

PRINTER Controller Type 850

Operating Instructions

PRINTER REFERENCE 1 (option)



Read this manual carefully before you use this product and keep it handy for future reference.

For safety, please follow the instructions in this manual.



PRINTER Controller Type 850 Operating Instructions



Introduction

This manual contains detailed instructions on the operation and maintenance of this machine. To get maximum versatility from this machine all operators should carefully read and follow the instructions in this manual.

Please keep this manual in a handy place near the machine.

Please read the Safety Information in the "Copy Reference" before using this machine. It contains important information related to USER SAFETY and PREVENTING EQUIPMENT PROBLEMS.

Important

Parts 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.

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PostScript® and Acrobat® are registered trademarks of Adobe System Incorporated.

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

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Warning:

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

Notes:

Some illustrations might be slightly different from your machine.

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

Note to users in the United States of America

Notice:

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

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

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

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

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

Warning

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

Caution :

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

STP with ferrite core must be used for RF interference suppression.

Declaration of Conformity

Product Name: Printer Controller

Model Number: Type 850

Responsible party: Ricoh Corporation

Address: 5 Dedrick Place, West Caldwell, NJ 07006

Telephone number: 973-882-2000

This device complies with part 15 of FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

Note to users in Canada

Note:

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

Remarque concernant les utilisateurs au Canada

Avertissement:

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

Manuals for This Machine

Manuals for This Machine

There are seven manuals that separately describe the operational procedures for the operation and maintenance of the machine.

To enhance safe and efficient operation of the machine, all users should read and follow the instructions contained in the following manuals.

❖ **Copy Reference**

Describes the procedures and functions for using this machine as a copier.

❖ **System Settings**

Describes the system settings of this machine.

❖ **Printer Reference 1**

Describes the system settings, procedures and functions for using this machine as a printer. (This Manual)

❖ **Printer Reference 2**

Describes the procedures and provides necessary information about using this machine as a printer. The manual is included as a PDF file on the CD-ROM labeled "Printer Drivers and Utilities".

❖ **Network Interface Board Quick Configuration Guide**

Describes the procedures and provides necessary information about setting up and using the printer under the network environment. We recommend this manual as your first choice. The manual is included as a PDF file on the CD-ROM labeled "Printer Drivers and Utilities". Read this manual as your first choice before referring to the paper version of the Quick Configuration Guide which comes with optional Network Interface Board Type 450-E.

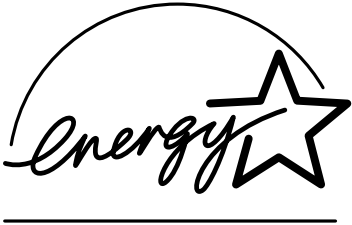
❖ **PostScript 3 Operating Instructions Supplement**

Describes the menus and features you can set using the PostScript printer driver. The manual is provided as a PDF file on the CD-ROM labeled "Printer Drivers and Utilities".

❖ **Network Interface Board Type 450-E Owner's Manual**

Describes the procedures and provides necessary information about setting up and using the printer under the network environment. The manual is provided as a PDF file which is included on the CD-ROM labeled "Print Server Software and Documentation" which comes with optional Network Interface Board Type 450-E.

ENERGY STAR Program

<p>ENERGY STAR®</p> 	<p>As an ENERGY STAR Partner, we have determined that this machine model meets the ENERGY STAR Guidelines for energy efficiency.</p>
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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**

This product automatically lowers its power consumption 15 minutes after the last copy or print job has finished. Printing is still possible in Low-power mode, but if you wish to make copies press the **[Energy Saver]** key first.

For how to change the default interval that the machine waits before entering Low-power mode, see “Low Power Shift Time” in the “System Settings”.

- **Sleep Mode**

If the printer features are installed, this product automatically lowers its power consumption even further 120 minutes after the last copy or print job has finished. Printing is still possible in Sleep mode, but if you wish to make copies press the operation switch first.

For how to change the default interval that the machine waits before entering Sleep mode, see “Auto Off mode” in the “System Settings”.

- **Auto Off mode**

If the printer feature is not installed, this product automatically turns itself off 90 minutes after the last copy or print job has finished. If you wish to make copies when the machine is in Auto Off mode, press the operation switch.

For how to change the default interval that the machine waits before entering Auto Off mode, see “Auto Off Timer” in the “System Settings”.

- **Duplex Priority**

To conserve paper resources, the Duplex function (1-Sided → 2-Sided) is selected preferentially when you turn on the operation switch or the main power switch, press the **[Energy Saver]** key, or when the machine resets itself automatically.

For how to turn Duplex Priority mode on or off, see “Duplex Mode Priority” in the “Copy Reference”.

❖ **Specification**

		Copy feature		Printer installed	
		Type 1 *1	Type 2 *1	Type 1 *1	Type2 *1
Low Power mode	Power consumption	312 W	320 W	324 W	332 W
	Default Time	15 minutes		15 minutes	
	Recovery Time	40 seconds or less	42 seconds or less	40seconds or less	42seconds or less
Sleep Mode	Power consumption	-		24 W	
	Default Time	-		120 minutes	
Auto Off mode	Power consumption	12 W		24 W	
	Default Time	90 minutes	120 minutes	90 minutes	120 minutes

*1 See the “System Settings” to confirm which machine (Type 1 or Type 2) you have.

Duplex Priority	1 Sided→1 Sided
-----------------	-----------------

Recycled Paper

In accordance with the ENERGY STAR Program, we recommend use of recycled paper which is environment friendly. Please contact your sales representative for recommended paper.

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, 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 operation panel.

Keys on the computer's keyboard.

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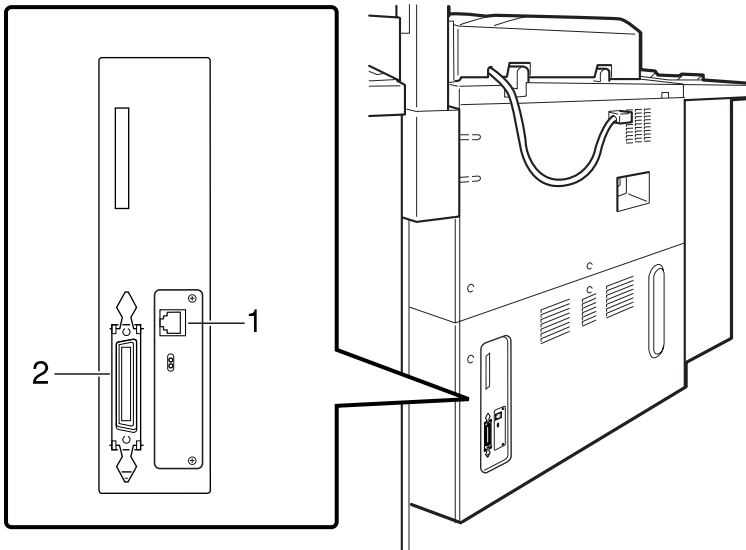
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1. Getting Started

Connecting the Machine

Confirm that the shape and the position of the connector are as shown in the illustration.



1. 10BASE-T/100BASE-TX (option)

2. Parallel Port

Requirements

Requirements

Before using this machine, confirm that all the environmental and electrical requirements have been met. Connect the machine to the host computer using the parallel port, optional Network Interface Board Type 450-E, or both.

Confirm that all the cables, connectors, and electrical outlets necessary to attach the machine to the host computer or network are present.

Important

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

 **Reference**

For more information about using the parallel port, see P.4 “*Connecting the Machine to the Host Using the Parallel Interface Cable*”.

For more information about using a network, see P.2 “*Network cable requirements*”.

Network cable requirements

Optional Network Interface Board Type 450-E can be installed to allow direct connection to an Ethernet network.

Network Interface Board supports 10BASE-T or 100BASE-TX connections.

You can use the machine in the following network environments:

- Using the appropriate network management software and printer driver.
- Attaching the machine to a networked computer set up as a server.

Client	Windows 95, 98, Windows 2000, Windows NT 4.0 ^{*1} , Mac OS (optional PostScript 3 Kit Type 850 is required)
Driver	PCL 6/5e, PostScript 3
File Server	NetWare 3.x, NetWare 4.x, NetWare 5
Protocol	TCP/IP, IPX/SPX, AppleTalk

^{*1} Under Windows NT 4.0, only x 86 CPU is supported.

In a mixed network environment, the protocol switches automatically.

 **Reference**

For more information about resolving network connection problems, see P.13 “*Configuring the Printer for the Network*”.

 **Note**

- Consult your network administrator before connecting the machine to a network.
- In a 100BASE-TX environment, be sure to use properly shielded and grounded cable (STP, Category/Type5) for the connection to the host computer (and/or HUB) in order to meet FCC and EMC Directive 89/336/EEC emission guidelines.

Parallel cable requirements

Connect the machine to the host computer using a parallel port. This machine does not provide the parallel cable to connect the machine to the host computer.

The machine's parallel interface is a standard bi-directional interface. It requires a standard 36-pin parallel cable compliant with IEEE 1284 and a parallel port available on the host computer.

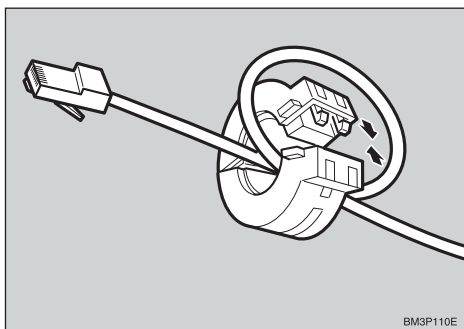
 **Note**

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

Connecting the Machine Using Network Interface Board Type 450-E

Connect the machine to the network using Network Interface Board Type 450-E. Follow these steps to connect the machine.

- 1** Confirm that you have the correct cable.
- 2** Confirm that the machine is turned off.
- 3** Loop the network cable. The loop should be about 15cm (6") from the end of the cable on the end closest to the printer.
- 4** Attach the ferrite core to the loop.



- 5** Attach the network cable to the 10BASE-T/100BASE-TX port on the machine.

 **Reference**

See P.1 "Connecting the Machine" to confirm of the position of the 10BASE-T/100BASE-TX port.

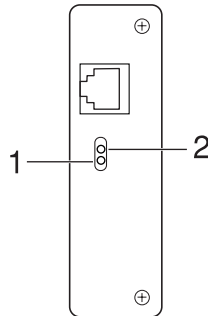
 **Note**

- Confirm that the cable is connected to the 10BASE-T/100BASE-TX port.

- 6** Connect the other end of the cable into the network.

Indicators on Network Interface Board

1



1. Indicator (orange)

Is on while Network Interface Board is working.

2. Indicator (green)

Is on while the machine is in a network environment.

Connecting the Machine to the Host Using the Parallel Interface Cable

Connect the machine to the host computer using a parallel interface cable compliant with IEEE 1284 (supplied by you).

Follow these steps to connect the machine to the host computer.

- 1** Confirm that you have the correct cable.
- 2** Confirm that both the machine and the host computer are turned off.
- 3** Plug the 36-pin end of the parallel cable into the parallel port at the right side of the back cover of the machine.

Reference

See P.1 “Connecting the Machine” to confirm the position of the parallel port.

- 4** Squeeze the wire clips on each side of the connector together until they snap into place. The clips hold the cable securely in place.
- 5** Plug the other end of the parallel cable into the computer's parallel port.

Features of this Machine

This printer is designed for office workgroups and CRD, both for shared usage within network environment, and for one-to-one usage by being connected directly to the computer.

1

❖ High Productivity

This printer comes with an 85-page per minute (ppm) or 105-page per minute (ppm) engine and offers a variety of paper handling functions. A Document Server function enables you to save documents in the machine memory and then edit and print them as you want. Sample print allows you to confirm the printing documents as expected before printing many.

❖ Versatile Paper Handling Options

This machine offers both versatile input and output paper handling options. Input capacity can be raised to 7,550 sheets with the optional Large Capacity Tray. For an output device, stapling, punching and booklet finishing are available with the optional finisher.

Reference

For more information about supporting paper size and type, and optional input and output devices, see the “Copy Reference”.

❖ Variety of Paper Media Support with Easy Handling

Paper types can be selected from the printer driver. If you set the paper type for each tray in advance, you can only select the paper type from the printer driver.

❖ Network Connectivity



This machine is network ready with optional Network Interface Board.

❖ Network utility

PRINTER MANAGER ^{*1}, software consisting of Administrator and Client versions, is provided. With this software, multiple print devices can be utilized effectively together on a network. This software offers several convenient functions such as parallel printing and recovery printing.

^{*1} For the name of PRINTER MANAGER you use, see the “Quick Configuration Guide” for optional Network Interface Board which is included as a PDF file on the CD-ROM labeled “Printer Drivers and Utilities”.

❖ Major Specifications

Printing Speed	85/105ppm (A4  , 8 1/2" × 11" ) *1
Engine Resolution	600dpi resolution
Printer Language	PCL 5e, PCL 6 Adobe PostScript Level 3 *2
Memory	32MB Max. up to 160MB
Interface	10BASE-T or 100BASE-TX *2 × 1 IEEE1284 × 1

*1 Printing Speed depends on the machine. Confirm which machine you have.

*2 Option

Printer Drivers for This Machine

Printing requires installation of a printer driver for your operating system. The following drivers are included on the CD-ROM that comes with this machine.

Printer Language	PCL 5e	PCL 6	PostScript 3
Operating system			
Windows 95 *1	√	√	√ *7
Windows 98 *2	√	√	√ *7
Windows 2000 *3	√	√	√
Windows NT 4.0 *4	√	√	√ *6 *7
Mac OS *5			√ *7

*1 Microsoft Windows 95 operating system

*2 Microsoft Windows 98 operating system

*3 Microsoft Windows 2000 operating system

*4 Microsoft Windows NT Server operating system version 4.0, Microsoft Windows NT Workstation operating system version 4.0 in a computer using a x86 processor.

*5 Required system is 8.5 or later operating system.

*6 Requires Service Pack 3 or later.

*7 The Adobe PostScript printer drivers and PostScript Printer Description (PPD) files are included on the CD-ROM.

❖ PCL Printer Drivers

Printer drivers allow the computer to communicate with the printer via a printer language. Two kinds of PCL printer drivers, PCL 6 and PCL 5e, are included on the CD-ROM that comes with this machine. We recommend PCL 6 as your first choice. However, some of your applications might require the installation of the PCL 5e printer driver. In this case, you can install PCL 5e in addition to PCL 6.

⇒ P.19 *“Windows 95/98 - Installing the PCL 6/5e Printer Driver”*

⇒ P.19 *“Windows 2000 - Installing the PCL 6/5e Printer Driver”*

⇒ P.22 *“Windows NT 4.0 - Installing the PCL 6/5e Printer Driver”*

❖ 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 machine. 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.24 *“Windows 95/98 - Installing the PostScript Printer Driver”*

⇒ P.26 *“Windows 2000 - Installing the PostScript Printer Driver”*

⇒ P.28 *“Windows NT 4.0 - Installing the PostScript Printer Driver”*

⇒ P.31 *“Macintosh - Installing the PostScript Printer Driver”*

Software and Utilities Included on the CD-ROM

❖ Agfa Font Manager

Helps you to install new screen fonts, or organize and manage fonts already installed on your system.

❖ PRINTER MANAGER FOR ADMINISTRATOR

A utility for the system administrator to manage printers on the network.

Reference

For the name of PRINTER MANAGER FOR ADMINISTRATOR you use, see the “Quick Configuration Guide” for optional Network Interface Board which is included on the CD-ROM labeled “Printer Drivers and Utilities”.

See PRINTER MANAGER FOR ADMINISTRATOR Online Help for more information about using PRINTER MANAGER FOR ADMINISTRATOR.

❖ PRINTER MANAGER FOR CLIENT

A utility for users to manage their own print jobs on the network.

Reference

For the name of PRINTER MANAGER FOR CLIENT you use, see the “Quick Configuration Guide” for optional Network Interface Board which is included on the CD-ROM labeled “Printer Drivers and Utilities”.

See PRINTER MANAGER FOR CLIENT Online Help for more information about using PRINTER MANAGER FOR CLIENT.

❖ **PortNavi**

A utility that helps you to use network printers effectively. It is useful in environments where two or more network printers are used.

 **Reference**

For more information about PortNavi, see the “Quick Configuration Guide” for Network Interface Board which is included on the CD-ROM named “Printer Drivers and Utilities”.

 **Important**

- If you upgrade to Windows 2000 from Windows 95/98, PortNavi must be uninstalled prior to install Windows 2000. And then reinstall it in a Windows 2000 environment.

❖ **Acrobat Reader**

A utility that allows you to read PDF (Portable Document Format).

 **Note**

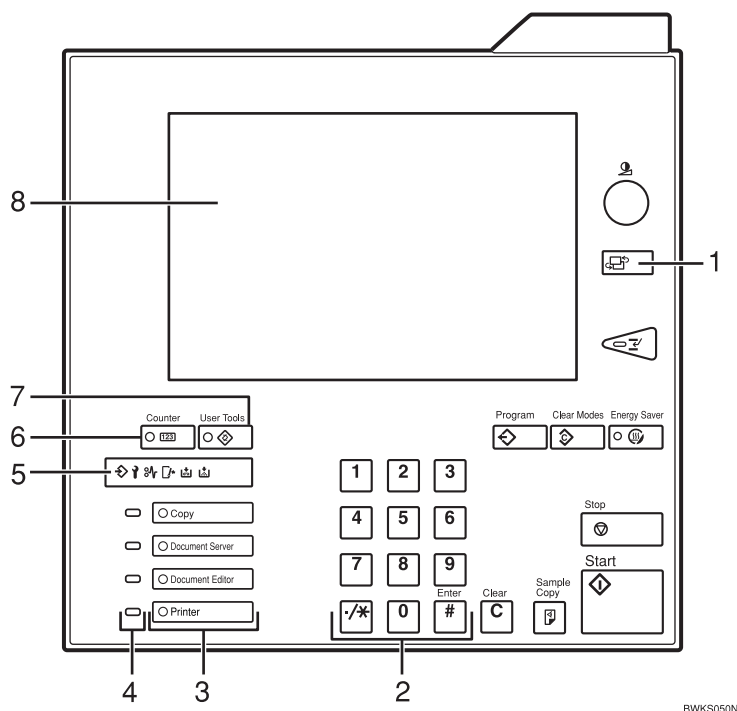
- Documentation about using the printer is included on the CD-ROM in PDF format.

Guide to This Machine

Operation Panel

1

This panel display is for the installed Copier and Printer.



1. **【Language Selection】** key

Press to change the display language.

2. **【Number】** keys

Use to enter numeric values.

3. **【Feature】** keys

Press the appropriate key to choose any of the following features:

- Copier
- Document Server
- Document Server Editor
- Printer

4. **Application Status indicators**

These show the status of the above features:

- Green: the feature is active.
- Red: the feature has been interrupted.

5. **Data In indicator**

Shows if the print job is being sent from the host computer.

If the indicator is blinking, the job is being sent.

If the indicator stays on, there is data to be printed out.

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6. **【Counter】** key

Press to check or print the total number of prints and copies made.

7. **【User Tools】** key

Press to change the default settings and conditions to meet your requirements.

8. **Panel Display**

Shows the operation status, error messages, and function menus.

Panel Display

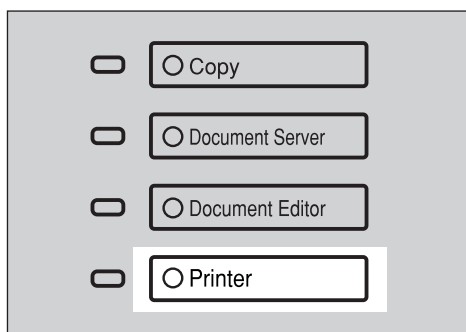
The panel display shows the status of the machine, error messages and function menus. To select items shown on the display, lightly press the items with your finger. When the item is selected, it is highlighted. Items that are not available are shown grayed out.

Important

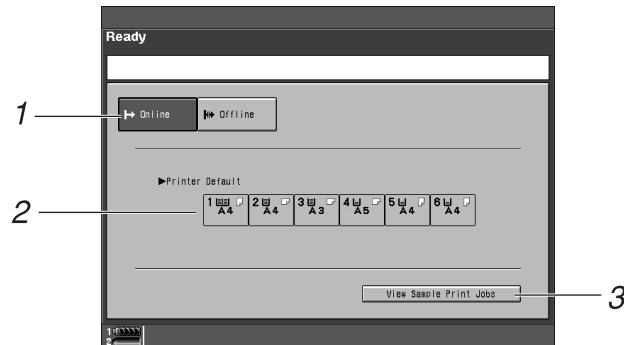
- Do not apply a strong shock or force of more than about 30N (about 3kgf) to the panel display or it may be damaged.

Online and Offline

Press the **【Printer】** key on the control panel.



The following screen appears on the panel display.



1. Online/Offline

Shows the status of "Online" or "Offline".

2. Printer Default

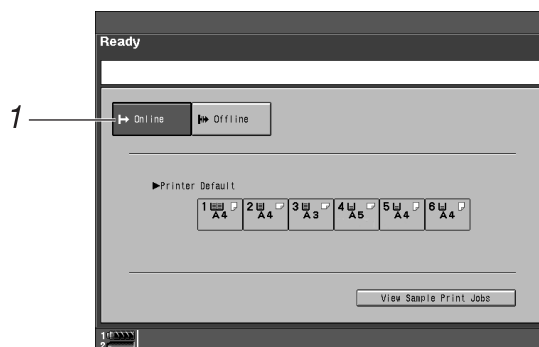
Shows the default input tray which is selected on the panel display. However, if "Auto" is selected, no tray is highlighted.

3. [View Sample Print Jobs]

Press to show the list of "Sample Print Jobs". You can also select each file to print, to delete, to save and to change settings.

Online

When the printer is online, it can receive data from the computer.



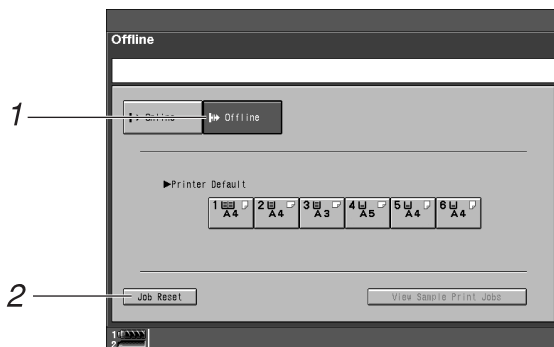
1. [Online] key

Press this key to switch the printer on-line. The preceding illustration shows the online status.

Offline

When the printer is offline, it cannot receive data from the computer.

1



1. [Offline] key

Press this key to switch the printer of-
fline. The preceding illustration shows
the offline status.

2. [Job Reset] key

Press this key to cancel the current print
job.

2. Configuring the Printer for the Network the Network

Configuring the Printer for the Network with the Operation Panel

After installing optional Network Interface Board, configure it for the network using the printer's operation panel.

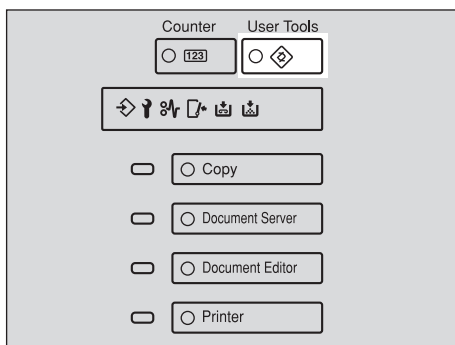
If you use TCP/IP, you should assign the IP Address and Subnet Mask. You can also set the Gateway Address using the printer's operation panel.

You can protect the network setting using the printer's operation panel. This menu helps you to prevent network setting being accidentally changed.

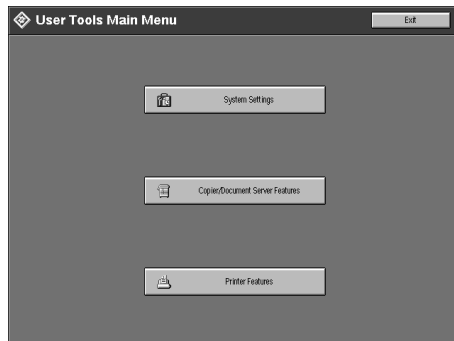
Reference

For more information about using this machine as a network printer, see "Quick Configuration Guide" which is included as a PDF File on the CD-ROM labeled "Printer Drivers and Utilities". Read this manual as your first choice before referring to the paper version of the Quick configuration Guide which comes with optional Network Interface Board Type 450-E.

1 Press **[User Tools]**.

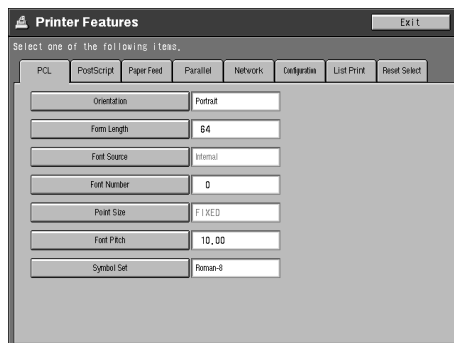


The following screen appears on the panel display.



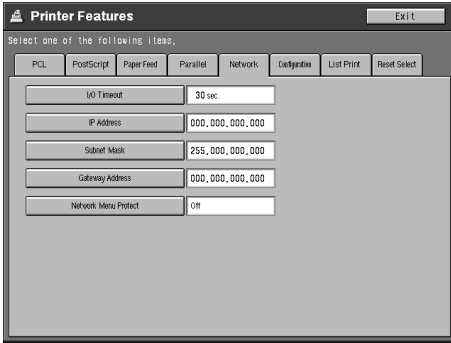
2 Select **[Printer Features]**.

The following screen appears on the panel display.



3 Select **[Network]**.

The following screen appears on the panel display.



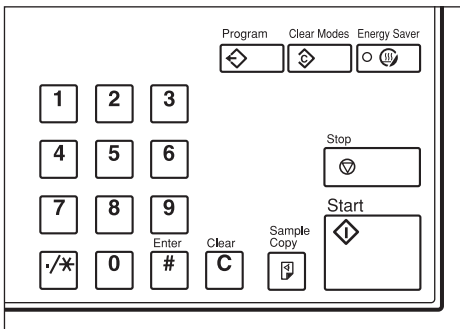
2

4 Press [IP Address].

The following screen appears on the panel display.



5 Set the IP Address with the number keys.



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Note

- To get the IP Address for the printer, contact your network administrator.

- Type the first three digits of the IP Address, and the pointer moves to the next entry field automatically.



Repeat these procedures to complete setting the IP Address.

Note

- If you press "Clear", the numerical value currently entered is canceled.
- If you press "Cancel", the entered value is canceled and the previous setting is restored.

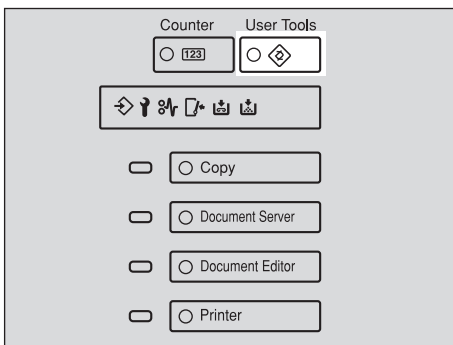
- Press [OK].
The setting of the IP Address is completed. Then return to the "Printer Features" screen.

6 Set "Subnet Mask" and "Gateway Address" following the same procedure for setting the IP Address, if necessary.

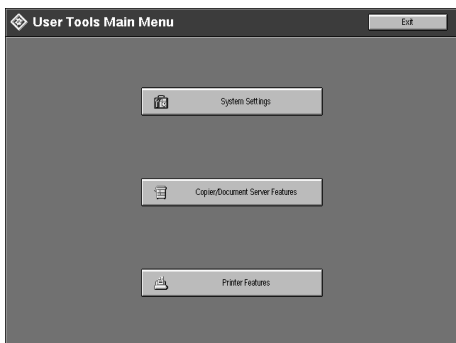
Protecting the Network Menu

You can protect the network setting to prevent it being accidentally changed.

1 Press [User Tools].

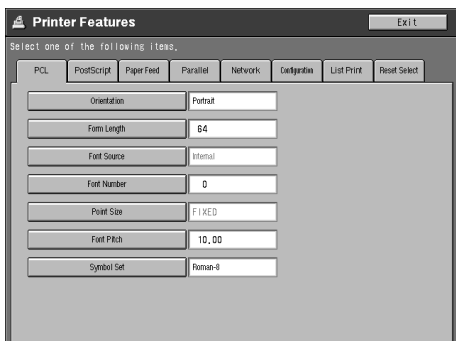


The following screen appears on the panel display.



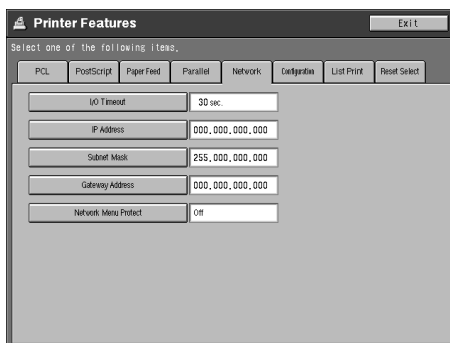
2 Select [Printer Features].

The following screen appears on the panel display.



3 Select [Network].

The following screen appears on the panel display.

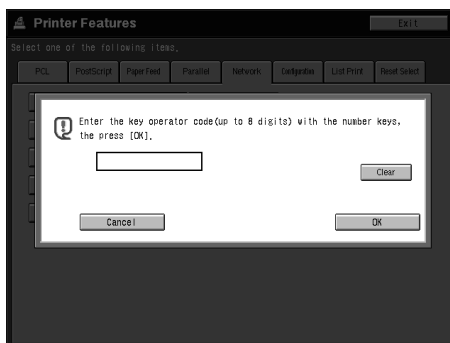


4 Select [Network Menu Protect].

The following screen appears on the panel display.



- ① When the operation code has been set, enter the key operator code, up to 8 digits with the number keys, and then press [OK].



Reference

For information about key operator code, see "System Settings".

5 Select [On]. Then press [OK].
Network Menu is protected.

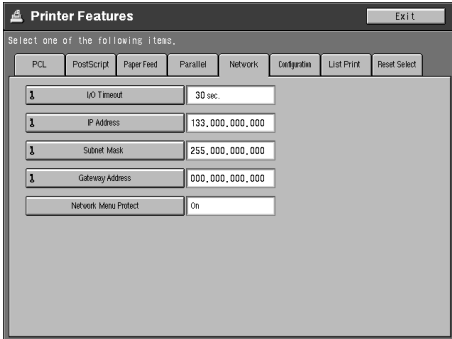
 **Note**

- When "Network Menu Protect" is [On], the icon will appear next to the menu name.

 **Reference**

For more information about network settings, see "Quick Configuration Guide" which is provided as a PDF file on the CD-ROM labeled "Printer Drivers and Utilities".

2



 **Address**

❖ **Subnet Mask**

A number used to mathematically "mask" or hide an IP Address on the network by eliminating those parts of the address that are alike for all the machines on the network.

❖ **Gateway Address**

A gateway is a connection or interchange point that connects two networks. A gateway address is for the router or host computer used as a gateway.

 **Note**

- To get the addresses, contact your network administrator.

3. Installing the Printer Driver and Software

All of the procedures in this manual assume that you are familiar with general Windows procedures and practices. If you are not, see the documentation that comes with Windows for more information.

Auto Run

You can install the printer driver by using Auto Run.

Auto Run is available for the following operating systems:

- Windows 95/98
- Windows 2000
- Windows NT 4.0

If your system is a Macintosh, see information about installing the printer driver.

⇒ P.19 *“Windows 95/98 - Installing the PCL 6/5e Printer Driver”*.

⇒ P.31 *“Macintosh”*.

Important

- Before starting this installation, close all documents and applications. In a network environment, confirm that users who are logged on are disconnected. Be sure to do this when it will create the least interference with other users.
- After installing a printer driver, you must restart the computer.

Limitation

- If your system is Windows 2000 or Windows NT 4.0, installing a printer driver by Auto Run requires permission of Administrators. When you install a printer driver by Auto Run, log on using an account that has Administrators permission.

Reference

For more information about the software and utilities included on the CD-ROM, see P.7 *“Software and Utilities Included on the CD-ROM”*.

Note

- Auto Run might not automatically work with certain OS settings. In this case, manually run "INSTTOOL.EXE" on the root to install printer driver.
- If you want to cancel Auto Run, insert the CD-ROM while pressing the **[SHIFT]** key until your computer finishes accessing the CD-ROM.

Using the Shared Printer on Windows 2000 or Windows NT 4.0 for Windows 95/98 Client

If you want to share the printer on Windows 2000 or Windows NT 4.0, you must not install the printer driver using Auto Run. In this case, cancel Auto Run and install the printer driver using **[Add Printer Wizard]** in the **[Printer]** window.

For more information about installing the printer driver as an alternate driver, see P.19 "Windows 2000 - Installing the PCL 6/5e Printer Driver" P.22 "Windows NT 4.0 - Installing the PCL 6/5e Printer Driver".

3

Installing by Auto Run

Follow these steps to install the printer driver on Windows 95/98/Windows 2000/Windows NT 4.0.

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, uninstall the old version, and then install the new one. For more information about uninstalling the printer driver and software, see "Uninstalling the Printer Driver and Software" in the "Printer Reference 2" included as a PDF file on the CD-ROM.

Note

- If the "plug and play" function is started, click **[Cancel]** of the **[New Hardware Found]** dialog box or **[Device Driver Wizard]**, and then insert the CD-ROM. **[New Hardware Found]** or **[Device Driver Wizard]** appears depending on the system version of Windows 95/98, Windows 2000.
- The appropriate language name is used in the CD-ROM folder: ENGLISH(English), DEUTSCH (German), FRANCAIS (French), ITALIANO (Italian), ESPANOL(Spanish), NEDRLNDS (Dutch), NORSK (Norwegian), DANSK (Danish), SVENSKA (Swedish)

- 1** Close all applications that are currently running.
- 2** Insert the CD-ROM into the CD-ROM drive.
- 3** Follow the instructions on the screen.
- 4** Restart your computer after installation is complete.
- 5** You should set up the options with the printer driver.

Installing the PCL 6/5e Printer Driver

Windows 95/98 - Installing the PCL 6/5e Printer Driver

Installing the printer driver

Install the driver in accordance with the steps explained. ⇒ P.18 *“Installing by Auto Run”*

Setting up options

Note

- When setting up options, you should access the Printer Properties from Windows. You cannot access the Printer Properties from an application.

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 Click the **[Accessories]** tab.

4 Select any options you have installed from the **[Options]** group.

5 Click **[OK]**.

Windows 2000 - Installing the PCL 6/5e Printer Driver

Installing the printer driver : Parallel connection

If the printer is connected to the computer with parallel cable, you must install the printer driver by using **[Add Printer Wizard]**. Follow the procedure below.

Note

- If the "plug and play" function starts, you can also install the printer driver following the instructions on the screen.
- During installation by using **[Add Printer Wizard]**, **[Digital Signature Not Found]** dialog box might appear. In this case, click **[Yes]** to continue the installation.

1 Close all applications that are currently running.

2 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

3 Double-click the **[Add Printer]** icon.

[Add Printer Wizard] starts.

4 Check **[Local Printer]** and click **[Next]**.

A dialog box for selecting the printer port appears.

5 Click to select the printer port you want to use, and then click **[Next]**.

A dialog box for selecting the printer manufacture and model name appears.

6 Click **[Have Disk]**.

A dialog box for installing the driver from a disk appears.

7 Insert the CD-ROM into the CD-ROM drive while pressing the **[SHIFT]** key until the computer finishes accessing the CD-ROM.

 **Note**

If the Auto Run program starts, click **[Cancel]**.

8 Change the drive name in the list box to the name of the CD-ROM drive, and then click **[Browse]**.

9 In the box, double-click **[PCL5E]** or **[PCL6]** and **[NT4_2000]**. Then double-click the folder of the appropriate language for the operating system. Finally, click **[Open]**.

10 Click **[OK]**.

A printer model selection dialog box appears.

11 Click to select the name of the printer whose driver you want to install, and then click **[Next]**.

A dialog box for changing the printer name appears.

12 Change the name of the printer if you want, and then click **[Next]**.

13 Click **[Next]**.

14 In the next dialog box asking if you want to print a test page, select **[No]** and then click **[Next]**.

A confirmation dialog box appears.

15 Confirm the settings you have set, and then click **[Next]**.

The installer copies the printer driver files from the CD-ROM to the computer's hard disk.

16 You should set up the options with the printer driver.

Installing the printer driver : Network environment

You can install the PCL 6/5e printer driver by using Auto Run.

Limitation

- 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, manually run "INSTTOOL.EXE" on the root to install printer driver.
- If you want to cancel Auto Run, insert the CD-ROM while pressing the **[SHIFT]** key until the computer finishes accessing the CD-ROM.

1 Close all applications that are currently running.

2 Insert the CD-ROM into the CD-ROM drive.

3 Follow the instructions on the screen.

4 Restart the computer after installation is complete.

5 You should set up the options with the printer driver.

If you want to share the printer on Windows 2000, you must not install the printer driver using Auto Run. In this case, cancel Auto Run and install the printer driver using **[Add Printer Wizard]** in the **[Printers]** window.

When prompted for the Windows 2000 alternate printer driver location, select the following folder in the CD-ROM.

Note

- During installation by using **[Add Printer Wizard]**, the **[Digital Signature Not Found]** dialog box might appear. In this case, click **[Yes]** to continue the installation.

When prompted for the Windows NT 4.0 alternate driver location, select the following folder in the CD-ROM.

- PCL 5e
 \DRIVERS\PCL5E\NT4\ (Language)\DISK1\
- PCL 6
 \DRIVERS\PCL6\NT4\ (Language)\DISK1\

When prompted for the Windows 95/98 alternate printer driver location, select the following folder in the CD-ROM.

- PCL 5e
 \DRIVERS\PCL5E\WIN95_98\ (Language)\DISK1\
- PCL 6
 \DRIVERS\PCL6\WIN95_98\ (Language)\DISK1\

Setting up options

Limitation

- Changing the setting of the printer 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.

Note

- When setting up options, you should access the Printer Properties from Windows. You cannot access the Printer Properties from an application.

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 Click the **[Accessories]** tab.

4 Select any options you have installed from the **[Options]** group.

5 Click **[OK]**.

Windows NT 4.0 - Installing the PCL 6/5e Printer Driver

Installing the printer driver

Limitation

- Installing a printer driver 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 install a printer driver, log on using an account that has Full Control permission.

Install the driver in accordance with the steps explained. ⇒ P.18 *“Installing by Auto Run”*

If you want to share the printer on Windows NT 4.0, you must not install the printer driver using Auto Run. In this case, cancel Auto Run and install the printer driver using **[Add Printer Wizard]** in the **[Printers]** window.

When prompted for the Windows 95/98 alternate driver location, select the following folder in the CD-ROM.

- PCL 5e
 \DRIVERS\PCL5E\WIN95_98\Language\DISK1\
- PCL 6
 \DRIVERS\PCL6\WIN95_98\Language\DISK1\

Setting up options

Limitation

- Changing the setting of the printer 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.

Note

- When setting up options, you should access the Printer Properties from Windows. You cannot access the Printer Properties from an application.

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 Click the **[Accessories]** tab.

4 Select any options you have installed from the **[Options]** group.

5 Click **[OK]**.

Installing the PostScript Printer Driver

This section describes basic instructions for installing the printer driver. The actual procedure may differ depending on the operating system. Follow the appropriate procedures below.

Important

- When updating the printer driver by installing the latest version, you should uninstall that of former version if any. See “*Uninstalling the Printer Driver and Software*” in the “Printer Reference 2”.

3

Windows 95/98 - Installing the PostScript Printer Driver

Installing the printer driver

Important

- Be sure to install the PPD file for Windows 95/98. Do not accidentally install the PPD file for Windows 2000/Windows NT 4.0.

1 Close all applications that are currently running.

2 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

3 Double-click the **[Add Printers]** icon.

[Add Printer Wizard] starts.

4 Click **[Next]**.

5 Check **[Local Printer]** and click **[Next]**.

A dialog box for selecting the printer manufacture and model name appears.

6 Click **[Have Disk]**.

A dialog box for installing the printer driver from a disk appears.

7 Insert the CD-ROM into the CD-ROM drive, while pressing the **[SHIFT]** key until the computer finishes accessing the CD-ROM.

If the Auto Run program starts, click **[Cancel]**.

8 Click **[Browse]**.

9 Use the **[Drives:]** list box to select the CD-ROM drive.

- 10** In the **[Folders:]** box, double-click **[PS]** and **[WIN95_98]**. Then double-click the folder of the appropriate language for the operating system. Finally, click **[OK]**.
- 11** Click **[OK]**.
- 12** Click to select the name of the printer whose driver you want to install, and then click **[Next]**.
- 13** In the **[Available ports:]** box, click to select **[Printer Port]**, and then click **[Next]**.
- 14** Change the name of the printer if you want, and then click **[Next]**.
- 15** Select whether or not you want to print a test page, and then click **[Finish]**.
- 16** If you are asked whether you want to restart Windows, select **[Yes]**. If you are not asked, restart Windows after completing the installation.

Important

- If the printer is equipped with certain options (ex. the paper feed unit or memory unit), you should set up the options with the printer driver.

Setting up options

Note

- When setting up options, you should access the **[Device Options]** tab from Windows. You cannot set up options when accessing the **[Device Options]** tab from an application.
- 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** Click the **[Device Options]** tab.
The **[Installable options]** group appears.
 - 4** From the **[Installable options]** box, select the option you have installed.
The current setting is displayed in the **[Change settings for:]** list.
 - 5** Use the **[Change setting for:]** list to select the appropriate setting for the selected option.
 - 6** Click **[Apply]** to apply the settings you made.
 - 7** After making all settings you want, click **[OK]**.

Windows 2000 - Installing the PostScript Printer Driver

Installing the printer driver

Limitation

- Installing a printer driver requires Manage Printers permission. Members of the Administrators, and Power Users groups have Manage Printers permission by default. When you install a printer driver, log on using an account that has Manage Printers permission.

Important

- Be sure to install the PPD file for Windows 2000. Do not accidentally install the PPD file for Windows 95/98/Windows NT 4.0.

1 Close all applications that are currently running.

2 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.
The **[Printers]** window appears.

3 Double-click the **[Add Printers]** icon.
[Add Printer Wizard] starts.

4 After confirming that the **[Local Printer]** option is selected, click **[Next]**.
A dialog box for selecting the printer port appears.

5 Check the check box of the port you want to use, and then click **[Next]**.
A dialog box for selecting the printer manufacture and model name appears.

6 Click **[Have Disk]**.
A dialog box for installing the driver from a disk appears.

7 Insert the CD-ROM into the CD-ROM drive while pressing the **[SHIFT]** key until the computer finishes accessing the CD-ROM.
If the Auto Run program starts, click **[Cancel]**.

8 Change the drive name in the list box to the name of the CD-ROM drive, and then click **[Browse]**.

9 In the **[Folders:]** box, double-click **[PS]** and **[WIN2000]**. Then double-click the folder of the appropriate language for the operating system. Finally, click **[Open]**.

10 Click **[OK]**.
A printer model selection dialog box appears.

- 11** Click to select the name of the printer whose driver you want to install, and then click **[Next]**.

A dialog box for changing the printer name appears.

- 12** Change the name of the printer if you want, and then click **[Next]**.

- 13** Click **[Next]**.

- 14** In the next dialog box asking if you want to print a test page, select **[No]** and then click **[Next]**.

A confirmation dialog box appears.

 **Note**

- Print a test page after completing installation and restarting Windows.

- 15** Confirm the settings you have set, and then click **[Finish]**.

The installer copies the printer driver files from the CD-ROM to the computer's hard disk.

- 16** You should set up the options with the printer driver.

Setting up options

 **Limitation**

- Changing the setting of the printer 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.

 **Note**

- When setting up options, you should access the Printer Properties from Windows. You cannot set up options when accessing the Printer Properties from an application.

- 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** Click the **[Device Settings]** tab.

- 4** Use the **[Installable Options]** group to select the options, and then select **[Installed]** or **[Not] Installed** from the drop-down list box.

- 5** Repeat steps **4** for all options.

- 6** After making all settings you want, click **[OK]**.

Windows NT 4.0 - Installing the PostScript Printer Driver

Installing the printer driver

Limitation

- Installing a printer driver 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 install a printer driver, log on using an account that has Full Control permission.

Important

- We recommend that you upgrade the Windows NT 4.0 operating system to Service Pack 3 or later before installing the printer driver. Contact your Windows retailer for more information about the latest version available.
- Be sure to install the PPD file for Windows NT 4.0. Do not accidentally install the PPD file for Windows 95/98.

1 Close all applications that are currently running.

2 Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Printers]**.
The Printers window appears.

3 Double-click the **[Add Printers]** icon.
[Add Printer Wizard] starts.

4 After confirming that the **[My Computer]** option is selected, click **[Next]**.
A dialog box for selecting the printer port appears.

5 Check the check box of the port you want to use, and then click **[Next]**.
A dialog box for selecting the printer manufacture and model name appears.

6 Click **[Have Disk]**.
A dialog box for installing the driver from a disk appears.

7 Insert the CD-ROM into the CD-ROM drive while pressing the **[SHIFT]** key until the computer finishes accessing the CD-ROM.
If the Auto Run program starts, click **[Cancel]**.

8 Change the drive name in the list box to the name of the CD-ROM drive, and then click **[Browse]**.

9 In the **[Folders:]** box, double-click **[PS]** and **[NT4]**. Then double-click the folder of the appropriate language for the operating system. Finally, click **[Open]**.

10 Click **[OK]**.
A printer model selection dialog box appears.

- 11 Click to select the name of the printer whose driver you want to install, and then click **[Next]**.

A dialog box for changing the printer name appears.

- 12 Change the name of the printer if you want, and then click **[Next]**.

- 13 Click **[Next]**.

- 14 In the next dialog box asking if you want to print a test page, select **[No]** and then click **[Finish]**.

The installer copies the printer driver files from the CD-ROM to the computer's hard disk.

 **Note**

- Print a test page after completing installation and restarting Windows.

- 15 If you are asked whether you want to restart Windows, select **[Yes]**. If you are not asked, restart Windows after completing the installation.

 **Important**

- If the printer is equipped with certain options (ex. the paper feed unit or memory unit), you should set up the options with the printer driver.

Setting up options

 **Limitation**

- Changing the setting of the printer 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.

 **Note**

- When setting up options, you should access the Printer Properties from Windows. You cannot set up options when accessing the Printer Properties from an application.

- 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 Click the **[Device Settings]** tab.

- 4 Use the **[Installable Options]** group to select the options.

- 5 Click **[OK]** to close the Printer Properties.

Using Adobe PageMaker Version 6.0 or 6.5

If you use the printer under Windows 95/98/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". It is in the folder "\PS\WIN95_98\Language\DISK1\" on the CD-ROM.

The **[WIN95_98]** folder, inside the **[PS]** folder, is for the Windows 95/98 operating system. Use the folder at this level that is appropriate for the operating system you are using.

The third folder, "(Language)" may be substituted by an appropriate language name.

Copy this file to the PageMaker folder.

For the PageMaker 6.0 default installation, the folder is "C:\PM6\RSRC\PPD4", and for the PageMaker 6.5 default installation, the directory is "C:\PM65\RSRC\USENGLISH\PPD4". The "USENGLISH" may be different, depending on your language selection.

Reference

For more information about the language name, see P.18 *"Installing by Auto Run"*.

Macintosh

Macintosh - Installing the PostScript Printer Driver

It is necessary to install a printer driver and a PPD file to print from a Macintosh. Follow these steps to install a printer driver and a PPD file into a Macintosh using a system 8.5 or later operating system.

- 1** Insert the CD-ROM into the CD-ROM drive.
- 2** Double-click the CD-ROM icon.
- 3** Double-click the [PS] folder.
- 4** Double-click the folder of the language you use.
- 5** Open [DISK1] and double-click the installer icon.
- 6** Follow the instructions on the screen.
- 7** Double-click [Extensions].
- 8** Double-click [Printer Descriptions].
- 9** Double-click the CD-ROM icon on the desktop.
- 10** Double-click [DISK1] in the folder of the language you use.
- 11** Click and drag the PPD file into [Printer Descriptions].
- 12** Click and drag the "Job Log" file into [Printer Descriptions] in [Extensions] in [System Folder].
- 13** Restart the Macintosh.

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.32 “Setting Up Options” to make the option settings, or close the [Chooser] dialog box.

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 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.

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