

Configure the default printer as necessary. Check **[Yes]** to set the printer as the default printer.
- 12** Click **[Finish]**.

The installation is complete.

 -  **Note**
 - You can specify the “User Code” with the Printer Driver Properties after installing the printer driver. See printer driver’s Help.
 -  **Reference**

For more information about option settings, see [p.120 “Setting Up Options”](#).
- 13** Restart the computer.



Printing without Using a Print Server

Preparation

To use a printer connected to the Ethernet interface or IEEE 802.11b (Wireless LAN) interface, select “SmartDeviceMonitor”, “Standard TCP/IP Port” or “LPR Port” when installing the printer driver.

- SmartDeviceMonitor See [p.98 “Configuring the Protocols”](#) and [p.100 “Installing Software”](#) and [p.101 “Installing the PCL 5c or RPCS Printer Driver”](#) or [p.107 “Installing the PostScript Printer Driver”](#).
- Standard TCP/IP Port, LPR Port See [p.98 “Configuring the Protocols”](#) and [p.101 “Installing the PCL 5c or RPCS Printer Driver”](#) or [p.107 “Installing the PostScript Printer Driver”](#).



Note

- If you want to use “LPR Port”, “Print Services for UNIX” must be installed.





Configuring the Protocols

Configuring TCP/IP and IPP for Printing

Follow these instructions to configure the printer and Windows XP or Windows Server 2003 to use the TCP/IP protocol and IPP.

❖ Configuring the printer

Configure the printer to use the TCP/IP protocol.

- Confirm that the TCP/IP protocol is set to be active. (The factory default is active.)
- Assign an IP address and make other settings required for using the TCP/IP protocol.



Reference

For more information about how to make the above settings, see “Configuring the printer for the Network”, *Administrator Reference*.

If DHCP is used to assign IP addresses, see “Using DHCP”, *Administrator Reference*.



Note

- After setting the IP address, use the ping command to confirm that it has been set correctly.
 - ① Click **[Start]**, point to **[All Programs]**, point to **[Accessories]**, and then click **[Command Prompt]**.
 - ② Type the following: (Example IP address is 192.168.15.16)

```
C:> ping 192.168.15.16
```

If the address has been configured correctly, the following message appears.

```
Reply from 192.168.15.16 : bytes=32 time<10ms TTL=32
```

If the address has been configured incorrectly, the following message appears.

```
Request timed out.
```




❖ **Configuring a Windows XP and Windows Server 2003 computer**

Follow these steps to configure a Windows XP and Windows Server 2003 computer to use the TCP/IP protocol.

- ① Click **[Start]** on the taskbar, point to **[Control Panel]**, and then click **[Network and Internet Connections]**.
- ② Click **[Local Area Connection]**.
- ③ On the **[File]** menu, click **[Properties]**.
- ④ Confirm that “Internet Protocol (TCP/IP)” is selected in the **[This connection uses the following items]** box on the **[General]** tab.



Note

- If the check box for TCP/IP protocol is not selected, select the box.
 - If the TCP/IP protocol is not installed, click **[Install...]** on the **[General]** tab and install it. For more information about installing the TCP/IP protocol, see Windows XP or Windows Server 2003 Help.
- ⑤ Configure the TCP/IP protocols with the appropriate IP address, subnet mask and other settings. Confirm that the settings are correct with the network administrator.



Installing Software

Preparation

If you are not using the print server, install SmartDeviceMonitor for Client, and then install the printer driver by selecting “SmartDeviceMonitor for Client”. This enables peer-to-peer network printing with the TCP/IP, NetBEUI, or IPP protocol.

Installing SmartDeviceMonitor for Client

- 1 Close all applications that are running.**
- 2 Insert the CD-ROM into the CD-ROM drive.**

Auto Run will start the installer.

Note


- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

- 3 Select a language to change the interface language, and then click [OK].**

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

- 4 Click [SmartDeviceMonitor for Client / Admin].**
- 5 Click to select [SmartDeviceMonitor for Client], and then click [Next >].**
- 6 Follow the instructions on the screen.**

Note

- If you are required to restart the computer after the installation of SmartDeviceMonitor for Client, restart the computer and continue with necessary configurations.
- 



Installing the PCL 5c or RPCS Printer Driver

- 1** Close all applications that are running.
- 2** Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

Important

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.


- 3** Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

- 4** Select [PCL/RPCS Printer Drivers].

- 5** The software license agreement appears in the [License Agreement] dialog box.

After reading through all of the contents, click [I accept the agreement] to agree with the license agreement, and then click [Next].





6 Select a printer drivers you want to use when the “Printer Program” dialog box appears.

You can select more than one printer driver.

7 Select the printer model(s) you want to use.

To change the printer name, change it in the **[Change settings for 'Printer Name']** box.

8 Double-click the printer name to display the printer settings.

 **Note**

- The details shown for **[Comment:]**, **[Driver:]**, and **[Port:]** vary depending on the operating system being used, the model of printer selected, and the port being used.

9 Click **[Port:]**, and then select the port you want to use.

- SmartDeviceMonitor
- Standard TCP/IP Port
- LPR Port



SmartDeviceMonitor

- ① Click **[Add]**.
- ② Select **[SmartDeviceMonitor]**, and then click **[OK]**.
- ③ Select a printer you want to use.

❖ TCP/IP

- ① Click **[TCP/IP]**, and then click **[Search]**.
Available printers will be listed.
- ② Click the printer you want to use, and then click **[OK]**.

Note

- Printers that respond to an IP broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the IP address or host name. You cannot add an address partially similar to that already used. For example, when “192.168.0.2” is already used, “192.168.0.2xx” cannot be used. Similarly, when “192.168.0.20” is already used, “192.168.0.2” cannot be used.

❖ IPP

- ① Click **[IPP]**.
The IPP setting dialog box appears.
- ② To specify the IP address of the printer, type “http://printer's-ip-address/printer” in the **[Printer URL]** field.

Note

- If this machine has the optional network data protection unit installed and server authentication is issued, enter “https://printer's-ip-address/printer” (Internet Explorer 5.01 or a later version must be installed).

(Example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer

- ③ As necessary, type the names to distinguish the printer in **[IPP Port Name]**. Type a different name from those of any existing port name.
If you omit this, the address typed in **[Printer URL]** will be set as the IPP port name.
- ④ If a proxy server and IPP user name are used, click **[Detailed Settings]**, and then configure the necessary settings.

Note

- For more information about these settings, see SmartDeviceMonitor for Client Help.

- ⑤ Click **[OK]**.

Standard TCP/IP Port

- 1 Click **[Add]**.
- 2 Select **[Standard TCP/IP]**, and then click **[OK]**.
- 3 Click **[Next]** in the “Add Standard TCP/IP Printer Port Wizard” window.
- 4 Type the printer name or IP address in the “Printer Name or IP Address” box.
- 5 Click **[Finish]** in the “Add Standard TCP/IP Printer Port Wizard” window.

LPR Port

- 1 Click **[Add]**.
- 2 Select **[LPR Port]**, and then click **[OK]**.
- 3 Type the printer's IP address in the “Name or address of server providing lpd” box.
- 4 Type “lp” in the “Name of printer or print queue on that server” box, and then click **[OK]**.
- 10 Make sure the location for the selected printer is shown after **[Port:]**.
- 11 Configure the default printer as necessary.
 - ❖ **Default Printer**
Check **[Default Printer]** to set the printer as the default printer.
- 12 Click **[Continue]** to start printer driver installation.



13 When the **[Select Program]** dialog box appears, click **[Finish]**.

 **Note**

- During installation, the **[Hardware Installation]** dialog box may appear. In this case, click **[Continue Anyway]** to continue the installation.

14 When the installation completion dialog box appears, click **[Finish]**.

15 Set up the options.

 **Note**

- You must set up the options when the bidirectional transmission is disabled. For more information about the status of the bidirectional transmission, see [p.121 “Bidirectional transmission”](#).

 **Reference**

For more information about option settings, see [p.120 “Setting Up Options”](#).



Installing the PostScript Printer Driver

- 1** Close all applications that are running.
- 2** Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

Important

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

- 3** Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

Note

- The printer driver with the selected language will be installed. The printer driver will be installed in English if you select the following languages: Portugues, Suomi

- 4** Click [PostScript 3 Printer Driver].

“Add Printer Wizard” starts.

- 5** Click [Next >].



6 Select **[Local printer]**, and then click **[Next>]**.

7 Select the port you want to use.

- SmartDeviceMonitor
- Standard TCP/IP Port
- LPR Port

SmartDeviceMonitor

1 Click **[Create a new port:]**.

2 Select **[SmartDeviceMonitor]**, and then click **[Next >]**.

3 Select a printer you want to use.

❖ TCP/IP

1 Click **[TCP/IP]**, and then click **[Search]**.

Available printers will be listed.

2 Click the printer you want to use, and then click **[OK]**.

Note

- Printers that respond to an IP broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the IP address or host name. You cannot add an address partially similar to that already used. For example, when “192.168.0.2” is already used, “192.168.0.2xx” cannot be used. Similarly, when “192.168.0.20” is already used, “192.168.0.2” cannot be used.

❖ IPP

- ① Click **[IPP]**.
The IPP setting dialog box appears.
- ② To specify the IP address of the printer, type “http://printer's-ip-address/printer” in the **[Printer URL]** field.

Note

- If this machine has the optional network data protection unit installed and server authentication is issued, enter “https://printer's-ip-address/printer” (Internet Explorer 5.01 or a later version must be installed).

(Example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer

- ③ As necessary, type the names to distinguish the printer in **[IPP Port Name]**. Type a different name from those of any existing port name.
If you omit this, the address typed in **[Printer URL]** will be set as the IPP port name.
- ④ If a proxy server and IPP user name are used, click **[Detailed Settings]**, and then configure the necessary settings.

Note

- For more information about these settings, see SmartDeviceMonitor for Client Help.

- ⑤ Click **[OK]**.

Standard TCP/IP Port

- 1 Click **[Create a new port:]**.
- 2 Select **[Standard TCP/IP]** in **[Create a new Port]**, and then click **[Next]**.
- 3 Select **[Standard TCP/IP]**, and then click **[OK]**.
- 4 Click **[Next]** in the “Add Standard TCP/IP Printer Port Wizard” window.
- 5 Type the printer name or IP address in the “Printer Name or IP Address” box, and then click **[Next>]**.
- 6 Click **[Finish]** in the “Add Standard TCP/IP Printer Port Wizard” window.

LPR Port

- 1 Click **[Create a new port:]**.
- 2 Select **[LPR Port]** in **[Create a new Port]**, and then click **[Next]**.
- 3 Type the printer's IP address in the “Name or address of server providing lpd” box.
- 4 Type “lp” in the “Name of printer or print queue on that server” box, and then click **[OK]**.
- 8 Confirm to select the name of the printer whose driver you want to install, and then click **[Next >]**.
- 9 Change the name of the printer if you want, and then click **[Next >]**.
Configure the default printer as necessary. Check **[Yes]** to set the printer as the default printer.
- 10 Click **[Next >]**.
- 11 Select whether or not you want to print a test page, and then click **[Next>]**.



12 Click **[Finish]**.

Start printer driver installation.

Note

- During installation, the **[Hardware Installation]** dialog box may appear. In this case, click **[Continue Anyway]** to continue the installation.

13 Set up the options.

Reference

For more information about option settings, see [p.120 “Setting Up Options”](#).



Changing Port Settings

Follow the steps to change SmartDeviceMonitor for Client settings, such as the proxy server settings or IPP URL.

1 From the **[Printers]** window, click the icon of the printer you want to use. On the **[File]** menu, click **[Properties]**.

2 Click the **[Ports]** tab, and then click **[Configure Port]**.

The **[Port Settings]** dialog box appears.

- For TCP/IP protocol, you can configure Timeout Settings.

 **Note**

- If you cannot set items on the **[Recovery/Parallel Printing]** tab, follow the procedure below.
 - ① Click **[Cancel]** to close the **[Port Configuration:]** dialog box.
 - ② Start SmartDeviceMonitor for Client, and then right-click the SmartDeviceMonitor for Client icon on the taskbar.
 - ③ Click **[Extended Features Settings]**, and then select the **[Set Recovery/Parallel Printing for each port]** check box.
 - ④ Click **[OK]** to close the **[Extended Features Settings]** dialog box.

- For IPP, you can configure User Settings, Proxy Settings and Timeout Settings.

 **Note**

- For more information about these settings, see SmartDeviceMonitor for Client Help file.



Printing with Parallel Connection

Preparation

To use a printer connected to the parallel interface, select “LPT1:” when installing the printer driver.

Installing the PCL 5c or RPCS Printer Driver

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

Important

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)



4 Select **[PCL/RPCS Printer Drivers]**.

5 The software license agreement appears in the **[License Agreement]** dialog box.

After reading through all of the contents, click **[I accept the agreement]** to agree with the license agreement, and then click **[Next]**.

6 Select a printer drivers you want to use when the “Printer Program” dialog box appears.

You can select more than one printer driver.

7 Check **[Printer Name]** to select the model(s) of printer you want to use.

To change the printer name, change it in the **[Change settings for 'Printer Name']** box.

8 Double-click the printer name to display the printer settings.

 **Note**

- The details shown for **[Comment:]**, **[Driver:]**, and **[Port:]** vary depending on the operating system being used, the model of printer selected, and the port being used.

9 After confirming **[Port:]** that the location for **[LPT1:]** shown.

10 Configure the default printer as necessary.

❖ **Default Printer**

Check **[Default Printer]** to set the printer as the default printer.



11 Click **[Continue]** to start printer driver installation.

 **Note**

- During installation, the **[Hardware Installation]** dialog box may appear. In this case, click **[Continue Anyway]** to continue the installation.

12 When the **[Select Program]** dialog box appears, click **[Finish]**.

13 When the installation completion dialog box appears, click **[Finish]**.

14 Set up the options.

 **Note**

- You must set up the options when the bidirectional transmission is disabled.
- For more information about the status of the bidirectional transmission, see [p.121 “Bidirectional transmission”](#).

 **Reference**

For more information about option settings, see [p.120 “Setting Up Options”](#).



Installing the PostScript Printer Driver

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

 **Important**

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

 **Note**

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

 **Note**

- The printer driver with the selected language will be installed. The printer driver will be installed in English if you select the following languages: Portugues, Suomi

4 Click [PostScript 3 Printer Driver].

“Add Printer Wizard” starts.

5 Click **[Next]**.

6 Click **[Local Printer]**, and then click **[Next]**.

7 Click the port you want to use, and then click **[Next]**.

A dialog box for selecting the printer manufacturer and model name appears.

8 Click to select the name of the printer whose driver you want to install, and then click **[Next]**.

9 Change the name of the printer if you want, and then click **[Next]**.

10 Select whether or not you want to print a test page, and then click **[Finish]**.

Start printer driver installation.

 **Note**

- During installation, the **[Hardware Installation]** dialog box may appear. In this case, click **[Continue Anyway]** to continue the installation.

11 Set up the options.

 **Reference**

For more information about option settings, see [p.120 “Setting Up Options”](#).

12 Restart the computer.



Installing the Printer Driver Using USB

This section describes basic instructions for installing the printer drivers using USB. The printer drivers can be installed from the provided CD-ROM.

Preparation

Before installation, check the status of the computer to which the USB cable is connected is as described below.

- Only the operating system should be running.
- Printing should not be in progress.

Limitation

- Installing a printer driver requires the Administrators permission. When you install a printer driver, log on using an account that has the Administrators permission.

Note

- When the USB cable is used for the first time, the **[Found New Hardware Wizard]** dialog box appears, and Windows XP or Windows Server 2003's **[USB Printing Support]** will be installed automatically.
- If the printer driver is already installed, the “plug and play” is displayed, and the printer with its port directed to the USB cable is added to the “Printers” folder.





Windows XP, Windows Server 2003-Installing the Printer Driver Using USB

The printer drivers can be installed from the provided CD-ROM.

1 Select the **[Install from list or specific location (Advanced)]** check box in the **[Found New Hardware Wizard]** dialog box, and then click **[Next]**.

2 Hold down the left **[SHIFT]** key and insert the CD-ROM into the CD-ROM drive.

 **Note**

- Keep the left **[SHIFT]** key held down until the computer has finished accessing the CD-ROM.
- If the Auto Run program starts, click **[Cancel]**, and then **[Exit]**.

3 Select the **[Include this location in the search]** check box under **[Search for the best driver in these location]**, and then click **[Browse]** to select the printer driver location.

If the CD-ROM drive is D, the locations where each printer driver is stored are as indicated below.

- RPCS
D:\DRIVES\RPCS\WIN2K_XP\(\Language)\DISK1
- PCL 5c
D:\DRIVES\PCL5c\WIN2K_XP\(\Language)\DISK1
- PostScript 3
D:\DRIVES\PS3\WIN2K_XP\(\Language)\DISK1

4 Check the printer driver location is displayed, and then click **[Next]**.

5 Click **[Continue]**.

6 Click **[Finish]**.

If installation is successful, an icon of the printer for which **[USB001]** is specified for **[Printing Port]** is created in the **[Printer]** window.

 **Note**

- The number after “USB” varies depending on the number of printers connected.



Setting Up Options

You must set up the options when bidirectional transmission is disabled.

1 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers and Faxes]**.

The **[Printers and Faxes]** window appears.

2 Click the icon of the printer you want to use.

3 On the **[File]** menu, click **[Properties]**.

4 Click the **[Accessories]** tab.

 **Note**

If you use the RPCS printer driver, Click the **[Change Accessories]** tab.

If you use the PS printer driver, Click the **[Device Settings]** tab.

5 Select options you have installed from the **[Option]** group. And make any settings you require.

6 Click **[OK]**.


 **Bidirectional transmission**

When bidirectional transmission is enabled, the information about the paper size and feed direction setting is automatically sent to the printer by a computer. You can also confirm the printer status from your computer.

- Bidirectional transmission is supported by Windows 95/98/Me/2000/XP, Windows Server 2003, and Windows NT 4.0.
- If you use the RPCS printer driver and bidirectional transmission is enabled, on Windows XP or Windows Server 2003, the **[Change Accessories]** tab is shaded.

 **Note**

- The RPCS printer driver supports bidirectional transmission and updates the printer status automatically.
- The PCL 5c printer driver supports bidirectional transmission, you can update the printer status manually.
- The PostScript 3 printer driver does not support bidirectional transmission.

To support bidirectional transmission, the following conditions are required:



❖ When connecting with a parallel cable

- The computer must support bidirectional transmission.
- The printer must be set to bidirectional transmission.
- The Interface cable must support bidirectional transmission.
- The machine must be connected to the computer using the standard parallel cable and parallel connector.
- Under Windows XP or Windows Server 2003, **[Enable bidirectional support]** must be selected and **[Enable printer pooling]** must not be selected on the **[port]** tab with RPCS printer driver.

❖ When connecting with the network

- The printer must be set to bidirectional transmission.
- SmartDeviceMonitor for Client included on the CD-ROM must be installed, and the TCP/IP protocol must be used.
- Under Windows XP or Windows Server 2003, **[Enable bidirectional support]** must be selected and **[Enable printer pooling]** must not be selected on the **[port]** tab with RPCS printer driver.

❖ When connecting with USB

The printer must be connected to the USB connector of a computer using the USB interface cable.





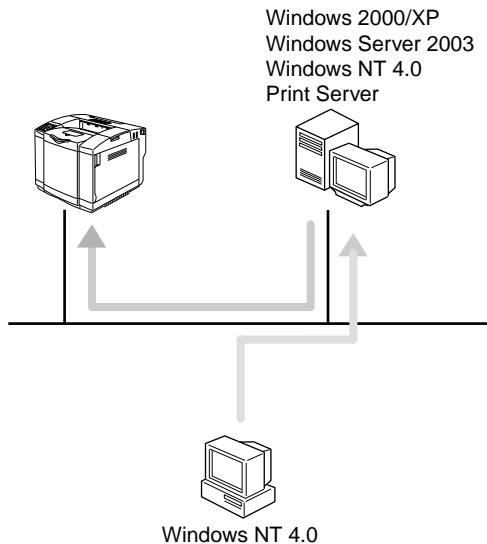
5. Windows NT 4.0 Configuration

Printing with a Print Server

Printing with a Windows 2000/XP, Windows Server 2003, or Windows NT 4.0 Print Server

This section describes the procedures for setting up a client in a network that uses Windows 2000/XP, Windows Server 2003, Windows NT 4.0.

Printing from Windows NT 4.0, you must install the printer driver and change the printer port to the print server.





Installing the PCL 5c or RPCS Printer Driver

Preparation

To use the print server, install the printer driver by selecting “Network printer server”, and then select the Windows 2000/XP, Windows Server 2003, or Windows NT 4.0 shared printer. For more information about how to install and setting, see *Administrator Reference*.

This section assumes that the client has already been configured to communicate with a Windows 2000/XP, Windows Server 2003, or Windows NT 4.0 print server. Do not begin the following procedure until the client has been set up and configured correctly.

Limitation

- If you print with a print server connected to the machine using the SmartDeviceMonitor port, Recovery Printing and Parallel Printing cannot be used from the client.
- If you print with a Windows XP or Windows Server 2003 print server, notification functions of SmartDeviceMonitor may not be used with the client.

Note

- If you print with a Windows NT 4.0 print server, install the printer driver before you connect the print server to the machine.

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

Important

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.



3 Select a language to change the interface language, and then click **[OK]**.

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

4 Select **[PCL/RPCS Printer Drivers]**.

5 The software license agreement appears in the **[License Agreement]** dialog box.

After reading through all of the contents, click **[I accept the agreement]** to agree with the license agreement, and then click **[Next]**.

6 Select a printer drivers you want to use when the “Printer Program” dialog box appears.

You can select more than one printer driver.

7 Check **[Printer Name]** to select the model(s) of printer you want to use.

To change the printer name, change it in the **[Change settings for 'Printer Name']** box.

8 Double-click the printer name to display the printer settings.

 **Note**

- The details shown for **[Comment:]**, **[Driver:]**, and **[Port:]** vary depending on the operating system being used, the model of printer selected, and the port being used.

9 Select **[Port:]**, and then click **[Add]**.

10 Select **[Network Printer]**, and then click **[OK]**.

11 Double-click the computer name you want to use as a print server in the “Browse for Printer” window.





- 12** Select the printer you want to use, and then click [OK].
- 13** Make sure the location for the selected printer is shown after [Port:].
- 14** Configure the default printer as necessary.

❖ Default Printer

Check [Default Printer] to set the printer as the default printer.

- 15** Click [Continue] to start printer driver installation.
- 16** When the [Select Program] dialog box appears, click [Finish].
- 17** When the installation completion dialog box appears, click [Finish].
- 18** Set up the options.

Note

- You must set up the options when the bidirectional transmission is disabled. For more information about the status of the bidirectional transmission, see [p.154 "Bidirectional transmission"](#).

Reference

For more information about option settings, see [p.153 "Setting Up Options"](#).



Installing the PostScript Printer Driver

- 1** Close all applications that are running.
- 2** Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

Important

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

- 3** Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

Note

- The printer driver with the selected language will be installed. The printer driver will be installed in English if you select the following languages: Portugues, Suomi

- 4** Click [PostScript 3 Printer Driver].

“Add Printer Wizard” starts.

- 5** Click [Next].



- 6** Click [Network printer], and then click [Next].
- 7** Click [Next].
- 8** Double-click the computer name you want to use as a print server in the “Shared printers:” window.
- 9** Select the printer you want to use, and then click [Next].
- 10** After confirming that the location for the selected printer shown, click [Next].
- 11** Change the name of the printer if you want, and then click [Next].
- 12** Select whether or not you want to print a test page, and then click [Finish].

The installation is complete.

 **Note**

- You can specify the “User Code” with the Printer Driver Properties after installing the printer driver. See printer driver’s Help.

 **Reference**

For more information about option settings, see [p.153 “Setting Up Options”](#).

- 13** Restart the computer.





Printing without Using a Print Server

Preparation

To use a printer connected to the Ethernet interface, select “SmartDeviceMonitor” or “LPR Port” when installing the printer driver.

- SmartDeviceMonitor
See [p.130 “Configuring the Protocols”](#) and [p.134 “Installing Software”](#) and [p.136 “Installing the PCL 5c or RPCS Printer Driver”](#) or [p.142 “Installing the PostScript Printer Driver”](#).
- LPR Port
See [p.130 “Configuring the Protocols”](#) and [p.136 “Installing the PCL 5c or RPCS Printer Driver”](#) or [p.142 “Installing the PostScript Printer Driver”](#).



Note

- ❑ If you want to use “LPR Port”, “Microsoft TCP/ IP Printing” must be installed.



Configuring the Protocols

Configuring TCP/IP and IPP for Printing

Follow these instructions to configure the printer and Windows NT 4.0 to use the TCP/IP protocol and IPP.

❖ Configuring the printer

Configure the printer to use the TCP/IP protocol.

- Confirm that the TCP/IP protocol is set to be active. (The factory default is active.)
- Assign an IP address and make other settings required for using the TCP/IP protocol.



Reference

For more information about how to make the above settings, see “Configuring the printer for the Network”, *Administrator Reference*.

If DHCP is used to assign IP addresses, see “Using DHCP”, *Administrator Reference*.



Note

- After setting the IP address, use the ping command to confirm that it has been set correctly.

① Click **[Start]**, point to **[Programs]**, and then click **[Command Prompt]**.

② Type the following: (Example IP address is 192.168.15.16)

```
C:> ping 192.168.15.16
```

If the address has been configured correctly, the following message appears.

```
Reply from 192.168.15.16 : bytes=32 time<10ms TTL=32
```

If the address has been configured incorrectly, the following message appears.

```
Request timed out.Request timed out.
```




❖ Configuring a Windows NT 4.0 computer

Follow these steps to configure a Windows NT 4.0 computer to use the TCP/IP protocol.

- ① Open **[Control Panel]** and double-click the **[Network]** icon. Confirm that “TCP/IP Protocol” is listed in the **[Network protocols]** box under the **[Protocols]** tab.



Note

- ❑ If the TCP/IP protocol is not installed, click **[Add]** under the **[Protocols]** tab and install it. For more information about installing the TCP/IP protocol, see Windows NT 4.0 Help.
- ② Configure the TCP/IP protocols with the appropriate IP address, subnet mask and other settings. Confirm that the settings are correct with the network administrator.
 - ③ Click the **[Services]** tab, and confirm that “Microsoft TCP/IP Printing” is installed. If “Microsoft TCP/IP Printing” is not installed, click **[Add]** under the **[Services]** tab, and install it. For more information about installing and configuring network services, see Windows NT 4.0 Help.



Configuring NetBEUI for Printing

Follow these instructions to configure the printer and Windows NT 4.0 to use the NetBEUI protocol.

Preparation

To use NetBEUI, use the SmartDeviceMonitor for Client port.

❖ Configuring the printer

Enable SMB to print using NetBEUI (The default is active).

Reference

For more information about how to make the above settings, see “Configuring the printer for the Network”, *Administrator Reference*.

❖ Configuring a Windows NT 4.0 computer

Install the NetBEUI protocol on the Windows NT 4.0 computer, and change the LAN adapter number (Lana Number).

- ① Open **[Control Panel]** and double-click the **[Network]** icon. Confirm that “NetBEUI Protocol” is listed in the **[Network Protocols]** box under the **[Protocols]** tab.

Note

- ❑ If the NetBEUI protocol is not installed, click **[Add...]** under the **[Protocols]** tab, and install it. For more information about installing the NetBEUI protocol, see Windows NT 4.0 Help.
- ② Change the Lana Number. Click the **[Services]** tab, click “NetBIOS Interface” in the **[Network Services:]** box, and click **[Properties]**.
 - ③ Click the Lana Number corresponding to the Nbf protocol of the **[Network Route]** headline, and click **[Edit]**.



④ Type “0” as the Lana Number.



Note

If another protocol's Lana Number is configured at “0”, change it to another number other than “0”.

⑤ Click **[OK]**.

⑥ Click **[Close]**, and close the **[Network]** dialog box.

⑦ After confirming the message to restart, click **[Yes]**.



Note

After you change the Lana Number, you must restart the computer.





Installing Software

Preparation

If you are not using the print server, install SmartDeviceMonitor for Client, and then install the printer driver by selecting “SmartDeviceMonitor for Client”. This enables peer-to-peer network printing with the TCP/IP, NetBEUI, or IPP protocol.

Installing SmartDeviceMonitor for Client

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

Important

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)



- 4** Click [SmartDeviceMonitor for Client / Admin].
- 5** Click to select [SmartDeviceMonitor for Client], and then click [Next >].
- 6** Follow the instructions on the screen.

 **Note**

- If you are required to restart the computer after the installation of SmartDeviceMonitor for Client, restart the computer and continue with necessary configurations.





Installing the PCL 5c or RPCS Printer Driver

- 1** Close all applications that are running.
- 2** Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

Important

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.


- 3** Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

- 4** Select [PCL/RPCS Printer Drivers].

- 5** The software license agreement appears in the [License Agreement] dialog box.

After reading through all of the contents, click [I accept the agreement] to agree with the license agreement, and then click [Next].





6 Select a printer drivers you want to use when the “Printer Program” dialog box appears.

You can select more than one printer driver.

7 Select the printer model(s) you want to use.

To change the printer name, change it in the **[Change settings for 'Printer Name']** box.

8 Double-click the printer name to display the printer settings.

 **Note**

- The details shown for **[Comment:]**, **[Driver:]**, and **[Port:]** vary depending on the operating system being used, the model of printer selected, and the port being used.

9 Click **[Port:]**, and then select the port you want to use.

- SmartDeviceMonitor
- LPR Port



SmartDevice Port

- ① Click **[Add]**.
- ② Select **[SmartDeviceMonitor]**, and then click **[OK]**.
- ③ Select a printer you want to use.

❖ TCP/IP

- ① Click **[TCP/IP]**, and then click **[Search]**.
Available printers will be listed.
- ② Click the printer you want to use, and then click **[OK]**.

Note

- Printers that respond to an IP broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the IP address or host name.
- You cannot add an address partially similar to that already used. For example, when “192.168.0.2” is already used, “192.168.0.2xx” cannot be used. Similarly, when “192.168.0.20” is already used, “192.168.0.2” cannot be used.

❖ NetBEUI

- ① Click **[NetBEUI]**, and then click **[Search]**.
A list of printers that can be used by the NetBEUI protocol appears.
- ② Click the printer you want to use, and then click **[OK]**.

Note

- Printers that respond to a broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the NetBEUI address. Confirm the NetBEUI address on the network is on the configuration page. For more information about printing the configuration page, see “Printing a Configuration Page”, *Administrator Reference*. NetBEUI address appears as “\RNPxxxxxx” on the configuration page. Type the printer's network path name in the form of “%%Computer name\Share name”. Do not type “\” as head characters but “%%”.
- You cannot print to printers beyond routers.

◆ **IPP**

- ① Click **[IPP]**.
The IPP settings dialog box appears.
- ② To specify the IP address of the printer, type “http://printer's-ip-address/printer” in the **[Printer URL]** field.

 **Note**

- If this machine has the optional network data protection unit installed and server authentication is issued, enter “https://printer's-ip-address/printer” (Internet Explorer 5.01 or a later version must be installed).

(Example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer

- ③ As necessary, type the names to distinguish the printer in **[IPP Port Name]**. Type a different name from those of any existing port name.
If you omit this, the address typed in **[Printer URL]** will be set as the IPP port name.
- ④ If a proxy server and IPP user name are used, click **[Detailed Settings]**, and then configure the necessary settings.

 **Note**

- For more information about these settings, see SmartDeviceMonitor for Client Help.

- ⑤ Click **[OK]**.

LPR Port

- 1 Click **[Add]**.
- 2 Select **[LPR Port]**, and then click **[OK]**.



Note

- If **[LPR Port]** is not displayed, “Microsoft TCP/IP Printing” is not installed. Click **[Add]** on the **[Service]** tab to install “Microsoft TCP/IP Printing”. For more information about installing the “Microsoft TCP/IP Printing”, see Windows NT 4.0 Help.

- 3 Type the printer's IP address in the “Name or address of server providing lpd” box.
- 4 Type “lp” in the “Name of printer or print queue on that server” box, and then click **[OK]**.
- 10 Make sure the location for the selected printer is shown after **[Port:]**.
- 11 Configure the default printer as necessary.
 - ❖ **Default Printer**
Check **[Default Printer]** to set the printer as the default printer.
- 12 Click **[Continue]** to start printer driver installation.
- 13 When the **[Select Program]** dialog box appears, click **[Finish]**.
- 14 When the installation completion dialog box appears, click **[Finish]**.
- 15 Set up the options.



Note

- You must set up the options when the bidirectional transmission is disabled. For more information about the status of the bidirectional transmission, see [p.154 “Bidirectional transmission”](#).



Reference

For more information about option settings, see [p.153 “Setting Up Options”](#).



Installing the PostScript Printer Driver

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

 **Important**

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

 **Note**

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

 **Note**

- The printer driver with the selected language will be installed. The printer driver will be installed in English if you select the following languages: Portugues, Suomi

4 Click [PostScript 3 Printer Driver].

“Add Printer Wizard” starts.

5 Click [Next].

6 Select the port you want to use.

- SmartDeviceMonitor
- LPR Port

SmartDeviceMonitor

- 1** Click **[Add Port:]**.
- 2** Select **[SmartDeviceMonitor]**, and then **[New Port...]**.
- 3** Select a printer you want to use.

❖ TCP/IP

- 1** Click **[TCP/IP]**, and then click **[Search]**.
Available printers will be listed.
- 2** Click the printer you want to use, and then click **[OK]**.

Note

- Printers that respond to an IP broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the IP address or host name.
- You cannot add an address partially similar to that already used. For example, when “192.168.0.2” is already used, “192.168.0.2xx” cannot be used. Similarly, when “192.168.0.20” is already used, “192.168.0.2” cannot be used.

❖ NetBEUI

- ① Click **[NetBEUI]**, and then click **[Search]**.
A list of printers that can be used by the NetBEUI protocol appears.
- ② Click the printer you want to use, and then click **[OK]**.

Note

- Printers that respond to a broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]**, and then type the NetBEUI address. Confirm the NetBEUI address on the network is on the configuration page. For more information about printing the configuration page, see “Printing a Configuration Page”, *Administrator Reference*. NetBEUI address appears as “\RNPxxxxxx” on the configuration page. Type the printer's network path name in the form of “%%Computer name\Share name”. Do not type “\” as head characters but “%%”.
- You cannot print to printers beyond routers.

◆ **IPP**

- ① Click **[IPP]**.
The IPP setting dialog box appears.
- ② To specify the IP address of the printer, type “http://printer's-ip-address/printer” in the **[Printer URL]** field.

 **Note**

- If this machine has the optional network data protection unit installed and server authentication is issued, enter “https://printer's-ip-address/printer” (Internet Explorer 5.01 or a later version must be installed).

(Example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer



- ③ As necessary, type the names to distinguish the printer in **[IPP Port Name]**. Type a different name from those of any existing port name.
If you omit this, the address typed in **[Printer URL]** will be set as the IPP port name.
- ④ If a proxy server and IPP user name are used, click **[Detailed Settings]** and configure the necessary settings.

 **Note**

- For more information about these settings, see SmartDeviceMonitor for Client Help.

- ⑤ Click **[OK]**.

LPR Port

- ❶ Click **[Add Port:]**.
- ❷ Select **[LPR Port]**, and then click **[OK]**.
- ❸ Type the printer's IP address in the “Name or address of server providing lpd” box.
- ❹ Type “lp” in the “Name of printer or print queue on that server” box, and then click **[OK]**.
- ❺ Confirm to select the name of the printer whose driver you want to install, and then click **[Next >]**.
- ❻ Change the name of the printer if you want, and then click **[Next >]**.
Configure the default printer as necessary. Check **[Yes]** to set the printer as the default printer.
- ❼ Select whether or not you want to print a test page, and then click **[Finish]**.
Start printer driver installation.
- ❽ Set up the options.
 -  **Note**
 - You can specify the “User Code” with the Printer Properties after installing the printer driver. See printer driver's Help.
 -  **Reference**
For more information about option settings, see [p.153 “Setting Up Options”](#).
- ❾ Restart the computer.



Changing Port Settings

Follow the steps to change SmartDeviceMonitor for Client settings, such as the proxy server settings or IPP URL.

 **Note**

- There are no settings for the NetBEUI protocol.

1 From the **[Printers]** window, click the icon of the printer you want to use. On the **[File]** menu, click **[Properties]**.

2 Click the **[Ports]** tab, and then click **[Configure Port]**.

The **[Port Settings]** dialog box appears.

- For TCP/IP protocol, you can configure Timeout Settings.

 **Note**

- If you cannot set items on the **[Recovery/Parallel Printing]** tab, follow the procedure below.

① Click **[Cancel]** to close the **[Port Configuration:]** dialog box.

② Start SmartDeviceMonitor for Client, and then right-click the SmartDeviceMonitor for Client icon on the taskbar.

③ Click **[Extended Features Settings]**, and then select the **[Set Recovery/Parallel Printing for each port]** check box.

④ Click **[OK]** to close the **[Extended Features Settings]** dialog box.

- For IPP, you can configure User Settings, Proxy Settings and Timeout Settings.

 **Note**

- For more information about these settings, see SmartDeviceMonitor for Client Help.



Printing with Parallel Connection

Preparation

To use a printer connected to the parallel interface, select “LPT1:” when installing the printer driver.

Installing the PCL 5c or RPCS Printer Driver

Preparation

The target printer must be turned on before starting the installation process.

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

Important

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)



4 Select **[PCL/RPCS Printer Drivers]**.

5 The software license agreement appears in the **[License Agreement]** dialog box.

After reading through all of the contents, click **[I accept the agreement]** to agree with the license agreement, and then click **[Next]**.

6 Select a printer drivers you want to use when the “Printer Program” dialog box appears.

You can select more than one printer driver.

7 Check **[Printer Name]** to select the model(s) of printer you want to use.

To change the printer name, change it in the **[Change settings for 'Printer Name']** box.

8 Double-click the printer name to display the printer settings.

 **Note**

- The details shown for **[Comment:]**, **[Driver:]**, and **[Port:]** vary depending on the operating system being used, the model of printer selected, and the port being used.

9 After confirming **[Port:]** that the location for **[LPT1:]** shown.

10 Configure the default printer as necessary.

❖ **Default Printer**

Check **[Default Printer]** to set the printer as the default printer.

11 Click **[Continue]** to start printer driver installation.

12 When the **[Select Program]** dialog box appears, click **[Finish]**.



13 When the installation completion dialog box appears, click [Finish].

14 Set up the options.

 **Note**

- You must set up the options when the bidirectional transmission is disabled. For more information about the status of the bidirectional transmission, see [p.154 “Bidirectional transmission”](#).

 **Reference**

For more information about option settings, see [p.153 “Setting Up Options”](#).



Installing the PostScript Printer Driver

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

 **Important**

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

 **Note**

- Auto Run might not automatically work with certain OS settings. In this case, launch “Setup.exe” located on the CD-ROM root directory.

3 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

 **Note**

- The printer driver with the selected language will be installed. The printer driver will be installed in English if you select the following languages: Portugues, Suomi

4 Click [PostScript 3 Printer Driver].

“Add Printer Wizard” starts.



5 Click [Next].

6 Click the port you want to use, and then click [Next].

A dialog box for selecting the printer manufacturer and model name appears.

7 Click to select the name of the printer whose driver you want to install, and then click [Next].

8 Change the name of the printer if you want, and then click [Next].

9 Click [Next].

10 Select whether or not you want to print a test page, and then click [Finish].

Set up the options with the printer driver.



Reference

For more information about option settings, see [p.153 "Setting Up Options"](#).

11 Restart the computer.





Setting Up Options

You must set up the options when bidirectional transmission is disabled.

- 1** Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

- 2** Click the icon of the printer you want to use.

- 3** On the **[File]** menu, click **[Properties]**.

- 4** Click the **[Accessories]** tab.

 **Note**

- If you use the RPCS printer driver, Click the **[Change Accessories]** tab.
- If you use the PostScript printer driver, Click the **[Device Settings]** tab.

- 5** Select options you have installed from the **[Option]** group. And make any settings you require.

- 6** Click **[OK]**.


 **Bidirectional transmission**

When bidirectional transmission is enabled, the information about the paper size and feed direction setting is automatically sent to the printer by a computer. You can also confirm the printer status from your computer.

- Bidirectional transmission is supported by Windows 95/98/Me/2000/XP, Windows Server 2003, and Windows NT 4.0.
- If you use the RPCS printer driver and bidirectional transmission is enabled, on Windows 95/98/Me, the unavailable functions are shaded.

 **Note**

- The RPCS printer driver supports bidirectional transmission and updates the printer status automatically.
- The PCL 5c printer driver supports bidirectional transmission, you can update the printer status manually.
- The PostScript 3 printer driver does not support bidirectional transmission.

To support bidirectional transmission, the following conditions are required:



❖ When connecting with a parallel cable

- The computer must support bidirectional transmission.
- The printer must be set to bidirectional transmission.
- The Interface cable must support bidirectional transmission.
- The machine must be connected to the computer using the standard parallel cable and parallel connector.
- Under Windows NT 4.0, **[Enable bidirectional support]** must be selected and **[Enable printer pooling]** must not be selected on the **[port]** tab with RPCS printer driver.

❖ When connecting with the network

- The printer must be set to bidirectional transmission.
- SmartDeviceMonitor for Client included on the CD-ROM must be installed, and the TCP/IP protocol must be used.
- Under Windows NT 4.0, **[Enable bidirectional support]** must be selected and **[Enable printer pooling]** must not be selected on the **[port]** tab with RPCS printer driver.
- Under Windows NT 4.0, specified IP address in the “Microsoft TCP/IP printing” is used.





6. Mac OS Configuration

This section describes how to configure Mac OS.

- If you are using Mac OS, see “Mac OS”.
- If you are using Mac OS X, see p.166 “Mac OS X”.

Mac OS

This section describes how to configure Mac OS to use EtherTalk and USB. The following procedure describes how to configure Mac OS 9.1. If you are not using Mac OS 9.1, see the manual that comes with your version of the Mac OS for more information.

Limitation

- For use with Mac OS 8.6 or later. (Mac OS X Classic environment is supported.)
- For use with a Mac OS, Power PC is required.

Note

- The PostScript 3 printer driver is stored in the following folder on the CD-ROM.

Mac OS 8 and 9:PS Driver:(language):Disk1



Installing the Printer Driver and Software

Preparation

If the AdobePS installation starts under Mac OS X, the desktop automatically changes to the Classic environment. If you want to set a printer with Mac OS X, see [p.166 "Mac OS X"](#).

Installing the PostScript Printer Driver and PPD File

It is necessary to install a printer driver and a PPD file to print from a Mac OS.

Follow these steps to install a printer driver and a PPD file into a Mac OS using Mac OS 8.6 or later.

PostScript Printer Driver

- 1** Insert the CD-ROM into the CD-ROM drive.
- 2** Double-click the CD-ROM icon.
- 3** Double-click the [Mac OS 8 and 9] folder.
- 4** Double-click the [PS Driver] folder.
- 5** Double-click the folder of the language you use.
- 6** Open [DISK1], and then double-click the installer icon.
- 7** Follow the instructions on the screen.



PPD File

- 1** Double-click the CD-ROM icon.
- 2** Double-click the [Mac OS 8 and 9] folder.
- 3** Double-click the [Printer Descriptions] folder.
- 4** Double-click the folder of the language you use.
- 5** Open [Disk1].
- 6** Drag the PPD file and the Plugin file into [Printer Descriptions] in [Extensions] in [System Folder].
- 7** Restart the Mac OS.



Setting Up the PPD File

Preparation

Confirm that the printer is connected to an AppleTalk network before performing the following procedure.

- 1** On the [Apple] menu, select [Chooser].
- 2** Click the [Adobe PS] icon.
- 3** In the [Select a PostScript Printer:] list, click the name of the printer you want to use.
- 4** Click [Create].
- 5** Click the printer you want to use, and then click [Select].

The PPD file is set up, and the [Adobe PS] icon appears at the left of the printer name in the list. Next, follow the procedure on [p.161 “Setting Up Options”](#) to make the option settings, or close the [Chooser] dialog box.





Creating a Desktop Printer icon

Preparation


Confirm that the printer is connected to the USB before performing the following procedure.

To use a printer connected by USB, create a Desktop Printer icon.

- 1** Double-click [Desktop Printer Utility] in the [AdobePS Components] folder.
- 2** Select [AdobePS] in [With:] and [Printer (USB)] in [Create Desktop], and then click [OK].
- 3** Click [Change] in [USB Printer Selection].
- 4** Select the model you are using in [Select a USB Printer:], and then click [OK].
- 5** Click [Auto Setup] in [PostScript™ Printer Description (PPD) File].
- 6** Click [Create].
- 7** Enter the printer name, and then click [Save].
The printer icon appears on the desktop.
- 8** Exit the Desktop Printer Utility.



Setting Up Options

- 1** On the [Apple] menu, select [Chooser].
- 2** Click the [Adobe PS] icon.
- 3** In the [Select the PostScript Printer:] list, click the name of the printer you want to use, and then click [Setup].
- 4** Click [Configure].
A list of options appears.
- 5** Select the option you want to set up, and then select the appropriate setting for it.
 **Note**
 - If the option you want to set up is not displayed, the PPD file might not be set up correctly. Check the name of the PPD file shown in the dialog box.
- 6** Click [OK].
The list of options closes.
- 7** Click [OK].
The [Chooser] dialog box appears.
- 8** Close the [Chooser] dialog box.





Installing the ColorSync profile

ColorSync profile makes it possible for the printer to print colors of similar intensity to those that appear on your computer display. You must install the ColorSync profile to use this feature.

 **Note**

- The ColorSync profile confirms with the color characteristics defined by the International Color Consortium (ICC).
- Some computer displays may require particular settings to be controlled by ColorSync. See the documentation that comes with your display for details.

The following procedure shows how to install the ColorSync profile.

1 Start the Mac OS.

2 Double-click the hard disk icon, and then open the appropriate folder for installing the ColorSync profile.

 **Note**

- The location of the appropriate folder may differ depending on the version of the operating system. The following are examples:
 - System: Preferences: ColorSync profiles
 - System: ColorSync profiles

3 Insert the CD-ROM into the CD-ROM drive.

The icon of the CD-ROM appears.

4 Double-click the CD-ROM icon.

The contents of the CD-ROM appear.

5 Double-click the [Mac OS 8 and 9] folder.



6 Double-click the [ColorSync™ Profiles] folder in the CD-ROM.

7 Drag the file to the [ColorSync™ Profiles] folder on the hard disk.

The ColorSync profile is installed.

Installing the Adobe Type Manager

 **Note**

Close all applications that are running before the installation. Install ATM after you restart the computer.

1 Start the Mac OS.

2 Insert the CD-ROM into the CD-ROM drive.

3 Double-click the CD-ROM icon.

4 Double-click the [Mac OS 8 and 9] folder.

5 Double-click the [ATM] folder.

6 Double-click the [ATM 4.6.2 installer] icon.

7 Follow the instructions on the screen.


8 When the procedure is complete, restart the computer. ATM will be completely installed only after restarting.

9 Select [Control Panel] from the Apple menu, and then select [~ATM].

10 Open the ATM control panel.

 **Note**

For more information about installation, see the User's Guide in the ATM folder.





Installing screen fonts

The screen fonts described below can be found in the CD-ROM, in the folder named **[Fonts]**.

1 Start the Mac OS.

2 Insert the CD-ROM into the CD-ROM drive.

The CD-ROM icon appears.

3 Double-click the CD-ROM icon.

The contents of the CD-ROM appear.

4 Double-click the [Mac OS 8 and 9] folder.

5 Double-click the [Fonts] folder.

6 Double-click the [Screen font] folder.

7 Double-click the [TrueType] or [Type1] folder.

Select the font type you want to use.

8 Copy the fonts you want to install in [Fonts] in [System Folder].

A Confirmation dialog box appears.

9 Click [OK].

The fonts are installed.

10 Restart the Mac OS.





Using USB Interface

This section explains the setup procedure when using the printer with a USB connection.

Preparation

Install the required files by referring to [p.157 "Installing the Printer Driver and Software"](#).


Connect your Macintosh and the printer using a USB cable.

Limitation

- Mac OS is compatible with the standard USB port only.

- 1** Open the [AdobePS Component] folder on the hard disk.
- 2** Double-click [Desktop Printer Utility].
- 3** Select [AdobePS] in [With:] and [Printer (USB)] in [Create Desktop], and then click [OK].
- 4** Click [Change] under [PostScript™ Printer Description (PPD) File].
- 5** Select the connected printer's PPD file, and then click [Select].
- 6** Click [Change] in [USB Printer Selection].
- 7** Select the model you are using in [Select a USB Printer:], and then click [OK].
- 8** Click [Create].

The following message appears.

- 9** Enter the printer name, and then click [Save].
 - 10** Specify the location where the file is to be saved, and the name, and then click [Save].
The printer icon appears on the desktop.
 - 11** Exit the Desktop Printer Utility.
- 



Mac OS X

This section describes how to configure a Mac OS X to use Ether Talk. The following procedure describes how to configure Mac OS X 10.1. If you are not using Mac OS X 10.1, see the manual that comes with your version of the Mac OS X for more information.

Limitation

- For use with Mac OS X 10.1 or later.

Note

- The PPD file is stored in the following folder on the CD-ROM.

Mac OS X:PPD Installer

Installing the PPD File

It is necessary to install a PPD file to print from a Mac OS X.

Preparation

You need an administrator name and a password (phrase). For more information, consult your administrator.

- 1** Insert the CD-ROM into the CD-ROM drive.
- 2** Double-click the CD-ROM icon.
- 3** Double-click the [Mac OS X] folder.
- 4** Double-click the installer icon.
- 5** Follow the instructions on the screen.



Setting Up the PPD File

1 Run Print Center.

2 Click [Add Printer].

Select [AppleTalk] in the first pop-up menu.

If the zone has been set, select the zone in the second pop-up menu.

3 Select the PPD file of the model you are using from the “Printer Model:” pop-up menu, and then click [Add].

Setting Up Options

 **Limitation**

- You cannot make the printer option settings under Mac OS X. Do not make settings for options that have not been installed.



Using USB Interface

1 Start the Print Center.

2 Click [Add].

3 Select [USB] on the pop-up menu.

The connected printer is displayed.

4 Select the printer, and then select its manufacturer the [Printer Model:] pop-up menu.

A list of printer types appears.

 **Note**

- For Mac OS X 10.1.x, a list of model names appears in the [Printer Model:] pop-up menu. Select the printer's model name, and then proceed to step **6**.

5 Select the connected printer's name in the list of printer types, and then click [Add].

6 Close the [Printer List], and then quit print center.



Using Rendezvous

When using Mac OS X 10.2.3 or later, you can print using Rendezvous. Ethernet and Wireless LAN connections can be used.


- 1** Start up the Print Center.
- 2** Click [Add].
- 3** Select [Rendezvous] from the pop-up menu.
The connected printer is displayed.
- 4** Select the printer, and then select its manufacturer the [Printer Model:] pop-up menu.
A list of printer types appears.
- 5** Select the name of the connected printer from the list of printer types, and then click [Add].
- 6** Close the [Printer List] and end the print center.



Configuring Mac OS

Changing to EtherTalk

Follow the procedure to configure a Mac OS to use EtherTalk.

-  **Reference**
For more information about installing the software required for EtherTalk, see the Mac OS manuals.

Mac OS

- 1** Open [Control Panel], and then double-click the [AppleTalk] icon.
- 2** From the [Connect via:] pop-up menu, select “Ethernet”.
- 3** If you change zones, select a name from the [Current zone:] pop-up menu.
- 4** Close the [AppleTalk] control panels.
- 5** Restart the computer.



Mac OS X

Preparation

You need an administrator name and a password (phrase). For more information, consult your administrator.

- 1** Open [System Preference], and then click the [Network] icon.
- 2** Click the [AppleTalk] tab.
- 3** If you change zone, select a name from the [AppleTalk Zone:] pop-up menu.
- 4** When the setting is complete, click [Apple Now].

Configuring the Printer

Use the control panel to activate the AppleTalk protocol. (The factory default is active.)

Reference

For more information about the configuration, see the “Configuring the printer for the Network”, *Administrator Reference*.





Changing the Printer Name

If the network has several same model printers, the names will be the same. Printers that have the same name will have their names changed slightly in the Chooser. For example, three printers named “printer” will appear in the chooser as “printer0”, “printer1” and “printer2”.

To install from Printer Utility for Mac, see the *PostScript 3 Supplement*.

Changing the Zone

It may be necessary to change the zone configuration.

To install from Web Image Monitor, see *Administrator Reference*.



7. NetWare Configuration

The following explanation assumes NetWare client software is installed on the client, and the environment is set correctly for NetWare server. When setup is not made, install the necessary software on the client side beforehand.

Set up the printer driver while Windows is logged on to NetWare's file server.

- OS: Windows 98
- NetWare version: 4.1
- File server name: CAREE
- Queue name: R-QUEUE

Windows Setup

1 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

Important

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch "Setup.exe" located on the CD-ROM root directory.

2 Select a language to change the interface language, and then click [OK].

The following languages are available: Cestina (Czech), Dansk (Danish), Deutsch (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyar (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)



3 Select **[PCL/RPCS Printer Drivers]**.

4 The software license agreement appears in the **[License Agreement]** dialog box.

After reading through all of the contents, click **[I accept the agreement]** to agree with the license agreement, and then click **[Next]**.

5 Select a printer drivers you want to use when the “Printer Program” dialog box appears.

You can select more than one printer driver.

6 Check **[Printer Name]** to select the model(s) of printer you want to use.

To change the printer name, change it in the **[Change settings for 'Printer Name']** box.

7 Double-click the printer name to display the printer settings.

 **Note**

- The details shown for **[Comment:]**, **[Driver:]**, and **[Port:]** vary depending on the operating system being used, the model of printer selected, and the port being used.

8 Select **[Port:]**, and then click **[Add]**.

9 Select **[Network Printer]**, and then click **[OK]**.

10 Double-click the name of the NetWare file server on the network tree.

The created queue is displayed.

11 Click the print queue, and then click **[OK]**.

12 Make sure the location for the selected printer is shown after **[Port:]**.



13 Click **[Finish]**.

The printer driver is installed.

 **Note**

- During installation, the **[Digital Signature Not Found]** dialog box may appear. In this case, click **[Yes]** to continue the installation.
- During installation, the **[Hardware Installation]** dialog box may appear. In this case, click **[Continue Anyway]** to continue the installation.

14 When the **[Component selection]** dialog box appears, click **[Finish]**.

15 When the **[Introduction complete]** dialog box appears, click **[Finish]**.

16 From the **[Printers]** window, open the printer properties.

 **Note**

- When using Windows XP and Windows Server 2003, open the printer properties from the **[Printers and Faxes]** window.

 **Limitation**

- In order to make changes in the printer properties under Windows 2000, Windows XP Professional, Windows Server 2003, and Windows NT 4.0, you must have “Printer Management” access rights. For this, log on as an Administrators or Power Users group member.

17 Click the **[Printer Settings]** tab.

 **Note**

- When using Windows 2000/XP, Windows Server 2003 or Windows NT4.0, click the **[NetWare setting]** tab.





18 Click to clear the **[Form Feed]** and **[Enable Banner]** check boxes.

 **Note**

- You should not check these boxes because they should be specified using the printer driver. If they are selected, the printer might not print correctly.

19 Click **[OK]** to close the **Printer Properties**.

When using the PostScript 3 Printer Driver

Follow these steps to set up for the PostScript 3 printer driver.

1 From the **[Printers]** or **[Printers and Faxes]** window, open the printer properties.

2 Click the **[PostScript]** tab.

 **Note**

- When using Windows 2000/XP, Windows Server 2003 or Windows NT 4.0, click the **[Device setting]** tab, and then proceed to the step **4**.

3 Click **[Advanced]**.

4 Click to clear the **[Send CTRL+D before job]** and **[Send CTRL+D after job]** check boxes, and then Click **[OK]**.

5 Click **[OK]** to close the **Printer Properties**.



 **If a message is displayed during installation of the printer driver**

When there is a driver in the computer that is newer than the one currently being installed, a message dialog box appears.

In such a case, you cannot install with the Auto Run program. Use the driver that was used in installing the driver that is displayed in the message, and reinstall with **[Add Printer]**.

- ① Click **[Start]**, point to **[Settings]**, and then click **[Printers]**.
- ② Double-click the **[Add Printer]** icon.
- ③ Follow the wizard to install the driver.

If the printer driver disk is a CD-ROM, the sources of installation are as follows. If the installer starts up, click **[Cancel]** to quit it.

If the CD-ROM drive is D, the locations where each printer driver is stored are as indicated below.

- RPCS
D:\DRIVES\RPCS\WIN9X_ME\Language\DISK1
- PCL 5c
D:\DRIVES\PCL5c\WIN9X_ME\Language\DISK1
- PostScript 3
D:\DRIVES\PS3\WIN9X_ME\Language\DISK1



8. Software and Utilities Included on the CD-ROM

Software and Utilities Included on the CD-ROM

There are three CD-ROMs that come with this printer. These are labeled “Operating Instructions”, “Printer Drivers and Utilities” and “Desk Top Binder V2 Lite”. The following items are included on the three separate CD-ROMs.

❖ **Font Manager 2000**

Helps you to install new screen fonts, or organize and manage fonts already installed on the system. For more information about Font Manager 2000, see the manual on the CD-ROM labeled “Printer Drivers and Utilities”.

❖ **SmartDeviceMonitor for Admin**

An utility for the system administrator to manage printers on the network.

Reference

For more information about SmartDeviceMonitor for Admin, see the SmartDeviceMonitor for Admin Help.

❖ **SmartDeviceMonitor for Client**

A utility for users to manage their own print status on the network.

Reference

For more information about SmartDeviceMonitor for Client, see the SmartDeviceMonitor for Client Help .

❖ **USB Printing Support**

Using the USB connection on the computer running Windows 98 SE/Me requires to install this utility.



Viewing the Contents of the CD-ROM

Follow the steps to view the contents of the CD-ROM.

1 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

2 Click **[Browse This CD-ROM]**.

Explorer starts and displays the contents of the CD-ROM.





Printer Drivers for This Printer

Printing requires installation of a printer driver for your operating system. The following drivers are included on the CD-ROM that comes with this printer.

Operating system	Printer Language	PCL 5c	RPCS	PostScript 3
Windows 95 *1		√	√	√ *10
Windows 98 *2		√	√	√ *10
Windows Me *3		√	√	√ *10
Windows 2000 *4		√	√	√
Windows XP *5		√	√	√
Windows Server 2003 *6		√	√	√
Windows NT 4.0 *7		√	√	√ *9 *10
Mac OS *8				√ *10
Mac OS X				√ *11



- *1 Microsoft Windows 95 operating system
- *2 Microsoft Windows 98 operating system
- *3 Microsoft Windows Me operating system
- *4 Microsoft Windows 2000 professional
Microsoft Windows 2000 Server
Microsoft Windows 2000 Advanced Server
- *5 Microsoft Windows XP Professional
Microsoft Windows XP Home Edition
- *6 Microsoft Windows Server 2003 Standard Edition
Microsoft Windows Server 2003 Enterprise Edition
Microsoft Windows Server 2003 Web Edition
- *7 Microsoft Windows NT Server operating system version 4.0, Microsoft Windows NT Workstation operating system version 4.0 in a computer using x86 processors.
- *8 Required version is 8.6 or later. (Mac OS X Classic environment is supported.)
- *9 Requires Service Pack 6 or later.
- *10 The Adobe PostScript printer drivers and PostScript Printer Description (PPD) files are included on the CD-ROM labeled “Printer Drivers and Utilities”.
- *11 The PostScript Printer Description (PPD) files are included on the CD-ROM labeled “Printer Drivers and Utilities”.

❖ PCL 5c printer driver

This printer driver allows the computer to communicate with the printer via a printer language.

⇒ p.188 “Windows 95/98/Me - Accessing the Printer Properties”

⇒ p.191 “Windows 2000 - Accessing the Printer Properties”

⇒ p.195 “Windows XP, Windows Server 2003 - Accessing the Printer Properties”

⇒ p.199 “Windows NT 4.0 - Accessing the Printer Properties”





❖ **RPCS printer driver**

This printer driver allows the computer to communicate with the printer via a printer language. The preset type user interface is provided in addition to the conventional one.

⇒ p.203 “Windows 95/98/Me - Accessing the Printer Properties”

⇒ p.207 “Windows 2000 - Accessing the Printer Properties”

⇒ p.211 “Windows XP, Windows Server 2003 - Accessing the Printer Properties”

⇒ p.215 “Windows NT 4.0 - Accessing the Printer Properties”

❖ **Adobe PostScript Printer Drivers and PPD files**

The Adobe PostScript printer drivers and the PPD files are included on the CD-ROM that comes with this printer. Adobe PostScript printer driver allows the computer to communicate with the printer via a printer language. The PPD files allow the printer driver to enable the printer specific functions.

⇒ p.219 “Windows 95/98/Me - Accessing the Printer Properties”

⇒ p.222 “Windows 2000 - Accessing the Printer Properties”

⇒ p.226 “Windows XP, Windows Server 2003 - Accessing the Printer Properties”

⇒ p.230 “Windows NT 4.0 - Accessing the Printer Properties”

⇒ p.234 “Mac OS - Setting up for Printing”

❖ **PPD files**

The PPD files are included on the CD-ROM that comes with this printer. The PPD files allow the printer driver to enable the printer specific functions.

See p.234 “Mac OS - Setting up for Printing”.





SmartDeviceMonitor for Admin

SmartDeviceMonitor for Admin is software that uses the TCP/IP and IPX/SPX protocols to monitor the printers in a network. It can monitor multiple network printers with IP addresses. We recommend network administrators to use this software.

❖ File Path

SmartDeviceMonitor for Admin is stored in the following folder on the CD-ROM.

NETWORK\NETMON\ADMIN\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 IPX/SPX provided with Windows XP NetWare Client provided with Windows XP Novell Client for Windows XP
Microsoft Windows Server 2003	TCP/IP provided with Windows Server 2003 IPX/SPX provided with Windows Server 2003 NetWare Client provided with Windows Server 2003 Novell Client for Windows Server 2003



OS	Protocol Stack
Microsoft Windows NT 4.0	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

❖ What can it do?

SmartDeviceMonitor for Admin is equipped with the following functions.

- Checks the information on printing, paper exhaustion, and such, on the computer.
- Checks the results of print jobs executed from the computer.



Reference

For the operations of the system administrator, see “Using SmartDeviceMonitor for Admin”, *Administrator Reference*.

For more information about using SmartDeviceMonitor for Admin, see the SmartDeviceMonitor for Admin Help.





SmartDeviceMonitor for Client

SmartDeviceMonitor for Client is 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, NetBEUI, and IPP from Windows 95/98/Me/2000/XP, Windows Server 2003, and Windows NT 4.0.
- Uses the TCP/IP and IPX/SPX protocols to constantly monitor the status of devices in a network.

❖ File Path

SmartDeviceMonitor 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 NetBEUI provided with Windows 95/98/Me NetWare network client provided with Windows 95/98/Me Novell Client for Windows 95/98/Me
Microsoft Windows 2000	TCP/IP provided with Windows 2000 IPX/SPX provided with Windows 2000 NetBEUI 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 IPX/SPX provided with Windows XP NetWare Client provided with Windows XP Novell Client for Windows XP



OS	Protocol Stack
Microsoft Windows Server 2003	TCP/IP provided with Windows Server 2003 IPX/SPX provided with Windows Server 2003 NetWare Client provided with Windows Server 2003 Novell Client for Windows Server 2003
Microsoft Windows NT 4.0	TCP/IP provided with Windows NT IPX/SPX provided with Windows NT NetBEUI provided with Windows NT Client Service for NetWare provided with Windows NT Novell Client for Windows NT/2000

❖ What can it do?

SmartDeviceMonitor for Admin

- 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 Printing /Parallel Printing.
- Notification function
 - An error message warns when there is an error on the specified printer during transfer or printing of data.
 - A window opens to notify the completion of printing. You can also select to be notified of the print condition, such as displaying the notice only when Recovery Printing is executed.



- Monitoring function
 - Checks the equipment information on printing, paper exhaustion, and such, on the computer.
 - Simultaneously monitors multiple printers in use.
 - Checks the printer's network settings and detailed information of devices.
 - Enables you to check the log of print jobs using the user ID.

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 Sample Print or Locked Print, you cannot execute Recovery/Parallel Printing.

Reference

For more information about using SmartDeviceMonitor for Client, See the SmartDeviceMonitor for Client Help.



9. Setting up the Printer Driver and Canceling a Print Job 188

PCL 5c - Accessing the Printer Properties

Windows 95/98/Me - Accessing the Printer Properties

There are two methods you can use to open the Printer Properties dialog box.

Making default printer settings

To make the default printer settings, first open the Printer Properties dialog box from the **[Printers]** window.

 **Note**

- With some applications, the printer driver's settings are not used, and the application's own default settings are applied.

1 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click to select the icon of the printer you want to use.

3 On the **[File]** menu, click **[Properties]**.

4 Make the necessary settings, and then click **[OK]**.



If a message is displayed during installation of the printer driver

When there is a driver in the computer that is newer than the one currently being installed, a message dialog box appears.

In such a case, you cannot install with the Auto Run program. Use the driver that was used in installing the driver that is displayed in the message, and reinstall with **[Add Printer]**.

- ① Click **[Start]**, point to **[Settings]**, and then click **[Printers]**.
- ② Double-click the **[Add Printer]** icon.
- ③ Follow the wizard to install the driver.

If the printer driver disk is a CD-ROM, the sources of installation are as follows. If the installer starts up, click **[Cancel]** to quit it.

- PCL 5c

DRIVERS \ PCL5C \ WIN9X_ME \ (Language) \ DISK1





Making printer settings from an application

To make the printer settings for a specific application, open the Printer Properties dialog box from that application. The following example describes how to make settings for the WordPad application that comes with Windows 95/98/Me.

Note

- The actual procedure you should follow to open the Printer Properties dialog box may differ depending on the application. For more information, see the documentation that comes with the application you are using.
- With some applications, the printer driver's settings are not used, and the application's own default settings are applied.
- Any settings you make in the following procedure are valid for the current application only.

1 On the [File] menu, click [Print].

The [Print] dialog box appears.

2 Select the printer you want to use in the [Name] list box, and then click [Properties].

The Printer Properties dialog box appears.

3 Make the necessary settings, and then click [OK].

4 Click [OK] to start printing.





Windows 2000 - Accessing the Printer Properties

Making printer default settings - Printer Properties

Limitation

- To change the printer settings requires Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default. When you set up options, log on using an account that has Manage Printers permission.

1 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click to select the icon of the printer you want to use.

3 On the **[File]** menu, click **[Properties]**.

The **[Printer Properties]** appears.

4 Make the necessary settings, and then click **[OK]**.

Note

- Settings you make here are used as the default settings for all applications.
- Do not set **[Form to Tray Assignment]**.



 **If a message is displayed during installation of the printer driver**

When there is a driver in the computer that is newer than the one currently being installed, a message dialog box appears.

In such a case, you cannot install with the Auto Run program. Use the driver that was used in installing the driver that is displayed in the message, and reinstall with **[Add Printer]**.

- ① Click **[Start]**, point to **[Settings]**, and then click **[Printers]**.
- ② Double-click the **[Add Printer]** icon.
- ③ Follow the wizard to install the driver.

If the printer driver disk is a CD-ROM, the sources of installation are as follows. If the installer starts up, click **[Cancel]** to quit it.

- PCL 5c

DRIVERS\PCL5C\WIN2K_XP\ (Language) \DISK1



Making printer default settings - Printing Preferences Properties

Limitation

- To change the printer settings requires Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default. When you set up options, log on using an account that has Manage Printers permission.

1 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click to select the icon of the printer you want to use.

3 On the **[File]** menu, click **[Printing Preferences...]**.

The Printing Preferences Properties dialog box appears.

4 Make the necessary settings, and then click **[OK]**.

Note

- Settings you make here are used as the default settings for all applications.





Making printer settings from an application

To make the printer settings for a specific application, open the Printing Preferences Properties from that application. The following example describes how to make settings for the WordPad application that comes with Windows 2000.

 **Note**

- The actual procedures you should follow to open the Printing Preferences Properties may differ depending on the application. For more information, see the documentation that comes with the application you are using.
- Any settings you make in the following procedure are valid for the current application only.

1 On the **[File]** menu, click **[Print...]**.

The **[Print]** dialog box appears.

2 Select the printer you want to use in the **[Select Printer]** box.

3 Make the necessary settings, and then click **[Apply]** to start your printing.





Windows XP, Windows Server 2003 - Accessing the Printer Properties

Making printer default settings - Printer Properties

Limitation

- To change the printer settings requires Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default. When you set up options, log on using an account that has Manage Printers permission.

1 Access the **[Printers and Faxes]** window from **[Start]** on the taskbar.

The **[Printers and Faxes]** window appears.

2 Click to select the icon of the printer you want to use.

3 On the **[File]** menu, click **[Properties]**.

The **[Printer Properties]** appears.

4 Make the necessary settings, and then click **[OK]**.

Note

- Settings you make here are used as the default settings for all applications.
- Do not set **[Form to Tray Assignment]**.



Making printer default settings - Printing Preferences Properties

Limitation

- To change the printer settings requires Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default. When you set up options, log on using an account that has Manage Printers permission.

1 Access the **[Printers and Faxes]** window from **[Start]** on the taskbar.

The **[Printers and Faxes]** window appears.

2 Click to select the icon of the printer you want to use.

3 On the **[File]** menu, click **[Printing Preferences...]**.

The Printing Preferences Properties dialog box appears.

4 Make the necessary settings, and then click **[OK]**.

Note

- Settings you make here are used as the default settings for all applications.





Making printer settings from an application

To make the printer settings for a specific application, open the Printing Preferences Properties from that application. The following example describes how to make settings for the WordPad application that comes with Windows XP.

 **Note**

- The actual procedures you should follow to open the Printing Preferences Properties may differ depending on the application. For more information, see the documentation that comes with the application you are using.
- Any settings you make in the following procedure are valid for the current application only.

1 On the **[File]** menu, click **[Print...]**.

The **[Print]** dialog box appears.

2 Select the printer you want to use in the **[Select Printer]** box.

3 Make the necessary settings, and then click **[Apply]** to start your printing.





Windows NT 4.0 - Accessing the Printer Properties

Making default printer settings - Printer Properties

Limitation

- To change the printer settings requires Full Control permission. Members of Administrators, Server Operators, Print Operators, and Power Users groups have Full Control permission by default. When you set up options, log on using an account that has Full Control permission.

1 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click to select the icon of the printer you want to use.

3 On the **[File]** menu, click **[Properties]**.

The Printer Properties dialog box appears.

4 Make the necessary settings, and then click **[OK]**.

Note

- Settings you make here are used as the default settings for all applications.
- Do not set **[Form to Tray Assignment]**.



If a message is displayed during installation of the printer driver

When there is a driver in the computer that is newer than the one currently being installed, a message dialog box appears.

In such a case, you cannot install with the Auto Run program. Use the driver that was used in installing the driver that is displayed in the message, and reinstall with **[Add Printer]**.

- ① Click **[Start]**, point to **[Settings]**, and then click **[Printers]**.
- ② Double-click the **[Add Printer]** icon.
- ③ Follow the wizard to install the driver.

If the printer driver disk is a CD-ROM, the sources of installation are as follows. If the installer starts up, click **[Cancel]** to quit it.

- PCL 5c
`DRIVERS\PCL5C\NT4\ (Language) \DISK1`





Making default printer settings - Default Document Properties

Limitation

- To change the printer settings requires Full Control access permission. Members of the Administrators, Server Operators, Print Operators, and Power Users groups have Full Control permission by default. When you set up options, log on using an account that has Full Control permission.

1 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click to select the icon of the printer you want to use.

3 On the **[File]** menu, click **[Document Defaults]**.

The Default Document Properties dialog box appears.

4 Make the necessary settings, and then click **[OK]**.

Note

- Settings you make here are used as the default settings for all applications.





Making printer settings from an application

To make the printer settings for a specific application, open the Printer Properties dialog box from that application. The following example describes how to make settings for the WordPad application that comes with Windows NT 4.0.

Note

- The actual procedure you should follow to open the Printer Properties dialog box may differ depending on the application. For more information, see the documentation that comes with the application you are using.
- With some applications, the printer driver settings are not used, and the application's own default settings are applied.
- Any settings you make in the following procedure are valid for the current application only.

1 On the **[File]** menu, click **[Print]**.

The **[Print]** dialog box appears.

2 Select the printer you want to use in the **[Name]** list box, and then click **[Properties]**.

The Printer Properties dialog box appears.

3 Make the necessary settings, and then click **[OK]**.

4 Click **[OK]** to start printing.





RPCS - Accessing the Printer Properties

Windows 95/98/Me - Accessing the Printer Properties

There are two windows types you can use to open the Printer Properties dialog box.

“Multi-tab” is used as an example in this manual. See Help for information about changing the windows types.

❖ **Multi-tab**

This is the window type for users who often change print settings in order to make various kinds of prints.

❖ **Custom Setting**

This is the window type for users who rarely change print settings when making prints. The Custom Setting display may vary depending on the installed options.





Making default printer settings

Making the default printer settings, first open the Printer Properties dialog box from the **[Printers]** window.

 **Note**

- With some applications, the printer driver settings are not used, and the application's own default settings are applied.

1 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click to select the icon of the printer you want to use.

3 On the **[File]** menu, click **[Properties]**.

 **Note**

- When you open the Printer Properties dialog box for the first time after installing the RPCS printer driver, the confirmation window appears. After that, the initial display of the Printer Properties dialog box appears.

4 Make the necessary settings, and then click **[OK]**.





If a message is displayed during installation of the printer driver

When there is a driver in the computer that is newer than the one currently being installed, a message dialog box appears.

In such a case, you cannot install with the Auto Run program. Use the driver that was used in installing the driver that is displayed in the message, and reinstall with **[Add Printer]**.

- ① Click **[Start]**, point to **[Settings]**, and then click **[Printers]**.
- ② Double-click the **[Add Printer]** icon.
- ③ Follow the wizard to install the driver.

If the printer driver disk is a CD-ROM, the sources of installation are as follows. If the installer starts up, click **[Cancel]** to quit it.

- RPCS

`DRIVERS\RPCS\WIN9X_ME\ (Language) \DISK1`



Making printer settings from an application

To make the printer settings for a specific application, open the Printer Properties dialog box from that application. The following example describes how to make settings for the WordPad application that comes with Windows 95/98/Me.

 **Note**

- The actual procedure you should follow to open the Printer Properties dialog box may differ depending on the application. For more information, see the documentation that comes with the application you are using.
- With some applications, the printer driver settings are not used, and the application's own default settings are applied.
- Any settings you make in the following procedure are valid for the current application only.

1 On the **[File]** menu, click **[Print]**.

The **[Print]** dialog box appears.

2 Select the printer you want to use in the **[Name]** list box, and then click **[Properties]**.

The Printer Properties dialog box appears.

3 Make the necessary settings, and then click **[OK]**.

4 Click **[OK]** to start printing.





Windows 2000 - Accessing the Printer Properties

Making printer default settings - Printer Properties

Limitation

- To change the printer settings requires Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default. When you set up options, log on using an account that has Manage Printers permission.

1 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click to select the icon of the printer you want to use.

3 On the **[File]** menu, click **[Properties]**.

The Printer Properties dialog box appears.

Note

- When you open the Printer Properties dialog box for the first time after installing the RPCS printer driver, the confirmation window appears. After that, the initial display of the Printer Properties dialog box appears.

4 Make the necessary settings, and then click **[OK]**.

Note

- Settings you make here are used as the default settings for all applications.
- Do not set **[Form to Tray Assignment]**.





Making printer default settings - Printing Preferences Properties

Limitation

- To change the printer settings requires Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default. When you set up options, log on using an account that has Manage Printers permission.

1 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click to select the icon of the printer you want to use.

3 On the **[File]** menu, click **[Printing Preferences...]**.

The Printing Preferences Properties dialog box appears.

4 Make the necessary settings, and then click **[OK]**.

Note

- Settings you make here are used as the default settings for all applications.





Making printer settings from an application

To make the printer settings for a specific application, open the Printing Preferences Properties from that application. The following example describes how to make settings for the WordPad application that comes with Windows 2000.

 **Note**

- The actual procedures you should follow to open the Printing Preferences Properties may differ depending on the application. For more information, see the documentation that comes with the application you are using.
- Any settings you make in the following procedure are valid for the current application only.

1 On the **[File]** menu, click **[Print...]**.

The **[Print]** dialog box appears.

2 Select the printer you want to use in the **[Select Printer]** box.

3 Make the necessary settings, and then click **[Apply]** to start your printing.





Windows XP, Windows Server 2003 - Accessing the Printer Properties

Making printer default settings - Printer Properties

Limitation

- To change the printer settings requires Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default. When you set up options, log on using an account that has Manage Printers permission.

1 Access the **[Printers and Faxes]** window from **[Start]** on the taskbar.

The **[Printers and Faxes]** window appears.

2 Click to select the icon of the printer you want to use.

3 On the **[File]** menu, click **[Properties]**.

The Printer Properties dialog box appears.

Note

- When you open the Printer Properties dialog box for the first time after installing the RPCS printer driver, the confirmation window appears. After that, the initial display of the Printer Properties dialog box appears.

4 Make the necessary settings, and then click **[OK]**.

Note

- Settings you make here are used as the default settings for all applications.
- Do not set **[Form to Tray Assignment]**.



 **If a message is displayed during installation of the printer driver**

When there is a driver in the computer that is newer than the one currently being installed, a message dialog box appears.

In such a case, you cannot install with the Auto Run program. Use the driver that was used in installing the driver that is displayed in the message, and reinstall with **[Add Printer]**.

- ① Access the **[Printers and Faxes]** window from **[Start]** on the taskbar.
- ② Double-click the **[Add Printer]** icon.
- ③ Follow the wizard to install the driver.

If the printer driver disk is a CD-ROM, the sources of installation are as follows. If the installer starts up, click **[Cancel]** to quit it.

- RPCS

DRIVERS\RPCS\WIN2K_XP\ (Language) \DISK1



Making printer default settings - Printing Preferences Properties

Limitation

- To change the printer settings requires Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default. When you set up options, log on using an account that has Manage Printers permission.

1 Access the **[Printers and Faxes]** window from **[Start]** on the taskbar.

The **[Printers and Faxes]** window appears.

2 Click to select the icon of the printer you want to use.

3 On the **[File]** menu, click **[Printing Preferences...]**.

The Printing Preferences Properties dialog box appears.

4 Make the necessary settings, and then click **[OK]**.

Note

- Settings you make here are used as the default settings for all applications.





Making printer settings from an application

To make the printer settings for a specific application, open the Printing Preferences Properties from that application. The following example describes how to make settings for the WordPad application that comes with Windows XP.

 **Note**

- The actual procedures you should follow to open the Printing Preferences Properties may differ depending on the application. For more information, see the documentation that comes with the application you are using.
- Any settings you make in the following procedure are valid for the current application only.

1 On the **[File]** menu, click **[Print...]**.

The **[Print]** dialog box appears.

2 Select the printer you want to use in the **[Select Printer]** box.

3 Make the necessary settings, and then click **[Apply]** to start your printing.





Windows NT 4.0 - Accessing the Printer Properties

Making default printer settings - Printer Properties

Limitation

- To change the printer settings requires Full Control permission. Members of Administrators, Server Operators, Print Operators, and Power Users groups have Full Control permission by default. When you set up options, log on using an account that has Full Control permission.

1 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click to select the icon of the printer you want to use.

3 On the **[File]** menu, click **[Properties]**.


The Printer Properties dialog box appears.

Note

- When you open the Printer Properties dialog box for the first time after installing the RPCS printer driver, the confirmation window appears. After that, the initial display of the Printer Properties dialog box appears.

4 Make the necessary settings, and then click **[OK]**.

Note

- Settings you make here are used as the default settings for all applications.
 - Do not set **[Form to Tray Assignment]**.
- 

 **If a message is displayed during installation of the printer driver**

When there is a driver in the computer that is newer than the one currently being installed, a message dialog box appears.

In such a case, you cannot install with the Auto Run program. Use the driver that was used in installing the driver that is displayed in the message, and reinstall with **[Add Printer]**.

- ① Click **[Start]**, point to **[Settings]**, and then click **[Printers]**.
- ② Double-click the **[Add Printer]** icon.
- ③ Follow the wizard to install the driver.

If the printer driver disk is a CD-ROM, the sources of installation are as follows. If the installer starts up, click **[Cancel]** to quit it.

- RPCS

DRIVERS\RPCS\NT4\ (Language) \DISK1



Making default printer settings - Default Document Properties

Limitation

- To change the printer settings requires Full Control access permission. Members of the Administrators, Server Operators, Print Operators, and Power Users groups have Full Control permission by default. When you set up options, log on using an account that has Full Control permission.

1 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click to select the icon of the printer you want to use.

3 On the **[File]** menu, click **[Document Defaults...]**.

The Default Document Properties dialog box appears.

4 Make the necessary settings, and then click **[OK]**.

Note

- Settings you make here are used as the default settings for all applications.





Making printer settings from an application

To make the printer settings for a specific application, open the Printer Properties dialog box from that application. The following example describes how to make settings for the WordPad application that comes with Windows NT 4.0.

Note

- The actual procedure you should follow to open the Printer Properties dialog box may differ depending on the application. For more information, see the documentation that comes with the application you are using.
- With some applications, the printer driver settings are not used, and the application's own default settings are applied.
- Any settings you make in the following procedure are valid for the current application only.

1 On the **[File]** menu, click **[Print]**.

The **[Print]** dialog box appears.

2 Select the printer you want to use in the **[Name]** list box, and then click **[Properties]**.

The Printer Properties dialog box appears.

3 Make the necessary settings, and then click **[Apply]**.

4 Click **[OK]** to start printing.





PostScript 3 - Setting up for Printing

Windows 95/98/Me - Accessing the Printer Properties

There are two methods you can use to open the Printer Properties dialog box.

Making default printer settings

To make the printer default settings, first open the Printer Properties dialog box from the **[Printers]** window.

 **Note**

- With some applications, the printer driver settings are not used, and the application's own default settings are applied.

1 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click to select the icon of the printer you want to use.

3 On the **[File]** menu, click **[Properties]**.

The Printer Properties dialog box appears.

4 Make the necessary settings, and then click **[OK]**.

5 Click **[OK]**.



If a message is displayed during installation of the printer driver

When there is a driver in the computer that is newer than the one currently being installed, a message dialog box appears.

In such a case, you cannot install with the Auto Run program. Use the driver that was used in installing the driver that is displayed in the message, and reinstall with **[Add Printer]**.

- ① Click **[Start]**, point to **[Settings]**, and then click **[Printers]**.
- ② Double-click the **[Add Printer]** icon.
- ③ Follow the wizard to install the driver.

If the printer driver disk is a CD-ROM, the sources of installation are as follows. If the installer starts up, click **[Cancel]** to quit it.

- PostScript 3

DRIVERS\PS\WIN9X_ME\ (Language) \DISK1



Making printer settings from an application

To make the printer settings for a specific application, open the Printer Properties dialog box from that application. The following example describes how to make settings for the WordPad application that comes with Windows 95/98/Me.

Note

- The actual procedure you should follow to open the Printer Properties dialog box may differ depending on the application. For more information, see the documentation that comes with the application you are using.
- With some applications, the printer driver settings are not used, and the application's own default settings are applied.
- Any settings you make in the following procedure are valid for the current application only.

1 On the **[File]** menu, click **[Print]**.

The **[Print]** dialog box appears.

2 Select the printer you want to use in the **[Name]** list box, and then click **[Properties]**.

The Printer Properties dialog box appears.

3 Make the necessary settings, and then click **[OK]**.

4 Click **[OK]** to start printing.





Windows 2000 - Accessing the Printer Properties

Making printer default settings - Printer Properties

Limitation

- To change the printer settings requires Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default. When you set up options, log on using an account that has Manage Printers permission.

1 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click to select the icon of the printer you want to use.

3 On the **[File]** menu, click **[Properties]**.

The Printer Properties dialog box appears.

4 Make the necessary settings, and then click **[OK]**.

Note

- Settings you make here are used as the default settings for all applications.
- Do not set **[Form to Tray Assignment]**.



If a message is displayed during installation of the printer driver

When there is a driver in the computer that is newer than the one currently being installed, a message dialog box appears.

In such a case, you cannot install with the Auto Run program. Use the driver that was used in installing the driver that is displayed in the message, and reinstall with **[Add Printer]**.

- ① Click **[Start]**, point to **[Settings]**, and then click **[Printers]**.
- ② Double-click the **[Add Printer]** icon.
- ③ Follow the wizard to install the driver.

If the printer driver disk is a CD-ROM, the sources of installation are as follows. If the installer starts up, click **[Cancel]** to quit it.

- PostScript 3

DRIVERS\PS\WIN2K_XP(Language)\DISK1



Making printer default settings - Printing Preferences Properties

Limitation

- To change the printer settings requires Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default. When you set up options, log on using an account that has Manage Printers permission.

1 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click to select the icon of the printer you want to use.

3 On the **[File]** menu, click **[Printing Preferences...]**.

The Printing Preferences Properties dialog box appears.

4 Make the necessary settings, and then click **[OK]**.

Note

- Settings you make here are used as the default settings for all applications.





Making printer settings from an application

To make the printer settings for a specific application, open the Printing Preferences Properties from that application. The following example describes how to make settings for the WordPad application that comes with Windows 2000.

 **Note**

- The actual procedures you should follow to open the Printing Preferences Properties may differ depending on the application. For more information, see the documentation that comes with the application you are using.
- Any settings you make in the following procedure are valid for the current application only.

1 On the [File] menu, click [Print...].

The [Print] dialog box appears.

2 Select the printer you want to use in the [Select Printer] box.

3 Make the necessary settings, and then click [Print] to start your printing.





Windows XP, Windows Server 2003 - Accessing the Printer Properties

Making printer default settings - Printer Properties

Limitation

- To change the printer settings requires Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default. When you set up options, log on using an account that has Manage Printers permission.

1 Access the **[Printers and Faxes]** window from **[Start]** on the taskbar.

The **[Printers and Faxes]** window appears.

2 Click to select the icon of the printer you want to use.

3 On the **[File]** menu, click **[Properties]**.

The Printer Properties dialog box appears.

4 Make the necessary settings, and then click **[OK]**.

Note

- Settings you make here are used as the default settings for all applications.
- Do not set **[Form to Tray Assignment]**.



If a message is displayed during installation of the printer driver

When there is a driver in the computer that is newer than the one currently being installed, a message dialog box appears.

In such a case, you cannot install with the Auto Run program. Use the driver that was used in installing the driver that is displayed in the message, and reinstall with **[Add Printer]**.

- ① Access the **[Printers and Faxes]** window from **[Start]** on the taskbar.
- ② Double-click the **[Add Printer]** icon.
- ③ Follow the wizard to install the driver.

If the printer driver disk is a CD-ROM, the sources of installation are as follows. If the installer starts up, click **[Cancel]** to quit it.

- PostScript 3

DRIVERS\PS\WIN2K_XP\ (Language) \DISK1





Making printer default settings - Printing Preferences Properties

Limitation

- To change the printer settings requires Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default. When you set up options, log on using an account that has Manage Printers permission.

1 Access the **[Printers and Faxes]** window from **[Start]** on the taskbar.

The **[Printers and Faxes]** window appears.

2 Click to select the icon of the printer you want to use.

3 On the **[File]** menu, click **[Printing Preferences...]**.

The Printing Preferences Properties dialog box appears.

4 Make the necessary settings, and then click **[OK]**.

Note

- Settings you make here are used as the default settings for all applications.





Making printer settings from an application

To make the printer settings for a specific application, open the Printing Preferences Properties from that application. The following example describes how to make settings for the WordPad application that comes with Windows XP.

 **Note**

- The actual procedures you should follow to open the Printing Preferences Properties may differ depending on the application. For more information, see the documentation that comes with the application you are using.
- Any settings you make in the following procedure are valid for the current application only.

1 On the [File] menu, click [Print...].

The [Print] dialog box appears.

2 Select the printer you want to use in the [Select Printer] box.

3 Make the necessary settings, and then click [Print] to start your printing.





Windows NT 4.0 - Accessing the Printer Properties

Making default printer settings - Printer Properties

Limitation

- To change the printer settings requires Full Control permission. Members of Administrators, Server Operators, Print Operators, and Power Users groups have Full Control permission by default. When you set up options, log on using an account that has Full Control permission.

1 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears .

2 Click to select the icon of the printer you want to use.

3 On the **[File]** menu, click **[Properties]**.

The Printer Properties dialog box appears.

4 Make the necessary settings, and then click **[OK]**.

Note

- Settings you make here are used as the default settings for all applications.
- Do not set **[Form to Tray Assignment]**.

 **If a message is displayed during installation of the printer driver**

When there is a driver in the computer that is newer than the one currently being installed, a message dialog box appears.

In such a case, you cannot install with the Auto Run program. Use the driver that was used in installing the driver that is displayed in the message, and reinstall with **[Add Printer]**.

- ① Click **[Start]**, point to **[Settings]**, and then click **[Printers]**.
- ② Double-click the **[Add Printer]** icon.
- ③ Follow the wizard to install the driver.

If the printer driver disk is a CD-ROM, the sources of installation are as follows. If the installer starts up, click **[Cancel]** to quit it.

- PostScript 3

DRIVERS\PS\NT4\ (Language) \DISK1



Making default printer settings - Default Document Properties

Limitation

- To change the printer settings requires Full Control access permission. Members of the Administrators, Server Operators, Print Operators, and Power Users groups have Full Control permission by default. When you set up options, log on using an account that has Full Control permission.

1 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

2 Click to select the icon of the printer you want to use.

3 On the **[File]** menu, click **[Document Defaults]**.

The Default Document Properties dialog box appears.

4 Make the necessary settings, and then click **[OK]**.

Note

- Settings you make here are used as the default settings for all applications.





Making printer settings from an application

To make the printer settings for a specific application, open the Printer Properties dialog box from that application. The following example describes how to make settings for the WordPad application that comes with Windows NT 4.0.

 **Note**

- The actual procedure you should follow to open the Printer Properties dialog box may differ depending on the application. For more information, see the documentation that comes with the application you are using.
- With some applications, the printer driver settings are not used, and the application's own default settings are applied.
- Any settings you make in the following procedure are valid for the current application only.

1 On the **[File]** menu, click **[Print]**.

The **[Print]** dialog box appears.

2 Select the printer you want to use in the **[Name]** list box, and then click **[Properties]**.

The Printer Properties dialog box appears.

3 Make the necessary settings, and then click **[OK]**.

4 Click **[OK]** to start printing.





Mac OS - Setting up for Printing

Making paper settings from an application

- 1** Open the file you want to print.
- 2** On the **[File]** menu, click **[Page Setup]**.
- 3** Confirm that the printer you want to use is shown in **[Format for:]**, and then use **[Paper]** to select the paper size you want to use.

Under Mac OS X, this is called **[Paper Size]**.

 **Note**

- If the printer is now shown in the **[Format for:]** box, use the pop-up menu to display a list of available printers.

 **Reference**

The actual appearance of the **[Page Setup]** dialog box depends on the application you are using. See the documentation that comes with the Mac OS for more information.

- 4** After configuring the settings, click **[OK]**.





Setting up for printing from an application

- 1** Open the file you want to print.
- 2** On the [File] menu, click [Print].
- 3** Confirm that the printer is selected in the [Printer] box, and then make the printer settings.
- 4** After configuring the settings, click [Print].



Canceling a Print Job

You can cancel printing from either this machine or a client computer. Since canceling procedures differ depending on print job status, check the job status and perform the cancellation in the following procedure:

Windows 95/98/Me/2000/XP, Windows Server 2003, Windows NT 4.0 - Canceling a Print Job

1 Check if the print job you want to cancel is currently printing.

The print job may not be currently printing but if the data-in indicator is lit or flashing, the printer is receiving data.

2 Cancel printing.



If the print job you want to cancel is currently printing out

① Press **[Job Reset]** key on the control panel.

“Job Reset?” appears on the panel display.

② Select between canceling the job currently printing and canceling all jobs (including the job currently printing) using **[▲]** or **[▼]** key.



Note

- Press the **[▲]** or **[▼]** key once, and not longer than necessary.
- When canceling only the current job

```
Job Reset?  
Current Job
```

- When canceling all jobs including the current job

```
Job Reset?  
All Jobs
```

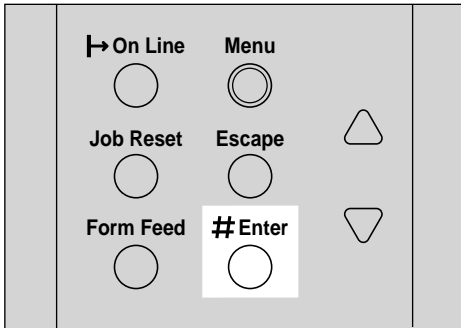


Note

- It is also possible to annul the cancellation. Resume printing is resumed by selecting “Resume Print”, and then pressing **[# Enter]** key.



3 Press **[# Enter]** key.



A confirmation message appears.

Note

- Printing resumes if you press **[Escape]** key at this point.

4 Press **[# Enter]** key.

The job is canceled. When the cancellation procedure is complete, the message appears.

Important

- When the printer is being shared by multiple computers, be careful not to accidentally cancel someone else's print job.

Note

- A print job that contains a large volume of data may take considerable time to stop.
- When the print job starts printing again, set **[I/O Timeout]** on the “Host Interface” menu to a longer time.

If the print job you want to cancel is not printing out

❶ Double-click the printer icon on the Windows taskbar.

A window appears, showing all the print jobs that are currently queuing to be printed. Check the current status of the job you want to cancel.

Note

- You can also open the print job queue window by double-clicking the printer icon in the **[Printer]** window.

❷ Select the name of the job you want to cancel.

❸ On the **[Document]** menu, click **[Cancel Printing]**.

Note

- When this printer is used as a network printer, other user's print jobs cannot be canceled from a client computer.
- Clicking **[Cancel a printing document]** from the **[printer]** menu deletes all currently queued print jobs . However, when this printer is used as a network printer, print jobs from other user's computer cannot be canceled from a client computer.
- When the print job selected in step ❷ starts printing, it takes some time before print job it disappears from the printer window.

Mac OS - Canceling a Print Job

1 Check if the print job you want to cancel is currently printing.

The print job may not be currently printing but if the data-in indicator is lit or flashing, the printer is receiving data.

2 Cancel printing.

If the print job you want to cancel is currently printing out

1 Press **[Job Reset]** key on the control panel.

“Job Reset?” appears on the panel display.

2 Select between canceling the job currently printing and canceling all jobs (including the job currently printing) using **[▲]** or **[▼]** key.

- When canceling only the current job



```
Job Reset?  
Current Job
```

- When canceling all jobs including the current job



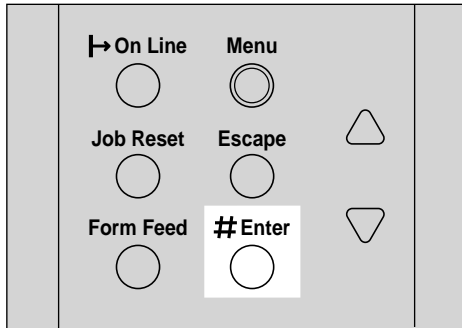
```
Job Reset?  
All Jobs
```

Note

- It is also possible to annul the cancellation. Resume printing is resumed by selecting “Resume Print”, and then pressing **[# Enter]** key.



3 Press **[# Enter]** key.



A confirmation message appears.

Note

- Printing resumes if you press **[Escape]** key at this point.

4 Press **[# Enter]** key.

The job is canceled. When the cancellation procedure is complete, the message appears.

Important

- When the printer is being shared by multiple computers, be careful not to accidentally cancel someone else's print job.

Note

- A print job that contains a large volume of data may take considerable time to stop.
- When the print job starts printing again, set **[I/O Timeout]** on the “Host Interface” menu to a longer time.



If the print job you want to cancel is not printing out

1 Double-click the printer's icon on the desktop.

A window appears, showing all the print jobs that are currently queuing to be printed. Check the current status of the job you want to cancel.



Note

- Under Mac OS X, start Print Center.

2 Select the name of the job you want to cancel.

3 Click the pause icon, and then click the trash icon.



Note

- When this printer is used as a network printer, other user's print jobs cannot be canceled from a client computer.



10. Sample Print/Locked Print

You can perform Sample Print and Locked Print using the optional hard disk drive.

Limitation

- To use this function, the optional hard disk drive must be installed on the printer.
- The actual number of pages the printer can save depends on the contents of the print images. For example, the printer can save up to 30 jobs or 1,000 pages for Sample Print and Locked Print. It depends on the data volume.

Reference

For more information about settings for printer driver, see the printer driver's Help.

Sample Print

Use this function to print only the first set of a multiple-set print jobs. The remaining sets are saved on the optional hard disk drive in the printer. The saved job can be printed or cancelled from the printer's control panel.

Also, files specified for Sample Print can be printed or deleted using the Web browser. For details, see Web Image Monitor Help.

Important

- If you turn off the power switch, the job that was saved on the hard disk drive will be deleted.
- Sample Print files will not appear on the panel display if they have already been executed or deleted using the Web browser before you select "Sample Print" from the control panel
- Sample Print files that are executed or deleted from the Web browser only after you have selected "Sample Print" from the control panel will be shown on the panel display. However, an error message will appear if you try to execute or delete them.

 **Note**

- You can identify the file you want to print by the User ID and the time when the job was stored.
- If the first set of the Sample Print file is not as you expected and you do not want to print the remaining sets, delete the Sample Print file using the control panel or Web browser.
- If you print the remaining sets of the Sample Print file, the job in the printer is deleted automatically.
- The following procedures describe how to use this function with the PCL 5c or RPCS printer driver under Windows. If you want to use this function with the PostScript 3 printer driver or on a Mac OS, see the *PostScript 3 Supplement*.

1 From an application, select the menu command to print.

The [Print] dialog box appears.

2 Select the printer you want to use in the [Name] list box, and then click [Properties].

The Printer Properties dialog box appears.

3 From the [Job type:] box, select [Sample Print].**4** In the [User ID:] box, type a User ID of up to eight alphanumeric characters. **Note**

- This is used to identify the user associated with a job.
- The User ID can consist of up to eight alphanumeric (a-z, A-Z, 0-9) characters.

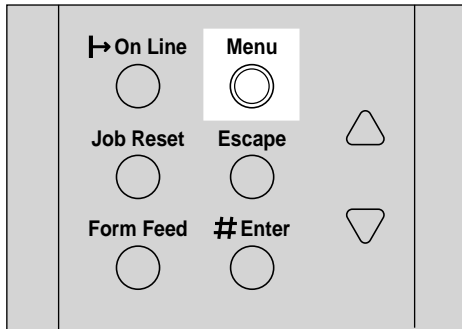
5 Click [OK].**6** After making the necessary settings, click [OK].**7** Check the print job, and then select from the control panel whether to print the remaining sets or delete them. **Reference**

- ⇒ p.245 “Printing the Remaining Sets”
- ⇒ p.247 “Deleting a Sample Print File”



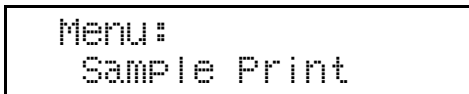
Printing the Remaining Sets

- 1** Press **[Menu]** key.



“Menu” appears on the panel display.

- 2** Press **[▲]** or **[▼]** key to display “Sample Print”, and then press **[# Enter]** key.



The User ID and the time when the job was stored are displayed.

- 3** Press **[▲]** or **[▼]** key to display the file you want to print, and then press **[# Enter]** key.



- 4** Confirm that “Print File” is displayed, and then press **[# Enter]** key.

```
Select Action:
Print File
```

The remaining sets are displayed.

 **Note**

- To cancel printing, press **[Escape]** key.

- 5** Press **[# Enter]** key. To change the number of sets you want to print, press **[▲]** or **[▼]** key and select the number of sets, and then press **[# Enter]** key.

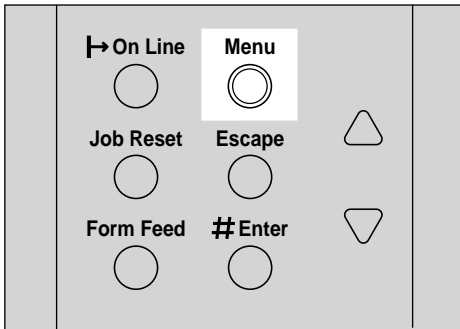
```
Qty: 6(1-999)
Press # to Print
```

The job is printed, and the job that was saved on the hard disk drive is deleted.



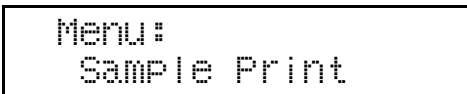
Deleting a Sample Print File

- 1** Press **[Menu]** key.

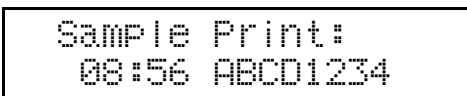


“Menu” appears on the panel display.

- 2** Press **[▲]** or **[▼]** key to display the “Sample Print” menu, and then press **[# Enter]** key.



- 3** Press **[▲]** or **[▼]** key to display the file you want to delete, and then press **[# Enter]** key.



- 4** Press **[▲]** or **[▼]** key to display “Delete File”, and then press **[# Enter]** key.

```
Select Action:
Delete File
```

 **Note**

- If you want to cancel the deletion of a Sample Print file, press **[Escape]** key.

- 5** Press **[# Enter]** key to delete the file.

The following message appears on the panel display.

```
08:56 ABCD1234
Press# to Delete
```

- 6** Press **[On Line]** key.

“Ready” appears on the panel display.

```
Ready
```



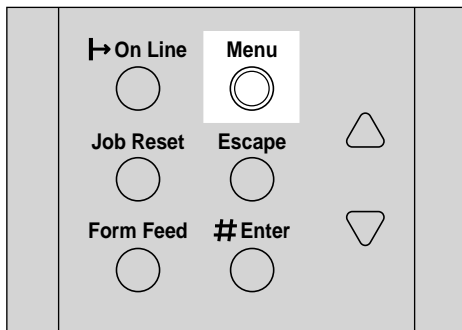
Checking the Error Log

When a print job is not saved on the Hard Disk Drive, it remains in the error log and can be checked using the control panel.

! Limitation

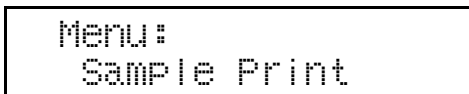
- The error log displays up to 20 of the newest jobs. If you turn off the power switch, the errors will be deleted.

1 Press **[Menu]** key.



“Menu” appears on the panel display.

2 Press **[▲]** or **[▼]** key to display “Sample Print”, and then press **[# Enter]** key.



The User ID and the time when the job was stored are displayed.

- 3** Press **[▲]** or **[▼]** key to display “Error File(s)”, and then press **[# Enter]** key.

```
Sample Print:  
Error File(s)
```

- 4** Press **[▲]** or **[▼]** key to check the log.

```
Error File(s):  
06:52 AB5D1234
```

 **Note**

- To print a document with an error, either print or delete the job saved on the hard disk drive, and then printing command the host computer to print again.

- 5** When you finish checking the error log, press **[Escape]** key.

The display returns to the Sample Print job selection menu.

- 6** Press **[On Line]** key.

“Ready” appears on the panel display.

```
Ready
```




Locked Print

Use this function to maintain privacy when printing confidential documents. Documents will not be printed out automatically, unless a password is entered, using the control panel after sending the print job.

Also, files specified for Locked Printt can be printed or deleted using the Web browser. For details, see Web Image Monitor Help.

Important

- If you turn off the power switch, the job that was saved on the hard disk drive will be deleted.
- Locked Print files will not appear on the panel display if they have already been executed or deleted using the Web browser before you select “Locked Print” from the control panel
- Locked Print files that are executed or deleted from the Web browser only after you have selected “Locked Print” from the control panel will be shown on the panel display. However, an error message will appear if you try to execute or delete them.

Note

- You can identify the file you want to print by the User ID and the time when the job was stored.
- After the Locked Print file is printed, the job in the printer is deleted automatically.
- The following procedures describe how to use this function with the PCL 5c or RPCS printer driver under Windows. If you want to use this function with the PostScript 3 printer driver or on a Mac OS, see the *PostScript 3 Supplement*.

1 From an application, select the menu command to print.

The **[Print]** dialog box appears.

2 Open the Printer Properties.

3 From the **[Job type:]** box, select **[Locked Print]**.

4 In the [User ID:] box, type a User ID of up to eight alphanumeric characters.

 **Note**

- This is used to identify the user associated with a job.
- The User ID can consist of up to eight alphanumeric (a-z, A-Z, 0-9) characters.

5 In the [Password:] box, type a password of four digits.

 **Note**

- The password must be four digits (0-9).

6 Command to print.

The job is saved on the hard disk drive.

7 Enter the password using the control panel, and then specify whether to print or delete.

 **Reference**

- ⇒ p.253 “Entering the Password”
- ⇒ p.255 “Deleting the Locked Print File”

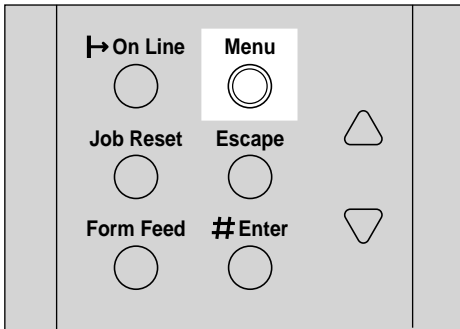
 **Limitation**

- Print jobs are not saved on the hard disk drive in the following cases. You can check the error log for jobs that were not saved.
 - When there are 30 Sample Print and Locked Print jobs saved on the hard disk drive, and a 31st job is transmitted.
 - The total number of pages saved on the hard disk drive exceeds 1,000 pages.



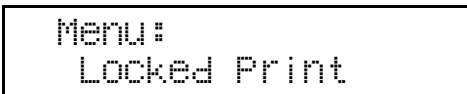
Entering the Password

1 Press **[Menu]** key.



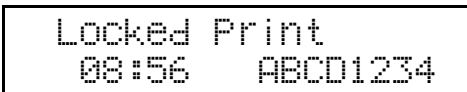
“Menu” appears on the panel display.

2 Press **[▲]** or **[▼]** key to display “Locked Print”, and then press **[# Enter]** key.



The User ID and the time when the job was stored are displayed.

3 Press **[▲]** or **[▼]** key to display a file you want to print, and then press **[# Enter]** key.



4 Enter the password.

- 1 Press **[▲]** or **[▼]** key to enter the left most digit of the password, and then press **[# Enter]** key.

```
Password:
[0----]
```

- 2 The next digit appears.

```
Password:
[*0--]
```

- 3 Enter the remaining digit of the password, and then press **[# Enter]** key.

5 Confirm that “Print File” is displayed, and then press **[# Enter]** key.

```
Select Action:
Print File
```

 **Note**

- If you want to cancel printing, press **[Escape]** key.

6 Press **[# Enter]** key.

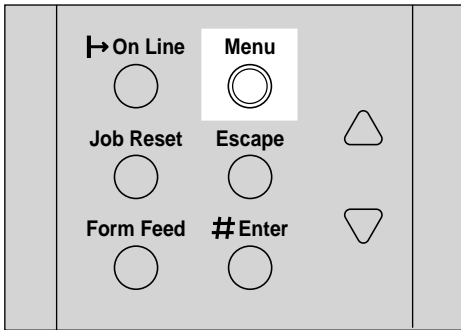
```
08:56 ABCD1234
Press # to Print
```

The job is printed, and the job that was saved on the hard disk drive is deleted.



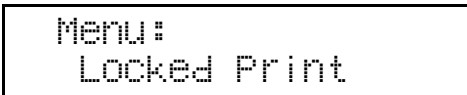
Deleting the Locked Print File

1 Press **[Menu]** key.

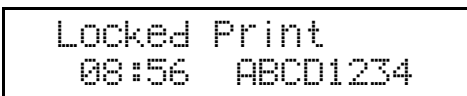


“Menu” appears on the panel display.

2 Press **[▲]** or **[▼]** key to display the “Locked Print” menu, and then press **[# Enter]** key.



3 Press **[▲]** or **[▼]** key to display a file you want to delete.



4 Enter the password of the Locked Print file.

- 1 Press **[▲]** or **[▼]** key to enter the left most digit of the password, and then press **[# Enter]** key.

```
Password:
[0----]
```

- 2 The next digit appears.

```
Password:
[*0--]
```

- 3 Repeat steps **1** and **2** to enter the remaining password digits, and then press **[# Enter]** key.

5 Press **[▲]** or **[▼]** key to display “Delete File”, and then press **[# Enter]** key.

```
Select Action:
Delete File
```

Note

- If you want change the Locked Print file, press **[Escape]** key.

6 Press **[# Enter]** key.

“Deleted” appears on the panel display, and then the printer returns to the previous menu.



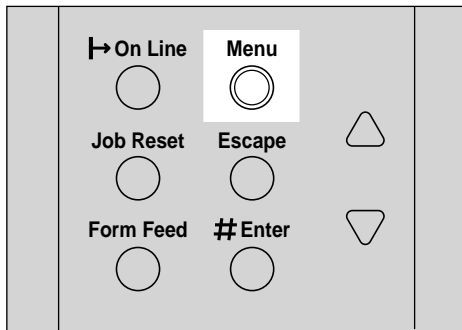
Checking the Error Log

When a print job is not saved on the Hard Disk Drive, it remains in the error log and can be checked using the control panel.

! Limitation

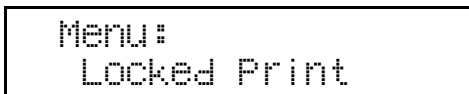
- The error log displays up to 20 of the newest jobs. If you turn off the printer power, the errors will be deleted.

1 Press **[Menu]** key.



“Menu” appears on the panel display.

2 Press **[▲]** or **[▼]** key to display “Locked Print”, and then press **[# Enter]** key.



The User ID and the time when the job was stored are displayed.



- 3** Press **[▲]** or **[▼]** key to display “Error File(s)”, and then press **[# Enter]** key.

```
Locked Print:  
Error File(s)
```

- 4** Press **[▲]** or **[▼]** key to check the log.

```
Error File(s):  
06:52 AB5D1234
```

 **Note**

- To print a document with an error, either print or delete the job saved on the hard disk drive, and then printing command the host computer to print again.

- 5** When you finish checking the error log, press **[Escape]** key.

The display returns to the Locked Print job selection menu.

- 6** Press **[On Line]** key.

“Ready” appears on the panel display.

```
Ready
```




11. Troubleshooting

Checking the Printer Status

SmartDeviceMonitor for Client

- 1** Start up SmartDeviceMonitor for Client.
- 2** Right-click the SmartDeviceMonitor for Client icon from the task bar, and then point and left-click [Options] from the displayed menu.
The [SmartDeviceMonitor for Client-Options] window is displayed.
- 3** Select the printer you want to use, check [To be Monitored], and then click [OK].
- 4** Right-click the SmartDeviceMonitor for Client icon from the task bar, and then point and left-click the printer you want to monitor.
The [Status] window of the target printer to be monitored is opened.
- 5** Click the [Configuration] tab to find the amount of paper in the Paper Tray, etc..

 **Note**

- For more information about how to use each item, see the SmartDeviceMonitor for Client Help.



Web Browser

- 1** Start up the web browser.
- 2** Type “http://(the IP address of the printer you want the status to be displayed)” for the address.
The status of the selected printer is displayed on the web browser.
- 3** Click [Status] to find the amount of paper in the Paper Tray, etc..

 **Note**

- For more information about how to use each item, see the Web Image Monitor Help.

12. Appendix

Printing a PDF File Directly

You can send PDF files directly to this machine to print, without opening its application.

Limitation

- This is possible for genuine Adobe PDF files only.
- Version 1.3, 1.4, and 1.5 PDF files are compatible.
- Transparency and JBIG2 (functions of PDF version 1.4) are not compatible.
- PDF version 1.5 only functions are not compatible.

Printing Method

Using DeskTopBinder V2 (Lite)

PDF files registered with DeskTopBinder V2 (Lite) can be sent directly to this machine for printing.

Limitation

- The RPCS printer driver must be installed.
- PDF file direct printing is not possible with some versions DeskTopBinder V2 (Lite). Use DeskTopBinder V2 (Lite) on the CD supplied with this machine.

 **Note**

- ❑ PDF Direct Print settings can be made from PDF Direct Print properties.
- ❑ To print password-protected PDF files, you must do the following:
 - Enter the PDF password using PDF Direct Print properties.
 - On the control panel, press **[PDF: Change PW]** on the “PDF” menu to set the PDF password.
- ❑ When a group password is set with DeskTopBinder V2 (Lite), set a group password using **[PDF Group PW]** on the “PDF” menu on the control panel.

 **Reference**

For details, see DeskTopBinder V2 (Lite) Help.

 **Using commands**

From Windows and UNIX, you can print PDF files directly, using commands such as “ftp” and “lpr”.

 **Reference**

- For more information about printing using commands under Windows, see “Printing Files Directly from Windows”, *Administrator Reference*.
- For more information about printing using commands under UNIX, see *UNIX Supplement*.



Printing with Bluetooth™ Connection

Preparation

This machine supports the following profiles:

- SPP
- HCRP
- BIP (Some machines do not support BIP. For details, see the manual that comes with the machine.)

Reference

For more information about printing with SPP, see [p.263 “Printing with Bluetooth™ Connection”](#)

For more information about printing with HCRP or BIP, see the manual for each product.

For more information about the supported profiles, see the manual that comes with the Bluetooth™ adaptor.

Printing with Bluetooth™ Connection

Preparation

Make sure you install the printer driver using the same procedure as for the parallel interface installation. For more information about how to install the printer driver, see [p.44 “Printing with Parallel Connection”](#).

Confirm that the followings are true:

- The power switch is on.
- The Bluetooth™ card has been inserted into the machine and its light is blinking.

This machine is confirmed to work with computer which has following Bluetooth™ adaptor.

- 3Com PCMCIA Bluetooth™ adaptor Parts# 3CRWB6096
- 3Com USB Bluetooth™ adaptor Parts# 3CRWB96

Note

- The system requirements depend on each Bluetooth™ product. See the manual for each product for more details.
- For more information about how to set up Bluetooth™ under other operating systems or for use with different utilities, see the manuals for those operating systems or utilities.



- 1** Run 3Com Bluetooth Connection Manager.
- 2** Make sure the printer you want to use appears in the 3Com Bluetooth Connection Manager.
- 3** Click [COM port] on the [Tool] menu.
- 4** Make sure that the line “Bluetooth Serial Client (COMx)” appears under Client Ports. (x indicating the COM port number used by Bluetooth™).
- 5** Click [Close].
- 6** Click [Start] on the taskbar, point to [Settings], and then click [Printers].
The [Printers] dialog box appears.
- 7** Click the icon of the printer you want to use.
- 8** On the [File] menu, click [Properties].
- 9** Click the [Ports] tab.
- 10** Under [Port], check [COMx:]. X is as same as checked step **4**.
- 11** Click [OK].
Close the [Printers] dialog box.

❖ If a dialog box appears while transmitting a print job, reestablish the connection as follows:

- ① Select the printer you want to use in the [Softkey] box.
- ② Click [Connect].

 **Note**

- If you always use the same printer, check [Always use for this connection].

 **Reference**

For more information, see the manual that comes with the Bluetooth™ adaptor.

Security Mode

1 Start 3Com Bluetooth Connection Manager.

2 Click **[Security Mode]** on the **[Tools]** menu.

The Security Mode dialog box appears.

3 Select the Security Mode from the **[Security Mode:]** drop-down list box.

If you select **[High]**, or if you select **[Custom]** and then specify **[Link]** in the **[Custom Settings]** dialog box, you will be asked to enter the Bluetooth™ password. (See [p.265 “Printing”](#) for details on how to find out what the password is.) For all other Security Modes and Custom Settings, no password will be asked.

 **Note**

- For more information about each mode, see the user's manual for the utility.

4 Click **[OK]**.

Close the Security Mode dialog box.

Printing

1 Transmit the print job to the printer being used.

Depending on how your computer is set up, the **[Connect]** dialog box may appear. If it does, use it to establish a connection with the machine.

2 The **[Authentication]** dialog box appears.

3 Enter the Bluetooth™ password and click **[OK]**.

The Bluetooth™ password consists of the last four digits of the machine's serial number. You can find the serial number on the label on the back of the machine. For example, if the serial number is 00A0-001234, the Bluetooth™ password is 1234.

4 The print job is transmitted.

 **Note**

- The Bluetooth™ password differs for each machine and cannot be changed.

 **SPP and HCRP**

- The maximum number of Bluetooth™ adaptor or Bluetooth™-equipped computers that can be connected at the same time by the Bluetooth™ interface is two, including one by SPP connection and one by HCRP connection.
- When connecting more than one Bluetooth™ adaptor or Bluetooth™-equipped computer at the same time, the first device which establishes the connection is selected. When selecting the connection between the other devices, you need to cancel the first established connection.
- Conditions for Bidirectional Communication
 - SPP connection does not support bidirectional communication.
 - HCRP connection supports bidirectional communication.

 **BIP**

- For BIP connection, a module which includes PostScript 3 must be installed in the machine.
- Only one Bluetooth™ adaptor or Bluetooth™-equipped computer can be connected using BIP.
- The format that can be printed using BIP connection is JPEG.
- User code is disabled for BIP connection.
 - If the print function of the machine is set to limited, you cannot print.
- Some machines do not support BIP. For details, see the manual that comes with the machine.

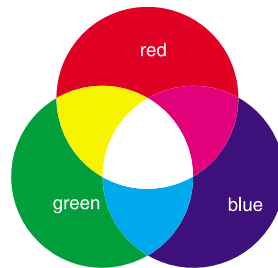


Color Guide

Color Printing Basics

Additive (Emitted) and Subtractive (Reflected) Color Models

All lights are a mixture of red, green, and blue, which are normally called the RGB color model. When red, green, and blue are of equal intensities, the RGB color model produces white.

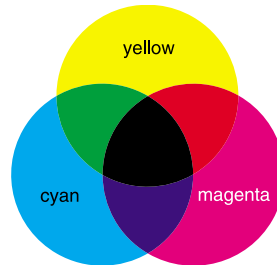


 **Note**

- RGB is also called additive or emitted color. The colors on your computer screen are produced by varying the intensities of RGB.



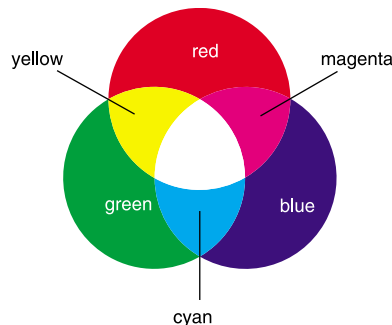
Printed color is a mixture of cyan, magenta, and yellow, which are normally called the CMY color model. When mixed in equal proportions the CMY color model produces black.



 **Note**

❑ CMY is also called subtractive or reflective color. The printer uses CMY toner plus K (black) toner (CMYK color model) to provide full color printing.

The colors of the RGB color model can be mixed to produce the cyan, magenta, and yellow of the CMY color model and vice versa. Two colors of one model are mixed to produce the color of the other model (mixing blue and green produces cyan, for example). The remaining color is the complement of the color produced (red in this example). Complementary colors are: red and cyan, green and magenta, blue and yellow.





Printed Color

The printer produces full-color output using four toner colors: cyan, magenta, yellow, and black. These four colors make up the CMYK color model.

 **Note**

- Mixing CMY in equal proportions should hypothetically produce pure black, but imperfections in the ink cause an equal measure of these colors to produce a muddy or dark brown. Black toner is added to the color model in order to make it possible to produce pure black.

For example, if the image is created with cyan only, there is no problem in printing all of it with cyan toner. However, full-color images are actually comprised of 10,000s of fine colors. These fine colors can be expressed by changing the ratio of CMYK toner particles to be printed per unit surface.

There are also dark and light shadings to each color. These shadings can be expressed by changing the amount of toner particles to be printed per unit surface.



Collate

The Collate function allows you to print while sorting printouts into page-ordered sets, such as when printing multiple copies of meeting materials, and so on.

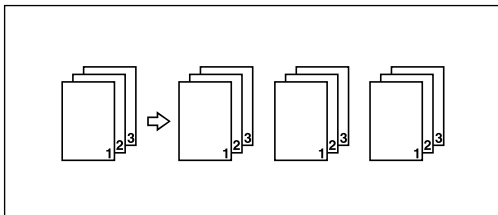


Reference

For more information about collate and job separation, see the printer driver's Help file.

❖ Collate

Outputs can be assembled as sets in sequential order.



Limitation

- To use these functions, the optional Memory Unit of at least 192 MB or the optional hard disk drive must be installed on the printer.
- Up to 150 pages can be sorted using RAM. If the optional hard disk drive is installed, up to 1,000 pages can be sorted.



Precautions when using Windows Server 2003

Precautions when using the Terminal Server mode

The following printer driver functions are either disabled or have limitations. Disabled functions are displayed in gray.

- Disabled functions
Locked Print, Sample Print, Overlay
- Functions that require administrator permission
Custom setting, Custom Size, Watermark, **[User settings]** on the **[Print Quality]** tab



Displaying the [Printers and Faxes] window with Windows XP and Windows Server 2003

Using Windows XP Professional or Windows Server 2003

Follow the procedure below to display the **[Printers and Faxes]** window under Windows XP Professional or Windows Server 2003.

- 1** On the **[Start]** menu, click **[Printers and Faxes]**.
The **[Printers and Faxes]** window appears.

Using Windows XP Home Edition

Follow the procedure below to display the **[Printers and Faxes]** window under Windows XP Home Edition.

- 1** On the **[Start]** menu, click **[Control Panel]**.
- 2** Click **[Printers and Other Hardware]**.
- 3** Click **[Printers and Faxes]**.

The **[Printers and Faxes]** window is displayed.



Installing the Font Manager 2000

Limitation

- If your system is Windows 2000/Windows XP, Windows Server 2003 or Windows NT 4.0, installing software by Auto Run requires Administrators permission. When you install a printer driver by Auto Run, log on using an account that has Administrators permission.

1 Close all applications that are running.

2 Insert the CD-ROM into the CD-ROM drive.

Auto Run will start the installer.

3 Select [Font Manager 2000].

4 Follow the instructions on the screen.





Using Adobe PageMaker Version 6.0, 6.5 or 7.0

If you use the machine under Windows 95/98/Me/2000/XP, Windows Server 2003, or Windows NT 4.0 with Adobe PageMaker, you need to copy the PPD file to the PageMaker folder.

The PPD file is the file with extension “.ppd” in the folder “DRIVERS\PS\WIN9X_ME\((Language)\DISK1\” on the CD-ROM.

The “WIN9X_ME” folder, inside the “PS” folder is for Windows 95/98/Me. Use the folder at this level that is appropriate for the operating system you are currently using.

The third folder, “(Language)” may be substituted by an appropriate language name.

Copy the file with extension “.ppd” to the PageMaker folder.

- **For PageMaker 6.0 default installation**

The directory is “C:\PM6\RSRC\PPD4”.

- **For PageMaker 6.5 default installation**

The directory is “C:\PM65\RSRC\USENGLISH\PPD4”.

The “USENGLISH” may vary depending on your language selection.

- **For PageMaker 7.0 default installation**

The directory is “C:\PM7\RSRC\USENGLISH\PPD4”.

The “USENGLISH” may vary depending on your language selection.

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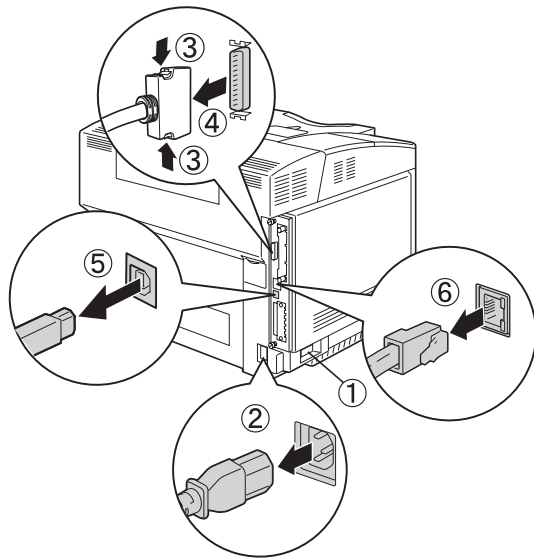
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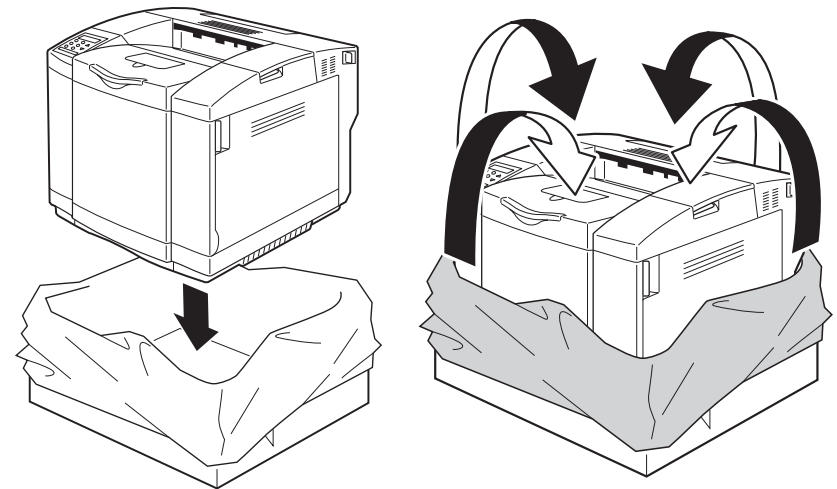


How To Repack

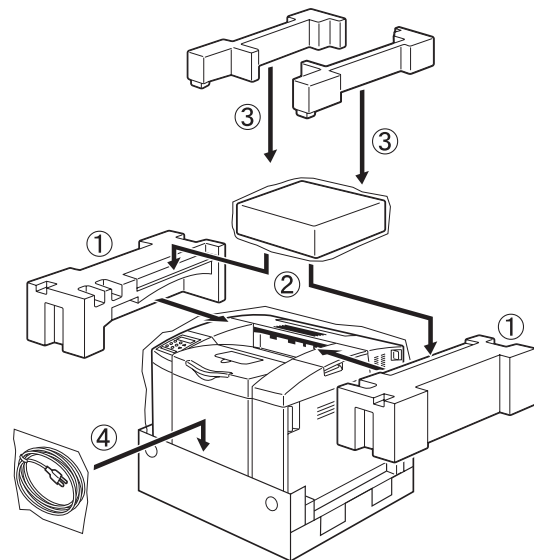
1



2



3



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