MANUALS FOR THIS PRINTER

: Paper
: CD-ROM
: Manuals for Administrator
: Manuals for Client

MANUALS PROVIDED

Printed Manuals

☑ MANUALS FOR THIS PRINTER (this sheet)

☐ Quick Installation Guide

☐ Option Setup Guide

☐ Maintenance Guide

Manuals on CD-ROM (Labeled "Operating Instructions")

☐ Manuals for this Printer
- ☐ Administrator Reference
- ☐ Client Reference
- ☐ PostScript 3 Supplement
- ☐ Option Setup Guide
- ☐ Maintenance Guide

- 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] — option setup
  [Language] — mainte

Icons

Click to go to the top page where you can select other manuals.

Click to go to the next page.

Click to go to the table of contents of the viewed manual.

- If you want to open multiple manuals at the same time, follow the procedure below:
  From the **[File]** menu, point to **[Preferences]** and select **[General...]**. Clear the **[Open Cross-Doc Links in Same Window]** check box in the **[General Preference]** dialog box that appears.

BEFORE YOU START

Printer Installation

Quick Installation Guide

Provides information about setting up the printer.
This also provides information about installing the software with [Quick Install] and specifying network settings from the control panel.
The Quick Installation Guide provides all the information you need to connect the printer to a network with the network interface cable.

PREPARING THE PRINTER

Option Installation

Option Setup Guide

Provides information about setting up the options.
❑ Options

Network Printer Configuration

Administrator Reference

Provides information about setting up the printer as a print server and making printer settings with the control panel.
❑ Windows 2000 Print Server Configuration
❑ Windows XP Print Server Configuration
❑ Windows NT4.0 Print Server Configuration
❑ NetWare Configuration
❑ Using SmartNetMonitor for Admin
❑ Using a Web Browser
❑ Monitoring and Configuring the Printer
❑ Making Printer Settings with the Control Panel

PREPARING THE CLIENT COMPUTER

Printing from Computers (Operating Systems)

Client Reference

Provides information about setting up and using the printer in Windows, Macintosh or NetWare environment, and also provides information about the software and utilities provided on the CD-ROM.
❑ Windows 95/98/Me Configuration
❑ Windows 2000 Configuration
❑ Windows XP Configuration
❑ Windows NT 4.0 Configuration
❑ Macintosh 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 1

Provides information about replacing consumables and cleaning and adjusting the printer.
❑ Getting Started
❑ Paper and Other Media
❑ Replacing Consumables and Maintenace Kit
❑ Cleaning and Adjusting the Printer
❑ Troubleshooting

G081-6500 Printed in the Netherland Copyright © 2002

QUICK INSTALLATION GUIDE <G081-6520>

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

1

WHERE TO PUT THE PRINTER

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

⚠ Warning

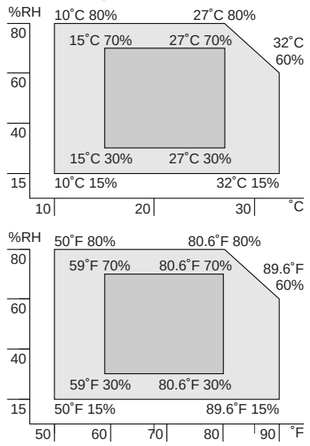
- Confirm that the wall outlet is near the machine and freely accessible, so that in event of an emergency, it can be unplugged easily.
- Only connect the machine to the power source described on this manual.
- Avoid multi-wiring.
- Do not damage, break or make any modifications to the power cord. Do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

⚠ 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.

1 Optimum Environmental Conditions

Recommended temperature and humidity



Possible operation range Recommended range

The machine must be level within 5 mm (0.2 inch) 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 m^3 (183 cubic inch)/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.

Depending on the temperature and humidity around the machine, vapor might occur when printing. Thus steam can be seen when prints come out.

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**

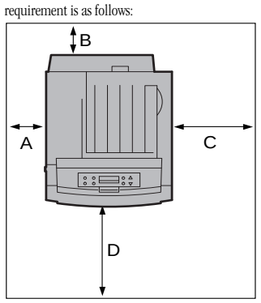
3 Power Connection

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

- 120 V, 60 Hz

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:



ZHBH710E

A: 13 cm (5.2 inches) or more
B: 11 cm (4.4 inches) or more
C: 35 cm (14.0 inches) or more
D: 61 cm (24.4 inches) or more

2

UNPACKING THE PRINTER AND CHECKING THE CONTENTS OF THE BOX

⚠ Caution

- To prevent an injury, this printer should be lifted by at least two people.

1

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

- **This package does not include an interface cable. Please purchase one for use with your host computer. See "Appendix" in the Administrator Reference.**

- ☐ MANUALS FOR THIS PRINTER
- ☑ Quick Installation Guide (This manual)
- ☐ Maintenance Guide
- ☐ Option Setup Guide
- ☐ CD-ROM "Printer Drivers and Utilities"
- ☐ CD-ROM "Operating Instructions"
- ☐ CD-ROM "DeskTopBinder V2 Lite"
- ☐ Power Cable
- ☐ Toner Cartridge (Black)
- ☐ Toner Cartridge (Yellow)
- ☐ Toner Cartridge (Cyan)
- ☐ Toner Cartridge (Magenta)
- ☐ Photo Conductor Unit (Black)
- ☐ Photo Conductor Unit (Color)
- ☐ Ferrite Core (2)
- ☐ Additional Documents

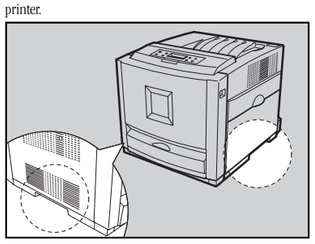
2

Remove the plastic bag.

3

Lift the printer at least two people 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.



ZHBH750E

Important

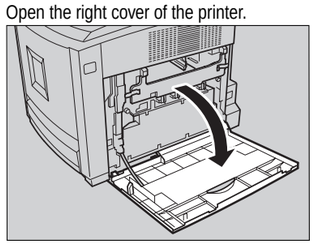
- **When installing the printer to a low position, be careful not to get your hand or clothes caught under the printer.**

3

INSTALLING THE PHOTO CONDUCTOR UNIT

1

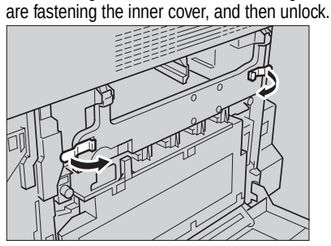
Open the right cover of the printer.



ZHBH291E

2

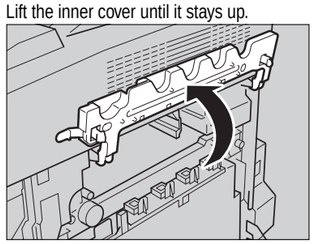
Pull out the green levers on the left and right that are fastening the inner cover, and then unlock.



ZHBH301E

3

Lift the inner cover until it stays up.



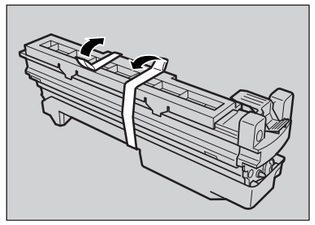
ZHBH311E

4

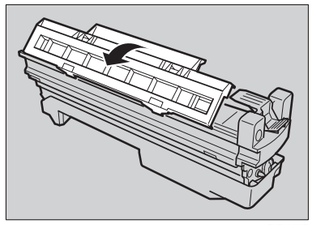
Take out the black photo conductor unit.

5

Peel off the tape, which is around Photo Conductor Unit by peeling it downward, and remove the cover on top of the Unit.



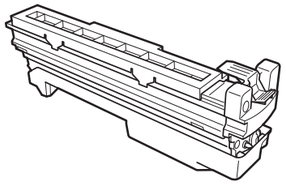
ZHBH681E



ZHBHA680E

Important

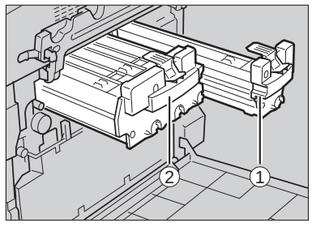
- **Do not remove the cover attached to the bottom of the photo conductor unit yet.**
- **After you take the new Photo Conductor Unit out of the bag, quickly install it.**



ZHBH680E

6

Check the locations for each Photo Conductor Unit.



ZHBH720E

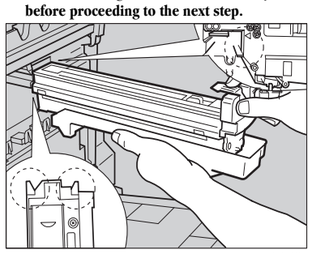
① Photo Conductor Unit (Black)
② Photo Conductor Unit (Color)

7

Match the green arrow at the tip of the photo conductor unit to the rail inside the printer.

Important

- **Make sure the green arrow fits securely on the rail before proceeding to the next step.**



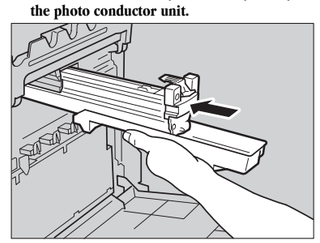
ZHBH370E

8

Push the front of the photo conductor unit slowly, slide the unit on the cover, and then push the unit in until it clicks.

Important

- **If you do not attach the green arrow of the photo conductor unit securely to the rail, you may damage the photo conductor unit.**



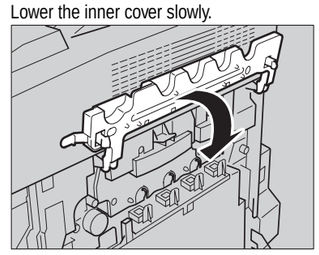
ZHBH390E

9

Repeat steps 4 to 8 to install the color photo conductor unit.

10

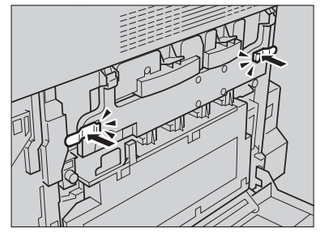
Lower the inner cover slowly.



ZHBH410E

11

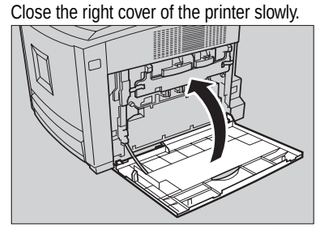
Push the green lever to fasten the inner cover.



ZHBH420E

12

Close the right cover of the printer slowly.

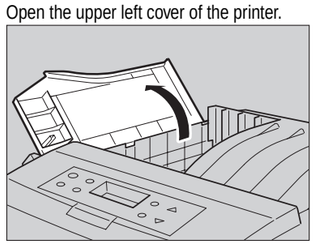


ZHBH430E

4

INSTALLING THE TONER CARTRIDGE

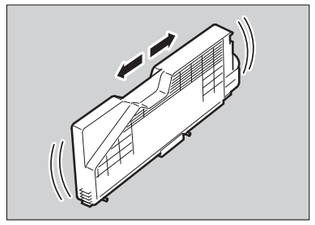
1 Open the upper left cover of the printer.



ZHBH441E

2 Take out the toner cartridge.

3 Hold the toner cartridge horizontally as illustrated, and then shake it back and forth about 10 times.

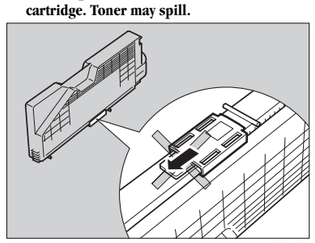


ZHBH460E

In the illustration, black cartridge is used as an example.

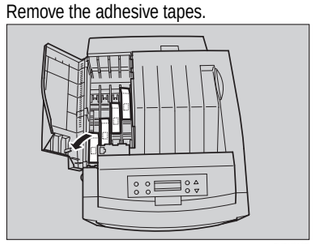
Important

❒ **Do not open the shutter on the bottom of the toner cartridge. Toner may spill.**



ZHBH470E

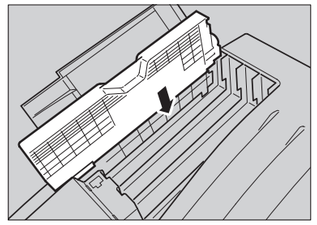
4 Remove the adhesive tapes.



ZHBH910E

5 Check the toner color and location are correct, and then insert the toner cartridge vertically and slowly.

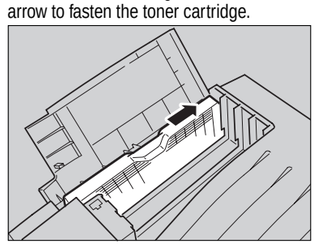
You can check the location for each toner cartridge by reading the labels on the printer.



ZHBH481E

In the illustration, yellow cartridge is used as an example.

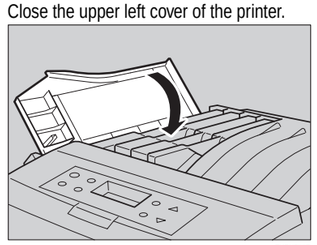
6 Push the toner cartridge in the direction of the arrow to fasten the toner cartridge.



ZHBH491E

7 Repeat steps 2 to 6, to install the other color toner cartridges.

8 Close the upper left cover of the printer.



ZHBH500E

Note

❒ **If the toner cartridge is not set properly, you cannot close the upper left cover of this printer.**

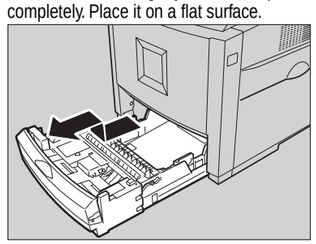
5

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 personal injury.

1 Pull the paper tray out of the printer until it stops. After that, lift it slightly, and then pull it out completely. Place it on a flat surface.

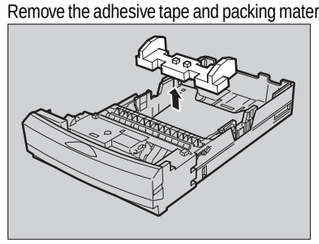


ZHBY010E

Note

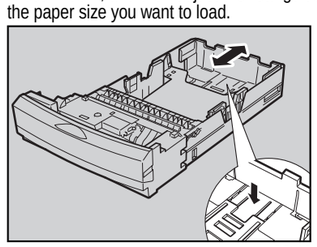
❒ **You cannot pull the Tray 1 out if the Bypass Tray is open.**

2 Remove the adhesive tape and packing material.



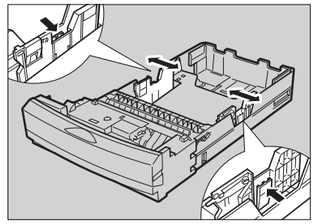
ZHBY920E

3 Press "Push", and then adjust the rear guide to the paper size you want to load.



ZHBY040E

4 Adjust the side guides to the paper size you want to load.



ZHBY060E

5 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.**

❒ **The front and side guides should be set exactly to the paper size to avoid paper misfeeds.**

❒ **Do not load different kinds of paper in the tray.**

6 Slide the paper tray completely into the printer.

6

CONNECTING THE POWER CORD

⚠ Warning

- It is dangerous to handle the plug with wet hands. Doing this may result in receiving an electric shock.

⚠ Caution

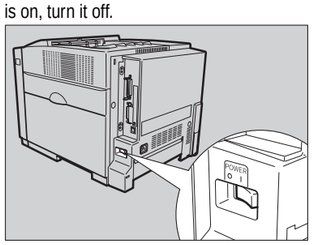
- When you pull the plug out of the socket, grip the plug, not the cord, to avoid damaging the cord and causing a fire or an electric shock.

Important

❒ **Be sure to connect the power plug to the socket or the wall outlet firmly.**

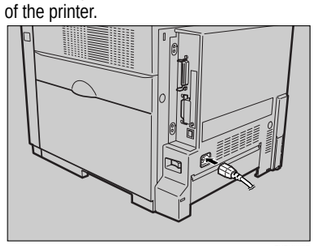
❒ **The printer power must be off when plugging in and out the power cord.**

1 Confirm that the printer's power switch is off. If it is on, turn it off.



ZHBH730E

2 Attach the power cord to the socket on the back of the printer.



ZHBH030E

3 Plug the other end securely into the wall outlet.

7

SELECTING THE PANEL DISPLAY LANGUAGE

Follow the procedure to select a language.

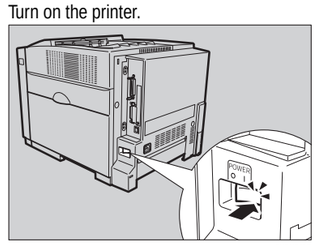
Note

❒ **You can select one of the following languages: English, German, French, Italian, Dutch, Swedish, Norwegian, Danish, Spanish, Finnish, Portuguese, Czech, Polish or Hungarian.**

❒ **The default setting is English.**

❒ **If you want to use the English panel display, it is not necessary for you to take the following procedures.**

1 Turn on the printer.

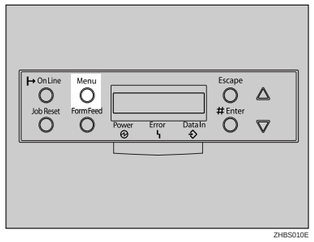


ZHBH740E

After the machine warms up, "Ready" appears on the panel display.

```
Ready
```

2 Press the 【Menu】 key.



ZHBS010E

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 to display the language you want to select.

6 Press the 【Enter #】 key.

"Menu" appears on the panel display.

```
Menu:
 Language
```

7 Press the 【On Line】 key.

"Ready" appears on the panel display.

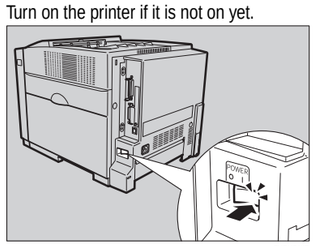
```
Ready
```

Go to sheet 2/2.

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 if it is not on yet.



ZHBH740E

After the machine warms up, "Ready" appears on the panel display.

```
Ready
```

2 Press the【Menu】key.

```
Menu:
 Paper Input
```

3 Press the【▲】or【▼】key to display "List/Test Print".

```
Menu:
List/Test Print
```

4 Press the【Enter #】key.

The following message appears on the panel display.

```
List/Test Print:
 Config.Page
```

5 Confirm that "Config.Page" is on the display, and then press the【Enter #】key.

6 In a short time, the test printing will start.

```
Printing...
```

Important

- **If you cannot complete the test printing correctly, see if an error message appears on the panel display. For more information about error messages, see "Troubleshooting" in the Maintenance Guide.**

7 Press the【On Line】key.

"Ready" appears on the panel display.

```
Ready
```

8 Turn off the printer's power switch.

9 ADJUSTING THE IMAGE DENSITY

To use the printer in its best condition, adjust the image density.

1 Press the【Menu】key.

```
Menu:
 Paper Input
```

"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 "Image Density", and then press the【Enter #】key.

```
Maintenance:
 Image Density
```

The following message appears on the panel display.

```
Image Density:
Prt.Test Sheet
```

4 Press the【Enter #】key.

The following massage appears on the panel display, and then Press the【Enter #】key.

```
Prt.Test Sheet:
Press # to Start
```

```
Printing...
```

5 Compare the colors on the printed image density test sheet with those on the Image Density Adjusting Card.

6 Press the【▲】or【▼】key to select the color you want to adjust, and then press the【Enter #】key.

```
Image Density
 Black
```

7 Press the【▲】or【▼】key to set the image density value, and then press the【Enter #】key.

```
Black
(-10 +10)     0
```

Note

- **You can adjust the image density from -10 to +10. Increasing the value makes the printouts darker and decreasing the value makes the printouts lighter.**
- **Pressing the【▲】or【▼】key makes the value increase or decrease by one.**

To adjust another color, repeat the steps 6 to 7.

8 Print another image density test sheet and check if the colors on the test sheet now match those on the Image Density Adjusting Card. If they still do not match, adjust the image density again.

9 Press the【On Line】key.

"Ready" appears on the panel display.

```
Ready
```

10 CONNECTING THE PRINTER TO A COMPUTER

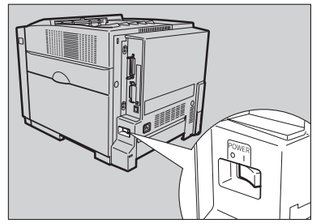
❖ **Connecting the printer to a computer using a network interface cable.**

If your printer is installed with the Network Interface Board, follow the procedures below.

Important

- **The interface cable is not provided with the printer. It is your responsibility to provide the interface cable appropriate for the computer that you are using.**

1 Confirm that the printer's power switch is off. If it is on, turn it off.

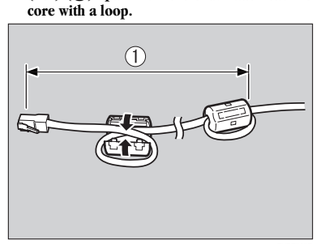


ZHBH730E

2 Loop the network interface cable and attach the ferrite core.

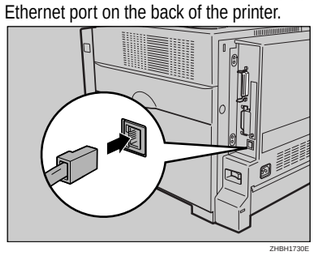
Note

- **Attach two ferrite cores to the network interface cable. One of them must be attached close to the end of the cable (on the end closet to the printer). The other must be attached approximately 45 cm (18") (①) apart from the end. Attach each ferrite core with a loop.**



ZHBP913E

3 Connect the network interface cable to the Ethernet port on the back of the printer.

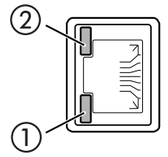


ZHBH1730E

4 Connect the other end of the cable to the network , e.g. hab.

5 Turn on the printer.

6 Confirm the LEDs on the Ethernet port.



ZESX338E

① is lit when 100 BASE-TX is in use and not lit when 10 BASE-T is in use.

② is lit when the printer is securely connected to the network.

7 Go to 11 "CONFIGURING THE PRINTER FOR THE NETWORK".

❖ **Connecting the printer to a computer using a parallel cable.**

Important

- **The parallel cable is not provided with the printer. It is your responsibility to provide the parallel cable appropriate for the computer that you are using.**
- **The printer's parallel connection is a standard bi-directional interface. It requires a standard 36-pin parallel cable compliant with IEEE1284 and the parallel port on the computer.**
- **To avoid electrical interference, use a shielded cable.**

Note

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

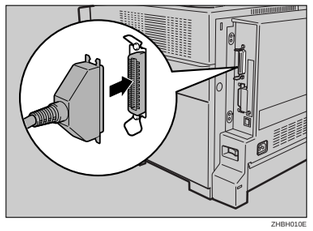
1 Confirm that the printer's power switch is off. If it is on, turn it off.

2 Turn the computer off.

3 Attach the parallel cable to the port of the printer. Secure the cable with the metal fittings as shown in the illustration.

Important

- **Rating voltage of the parallel port for the computer; Max. DC 5V.**



ZHBH010E

4 Attach the other end of the parallel cable to the port of the computer. Secure the cable.

5 Turn on the printer and the computer.

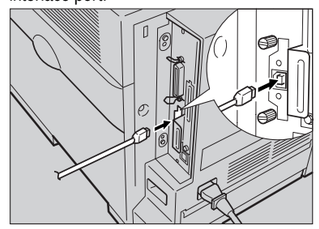
6 Go to 12 "INSTALLING THE PRINTER DRIVER".

❖ **Connecting the printer to a computer using a USB cable.**

Important

- **The interface cable is not provided with the printer. It is your responsibility to provide the interface cable appropriate for the computer that you are using.**

1 Connect the interface cable to the USB2.0 interface port.



ZHBP470E

2 Connect the other end of the interface cable to the USB interface connector of the computer or the USB Hub.

11

CONFIGURING THE PRINTER FOR THE NETWORK

You must configure the printer setting using the control panel when using in a network environment. The following list is the items you can set and their default settings.

DHCP	On
IP Address	011.022.033.044
Subnet Mask	000.000.000.000
Gateway Address	000.000.000.000
Frame Type (NW)	Auto
Active Protocol	TCP/IP
Ethernet	Auto

The procedure below shows how to set the TCP/IP protocol. Make the settings for the other items by taking the same procedure.

1 Press the【**Menu**】key.

"Menu" appears on the panel display.

```
Menu:
 Paper Input
```

2 Press the【▲】or【▼】key to display "Host Interface", and then press the【**Enter #**】key.

```
Menu:
 Host Interface
```

The interface setiing menu appears.

3 Start the protocol for use.

❶ Press the【▲】or【▼】key to display "Network Setup", and then press the【**Enter #**】key.

```
Host Interface:
 Network Setup
```

❷ Press the【▲】or【▼】key to display "Active Protocol", and then press the【**Enter #**】key.

```
Network Setup:
 Active Protocol
```

❸ Press the【▲】or【▼】key to display "TCP/IP", and then press the【**Enter #**】key.

```
Active Protocol:
 TCP/IP
```

❹ Press the【▲】or【▼】key to display "Active", and then press the【**Enter #**】key.

```
TCP/IP:
*Active
```

Note

❒ *** shows the current setting.**

In about two seconds, the display returns to the "Active Protocol" setting screen.

❺ Set the rest of the protocols for use.

❻ When all settings for the protocol are done, press the【**Escape**】key.

The "Network Setup" setting screen appears.

Note

❒ **The default settings for all of the protocols are "Active".**

❒ **It is recomended to set the unused protocols "Not Active".**

4 When you use this machine under DHCP environment, go to step ❽. When you use this machine with a fixed IP address, you must make the setting for the required item after making the setting for DHCP Off. Go to step ❺.

Important

❒ **When DHCP is On, you cannot make the setting for the following menus:**

IP Address
Subnet Mask
Gateway Address

Note

❒ **Consult the network administrator for information about how to make the setting for the network**

5 Make the setting for DHCP Off.

❶ Press【▲】or【▼】to display "DHCP", and then press【**Enter #**】.

```
Network Setup:
 DHCP
```

❷ Press【▲】or【▼】to display "Off", and then press【**Enter #**】.

```
DHCP:
*Off
```

Note

❒ *** shows the current setting.**

In about two seconds, the display returns to the "Network Setup" setting screen.

6 Set the IP address for the printer.

Note

❒ **Confirm the IP address to the network administrator.**

❶ Press the【▲】or【▼】key to display "IP Address", and then press the【**Enter #**】key.

```
Network Setup:
 IP Address
```

The currently selected IP address appears.

Note

❒ **When the【Enter #】key is pressed, the cursor moves to the next field.**

❒ **When the【▲】or【▼】key is kept pressed for a few seconds, the value chages by 10.**

❷ Press the【▲】or【▼】key to set the value for the field.

```
IP Address:
 199.022.033.044
```

❸ Press the【**Enter #**】key.

The cursor moves to the next field.

❹ Repeat ❷ and ❸ to set the value for the rest of the fields.

7 Set "Subnet Mask" and "Gateway Address" by following the same procedure for setting the IP address.

Important

❒ **The subnet mask is the mask value to use a part of the IP address as a network address. Confirm the value to the network administrator.**

❒ **The gateway address is the address of the host or router that acts as a gateway when interacting with work stations in another network. Confirm the value to the network administrator.**

Note

❒ **If you are not sure of the setting addresses, leave them as default.**

8 When all of the settings are done, press the【**On Line**】key.

"Ready" appears on the panel display.

```
Ready
```

9 Print the configuration page to confirm the settings made.

See ❾ "PRINTING THE TEST PAGE" for printing the configuration page.

12

INSTALLING THE PRINTER DRIVER

You can install the printer drivers and software easily from the CD-ROM labeled "Printer Drivers and Utilities".

The supported operating systems are Windows 95/98/Me, Windows 2000, Windows XP and Windows NT 4.0.

Click **[Quick Install]** in the window of the CD-ROM to install PCL5c and RPCS printer drivers. To install the PostScript 3 printer driver, click the **[PostScript 3 printer driver]** button. For more information about the PostScript 3 printer driver, see the Administrator Reference or the Client Reference on the CD-ROM labeled "Operating Instructions" depending on the environment you use in.

When the TCP/IP protocol is used, SmartNet-Monitor for Client will be installed as well.

When using with TCP/IP protocol, confirm the followings:

❒ The printer is connected to a network with the network interface cable.

❒ The TCP/IP protocol is set.

❒ The IP address is set for the printer and the computer.

1 Insert the CD-ROM labeled "Printer Drivers and Utilities" into the CD-ROM drive.

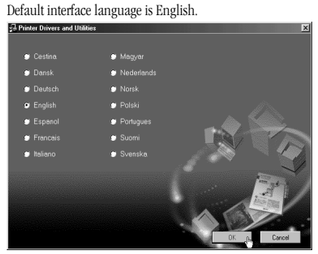
Auto Run will start the installer.

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)

Default interface language is English.

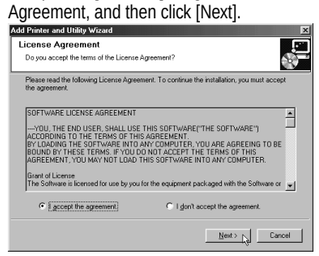


3 Select **[Quick Install]**.

The software license agreement appears in the [License Agreement] dialog box.

This is an example when English is selected in step ❷.

4 After reading through all of the contents, click [I accept the agreement] to agree with the License Agreement, and then click [Next].



5 Select the printer model you want to install in the "Select Printer" dialog box.

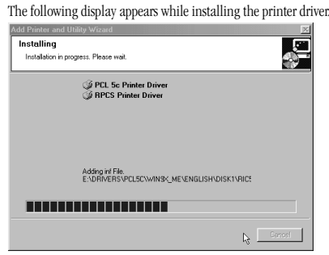
Note

❒ **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].**

6 Click [Install].

The following display appears while installing the printer driver.



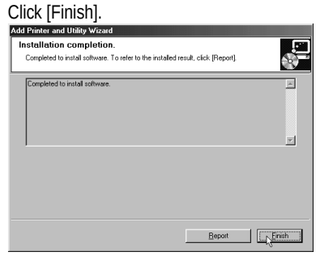
When finished, the [Installation Completion] dialog box appears.

Note

❒ **Under Windows 2000, the [Digital Signature Not Found] dialog box may appear when installing the printer driver. In this case, click [Yes] to continue the installation.**

❒ **Under Windows XP, the [Hardware Installation] dialog box may appear. In this case, click [Continue Anyway] to continue the installation.**

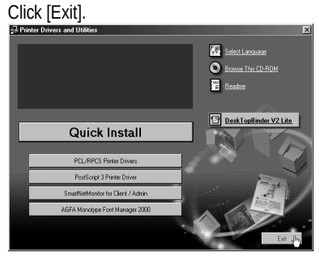
7 Click [Finish].



Note

❒ **A message directing to restart the computer may appear. In this case, restart your computer to complete the installation. If no a message appears, go to step ❽.**

8 Click [Exit].



The installation is now complete.

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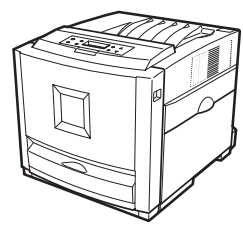
Aficio™ CL3000/CL3000DN

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

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

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 “Safety Information” in this manual before using this machine. It contains important information related to USER SAFETY and PREVENTING EQUIPMENT PROBLEMS.

Power Source

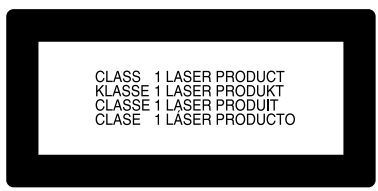
220-240V, 50/60 Hz, 4A or more

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

Operator Safety:

This printer is considered a class 1 laser device, safe for office/ EDP use. The printer contains 7 milliwat, 645 - 660 nanometer wavelength, AlGaInP Laser Diode. Direct (or indirect reflected) eye contact with the laser beam might cause serious eye damage. Safety precautions and interlock mechanisms have been designed to prevent any possible laser beam exposure to the operator.

The following label is attached on the back 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 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 print 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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Trademarks

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

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

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.

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 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 our authorized dealer or at appropriate collection sites.***
- ***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 place the IC2 lithium battery near or into fire, or it will explode and cause a burn.***
- ***The User Account Enhance Unit installed on the controller board has a IC2 lithium battery which can explode if replaced incorrectly. Replace the User Account Enhance Unit only with the indicated one.***

⚠ *CAUTION:*

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

⚠ *CAUTION:*

- *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.*
- *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.*
- *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.*
- *When moving the Paper Feed Unit, hold the handles that are located on the top of the unit, and then lift it slowly. Lifting it 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.*
- *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.*

ENERGY STAR Program

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

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

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

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

❖ Low-power Mode (Energy Saver mode)

This printer automatically lowers its power consumption 60 minutes after the last operation has been completed. To exit Low-power (Energy Saver) mode, press any key on the control panel. For more information about how to configure Energy Saver mode, see "*Making Printer Settings with Control Panel*" in the Administrator Reference on the CD-ROM labeled "Operating Instructions".

❖ Specifications

Energy Saver mode	Power Consumption	15 W or less
	Default Time	60 minutes
	Recovery Time	3 seconds or less

How to Read This Manual

Symbols

In this manual, the following symbols are used:

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

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

* The statements above are notes for your safety.

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

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

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.

Features of this Printer

❖ **High Image Quality**

True 1200 x 1200 dpi resolution provides high resolution. You can print various business documents in fine detail from presentations and newsletters containing illustrations or graphics to catalogues, ads, and pictures. In addition, the built-in automatic color registration function assures high image quality at all times.

❖ **High Performance**

By using an intermediate transfer belt with the single path method, we've achieved short paper path architecture equivalent to the single drum method. This printer is as compact as a monochrome printer but offers high performance output of 20 pages per minute (ppm) in black and white and 16 ppm in full color. The printer performs duplex printing at the same speed as simplex printing with the Interleave function installed. Also, by using induction-heating technology in the fusing unit, a short warm-up time after turning the printer on has been achieved and also the recovery time from the Energy Saver mode has been reduced for fast printout when you want to print immediately. The printer also comes with our advanced-technology high-speed controller that allows fast printing and time saving on the total printing time for large-volume data.

❖ **Ease of Use**

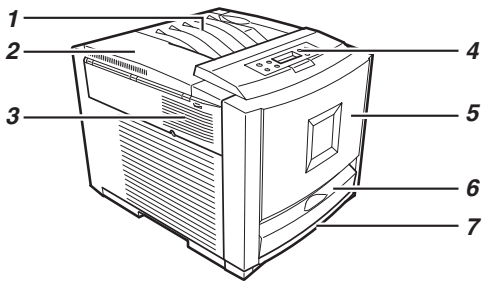
With a compact body like our other A4 20-ppm monochrome printer, it takes up minimum space. Also, the optional duplex unit is installed on the front cover so you don't need extra space or cover opening space. Replacing consumables is easy so you don't need to spend time on maintenance.

By using induction-heating technology in the fusing unit, we've reduced the time to reach the fusing temperature. And, the printer can reduce power consumption to the lowest level possible when idle.

Many different interface options such as a USB 2.0 interface or wireless LAN can be installed in the printer according to your requirements.

Guide to the Printer

Exterior: Front View



ZHBH020E

1. Standard Tray

Output is stacked here with the print side down.

2. Upper Left Cover

Open this cover when replacing toner cartridges.

3. 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.

4. Control Panel

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

5. Front Cover

Open this cover when replacing the fusing unit or transfer roller, installing the Duplex Unit, or removing misfed paper.

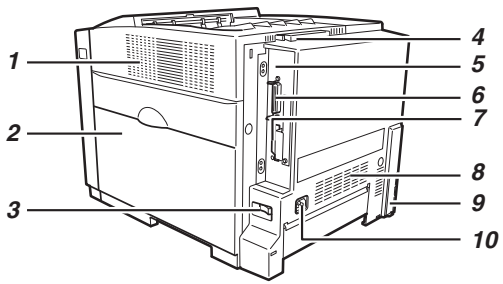
6. Bypass Tray

Use to print onto thick paper, OHP transparencies, custom size paper, and envelopes as well as plain paper. When printing on custom size paper , printer driver settings are required.

7. Tray 1

Up to 530 sheets of plain paper can be loaded.

Basic Model Printer Exterior: Rear View



ZHBH031E

1. 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.

2. Right Cover

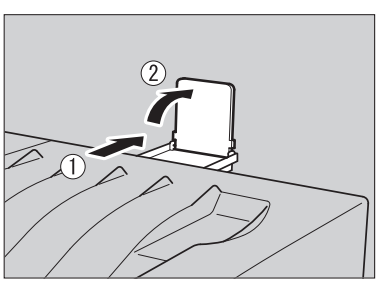
Open this cover when replacing photo conductor units, the transfer belt or waste toner bottle.

3. Power Switch

Use this switch to turn the power on and off.

4. Standard Tray Extension

Pull out this extension when printing on paper of its length is longer than that of A4 or 8 $^1/_2$″ × 11″.



ZHBH700E

5. Controller Board

Slide this out when installing options such as Memory Unit, Printer Hard Disk, 1394 Interface Unit, 802.11b Interface Unit, USB2.0 Interface Unit or User Account Enhance Unit.

6. Parallel Port

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

7. USB Port

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

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

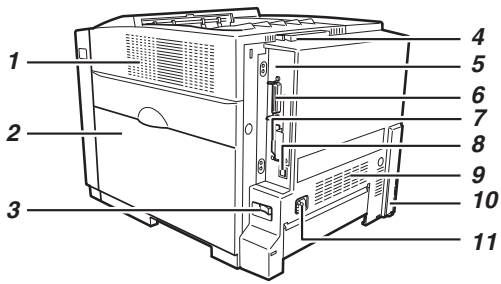
9. Optional Paper Feed Unit Connector

Use the Paper Feed Unit connector to connect the printer to the Paper Feed Unit.

10. Power Port

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

Network Standard Model Exterior: Rear View



ZHBH030E

1. 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.

2. Right Cover

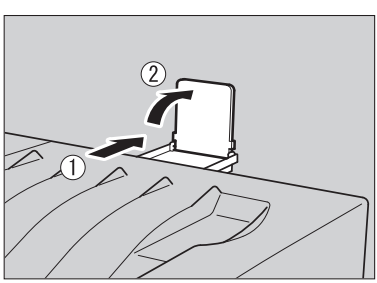
Open this cover when replacing photo conductor units, the transfer belt or waste toner bottle.

3. Power Switch

Use this switch to turn the power on and off.

4. Standard Tray Extension

Pull out this extension when printing on paper of its length is longer than that of A4 or 8 $^1/_2$" × 11".



ZHBH700E

5. Controller Board

Slide this out when installing options such as Memory Unit, Printer Hard Disk, 1394 Interface Unit, 802.11b Interface Unit, USB2.0 Interface Unit or User Account Enhance Unit.

6. Parallel Port

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

7. USB Port

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

8. Ethernet Port

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

9. 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

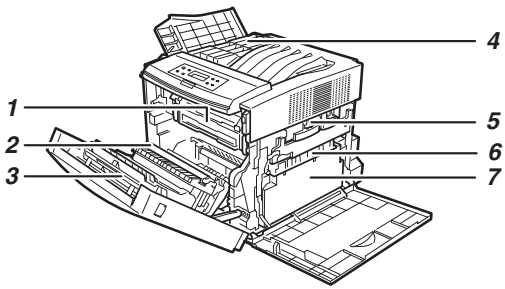
10. Optional Paper Feed Unit Connector

Use the Paper Feed Unit connector to connect the printer to the Paper Feed Unit.

11. Power Port

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

Inside



ZHBH040E

1. Fusing Unit

Fuses the image on paper.

When "Replace Fusing Unit" appears on the panel display, replace this unit.

2. Transfer Roller

When "Replace Fusing Unit" appears on the panel display, replace this roller.

3. Duplex Unit (optional for Basic Model Printer)

Use to print on both sides of paper.

4. Toner Cartridges

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

5. Photo Conductor Unit Color/Black

When "Replace Color PCU" or "Replace Black PCU" appears on the panel display, replace the indicated Photo Conductor Unit.

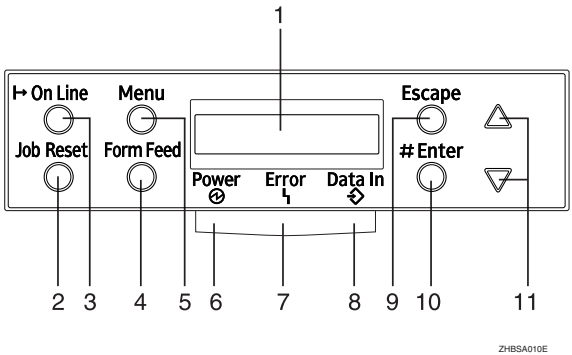
6. Transfer Belt

When "Replace Transfer Belt" appears on the panel display, replace this unit.

7. Waste Toner Bottle

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

Control Panel



1. Panel Display

Shows the current status of the printer and error messages.

2. 【Job Reset】 Key

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

3. 【On Line】 Key

Indicates whether the printer is online or offline.

Press this key to switch between online and offline.

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

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

Press this key to return to the ready condition.

4. 【Form Feed】 Key

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

You can use this to force the printer to print the data received in the online status when the paper size or type does not match with the actual set size or type.

5. 【Menu】 Key

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

6. Power Indicator

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

7. Error Indicator

Lights when a printer error occurs. Goes off when the printer goes in Energy Saver mode.

8. Data In Indicator

Blinks while the printer is receiving data from a computer. Stays on when there is data to be printed.

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.

11. 【▲】【▼】 Keys

Use these keys to increase or decrease values on the panel display when making settings. Keep pressing the key to quicken scrolling, and increase or decrease values on the panel display in units of 10.

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)	Bypass Tray	Tray 1	Paper Feed Unit (Tray 2/3)
A4		210 × 297	☆	◎	◎
B5 JIS		182 × 257	☆	◎	◎
A5		148 × 210	☆	×	×
A6		105 × 148	☆	×	×
Legal (LG, $8^1/_2 \times 14$ inches)		216 × 356	☆	◎	◎
Letter (LT, $8^1/_2 \times 11$ inches)		216 × 279	☆	◎	◎
$5^1/_2 \times 8^1/_2$ inches		140 × 216	☆	×	×
Executive (Exec., $7^1/_4 \times 10^1/_2$ inches)		184 × 276	☆	×	×
Folio ($8^1/_4 \times 13$ inches)		210 × 330	☆	×	×
Foolscap (F4, $8^1/_2 \times 13$ inches)		216 × 330	☆	×	×
F/GL (8 × 13 inches)		203 × 330	☆	×	×
Com#10 Env ($4\ ^1/_8 \times 9\ ^1/_2$ inches)		104.8 × 241.3	☆	×	×

	Feed direction	Size (mm)	Bypass Tray	Tray 1	Paper Feed Unit (Tray 2/3)
C5 Env (6.38 × 9.02 inches)	▯	162 × 229	☆	×	×
C6 Env (4.49 × 6.38 inches)	▯	114 × 162	☆	×	×
DL Env (4.33 × 8.66 inches)	▯	110 × 220	☆	×	×
Monarch Env ($3\,^7/_8 \times 7\,^1/_2$ inches)	▯	98.4 × 190.5	☆	×	×
Custom Size	-	-	★	×	×
16K ($7.68 \times 10^1/_2$ inches)	▯	195 × 267	☆	×	×

- ◎
  Means that the size is supported and the printer selects the paper size automatically.
- ☆
  Means that the size is supported. See p.24 “Loading Paper in the Bypass Tray”.
- ★
  Means that the size is supported but the paper size should be set with the control panel as a custom size. The supported size is approximately 90 - 216 mm in width and 148 - 356 mm in length.
- ×
  Means that the size is not supported.

❖ Input Paper Sizes (Inch version)

	Feed direction	Size (inch)	Bypass Tray	Tray 1	Paper Feed Unit (Tray 2/3)
Legal (LG)	▯	$8^1/_2 \times 14$	☆	◎	◎
Letter (LT)	▯	$8^1/_2 \times 11$	☆	◎	◎
$5\,^1/_2 \times 8\,^1/_2$ inches	▯	$5^1/_2 \times 8^1/_2$	☆	×	×
Executive (Exec.)	▯	$7^1/_4 \times 10^1/_2$	☆	×	×
A4	▯	8.26 × 5.83	☆	◎	◎
B5 JIS	▯	7.17 × 10.12	☆	◎	◎
A5	▯	5.83 × 8.26	☆	×	×
A6	▯	4.13 × 5.63	☆	×	×

	Feed direction	Size (inch)	Bypass Tray	Tray 1	Paper Feed Unit (Tray 2/3)
Folio	▯	$8^1/_4 \times 13$	☆	×	×
Foolscap F4	▯	$8^1/_2 \times 13$	☆	×	×
F/GL	▯	8×13	☆	×	×
Com#10 Env	▯	$4\ ^1/_8 \times 9\ ^1/_2$	☆	×	×
C5 Env	▯	6.38×9.02	☆	×	×
C6 Env	▯	4.49×6.38	☆	×	×
DL Env	▯	4.33×8.66	☆	×	×
Monarch Env	▯	$3\ ^7/_8 \times 7\ ^1/_2$	☆	×	×
Custom Size	-	-	★	×	×
16K	▯	$7.68 \times 10^1/_2$	☆	×	×

- ◎
  Means that the size is supported and the printer selects the paper size automatically.
- ☆
  Means that the size is supported. See p.24 “Loading Paper in the Bypass Tray”
- ★
  Means that the size is supported but the paper size should be set with the control panel as a custom size. The supported size is approximately 3.5 - 8.5 inches in width and 5.8 - 14 inches in length.
- ×
  Means that the size is not supported.

❖ Paper weight and number of sheets to be set

	Supported paper weight	Maximum number of sheets (plain paper) *1
Tray 1	60 - 105 g/m^2 (16 - 28 lb. Bond)	530 (80 g/m^2, 20 lb. Bond)
Bypass Tray	60 - 165 g/m^2 (16 - 90 lb. Index)	100 (80 g/m^2, 20 lb. Bond)
PAPER FEED UNIT Type 3000	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 paper that is meant for an ink-jet printer, or it may stick to the fusing unit and cause a paper misfeed.

❒ Set the paper as described below
- Tray 1: Print side facing up
- Paper Feed Unit: Print side facing up
- Bypass Tray: Print side facing down

❒ 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

- Plain paper refers to paper up to 105 g/m^2 (28 lb. Bond). If you print on paper heavier than 105 g/m^2 (28 lb. Bond), use the Bypass Tray.
- Any input tray can be used.
- Tray 1 can hold up to 530 sheets.
  PAPER FEED UNIT Type 3000 can hold up to 530 sheets.
  (Up to two units can be installed to the printer.)
  The Bypass Tray can hold up to 100 sheets.
  Confirm that the top of the stack is not higher than the limit mark inside the tray.
- The Bypass Tray supports custom size paper approximately 90 to 216 mm (3.5 to 8.5 inches) in width, and approximately 148 to 356 mm (5.8 to 14 inches) in length.

- When printing on the reverse side of plain paper that has been already printed on, load it on the Bypass Tray with print side down, and then select **[Plain:Dup. Back]** with the control panel or the printer driver. Only the Bypass Tray supports this function.

❖ Thick Paper

- Thick paper refers to paper between 106 g/m^2 (28.2 lb. Bond) to 165 g/m^2 (90 lb. Index).
- Use the Bypass Tray and select the thick paper mode with the control panel or printer driver. Tray 1 or Paper Feed Unit cannot be used.
- Confirm that the top of the stack is not higher than the limit mark inside the tray.
- When printing on the reverse side of thick paper that has been already printed on, load it on the Bypass Tray with print side down, and then select **[Thick:Dup. Back]** with the control panel or the printer driver. Only the Bypass Tray supports this function.

Note

❒ The number of sheets to be set may vary depending on the paper thickness and paper type.

❒ There may be noise when printing on thick paper. This is not a malfunction.

❖ Thin Paper

- Thin paper refers to paper between 60g/m^2 (16 lb.Bond) to 70g/m^2 (19 lb.Bond).
- Set the printer to Thin Paper mode using the control panel.

Reference

See “Specifying a paper type” or p.27 “Specifying a paper type for the Bypass Tray”.

❖ Glossy Paper

- Glossy paper refers to paper 130 g/m2 (100 lb Text).
- Use the Bypass Tray and select glossy paper mode with the printer driver. Tray 1 or Paper Feed Unit cannot be used.

❖ OHP transparencies

When printing on an OHP transparency that has a print side, be sure to print on the print side. Otherwise, it may stick to the fusing unit and cause a paper misfeed.

Print quality cannot be guaranteed if OHP transparencies other than the ones recommended is used. For more information about recommended OHP transparency, contact your sales or service representative.

- Use the Bypass Tray. Tray 1 or Paper Feed Unit cannot be used.
- The Bypass Tray can hold up to 50 sheets.

- Separate stuck OHP transparencies every time before printing.
- If OHP transparencies stick together when they feed, set them on the tray one by one or select "Slip sheet" in the printer driver. For more information about using "Slip sheet", see the printer driver's Help.
- Confirm that the top of the stack is not higher than the limit mark inside the tray.
- When printing on OHP transparencies, select the Transparency mode with the control panel or the printer driver.
- Remove OHP transparencies from the tray after use to prevent them from sticking to each other.

❖ Envelopes

- Use the Bypass Tray. Tray 1 and the Paper Feed Unit cannot be used.
- The Bypass Tray can hold up to 10 envelopes.
- Load envelopes in the Bypass Tray with the print side down.
- Load only one size and type of envelope at a time.
- Do not forcibly push envelopes when loading.
- Confirm that the top of the stack is not higher than the limit mark inside the tray.
- Use flat envelopes with no curl. If they have a curl, flatten them.
- Use completely flat envelopes that contain no air inside.
- Do not print on both sides of envelopes.
- Do not use the following envelopes:
  Envelopes with multiple flaps
  Envelopes with a peel-off adhesive strip
  Envelopes with windows or clasps
  Envelopes made of paper that is not supported by this printer (See p.20 “Paper not supported by this printer”)
- We recommend setting the margins to at least 15 mm (0.6 inch) for all four directions.
- Envelopes may wrinkle or print quality may be poor depending on the characteristics of the envelope such as weight and stiffness.
- See p.15 “Paper Sizes” for the supported sizes of envelopes.

❖ Paper not supported by this printer

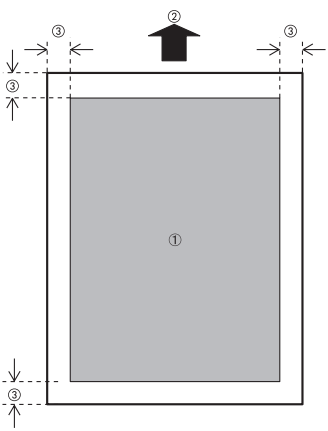
Avoid using the following paper as they are not supported by this printer.

- 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
- 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.



① : Print area

② : Feed direction

③ : Approx. 5 mm (0.2 inch)

Note

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

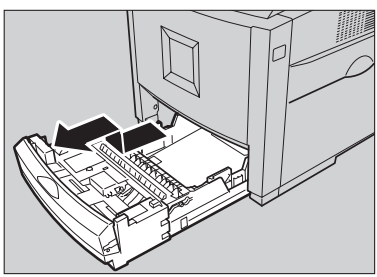
Loading Paper

⚠ ***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.*

Loading Paper in Tray 1/Optional Paper Feed Unit

1 **Pull the paper tray out of the printer until it stops. After that, lift it slightly, and then pull it out completely. Place it on a flat surface.**

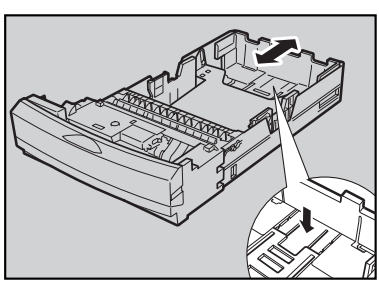


ZHBY010E

Note

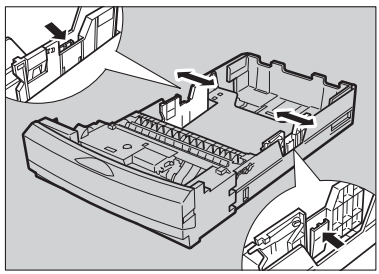
❒ You can not pull Tray 1 out if the Bypass Tray is open.

2 **Press "Push", and then adjust the rear guide to the paper size you want to load.**



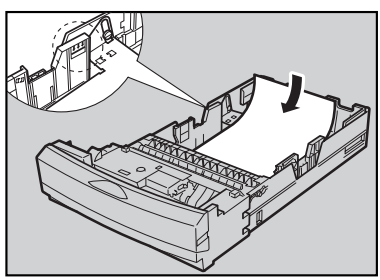
ZHBY040E

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



ZHBY060E

4 **Load paper into the paper tray with the print side up.**



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Important

❒ Make sure that the top of the stack is not higher than the limit mark inside the tray.

❒ The side guides should be set exactly to the paper size to avoid paper misfeeds.

❒ Do not load different kinds of paper in the tray.

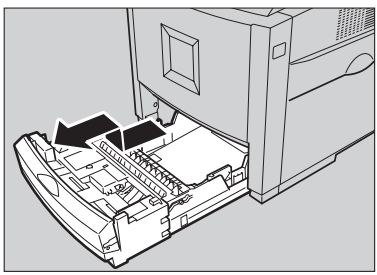
5 **Slide the paper tray completely into the printer.**

Important

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

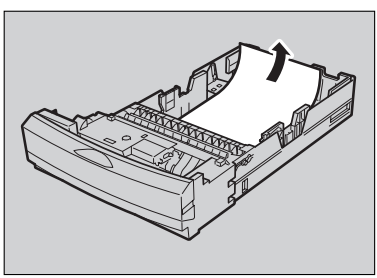
Changing paper size of the paper tray

1 **Pull the paper tray out of the printer until it stops. After that, lift it slightly, and then pull it out completely. Place it on a flat surface**



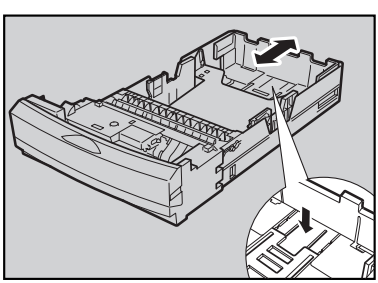
ZHBY010E

2 **Remove the paper.**



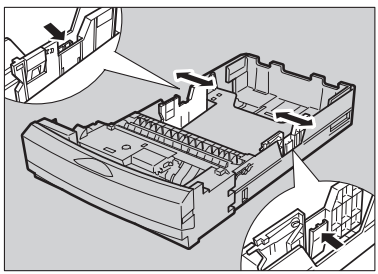
ZHBY030E

3 **Press "Push", and then adjust the rear guide to the paper size you are using.**



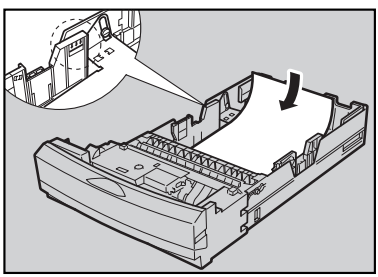
ZHBY040E

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



ZHBY060E

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



ZHBY020E

Important

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

6 **Slide the paper tray completely into the printer.**

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:

- Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Preprinted, Prepunched, Bond Paper, Cardstock

Note

❒ When selecting "Plain Paper", select either "Thin" or "Normal" for "PlainPaper Type" in the "Maintenance" menu.

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
```

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

```
Paper Input:
 Paper Type
```

4 **Press the [▲] or [▼] key to display "Tray 1", and then press the [Enter #] key.**

```
Paper Type:
 Tray 1
```

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

```
Tray 1:
 Recycled Paper
```

In about two seconds, “Menu” appears on the panel display.

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

"Ready" appears on the panel display.

Loading Paper in the Bypass Tray

In addition to plain paper, you can load thick paper, envelopes, glossy paper and OHP transparencies onto the Bypass Tray.

Note

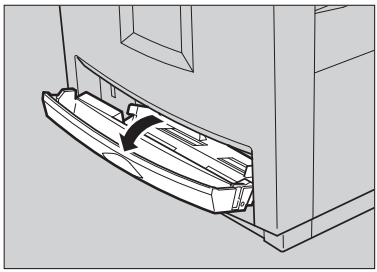
❒ Paper sizes supported by the Bypass Tray can be 90 - 216 mm (3.5 - 8.5 inches) in width, and 148 - 356 mm (5.8 - 14 inches) in length.

❒ The paper size selected with the printer driver overrides the one selected with the control panel. You do not have to make settings with the control panel if you have already made them with the printer driver. However, when using a printer driver other than the RPCS printer driver, you must make the settings using the control panel. For more information about the printer driver, see the printer driver's Help. Also, see p.27 “Specifying a paper type for the Bypass Tray”.

❒ If you load thick paper, or plain or thick paper that has been already printed on one side, make the settings for the paper type with the control panel or the printer driver. See p.26 “Specifying a custom paper size for the Bypass Tray”.

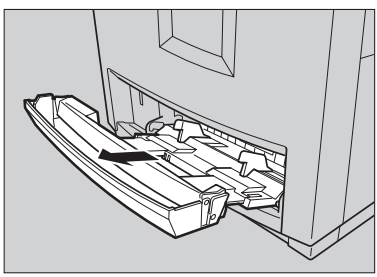
❒ The number of pages that can be loaded in the Bypass Tray differs depending on the paper type.

1 **Open the Bypass Tray.**



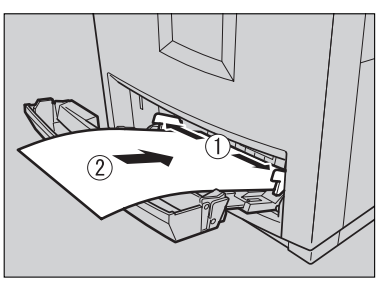
ZHBY070E

2 **Extend the Bypass Tray.**



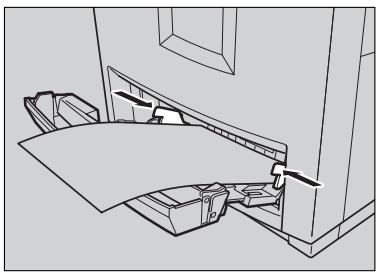
ZHBY080E

3 **Slide the side guides outward①, and then load paper until it stops with the print side down ②.**



ZHBY090E

4 **Adjust the side guides to the paper width.**



ZHBY100E

Important

- ❒ Confirm that the top of the stack is not higher than the limit mark inside the tray.
- ❒ Shuffle the paper before loading the stack onto the tray so multiple sheets are not fed in at the same time.

5 **Set the paper size using the control panel as follows:**

❶ **Press the 【Menu】 key.**

"Menu" appears on the panel display.

❷ **Press the 【▲】 or 【▼】 key to display "Paper Input", and then press the 【Enter #】 key.**

```
Menu:
  Paper Input
```

❸ **Confirm that "Bypass Size" is displayed, and then press the 【Enter #】 key.**

```
Paper Input:
  Bypass Size
```

❹ **Press the [▲] or [▼] key to display the size and direction of the paper in the Bypass Tray.**

```
Bypass Size:
 8 1/2 × 13
```

In about two seconds, “Menu” appears on the panel display.

❺ **Press the [On Line] key.**

"Ready" appears on the panel display.

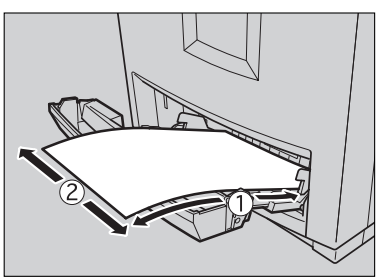
Specifying a custom paper size for the Bypass Tray

Specify the paper size with the control panel when you load custom size paper.

Note

❒ The printer cannot print from applications that do not support custom paper size.

❒ Set the vertical value for ①, and set the horizontal value for ②.



ZHBY110E

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
```

3 **Confirm that "Bypass Size" is displayed, and then press the [Enter #] key.**

```
Paper Input:
 Bypass Size
```

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

```
Bypass Size:
 Custom Size
```

5 **Press the [▲] or [▼] key to set the vertical value, and then press the [Enter #] key.**

```
Custom Size:
 Vert.    150mm
```

The unit on the panel display can be changed to inches with the control panel.

6 **Press the [▲] or [▼] key to set the horizontal value, and then press the [Enter #] key.**

```
Custom Size:
 Horiz.   200mm
```

In about two seconds, "Menu" appears on the display panel.

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

"Ready" appears on the panel display.

Specifying a paper type for the Bypass Tray

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

You can select from the following paper types:

- Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Preprinted, Prepunched, Labels (adhesive label paper), Bond Paper, Cardstock, Transparency (OHP transparency), Thick Paper, Plain:Dup.Back (reverse side of plain paper), Thick:Dup.Back (reverse side of thick paper), Glossy Paper

Note

❒ When selecting "Plain Paper", select either "Thin" or "Normal" for "PlainPaper Type" in the "Maintenance" menu.

Important

❒ You must specify the paper type when using thick paper, adhesive label paper, OHP transparencies, or when printing on plain or thick paper that has already been printed on one side.

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
```

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

```
Paper Input:
 Paper Type
```

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

```
Paper Type:
 Bypass Tray
```

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

```
Bypass Tray:
 Thick Paper
```

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

"Ready" appears on the panel display.

3. Replacing Consumables and Maintenance Kit

Toner Cartridge

⚠ ***WARNING:***

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

⚠ ***CAUTION:***

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

Note

❒ 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
 XXX/XXX
```

or

```
Toner is Almost
Empty:XXX
```

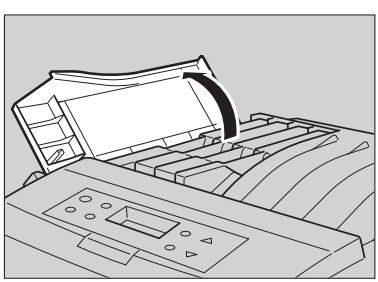
Note

❒ 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.

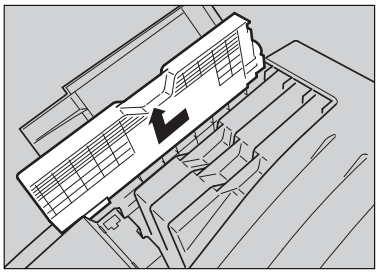
❒ If black toner runs out, printing is not possible until the black toner cartridge is replaced.

1 Open the upper left cover of the printer.



ZHBH440E

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



ZHBH900E

You can remove all four cartridges in the same way.

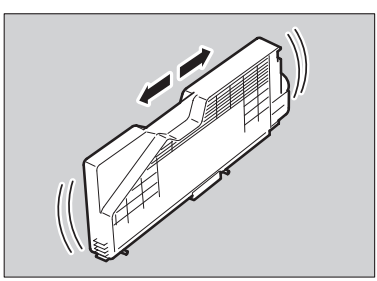
In the illustration, yellow cartridge is used as an example.

Important

❒ Do not shake the removed toner cartridge. The remaining toner may spill.

3 Take out a new toner cartridge from the package.

4 Shake the toner cartridge back and forth about 10 times.

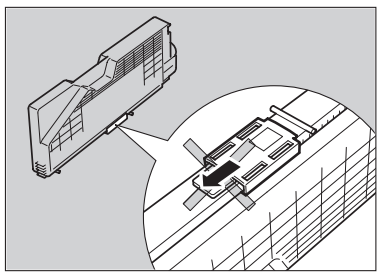


ZHBH460E

In the illustration, black cartridge is used as an example.

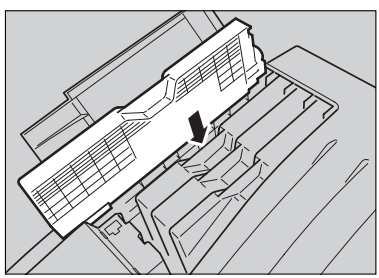
Important

❒ Do not open the shutter at the bottom of the toner cartridge. The toner may spill.



ZHBH470E

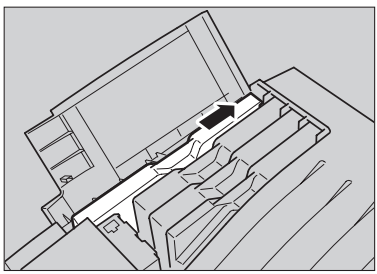
5 Check that the toner color and location are correct, and then insert the toner cartridge vertically and slowly.



ZHBH480E

6 **Insert the toner cartridge in the direction of the arrow.**

You can install all four cartridges in the same way.

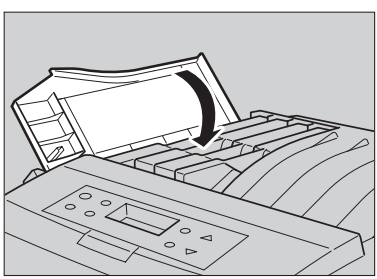


ZHBH490E

Important

❒ Do not repeatedly install and remove the toner cartridges. This could result in a toner leak.

7 **Close the upper left cover of the printer.**



ZHBH500E

Note

❒ If the toner cartridge is not installed properly, you cannot close the upper left cover of the printer.

Waste Toner Bottle Type 125

⚠ ***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:***

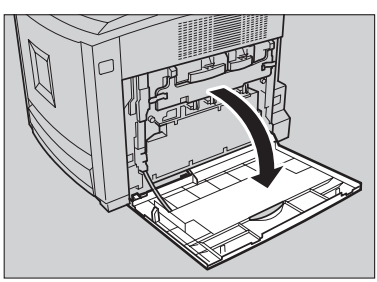
- *Keep toner (used or unused) and the toner cartridge out of reach of children.*
- *Do not put an object on the right cover when it is open.*

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

```
Replace
Waste Toner
```

1 **Turn off the power.**

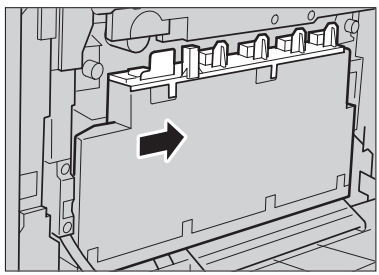
2 **Open the right cover.**



ZHBH290E

3 **Take out a new waste toner bottle from the bag.**

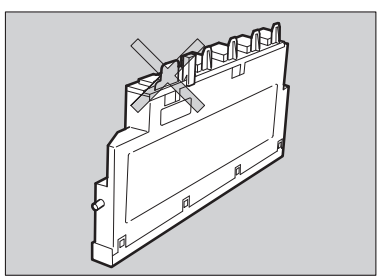
4 **Unlock the waste toner bottle.**



ZHBH630E

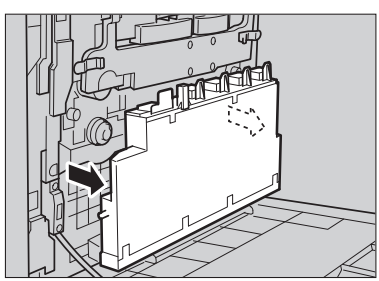
Important

❒ Do not lock the waste toner bottle that has been removed. Toner may spill.



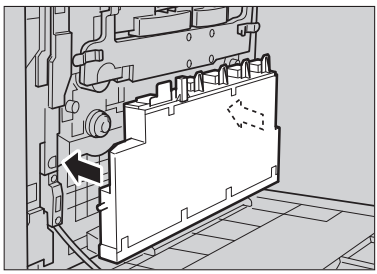
ZHBH640E

5 **Remove the used waste toner bottle slowly.**



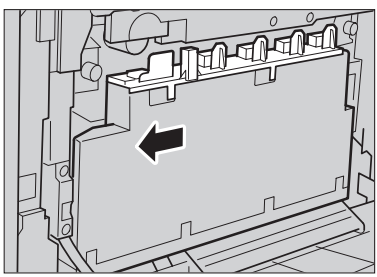
ZHBH650E

6 **Place the new waste toner bottle in the position as shown in the illustration.**



ZHBH660E

7 **Lock the waste toner bottle.**

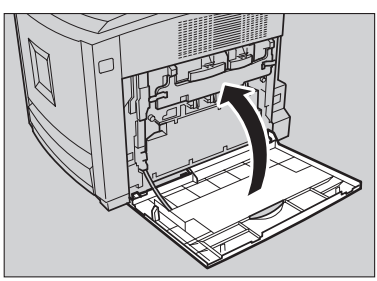


ZHBH670E

Important

❒ Be sure to lock the waste toner bottle to prevent toner from leaking inside the printer.

8 **Close the right cover slowly.**



ZHBH430E

9 **Turn on the power.**

Photo Conductor Unit Type 125 Black/Color

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

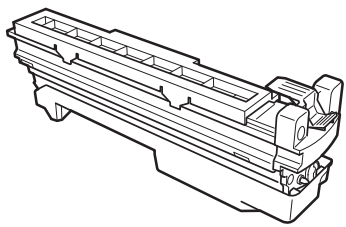
```
Replace
Black PCU
```

or

```
Replace
Color PCU
```

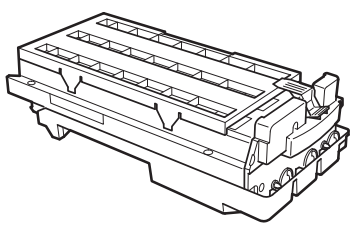
Check the contents of the box for the following items:

❖ **Photo Conductor Unit Type 125 Black**



ZHBH680E

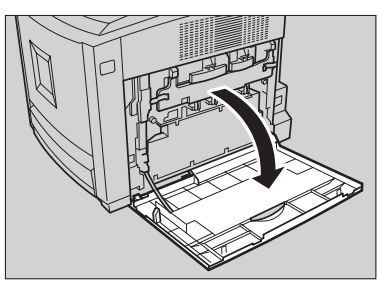
❖ **Photo Conductor Unit Type 125 Color**



ZHBH690E

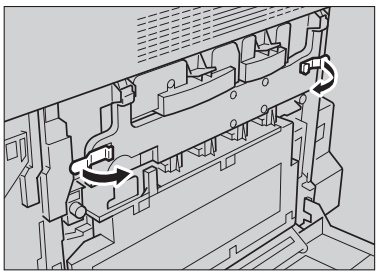
1 **Turn off the power.**

2 **Open the right cover.**



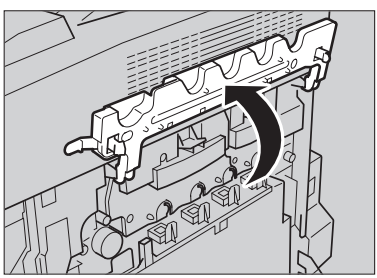
ZHBH290E

3 **Pull out the green levers on the left and right that are fastening the inner cover to unlock the levers.**



ZHBH300E

4 **Lift the inner cover until it stays up.**

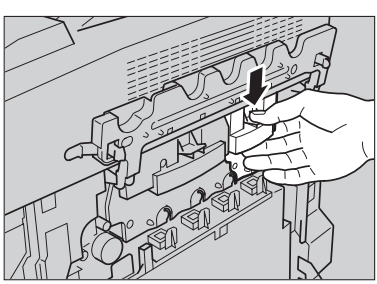


ZHBH310E

5 **Remove the photo conductor unit.**

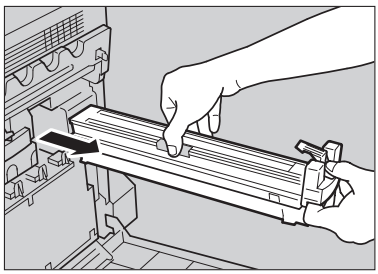
Photo Conductor Unit Type 125 Black

❶ **Pinch the green lever to unlock the unit.**



ZHBH320E

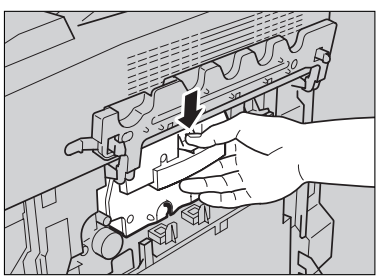
❷ **Pull out the photo conductor unit slowly.**



ZHBH330E

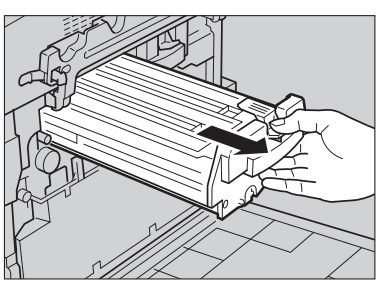
Photo Conductor Unit Type 125 Color

❶ **Pinch the green lever to unlock the unit.**



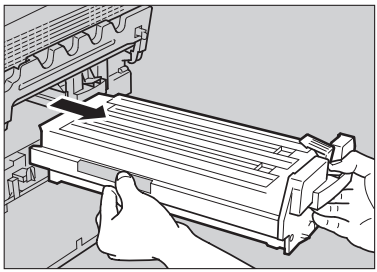
ZHBH340E

❷ **Pull out the photo conductor unit slowly until it stops.**



ZHBH350E

❸ **Pinch the green part to unlock.**



ZHBHa910E

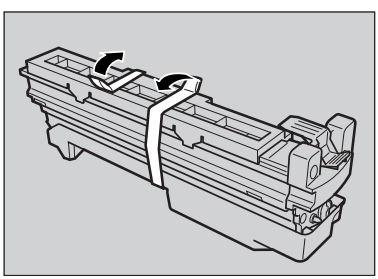
❹ **Pull out the photo conductor unit slowly.**

Important

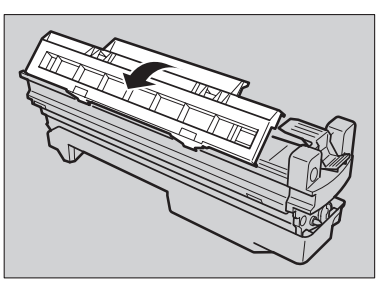
❒ Be sure to hold the unit with both hands, and then pull it out slowly.

6 **Take out the new photo conductor unit.**

7 **Peel off the tape, which is around Photo Conductor Unit by peeling it downward, and remove the cover on top of the Unit.**



ZHBH681E



ZHBHA680E

Important

❒ Do not remove the cover attached to the bottom of the photo conductor unit yet.

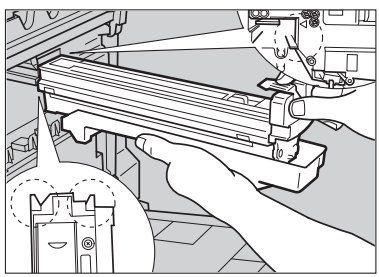
❒ After you take the new Photo Conductor Unit out of the bag, quickly install it.

8 **Align the green arrow at the tip of the photo conductor unit to the rail inside the printer.**

Important

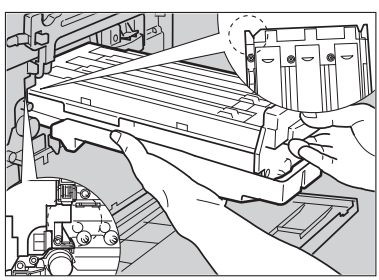
❒ Make sure the green arrow fits securely on the rail before proceeding to the next step.

❖ **Photo Conductor Unit Type 125 Black**



ZHBH370E

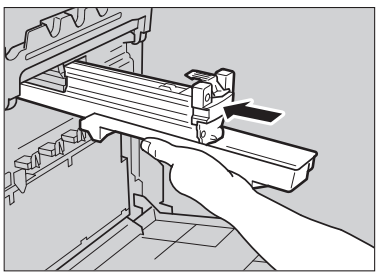
❖ **Photo Conductor Unit Type 125 Color**



ZHBH380E

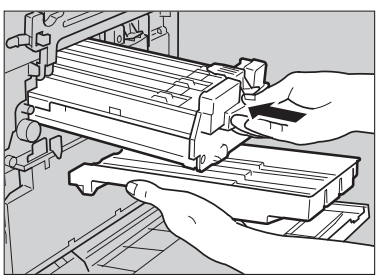
9 **Push the front of the photo conductor unit slowly, sliding the unit on the cover and into the machine until it stops.**

❖ **Photo Conductor Unit Type 125 Black**



ZHBH390E

❖ **Photo Conductor Unit Type 125 Color**

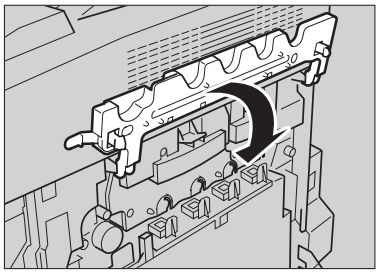


ZHBH400E

Important

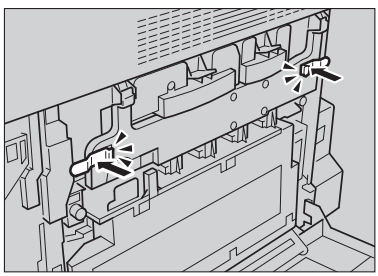
❒ If you do not attach the green arrow of the photo conductor unit securely to the rail, you may damage the photo conductor unit.

10 **Lower the inner cover slowly.**



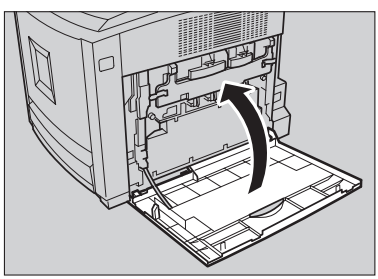
ZHBH410E

11 **Push the green lever to fasten the inner cover.**



ZHBH420E

12 **Close the right cover slowly.**



ZHBH430E

13 **Turn on the power.**

Fusing Unit Type 125

⚠ ***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.*
- *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.*

Replace the fusing unit when the following message appears on the panel display.

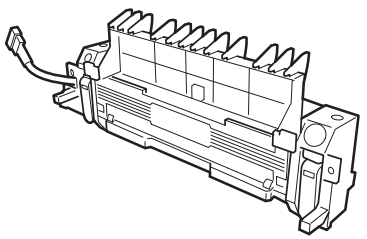
```
Replace Fusing
Unit Soon
```

or

```
Replace
Fusing Unit
```

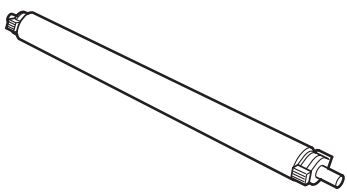
Check the contents of the box for the following items:

❖ **Fusing Unit**



ZHBH200E

❖ **Transfer Roller**



ZHBH590E

Important

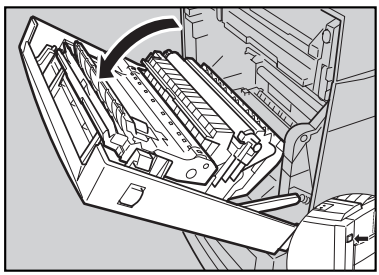
❒ Be sure to make the setting from the control panel after replacing the fusing unit. Without it, the procedure is incomplete.

1 **Turn off the power.**

Important

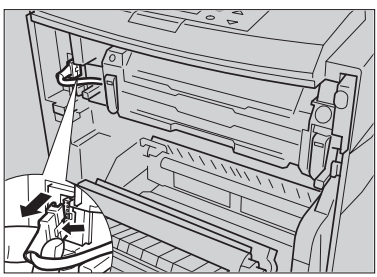
❒ To prevent a burn, after the power is turned off, be sure to wait about 30 minutes until the fusing unit cools down before touching the fusing unit.

2 **Open the front cover by pushing the front cover release button.**



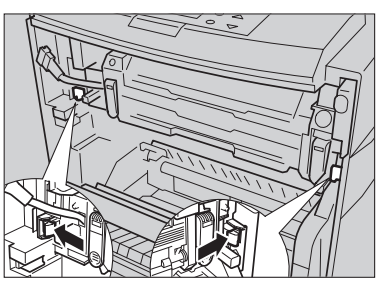
ZHBP281E

3 **Pinch the connector lever, and then pull out the connector.**



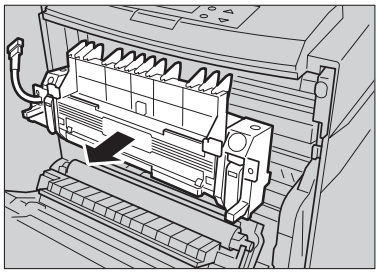
ZHBH210E

4 **Push the green release buttons on the left and right outwards to unlock the fusing unit.**



ZHBH220E

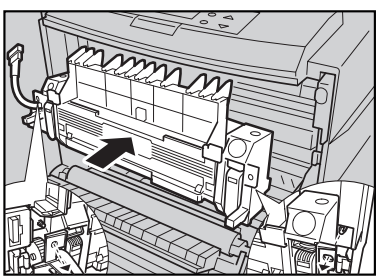
5 **Remove the fusing unit slowly.**



ZHBH230E

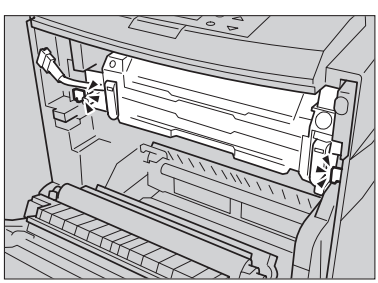
6 **Take out the new fusing unit from the box.**

7 **Place the unit as shown, and then insert the new fusing unit slowly.**



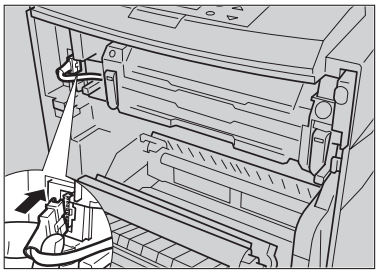
ZHBH240E

8 **Insert the fusing unit until it clicks, and then check that the unit is locked.**



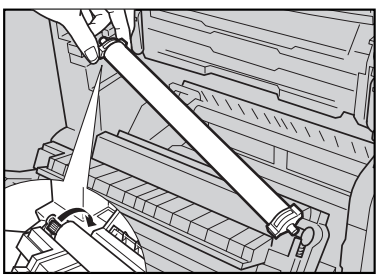
ZHBH250E

9 **Push in the connector.**



ZHBH260E

10 **Turn the green part in the direction of the arrow, and then remove the transfer roller.**

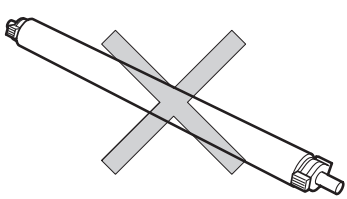


ZHBH600E

11 **Take out the new transfer roller.**

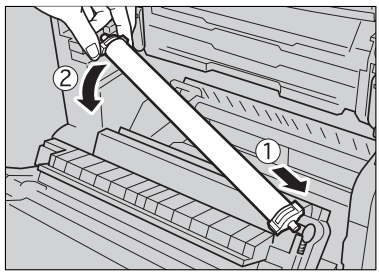
Important

❒ Do not touch the roller part.



ZHBH610E

12 **Hold the green part as shown, and then insert the transfer roller into the printer.**



ZHBH620E

Important

❒ The end with a longer shaft must be on the left.

13 **Close the front cover slowly.**

14 **Turn on the power.**

15 **Make the setting from the control panel.**

When "Replace Fusing Unit" Appears on the Panel Display

❶ **If the following message is on the control panel, press the【Escape】key for more than five seconds. The message disappears and a maintenance reset is performed automatically.**

```
Replace
Fusing Unit
```

When "Replace Fusing Unit Soon" Appears on the Panel Display

❶ **Press the【Menu】key.**

"Menu" appears on the panel display.

❷ **Press the 【▲】 or 【▼】 key to display "Maintenance", and then press the 【Enter #】 key.**

```
Menu:
 Maintenance
```

❸ **Press the 【▲】 or 【▼】 key to display "Maint. Reset", and then press the 【Enter #】 key.**

```
Maintenance:
 Maint. Reset
```

❹ **Press the 【▲】 or 【▼】 key to display "Fusing Unit", and then press the 【Enter #】 key.**

```
Maint. Reset
 Fusing Unit
```

The following message appears.

```
Fusing Unit:
 Press # to Reset
```

❺ **Press the 【Enter #】 key. Wait for a few seconds.**

❻ **Press the 【On Line】 key.**

"Ready" appears on the panel display.

Intermediate Transfer Unit Type 125

⚠ ***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.*

Replace the transfer belt when the following message appears on the panel display.

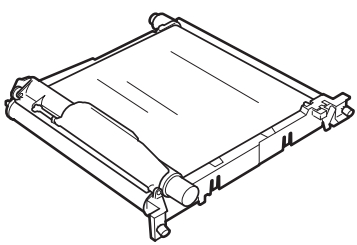
```
Replace Transfer
Belt soon
```

or

```
Replace
Transfer Belt
```

Check the contents of the box for the following items:

❖ **Transfer Belt**



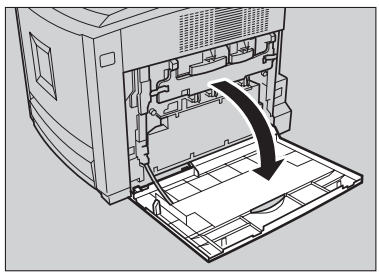
ZHBH510E

Important

❒ Be sure to make the setting from the control panel after replacing the transfer belt. Without it, the procedure is incomplete.

1 **Turn off the power.**

2 **Open the right cover of the printer.**



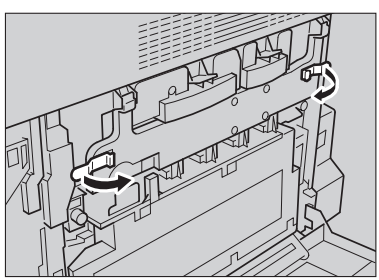
ZHBH290E

3 **Remove the Waste Toner Bottle.**

Reference

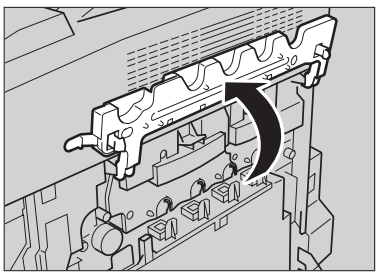
See p.32 “Waste Toner Bottle Type 125”.

4 **Pull out the green levers on the left and right that are fastening the inner cover to unlock the levers.**



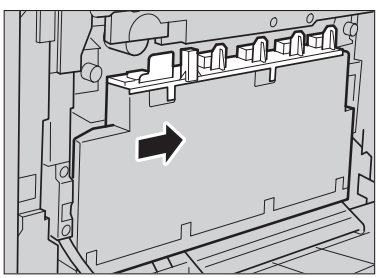
ZHBH300E

5 **Lift the inner cover until it stays up.**



ZHBH310E

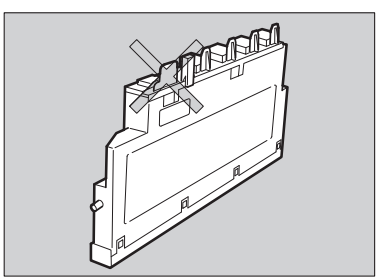
6 **Unlock the waste toner bottle.**



ZHBH630E

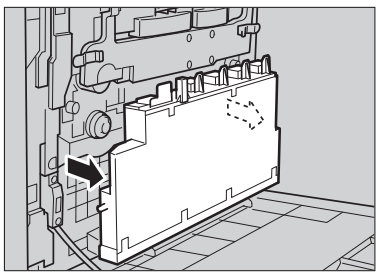
Important

❒ Do not lock the waste toner bottle that has been removed. Toner may spill.



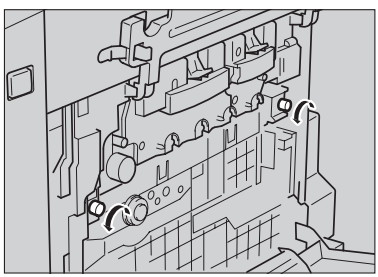
ZHBH640E

7 **Remove the waste toner bottle slowly.**



ZHBH650E

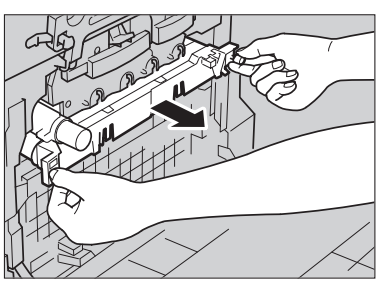
8 **Turn the green screws on the left and right in the direction of the arrows to loosen them.**



ZHBH520E

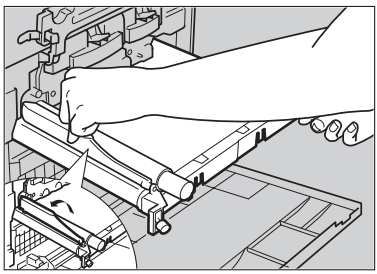
The screws are not removed.

9 **Pinch the both screws and remove the transfer belt slowly until it stops.**



ZHBH530E

10 **Raise the green cover, hold the transfer belt as shown, and then remove the transfer belt.**



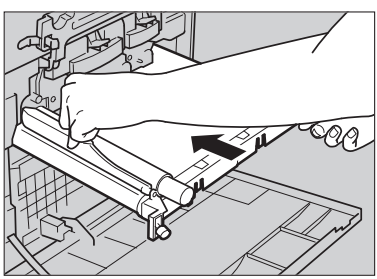
ZHBH540E

Important

- ❒ Be sure to hold the unit with both hands, and then pull it out slowly.
- ❒ Do not touch the belt part.

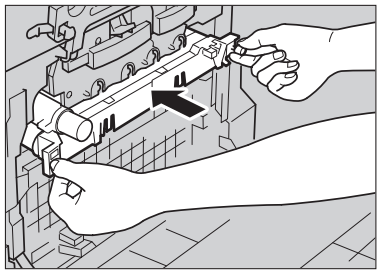
11 **Take out the new transfer belt.**

12 **Holding the transfer belt as shown, insert the transfer belt in the printer.**



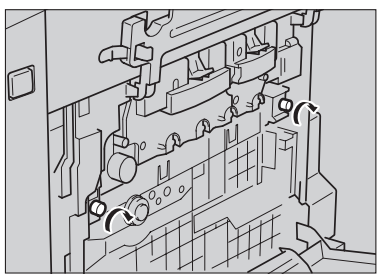
ZHBH560E

13 **Close the green cover, and then insert it until it stops.**



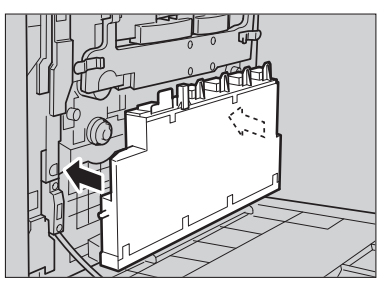
ZHBH920E

14 **Turn the green screws on the left and right in the direction of the arrows to tighten them.**



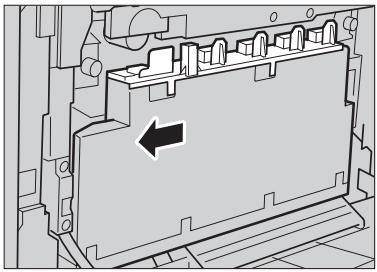
ZHBH580E

15 **Place the waste toner bottle in the position as shown in the illustration.**



ZHBH660E

16 **Lock the waste toner bottle.**

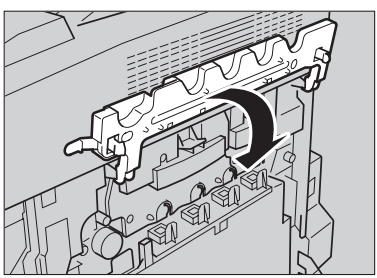


ZHBH670E

Important

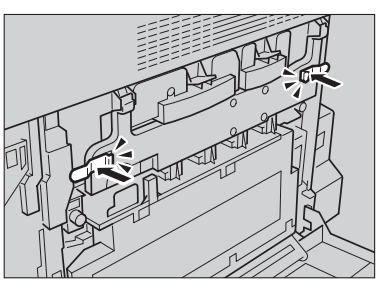
❒ Be sure to lock the waste toner bottle to prevent toner from leaking inside the printer.

17 **Lower the inner cover slowly.**



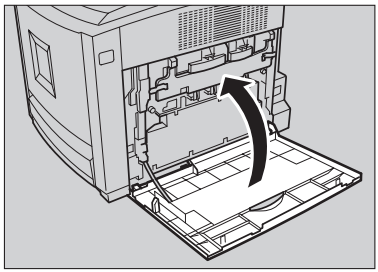
ZHBH410E

18 **Push the green levers to fasten the inner cover.**



ZHBH420E

19 **Close the right cover.**



ZHBH430E

20 **Turn on the power.**

21 **Make the setting from the control panel.**

When "Replace Transfer Belt" Appears on the Panel Display

❶ **If the following message is on the control panel, press the 【Escape】 key for more than five seconds. The message disappears and a maintenance reset is performed automatically.**

When "Replace Transfer Belt Soon" Appears on the Panel Display

❶ **Press the 【Menu】 key.**

"Menu" appears on the panel display.

❷ **Press the 【▲】 or 【▼】 key to display "Maintenance", and then press the 【Enter #】 key.**

```
Menu:
 Maintenance
```

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

```
Maintenance:
 Maint. Reset
```

❹ **Press the [▲] or [▼] key to display "Transfer Belt", and then press the [Enter #] key.**

```
Maint. Reset:
 Transfer Belt
```

The following message appears.

```
Transfer Belt:
Press # to Reset
```

❺ **Press the [Enter #] key.**

Wait for a few seconds.

❻ **Press the [On Line] key.**

"Ready" appears on the panel display.

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.

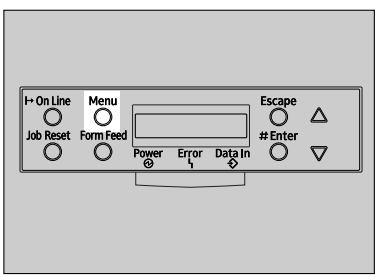
❒ If there is dust or grime inside the printer, wipe with a clean, dry cloth.

Adjusting the Color Registration

When the printer is moved, when the Fusing Unit is replaced, or after printing repeatedly for some time, registration shifting might occur. By performing color registration adjustment, you can maintain optimum print results.

If the color documents show registration shifting, perform automatic color adjustment.

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 Regist.", and then press the [Enter #] key.**

```
Maintenance:
 Color Regist.
```

The following message appears.

```
Press #
To Adjust
```

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

Automatic color adjustment begins, and the following message is displayed.

```
Adjusting...
```

Important

❒ Do not turn off the power switch while "Adjusting..." appears on the panel display to avoid printer malfunction.

Automatic color adjustment takes about two minutes. When it is complete, the following message appears.

```
Completed
```

```
Maintenance:
 Color Regist.
```

Adjusting the Image Density

Adjust the image density when the print side of the page is shaded or the print image looks patchy.

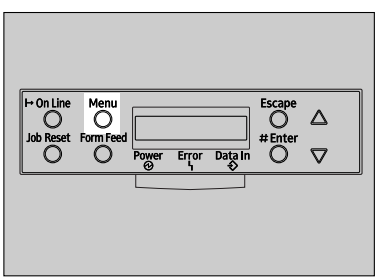
Important

- ❒ Extreme settings may create output that appears dirty.
- ❒ Image density settings should be made from the application or the printer driver whenever possible.

Note

- ❒ Changing the image density setting might cause a deterioration of color balance. We recommend that you leave the image density at its factory default setting.

1 **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 "Image Density", and then press the [Enter #] key.**

```
Maintenance:
 Image Density
```

The following message appears on the panel display.

```
Image Density:
Prt. Test Sheet
```

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

The following message appears on the panel display, and then press the [Enter #] key.

```
Prt.Test Sheet:
Press # to Start
```

```
Printing
```

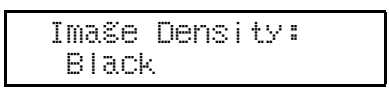
5 **Compare the colors on the printed image density test sheet with those on the Image Density Adjusting Card.**

Note

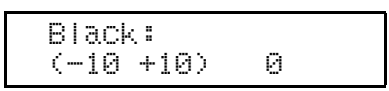
- ❒ If the image density of the Image Density Adjusting Card is equal to the framed part of the test sheet, you do not need to adjust the image density value.

❒ If the image density of the Image Density Adjusting Card is equal to the density shown above the frame, select "-" for the image density setting. If the image density of the Image Density Adjusting Card is equal to the density shown below the frame, select "+" for the image density setting.

6 Press the [▲] or [▼] key to select the color you want to adjust, and then press the [Enter #] key.



7 Press the [▲] or [▼] key to set the image density value, and then press the [Enter #] key.



Note

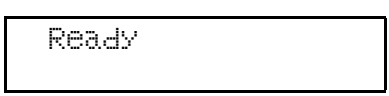
❒ You can adjust the image density in 21 steps from -10 to +10. Increasing the value makes the printouts darker and decreasing the value makes the printouts lighter.

❒ Pressing the [▲] or [▼] key makes the value increase or decrease by one.

To adjust another color, repeat the steps 6 and 7.

8 Press the [On Line] key.

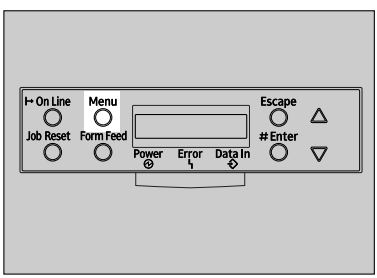
"Ready" appears on the panel display.



Adjusting the Tray Registration

You can adjust the registration of Tray 2 and Tray 3 (optional Paper Feed Unit). The vertical adjustment is used for all trays. Normally, you need not update the registration. But when the optional Paper Feed Unit or the Duplex Unit is installed, updating the registration is useful in some cases. The following procedure describes how to adjust the registration of Tray 2. You can use the same procedure to adjust the other tray as well.

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 **Print the test sheet to preview the settings.**

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

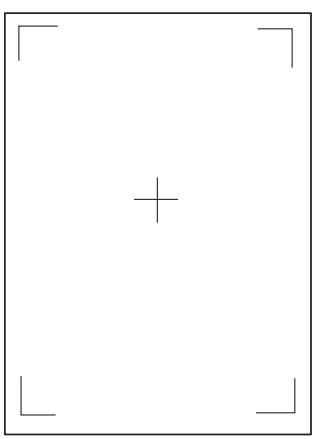
```
Registration:
 Prt. Test Sheet
```

❷ **Press the [▲] or [▼] key to display the tray to adjust, and then press the [Enter #] key.**

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

The test sheet is printed, and then the printer returns to the previous menu.

5 **Confirm the position of the image on the test sheet, and then adjust the registration value.**



The following steps show how to adjust the registration value to make the margins equal.

❶ **Press the 【Escape】 key.**

❷ **Press the 【▲】 or 【▼】 key to display "Adjustment", and then press the 【Enter #】 key.**

```
Registration:
 Adjustment
```

❸ **Press the 【▲】 or 【▼】 key to display the tray to adjust, and then press the 【Enter #】 key.**

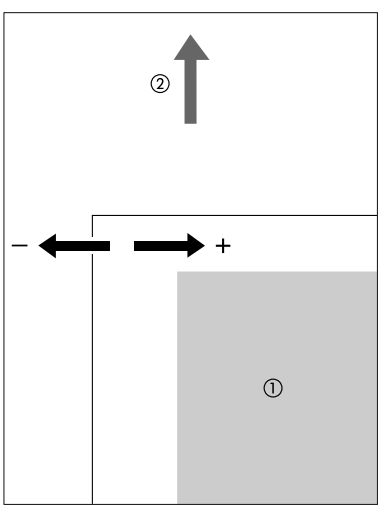
```
Adjustment:
 Horiz.: Tray 2
```

❹ **Press the 【▲】 or 【▼】 key to set the registration value (mm).**

```
Horiz.: Tray 2:
(-15 +15) 0
```

Note

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



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① : Print Area

② : Feed Direction

❒ Pressing the 【▲】 or 【▼】 key makes the value increase or decrease by 0.5 mm steps.

❺ **Press the 【Enter #】 key.**

❻ **Press the 【Escape】 key.**

6 Print the test sheet to check the settings you have made.

7 Press the 【On Line】 key.

"Ready" appears on the panel display.

```
Ready
```

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.
Please Wait	The printer is initializing the development unit or HDD. Wait for a while. This message may appear when printing with small size paper continuously. Wait for a while.
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.
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.29 "Replacing Consumables and Maintenance Kit".

Messages/Second messages	Description	Solution
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 check Signal in Ad hoc	The signal strength for the wireless LAN cannot be checked because "Ad hoc" is selected in "Comm. Mode" for "IEEE 802.11b" in the Host Interface menu.	Change the transmission mode to **[Infrastructure]** in the Host Interface menu.
Change Setting Tray # /Paper Size: Paper Type:	The paper size or paper type set in the indicated tray differs from the setting made. #: tray number	Load paper of the selected size and type in the tray, and then change the paper 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.
Close Front and/ or Right Cover	The front or right cover of the printer is open.	Close the front or right cover of the printer.
Close Upper Left Cover	The upper left cover of the printer is open.	Close the upper left cover of the printer.
Color Regist Error	Color registration has failed.	Turn the power switch off and on. If the message appears again, contact your sales or service representative.
Error: Tray # Form Feed /Reset The Job Then Power OffOn	There is a problem with the indicated tray. #: tray number or Bypass Tray	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.
Hardware Problem Black PCU	An error has occurred in the black PCU (Photo Conductor Unit).	Turn the power switch off and on. If the message appears again, contact your sales or service representative.

Messages/Second messages	Description	Solution
Hardware Problem Bypass Tray	An error has occurred in the Bypass Tray.	Close the Bypass Tray and then pull out Tray 1 partially. Slide it completely into the printer. If the message appears yet, turn the power switch off and on. If the message appears again, contact your sales or service representative.
Hardware Problem Color PCU	An error has occurred in the color PCU (Photo Conductor Unit).	Turn the power switch off and on. If the message appears again, contact your sales or service representative.
Hardware Problem DIMM	The printer detected a DIMM sum value error.	Turn the power switch off and on. If the message appears again, contact your sales or service representative.
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 Printer Hard Disk correctly. If the message appears again, contact your sales or service representative. See the Option Setup Guide.
Hardware Problem IEEE1394	The printer detected an IEEE1394 Board error.	Remove and reinstall IEEE1394 Board correctly. 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.	Remove and reinstall the IEEE 802.11b board or Bluetooth board. If the message appears again, contact your sales or service representative.
Hardware Problem NV-RAM	The printer detected a Memory Switch error.	Remove and reinstall the optional User Account Enhance Unit. If the message appears again, contact your sales or service representative.

Messages/Second messages	Description	Solution
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. See the Option Setup Guide.
Hardware Problem Parallel I/F	There is a problem with the parallel interface.	If you use the parallel interface, replace the interface cable that caused the error. 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.
Invalid Password Try Again	The entered password is not correct.	Enter the correct password.
Load Correct Size Paper /Press # To Continue	The paper size set in the indicated tray differs from the setting made.	Load paper of the selected size in the tray, and then press the **【Enter #】** key to resume printing. If you want to ignore the message and continue printing, press the **【Enter #】** key.
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.

Messages/Second messages	Description	Solution
Load Paper Tray #	The indicated tray is out of paper. #: tray number	Load paper into the indicated paper tray.
Menu Protected Cannot Change	The menu is protected.	The setting cannot be changed for the selected menu.
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.
Remove Misfeed B: Fusing Unit	There is a misfeed in the fusing unit.	Remove the misfed paper. For more information, see p.70 “When "Remove Misfeed B: Fusing Unit" Appears”.
Remove Misfeed A: Internal Path	There is a misfeed in the printer.	Remove the misfed paper. For more information, see p.69 “When "Remove Misfeed A:Internal Path" Appears”.
Remove Misfeed Y: Paper Tray	There is a misfeed in the input tray, or the printer is not feeding paper.	Remove the misfed paper. For more information, see p.72 “When "Remove Misfeed Y: Paper Tray" Appears”.
Remove Paper Standard Tray	The standard output tray is full.	Remove paper from the standard output tray.
Replace Black PCU	It is time to replace the black PCU (Photo Conductor Unit).	Replace the black PCU (Photo Conductor Unit) with a new black PCU. See p.29 “Replacing Consumables and Maintenance Kit”.
Replace Color PCU	It is time to replace the color PCU (Photo Conductor Unit).	Replace the color PCU (Photo Conductor Unit) with a new color PCU. See p.29 “Replacing Consumables and Maintenance Kit”.
Replace Fusing Unit	It is time to replace the fusing unit.	Replace the fusing unit with a new one. See p.29 “Replacing Consumables and Maintenance Kit”.
Replace Fusing Unit Soon	It will be time to replace the fusing unit soon.	Prepare a new fusing unit.
Replace Transfer Belt soon	It will be time to replace the transfer belt soon.	Prepare a new transfer belt.

Messages/Second messages	Description	Solution
Replace Waste Toner	It is time to replace the waste toner bottle.	Replace the waste toner bottle with a new waste toner bottle. See p.29 “Replacing Consumables and Maintenance Kit”.
Reset PCU Correctly	The black or color PCU is not set correctly or is not set.	Set the black or color PCU correctly. See p.29 “Replacing Consumables and Maintenance Kit”.
Reset Fusing Unit Correctly	The fusing unit is not set correctly or is not set.	Set the fusing unit correctly. See p.29 “Replacing Consumables and Maintenance Kit”.
Reset Paper Bypass Tray	There is paper left in the Bypass Tray.	Remove paper from the Bypass Tray, and then reset the paper.
Reset Toner /Yellow/Magenta/Cyan/Black	The indicated toner cartridge(s) is/are not set correctly	Set the indicated toner cartridge correctly. See p.29 “Replacing Consumables and Maintenance Kit”.
Reset Tray # Correctly	The indicated tray is not set or is not set correctly. #: tray number	Set the tray correctly. Or press the 【Form Feed】 key several times until the tray with the desired paper setting appears on the panel display. Or press the 【Job Reset】 key to cancel the print job.
Reset Duplex Unit	The duplex unit is not set correctly or is not set.	Remove and reinstall the duplex unit. If the message appears again, contact your sales or service representative. See the Option Setup Guide.
Replace Transfer Belt	It is time to replace the transfer belt.	Replace the transfer belt with a new transfer belt. See p.29 “Replacing Consumables and Maintenance Kit”.
SC XXX-X Power Off On	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.
Toner is Almost Empty: Black	The black toner is almost empty.	Prepare a new black toner cartridge.
Toner is Almost Empty: Cyan	The cyan toner is almost empty.	Prepare a new cyan toner cartridge.

Messages/Second messages	Description	Solution
Toner is Almost Empty: Magenta	The magenta toner is almost empty.	Prepare a new magenta toner cartridge.
Toner is Almost Empty: Yellow	The yellow toner is almost empty.	Prepare a new yellow toner cartridge.

❖ Print Error Messages ("Error Log" in Configuration Page)

Messages/Second messages	Description	Solution
Collate Cancelled	The collate feature has been cancelled.	Install the optional Printer Hard Disk or increase the memory capacity to 128MB or more.
Driver Setting Error (Memory)	There is an error in the downloaded font(s).	Reset the parameter for downloading fonts.
Duplex Cancelled	Duplex printing has been canceled.	Confirm that the paper used is supported for duplex printing. Or, increase the memory capacity.
Exceeded Max. Pages (Collate)	The maximum number of pages has been exceeded for collation.	Install the optional Printer Hard Disk or increase the memory capacity to 128MB or more.
Exceeded Max. Stored Files	The maximum number of files has been exceeded during Sample Print or Locked Print.	Delete the stored files or reduce the file size of them.
Exceeded Max. Stored Pages	The maximum number of pages has been exceeded during Sample Print or Locked Print.	Reduce the number of pages to print.
HDD Full	The maximum hard disk area size for form/font has been exceeded.	Delete unused form/font types.
	An HDD overflow error occurred during Sample Print or Locked Print.	Delete the stored files or reduce the file size of them.
HDD Not Installed	The Sample Print or Locked Print feature was tried without the Printer Hard Disk installed.	To use the Sample Print or Locked Print feature, install the optional Printer Hard Disk. If the message appears again, contact your sales or service representative.
I/O Buffer Overflow	The maximum size of the I/O buffer has been exceeded.	Increase the size of the I/O buffer.
Print Overrun	The image data has been thinned out due to image compression.	Increase the memory capacity.

Messages/Second messages	Description	Solution
RPCS Graphic Error	There is not enough graphics memory to print the data.	Specify the correct memory capacity in the **[Change Accessories...]** option in the RPCS printer driver's print settings tab. For more information, see the printer driver's Help.
		To print the image correctly, add memory to the printer, or reduce the resolution of the image.
RPCS Memory Overflow	A memory overflow occurred during the print job. After part of the data for the page was printed, the print job was suspended.	Specify the correct memory capacity in the **[Change Accessories...]** option in the RPCS printer driver's print settings tab. For more information, see the printer driver's Help.
		To print the image correctly, add memory to the printer, or reduce the resolution of the image.
RPCS Syntax Error	Bidirectional transmission may not be working properly or the RPCS printer driver settings may not be correct.	Confirm that the option settings for the printer driver match the options actually installed on the printer.
	There may not be enough memory or the memory settings for the printer driver may not match the memory actually installed on the printer.	Specify the correct memory capacity in the **[Change Accessories...]** option in the RPCS printer driver's print settings tab. For more information, see the printer driver's Help.
		To print the image correctly, add memory to the printer, or reduce the resolution of the image.
	This message may appear when the computer is connected to the printer with parallel interface.	Set the parallel interface mode of the computer to a mode other than ECP.

Printer Does Not Print

Possible Cause	Solutions
Is the power on?	Confirm that the cable is securely plugged into the power outlet and the printer. Turn on the power.
Does the **On Line** indicator stay on?	If not, press 【On Line】 to light it.
Does the **Error** 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 or on the Bypass Tray. See p.22 “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*" in the Administrator Reference.
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*" in the Administrator Reference.

Possible Cause	Solutions
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** Make sure the following printer port settings are correct: • For a parallel port connection, port LPT1 or LPT2 should be set. • For a USB port connection, port USB00 (n) *1 should be set. • For a IEEE 1394 (SCSI print) port connection, port 1394_00(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** 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 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.

Possible Cause	Solutions
When you use 1394 Interface Unit Type 4510	❖ **Network Connection** Contact your network administrator. ① Confirm that 1394 Interface Unit Type4510 is attached to the computer correctly. ② Confirm that IEEE1394 interface cable is connected securely. ③ Restart the computer. If the error occurs even after executing above operation, go to the following steps. ④ Unplug the IEEE 1394 interface cable which is connected to the printer. ⑤ Execute the utility tool for 1394 Interface Unit Type 4510 which is stored in the following path in the CD-ROM labeled "Printer Drivers and Utilities". `UTILITY\1394` **Important** ❒ For more information about using the utility tool for IEEE 1394, see the README file in the same directory in the CD-ROM.

Other Printing Problems

Status	Possible Causes, Descriptions, and Solutions
Toner smears appear on the print side of the page.	When “Replace PCU” appears on the panel display, replace the photo conductor unit. See p.29 “Replacing Consumables and Maintenance Kit”.
	Set the image density lighter with the control panel in the "Maintenance" menu. See p.47 “Cleaning and Adjusting the Printer”.
	Confirm that the paper is not curled or bent. Envelopes can be curled easily. Flatten paper before loading. See p.15 “Paper and Other Media”.
Paper gets wrinkles.	Paper is damp. Use paper that has been stored properly. See p.15 “Paper and Other Media”.
	Paper is too thin. See p.15 “Paper and Other Media”.
	The fusing unit is deteriorated or damaged. Replace the unit. See p.29 “Replacing Consumables and Maintenance Kit”.
The color of the printout is different from the color specified.	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.
Color changes extremely when adjusted with the printer driver.	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.
Photo images are coarse.	Some applications lower the resolution for making prints.
Black gradation is not natural.	Select "CMY+K" for **[Gray Reproduction]** in the printer driver's dialog box. See the printer driver's Help.
Color documents are printed in black and white.	The printer driver is not set up for color printing. See the printer driver's Help.
	Some applications print color files in black and white.
Fine dot pattern does not print.	Change the **[Dithering]** setting in the printer driver's dialog box. See the printer driver's Help.
Images are cut off, or excess pages are printed.	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.

Status	Possible Causes, Descriptions, and Solutions
It takes too much time to complete the print job.	Photographs and other data intensive pages take a long time for the printer to process, so simply wait when printing such data. Changing the settings with printer driver may help to speed up printing. See the printer driver's Help.
	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.
	If "Warming Up..." appears on the panel display, the printer is now warming up. Wait for a while.
It takes too much time to resume printing.	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.
	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" in the System Settings menu.
Multiple pages are fed at once.	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.15 “Paper and Other Media”.
	Paper is static. Use paper that has been stored properly. When loading paper, separate paper from each other. See p.15 “Paper and Other Media”.
	Paper is either too thick or too thin. See p.15 “Paper and Other Media”.
Paper is not fed from the selected tray.	When using the Bypass Tray, confirm that the paper size and the feed direction on the tray are the same as the ones set with the control panel. See p.24 “Loading Paper in the Bypass 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.

Status	Possible Causes, Descriptions, and Solutions
Paper jams occur frequently.	The paper guide in the paper tray is not locked. Lock the paper guide. See p.22 “Loading Paper”.
	The paper size and feed direction loaded on the Bypass Tray are different from them set with the control panel. Either change the setting or load paper to meet the setting. See p.24 “Loading Paper in the Bypass Tray”.
	The end guide in the paper tray is not set correctly. Set the end guide correctly. See p.22 “Loading Paper”.
	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.22 “Loading Paper”.
	Paper is damp. Use paper that has been stored properly. See p.15 “Paper and Other Media”.
	Paper is either too thick or too thin. See p.15 “Paper and Other Media”.
	Paper is bent or wrinkled. Use paper that have no bents or wrinkles. See p.15 “Paper and Other Media”.
	Paper has already been printed on. See p.15 “Paper and Other Media”.
	The fusing unit is deteriorated or damaged. Replace them. See p.29 “Replacing Consumables and Maintenance Kit”.
Solid areas, lines or text are shiny or glossy when created as a mixture of cyan, magenta, yellow.	Select "K(black)" for **[Gray Reproduction]** 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.
The color of the printout is different from the color on the computer's display.	The colors made using color toner are different from colors displayed on the display in its production system. See "*Appendix*" in the Client Reference.
	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.
Images are printed in the wrong orientation.	The feed direction you selected and the feed direction selected in Option Setup of the printer driver might not be the same. Make the proper settings.

Status	Possible Causes, Descriptions, and Solutions
An error message on the control panel stays on after removing the misfed paper.	Open the front cover of the printer, and then close it.
A print image is not clear.	Due to a sudden change in temperature, condensation might appear inside the printer, reducing print quality. If this occurs when you move the printer from a cold room to a warmer room, do not use the printer until it acclimatizes to the temperature.
The print side of the page is a hazy gray.	Adjust the image density. To adjust the image density, press 【Menu】, and select Image Density from the "Maintenance" menu. See p.49 "Adjusting the Image Density".
	If paper is curled, flatten it. Curled or folded paper might cause a hazy gray print. Curling often occurs on envelopes, so be sure to flatten it before printing.
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.

5

Note

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

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

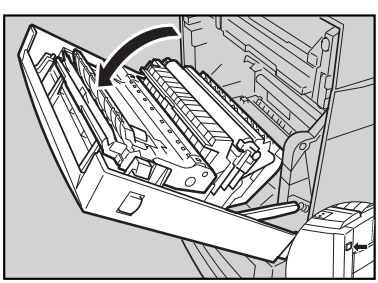
- ❒ Toner dust may be on the misfed paper after removal. Be careful not to get it on your hands or clothes.
- ❒ Toner dust may be on the paper printed after removing misfed paper. Make a few prints until smears do not appear any more.
- ❒ Forcefully removing misfed paper may cause paper to tear and leave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

When "Remove Misfeed A:Internal Path" Appears

⚠ 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 **Open the front cover by pushing the front cover release button.**

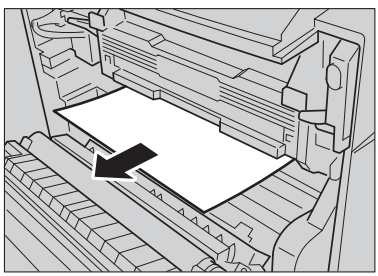


ZHBP281E

Note

- ❒ Close the Bypass Tray if it is extended. If the Bypass Tray is extended, the front cover does not open.

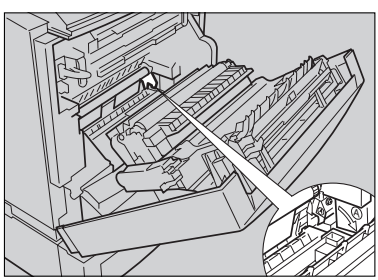
2 **If you see the misfed paper, slowly pull it out.**



ZHBH120E

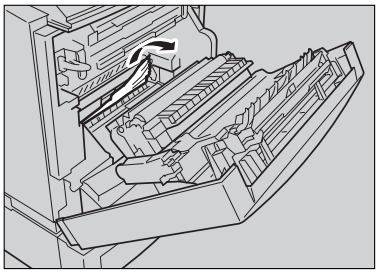
If you cannot remove paper easily, do not forcefully pull it, but go to next step.

3 **Pull part "A" in the direction of the arrow, and then open the cover.**



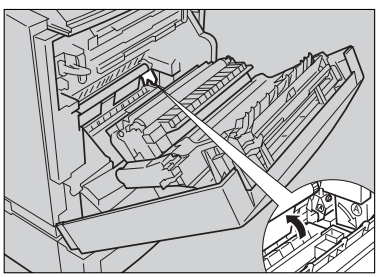
ZHBH070E

4 **Remove the misfed paper.**



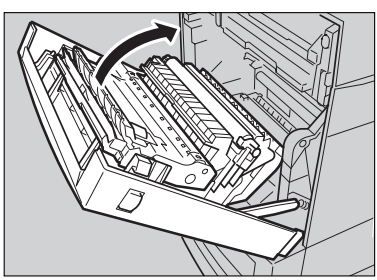
ZHBH080E

5 **Close the cover.**



ZHBH090E

6 **Close the front cover slowly.**



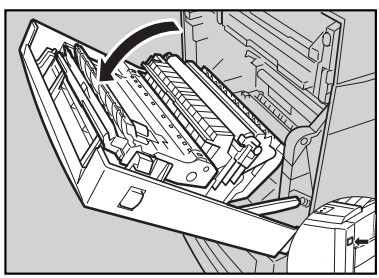
ZHBP282E

When "Remove Misfeed B: Fusing Unit" Appears

⚠ ***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 **Open the front cover by pushing the front cover release button.**

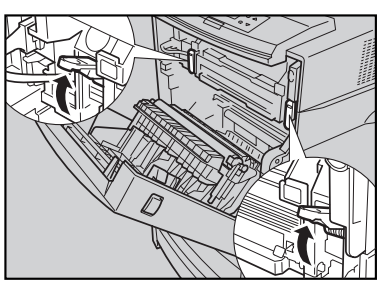


ZHBP281E

Note

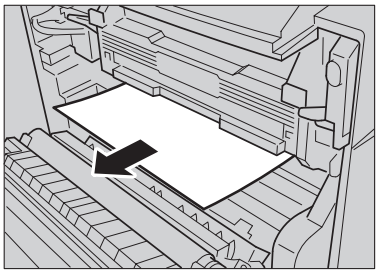
❒ Close the Bypass Tray if it is extended. If the Bypass Tray is extended, the front cover does not open.

2 **Pull out levers "B1" on the left and right.**



ZHBH110E

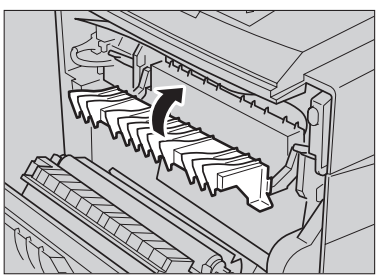
3 **Remove the misfed paper.**



ZHBH120E

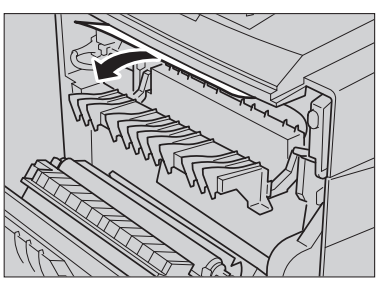
If you cannot remove the paper easily, do not forcefully pull it, but go to the next step.

4 **Pull part "B2" toward the front, and then open the guide board.**



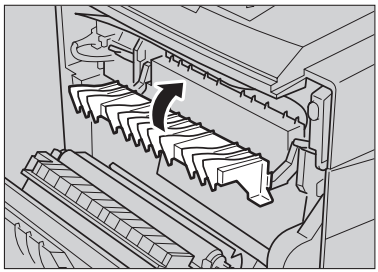
ZHBH130E

5 **Remove the misfed paper.**



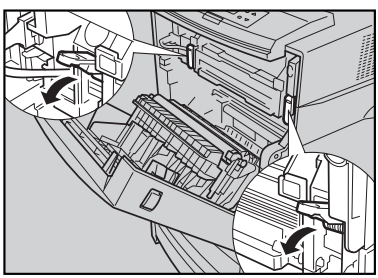
ZHBH140E

6 **Return the guide board.**



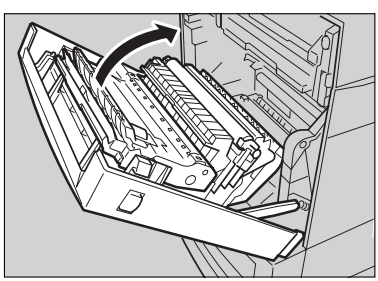
ZHBH130E

7 **Return levers "B1" on the left and right.**



ZHBH930E

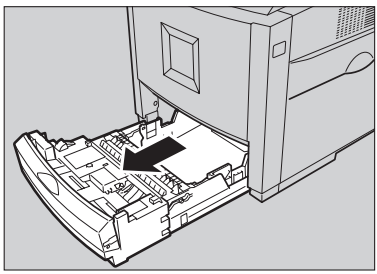
8 **Close the front cover slowly.**



ZHBP282E

When "Remove Misfeed Y: Paper Tray" Appears

1 **Pull out the tray.**



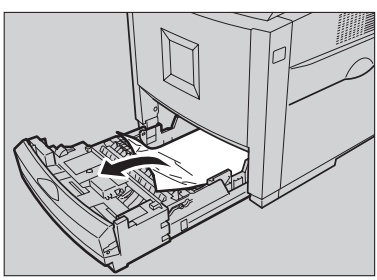
ZHBH940E

Important

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

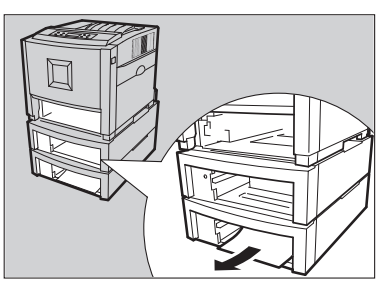
2 **Remove the misfed paper.**

❖ **Tray 1**



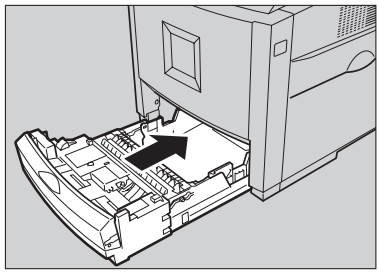
ZHBH760E

❖ **Tray 2/3**



ZHBH770E

3 **Slide the paper tray completely into the printer.**

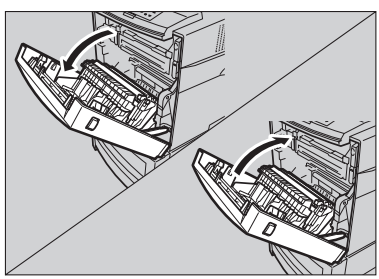


ZHBH160E

Important

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

4 **Open the front cover by pushing the front cover release button, and then close it to reset the misfeed condition.**



ZHBH170E

Note

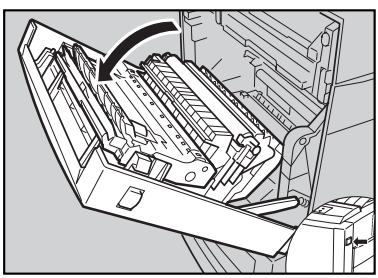
❒ You can apply this procedure for both the paper tray and the optional Paper Feed Unit.

When "Remove Misfeed Z: Duplex Unit" Appears

⚠ ***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 **Open the front cover by pushing the front cover release button.**

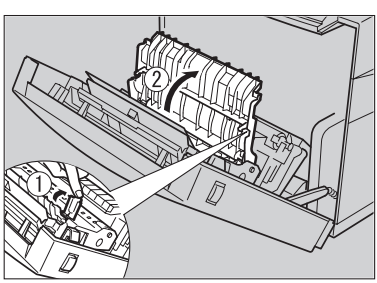


ZHBP281E

Note

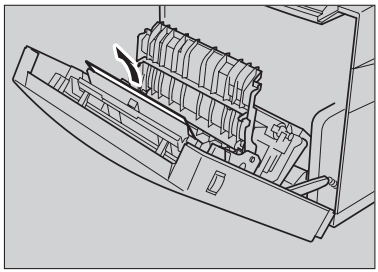
❒ Close the Bypass Tray if it is extended. If the Bypass Tray is extended, the front cover does not open.

2 **Pull lever "PULL" of the Duplex Unit ①, and then pull up the Duplex Unit until it stops ②.**



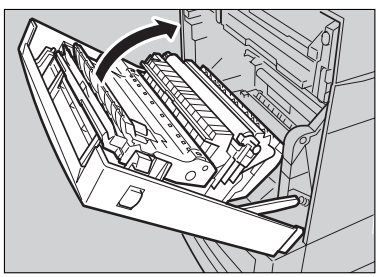
ZHBH180E

3 **Remove the misfed paper.**



ZHBH190E

4 **Close the front cover slowly.**



ZHBP282E

5

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 29.4 kg (64.8 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 the 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 the 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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Declaration of Conformity

"The Product complies with the requirements of the EMC Directive 89/336/EEC and the Low Voltage Directive 73/23/EEC."

Notice to Users in EEA Countries

802.11b Interface Unit TypeA(R-WL11):

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:

| means POWER ON.

O means POWER OFF.

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Aficio™ CL3000/CL3000DN **Operating Instructions Maintenance Guide**

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Printed in The Netherlands
EE (GB) G081-6570

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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 printer.

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

Important

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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® XP are as follows:
  Microsoft® Windows® XP Professional
  Microsoft® Windows® XP Home Edition

- 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 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

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, Windows XP	**[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.7 “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.10 “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, Windows XP, 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*" in the Client Reference.

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

If not, you can delete the saved job. See "*Deleting a Sample Print File*" in the 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, Windows XP, 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 128MB 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, 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	**[Collate]** on the **[Setup]** tab.
Windows 2000, Windows XP	**[Collate]** 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 **[Feture 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, Windows XP	**[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, Windows XP, Mac OS, Mac OS X

Note

❒ If you use a Macintosh, 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 Mode]** on the **[Setup]** tab.
Windows 2000, Windows XP	**[Color Mode]** 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 **[Print 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

Paper Sources and Output Tray Tabs

Use this to select the media type, input tray, and output tray.

Limitation

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

Reference

For more information about the **[Paper Sources and Output Tray]** 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, Windows XP	**[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*" in the Maintenance Guide.

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, Windows XP	**[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*" in the 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	**[All Pages]** on the **[Paper]** tab.
Windows 2000, Windows XP	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 **[600dpi]** or **[1200dpi]**.

Limitation

❒ When the resolution option is set to **[1200dpi]**, the gradation option must be set to **[Fast]**.

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

Windows 95/98/Me	**[Advanced]** on the **[Print Quality]** tab.
Windows 2000, Windows XP	**[Graphic]** on **[Advanced...]** on the **[Paper/Quality]** tab in the Printing Preferences dialog box.
Windows NT 4.0	**[Graphic]** on **[Document Options]** on the **[Advanced]** tab in the Document Defaults dialog box.
Mac OS	**[Printer Specific Options]** in the print dialog box.
Mac OS X	**[Resolution]** on the **[Features 1]** tab on **[Printer Features]** in the print dialog box.

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, Windows XP	**[Gradation]** 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	The **[Print Quality]** tab.
Windows 2000, Windows XP	**[Color Profile]** 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.

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	**[Advanced]** on the **[Print Quality]** tab.
Windows 2000, Windows XP	**[Color Setting]** 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 γ = 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 γ = 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]**.

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	**[Advanced]** on the **[Print Quality]** tab.
Windows 2000, Windows XP	**[Dithering]** 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	**[Advanced]** on the **[Print Quality]** tab.
Windows 2000, Windows XP	**[Black Text/ Graphics]** 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 Text/Graphics]** 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.

Important

❒ If you use Windows 95/98/Me, you can configure **[Gray Reproduction]** in **[Advanced]** by selecting **[Manual]** from the **[Color]** setting. **[Automatic]** sets the printer to "Pure Black Text".

Note

❒ If you use Windows 2000, Windows XP, Windows NT 4.0, Mac OS or Mac OS X, this function is called "Black Text/Graphics".

You can select the following items:

❖ **Pure Black Text**

Select this setting to use a black toner.

Note

❒ If you use Windows 2000, Windows XP, Windows NT 4.0, Mac OS or Mac OS X, this mode is called "K".

❖ **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	**[Advanced]** on the **[Print Quality]** tab.
Windows 2000, Windows XP	**[Black Over Print]** 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.

Important

❒ If you use Windows 95/98/Me, you can configure **[Black Over Print]** in **[Advanced]** by selecting **[Manual]** from the **[Color]** setting.

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, Windows XP	**[Toner Saver]** 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 Saver]** 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, Windows XP	**[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 or Windows XP, 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 SmartNetMonitor 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, Windows XP	**[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 SmartNetMonitor 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	**[Option]** on the **[Accessories]** tab.
Windows 2000, Windows XP	**[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	**[Chooser]** on the Apple Menu.
Mac OS X	This function is not available.

❖ Tray 2

- You can select the tray with the following menu for PAPER FEED UNIT Type 3000:
  Paper Source⇒ p.20

❖ Tray 3

- You can select the other tray with the following menu for an additional PAPER FEED UNIT Type 3000:
  Paper Source⇒ p.20

Note

❒ If you use Windows 2000, Windows XP, Windows NT 4.0, Mac OS or Mac OS X, this menu is called "Tray 2 and 3".

❖ Duplex Unit

- You can use the following function with AD440:
  Duplex Printing⇒ p.14

❖ Hard Disk

- You can use the following function with Printer Hard Disk Type 3000:
  Collate⇒ p.13

Note

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

❖ Total Memory

- You can use the following function with Memory Unit Type C (64/128/256 MB):
  Collate⇒ p.13

Note

❒ The optional Memory Unit of at least 128MB must be installed on the printer.

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

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 Macintosh.**
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.36 “Downloading PS Fonts”.
- **[Display Printer's Fonts...]**
  Display and delete the fonts in printer memory and the printer's hard disk drive. See p.38 “Displaying Printer's Fonts”.
- **[Initialize Printer's Disk...]**
  Initialize the printer's hard disk drive. See p.39 “Initializing the Printer Disk”.
- **[Page Setup...]**
  Set up the paper size to print “Printer Font Catalog” and “Printer Font Sample”. See p.40 “Page Setup”.
- **[Print Font Catalog...]**
  Print the names of available fonts. See p.40 “Printing Font Catalog”.
- **[Print Font Sample...]**
  Print a sample of fonts. See p.40 “Printing Font Sample”.
- **[Rename Printer...]**
  Change the printer's name when viewed via Appletalk. See p.41 “Renaming the Printer”.
- **[Restart Printer]**
  Restart the printer. See p.42 “Restarting the Printer”.

❖ **Utility menu**

- **[Download PostScript File...]**
  Download a PostScript File. See p.42 “Downloading PostScript Files”.
- **[Select Zone...]**
  Change the zone to which the printer belongs to via Appletalk. See p.43 “Selecting the Zone”.
- **[Display Printer Status...]**
  Display the status of the printer. See p.44 “Displaying the Printer Status”.
- **[Launch Dialogue Console...]**
  Create and edit a PostScript file, and then download it to the printer. See p.44 “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 Macintosh 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 Macintosh 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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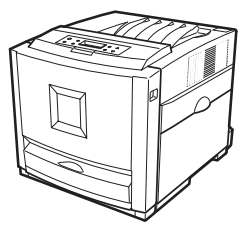
RICOH

Aficio™ CL3000/CL3000DN

Option Setup Guide



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

ZPIntroduction

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 before using this machine. It contains important information related to USER SAFETY and PREVENTING EQUIPMENT PROBLEMS.

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 metric version.

For good copy quality, supplier recommends that you use genuine supplier's toner.

Supplier shall not be responsible for any damage or expense that might result from the use of parts other than genuine supplier's office product.

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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 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 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.

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 the Administrator Reference.

❖ Option List

	Basic model Printer	Network standard model Printer
PAPER FEED UNIT Type 3000	❍	❍
AD440 (Duplex Unit)	❍	
Memory Unit Type C	❍	❍
Printer Hard Disk Type 3000	❍	❍
1394 Interface Unit Type 4510	❍ *1	❍ *2
802.11b Interface Unit Type A	❍ *1	❍ *2
Bluetooth Interface Unit Type A	❍ *1	❍ *2
Network Interface Board Type 3000	❍ *1	
User Account Enhance Unit Type B	❍	❍

❍: Available option

*1 With Basic model, these cannot be installed at the same time

*2 With Network standard model, these cannot be attached at the same time.

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

❗ Important

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

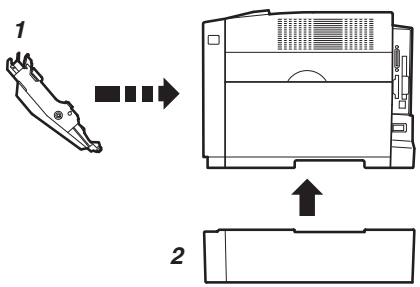
❖ Option Installation Flow Chart

1 Attach the Paper Feed Unit. (PAPER FEED UNIT Type 3000) ▼	Attach the Paper Feed Unit to the bottom of the printer. You can attach up to two Paper Feed Units.
2 Install the Duplex Unit. (AD440) ▼	Install the unit to the back of the front cover.
3 Install the SDRAM Module. (Memory Unit Type C) ▼	Install the module to the SDRAM module slot on the controller board. 64MB, 128MB, and 256MB Memory Units are available.
4 Install the Printer Hard Disk. (Printer Hard Disk Type 3000) ▼	Install the Printer Hard Disk to the controller board.
5 Install the 1394 Interface Unit. (1394 Interface Unit Type 4510) ▼	Install the 1394 Interface Unit to the slot on the controller board. If you choose to install the 1394 Interface Unit, remove the USB2.0 Interface Board and you cannot install the 802.11b Interface Unit or Bluetooth Interface Unit.
6 Install the 802.11b Interface Unit (802.11b Interface Unit Type A) ▼	Install the 802.11b Interface Unit to the slot on the controller board. If you choose to install the 802.11b Interface Unit, remove the USB2.0 Interface Board and you cannot install the 1394 Interface Unit or Bluetooth Interface Unit.
7 Install the Bluetooth Interface Unit (Bluetooth Interface Unit Type A) ▼	Install the Bluetooth Interface Unit to the slot on the controller board. If you choose to install the Bluetooth, remove the USB2.0 Interface Board and you cannot install the 802.11b Interface Unit or 1394 Interface Unit.
8 Install the Network Interface Board (Network Interface Board Type 3000) ▼	Install the Network Interface Board to the slot on the controller board, only for basic model printer. If you choose to install the Network Interface Board, you cannot install the 1394 Interface Unit, 802.11b Interface Unit or Bluetooth Interface Unit.

9 Install the User Account Enhance Unit. (User Account Enhance Unit Type B) ▼	Install the module to the User Account Enhance Unit slot on the controller board.

Install options in the positions as shown in the illustration.

❖ Exterior



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1. AD440 (Duplex Unit)

Install to the back of the front cover. Makes duplex prints.

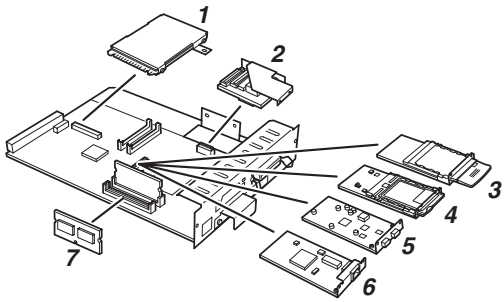
See p.11 “AD440 (Duplex Unit)”.

2. PAPER FEED UNIT Type 3000

Loads up to 530 sheets of paper. Up to two units can be attached to the printer. "Tray 2" appears on the panel display for the first unit and "Tray 3" appears on the panel display for the second unit.

See p.8 “PAPER FEED UNIT Type 3000”

❖ Basic model Printer : Interior



1. Printer Hard Disk Type 3000

Install Printer Hard Disk to the controller board.

See p.16 “Printer Hard Disk Type 3000”.

2. User Account Enhance Unit Type B

See p.38 “User Account Enhance Unit Type B”.

3. 802.11b Interface Unit Type A

Note

❒ 802.11b Interface Unit, USB2.0 Interface Board, Bluetooth Interface Unit and 1394 Interface Unit cannot be installed in the printer at the same time.

See p.25 “802.11b Interface Unit Type A”.

4. Bluetooth Interface Unit

Note

❒ Bluetooth Interface Unit, USB2.0 Interface Board, 802.11b Interface Unit and 1394 Interface Unit cannot be installed in the printer at the same time.

5. 1394 Interface Unit Type 4510

Note

❒ 1394 Interface Unit, USB2.0 Interface Board, Bluetooth Interface Unit and 802.11b Interface Unit cannot be installed in the printer at the same time.

See p.19 “1394 Interface Unit Type 4510”.

6. Netwok Interface Board Type 3000

Note

❒ Netwok Interface Board, USB2.0 Interface Board, 802.11b Interface Unit, Bluetooth Interface Unit and 1394 Interface Unit cannot be installed in the printer at the same time.

7. Memory Unit Type C (SDRAM Module)

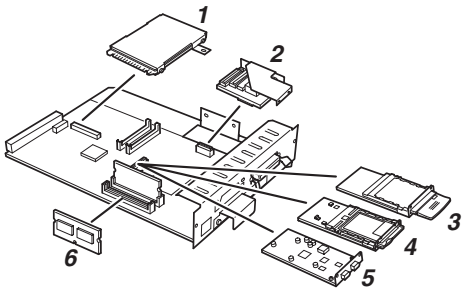
Install 64MB, 128MB, or 256MB RAM into the slot on the controller board.

See p.13 “Memory Unit Type C (SDRAM Module)”.

Important

❒ Remove USB2.0 Interface Board when you install 1394 Interface Unit, 802.11b Interface Unit, Bluetooth Interface Unit or Netwok Interface Board.

❖ **Network standard model Printer : Interior**



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1. Printer Hard Disk Type 3000

Install Printer Hard Disk to the controller board.

See p.16 "Printer Hard Disk Type 3000".

2. User Account Enhance Unit Type B

See p.38 "User Account Enhance Unit Type B".

3. 802.11b Interface Unit Type A

Note

❒ 802.11b Interface Unit, USB2.0 Interface Board, Bluetooth Interface Unit and 1394 Interface Unit cannot be installed in the printer at the same time.

See p.25 "802.11b Interface Unit Type A".

4. Bluetooth Interface Unit

Note

❒ Bluetooth Interface Unit, USB2.0 Interface Board, 802.11b Interface Unit and 1394 Interface Unit cannot be installed in the printer at the same time.

5. 1394 Interface Unit Type 4510

Note

❒ 1394 Interface Unit, USB2.0 Interface Board, Bluetooth Interface Unit and 802.11b Interface Unit cannot be installed in the printer at the same time.

See p.19 "1394 Interface Unit Type 4510".

6. Memory Unit Type C (SDRAM Module)

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

See p.13 "Memory Unit Type C (SDRAM Module)".

Important

❒ Remove USB2.0 Interface Board when you install 1394 Interface Unit, 802.11b Interface Unit, Bluetooth Interface Unit.

PAPER FEED UNIT Type 3000

1

Preparation

When installing multiple options, install the Paper Feed Unit first.

Up to two Paper Feed Units can be attached to the printer. When installing two Paper Feed Units, connect the two units first by following the procedure below before connecting the units to the printer. Then, place the printer on the connected two Paper Feed Units.

⚠ ***CAUTION:***

- *When moving the machine, each person should hold the handles that are located on opposite sides, and then lift the machine slowly. Lifting it carelessly or dropping it may cause an injury.*
- *When moving the Paper Feed Unit, hold the handles that are located on the top of the unit, and then lift it slowly. Lifting it carelessly or dropping it may cause an injury.*

Note

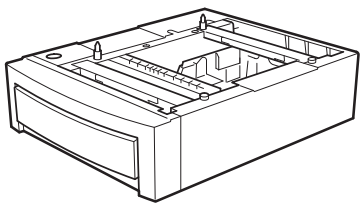
❒ The printer weighs approximately 29.4 kg (64.8 lb.bond).

❒ The Paper Feed Unit weighs approximately 7.42 kg (16.4 lb.bond).

❒ "Tray 2" appears on the panel display when only one unit is installed. "Tray 3" appears on the panel display for the second unit when two units are installed.

1 **Check the contents of the package for the following:**

❖ **Paper Feed Unit (including a paper tray)**



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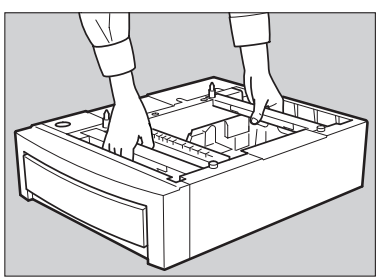
2 **Turn off the power, and then unplug the power cable.**

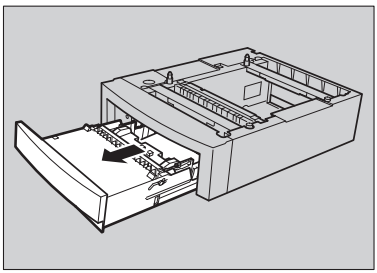
3 **Hold the Paper Feed Unit as shown in the illustration, and then place it on a flat surface near the place where the machine is to be installed.**



Note

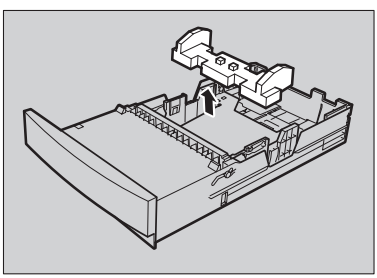
❒ Be sure to work in a place with enough space, so that you can get behind the printer.

4 **Pull the paper tray out of the Paper Feed Unit until it stops. After that, lift it slightly, and then pull it out completely. Place it on a flat surface.**



ZHBYA930E

5 **Remove the adhesive tape and packing material.**



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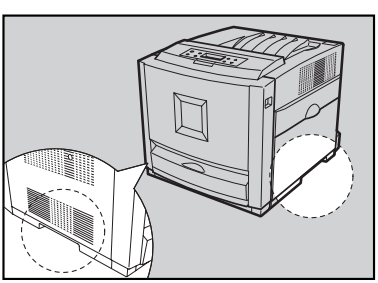
6 **Slide the paper tray completely into the Paper Feed Unit.**

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



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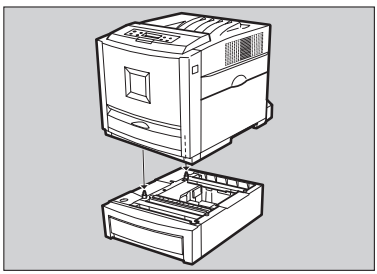
8 **Align the printer to the two upright pins on the Paper Feed Unit and then lower it slowly.**



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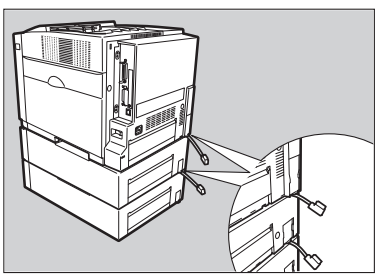
Note

❒ Be sure not to place the printer on the Paper Feed Unit cable.



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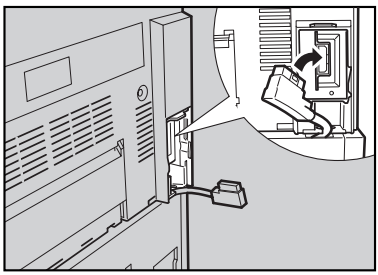
9 **Open the connector cover of the printer.**

ZHBP360E

10 Connect the Paper Feed Unit cable to the socket inside the printer securely.

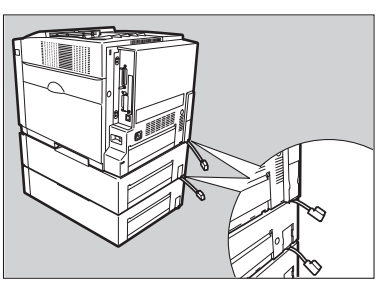


ZHBP370E

11 Close the connector cover of the printer.

ZHBP380E

To connect two Paper Feed Units, connect the paper feed unit cable to the socket inside the Paper Feed Unit securely, and then close the connector cover.



ZHBP390E

Note

❒ When moving or transporting the printer, make sure to unplug the Paper Feed Unit connector. For more information, see "Moving and Transporting the Printer" in the Maintenance Guide.

Note

❒ 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 "Paper Feed Unit (Tray 2)" or "Paper Feed Unit (Tray 3)" under the "Options" list.

❒ If the Paper Feed Unit is not installed properly, reinstall it from step 3. If you cannot install it properly even after attempting reinstallation, contact your sales or service representative.

Reference

For printing the configuration page, see "Making Printer Settings with the Control Panel" in the Administrator Reference.

See "Loading Paper" in the Maintenance Guide.

Important

❒ Before using the new Paper Feed Unit, you must make settings in the printer driver.

AD440 (Duplex Unit)

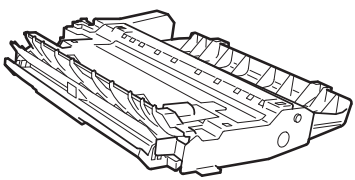
⚠ ***CAUTION:***

- *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.*

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

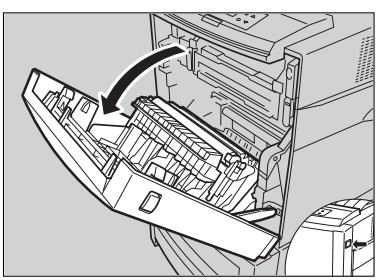
2 **Check the contents of the package for the following:**

❖ **Duplex Unit**



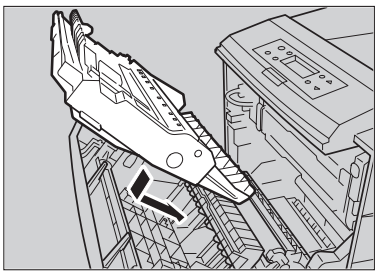
ZHBP240E

3 **Open the front cover by pushing the front cover release button.**

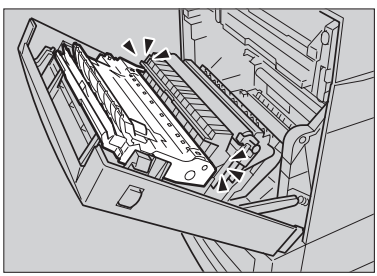


ZHBP260E

4 **Hold the Duplex Unit as shown in the illustration, and then insert it into the inside of the front cover.**



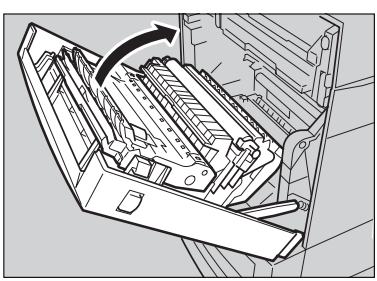
ZHBP270E



ZHBP280E

Align the arrows, and then insert the Duplex Unit until it clicks.

5 **Close the front cover.**



ZHBP282E

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.

❒ If the Duplex Unit is not installed properly, reinstall it from step 3. If you cannot install it properly even after attempting reinstallation, contact your sales or service representative.

Reference

See "Making Printer Settings with the Control Panel" in the Administrator Reference for printing the configuration page.

Important

❒ Before using the Duplex Unit, you must make settings in the printer driver.

Memory Unit Type C (SDRAM Module)

⚠ ***CAUTION:***

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

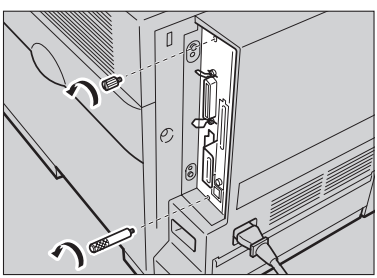
Important

❒ 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.

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

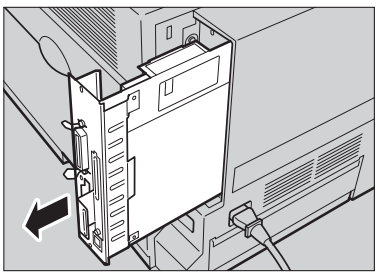
2 **Remove the two screws that fasten the controller board on the back of the printer.**



ZHBP080E

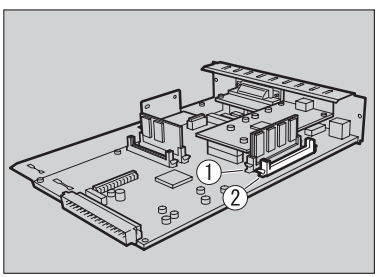
The removed screws will be used in step **7** to fasten the controller board.

3 **While holding the handle, pull out the controller board slowly.**



ZHBP020E

There are two slots for the Memory Unit. Use the available slot (the one in the front in the illustration ②) to install an optional Memory Unit



ZHBP100E

Important

❒ In order to install the maximum 384 MB memory, remove the standard Memory Unit ①, and then replace with the 128 MB Memory Unit. Then install the 256 MB Memory Unit onto the other slot (the one in the front in the illustration ②).

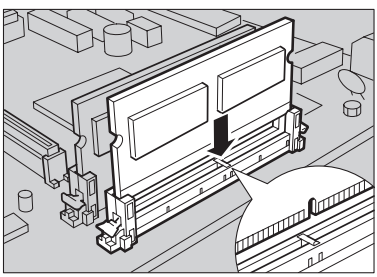
❒ When using only one Memory Unit, be sure to use the slot in the back shown in the illustration ①.

Note

❒ The following is the recommended combination of the Memory Units.

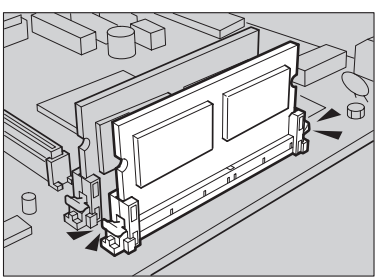
Slot		Total memory
CN2 (back ①)	CN3 (front ②)	
64 MB	None	64 MB
64 MB	64 MB	128 MB
64 MB	128 MB	192 MB
64 MB	256 MB	320 MB
128 MB	256 MB	384 MB

4 **Adjust the notch of the Memory Unit to the slot, and then insert vertically.**



ZHBP110E

5 **Press the Memory Unit down until it clicks into place.**

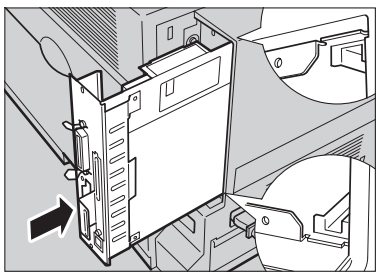


ZHBP120E

6 **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.

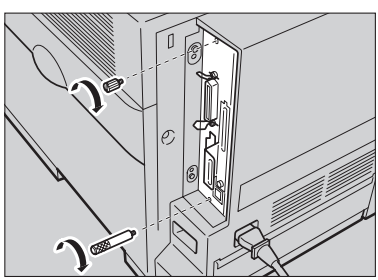


ZHBP070E

Important

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

7 **Fasten the controller board to the printer with the two screws that you removed in step 2.**



ZHBP010E

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".

❒ 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 "Making Printer Settings with the Control Panel" in the Administrator Reference.

Important

❒ Before using the new Memory Unit, you must make settings in the printer driver.

Printer Hard Disk Type 3000

1

⚠ ***CAUTION:***

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

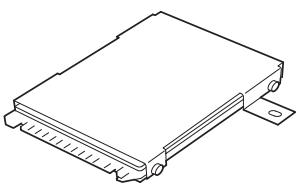
Important

❒ Before touching the Printer Hard Disk, touch something metal to discharge any static electricity. Static electricity can damage the Printer Hard Disk.

❒ Do not subject the Printer Hard Disk to physical shocks.

1 Check the contents of the package for the following:

❖ **Printer Hard Disk Type 3000**

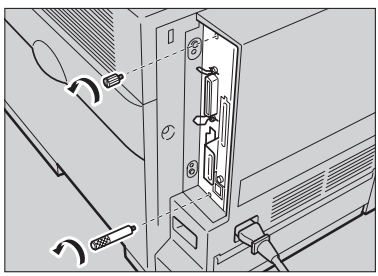


ZHBPD010E

❖ **Screw**

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

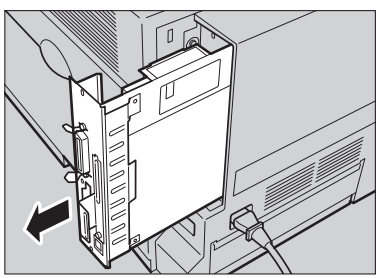
3 Remove the two screws that fasten the controller board on the back of the printer.



ZHBP080E

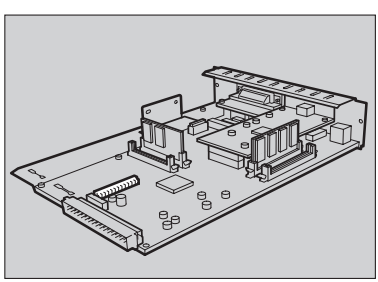
The removed screws will be used in step 8 to fasten the controller board.

4 While holding the handle, pull out the controller board slowly.



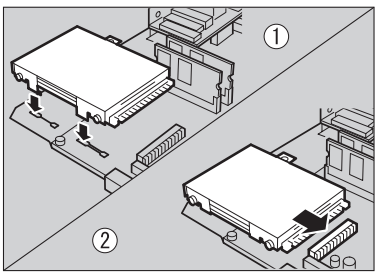
ZHBP020E

The Printer Hard Disk is to be installed to the position shown in the illustration.



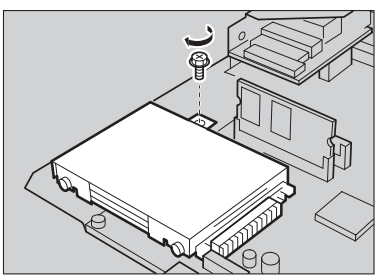
ZHBP160E

5 **Insert the Printer Hard Disk by aligning it with the controller board slot, sliding it in the direction of the arrow, and then connecting it to the connector on the controller board.**



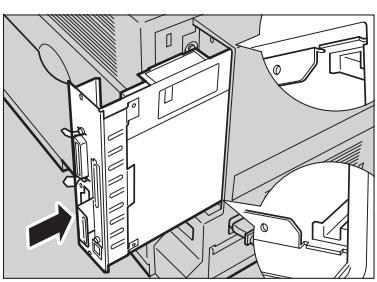
ZHBP170E

6 **Fasten the Printer Hard Disk using the supplied screw.**



ZHBP180E

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



ZHBP070E

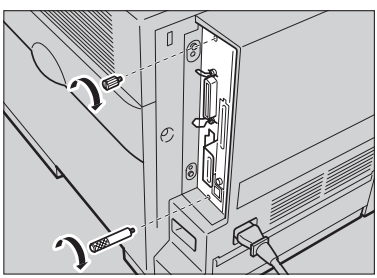
Note

❒ 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.

8 **Fasten the controller board to the printer with the two screws that you removed in step 3.**



ZHBP010E

When the power is turned on, the Printer Hard Disk will be formatted automatically.

Note

❒ After finishing installation, you can check whether the Printer Hard Disk 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".

❒ If the Printer Hard Disk 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

See "Making Printer Settings with the Control Panel" in the Administrator Reference for printing the configuration page.

Important

❒ Before using the new Printer Hard Disk, you must make the settings in the printer driver.

Formatting the Printer Hard Disk drive

If it becomes necessary to format the Printer Hard Disk after initial setup, execute "HDD Format" in the Maintenance menu.

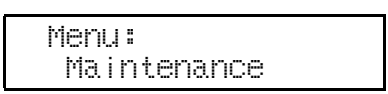
Important

❒ Formatting the Printer Hard Disk will delete all data.

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 "HDD Format", and then press the [Enter #] key.**

A message to start to format is shown.

Note

❒ If "HDD Format" is not displayed on the panel display, the Printer Hard Disk is not installed properly. Reinstall it from step **1**. If you cannot install it properly even after the reinstallation, contact your sales or service representative.

Important

❒ Do not turn off the power while formatting the Printer Hard Disk to avoid a printer malfunction.

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

The Printer Hard Disk is formatted, and a message to restart the printer is shown.

5 **Turn off the power, and then turn it back on.**

Formatting the Printer Hard Disk is completed and it is enabled to use.

1394 Interface Unit Type 4510

⚠ ***CAUTION:***

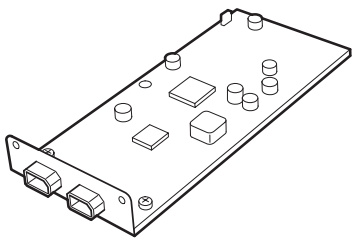
- *Do not touch the inside of the controller board compartment. It may cause a machine malfunction or a burn.*

Important

- ❒ Printing using "1394/Scsi Printer" (Windows 2000) device and "IEEE 1394 and SCSI printers" (Windows XP) with the optional 1394 Interface Unit is possible under Windows 2000 and Windows XP. Printing with IP over 1394 is possible under Windows Me and Windows XP.
- ❒ Under Windows 2000, the 1394 Interface Unit can only be used with Service Pack 1 or later. If the Service Pack is not installed, the connectable SCSI print device in a 1394 bus is only one. The client cannot install the printer driver without using an account with Administrators permission.
- ❒ Before touching the 1394 Interface Unit, touch something metal to discharge any static electricity. Static electricity can damage the 1394 Interface Unit
- ❒ Unplug all the interface cables from the printer before installation. If you take out the controller board with cables plugged in, the 1394 Interface Unit might be damaged.
- ❒ Do not plug or unplug the 1394 interface cable while installing the printer driver
- ❒ Use the 1394 Interface cable that comes with 1394 Interface Unit.

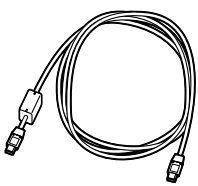
1 **Check the contents of the package for the following:**

❖ **1394 Interface Unit Type 4510**



ZHBP400E

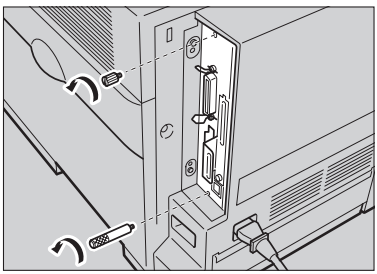
❖ **Interface Cable (6 pins × 6 pins)**



❖ **Interface Cable (6 pins × 4 pins)**

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

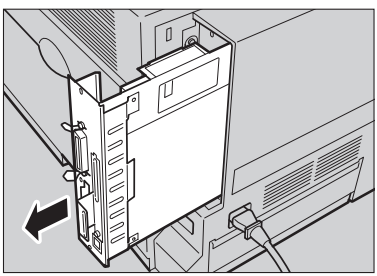
3 **Remove the two screws that fasten the controller board on the back of the printer.**



ZHBP080E

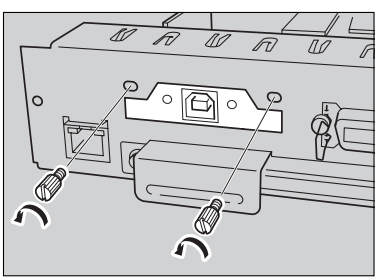
The removed screws will be used in step **9** to fasten the controller board.

4 **While holding the handle, pull out the controller board slowly.**



ZHBP020E

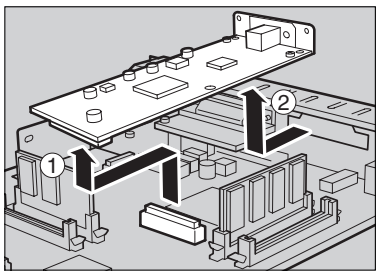
5 **Remove USB2.0 Interface Unit.**



ZHBPB460E

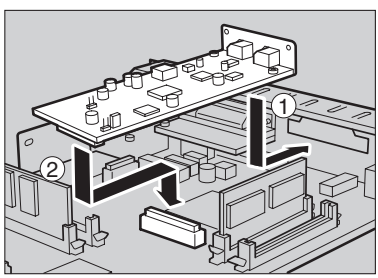
Note

- The removed screws will be used in step **7** to fasten the 1394 Interface Unit.
- Lift the end of USB2.0 Interface Unit (①), and then remove it from the controller board (②).



ZHBP450E

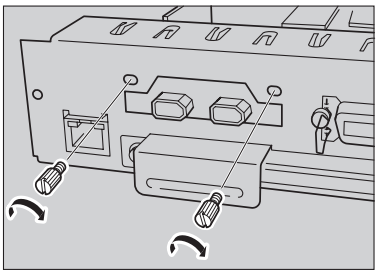
6 **Attach the 1394 Interface Unit to the controller board. Insert the end of the 1394 Interface Unit into the opening (①), and then push down until it clicks (②).**



ZHBP050E

Confirm that the 1394 Interface Unit is firmly connected to the controller board.

7 **Fasten the 1394 Interface Unit on the controller board using the screws that you removed in step 5.**

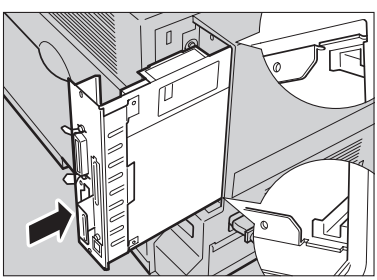


ZHBPB060E

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.

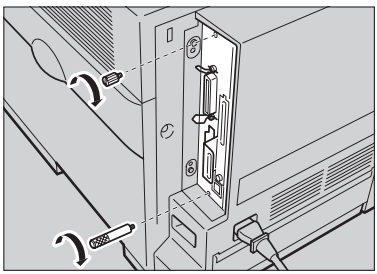


ZHBP070E

Important

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

9 **Fasten the controller board to the printer with the two screws that you removed in step 3.**



ZHBP010E

Note

❒ After finishing installation, you can check whether the 1394 Interface Unit is installed properly. Print the configuration page from the "List/Test Print" menu. If it is installed properly, you will see "IEEE1394" for "Controller Option".

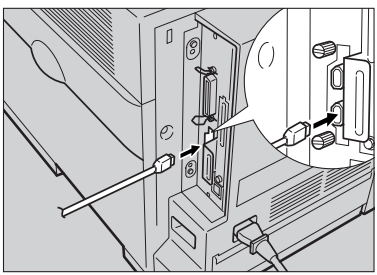
❒ If the 1394 Interface Unit is not installed properly, reinstall it from step 2. If you cannot install it properly even after attempting reinstallation, contact your sales or service representative.

Reference

See "Making Printer Settings with the Control Panel" in the Administrator Reference for printing the configuration page.

Connecting the cable to the 1394 Interface Unit

1 Connect the interface cable to the 1394 interface port.



ZHBP090E

Note

❒ Either connector can be used.

❒ If you use a interface cable (6 pins x 6 pins) connect the end with the ferrite core to the printer.

2 Connect the other end to the host computer.

Important

❒ You cannot plug devices together to create loops.

❒ Do not use a cable more than 4.5 meters (14.8 feet) long.

IEEE 1394 Configuration

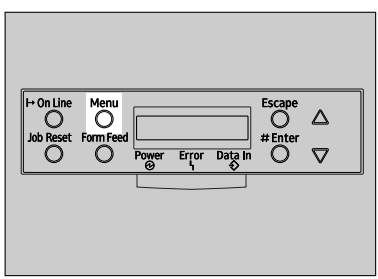
Use this procedure to configure the printer for use in the IEEE 1394 environment. The following table shows the control panel settings and their default values. These items are included in the "Host Interface" menu.

Setting Name	Value
IP Address1394	000.000.000.000
Subnet Mask1394	000.000.000.000
IP over 1394	Active
SCSI print	Active
Bidi-SCSI print	Active

Depending on the protocol you use, procedures vary. See the following table.

IP over 1394	Steps 1-8 and then go to steps 13 to 14
SCSI print	Steps 1-4 and then go to steps 9 to 14

1 Press [Menu].



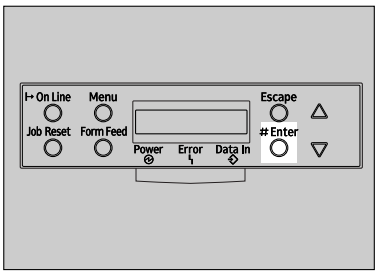
ZHBS010E

"Menu" appears on the panel display.

2 Press [▲] or [▼] to display "Host Interface" menu.

```
Menu:
  Host Interface
```

3 **Press [Enter #].**



The following message appears on the panel display.

```
Host Interface:
 I/O Buffer
```

4 **Press [▲] or [▼] to display "IEEE 1394 Setup".**

```
Host Interface:
 IEEE 1394 Setup
```

5 **Press [Enter #].**

The following message appears on the panel display.

```
IEEE 1394 Setup:
 IP Address1394
```

6 **Press [▲] or [▼] to display "IP over 1394".**

```
IEEE 1394 Setup:
 IP over 1394
```

❶ **Press [Enter #].**

❷ **Press [▲] or [▼] to select either "Active" or "Not Active".**

❸ **Press [Enter #].**

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

7 **Assign the IP address to the printer.**

Do not overlap the IP address in the same subnet or the same IP address in the network setting.

Note

❒ To get the IP address for the printer, contact your network administrator.

❶ **Press [▲] or [▼] until the following message appears.**

```
IEEE 1394 Setup:
 IP Address1394
```

❷ **Press [Enter #].**

The current IP address appears on the panel display.

```
IP Address1394:
 000.000.000.000
```

❸ **Press [▲] or [▼] to enter the leftmost entry field of the IP address.**

```
IP Address1394:
 192.000.000.000
```

❹ **Press [Enter #].**

The pointer (▒) moves to the next entry field automatically.

```
IP Address1394:
 192.02▒.000.000
```

Note

❒ The value moves by 10 if [▲] or [▼] is kept pressed.

❒ You can return the pointer (▒) to the previous (left) entry field by pressing [Escape].

❒ If you press 【Escape】 when the pointer (▒) is on the leftmost position, the selected IP address is reset.

❺ Repeat steps ❸ and ❹ to enter the IP address.

```
IP Address1394:
 192.168.000.011
```

Check if the pointer (▒) is at the rightmost position, and press 【Enter #】 to register the IP address you selected.

```
IEEE 1394 Setup:
 IP Address1394
```

8 Set "Subnet Mask1394" in the same way.

9 Set "SCSI print" and "Bidi-SCSI print" if necessary.

Note

❒ The default setting is "Active".

10 Press 【▲】 or 【▼】 to display "SCSI print".

```
IEEE 1394 Setup:
 SCSI print
```

11 Press 【Enter #】.

The following message appears on the panel display.

```
SCSI print:
*Active
```

12 Press 【▲】 or 【▼】 to select either "Active" or "Not Active", and then press 【Enter #】.

Set " Bidi-SCSI print " in the same way.

13 Press 【On Line】.

"Ready" appears on the panel display.

```
Ready
```

14 Print a configuration page to confirm the settings made. See "Printing a Configuration Page" in the Administrator Reference.

802.11b Interface Unit Type A

⚠ ***CAUTION:***

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

Important

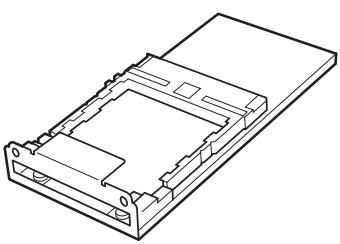
❒ Before touching the 802.11b Interface Unit, touch something metal to discharge any static electricity. Static electricity can damage the 802.11b Interface Unit

❒ Do not subject the 802.11b Interface Unit to physical shocks.

1 Check the contents of the package for the following:

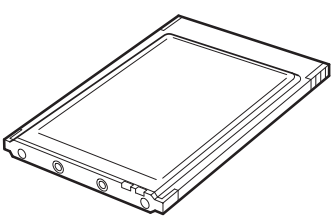
❖ **802.11b Interface Unit Type A**

- Interface Unit



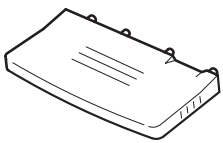
ZHBP410E

- Card



ZHBP420E

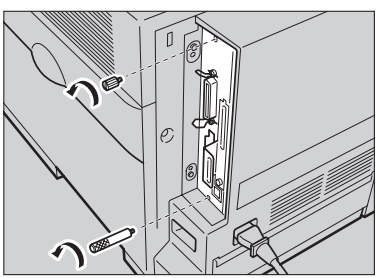
- Antenna



ZHBP430E

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

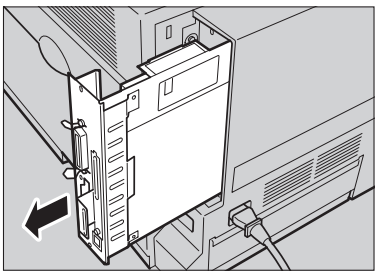
3 Remove the two screws that fasten the controller board on the back of the printer.



ZHBP080E

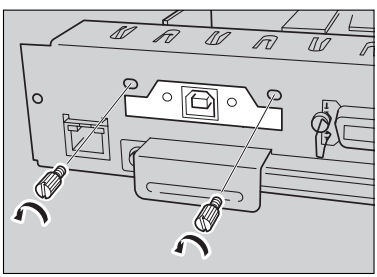
The removed screws will be used in step 11 to fasten the controller board.

4 **While holding the handle, pull out the controller board slowly.**



ZHBP020E

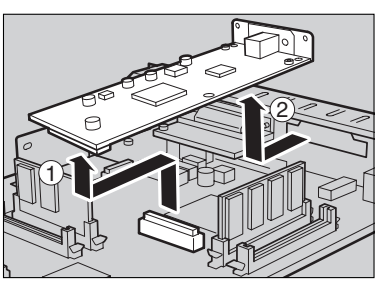
5 **Remove USB2.0 Interface Unit.**



ZHBPB460E

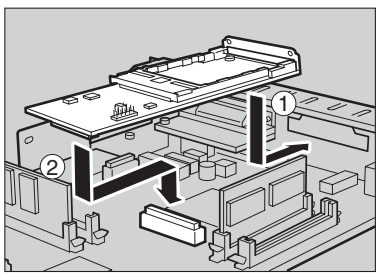
Note

- The removed screws will be used in step **7**.
- Lift the end of USB2.0 Interface Unit (①), and then remove it from the controller board (②).



ZHBP450E

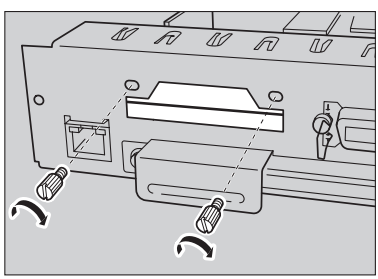
6 **Attach the 802.11b Interface Unit. Insert the end of the 802.11b Interface Unit to the opening (①), and then push down until it clicks (②).**



ZHBP190E

Confirm that the 802.11b Interface Unit is firmly connected to the controller board.

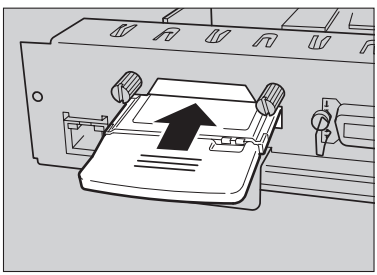
7 **Fasten the 802.11b Interface Unit on the controller board using the screws that you removed in step 5.**



ZHBP200E

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

9 **Insert the card slowly into the 802.11b Interface Unit with the label facing down and the uneven black antenna surface facing up until it stops.**

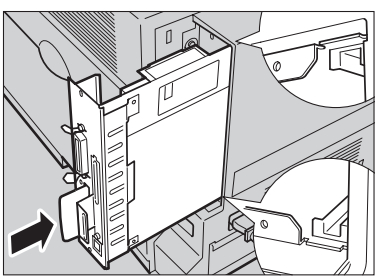


ZHBP210E

10 **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.

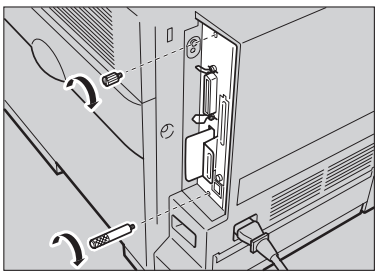


ZHBP220E

Important

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

11 **Fasten the controller board to the printer with the two screws that you removed in step 3.**



ZHBPB230E

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

See "Making Printer Settings with the Control Panel" in the Administrator Reference for printing the configuration page.

IEEE 802.11b (Wireless LAN) Configuration

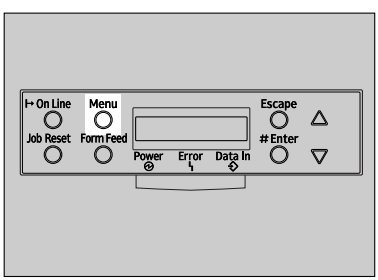
1

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	• Inch version (1-11) 11
	• Metric version (1-13) 11
Trans. Speed	Auto
WEP Setting	Not Active

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 "Network Setup", see the Quick Installation Guide.

1 Press [Menu].

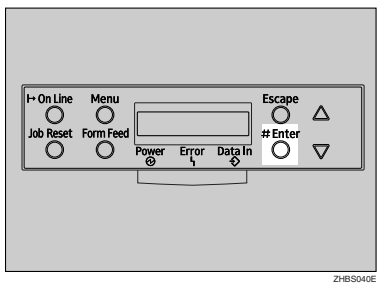


"Menu" appears on the panel display.

2 Press [▲] or [▼] to display "Host Interface" menu.

```
Menu:
 Host Interface
```

3 Press [Enter #].



The following message appears on the panel display.

```
Host Interface:
 I/O Buffer
```

4 Press [▲] or [▼] to display "IEEE 802.11b".

```
Host Interface:
 IEEE 802.11b
```

5 Press [Enter #].

Be sure that "Comm. Mode" appears on the panel display.

```
IEEE 802.11b:
 Comm. Mode
```

6 Press [Enter #].

The following message appears on the panel display.

```
Comm. Mode:
*802.11 Ad hoc
```

7 **Press 【▲】 or 【▼】 to select the transmission 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".

8 **Press 【Enter #】.**

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.

❶ **Press 【▲】 or 【▼】 to display "Channel".**

```
IEEE 802.11b:
 Channel
```

❷ **Press 【Enter #】.**

The channel currently used appears on the panel display.

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

❸ **Press 【▲】 or 【▼】 to enter the channel.**

❹ **Press 【Enter #】.**

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 **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.

❶ **Press the 【Enter #】 key.**

The following message appears on the panel display.

```
SSID:          [ 0]
▒
```

Note

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

❷ **Press the 【▲】 or 【▼】 key to select characters, and then press the 【Enter #】 key.**

```
SSID:        [ 1]
A
```

The pointer (▒) moves to the next character position.

```
SSID:        [ 1]
A▒
```

❸ **Continue entering the key.**

Note

❒ The characters that can be used are ASCII 0x20-0x7e (32 bytes).

❒ If you press the 【Escape】 key, the pointer (▒) moves to the previous character position.

❹ **After entering the key, press the 【Enter #】 key twice.**

```
SSID:       [32]
AAAAAAAAAAAAAAAA
```

The screen returns to step ⓫.

⓬ **Press the 【▲】 or 【▼】key to display "WEP Setting".**

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

❶ **Press the 【Enter #】 key.**

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

❷ **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
```

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.

❸ **Press the 【Enter #】 key.**

```
WEP Key:     [ 0]
▒
```

Note

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

❹ **Press the 【▲】 or 【▼】 key to select characters, and then press the 【Enter #】 key.**

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

The pointer (▒) moves to the next character position.

```
WEP Key:     [ 1]
0▒
```

❺ **Continue entering the key.**

Note

❒ You can enter either 10 or 26 characters. If the key you enter is not 10 or 26 characters long, the following message appears.

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

❒ If you press the 【Escape】 key, the pointer (▒) moves to the previous character position.

❻ **After entering the key, press the 【Enter #】 key.**

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

The screen returns to step ⓬.

⓭ **Press 【On Line】.**

"Ready" appears on the panel display.

```
Ready
```

⓮ **Print a configuration page to confirm the settings made. See "Printing a Configuration Page" in the Administrator Reference.**

Bluetooth Interface Unit Type A

1

⚠ ***CAUTION:***

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

Important

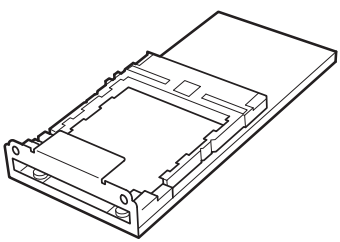
❒ Before manipulating the Bluetooth Interface Unit, touch any metal thing to discharge static electricity. Static electricity thing damage the Bluetooth Interface Unit.

❒ Do not subject the Bluetooth Interface Unit to physical shocks.

1 Check the contents of the package for the following:

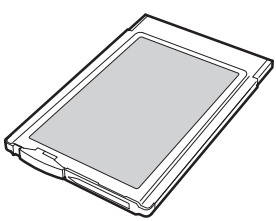
❖ **Bluetooth**

- Interface Unit



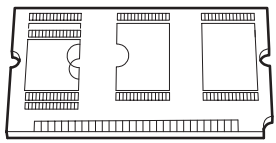
ZHBP410E

- Card



ZHBP510E

- Bluetooth Module



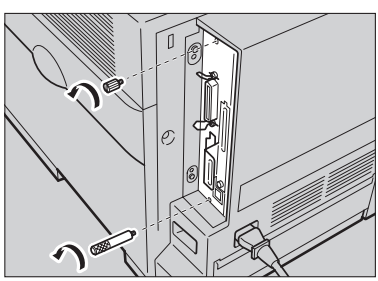
ZHBP520E

- Antenna Cap

ZHBPA921E

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

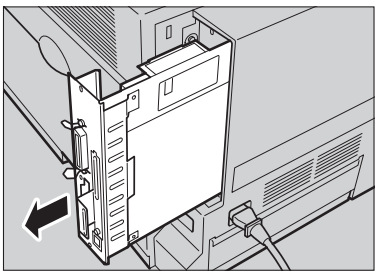
3 Remove the two screws that fasten the controller board on the back of the printer.



ZHBP080E

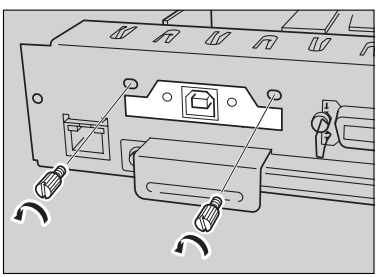
The removed screws will be used in step 12 to fasten the controller board.

4 **While holding the handle, pull out the controller board slowly.**



ZHBP020E

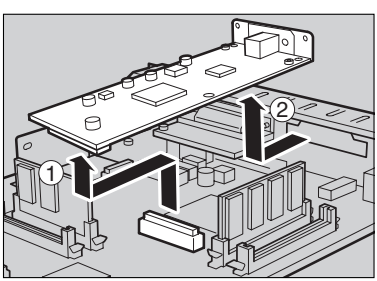
5 **Remove USB2.0 Interface Unit.**



ZHBPB460E

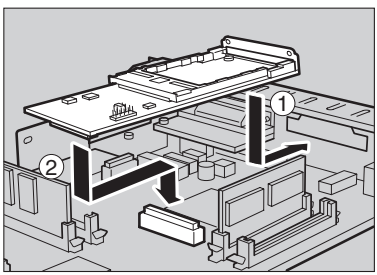
Note

- The removed screws will be used in step **7**
- Lift the end of USB2.0 Interface Unit (①), and then remove it from the controller board (②).



ZHBP450E

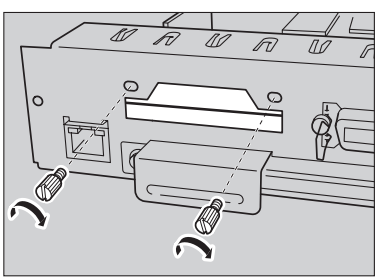
6 **Attach the Bluetooth Interface Unit. Insert the end of the Bluetooth Interface Unit to the opening (①), and then push down until it clicks (②).**



ZHBP190E

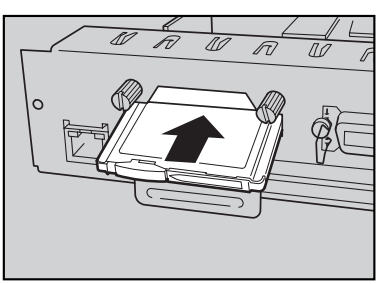
Confirm that the Bluetooth Interface Unit is firmly connected to the controller board.

7 **Fasten the Bluetooth Interface Unit on the controller board using the screws removed in step 5.**



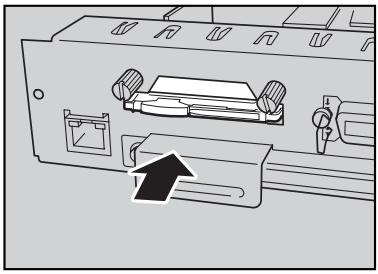
ZHBP200E

8 **Insert the card slowly into the Bluetooth Interface Unit with its side labeled "INSERT" facing up until it stops.**



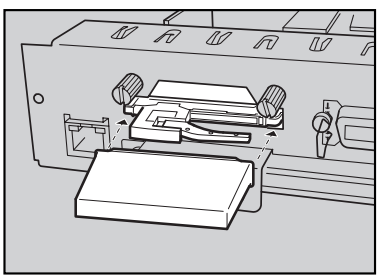
ZHBP530E

9 **Press the antenna to extend it.**



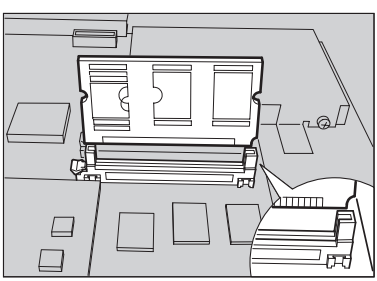
ZHBPA530E

10 **Attach the antenna cap over the antenna.**



ZHBPA920E

11 **Adjust the Bluetooth module to the slot, and then insert vertically.**

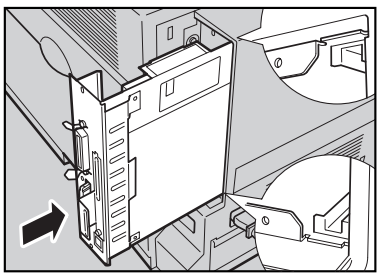


ZHBPS540E

12 **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.

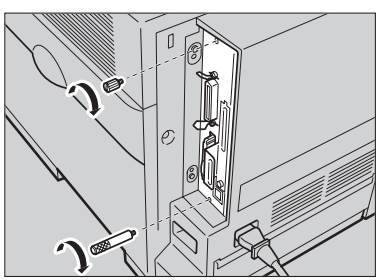


ZHBOS550E

Important

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

13 **Fasten the controller board to the printer with the two screws removed in step 3.**



ZHBPB560E

Network Interface Board Type 3000

⚠ ***CAUTION:***

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

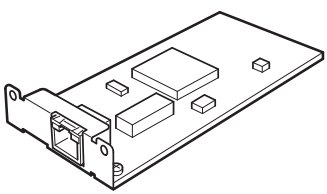
Important

❒ Before touching the Network Interface Board, touch something metal to discharge any static electricity. Static electricity can damage the Network Interface Board.

❒ Do not subject the Network Interface Board Interface Unit to physical shocks.

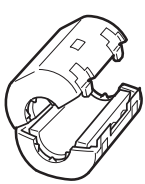
1 **Check the contents of the package for the following:**

❖ **Network Interface Board Type 3000**



ZHBP910E

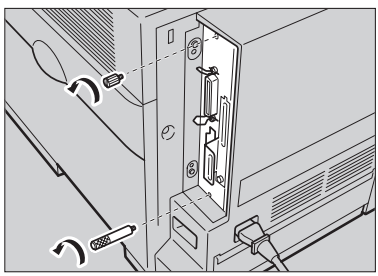
❖ **Ferrite Core × 2**



ZHBP911E

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

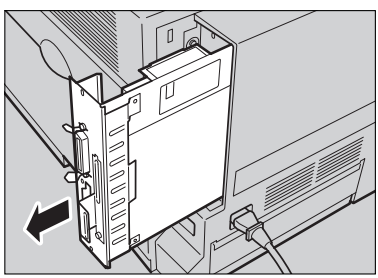
3 **Remove the two screws that fasten the controller board on the back of the printer.**



ZHBPA080E

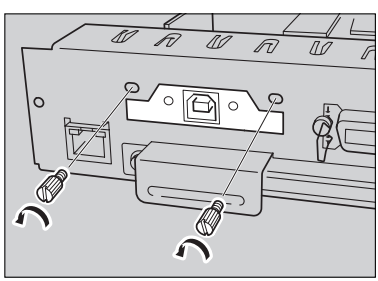
The removed screws will be used in step **9** to fasten the controller board.

4 **While holding the handle, pull out the controller board slowly.**



ZHBPA020E

5 **Remove USB2.0 Interface Unit.**

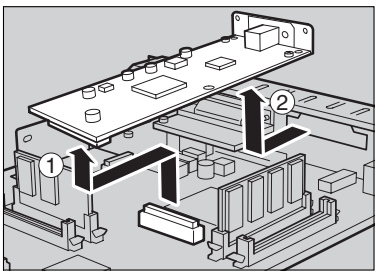


ZHBPB460E

Note

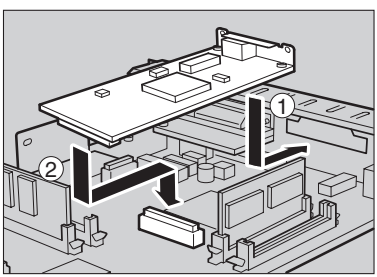
❒ The removed screws will be used in step 7.

❒ Lift the end of USB2.0 Interface Unit (①), and then remove it from the controller board (②).



ZHBP450E

6 Attach the Network Interface Board. Insert the end of the Network Interface Board to the opening (①), and then push down until it clicks (②).

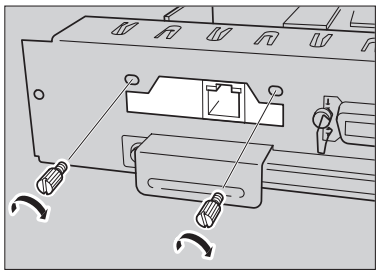


ZHBPA050E

Confirm that the Network Interface Board is firmly connected to the controller board.

9 Fasten the controller board to the printer with the two screws that

7 Fasten the Network Interface Board on the controller board using the screws that you removed in step 5.

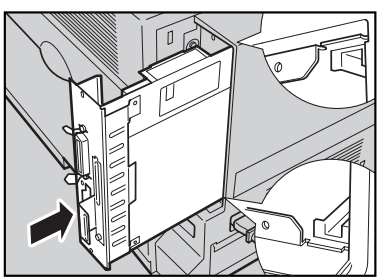


ZHBPC060E

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.

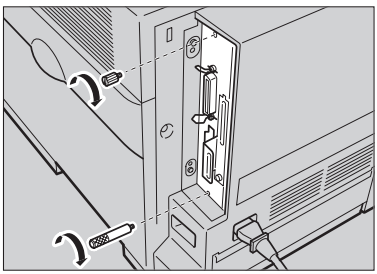


ZHBPA070E

Important

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

you removed in step 3.



ZHBPA010E

Note

❒ After finishing installation, you can check whether the Network Interface Board is installed properly. Print the configuration page from the "List/Test Print" menu. If it is installed properly, you will see "Option Ethernet Board" for "Controller Option".

❒ If the Network Interface Board 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

See "Making Printer Settings with the Control Panel" in the Administrator Reference for printing the configuration page.

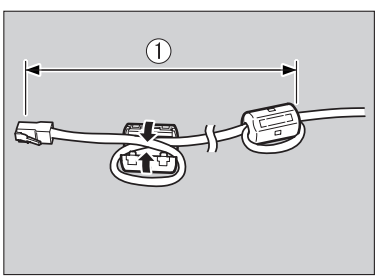
Connecting the Network Interface Cable to the Network

1 Turn off the power

2 Loop the network interface cable and attach the ferrite core.

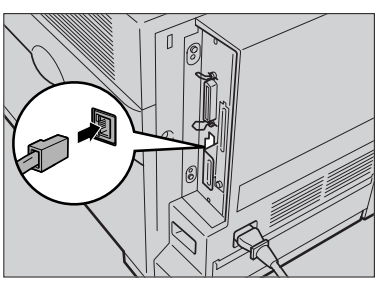
Note

❒ Attach two ferrite cores to the network interface cable. One of them must be attached close to the end of the cable (on the end closet to the printer). The other must be attached approximately 45 cm (18") (①) apart from the end. Attach each ferrite core with a loop.



ZHBP913E

3 Attach the network interface cable to the jack on the Network Interface Unit.



ZHBP1470E

4 Connect the other end of the network interface cable to the network.

5 Turn on the power.

User Account Enhance Unit Type B

1

⚠ ***WARNING:***

- ***Do not place the IC2 lithium battery near or into fire, or it will explode and cause a burn.***
- ***The User Account Enhance Unit installed on the controller board has a IC2 lithium battery which can explode if replaced incorrectly. Replace the User Account Enhance Unit only with the indicated one.***

⚠ ***CAUTION:***

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

Note

❒ Disposal should take place at an authorized dealer or an appropriate collection site. An IC2 lithium battery is inside the User Account Enhance Unit.

❒ If you dispose the unit, separate the IC2 lithium battery from the board, and then dispose of them according to the local regulations.

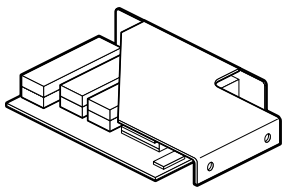
Important

❒ Before touching the User Account Enhance Unit, touch something metal to discharge any static electricity. Static electricity can damage the User Account Enhance Unit.

❒ Do not subject the User Account Enhance Unit to physical shocks.

1 **Check the contents of the package for the following:**

❖ **User Account Enhance Unit**



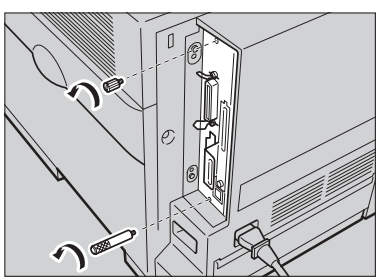
❖ **Screw**

Note

❒ The other screw supplied is not to be used.

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

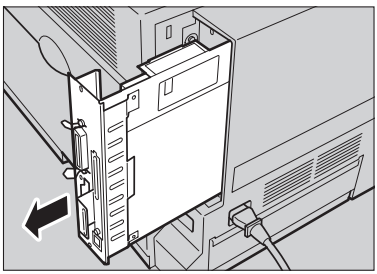
3 **Remove the two screws that fasten the controller board on the back of the printer.**



ZHBP080E

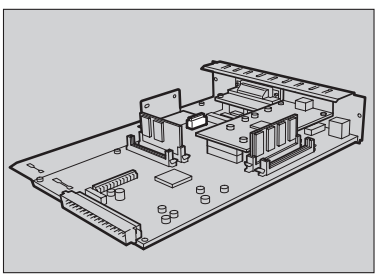
The removed screws will be used in step **8** to fasten the controller board.

4 **While holding the handle, pull out the controller board slowly.**



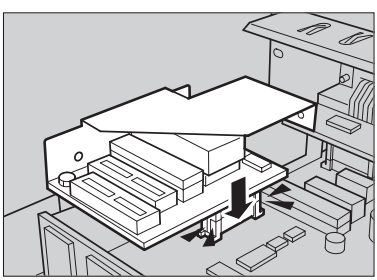
ZHBP020E

The User Account Enhance Unit is to be installed to the position shown in the illustration.



ZHBP130E

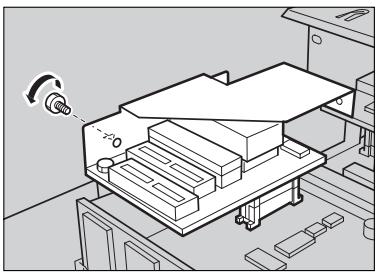
5 **Set the User Account Enhance Unit on the controller board in the direction shown in the illustration.**



ZHBP140E

Confirm that the User Account Enhance Unit is firmly connected to the controller board.

6 **Align the screw hole of the User Account Enhance Unit and the controller board, and then fasten the User Account Enhance Unit on the controller board using a supplied screw.**

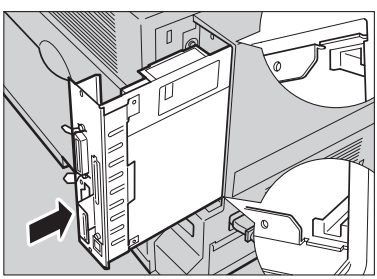


ZHBP150E

7 **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.

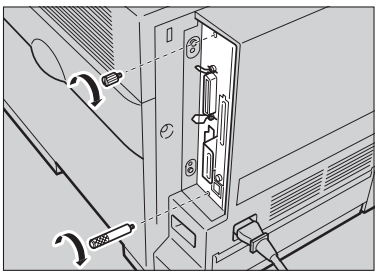


ZHBP070E

Important

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

8 Fasten the controller board to the printer with the two screws that you removed in step 3.



ZHBP010E

Note

❒ After finishing installation, you can check whether the User Account Enhance Unit is installed properly. Print the configuration page from the "List/Test Print" menu. If it is installed properly, you will see "Accounting Module" for "Controller Option".

❒ If the User Account Enhance 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

See "Making Printer Settings with the Control Panel" in the Administrator Reference for printing the configuration page.

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MEMO

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Aficio™ CL3000/CL3000DN Option Setup Guide Maintenance Guide

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Printed in The Netherlands
EE (GB) G081-6530

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Introduction

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 before using this machine. It contains important information related to USER SAFETY and PREVENTING EQUIPMENT PROBLEMS.

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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Solaris is a trademark or registered trademark of Sun Microsystems, Inc. in the United States and other countries.

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.

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® XP are as follows:
  Microsoft® Windows® XP Professional
  Microsoft® Windows® XP Home Edition
- 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 NT® 4.0 are as follows:
  Microsoft® Windows NT® Server 4.0
- Microsoft® Windows NT® Workstation 4.0

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.

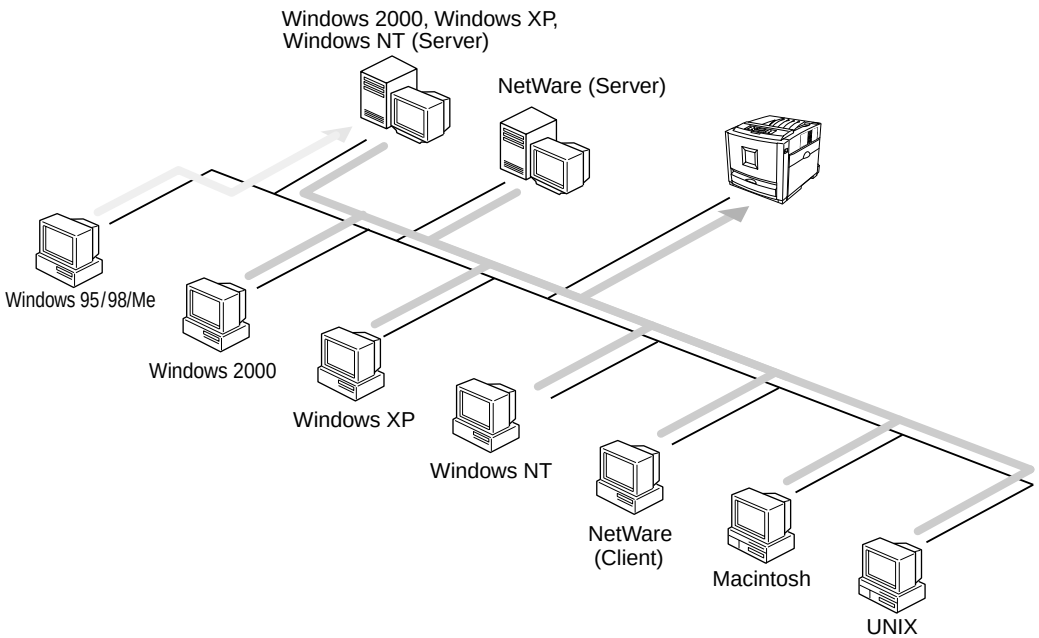
Limitation
This symbol indicates numerical limits, functions that cannot be used together, or conditions in which a particular function cannot be used.

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

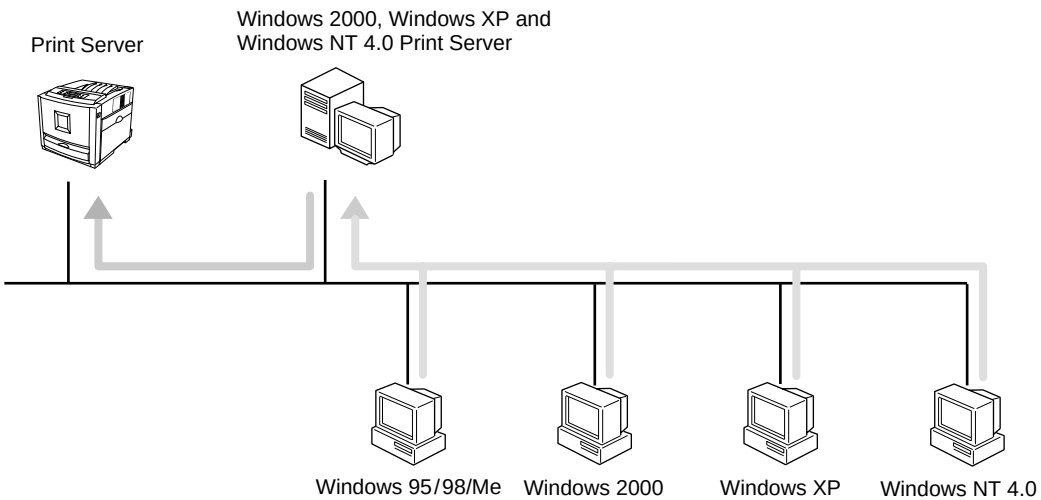


❖ **Connecting Printer and Computer**

- Network connection (Ethernet cable)
- Parallel connection (parallel cable)

Print Server Configuration

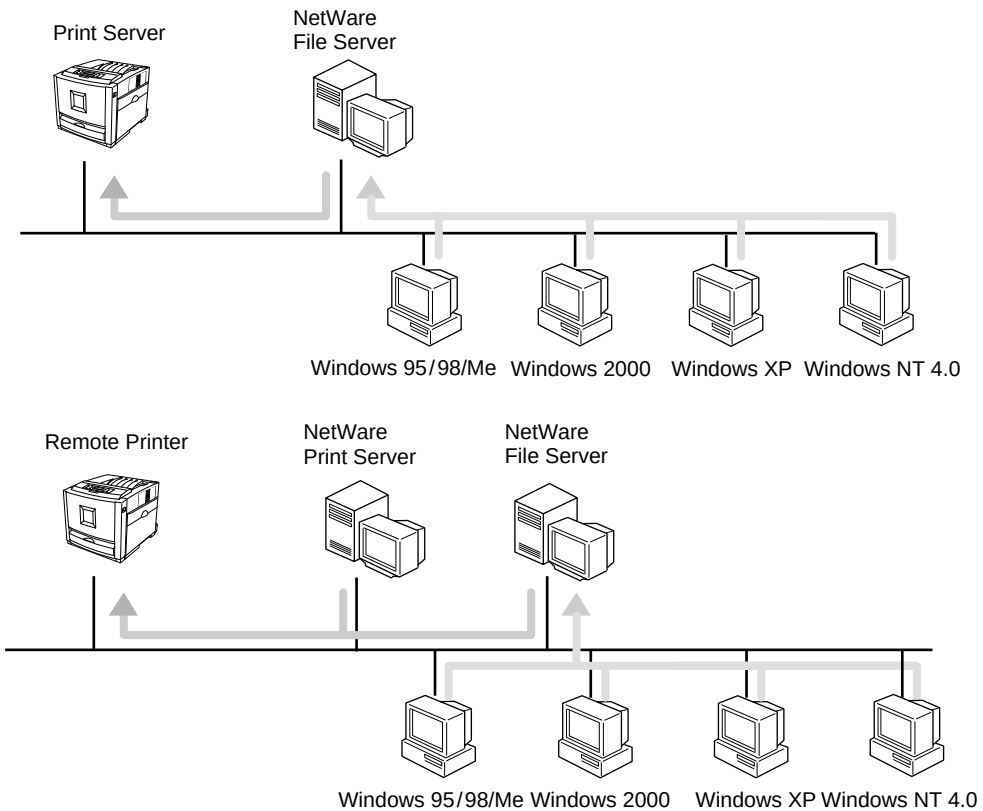
You can use Windows 2000, Windows XP, or Windows NT 4.0 as a print server.



See p.14 “Windows 2000 Print Server Configuration”.
See p.34 “Windows XP Print Server Configuration”.
See p.52 “Windows NT 4.0 Print Server Configuration”.

Netware Configuration

For setting up the machine as a network printer in a NetWare environment. The Network Interface Board allows you to use the machine as either a print server or a remote printer.



See p.71 “NetWare Configuration”.

To use a printer connected to the Ethernet interface, select "SmartNetMonitor", "Standard TCP/IP Port" or "LPR Port" when installing the printer driver.

- SmartNetMonitor
  See p.14 “Configuring the Protocols” and p.18 “Installing Software” and p.19 “Installing the PCL 5c or RPCS Printer Driver” or p.24 “Installing the PostScript Printer Driver”.
- Standard TCP/IP Port, LPR Port
  See p.14 “Configuring the Protocols” and p.19 “Installing the PCL 5c or RPCS Printer Driver” or p.24 “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 Network Interface Board and Windows 2000 to use the TCP/IP protocol and IPP.

Preparation

To use NetBEUI, use the SmartNetMonitor for Client port.

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 2000 Configuration*" in Printer Client Reference that comes with this printer.

If DHCP is used to assign IP addresses, see p.231 “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.

Configuring NetBEUI for Printing

Follow these instructions to configure the Network Interface Board and Windows 2000 to use the NetBEUI protocol.

Configuring the printer

Configure the printer to use the NetBEUI protocol.

- Confirm that the NetBEUI protocol is set to be active. (The factory default is active.)

Reference

For more information about how to make the above settings, see "*Windows 2000 Configuration*" in Printer Client Reference 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 SmartNetMonitor 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 [SmartNetMonitor for Client / Admin].**
5. **Click to select [SmartNetMonitor 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 SmartNetMonitor 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.

- SmartNetMonitor
- Standard TCP/IP Port
- LPR Port

SmartNetMonitor

❶ Click [Add].

❷ Select [SmartNetMonitor], and then click [OK].

❸ 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.130 “Printing a Configuration Page”. NetBEUI address appears as “\\RNPxxxx\xxx” 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" or "ipp://printer's-ip-address/printer" in the **[Printer URL]** field.
(Example IP address is 192.168.15.16)

```
http://192.168.15.16/printer
ipp://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 SmartNetMonitor for Client Help.

⑤ Click **[OK]**.

Standard TCP/IP Port

❶ **Click [Add].**
❷ **Select [Port:], and then click [Add].**
❸ **Select [Standard TCP/IP], and then click [OK].**
❹ **Click [Next] in the "Add Standard TCP/IP Printer Port Wizard" window.**
❺ **Type the printer name or IP address in the "Printer Name or IP Address" box.**
❻ **Click [Finish] in the "Add Standard TCP/IP Printer Port Wizard" window.**

LPR Port

❶ **Click [Add].**
❷ **Select [Port:], and then click [Add].**
❸ **Select [LPR Port], and then click [OK].**
❹ **Type the printer's IP address in the "Name or address of server providing lpd" box.**
❺ **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.33 “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.

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 bidirectional transmission is disabled. For more information about the status of bidirectional transmission, see p.31 “Bidirectional transmission”.

Reference

For more information about option settings, see p.30 “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: Cestina, Magyar, Polski, Portugues, Suomi

4 **Click [PostScript 3 Printer Driver].**

"Add Printer Wizard" starts.

5 **Click [Next >].**

6 Select the port you want to use.

- SmartNetMonitor
- Standard TCP/IP Port
- LPR Port

SmartNetMonitor

❶ **Click [Create a new port:].**

❷ **Select [SmartNetMonitor], and then click [Next >].**

❸ **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.130 “Printing a Configuration Page”. NetBEUI address appears as “\\RNPxxxx\xxx” 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" or "ipp://printer's-ip-address/printer" in the **[Printer URL]** field.
(Example IP address is 192.168.15.16)

```
http://192.168.15.16/printer
ipp://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 SmartNetMonitor for Client Help.

⑤ Click **[OK]**.

Standard TCP/IP Port

❶ **Click [Create a new port:].**

❷ **Select [Standard TCP/IP] in [Create a new Port], and then click [Next].**

❸ **Click [Next] in the "Add Standard TCP/IP Printer Port Wizard" window.**

❹ **Type the printer name or IP address in the "Printer Name or IP Address" box, and then click [Next>].**

❺ **Click [Finish] in the "Add Standard TCP/IP Printer Port Wizard" window.**

LPR Port

❶ **Click [Create a new 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].**

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.33 “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.30 “Setting Up Options”.

Changing Port Settings

Follow the steps to change SmartNetMonitor 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 SmartNetMonitor for Client, and then right-click the SmartNetMonitor 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 SmartNetMonitor 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, Windows 2000, Windows XP 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.
- SmartNetMonitor 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].**

To use a printer connected to the Ethernet interface, select "SmartNetMonitor", "Standard TCP/IP Port" or "LPR Port" when installing the printer driver.

- SmartNetMonitor
  See p.34 “Configuring the Protocols” and p.37 “Installing Software” and p.38 “Installing the PCL 5c or RPCS Printer Driver” or p.43 “Installing the PostScript Printer Driver”.
- Standard TCP/IP Port, LPR Port
  See p.34 “Configuring the Protocols” and p.38 “Installing the PCL 5c or RPCS Printer Driver” or p.43 “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 Network Interface Board and Windows XP 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 Configuration*" in Printer Client Reference that comes with this printer.

If DHCP is used to assign IP addresses, see p.231 “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 computer

Follow these steps to configure a Windows XP 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 [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 XP 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 SmartNetMonitor 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 [SmartNetMonitor for Client / Admin].**
5. **Click to select [SmartNetMonitor 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 SmartNetMonitor 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.

- SmartNetMonitor
- Standard TCP/IP Port
- LPR Port

SmartNetMonitor

❶ Click [Add].

❷ Click [OK].

❸ 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" or "ipp://printer's-ip-address/printer" in the **[Printer URL]** field.
(Example IP address is 192.168.15.16)

```
http://192.168.15.16/printer
ipp://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 SmartNetMonitor for Client Help.

⑤ Click **[OK]**.

Standard TCP/IP Port

❶ **Click [Add].**
❷ **Select [Standard TCP/IP], and then click [OK].**
❸ **Click [Next] in the "Add Standard TCP/IP Printer Port Wizard" window.**
❹ **Type the printer name or IP address in the "Printer Name or IP Address" box.**
❺ **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].**

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.51 “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.**

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.49 “Bidirectional transmission”.

Reference
For more information about option settings, see p.48 “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: Cestina, Magyar, Polski, Portugues, Suomi

4 Click [PostScript 3 Printer Driver].

"Add Printer Wizard" starts.

5 **Click [Next >].**

6 **Select the port you want to use.**

- SmartNetMonitor
- Standard TCP/IP Port
- LPR Port

SmartNetMonitor

❶ **Click [Create a new port:].**

❷ **Select [SmartNetMonitor], and then [Next >].**

❸ **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" or "ipp://printer's-ip-address/printer" in the **[Printer URL]** field.
(Example IP address is 192.168.15.16)

```
http://192.168.15.16/printer
ipp://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 SmartNetMonitor for Client Help.

⑤ Click **[OK]**.

Standard TCP/IP Port

❶ **Click [Create a new port:].**

❷ **Select [Standard TCP/IP] in [Create a new Port], and then click [Next].**

❸ **Click [Next] in the "Add Standard TCP/IP Printer Port Wizard" window.**

❹ **Type the printer name or IP address in the "Printer Name or IP Address" box, and then click [Next>].**

❺ **Click [Finish] in the "Add Standard TCP/IP Printer Port Wizard" window.**

LPR Port

❶ **Click [Create a new 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].**

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.51 “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.48 “Setting Up Options”.

Changing Port Settings

Follow the steps to change SmartNetMonitor 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 SmartNetMonitor for Client, and then right-click the SmartNetMonitor 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 SmartNetMonitor 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, Windows 2000, Windows XP 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 **[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.
- SmartNetMonitor for Client included on the CD-ROM must be installed, and the TCP/IP protocol must be used.
- Under Windows XP **[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 [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].**

To use a printer connected to the Ethernet interface, select "SmartNetMonitor" or "LPR Port" when installing the printer driver.

- SmartNetMonitor
  See p.52 “Configuring the Protocols” and p.56 “Installing Software” and p.57 “Installing the PCL 5c or RPCS Printer Driver” or p.62 “Installing the PostScript Printer Driver”.
- LPR Port
  See p.52 “Configuring the Protocols” and p.57 “Installing the PCL 5c or RPCS Printer Driver” or p.62 “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 Network Interface Board and Windows NT 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*" in Printer Client Reference that comes with this printer.

If DHCP is used to assign IP addresses, see p.68 “Bidirectional transmission”.

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 computer

Follow these steps to configure a Windows NT 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 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 Help.

Configuring NetBEUI for Printing

Follow these instructions to configure the Network Interface Board and Windows NT to use the NetBEUI protocol.

Preparation

To use NetBEUI, use the SmartNetMonitor for Client port.

Configuring the printer

Configure the printer to use the NetBEUI protocol.

- Confirm that the NetBEUI protocol is set to be active. (The factory default is active.)

Reference

For more information about how to make the above settings, see "*Windows NT 4.0 Configuration*" in Printer Client Reference that comes with this printer.

Configuring a Windows NT computer

Install the NetBEUI protocol on the Windows NT 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 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 SmartNetMonitor 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 [SmartNetMonitor for Client / Admin].**
5. **Click to select [SmartNetMonitor 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 SmartNetMonitor 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.

- SmartNetMonitor
- LPR Port

SmartNetMonitor

❶ Click [Add].

❷ Select [SmartNetMonitor], and then click [OK].

❸ 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 an 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.130 “Printing a Configuration Page”. NetBEUI address appears “\\RNPxxxx\xxx” 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" or "ipp://printer's-ip-address/printer" in the **[Printer URL]** field.
(Example IP address is 192.168.15.16)

http://192.168.15.16/printer
ipp://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 SmartNetMonitor for Client Help.

⑤ Click **[OK]**.

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].

❿ Make sure the location for the selected printer is shown after [Port:].

⓫ Double-click [Shared] to display the shared settings.

⓬ To share the printer, check the left side of the [Shared] box.

⓭ 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.70 “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.**

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 bidirectional transmission is disabled. For more information about the status of bidirectional transmission, see p.68 “Bidirectional transmission”.

Reference
For more information about option settings, see p.67 “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: Cestina, Magyar, Polski, Portugues, Suomi

4 Click [PostScript 3 Printer Driver].

"Add Printer Wizard" starts.

5 **Click [Next >].**

6 **Select the port you want to use.**

- SmartNetMonitor
- LPR Port

SmartNetMonitor

❶ **Click [Create a new port:].**

❷ **Select [SmartNetMonitor], and then [New Port...].**

❸ **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.130 “Printing a Configuration Page”. NetBEUI address appears as “\\RNPxxxx\xxx” 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" or "ipp://printer's-ip-address/printer" in the **[Printer URL]** field.
(Example IP address is 192.168.15.16)

```
http://192.168.15.16/printer
ipp://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 SmartNetMonitor 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].**

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 [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.70 “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.

12 **Set up the options.**

Reference

For more information about option settings, see p.67 “Setting Up Options”.

Changing Port Settings

Follow the steps to change SmartNetMonitor 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 SmartNetMonitor for Client, and then right-click the SmartNetMonitor 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 SmartNetMonitor 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, Windows 2000, Windows XP 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.
- SmartNetMonitor 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.

4. NetWare Configuration

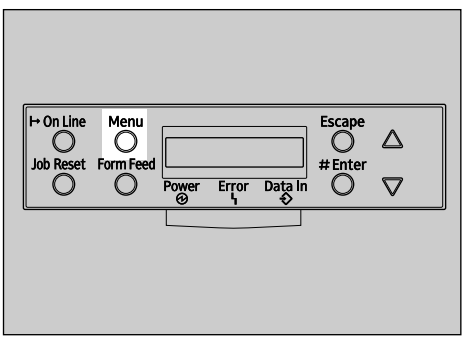
This chapter describes how to configure the printer to use as a print server or a remote printer in a NetWare environment.

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.

❶ **Press the [▲] or [▼] key to display "Active Protocol", and then press the [Enter #] key.**

```
Active Protocol:
 TCP/IP
```

❷ **Press the [▲] or [▼] key to display "NetWare".**

❸ **Press the [Enter #] key.**

The current setting appears on the panel display.

```
NetWare:
*Active
```

7 Select the frame type for NetWare.

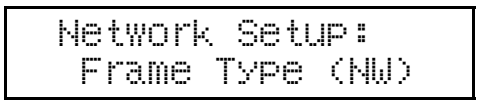
Select one of the following items if necessary.

- Auto (Default)
- Ethernet 802.3
- Ethernet 802.2
- Ethernet II
- Ethernet SNAP

Note

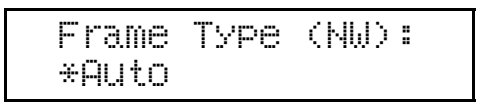
❒ In most situations, use the default setting ("Auto "). When you first select "Auto ", the frame type first detected by the printer is adopted. If the network can use more than two frame types, the printer may fail to select the correct frame type if "Auto " is selected. In this case, select the appropriate frame type.

❶ **Press the [▲] or [▼] key to display "Frame Type (NW)".**



❷ **Press the [Enter #] key.**

The current setting appears on the panel display.



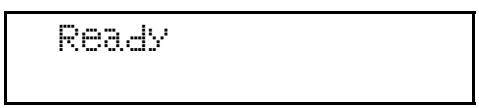
❸ **Press the [▲] or [▼] key to display the frame type you want to use.**

❹ **Press the [Enter #] key.**

In about two seconds, the display returns to "Network Setup".

❺ **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.130 “Printing a Configuration Page”.

❖ **SmartNetMonitor for Admin**

Using a printer in a NetWare environment, configure the NetWare printing environment by using SmartNetMonitor for Admin.

Note

❒ If you configure the NetWare printing environment by using SmartNetMonitor 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/Windows NT 4.0

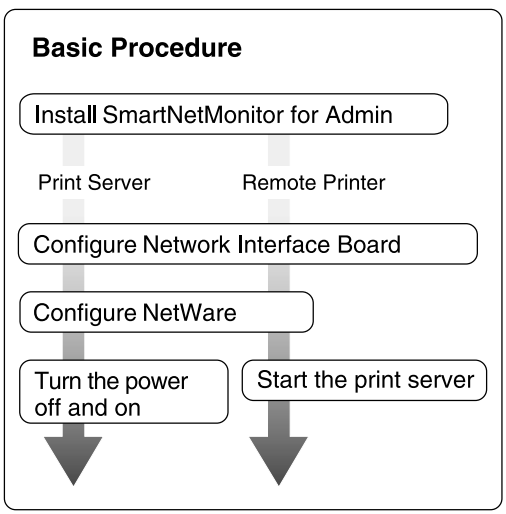
❒ Use the version of Novell Client provided with your operating system or the latest version.

❖ Printers listed by SmartNetMonitor for Admin

SmartNetMonitor for Admin displays a list of printers, which are connected to the network. If you cannot find out the printer from the displayed list, refer to the configuration page printed from the printer. For more information about printing a configuration page, see p.130 “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 SmartNetMonitor for Admin

Install SmartNetMonitor for Admin on your computer. For the installation procedure, see p.94 “Installing SmartNetMonitor for Admin”.

After installing SmartNetMonitor for Admin, go to p.77 “Setting Up as a Print Server” to use this computer as a print server, or to p.79 “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 SmartNetMonitor 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.130 “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.71 “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 SmartNetMonitor 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 SmartNetMonitor 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.130 "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.71 "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.**

   ❶ **In the [Print Server Name] box, type the name of the print server.**

   ❷ **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.

   ❸ **In the [Print Server Operation Mode] group, click [As Remote Printer].**

❹ **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.

❺ **Click [OK] to close the property sheet.**

❻ **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.

❶ **From the [Available Options] menu, select [Print Queue Information], and then press 【Enter】.**

❷ **Press 【INSERT】, and then type a print queue name.**

❸ **Press 【ESC】 to return to the [Available Options] menu.**

10 **Create a printer as follows:**

❶ **From the [Available Options] menu, select [Print Server Information], and then press 【Enter】.**

❷ **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 - ❶).

❸ **From the [Print Server Information] menu, select [Print Server Configuration].**

❹ **From the [Print Server Configuration] menu, select [Printer Configuration].**

❺ **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 - ❹).

❻ **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.

❼ **As type, select [Remote Parallel, LPT1].**

The IRQ, Buffer size, Starting form, and Queue service mode are automatically configured.

❽ **Press the【ESC】key, and then click [Yes] in the confirmation dialog box.**

❾ **Press the【ESC】key to return to [Print Server Configuration Menu].**

11 **Assign print queues to the created printer as follows:**

❶ **From [Print Server Configuration Menu], select [Queues Serviced By Printer].**

❷ **Select the printer created in step 10.**

❸ **Press the【INSERT】key to select a queue serviced by the printer.**

Note

❒ You can select more than one queue at a time.

❹ **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

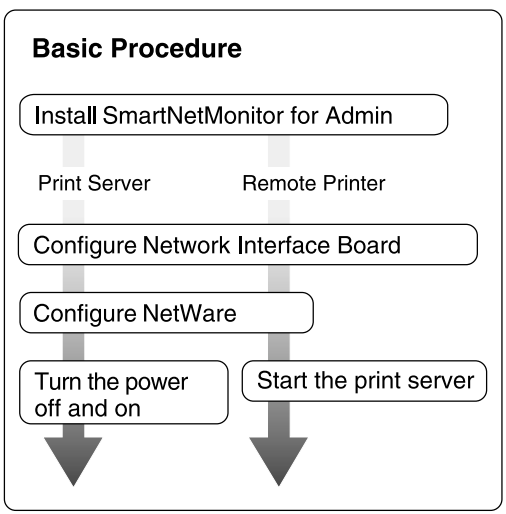
❒ If the printer works as configured, "Waiting for job" appears.

NetWare 4.x, 5 - 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 environment.

❖ To use NetWare 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.71 “Configuring the NetWare Protocol using the Control Panel”.



Installing SmartNetMonitor for Admin

Install SmartNetMonitor for Admin on your computer. For the installation procedure, see p.94 “Installing SmartNetMonitor for Admin”.

After installing SmartNetMonitor for Admin, go to p.84 “Setting Up as a Print Server” to use this computer as a print server, or to p.88 “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 SmartNetMonitor 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.130 “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.71 “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.**

Note

❒ If you use Pure IP, see p.86 “Using Pure IP in the NetWare 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 SmartNetMonitor 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 Environment

1 Log on to the file server as Admin or an Admin equivalent.

2 Run SmartNetMonitor 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.

❶ In the [Print Server Name:] box, type the name of the print server.

❷ 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.

❸ **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".

❹ **In the [Print Server Operation Mode] group, click [As Print Server].**

❺ **Click [OK] to close the property sheet.**

❻ **After a confirmation dialog box appears, click [OK].**

5 **Exit SmartNetMonitor for Admin.**

After this step, go to step 8 on p.88 “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 SmartNetMonitor 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.130 "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.71 "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.**

   ❶ **In the [Print Server Name] box, type the name of the print server.**

   ❷ **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.

❸ **In the [NDS Context] box, type the context in which the print server is to be created.**

By clicking **[Browse]**, you can select context among those listed in the **[Browse]** dialog box.

As context, object names are typed from a lower level object and divided by a period. For example, if you want to create a print server into NET under DS, type "NET.DS".

❹ **In the [Print Server Operation Mode] group, click [As Remote Printer].**

❺ **In the [Remote Printer No.] box, type the number of the printer.**

Important

❒ Use the same number as that of the printer to be created in the print server.

❻ **Click [OK] to close the property sheet.**

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:**

❶ **Select the container object the print queue is located in among those in the directory tree, and then click [Create] on the [Object] menu.**

❷ **In the [Class of new object] box, click "Print Queue", and then click [OK].**

❸ In the [Print Queue name] box, type the name of the print queue.

❹ In the [Print Queue Volume] box, click the [Browse] button.

❺ In the [Available objects] box, click the volume in which the print queue is created, and then click [OK].

❻ After confirming the settings, click [Create].

10 Create a printer as follows:

❶ Select the container object the printer is located in, and then click [Create] in the [Object] menu.

❷ In the [Class of new object] box, click "Printer", and then click [OK]. When you are using NetWare 5, click "Printer (Non NDPS)".

❸ In the [Printer name] box, type the name of the printer.

❹ Click [Define additional properties] to check a box, and then click [Create].

11 Assign print queues to the created printer as follows:

❶ Click [Assignments], and then click [Add] in the [Assignments] group.

❷ In the [Available objects] box, click the queue created in step 9, and then click [OK].

❸ Click [Configuration], and in the [Printer type] box, select [Parallel] using the drop-down menu, and then click [Communication].

❹ Click [Manual load] in the [Communication type] group, and then click [OK].

❺ After confirming the settings, click [OK].

12 Create a print server as follows:

❶ Select the context specified using the NIB Setup Tool (Step 9 - ❶), and on the [Object] menu, click [Create].

❷ **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)".**

❸ **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 - ❶).

❹ **Click [Define additional properties] to check a box, and click [Create].**

13 Assign the printer to the created print server as follows:

❶ **Click [Assignments], and then click [Add] in the [Assignments] group.**

❷ **In the [Available objects] box, click the queue created in the step 11, and then click [OK].**

❸ **In the [Printers] group, click the printer assigned in step ❷, and then click [Printer Number].**

❹ **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 - ❺).

❺ **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
```

5. Using SmartNetMonitor for Admin

Using SmartNetMonitor 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.

SmartNetMonitor 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.

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 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

Note

❒ Select the appropriate protocol stack for your operating system.

Installing SmartNetMonitor 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 [SmartNetMonitor 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 SmartNetMonitor for Admin, restart the computer and continue with necessary configurations.

Changing the Network Interface Board Configuration

1. **Run SmartNetMonitor 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] or [Property Sheet], 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]**.

Selecting [Wizard]

❶ **Fill in the necessary items, and then click [Next].**

Selecting [Property Sheet]

❶ **A configuration list appears on the dialog box.**

For more information about each item on the dialog box, see SmartNetMonitor for Admin Help.

Locking the Menus on the Printer's Control Panel

1. **Run SmartNetMonitor 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 Operation Panel Menu].**
   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 Operation Panel Menu] pull-down menu, select [Apply].**

   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 SmartNetMonitor 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. **Select the sheet type, and then click [Apply].**
7. **Exit the Web browser.**

Managing the Number of Copies to be Printed

Preparation

Optional User Account Enhance Unit Type B must be installed to manage the number of copies to be printed. For more information about installing the User Account Enhance Unit Type B, see "*User Account Enhance Unit Type B*" in the Option Setup Guide.

1. **Run SmartNetMonitor 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 statistics information you want to manage.**
4. **From the [Tools] menu, select [User Management Tool].**

   The screen that prompts you to type a password appears.
5. **Type the password, and then click [OK].**

   Note

   ❒ The factory default password is "password".

   The User Code Maintenance Tool starts up.

   For more information about using the User Management Tool, see SmartNetMonitor for Admin Help.

Configuring the Energy Save Mode

1. **Run SmartNetMonitor 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 SmartNetMonitor 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 enter a password, and then click [OK].**

6. Using a Web Browser

The Network Interface Board functions as a Web server or as a network printer. You can use a Web browser to view the printer status and configure the Network Interface Board.

❖ Configuring the printer

This requires the TCP/IP protocol to be installed. After the printer has been configured to use the TCP/IP protocol, it will be possible to adjust the settings using a Web browser.

Reference

For more information about configuring the printer to use the TCP/IP protocol, see “CONFIGURING THE PRINTER FOR THE NETWORK” in the Quick Installation Guide.

❖ Operating system browser requirements

OS	Browser
Windows 95/98/Me	Microsoft Internet Explorer 4.01 or later Netscape Navigator 4.06 or later
Windows 2000	
Windows XP	
Windows NT 4.0	
Mac OS 8.1 or later	
Mac OS X v10.1	
Solaris 2.5/2.6/2.7/7/8	

Limitation

- ❒ Sometimes after clicking **[Back]** , the previous page may not appear. In this case, click **[Refresh]** or **[Reload]** .
- ❒ The text on the screen may disappear or be aligned incorrectly if the font size settings of the browser are too large. It is recommended that you use a font size equal to or smaller than "10 points" with Netscape Navigator, and "Medium" or smaller with Internet Explorer.

Going to the Top Page

After launching the Web Browser, type the IP address of the printer. See the example below. This example is for the English version.

http://192.168.15.16/

(In this example, the IP address of the Network Interface Board is 192.168.15.16.)

Note

- If a DNS server is used on the network, you can type the host name as an URL. For example, http://webmonitor.netprinter.com/. In order to do this, you must register the IP address and the host name of the Network Interface Board with the DNS server. Consult the network administrator for information about how to do this.
- When you use the proxy server, you must set up the proxy server address for the Web browser you are using. Consult the network administrator for information about how to set the proxy server.

1. Header Buttons

You can register favorite URLs with **[URL]**. To view the Help section, click **[Help]**.

Important

- It costs to use the browser to access a Website.

Note

- The Help file is stored in the following folder on the CD-ROM in HTML format. The third folder, "(Language)" may be substituted by an appropriate language name.

  \HELP\WSMHLP\(Language)

2. Menu Buttons

Buttons to configure the Network Interface Board and confirm the status of the printer.

Note

❒ When you click **[Network Config]**, a dialog box appears requesting the user name and a password. Type only the password in this dialog box. The factory default password is "password".

❒ The password is the same as that used for remote maintenance and that used in the NIB Setup Tool. If you change a password with the Web browser, other passwords are also changed.

3. Status

Displays the name and comments of the Network Interface Board, and the printer status.

Configuring the Network Interface Board Settings

1 Start the Web browser.

2 Point your browser at the URL or IP address of the printer (e.g. http://XXX.XXX.XXX.XXX where the Xs are the number of the IP address).

The status of the printer you chose appears on the Web browser.

3 Click [Configuration].

The dialog box for entering the password and user name is displayed.

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 the item you want to configure, and then make all the settings.

The following items can be configured:

❖ **[General]**
Configure the general settings for the machine here.

❖ **[TCP/IP]**
Configure the TCP/IP-related settings for the Network Interface Board, the optional 802.11b Interface Unit, and the optional 1394 Interface Unit.

❖ **[SNMP]**
Configure the appropriate community settings here. Up to 10 types of community names can be registered.

❖ **[NetWare]**
Configure the settings for printing in a NetWare environment here.

❖ **[AppleTalk]**
Configure the Network Interface Board or the optional 802.11b Interface Unit settings related to the AppleTalk protocol.

❖ **[NetBEUI]**
Configure the Network Interface Board or the optional 802.11b Interface Unit settings related to the NetBEUI protocol here.

❖ **[IEEE 1394]**
Configure the optional 1394 Interface Unit settings related to IP over 1394 and SCSI print (SBP-2).

Limitation

❒ This page is displayed when the optional 1394 Interface Unit is installed.

❖ **[IPP Authentication]**
If using the IPP protocol, configure the authentication settings for printing here.

❖ **[Paper Type]**
Select the paper type loaded in the machine from the drop-down menu.

❖ **[Password]**
Follow the procedure below to change the password.
Enter the password to change the network and machine settings or delete spooled print jobs.

❖ **[IEEE 802.11b (Wireless LAN)]**
Configure the optional 802.11b Interface Unit settings related to communication.

Limitation

❒ This page is displayed when the optional 802.11b Interface Unit is installed.

Verifying the Network Interface Board Settings

1 **Start the Web browser.**

2 **Point your browser at the URL or IP address of the printer (e.g. http://XXX.XXX.XXX.XXX where the Xs are the number of the IP address).**

The status of the printer you chose appears on the Web browser.

3 **Click [Config. Reference].**

The dialog box for entering the password and user name is displayed.

4 Click the item you want to check.

The following items can be checked:

❖ **[General]**
Shows general settings for the machine.

❖ **[TCP/IP]**
Shows the TCP/IP-related settings for the Network Interface Board, the optional 802.11b Interface Unit, and the optional 1394 Interface Unit.

❖ **[NetWare]**
Shows the settings for printing in a NetWare environment.

❖ **[AppleTalk]**
Shows the Network Interface Board or the optional 802.11b Interface Unit settings related to the AppleTalk protocol.

❖ **[NetBEUI]**
Shows the Network Interface Board or the optional 802.11b Interface Unit settings related to the NetBEUI protocol.

❖ **[IEEE 1394]**
Shows the optional 1394 Interface Unit settings related to IP over 1394 and SCSI print (SBP-2).

❖ **[IEEE 802.11b (Wireless LAN)]**
Shows the optional 802.11b Interface Unit settings related to communication.

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 on a Web server.

① Copy the Help files on the CD-ROM to a desired location. The Help files are located in folders labeled with abbreviated language names. For example, English Help files are in the **[EN]** folder. Be sure to copy the entire **[EN]** folder to the new location.

② Using a Web browser, navigate to the Top Page, and then click **[Network config]**.

③ Type your password, (it is not necessary to type a user name), and then click **[OK]**.

④ Type the path to the Help files in the **[Help URL]** box.
If you copied the Help files to "C:\HELP\EN", type "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", type "http://a.b.c.d/HELP/".

⑤ Click **[Apply]**.
When a warning message appears, select to continue the configuration.

Changing Names and Comments

You can change printer names and make a comment on printers to easily identify the printers listed on SmartNetMonitor for Client.

The following utilities are used to change printer names and comments.

❖ **SmartNetMonitor for Admin**

Allows you to change names and comments when the TCP/IP protocol or IPX/SPX protocol is available. You can install SmartNetMonitor for Admin from the CD-ROM that comes with the printer. For more information about installing SmartNetMonitor for Admin, see p.84 “Installing SmartNetMonitor 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.

SmartNetMonitor for Admin

1 Run SmartNetMonitor 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

❶ 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 13 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

❶ **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.

❷ **Click the [NetBEUI] tab.**

❸ **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 13 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 SmartNetMonitor for Admin.

Web Browser

1 Run the Web browser.

2 Type the address "http:// (IP address of the printer you want to change the settings)".

The status of the selected printer is displayed on the Web browser.

3 Click [Configuration].

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 Change names and comments.

TCP/IP

❶ Click the [General] tab, and then type the name into the [Printer Name] box and comment into the [Comment] box.

- In the **[Printer Name]** box, type the name of the printer within 13 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.
- In the **[Comment]** box, type any comment on printers within 31 characters.

❷ **Click the [IEEE 1394], and then type the name into the [Device Name:] box when you change the device name for IEEE 1394 (IP over 1394) interface.**

- In the **[Device Name:]** box, type the name of the printer within 13 characters. The factory default name consists of "RNP" and the last 5 bytes of the EUI-64 on the IEEE 1394 (IP over 1394) interface. For example, when the EUI-64 is 00:00:74:00:02:01:0A:66, the factory default name is "RNP0002010A66". No name of 13 characters is permitted if the prefix is "RNP".

NetBEUI

❶ **Click [NetBEUI].**

❷ **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 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 13 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 [Apply].**

The setting is transmitted to the printer.

7 **Exit the Web browser.**

Displaying the Status of Printer

You can view the status of printers using SmartNetMonitor for Admin, SmartNetMonitor for Client, or Web browser.

SmartNetMonitor for Admin

1 Run SmartNetMonitor 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 SmartNetMonitor 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 is displayed on the dialog box.

Note

❒ For more information about each item on the dialog box, see Help.

SmartNetMonitor for Client

Viewing the status of printers using SmartNetMonitor for Client, you must, in advance, configure SmartNetMonitor for Client so it monitors the printer whose status you want to view.

Monitoring Printers

1 Run SmartNetMonitor for Client.

The SmartNetMonitor for Client icon appears at the right end of the taskbar.

2 Right-click the SmartNetMonitor for Client icon, and check if the desired printer is configured on the pop-up menu that appears.

If it is configured, see p.115 “Displaying the Status of Printers”.

3 If the desired printer is not configured, click [Options] on the pop-up menu.

The **[SmartNetMonitor for Client - Options]** dialog box appears.

4 Click the printer to be monitored, and select the [To Be Monitored] check box from the [Monitoring Information Settings] group.

Note

❒ Selecting the **[Displayed on Task Bar]** check box will bring up the status of a printer with an icon on the SmartNetMonitor for Client icon on the task tray.

5 Click [OK].

The dialog box closes and the configured printer is monitored.

Displaying the Status of Printers

1. **Run SmartNetMonitor for Client.**
2. **The status of printers is displayed on the SmartNetMonitor for Client icon on the task tray.**

Note

❒ For more information about the status icons, see Help.

3. **Getting further information on the status, right-click the SmartNetMonitor for Client icon, and then click the desired printer.**

The status of the printer is displayed 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. **Type the address "http:// (IP address of the printer whose status you want to view)".**

The status of the selected printer is displayed on the Web browser.

3. **Click [Status] and you can check the status of the printer.**

Note

❒ For more information about each item, see Help.

Menu Chart

This section describes how to change the default settings of the printer and provides information about the parameters included in each menu.

Category	Function Menu
Sample Print *1	Select Action / Error File(s)
Locked Print *1	Select Action / Error File(s)
Paper Input ⇒ p.122	Bypass Size
	Paper Type
	Tray Locking
	Tray Priority
List/Test Print ⇒ p.129	Config. Page
	Menu List
	Color Demo Page
	PS Config. Page
	PCL Config.Page
	Hex Dump
Maintenance ⇒ p.136	Color Regist.
	Image Density
	Registration
	PlainPaper Type

Category	Function Menu
Maintenance ⇒ p.136	Maint. Reset
	HDD Format *2
	ROM Update *3
	4C.Graphic Mode
	WL.LAN Signal *4
	WL.LAN Defaults
	Print Area
	Key Repeat
	Menu Protect *5
	Series Prnt.Job *5
System ⇒ p.149	MisfeedRecovery
	Prt. Err Report
	Auto Continue
	Memory Overflow
	Copies
	Printer Lang.
	Sub Paper Size
	Page Size
	Duplex *6

Category	Function Menu
System ⇒ p.149	Energy Saver 1
	E. Saver2 Timer
	Unit of Measure
	Resolution
	B&W Page Detect
	Spool Printing *2
	Letterhead Mode *5
	E.Saver2 OnOff *5
Host Interface ⇒ p.159	I/O Buffer
	I/O Timeout
	Network Setup *7
	IEEE 1394 Setup *8
	IEEE 802.11b *9
	USB Setting *5

Category	Function Menu
PCL Menu ⇒ p.171	Orientation
	Form Lines
	Font Source
	Font Number
	Point Size
	Font Pitch
	Symbol Set
	Ext. A4 Width
	Append CR to LF
Language ⇒ p.177	

*1 The "Sample Print" menu and the "Locked Print" menu appear only when the optional Printer Hard Disk is installed.

*2 The “HDD Format” and the "Spool Printing" menu appears only when the optional Printer Hard Disk is installed.

*3 ROM Update is not currently used.

*4 The "WL.LAN Signal" menu appears only when "IEEE 802.11b" is selected in "LAN Type" in the Host Interface menu.

*5 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", "Series Prnt.Job" "Letterhead Mode", "E.Saver2 OnOff", "USB Setting" on the panel display.

*6 The “Duplex” menu appears only when the optional AD440 is installed.

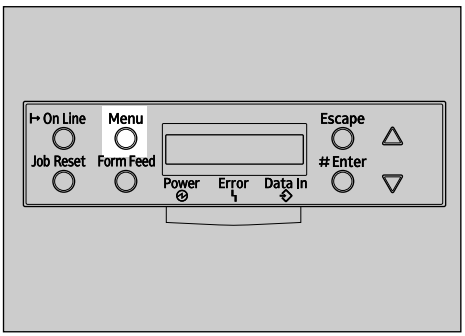
*7 The “Network Setup” menu appears only when the optional Network Interface Unit or 802.11b Interface Unit is installed.

*8 The “IEEE 1394 Setup” menu appears only when the optional 1394 Interface Unit is installed.

*9 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.



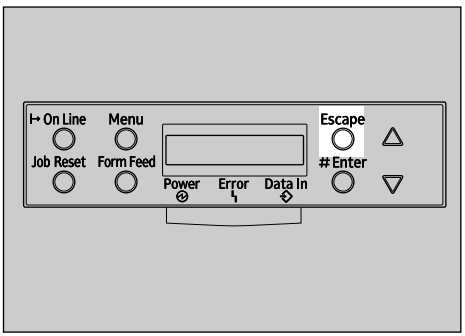
This menu shows the following 9 items which can be displayed one by one by pressing the 【▲】 or 【▼】 key.

- Sample Print
- Locked Print
- Paper Input
- List/Test Print
- Maintenance
- System
- Host Interface
- PCL Menu
- Language

Note

❒ If the optional Printer Hard Disk is not installed, the "Sample Print" menu and the "Locked Print" menu cannot be displayed on the control panel.

- ❒ 【▼】: Press to go to the next page.
- ❒ 【▲】: 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.



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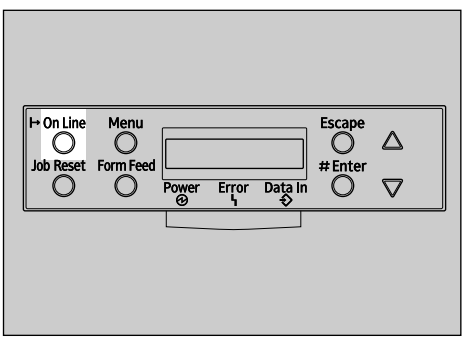
- ❒ After making the printer settings, press the 【On Line】 key to return to the "Ready" condition.



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- ❒ 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.

- Bypass Size
- Paper Type
- Tray Locking
- Tray Priority

Reference

For more information about loading paper in the tray, see the Option Setup Guide.

Paper Input Parameters

Menu	Description
Bypass Size	The paper size for the bypass tray. For more information about paper sizes that can be set in the bypass tray, see "Paper and Other Media Supported by This Printer" in the Maintenance Guide. 8 1/2 x 14, 8 1/2 x 11, 5 1/2 x 8 1/2, 7 1/4 x 10 1/2, 8 x 13, 8 1/2 x 13, 8 1/4 x 13, A4 (210x297), B5JIS (182x257), A5 (148x210), A6 (105x148), 16K (195x267), 4 1/8 x 9 1/2, 3 7/8 x7 1/2, C5 Env(162x229), C6 Env(114x162), DL Env(110x220), Custom Size **Note** ❒ Default: A4 (210x297) (Metric version), 11 x 8 1/2 (Inch version)

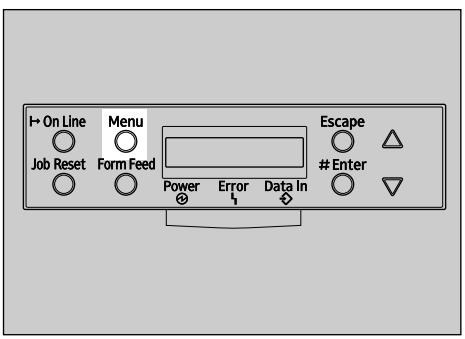
Menu	Description
Paper Type	If you use different kinds of paper, set the paper type for Tray 1, Tray 2, Tray 3 or Bypass Tray. For more information about paper sizes that can be set in each tray, see the Maintenance Guide. ❖ **Tray 1, Tray 2, Tray 3** Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Preprinted, Prepunched, Bond Paper ❖ **Bypass Tray** Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Preprinted, Prepunched, Labels, Bond Paper, Cardstock, Transparency, Thick Paper, Thick:Dup.Back, Glossy Paper **Note** ❒ Default : Plain Paper ❒ Only the installed trays appear on the panel display.

Menu	Description
Tray Locking	If you use different kinds of paper, you can lock a tray to prevent printing on wrong paper such as letterhead or colored paper. When "Auto 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. Tray 1, Tray 2, Tray 3 **Note** ❒ Default : Off ❒ Only the installed trays appear on the panel display. ❒ You can lock multiple trays. ❒ If you want to use the locked tray, you must select the tray from the printer driver and the control panel each. ❒ When a locked tray is selected from the printer driver, the printer does not search for another tray.
Tray Priority	You can set which tray should be checked first when "Auto tray Select" is selected in the Paper Source selections from the printer driver. When printing from DOS, the tray selected here is used when no tray is selected for a print job. Tray 1, Tray 2, Tray 3 **Note** ❒ Default : Tray 1 ❒ Only the installed trays appear on the panel display. ❒ 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

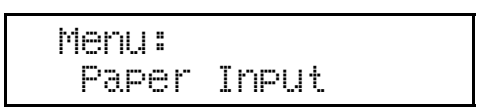
Tray Locking

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.**



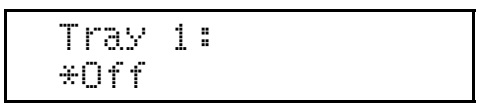
3 **Press the【▲】or【▼】key to display "Tray Locking", and then press the【Enter #】key.**

4 **Press the【▲】or【▼】key to display the tray to change the tray locking off, and then press the【Enter #】key.**

Note

❒ The Bypass Tray would not be locked.

5 **Press the【▲】or【▼】key to display "Off", and then press the【Enter #】key.**



Wait for two seconds.

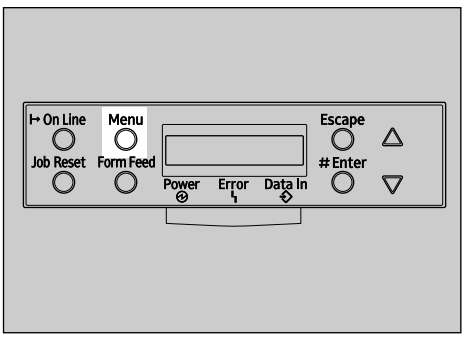
"Paper Input" appears on the panel display.

6 **Press the【On Line】key.**

"Ready" appears on the panel display.

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.**

```
Menu:
 Paper Input
```

3 **Press the【▲】or【▼】key to display "Tray Priority", and then press the【Enter #】key.**

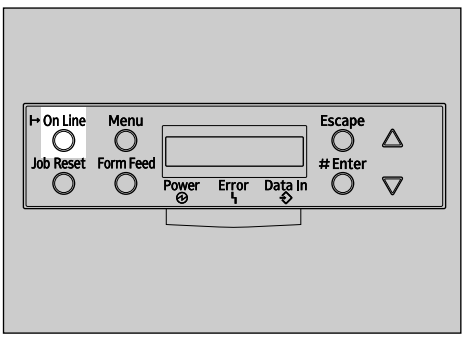
```
Paper Input:
 Tray Priority
```

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.

List/Test Print Menu

There are 6 menu items in the "List/Test Print" menu.

- Config. Page
- Menu List
- Color Demo Page
- PS Config. Page
- PCL Config.Page
- Hex Dump

List/Test Print Parameters

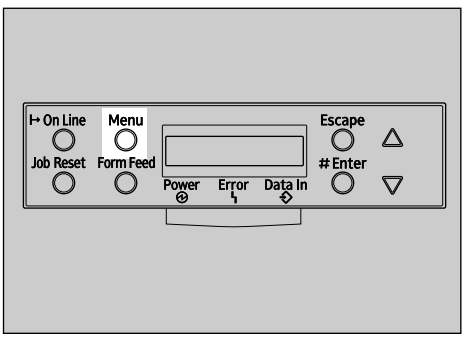
Menu	Description
Config. Page	You can print the current configuration of the printer. See p.130 “Printing a Configuration Page”.
Menu List	You can print the Menu List which shows the function menus of this printer.
Color Demo Page	You can print the Color Demo Page.
PS Config. Page	You can print a list of the installed PS Fonts.
PCL Config.Page	You can print the current configuration of the PCL.
Hex Dump	You can print the Hex Dump.

Printing a Configuration Page

Reference

For more information, see p.133 “Interpreting the Configuration Page”.

1 **Press the【Menu】key.**



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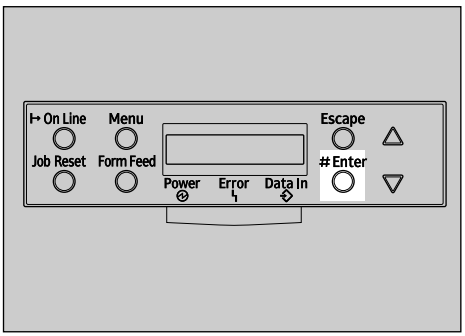
"Menu" appears on the panel display.

2 **Press the【▼】or【▲】key to display the "List/Test Print" menu.**

```
Menu:
  List/Test Print
```

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



The following message appears on the panel display.

```
List/Test Print:
  Confi&. Pa&e
```

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

The following message appears on the panel display.

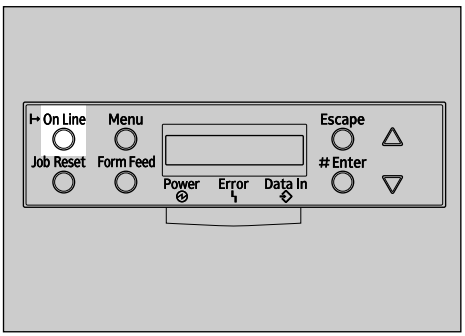
```
  Printin&...
```

In a short time, the printing of the configuration page will start.

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*" in the Maintenance Guide.

5 **Press the【On Line】key.**



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"Ready" appears on the panel display.

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.122 “Paper Input Menu”.

Maintenance

Shows the settings made under the “Maintenance” menu.

Reference
For more information, see p.136 “Maintenance Menu”.

System

Shows the settings made under the "System " menu.

Reference
For more information, see p.149 “System Menu”.

PCL Menu

Shows the settings made under the "PCL Menu".

Reference

For more information, see p.171 “PCL 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 about the "Host Interface" menu, see p.159 “Host Interface Menu”.

Interface Information

Shows the interface information.

Error Log

Shows the log of printer errors.

Maintenance Menu

There are 13 menu items in the "Maintenance" menu.

- Color Regist.
- Image Density
- Registration
- PlainPaper Type
- Maint. Reset
- HDD Format
- ROM Update
- 4C.Graphic Mode
- WL.LAN Signal
- WL.LAN Defaults
- Print Area
- Key Repeat
- Menu Protect
- Series Prnt.Job

Maintenance Menu Parameters

Menu	Description
Color Regist.	You can adjust the color alignment for each color (black, cyan, magenta, yellow) **Reference** For more information about how to registration, see "Adjusting the Color Registration" in the Maintenance Guide.
Image Density	❖ **Prt. Test Sheet** You can print the registration test sheet. ❖ **Black, Cyan, Magenta, Yellow** You can specify per color the image density in the range of -10 to +10. ❖ **Reset→Defaults** This function returns settings to their default values.

Menu	Description
Registration	❖ **Prt. Test Sheet** You can print the registration test sheet. Tray 2, Tray 3, Duplex.BackSide ❖ **Adjustment** You can select the start position for printing on page. Horiz.: Tray 2, Horiz.: Tray 3, Horiz.:Dup.Back -15 to +15 (by 1) One step is 1/300 inch (0.8 mm) **Note** ❒ The registration values are not default. ❒ Only the installed trays appear on the panel display.
PlainPaper Type	You can select the type of plain paper you wish to use as a default. ❖ **Tray 1, Tray 2, Tray 3, Bypass Tray** • Thin • Normal
Maint. Reset	Maintenance Reset allows the user to reset each internal unit counters such as the Transfer Belt and Fusing Unit. These counters can be reset at anytime, but are necessary at the time of unit reinstallation. For more information, see "*Replacing Consumables*" in the Maintenance Guide.
HDD Format	You can format the Printer Hard Disk. Available when the optional Printer Hard Disk is installed. **Reference** For more information about formatting the Printer Hard Disk, see *"Printer Hard Disk Type 3000"* in the Option Setup Guide.

Menu	Description
ROM Update	This menu is not currently used.
4C.Graphic Mode	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. **Note** ❒ Default:Photo Priority
WL.LAN Signal	You can check the signal strength when using the wireless LAN. **Reference** For more information about displaying the signal strength. See p.144 “Displaying the Signal Strength”.
WL.LAN Defaults	You can reset the wireless LAN settings to the default.
Print Area	You can extend the printable area by about 2.5 mm (0.01 inch). • Normal • Enlarge Area **Note** ❒ Default:Normal
Key Repeat	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.

Menu	Description
Menu Protect *1	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. • Level 1 • Level 2 • Off **Note** ❒ 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. ❒ You can protect the "Maintenance", "System ", "Host Interface" and "Language" menu on Level 1. ❒ You can protect the "Paper Input", "Maintenance", "System ", "Host Interface" and "Language" menu on Level 2.
Series Prnt.Job *1	You can print series of print jobs without time intervals between them when jobs are sent from the same computer, PDL, and interface. **Note** ❒ Default: On ❒ When the Job Reset key is pressed, all jobs sent to the machine will be canceled.

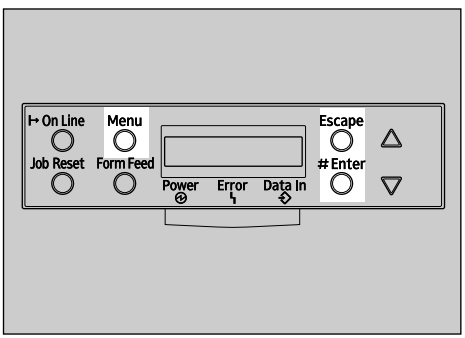
*1 While the printer is On Line, press the 【Enter #】key, and then press the 【Escape】key. Finally, press the 【Menu】key. You can access the "Menu Protect", and "Series Prnt.Job" menu on the panel display.

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.**



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"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 Regist.
```

4 Press the [▲] or [▼] key to display "Menu Protect".

```
Maintenance:
 Menu Protect
```

5 Press the [Enter #] key.

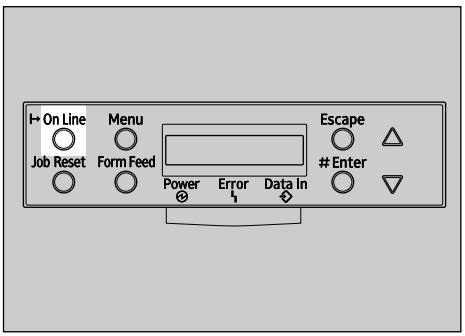
The following message appears on the panel display.

```
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 Regist.
```

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.

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.

```
Menu:
 Maintenance
```

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

The following message appears on the panel display.

```
Maintenance:
 Color Regist.
```

4 **Press the [▼] or [▲] key to display "WL.LAN Signal".**

```
Maintenance:
 WL.LAN Signal
```

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

One of the following messages appears on the panel display.

```
WL.LAN Signal
Good        100%
```

```
WL.LAN Signal
Fair         50%
```

```
WL.LAN Signal
Poor         30%
```

```
WL.LAN Signal
Unavailable  10%
```

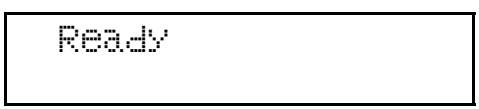
Note

- 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.
- If "802.11 Ad hoc" or "Ad hoc" in "Comm. Mode" of "IEEE 802.11b" in the Host Interface menu is selected, you cannot check the signal. Select "Infrastructure" and then check it again.
- Every time you press the 【Enter #】 key, the signal is updated.
- The signal is indicated as "Good" if the signal strength is 76-100%, "Fair" if the strength is 41-75%, "Poor" if the strength is 21-40%, and "Unavailable" if the strength is 0-20%. 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.

6 Press the 【Escape】 key.

7 Press the 【On Line】 key.

"Ready" appears on the panel display.



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.

```
Menu:
 Maintenance
```

3 Press the [Enter #] key.

The following message appears on the panel display.

```
Maintenance:
 Color Regist.
```

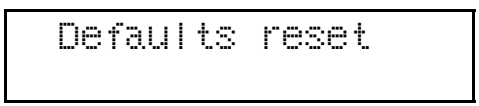
4 Press the [▼] or [▲] key to display "WL.LAN Defaults".

```
Maintenance:
 WL.LAN Defaults
```

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

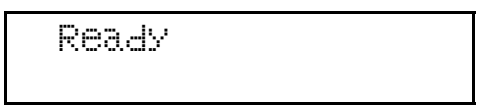
6 **Press the [Enter #] key.**

The following message appears on the panel display.



The wireless LAN setting value is reset.

“Ready” appears on the panel display.



System Menu

There are 14 menu items in the "System " menu.

- MisfeedRecovery
- Prt. Err Report
- Auto Continue
- Memory Overflow
- Copies
- Printer Lang.
- Sub Paper Size
- Page Size
- Duplex
- Energy Saver 1
- E. Saver2 Timer
- Unit of Measure
- Resolution
- B&W Page Detect
- Spool Printing
- Letterhead Mode
- E.Saver2 OnOff

System Parameters

Menu	Description
MisfeedRecovery	You can select whether Misfeed Recovery is enabled. When it is on, printing re-starts after the misfed paper has been cleared. • On • Off **Note** ❒ Default: On
Prt. Err Report	You can select whether or not to have an error report printed when a printer error or memory error occurs. • On • Off **Note** ❒ Default: Off

Menu	Description
Auto Continue	You can set whether Auto Continue is enabled. When it is on, printing continues after a system error occurs. • Off • 0 minutes • 1 minute • 5 minutes • 10 minutes • 15 minutes **Note** ❒ Default: Off ❒ When it is on, and certain types of error occur, the current job might be canceled, and the machine automatically resumes the next job.
Memory Overflow	You can select whether the memory overflow error report should be printed. • Not Print • Error Report **Note** ❒ Default: Not Print
Printer Lang.	You can specify how many pages to print. This setting is disabled if the number of pages to print has been specified with the printer driver or a command. • 1-999

Menu	Description
Printer Lang.	You can specify the printer language. • Auto Detect • PCL • PS **Note** ❒ Default: Auto Detect
Sub Paper Size	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. • Auto • Off **Note** ❒ Default: Off
Page Size	You can specify the default paper size. 8 1/2 x 14, 8 1/2 x 11, 5 1/2 x 8 1/2, 7 1/4 x 10 1/2, 8 x 13, 8 1/2 x 13, 8 1/4 x 13, A4, B5, A5, A6, 16K, 4 1/8 x 9 1/2, 3 7/8 x7 1/2, C5 Env(162x229), C6 Env(114x162), DL Env(110x220), Custom Size **Note** ❒ Default: • Metric: A4 • Inch: 8 1/2 x 11

Menu	Description
Duplex	You can select whether you want to print on both sides of each page. • Off • Short Edge Bind • Long Edge Bind **Note** ❒ Default: Off ❒ This menu appears only when the optional AD440 is installed.
Energy Saver 1	You can set On/Off for the Energy Save Mode level 1. This is Preheat mode. • On • Off **Note** ❒ Default: On ❒ When the printer switches to Energy Saver mode, the **Power** indicator turns off, while the **On Line** indicator stays on.
E. Saver2 Timer	You can set how many minutes the printer waits before switching to Energy Saver mode. Energy Saver mode reduces electric power consumption. 5 minutes, 15 minutes, 30 minutes, 45 minutes, 60 minutes. **Note** ❒ Default: 60 minutes ❒ When the printer switches to Energy Saver mode, the **Power** indicator turns off, while the **On Line** indicator stays on and "Energy Save Mode" is displayed on the panel display.

Menu	Description
Unit of Measure	You can select "mm" or "inch" for the custom paper size. **Note** ❒ Default: mm (Metric version), inch (Inch version)
Resolution	You can set the print resolution in dots per inch. ❖ **PCL** 300 x 300 dpi, 600 x 600 dpi ❖ **PS3** 600 x 600 dpi, 1200 x 1200 dpi, 1200 x 600 dpi **Note** ❒ Default: PCL 600 x 600 dpi, PS3 600 x 600 dpi
B&W Page Detect	You can specify whether the Black & White Page Detect feature is enabled. • On • Off **Note** ❒ Default: On

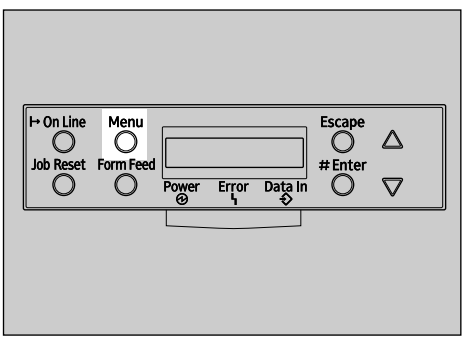
Menu	Description
Spool Printing	You can select whether all of the print data is spooled to the Printer Hard Disk before printing. • On • Off **Note** ❒ Default: Off ❒ Spooling stores the print job sent by a computer temporarily in the printer, transfers the print job, and then prints it. ❒ This menu appears Only when the optional Printer Hard Disk is installed.
Letterhead Mode *1	You can select the letterhead printing mode. • Off • Auto Detect **Note** ❒ Default: Off
E.Saver2 OnOff *1	You can set On/Off for the Energy Save Mode level 2. • On • Off **Note** ❒ Default: On

*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 "Letterhead Mode", "E.Saver2 OnOff" menu on the panel display.

Changing the System Menu

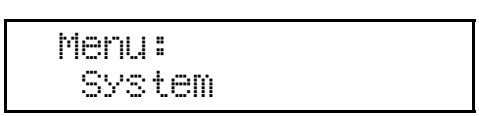
The following example describes how to change the settings for "E. Saver2 Timer".

1 Press [Menu].

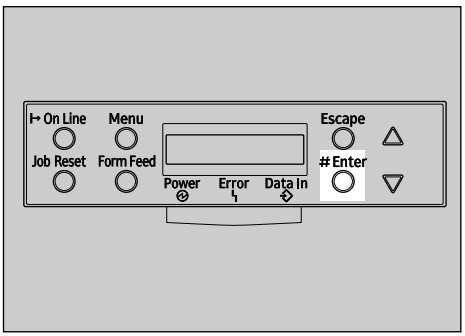


"Menu" appears on the panel display.

2 Press [▲] or [▼] to display "System ".



3 **Press【Enter #】.**



The following message appears on the panel display.

```
System :
 MisfeedRecovery
```

4 **Press【▲】or【▼】to display "E. Saver2 Timer", and then press【Enter #】.**

```
System :
E. Saver2 Timer
```

5 **Press [▲] or [▼] to select how many minutes the printer waits before switching to Energy Saver mode.**

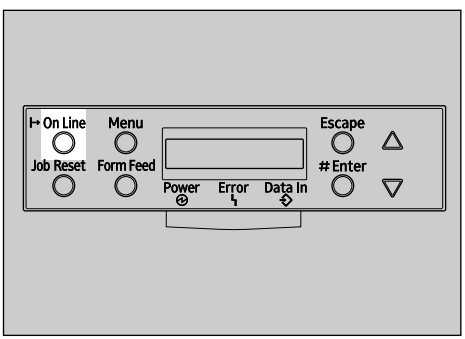
The following message appears on the panel display.

```
E. Saver2 Timer
*30 minutes
```

6 **Press [Enter #]. Wait for two seconds.**

"Menu" appears on the panel display.

7 **Press [On Line].**



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"Ready" appears on the panel display.

```
Ready
```

Host Interface Menu

There are 6 menu items in the "Host Interface" menu.

- I/O Buffer
- I/O Timeout
- Network Setup
- IEEE 1394 Setup
- IEEE 802.11b
- USB Setting

Note

❒ For more information about the "Network Setup", see "*Configuring the printer for the Network*" in the Quick Installation Guide.

Host Interface Parameters

Menu	Description
I/O Buffer	You can set the size of the I/O Buffer. Normally it is not necessary to change this setting. 128 KB, 256 KB, 512 KB **Note** ❒ Default: 128 KB
I/O Timeout	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. 10 seconds, 15 seconds, 20 seconds, 25 seconds, 60 seconds **Note** ❒ Default: 15 seconds

Menu	Description
Network Setup	❖ **DHCP** You can set how the Network Interface Board acquires TCP/IP settings. **Note** ❒ Default: On **Reference** See *"Configuring the Printer for the Network"* in the Quick Installation Guide. ❖ **IP Address** You can set the IP address. **Limitation** ❒ 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. **Note** ❒ Default: All zero **Reference** See *"Configuring the Printer for the Network"* in the Quick Installation Guide.

Menu	Description
	❖ **Subnet Mask** You can set the Subnet mask. **Limitation** ❒ 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. **Note** ❒ Default: All zero **Reference** See *"Configuring the Printer for the Network"* in the Quick Installation Guide.
	❖ **Gateway Address** You can set the gateway address. **Limitation** ❒ 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. **Note** ❒ Default: All zero **Reference** See *"Configuring the Printer for the Network"* in the Quick Installation Guide.

Menu	Description
	❖ **Frame Type (NW)** You can set the Frame type for NetWare. **Note** ❒ Default: Auto ❖ **Active Protocol** You can set the active protocol. TCP/IP, NetWare, NetBEUI, AppleTalk **Note** ❒ Default: All Active

Menu	Description
	❖ **Ethernet** You can select the speed of the network that the printer is connected to. Auto , 10 Mbps, 100 Mbps **Note** ❒ Default: Auto **Reference** See *"Configuring the Printer for the Network"* in the Quick Installation Guide. ❖ **LAN Type** You can select Ethernet or IEEE 802.11b for the LAN Type. **Note** ❒ Default: Ethernet ❒ Appears Only when the optional 802.11b Interface Unit is installed. **Reference** For more information about Network Setup, see "Configuring the Printer for the Network" in the Quick Installation Guide.

Menu	Description
IEEE 1394 Setup *1	You can make settings for using IEEE 1394. This menu appears only when the optional IEEE 1394 board is installed. ❖ **IP Address1394** You can set the IP address for IEEE 1394 (IP over 1394). **Note** ❒ Default: All zero ❖ **Subnet Mask1394** You can set the Subnet Mask for IEEE 1394 (IP over 1394). **Note** ❒ Default: All zero ❖ **IP over 1394** You can activate IP over 1394. **Note** ❒ Default: Active ❖ **SCSI print** You can activate SCSI print. **Note** ❒ Default: Active ❖ **Bidi-SCSI print** You can activate bidirectional transmission for SCSI print. **Note** ❒ Default: On

Menu	Description
IEEE 802.11b *2	You can make settings for using the wireless LAN. This menu appears only when the optional 802.11b Interface Unit is installed. ❖ **Comm. Mode** You can set the transmission mode for IEEE 802.11b. **Note** ❒ Default: 802.11 Ad hoc ❖ **Channel** The selectable channels are 1-11 (Inch version) and 1-13 (Metric version). **Note** ❒ Default: 11 ❖ **Trans. Speed** You can set the transmission speed for IEEE 802.11b. **Note** ❒ Default: Auto

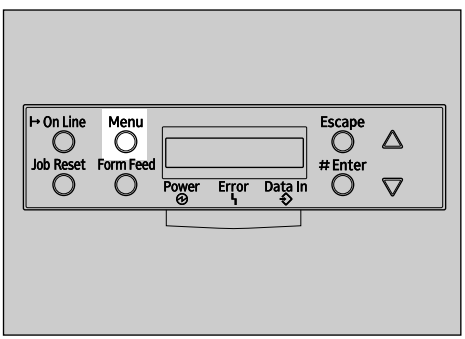
Menu	Description
	❖ **SSID** You can set for SSID in Infrastructure mode and 802.11 Ad hoc mode. **Limitation** ❒ Select "¥" if you want to enter "/" in the SSID. Also, "¥" appears when printing the configuration page, read it as "/". **Note** ❒ The characters that can be used are ASCII 0x20-0x7e (32 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 802.11 Ad hoc mode, the same value as for Infrastructure mode or an "ASSID" value is set automatically. ❖ **WEP Setting** You can set the code for IEEE 802.11b. **Note** ❒ Default: Not Active ❒ With a 64-bit WEP, you can use 10 digit hexadecimal. With a 128-bit WEP, you can use 26 digit hexadecimal.
USB Setting	You can set the transmission speed for USB. **Note** ❒ Default: Auto

*1 Appears only when the optional 1394 Interface Unit is installed.
*2 Appears only when the optional 802.11b Interface Unit is installed.

Changing the Host Interface Menu

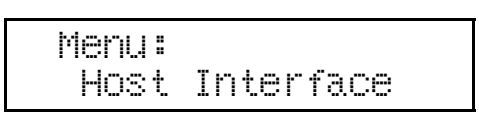
The following example describes how to change the setting for "I/O Timeout".

1 Press the【Menu】key.

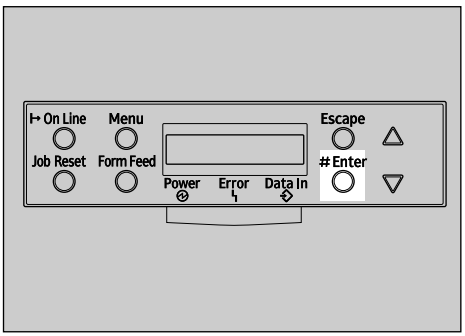


"Menu" appears on the panel display.

2 Press the【▲】or【▼】key to display the "Host Interface" menu.



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 "I/O Timeout".**

```
Host Interface:
 I/O Timeout
```

5 **Press the【Enter #】key.**

The following message appears on the panel display.

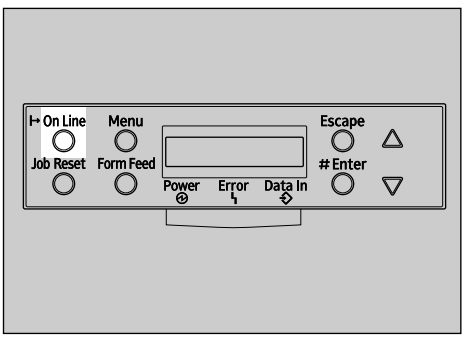
```
I/O Timeout:
*15 seconds
```

6 Press the [▲] or [▼] key to select how many minutes the printer waits before ending a print job.

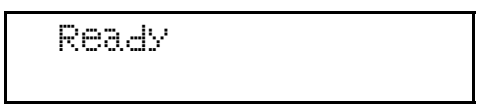
7 Press the [Enter #] key. Wait for two seconds.

"Host Interface" appears on the panel display.

8 Press the [On Line] key.



"Ready" appears on the panel display.



PCL Menu

There are 9 menu items in the "PCL Menu".

- Orientation
- Form Lines
- Font Source
- Font Number
- Point Size
- Font Pitch
- Symbol Set
- Ext. A4 Width
- Append CR to LF

PCL Parameters

Menu	Description
Orientation	You can set the page orientation. • Portrait • Landscape **Note** ❒ Default: Portrait

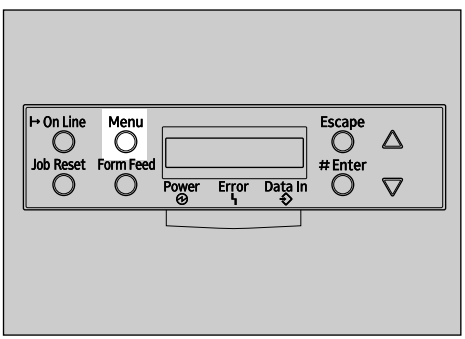
Menu	Description
Form Lines	You can set the number of lines per page. 5-128 **Note** ❒ Default: 64 (Metric version), 60 (Inch version)
Font Source	You can set the location of the default font. • Resident • RAM • HDD **Note** ❒ Default: Resident ❒ When you select "RAM", you can select only fonts downloaded to the printer RAM.
Font Number	You can set the ID of the default font you want to use. • 0 to 50 (for Resident) • 0 to 44 (for RAM) • 1 to 32767 (for HDD) **Note** ❒ Default: 0
Point Size	You can set the point size you want to use for the default font. 4 to 999.75 by 0.25 **Note** ❒ Default: 12.00 points ❒ This setting is effective only for a variable-space font.

Menu	Description
Font Pitch	You can set the number of characters per inch you want to use for the default font. 0.44 to 99.99 by 0.01 **Note** ❒ Default: 10.00 pitch ❒ This setting is effective only for a fixed-space font.
Symbol Set	You can specify the set of print characters for the default font. The available options are as follows: 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 **Note** ❒ Default: Roman-8
Ext. A4 Width	You can extend the width of the printable area for an A4 sheet leaving a narrow margin on the sides. • On • Off **Note** ❒ Default: Off
Append CR to LF	By adding a CR code to each LF code, you can print text data clearly. • On • Off **Note** ❒ Default: Off

Changing the PCL Menu

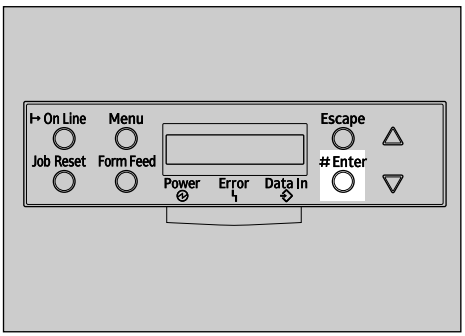
The following example describes how to change the setting for "Orientation".

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.

```
PCL Menu:
 Orientation
```

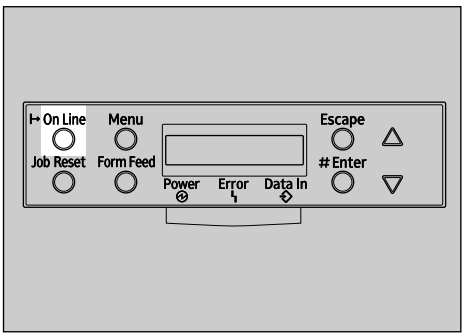
3 Press the [Enter #] key.

```
Orientation:
*Portrait
```

4 Press the [▲] or [▼] key to select the orientation desired, and then press the [Enter #] key. Wait for two seconds.

"PCL Menu" appears on the panel display.

5 **Press the【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.

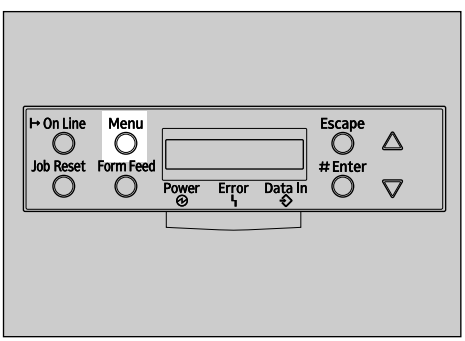
Note

❒ Default: English

Changing the Language Menu

You can change the language by the following procedures.

1 Press the【Menu】key.

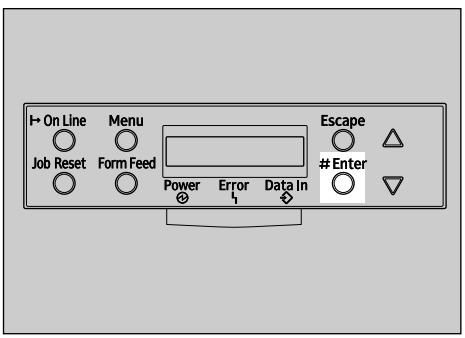


"Menu" appears on the panel display.

2 Press the [▲] or [▼] key to display "Language".

```
Menu:
 Language
```

3 Press the [Enter #] key.



The following message appears on the panel display.

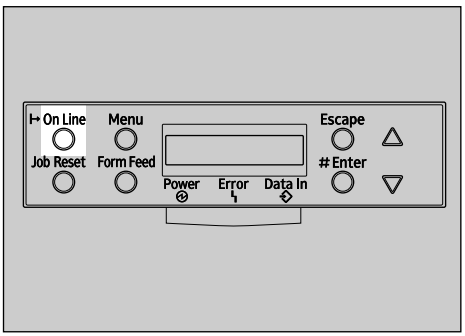
```
Language:
*English
```

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

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.

SNMP

The Network Interface Board functions as a SNMP (Simple Network Management Protocol) agent using the UDP and IPX protocols. 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.

Reference

You can configure SNMP from the command line using telnet. See p.191 “SNMP”.

You can configure SNMP from SmartNetMonitor for Admin using the NIB Setup Tool. See Help for SmartNetMonitor for Admin.

You can configure SNMP from your Web browser. See Help on the CD-ROM.

Limitation

- ❒ The optional 1394 Interface Unit supports TCP/IP only.
- ❒ The kinds of supported MIBs differ depending on the printer.

❖ Supported MIBs

- MIB-II
- PrinterMIB
- HostResourceMIB
- RicohPrivateMIB

Spool Printing

With Spool Printing, the whole data of a print job is saved in the Printer Hard Disk before printing. To use this function, set it from the menu. See p.149 “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 Printer Hard Disk and be printed when the printer is turned on.

Limitation

- Spool Printing does not appear unless the optional Printer Hard Disk is installed.
- Data that has been received in the protocol other than LPD or IPP cannot be spooled.
- Up to 50 jobs (approximately 1000 MB) can be spooled at a time.
- 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 five LPR jobs and one IPP job can be spooled. Jobs exceeding the maximum number cannot be spooled. Wait until the number of spooled print jobs falls below the maximum.

Note

- When "On" is selected, the first print will take time.

Note

- Spool jobs stored in the machine can be viewed or deleted using a Web browser.

Viewing/Deleting spool jobs in a Web browser

Launch the Web browser and enter the machine's IP address in the address bar. This displays the top page.

Example : `http://192.168.0.10`

(In this example, the IP address of the machine is 192.168.0.10)

Click “Admin Info”, and then “Spool Printing Job List (Printer)” to display the spool jobs. To delete, check the box next to the name of the file you want to delete. Enter the password *1 , and then click **[Delete]**. For more information, see p.103 “Configuring the Network Interface Board Settings”.

*1 The default password is “password”.

Setting Spool Printing

Spool Printing can be set using telnet or a Web browser.

- Using a Web browser
  Click ”Configuration”, and then “General”. Set “Spool Printing”to “Enable”.
- Using telnet
  Enter “spoolsw spool on” to set Spool Printing.

Reference

For more information about how to set up the spool printing, see the Help file.

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.

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
```

Note

❒ In order to use the host name instead of the IP address, you must write it to the "/etc/hosts" file.

2 **Type the password.**

Note

❒ The factory default is "password".

3 **Type a command.**

Reference

For more information about telnet commands, see p.184 “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】.**

If you do not want to save the changes, type "no", and then press 【Enter】. If you want to make additional changes, type "return" at the command line, and then press 【Enter】.

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 naf0	Ethernet Interface *1
ip1394 *2 fwip0 *2	IEEE 1394 Interface
wlan *3 wi0 *3	IEEE 802.11b Interface

*1 If you did not enter the interface name, it will be automatically set to the Ethernet interface.
*2 Available when the optional 1394 Interface Unit is installed.
*3 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 LAN interface or IEEE 802.11b interface when using the optional 802.11b Interface Unit.

```
msh> ifconfig interface up
```

Note

❒ You cannot specify the IEEE 1394 interface.

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 LAN 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 LAN interface and IEEE 802.11b interface.

❒ When installing the optional 1394 Interface Unit, set the subnet so that it does not overlap with the LAN interface or the IEEE 1394 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.
- ❒ When using a Web browser, telnet or SmartNetMonitor for Client/Admin, you can use an IP address that has not been restricted by access control.

❖ 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 set command to configure the boot method.

```
msh> set parameter {on|off}
```

"on" means active and "off" means inactive.

Parameter	Meaning
dhcp	DHCP (Dynamic Host Configuration Protocol)

Note

- ❒ The default is "on".
- ❒ When you use DHCP, the server also needs to be configured.
- ❒ DHCP takes precedence over all other settings.

Protocol

Use the set command to allow/prevent remote access for each protocol.

msh> set *protocol* {up | down}

Protocol	
appletalk tcpip netware netbeui scsiprint *1 ip1394 *1 lpr ftp rsh diprint web snmp ipp	"up" means active and "down" means inactive.

*1 Available when the optional 1394 Interface Unit is installed.

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 ip1394, lpr, ftp, rsh, diprint, web, snmp and ipp.

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.212 “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.214 “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.219 “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.
- ❒ 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
read	Read only
write	Read and write
trap	User is notified of trap messages.
no	All access is denied.

❖ 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}

- "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.

Command syntax:

msh> snmp *number* {ip | 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.
```

SPRINT

To make setting for IEEE 1394 (SCSI print), use the sprint command.

❖ **View settings**

The IEEE 1394 (SCSI print) settings are displayed.

```
msh> sprint
```

❖ **Bidirectional configuration for the IEEE 1394 (SCSI print)**

Use this setting to configure whether the IEEE 1394 (SCSI print) is bidirectional.
The factory default is "on".

```
msh> sprint bidi [on/off]
```

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 [0~65535]
```

Note

❒ The factory default is 300 seconds.

❒ If 0 is set, timeout is disabled.

❖ 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.

msh >smb *parameter*

Parameter	Settings
smb comp	Your computer name consisting of up to 13 characters
smb group	Workgroup name consisting of up to 15 characters
smb comment	Comment consisting of up to 31 characters
smb clear comp	Clears complete name
smb clear group	Clears Workgroup name
smb clear comment	Clears comment

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 gateway	Adds a host/network route to "destination", and a gateway address to "gateway" in the table. Host becomes the default setting.

Parameter	Topics of setting
route delete {host | net} destination	Deletes a host/network route from the table. Host becomes the default setting.
route get {destination}	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

SLP

Use this command to configure SLP settings.

You can search the NetWare server using SLP in the PureIP environment of NetWare 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 card information is displayed.

```
msh> wiconfig cardinfo
```

Note

❒ If the IEEE 802.11b interface is not working correctly, the IEEE 802.11b card 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.

Parameter	Value to be configured
ssid *ID value*	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 *channel no.*	You can set the channel. You can specify from following channel. • 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.
key [*key value*]	With a 64-bit WEP, you can use 10 digit hexadecimal. With a 128-bit WEP, you can use 26 digit hexadecimal. To use this function, set the same WEP key for all the ports that transmit to each other.

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

WINS

Use the wins command to configure the WINS server settings

For more information about WINS server settings, see p.233 “Configuring a WINS Server”.

❖ Configuration

Use the set command to make WINS active or inactive.

```
msh> set wins {on|off}
```

- "on" means active and "off" means inactive.

❖ **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
```

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.

❖ **Address configuration**

Use this command to configure a WINS server IP address.

```
msh> wins {primary|secondary} IP_address
```

Note

❒ Use the "primary" to configure a primary WINS server IP address.

❒ Use the "secondary" to configure a secondary WINS server IP address.

AutoNet

Use the set command to configure Autonet.

Note

❒ For more information about Autonet, see p.232 “Using AutoNet”.

```
msh>set autonet {on|off}
```

Select "on" to activate Autonet, and "off" to deactivate it.

Changing the Host Name

Use the hostname command to change the printer name.

msh> hostname [*interface_name*] *printer_name*

interface name	Interface to be configured
ether	Ethernet interface *1
wlan *2	IEEE 802.11b interface
ip1394 *3	IEEE 1394 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.
*3 If you install the optional 1394 Interface Unit, you can set the command.

Note

- Enter the printer name using up to 13 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.

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 3600 seconds.
- ❒ You can set the interval from 16 to 16384 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 in the configuration of the Network Interface Board using a Web browse and that used in the NIB Setup Tool. If you change a password from telnet, other passwords are also changed.

4. **Type the new password once again.**

```
Retype new password:
```

Getting Printer Information over the Network

Printer current status

You can check the printer's status using the telnet command.

❖ **telnet**

Use the status command.

Messages	Description
Add Toner: Cyan	The toner cartridge is empty.
Add Toner: Magenta	The toner cartridge is empty.
Add Toner: Yellow	The toner cartridge is empty.
Calibrating...	The printer is calibrating or the photoconductor unit is being supplied.
Color Regist Error	The color registration error has occurred.
Energy Save Mode	The printer is in Energy Saver Mode.
Hardware Problem Black PCU	The photoconductor unit is not set correctly.
Hardware Problem Bypass Tray	An error has occurred in the Bypass Tray.
Hardware Problem Color PCU	The photoconductor unit is not set correctly.
Hardware Problem DIMM	An error has occurred in the DIMM.
Hardware Problem Ethernet	An error has occurred in the Ethernet interface.
Hardware Problem HDD	An error has occurred in the optional Printer Hard Disk.
Hardware Problem IEEE1394	An error has occurred in the IEEE 1394 interface.
Hardware Problem NV-RAM	An error has occurred in the optional Account Enhance Unit.

Messages	Description
Hardware Problem Option RAM	An error has occurred in the optional Memory Unit.
Hardware Problem Parallel I/F	An error has occurred in the parallel interface.
Hardware Problem USB	An error has occurred in the USB interface.
Hardware Problem Wireless Board	An error has occurred in the IEEE 802.11b (Wireless LAN) interface.
Hardware Problem Wireless Card	An error has occurred in the IEEE 802.11b (Wireless LAN) card.
Hex Dump Mode	The printer is in Hex Dump Mode.
Offline	The printer is offline and cannot print data.
Please Wait	The printer is initializing the development unit.
	The printer is initializing HDD.
Processing...	Print data is being processed.
Ready	Printing is available.
Replace Black PCU	It is time to replace the photoconductor unit.
Replace Color PCU	It is time to replace the photoconductor unit.
Replace Fusing Unit	It is time to replace the fusing unit.
Resetting Job...	Job is being reset.
Toner is Almost Empty: Black	The toner cartridge is almost empty.
Toner is Almost Empty: Cyan	The toner cartridge is almost empty.
Toner is Almost Empty: Magenta	The toner cartridge is almost empty.
Toner is Almost Empty: Yellow	The toner cartridge is almost empty.
Waiting...	The printer is waiting for the next data to print.

Messages	Description
Warming Up...	The printer is warming up.
Waste Toner is Almost Full	The waste toner is full.

Printer configuration

You can check the printer configuration using telnet.

❖ telnet

Use the info command.

Note

❒ "*" (asterisk) is displayed 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

Item	Description
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.)
Bypass Tray	Bypass Tray

❖ *2 Input Tray: PaperSize

Paper Size	Description
A4 (210 × 297 mm)	A4 (210 × 297)
B5JIS (182 × 257 mm)	B5 (182 × 257)
A5 (148 × 210 mm)	A5 (148 × 210)
A6 (105 × 148 mm)	A6 (105 × 148)
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 $^{1}/_{2}$
Custom(XXXxYYY mm)	Custom Size
7 1/4 × 10 1/2	7 $^{1}/_{4}$ × 10 $^{1}/_{2}$

Paper Size	Description
8 1/4 × 13	8 1/4 × 13
8 1/2 × 13	8 1/2 × 13
4 1/8 × 9 1/2	4 1/8 × 9 1/2
3 7/8 × 7 1/2	3 7/8 × 7 1/2
DL (110 × 220 mm)	DL (110 × 220)
C5 Env (162 × 229 mm)	C5 Env (162 × 229)
8 × 13	8×13
C6 Env (114 × 162 mm)	C6 Env (114 × 162)
8K (267 × 390 mm)	8K (267 × 390)
16K (195 × 267 mm)	16K (195 × 267)
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
Standard Tray	Output Tray

❖ *5 Output Tray: Status

Status	Description
Normal	----
PaperExist	There is paper in the output tray
OverFlow	Output tray is full of paper
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.190 “Printer status” .

Item name	Meaning
Rank	Print job status. • 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.190 “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.190 “Network Interface Board configuration settings information” .

Item name	Meaning
Common	
Mode	
Protocol Up/Down	Up means active, Down means inactive.
AppleTalk	
TCP/IP	
NetWare	
NetBEUI	
IP over 1394 *1 *4	
SCSI print *4	
Ethernet interface	
Syslog priority	Internal version number.
NVRAM version	
Device name	
Comment	
Location	
Contact	
Soft switch	

Item name	Meaning
AppleTalk	
Mode	AppleTalk protocol in selection.
Net	Network number.
Object	Macintosh printer name.
Type	The type of printer.
Zone	Name of the zone that the printer belongs to.
TCP/IP	
Mode	Up means active, Down means inactive.
ftp	
lpr	
rsh	
diprint	
web	
telnet	
snmp	
ipp	
EncapType	Frame type.
dhcp	Dynamic Host Configuration Protocol (on/off)
Address	IP address.
Netmask	Subnet mask.
Broadcast	Broadcast address.
Gateway	Default gateway address.
Access Range[☆] *2	Access Control Range.

Item name	Meaning
Primary WINS	Primary WINS server address.
Secondary WINS	Secondary WINS server address.
Time server	NTP server address
Time Zone	NTP server time difference
Time server polling time	Synchronizes interval
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.
NetWare	
EncapType	Frame type.
RPRINTER number	Remote printer number.
Print server name	Print server name.
File server name	Name of the connect file server.
Context name	Context of print server.
Switch	
Mode	Active mode.
NDS/Bindery	(this value is fixed)
Packet negotiation	
Print job timeout	Time of the job timeout.

Item name	Meaning
NetBEUI	
Switch	
Mode	(this value is fixed)
Direct print	(this value is fixed)
Notification	Notification of print job completion.
Workgroup name	Name of the workgroup.
Computer name	Name of the computer.
Comment	Comment.
Share name[1]	Share name (name of the printer type).
IEEE 802.11b *3	
SSID	SSID being used.
Channel range	Channels available for use.
Channel	Channel being used.
Communication mode	IEEE 802.11b interface transmitting mode.
Rate	IEEE 802.11b interface speed.
WEP encryption	Whether WEP is enabled or disabled.
Auth	Validity or invalidity of the authorized mode setting when using WEP.
Encryption key	WEP key.

Item name	Meaning
IP over 1394 *1 *4	
Device name	
Address	IP address.
Netmask	Subnet mask.
Broadcast	Broadcast address.
SCSI print *4	
Bidi.	Bidirectional setting (on/off).
Shell mode	Mode of the remote maintenance tool.

*1 The optional 1394 Interface Unit supports TCP/IP only.
*2 ☆ represents a target number between 1 and 5.
*3 You can display the item names when installing the optional the optional 802.11b Interface Unit.
*4 You can display the item names when installing the optional 1394 Interface Unit.

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.184 “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: community<community name> already defined.	The same community name already exists. Use another community name.
add_sess: session<community name>already defined.	A requested community name is not defined.
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_ipx: bad trap addr: <IPX address>, 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.

Message	Description and Solutions
add_sess_ipx: session_ipx<community name> not defined.	A requested community name is not defined.
ANONYMOUS FTP LOGIN FROM <IP address>, <password>	An anonymous login has been made with a password <password> from the host <IP address>.
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>.

Message	Description and Solutions
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).
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.

Message	Description and Solutions
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.
IEEE 802.11b Card Firmware REV.IEEE 802.11b Card Firmware REV.	This is the wireless LAN card's firmware version.
IEEE 802.11b current channel <Channel>	The current channel is displayed. The value chosen by the user is displayed in ad hoc mode. The channel used in the access point is displayed in infrastructure mode. (Example: Current channel is 11.) IEEE 802.11b current channel 11
IEEE 802.11b MAC Address = <MAC Address>	The IEEE 802.11b I/F MAC address is displayed. (Example: Current MAC address is 00:00:74:XX:XX:XX.) IEEE 802.11b MAC Address = 00:00:74:XX:XX:XX
IEEE 802.11b SSID <ssid> (AP MAC Address < MAC Address>)	The SSID of the access point used in infrastructure mode and the MAC address of the access point are displayed. (Example: Current MAC address is xx:xx:xx:xx:xx:xx and SSID value is "test-ssid".) IEEE 802.11b SSID test-ssid (AP MAC Address xx:xx:xx:xx:xx:xx)

Message	Description and Solutions
IEEE 802.11b <transmission mode> mode	This is the IEEE 802.11b transmission mode. • IEEE 802.11b **[infrastructure]** mode : in infrastructure mode • IEEE 802.11b **[802.11 ad hoc]** mode : in 802.11 adhoc mode • IEEE 802.11b **[ad hoc]** mode : in adhoc mode
IEEE 802.11b Tx Rate <Transfer Speed>	The IEEE 802.11b transmitting speed (set speed) is displayed. (Example: Current Tx Rate is 11Mbps.) IEEE 802.11b Tx Rate 11Mbps
inetd start.	An inetd has started.
<interface> started with IP: <IP address>	<IP address> has been set for <Interface> and <Interface> started.
<Interface>: Subnet overlap.	Subnet from Netmask and the IP address you tried to set for <Interface> overlap the subnet for another interface. Set Subnet so that it does not overlap with another interface.
IPP cancel-job: permission denied.	The printer could not authenticate the name of the user attempting to cancel a job.
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.

Message	Description and Solutions
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>)	(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.
nbtd start.	A nbtd (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.
npriter 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.
papd start. (AppleTalk)	AppleTalk print service has started.

Message	Description and Solutions
permission denied.	Job cancellation was determined to be unauthorized after checking the user name and host address (except for ROOT authorization).
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.

Message	Description and Solutions
sap enable, saptype=<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.
Set context to <NDS context name>	A <NDS context name> has been set.
shutdown signal received. network service rebooting...	Rebooting the network service.
smbd start. (NetBEUI)	An smbd (SMB (Server Message Block) service) has started.
Snmp over ip is ready.	Communication over TCP/IP with SNMP is available.
Snmp over IP over 1394 is ready.	Communication over IP over 1394 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.
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.
win2kspd protocol-DOWN (APPEXIT).	NVRAM setting ioctl (SPIO CAPPEXIT) of device SBP2TSP was set by protocol-DOWN. SCSI print is not receiving data.
win2kspd protocol-UP (APPENTRY).	NVRAM setting ioctl (SPIO CAPPENTRY) of device SBP2TSP was set by protocol-UP. SCSI print is not receiving data.
win2kspd started.	SCSI print (SBP-2) service has started.

Message	Description and Solutions
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(errornumber)	Set Net BIOS 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 address0.0.0.0	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.
write error occurred. (diskfull)	The hard disk became full while the spool file was being written. Wait until enough HDD space becomes available as printing proceeds.
write error occurred. (fatal)	A fatal error occurred while the spool file was being written. Turn the printer off and then on. If this does not work, contact your service or sales representative.

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 the Option Setup Guide that comes with the printer.
- 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.71 “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.71 “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, clear the **[Form feed]** check box under the **[NetWare Settings]** tab in the Printer Properties dialog box.
- With 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, clear the **[Enable banner]** check box under the **[NetWare Settings]** tab in the Printer Properties dialog box.
- With 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

You can use the printer under a DHCP environment. You can also register the printer NetBIOS name on a WINS server when it is running.

Limitation

❒ DHCP cannot be used with IEEE 1394 (IP over 1394). Set a fixed IP address with the control panel, telnet or a Web browser.

- See the Setup Guide.
- See p.185 “TCP/IP address”.
- See p.103 “Configuring the Network Interface Board Settings”.

Note

- Printers that register the printer NetBIOS name on a WINS server must be configured for the WINS server. See p.201 “WINS”.
- Supported DHCP server is Windows NT 4.0 Server Service Pack 4 or later, Windows 2000 Server and NetWare 5.
- If you do not use the WINS server, reserve the printer's IP address in the DHCP server so that the same IP address is assigned every time.
- DHCP relay-agent is not supported. If you use DHCP relay-agent on a network via an ISDN line, it will result in 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.

Limitation

- You must change the setting to "on" to use AutoNet. See p.202 “AutoNet”.

Note

- The IP address assigned by the DHCP server is given priority to that selected by AutoNet.
- You can confirm the current IP address on the configuration page. For more information about the configuration page, see p.130 “Printing a Configuration Page”.
- When AutoNet is running, the NetBIOS name is not registered on the WINS server.

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 SmartNetMonitor 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. **Point your browser at the URL or IP address of the printer (e.g. http://XXX.XXX.XXX substituting the Xs with the IP address).**

   The status of the printer you chose appears on the Web browser.
3. **Click Network Config.**

   The dialog box for entering the password and user name is displayed.
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 TCP/IP.**
6. **Set WINS to active and enter the IP address of the WINS server in Primary WINS Server and Secondary WINS Server.**
7. **Click Refresh.**
8. **Exit the Web browser.**

Using telnet

1. **Connect to the remote printer using telnet.**
2. **Use the set command to make WINS active.**

```
msh> set wins on
```

3. **Specify the IP addresses (primary and secondary) using the following commands.**

```
msh> wins primary Ipaddress
msh> wins secondary Ipaddress
```

Note

❒ To confirm the current configuration, use the show command.

4. **Log out from telnet.**

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	64 MB (Standard)		64 MB (Standard)	
	B5				
	LT				
	Legal				
1200×600 dpi *2	A4	64 MB (Standard)		64 MB (Standard)	128 MB (Standard + 64 MB)
	B5				
	LT				
	Legal				
1200×1200 dpi *3	A4	64 MB (Standard)	128 MB (Standard + 64 MB)	128 MB (Standard + 64 MB)	192 MB (Standard + 128 MB)
	B5				
	LT				
	Legal				

*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: **[600dpi]** 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: **[600dpi]** on **[Resolution]** and **[Standard]** on **[Gradation]**

Reference

For more information about how to set the printer driver, see printer driver's Help.

*3 To set resolution from each printer driver is as follows:

- RPCS: **[1200 x 1200dpi]** on **[Resolution]**
- PostScript 3: **[1200dpi]** on **[Resolution]** and **[Standard]** on **[Gradation]**

Reference

For more information about how to set the printer driver, see printer driver's Help.

Specifications

Mainframe

❖ **Configuration:**
Desktop

❖ **Print Process:**
Laser beam scanning & Electrophotographic printing
Mono component toner development
4 drums tandem method

❖ **Printing Speed:**
Monochrome: Maximum 20 pages per minute (A4), Maximum 21 pages per minute (11×8 1/2)
Color: Maximum 16 pages per minute (A4), Maximum 17 pages per minute (11×8 1/2
First print Speed: Pre Heat On (Default): 15.5 sec, Pre Heat Off: 25 sec or less

❖ **Interface:**

- Network Standard Model
  Standard:
  - Parallel (Bidirectional IEEE1284)
  - Ethernet (10/100Base-TX)
  - USB (USB1.1, USB2.0 *1)

    *1 It requires a USB computer port and cable that support USB 2.0.

Optional:

- IEEE 1394 (SCSI print, IP over 1394)
- IEEE 802.11b (Wireless LAN)
- Bluetooth™

- Basic
  Standard:
  - Parallel (Bidirectional IEEE1284)
  - USB (USB1.1, USB2.0 *1)

    *1 It requires a USB computer port and cable that support

  Optional:
  - Ethernet (10/100Base-TX)
  - IEEE 1394 (SCSI print, IP over 1394)
  - IEEE 802.11b (Wireless LAN)
  - Bluetooth™

❖ **Resolution:**

1200 × 1200 dpi (RPCS, PostScript 3)
1200 × 600 dpi (RPCS, PostScript 3)
600 × 600 dpi (PCL 5c, RPCS, PostScript 3)
300 × 300 dpi (PCL 5c *1 , RPCS)

*1 monochrome only

❖ **Printer Language:**

PCL 5c, RPCS, Adobe PostScript Level 3

❖ **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

❖ **Paper size:**

See "*Paper and Other Media*" in the Maintenance Guide.

❖ **Paper Weight:**

See "*Paper and Other Media*" in the Maintenance Guide.

❖ **Media Type:**

See "Paper and Other Media" in the Maintenance Guide.

❖ **Power Source:**

220 - 240 V, 50/60Hz

❖ **Power Consumption:**

Printing	1300 W or less
Energy Saver	9 W or less

❖ **Noise Emission [*1] :**

Sound Power Level

	Mainframe only
During Printing	63 dB (A)
Stand-by	40 dB (A)

Sound Pressure level [*2]

	Mainframe only
Stand by	34 dB (A)
During Printing	45 dB (A)

[*1] The preceding measurements made in accordance with ISO7779 are actual values.
[*2] Measured at the position of a bystander.

❖ Dimensions:

	Width	Depth	Height
Printer only (tray not extended)	419 mm (16.5 inches)	536 mm (21.1 inches)	395 mm (15.5 inches)

❖ Weight:

Approximately 30 kg (66.1 lb) (toner cartridge and power cord included)

❖ Warm-up Time:

Less than 30 seconds (23°C, 73F) [*1]

[*1] When no error.

❖ Paper Input Capacity:

Standard Paper Tray	530 sheet tray [*1]
Bypass Tray	100 sheet [*2]
Optional Paper Feed Units	530 sheet paper tray × 2 [*1]

[*1] Paper weight: 80 g/m^2 (20 lb. bond)
[*2] You can load up to 10 envelopes at the same time.

❖ **Paper Output Capacity:**
Standard 250 sheets (80 g/m^2 (20 lb.bond))

❖ **Memory:**
Standard 64 MB, up to 384 MB (with the optional Memory Unit)

❖ **Network:**
Protocol: TCP/IP, NetBEUI*1, IPX/SPX, AppleTalk
*1 To use NetBEUI, use the SmartNetMonitor for Client port.

Options

PAPER FEED UNIT Type 3000

❖ **Dimensions (W × D × H):**
410 × 536 × 146 mm (16.1 × 21.1 × 5.8 inches)

❖ **Paper size:**
A4, B5(JIS), 8 $^1/_2$ × 14, 8$^1/_2$ × 11

❖ **Paper weight:**
60 - 105 g/m^2, (16 - 28 lb. bond)

❖ **Weight:**
Less than 7.42 kg (16.3 lb)

AD440

❖ **Dimensions (W × D × H):**
355 × 237 × 69 mm (12.8 × 9.3 × 2.7 inches)

Note
❒ This option is built into the machine.

❖ **Paper size:**
A4, B5(JIS), 8 $^1/_2$ × 14, 8$^1/_2$ × 11

❖ **Paper weight:**
60 - 105 g/m^2 (16 - 28 lb. bond)

❖ **Weight:**
Less than 0.74 kg (1.6 lb. bond)

Printer Hard Disk Type 3000

❖ **Storage Capacity (Formatted):**
10 GB

❖ **Specifications:**

- Spool print data to collate
- Spool Sample/Locked Print data
- Store PostScript fonts
- Store log data

Note

❒ You can install PostScript fonts with this optional Printer Hard Disk Type 3000. With Macintosh, types of fonts supported are PostScript Type 1 and PostScript Type 2. To download them, use Printer Utility for Mac.

Memory Unit Type C 64/128/256MB

❖ **Module Type:**
SO-DIMM (Small Outline Dual-in-line Memory Module)

❖ **Memory Type:**
SDRAM (Synchronous Dynamic RAM)

❖ **Number of Pins:**
144 pins

User Account Enhance Unit Type B

❖ **Capacity:**
64 KB

❖ **Specifications:**
Store User Code (Up to 400 users)

Network Interface Board Type 3000

❖ **Topology:**
Ethernet (10Base-T/100Base-TX)

❖ **Protocols:**
TCP/IP, NetBEUI, IPX/SPX, AppleTalk

❖ **Interface Connector:**
RJ45

❖ **Required Cable:**
STP (Shielded Twisted-Pair) cable
Category / Type 5 or better

1394 Interface Unit Type 4510

❖ **Interface:**
IEEE Std. 1394-1955 compliant, IEEE Std. 1394-2000 compliant.

❖ **Interface Connector:**
IEEE 1394 (6 pins × 2)

❖ **Required cable:**
IEEE 1394 interface cable (6 pins x 4 pins, 6 pins x 6 pins)

Important

❒ You cannot plug devices together to create loops.

❒ Do not use a cable more than 4.5 meters long.

❖ **Connectable number of devices in a bus:**
Maximum 63

❖ **Allowed cable hops in a bus:**
Maximum 16

❖ **Data Transmission:**
400 Mbps (Maximum)

❖ **Power supply:**
Non power supply
Cable Power repeated (IEEE 1394a-2000 compliant)

802.11b Interface Unit TypeA (R-WL11)

❖ **Transmission Spec.:**
Based on IEEE 802.11b (Wireless LAN)

❖ **Protocol:**
TCP/IP, NetBEUI, IPX/SPX, AppleTalk

Note

❒ SmartNetMonitor and WebStatusMonitor are supported.

❖ **Data Transfer Speed:**
Auto select from below speed
1Mbps, 2Mbps, 5.5Mbps, 11Mbps

❖ **Frequency Range:**

- Inch version:
  2412-2462 Mhz (1-11 channels)
- Metric version:
  2412-2472 Mhz (1-13 channels)

❖ **Transmittable Distance:**

1Mbps 400m *1
2Mbps 270m *1
5.5Mbps 200m *1
11Mbps 140m *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

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expat

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- Information on expat 1.95.2 is available at:

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Introduction

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 before using this machine. It contains important information related to USER SAFETY and PREVENTING EQUIPMENT PROBLEMS.

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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® XP are as follows:
  Microsoft® Windows® XP Professional
  Microsoft® Windows® XP Home Edition
- 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 NT® 4.0 are as follows:
  Microsoft® Windows NT® Server 4.0
- Microsoft® Windows NT® Workstation 4.0

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.

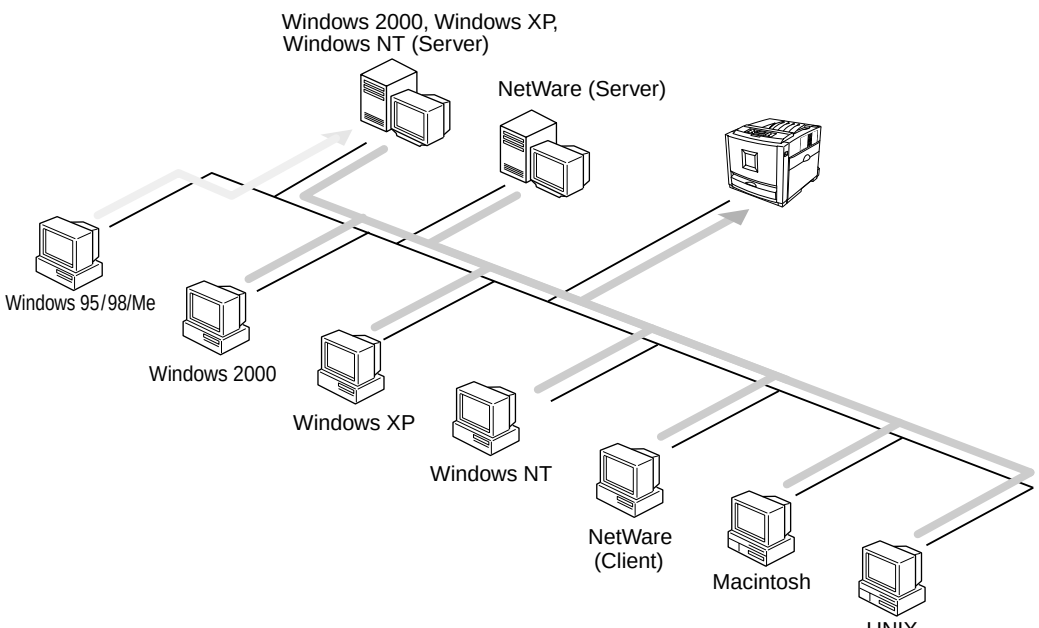
Keys and buttons that appear on the computer's display.

【 】

Keys built into the machine's control panel.

Keys on the computer's keyboard.

Confirming a Network Environment

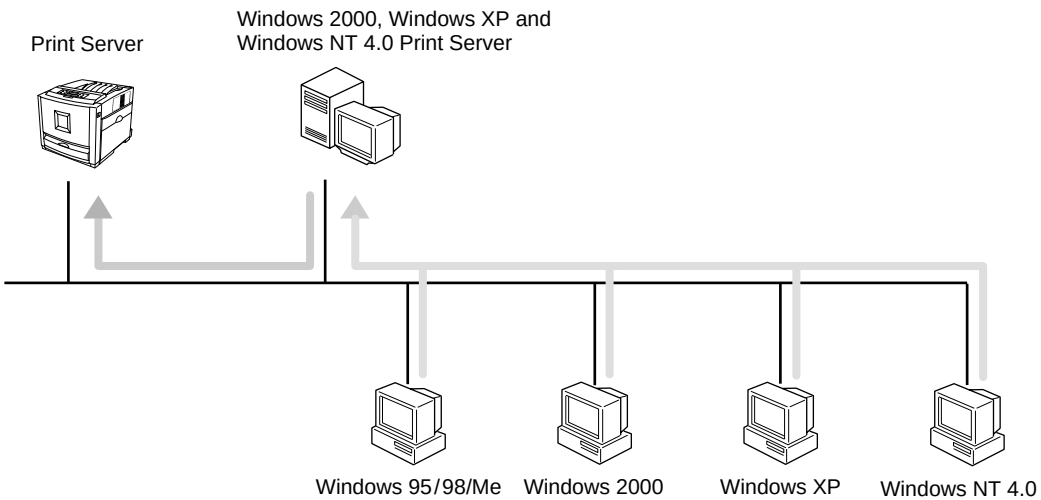


❖ Connecting Printer and Computer

- Network connection (Ethernet cable, IEEE 1394 cable (IP over 1394), IEEE 802.11b (Wireless LAN))
- Parallel connection (parallel cable)
- USB connection (USB cable)
- IEEE 1394 (SCSI print) connection (IEEE 1394 cable)

Windows Configuration

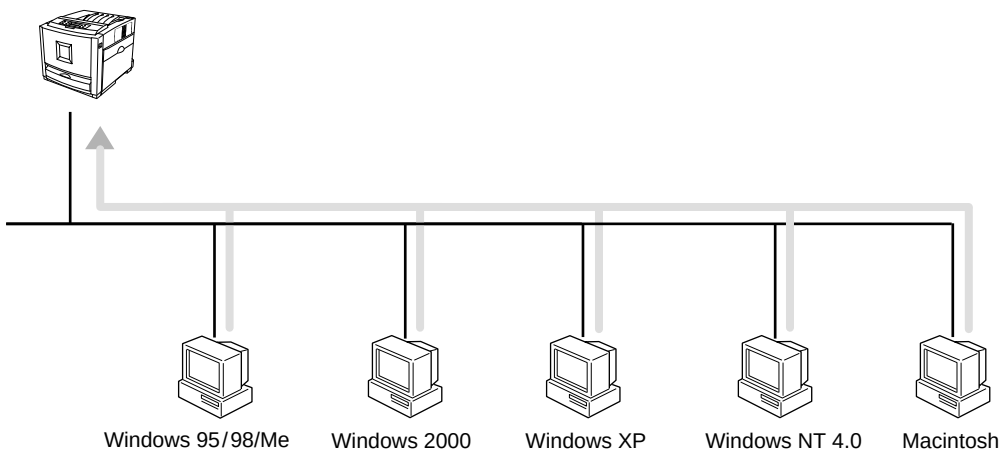
❖ Connecting a Print Server



- See p.19 “Printing with a Print Server” in "Windows 95/98/Me Configuration".
- See p.51 “Printing with a Print Server” in "Windows 2000 Configuration".
- See p.85 “Printing with a Print Server” in "Windows XP Configuration".
- See p.118 “Printing with a Print Server” in "Windows NT 4.0 Configuration".

❖ Network Connection

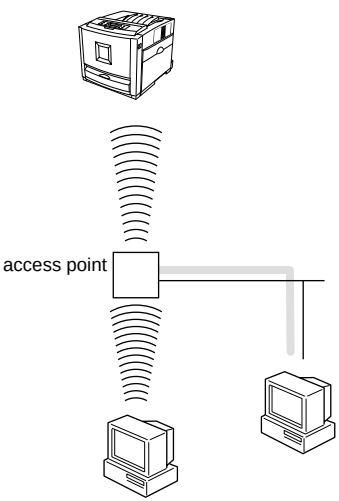
- Ethernet, IEEE 1394 (IP over 1394)



- IEEE 802.11b

❖ad hoc mode

❖infrastructure mode



❖ Interface supported protocols

		Interface		
		Ethernet	IEEE 802.11b	IEEE 1394 (IP over 1394)
Protocol	TCP/IP	❍	❍	❍
	NetBEUI	❍	❍	×
	NetWare	❍	❍ *1	×
	AppleTalk	❍	❍	×

❍ means that the protocol is supported.
× means that the protocol is not supported.
*1 If the optional 802.11b Interface Unit Type A has been installed, you cannot use the ad hoc mode.

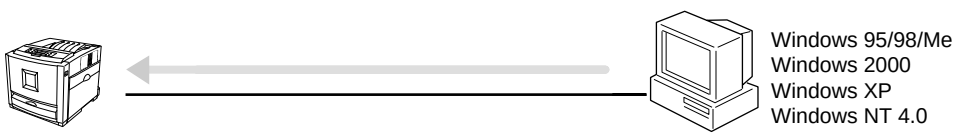
- See p.25 “Printing without Using a Print Server” in "Windows 95/98/Me Configuration".
- See p.57 “Printing without Using a Print Server” in "Windows 2000 Configuration".
- See p.91 “Printing without Using a Print Server” in "Windows XP Configuration".
- See p.124 “Printing without Using a Print Server” in "Windows NT 4.0 Configuration".

❖ Parallel Connection

- See p.39 “Printing with Parallel Connection” in "Windows 95/ 98/ Me Configuration".
- See p.72 “Printing with Parallel Connection” in "Windows 2000 Configuration".
- See p.104 “Printing with Parallel Connection” in "Windows XP Configuration".
- See p.139 “Printing with Parallel Connection” in "Windows NT 4.0 Configuration".

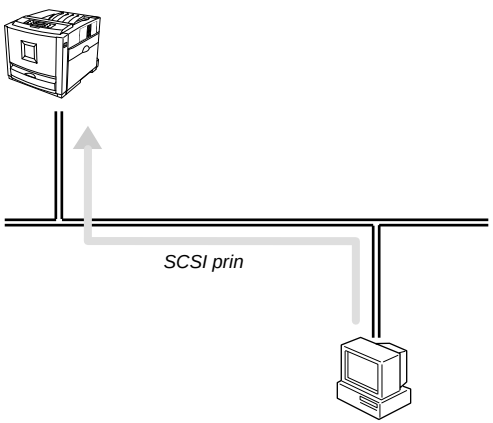
❖ USB Connection

- See p.43 “Installing the Printer Driver Using USB” in "Windows 95/ 98/ Me Configuration".
- See p.77 “Installing the Printer Driver Using USB” in "Windows 2000 Configuration".
- See p.109 “Installing the Printer Driver Using USB” in "Windows XP Configuration".



❖ IEEE 1394 Connection

- See p.45 “Installing the Printer Driver Using IEEE 1394” in "Windows 95/ 98/ Me Configuration".
- See p.78 “Installing the Printer Driver Using IEEE 1394” in "Windows 2000 Configuration".
- See p.110 “Installing the Printer Driver Using IEEE 1394” in "Windows XP Configuration".



❖ Connecting a NetWare Server

See p.159 “NetWare Configuration”.

Macintosh Configuration

See p.145 “Macintosh Configuration”.

UNIX Configuration

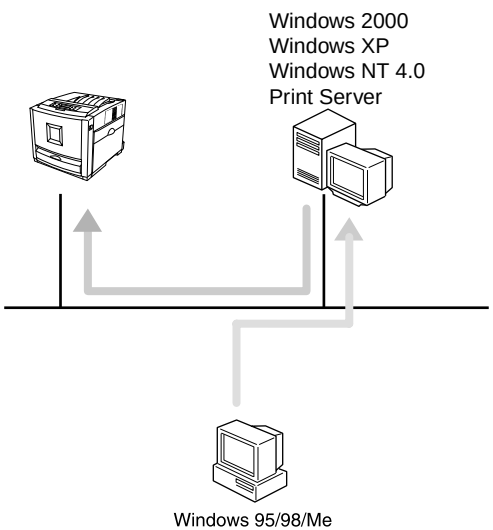
Concerning UNIX printing information, please visit our Web site or consult your authorized reseller.

Printing with a Print Server

Printing with a Windows 2000, Windows XP or Windows NT 4.0 Print Server

This section describes the procedures for setting up a client on a network that uses Windows 2000, Windows XP, 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, Windows XP or Windows NT 4.0 shared printer. For more information about how to install and setting, see the Administrator Reference.

This section assumes that the client has already been configured to communicate with a Windows 2000, Windows XP or Windows NT 4.0 print server. Do not begin the following procedure until the client has been set up and configured correctly.

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.47 “Bidirectional transmission”.

Reference

For more information about option settings, see p.47 “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: Cestina, Magyar, Polski, 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.47 “Setting Up Options”.

13. **Restart the computer.**

Printing without Using a Print Server

Preparation

To use a printer connected to the Ethernet interface, IEEE 802.11b (Wireless LAN) interface or IEEE 1394 (IP over 1394) interface, select "SmartNetMonitor" 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*" in the Quick Installation Guide.

If DHCP is used to assign IP addresses, see Appendix, "*When Using DHCP*" in the Administrator Reference.

Under Windows Me, when you want to use the IP over 1394, see the Option Setup Guide.

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.

❒ Under Windows Me, if you want to use IEEE 1394 (IP over 1394) interface, make sure TCP/IP is bound to the IEEE 1394 adaptor being used. The following message will be displayed:

```
TCP/IP -> (IEEE 1394 adaptor in use)
```

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 SmartNetMonitor for Client port.

❖ Configuring the printer

Configure the printer to use the NetBEUI protocol.

- Confirm that the NetBEUI protocol is set to be active. (The factory default is active.)

Reference

For more information about how to make the above settings, see "*Configuring the printer for the Network*" in the Quick Installation Guide.

❖ 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 SmartNetMonitor for Client, and then install the printer driver by selecting "SmartNetMonitor for Client". This enables peer-to-peer network printing with the TCP/IP, NetBEUI, or IPP protocol.

Note

❒ Under Windows Me, you can print using TCP/IP and the IEEE 1394 (IP over 1394) interface.

Installing SmartNetMonitor 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 [SmartNetMonitor for Client / Admin].**

5 **Click to select [SmartNetMonitor 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 SmartNetMonitor 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 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 SmartNetMonitor.

SmartNetMonitor

❶ Select [Port:], and then click [Add].

❷ Select [SmartNetMonitor], and then click [OK].

❸ 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*" in the Administrator Reference. NetBEUI address appears as "\\RNPxxxx\xxx" 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" or "ipp://printer's-ip-address/printer" in the **[Printer URL]** field.
(Example IP address is 192.168.15.16)

```
http://192.168.15.16/printer
ipp://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 SmartNetMonitor 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.47 “Bidirectional transmission”.

Reference

For more information about option settings, see p.47 “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: Cestina, Magyar, Polski, 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 [SmartNetMonitor], and then click [OK].**

15 **Select a printer you want to use.**

TCP/IP

❶ **Click [TCP/IP], and then click [Search].**

Available printers will be listed.

❷ **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

❶ **Click [NetBEUI], and then click [Search].**

A list of printers that can be used by the NetBEUI protocol appears.

❷ **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*” in the Administrator Reference. NetBEUI address appears as “\\RNPxxxx\xxx” 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

❶ **Click [IPP].**

The IPP setting dialog box appears.

❷ **In [Printer URL], type "http://(printer's IP address)/printer" as the printer's IP address.**

(Example IP address is 192.168.15.16)

```
http://192.168.15.16/printer
```

❸ **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.

❹ **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 SmartNetMonitor for Client Help.

❺ **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 the Help file for the printer driver.

Reference

For more information about option settings, see p.47 "Setting Up Options".

18 Restart the computer.

Changing Port Settings

Follow the steps to change SmartNetMonitor 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 SmartNetMonitor for Client, and then right-click the SmartNetMonitor 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 SmartNetMonitor 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 uninstall 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.47 “Bidirectional transmission”.

Reference

For more information about option settings, see p.47 “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: Cestina, Magyar, Polski, 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.47 “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.

Important

❒ Be sure that all other applications are closed and that the computer is not currently making prints before installation.

Windows 98/Me-Installing the Printer Driver Using USB

The procedure below takes Windows 98 as an example. The procedure for Windows Me may be slightly different.

When the USB cable is used for the first time, the "plug and play" function starts and **[New Hardware Found]**, **[Device Driver Wizard]** or **[Found 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**】 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 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].

8 Follow the "plug and play" on the screen to install the printer drivers.

When the installation is complete, the printer with its port directed to "USB00n" appears on the **[Printers]** folder. ("n" is the number of printers connected.")

Installing the Printer Driver Using IEEE 1394

This section gives basic instructions for installing the printer drivers using IEEE 1394 interface. The printer drivers can be installed from the CD-ROM provided.

Preparation

To use a printer connected to the IEEE 1394 (IP over 1394) interface, select "SmartNetMonitor" when installing the printer driver. p.25 “Configuring the Protocols” and p.28 “Installing Software”

Important

❒ Be sure that all other applications are closed and that the computer is not printing before installation.

Printing with IP over 1394

You can print by setting the IP address for this machine and the computer on which Windows Me is installed.

Limitation

❒ When using the IEEE 1394 (IP over 1394) interface in a network, the Ethernet interface cannot be used in the same network.

Note

❒ The maximum number of simultaneous print requests when connecting with IP over 1394 includes the print requests from the Ethernet interface. For more information, see the Administrator Reference.

Installing the Printer Driver

To Print using SmartNetMonitor. See p.25 “Printing without Using a Print Server”.

Note

❒ When **[Add New Hardware Wizard]** starts every time you restart the computer with an operating system, which does not support SCSI print or plug in or out the cable, inactivate the device by following procedures.

① In the **[Add New Hardware Wizard]** dialog box, confirm that **[Windows has found the following new Hardware: IEEE SBP-2 Device]** is displayed, and select **[Recommended search for a better driver [Recommended]]**, and then click **[Next>]**.

② When the **[Windows was unable to locate the software for this device.]** message appears, click **[Finish]**.

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, Windows 2000, Windows XP 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.
- SmartNetMonitor 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 IEEE 1394

- The printer must be connected to the IEEE 1394 connector of a computer using the IEEE 1394 interface cable.

❖ When connecting with USB

The printer must be connected to the USB connector of a computer using the USB interface cable.

Using Adobe PageMaker Version 6.0, 6.5 or 7.0

If you use the machine under Windows 95/98/Me, Windows 2000, Windows XP 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.

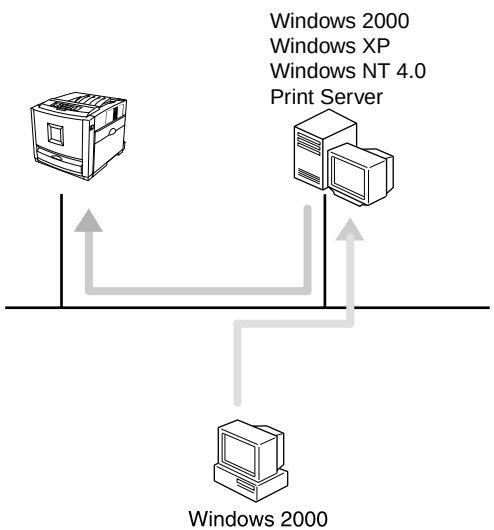
- **For PageMaker 6.0 default installation**
  The directory is "C:\PM6\RSRC\PPD4".
- **For PageMaker 6.5 default installation**
  The directory is "C:\PM65\RSRC\USENGLISH\PPD4".
  The "USENGLISH" may vary depending on your language selection.
- **For PageMaker 7.0 default installation**
  The directory is "C:\PM7\RSRC\USENGLISH\PPD4".
  The "USENGLISH" may vary depending on your language selection.

Printing with a Print Server

Printing with a Windows 2000, Windows XP or Windows NT 4.0 Print Server

This section describes the procedures for setting up a client in a network that uses Windows 2000, Windows XP, 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

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.82 “Bidirectional transmission”.

Reference

For more information about option settings, see p.82 “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: Cestina, Magyar, Polski, 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.82 “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 "SmartNetMonitor", "Standard TCP/IP Port", "LPR Port" when installing the printer driver.

- SmartNetMonitor See p.57 “Configuring the Protocols” and p.60 “Installing Software” and p.61 “Installing the PCL 5c or RPCS Printer Driver” or p.66 “Installing the PostScript Printer Driver”.
- Standard TCP/IP Port, LPR Port See p.57 “Configuring the Protocols” and p.61 “Installing the PCL 5c or RPCS Printer Driver” or p.66 “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*" in the Quick Installation Guide.

If DHCP is used to assign IP addresses, see Appendix, "*When Using DHCP*" in the 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 SmartNetMonitor for Client port.

❖ Configuring the printer

Configure the printer to use the NetBEUI protocol.

- Confirm that the NetBEUI protocol is set to be active. (The factory default is active.)

Reference

For more information about how to make the above settings, see "*Configuring the printer for the Network*" in the Quick Installation Guide.

❖ 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 SmartNetMonitor for Client, and then install the printer driver by selecting "SmartNetMonitor for Client". This enables peer-to-peer network printing with the TCP/IP, NetBEUI, or IPP protocol.

Installing SmartNetMonitor 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 [SmartNetMonitor for Client / Admin].**

5 **Click to select [SmartNetMonitor 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 SmartNetMonitor 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 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.**

- SmartNetMonitor
- Standard TCP/IP Port
- LPR Port

SmartNetMonitor

❶ **Click [Add].**

❷ **Select [SmartNetMonitor], and then click [OK].**

❸ **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*" in the Administrator Reference. NetBEUI address appears as "\\RNPxxxx\xxx" 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" or "ipp://printer's-ip-address/printer" in the **[Printer URL]** field.
(Example IP address is 192.168.15.16)

```
http://192.168.15.16/printer
ipp://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 SmartNetMonitor for Client Help.

⑤ Click **[OK]**.

Standard TCP/IP Port

❶ **Click [Add].**

❷ **Select [Standard TCP/IP], and then click [OK].**

❸ **Click [Next] in the "Add Standard TCP/IP Printer Port Wizard" window.**

❹ **Type the printer name or IP address in the "Printer Name or IP Address" box.**

❺ **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].**

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 **[Digital Signature Not Found]** dialog box may appear. In this case, click **[Yes]** 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.82 “Bidirectional transmission”.

Reference

For more information about option settings, see p.82 “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: Cestina, Magyar, Polski, 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.**

- SmartNetMonitor
- Standard TCP/IP Port
- LPR Port

SmartNetMonitor

❶ **Click [Create a new port:].**

❷ **Select [SmartNetMonitor], and then click [Next >].**

❸ **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*" in the Administrator Reference. NetBEUI address appears as "\\RNPxxxx\xxx" 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" or "ipp://printer's-ip-address/printer" in the **[Printer URL]** field.
(Example IP address is 192.168.15.16)

```
http://192.168.15.16/printer
ipp://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 SmartNetMonitor for Client Help.

⑤ Click **[OK]**.

Standard TCP/IP Port

❶ **Click [Create a new port:].**

❷ **Select [Standard TCP/IP] in [Create a new Port], and then click [Next].**

❸ **Select [Standard TCP/IP], and then click [OK].**

❹ **Click [Next] in the "Add Standard TCP/IP Printer Port Wizard" window.**

❺ **Type the printer name or IP address in the "Printer Name or IP Address" box, and then click [Next>].**

❻ **Click [Finish] in the "Add Standard TCP/IP Printer Port Wizard" window.**

LPR Port

❶ **Click [Create a new 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].**

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.82 “Setting Up Options”.

Changing Port Settings

Follow the steps to change SmartNetMonitor 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 SmartNetMonitor for Client, and then right-click the SmartNetMonitor 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 SmartNetMonitor 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.82 “Bidirectional transmission”.

Reference

For more information about option settings, see p.82 “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: Cestina, Magyar, Polski, 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.82 “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.

Important

❒ Be sure that all other applications are closed and that the computer is not currently making prints before installation.

Windows 2000-Installing the Printer Driver Using USB

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.

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.

1. **Install the printer driver by referring to the instructions for installing the printer driver with Parallel/Ethernet connection.**

   When installation is complete, the printer with its port directed to "USB00n" appears on the **[Printers]** folder. ("n" is the number of printers connected.")

Installing the Printer Driver Using IEEE 1394

This section gives basic instructions for installing the printer drivers using IEEE 1394 interface. The printer drivers can be installed from the CD-ROM provided.

Important

❒ Be sure that all other applications are closed and that the computer is not printing before installation.

Printing with SCSI Print

Printing using a SCSI print device with the optional 1394 Interface Unit Type 4510 is possible under Windows 2000.

Important

❒ The optional 1394 Interface Unit Type 4510 can only be used with Service Pack 1 (SP1) or later. If the Service Pack is not installed, the connectable SCSI print device in a 1394 bus is only one. The client cannot install the printer driver without using an account with Administrators permission.

❒ Do not connect new IEEE 1394 or USB devices to PC or turn on other printer while installing the printer driver.

❒ Before uninstalling the printer driver, be sure to disconnect the IEEE 1394 interface cable from the computer.

❒ “SCSI print” must be set active from the control panel. For more information, see "IEEE 1394 Configuration" in the Option Setup Guide.

Note

❒ This machine cannot receive print data from more than one computer at the same time. If you send data from your computer when data is being received from another computer, a message may appear on the computer display.

Installing the Printer Driver

Note

- If **[Found New Hardware Wizard]** appears every time the computer is started or the cable is connected with Windows 2000, inactivate the device. If you want to install another printer driver after setting the "1394_00n" port, select the "1394_00n" port by following the procedures of installing a printer driver.
- When the printer connected via the optional 1394 Interface Unit Type 4510 is installed properly, the appearance of the icon in the printer folder changes according to whether the cable is plugged in or not.

1. **Connect the printer and the computer using the IEEE 1394 interface cable.**
2. **In the [Found New Hardware Wizard] dialog box, and then click [Next>].**
3. **When the [This wizard will complete the installation for this Device: Unknown] message appears, select [Optional search locations:], and then click [Next>].**
4. **When the [Locate Driver Files] message appears, select the [Optional search locations.] check box, and then select [Specify a location], and then click [Next>].**
5. **Hold down the left【SHIFT】key and insert the CD-ROM into the CD-ROM drive.**

   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]**.
6. **Click [Browse].**

7 **Select the printer driver that you want to use. The following are locations where printer drivers are stored:**

- RPCS
  \DRIVERS\RPCS\WIN2K_XP\(Language)\DISK1
- PCL 5c
  \DRIVERS\PCL5C\WIN2K_XP\(Language)\DISK1
- PostScript 3
  \DRIVERS\PS\WIN2K_XP\(Language)\DISK1

8 **Click [Open].**

9 **Click [OK].**

A printer model selection dialog box appears.

10 **Follow the instructions on the screen.**

Note

- During installation, the **[Digital Signature Not Found]** dialog box may appear. In this case, click **[Yes]** to continue the installation.
- If the printer driver is already installed, the printer icon is automatically added to the **[Printer]** folder. In such a case, installation of the printer driver is not necessary.
- When the installation is complete, the printer with its port directed to "1394_00n" appears on the **[Printers]** folder. ("n" is the number of printers connected.")
- If printing does not work properly after installation, you need to delete the port and reinstall the printer driver. For more information, see "Printer Does Not Print" in the Maintenance Guide.

- If you do not want to install the printer when **[Found New Hardware Wizard]** starts with an operating system, which supports SCSI print, inactivate the device by following the procedures.
  ① In **[Found New Hardware Wizard]** dialog box, and then click **[Next>]**.
  ② When the **[This wizard will complete the installation for this Device: Unknown]** message appears, and select **[Search for a suitable driver for my device [recommended]]**, and then click **[Next>]**.
  ③ When the **[Locate Driver Files]** message appears, remove all the selections from **[Optional search locations.]**, and then click **[Next>]**.
  ④ When the **[Driver Files Search Results]** message appears, select the **[Disable the device. The Add/Remove Hardware Wizard in the control Panel can be able to complete the driver installations.]** check box, and then click **[Finish]**.
- When **[Found New Hardware Wizard]** appears every time you restart the computer with an operating system which does not support IP over 1394, plug in or take out the cable, inactivate the device with the following procedure.
  ① In **[Found New Hardware Wizard]** dialog box, and then click **[Next>]**.
  ② When the **[This wizard will complete the installation for this Device:]** message appears and "IP over 1394" appears select **[Search for a suitable driver for my device [recommended]]**, and then click **[Next>]**.
  ③ When the **[Locate Driver Files]** message appears, remove all the selections from **[Optional search locations.]**, and then click **[Next>]**.
  ④ When the **[Driver Files Search Results]** message appears, select the **[Disable the device. The Add/Remove Hardware Wizard in the control Panel can be able to complete the driver installations.]** check box, and then click **[Finish]**.

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, Windows 2000, Windows XP 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.
- SmartNetMonitor 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 IEEE 1394

- The printer must be connected to the IEEE 1394 connector of a computer using the IEEE 1394 interface cable.
- **[Activate]** is selected in the SCSI print of IEEE 1394 and **[Activate]** is selected in the Bidi-SCSI print.
- 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

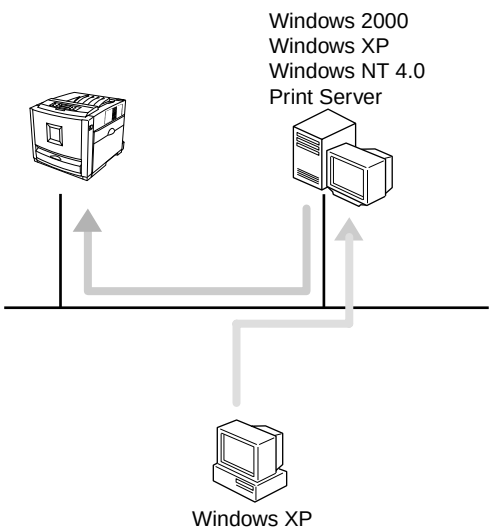
The printer must be connected to the USB connector of a computer using the USB interface cable.

Printing with a Print Server

Printing with a Windows 2000, Windows XP or Windows NT 4.0 Print Server

This section describes the procedures for setting up a client in a network that uses Windows 2000, Windows XP, Windows NT 4.0.

To print from Windows XP, you must install the printer driver and change the printer port to the print server.



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 [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.115 “Bidirectional transmission”.

Reference

For more information about option settings, see p.115 “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: Cestina, Magyar, Polski, 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.115 “Setting Up Options”.

13 Restart the computer.

Printing without Using a Print Server

Preparation

To use a printer connected to the Ethernet interface, IEEE 802.11b (Wireless LAN) interface or IEEE 1394 (IP over 1394) interface, select "SmartNetMonitor", "Standard TCP/IP Port" or "LPR Port" when installing the printer driver.

- SmartNetMonitor See p.91 “Configuring the Protocols” and p.93 “Installing Software” and p.94 “Installing the PCL 5c or RPCS Printer Driver” or p.98 “Installing the PostScript Printer Driver”.
- Standard TCP/IP Port, LPR Port See p.91 “Configuring the Protocols” and p.94 “Installing the PCL 5c or RPCS Printer Driver” or p.98 “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 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*" in the Quick Installation Guide.

If DHCP is used to assign IP addresses, see Appendix, "*When Using DHCP*" in the Administrator Reference.

To use the IP over 1394, see the Option Setup Guide.

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 computer

Follow these steps to configure a Windows XP 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]**.

Note

❒ With the IP over 1394, click **[1394 Connection]**.

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 XP 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 SmartNetMonitor for Client, and then install the printer driver by selecting "SmartNetMonitor for Client". This enables peer-to-peer network printing with the TCP/IP, NetBEUI, or IPP protocol.

Installing SmartNetMonitor 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 [SmartNetMonitor for Client / Admin].**

5 **Click to select [SmartNetMonitor 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 SmartNetMonitor 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.

- SmartNetMonitor
- Standard TCP/IP Port
- LPR Port

SmartNetMonitor

❶ **Click [Add].**

❷ **Select [SmartNetMonitor], and then click [OK].**

❸ **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.

❒ You can set a port using TCP/IP and the IEEE 1394 (IP over 1394) interface.

❖ 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" or "ipp://printer's-ip-address/printer" in the **[Printer URL]** field.
(Example IP address is 192.168.15.16)

```
http://192.168.15.16/printer
ipp://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 SmartNetMonitor for Client Help.

⑤ Click **[OK]**.

Standard TCP/IP Port

❶ **Click [Add].**
❷ **Select [Standard TCP/IP], and then click [OK].**
❸ **Click [Next] in the "Add Standard TCP/IP Printer Port Wizard" window.**
❹ **Type the printer name or IP address in the "Printer Name or IP Address" box.**
❺ **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].**

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.115 “Bidirectional transmission”.

Reference
For more information about option settings, see p.115 “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: Cestina, Magyar, Polski, 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.**

- SmartNetMonitor
- Standard TCP/IP Port
- LPR Port

SmartNetMonitor

❶ **Click [Create a new port:].**

❷ **Select [SmartNetMonitor], and then click [Next >].**

❸ **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.

❒ You can set a port using TCP/IP and the IEEE 1394 (IP over 1394) interface.

❖ 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" or "ipp://printer's-ip-address/printer" in the **[Printer URL]** field.
(Example IP address is 192.168.15.16)

```
http://192.168.15.16/printer
ipp://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 SmartNetMonitor for Client Help.

⑤ Click **[OK]**.

Standard TCP/IP Port

❶ **Click [Create a new port:].**

❷ **Select [Standard TCP/IP] in [Create a new Port], and then click [Next].**

❸ **Select [Standard TCP/IP], and then click [OK].**

❹ **Click [Next] in the "Add Standard TCP/IP Printer Port Wizard" window.**

❺ **Type the printer name or IP address in the "Printer Name or IP Address" box, and then click [Next>].**

❻ **Click [Finish] in the "Add Standard TCP/IP Printer Port Wizard" window.**

LPR Port

❶ **Click [Create a new 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].**

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.115 “Setting Up Options”.

Changing Port Settings

Follow the steps to change SmartNetMonitor 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 SmartNetMonitor for Client, and then right-click the SmartNetMonitor 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 SmartNetMonitor 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.115 “Bidirectional transmission”.

Reference

For more information about option settings, see p.115 “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: Cestina, Magyar, Polski, 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.115 “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.

Important

❒ Be sure that all other applications are closed and that the computer is not currently making prints before installation.

Windows XP-Installing the Printer Driver Using USB

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.

When the USB cable is used for the first time, the **[Found New Hardware Wizard]** dialog box appears, and Windows XP'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 and Faxes" folder.

With Windows XP, even if the printer driver has already been installed, **[Found New Hardware Wizard]** may start when connecting the printer and the computer with the USB cable for the first time. In this case, install the printer driver by following the procedure below.

1. **Install the printer driver by referring to the instructions for installing the printer driver with Parallel/Ethernet connection.**

   When installation is complete, the printer with its port directed to "USB00n" appears on the **[Printers and Faxes]** folder. ("n" is the number of printers connected.")

Installing the Printer Driver Using IEEE 1394

This section gives basic instructions for installing the printer drivers using IEEE 1394 interface. The printer drivers can be installed from the CD-ROM provided.

Important

❒ Be sure that all other applications are closed and that the computer is not printing before installation.

Printing with SCSI Print

Printing using a SCSI print device with the optional 1394 Interface Unit Type 4510 is possible under Windows XP.

Important

❒ Do not connect new IEEE 1394 or USB devices to PC or turn on other printer while installing the printer driver.

❒ Before uninstalling the printer driver, be sure to disconnect the IEEE 1394 interface cable from the computer.

❒ “SCSI print” must be set active from the control panel. For more information, see "IEEE 1394 Configuration" in the Option Setup Guide.

Note

❒ This machine cannot receive print data from more than one computer at the same time. If you send data from your computer when data is being received from another computer, a message may appear on the computer display.

Installing the Printer Driver

Note

- If you want to install another printer driver after setting the "1394_00n" port, select the "1394_00n" port by following the procedures of installing a printer driver.
- When the printer connected via the optional 1394 Interface Unit Type 4510 is installed properly, the appearance of the icon in the printer folder changes according to whether the cable is plugged in or not.

1. **Connect the printer and the computer using the IEEE 1394 interface cable.**
2. **In the [Found New Hardware Wizard] dialog box, confirm that [This wizard helps you install software for: (Unknown)] is displayed, and select [Install from a list on specific location (Advanced)], and then click [Next>].**
3. **When the [Please choose your search and installation option.] messages appears, select the [Search for the best driver in these locations.] check box, and then select the [Include this location in the search:] check box, and then select the [Include this location in the search:] check box.**
4. **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]**.

5. **Click [Browse].**

6 **Select the printer driver that you want to use. The following are locations where printer drivers are stored:**

- RPCS
  \DRIVERS\RPCS\WIN2K_XP\(Language)\DISK1
- PCL 5c
  \DRIVERS\PCL5C\WIN2K_XP\(Language)\DISK1
- PostScript 3
  \DRIVERS\PS\WIN2K_XP\(Language)\DISK1

7 **Click [Open].**

8 **Click [OK].**

A printer model selection dialog box appears.

9 **Follow the instructions on the screen.**

Note

- ❒ During installation in Windows XP, the **[Hardware Installation]** dialog box may appear. In this case, click **[Continue Anyway]** to continue the installation.
- ❒ When the installation is complete, the printer with its port directed to "1394_00n" appears on the **[Printers and Faxes]** folder. ("n" is the number of printers connected.")
- ❒ If the printer driver is already installed, the printer icon is automatically added to the **[Printers and Faxes]** folder. In this case, installation of the printer driver is not necessary.
- ❒ Even if the printer driver has already been installed, **[Found New Hardware Wizard]** may start when connecting the printer and the computer with the IEEE 1394 interface cable for the first time. In this case, install the printer driver by following the procedure.
- ❒ If printing does not work properly after installation, you need to delete the port and reinstall the printer driver. For more information, see "Printer Does Not Print" in the Maintenance Guide.

❒ If you do not want to install the printer when [Found New Hardware Wizard] starts with an operating system, which supports SCSI print, inactivate the device by following the procedures.

① In the **[Found New Hardware Wizard]** dialog box, confirm that **[This wizard helps you install software for: Unknown]** is displayed, and select **[Install from a list on specific location (Advanced)]**, and then click **[Next>]**.

② When the **[Please choose your search and installation option.]** message appears, remove all the selections from **[Search for the best driver in these locations.]**, and then click **[Next>]**.

③ When the **[The wizard could not find the software on your computer for..]** message appears, click **[OK]**.

④ When the **[Cannot Install this Hardware]** message appears, select the **[Don't prompt again to install the software]** check box, and then click **[Finish]**.

Printing with IP over 1394

You can print by setting the IP address for this machine and the computer on which Windows XP is installed.

Preparation

"IP over 1394" must be set on the control panel and an IP address for the IEEE 1394 (IP over 1394) interface must be specified.

For more information about how to make printer settings, see "IEEE 1394 Configuration" in the Option Setup Guide.

Limitation

❒ When using the IEEE 1394 (IP over 1394) interface in a network, the Ethernet interface cannot be used in the same network.

Note

❒ The maximum number of simultaneous print requests when connecting with IP over 1394 includes the print requests from the Ethernet interface. For more information, see the Administrator Reference.

Installing the Printer Driver

To Print using SmartNetMonitor. See p.91 “Printing without Using a Print Server”.

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, Windows 2000, Windows XP and Windows NT 4.0.
- If you use the RPCS printer driver and bidirectional transmission is enabled, on Windows XP, 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, **[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.
- SmartNetMonitor for Client included on the CD-ROM must be installed, and the TCP/IP protocol must be used.
- Under Windows XP, **[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 IEEE 1394

- The printer must be connected to the IEEE 1394 connector of a computer using the IEEE 1394 interface cable.
- **[Activate]** is selected in the SCSI print of IEEE 1394 and **[Activate]** is selected in the Bidi-SCSI print.
- Under Windows XP, **[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

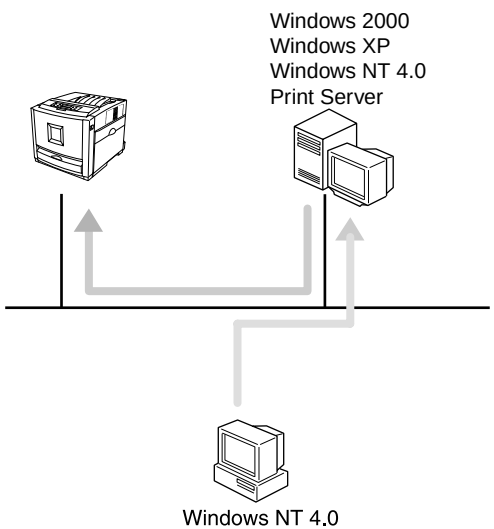
The printer must be connected to the USB connector of a computer using the USB interface cable.

Printing with a Print Server

Printing with a Windows 2000, Windows XP or Windows NT 4.0 Print Server

This section describes the procedures for setting up a client in a network that uses Windows 2000, Windows XP, 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

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 **[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.143 “Bidirectional transmission”.

Reference

For more information about option settings, see p.143 “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: Cestina, Magyar, Polski, 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.143 “Setting Up Options”.

13 Restart the computer.

Printing without Using a Print Server

Preparation

To use a printer connected to the Ethernet interface, select "SmartNetMonitor" or "LPR Port" when installing the printer driver.

- SmartNetMonitor
  See p.124 “Configuring the Protocols” and p.128 “Installing Software” and p.129 “Installing the PCL 5c or RPCS Printer Driver” or p.134 “Installing the PostScript Printer Driver”.
- LPR Port
  See p.124 “Configuring the Protocols” and p.129 “Installing the PCL 5c or RPCS Printer Driver” or p.134 “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*" in the Quick Installation Guide.

If DHCP is used to assign IP addresses, see Appendix, "*When Using DHCP*" in the 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 SmartNetMonitor for Client port.

❖ Configuring the printer

Configure the printer to use the NetBEUI protocol.

- Confirm that the NetBEUI protocol is set to be active. (The factory default is active.)

Reference

For more information about how to make the above settings, see "*Configuring the printer for the Network*" in the Quick Installation Guide.

❖ 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 SmartNetMonitor for Client, and then install the printer driver by selecting "SmartNetMonitor for Client". This enables peer-to-peer network printing with the TCP/IP, NetBEUI, or IPP protocol.

Installing SmartNetMonitor 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 [SmartNetMonitor for Client / Admin].**

5 **Click to select [SmartNetMonitor 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 SmartNetMonitor 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 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.

- SmartNetMonitor
- LPR Port

SmarteNet Port

❶ **Click [Add].**

❷ **Select [SmartNetMonitor], and then click [OK].**

❸ **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*" in the Administrator Reference. NetBEUI address appears as "\\RNPxxxx\xxx" 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" or "ipp://printer's-ip-address/printer" in the **[Printer URL]** field.
(Example IP address is 192.168.15.16)

```
http://192.168.15.16/printer
ipp://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 SmartNetMonitor for Client online Help.

⑤ Click **[OK]**.

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].**

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.**

Note

❒ During installation, the **[Digital Signature Not Found]** dialog box may appear. In this case, click **[Yes]** to continue the 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.143 “Bidirectional transmission”.

Reference

For more information about option settings, see p.143 “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: Cestina, Magyar, Polski, Portugues, Suomi

4 Click [PostScript 3 Printer Driver].

"Add Printer Wizard" starts.

5 **Click [Next].**

6 **Select the port you want to use.**

- SmartNetMonitor
- LPR Port

SmartNetMonitor

❶ **Click [Add Port:].**

❷ **Select [SmartNetMonitor], and then [New Port...].**

❸ **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*" in the Administrator Reference. NetBEUI address appears as "\\RNPxxxx\xxx" 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" or "ipp://printer's-ip-address/printer" in the **[Printer URL]** field.
(Example IP address is 192.168.15.16)

```
http://192.168.15.16/printer
ipp://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 SmartNetMonitor 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].**

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 **Select whether or not you want to print a test page, and then click [Finish].**

Start printer driver installation.

10 **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.143 “Setting Up Options”.

11 **Restart the computer.**

Changing Port Settings

Follow the steps to change SmartNetMonitor 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 SmartNetMonitor for Client, and then right-click the SmartNetMonitor 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 SmartNetMonitor 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

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.**

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.143 “Bidirectional transmission”.

Reference

For more information about option settings, see p.143 “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: Cestina, Magyar, Polski, 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.143 “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 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, Windows 2000, Windows XP 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.
- SmartNetMonitor 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 NT4.0, specified IP address in the Microsoft TCP/IP print is used.

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.154 "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 Macintosh, 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.154 “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 Macintosh.

Follow these steps to install a printer driver and a PPD file into a Macintosh 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 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.149 “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 [PostScriptTM 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 Macintosh.

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 Macintosh.**

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 Macintosh.**

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 Macintosh.**

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.

❒ For use with a Macintosh, Power PC is required.

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 Macintosh.

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.

Configuring Macintosh

Changing to EtherTalk

Follow the procedure to configure a Macintosh to use EtherTalk.

Reference

For more information about installing the software required for EtherTalk, see the Macintosh 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 with the Control Panel*" in the Quick Installation Guide.

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 Status Monitor, see the Administrator Reference.

6. NetWare Configuration

This chapter describes how to set up a client computer when using a NetWare print server.

Note

- ❒ Use the version of Novell Client provided with your operating system or the latest version.
- ❒ This section assumes that the client has NetWare client applications installed and is correctly configured to communicate with a NetWare print server. If not, install the necessary applications before starting the setting up procedure.

Windows 95/98/Me

Follow the procedure to set up a Windows 95/98/Me client.

After installing the printer driver, change the print port to NetWare queue.

Preparation

Log on to the NetWare file server before starting the following procedure.

1 Install the printer driver you want to use as "Local Printer".

Reference

For more information about installing the printer driver, see p.39 “Printing with Parallel Connection”.

Note

- ❒ Any port can be selected during the installation, however, LPT1 is recommended.

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.

2. **Click [Start], point to [Settings], and then click [Printers].**
3. **In the [Printers] window, click the icon of the printer you want to use.**
   On the **[File]** menu, click **[Properties]**.
4. **Click the [Details] tab, and then click [Add Port].**
5. **Click [Network], and then click [Browse].**
6. **On the network tree, double-click the name of the file server.**
   The queues are displayed.
7. **Click the queue you want to print, and then click [OK].**
8. **Click [OK].**
   In the **[Print to the following port]** box, a network path to the printer appears.
9. **Click [OK] to close the Printer Properties, and open it again.**
10. **Click the [Printer Settings] tab.**
11. **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.

When using the PostScript 3 printer driver

Follow these steps to set up for the PostScript 3 printer driver.

❶ **Click the [PostScript] tab.**

❷ **Click [Advanced].**

❸ **Click to clear the [Send CTRL+D before job] and [Send CTRL+D after job] check boxes.**

⓬ **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.

- PCL 5c
  DRIVERS\PCL5C\WIN9X_ME\(Language)\DISK1
- RPCS
  DRIVERS\RPCS\WIN9X_ME\(Language)\DISK1
- PostScript 3
  DRIVERS\PS\WIN9X_ME\(Language)\DISK1

Windows 2000

Follow the procedure to set up a Windows 2000 client.

Preparation

Log on to the NetWare file server before starting the following procedure.

1. **Double-click the [My Network Places] icon on the desktop and navigate to the queue you want to use, and then double-click it.**

   The printers dialog box appears.

2. **Click [No].**

3. **Close all applications that are running.**

4. **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.

5. **Select a language to change the interface language, and then click [OK].**

   The following languages are available: Cestina (Czech), Dansk (Danish), Deutsh (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyer (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

Using the PCL 5c or RPCS Printer Driver

1. **Select [PCL/RPCS Printer Drivers].**
2. **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 licenseagreement, and then click **[Next]**.
3. **Select a printer drivers you want to use when the "Printer Program" dialog box appears, and then click [Next].**

   You can select more than one printer driver.
4. **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.
5. **Double-click the printer name to display the printer settings, and then click [Port:]**
6. **From the [Change settings for 'Port'] list box drop-down list box, select the queue you selected in step 1.**
7. **Click [Continue]. Go to step 6.**

Using the PostScript Printer Driver

1. **Click [PostScript 3 Printer Driver].**

   "Add Printer Wizard" starts.
2. **Click [Next].**
3. **Click [Local Printer], and then click [Next].**
4. **From the [Use the following port:] list box, select the queue you selected in step 1.**
5. **Click [Next].Go to step 6.**

6 **Follow the instructions on the screen.**

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
- RPCS
  DRIVERS\RPCS\WIN2K_XP\(Language)\DISK1
- PostScript 3
  DRIVERS\PS\WIN2K_XP\(Language)\DISK1

Windows XP

Follow the procedure to set up a Windows XP client.

Preparation

Log on to the NetWare file server before starting the following procedure.

1. **Double-click the [My Network Places] icon, and then navigate to the queue you want to use, and then double-click it.**

   The printers dialog box appears.

2. **Click [Cancel].**

3. **Close all applications that are running.**

4. **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.

5. **Select a language to change the interface language, and then click [OK].**

   The following languages are available: Cestina (Czech), Dansk (Danish), Deutsh (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyer (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

Using the PCL 5c or RPCS Printer Driver

1. **Select [PCL/RPCS Printer Drivers].**
2. **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 licenseagreement, and then click **[Next]**.
3. **Select a printer drivers you want to use when the "Printer Program" dialog box appears, and then click [Next].**

   You can select more than one printer driver.
4. **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.
5. **Double-click the printer name to display the printer settings, and then click [Port:]**
6. **From the [Change settings for 'Port'] list box drop-down list box, select the queue you selected in step 1.**
7. **Click [Continue]. Go to step 6.**

Using the PostScript Printer Driver

1. **Click [PostScript 3 Printer Driver].**

   "Add Printer Wizard" starts.
2. **Click [Next].**
3. **Click [Local Printer], and then click [Next].**
4. **From the [Use the following port:] list box, select the queue you selected in step 1.**
5. **Click [Next].Go to step 6.**

6 **Follow the instructions on the screen.**

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
- RPCS
  DRIVERS\RPCS\WIN2K_XP\(Language)\DISK1
- PostScript 3
  DRIVERS\PS\WIN2K_XP\(Language)\DISK1

Windows NT 4.0

Follow the procedure to set up a Windows NT 4.0 client.

Preparation

Log on to the NetWare file server before starting the following procedure.

1. **Double-click the [My Network Places] icon on the desktop and navigate to the queue you want to use, and then double-click it.**

   The printers dialog box appears.

2. **Click [No].**

3. **Close all applications that are running.**

4. **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.

5. **Select a language to change the interface language, and then click [OK].**

   The following languages are available: Cestina (Czech), Dansk (Danish), Deutsh (German), English (English), Espanol (Spanish), Francais (French), Italiano (Italian), Magyer (Hungarian), Nederlands (Dutch), Norsk (Norwegian), Polski (Polish), Portugues (Portuguese), Suomi (Finnish), Svenska (Swedish)

Using the PCL 5c or RPCS Printer Driver

❶ **Select [PCL/RPCS Printer Drivers].**

❷ **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 licenseagreement, and then click **[Next]**.

❸ **Select a printer drivers you want to use when the "Printer Program" dialog box appears, and then click [Next].**

You can select more than one printer driver.

❹ **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.

❺ **Double-click the printer name to display the printer settings, and then click [Port:]**

❻ **From the [Change settings for 'Port'] drop-down list box, select the queue you selected in step 1.**

❼ **Click [Continue]. Go to step 6.**

Using the PostScript Printer Driver

❶ **Click [PostScript 3 Printer Driver].**

"Add Printer Wizard" starts.

❷ **Click [My Computer], and then click [Next].**

❸ **From the [Use the following port:] list box, select the queue you selected in step 1.**

❹ **Click [Next].Go to step 6.**

6 **Follow the instructions on the screen.**

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
- RPCS
  DRIVERS\RPCS\NT4\(Language)\DISK1
- PostScript 3
  DRIVERS\PS\NT4\(Language)\DISK1

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.

❖ **Agfa Monotype Font Manager 2000**

Helps you to install new screen fonts, or organize and manage fonts already installed on the system. For more information about Agfa Font Manager, see the manual on the CD-ROM labeled "Printer Drivers and Utilities".

❖ **SmartNetMonitor for Admin**

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

Reference

For more information about SmartNetMonitor for Admin, see the SmartNetMonitor for Admin Help file.

❖ **SmartNetMonitor for Client**

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

Reference

For more information about SmartNetMonitor for Client, see the SmartNetMonitor for Client Help file.

❖ **1394 Utility**

This utility is for the optional 1394 Interface Unit Type 4510. For more information, see the Readme file or the manual that comes with the optional 1394 Interface Unit Type 4510.

❖ **USB Printing Support**

Using the USB connection on the computer running Windows 98SE/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.

Printer Language / Operating system	PCL 5c	RPCS	PostScript 3
Windows 95 *1	√	√	√ *9
Windows 98 *2	√	√	√ *9
Windows Me *3	√	√	√ *9
Windows 2000 *4	√	√	√
Windows XP *5	√	√	√
Windows NT 4.0 *6	√	√	√ *8 *9
Mac OS *7			√ *9
Mac OS X			√ *10

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

*7 Required version is 8.6 or later. (Mac OS X Classic environment is supported.)
*8 Requires Service Pack 6 or later.
*9 The Adobe PostScript printer drivers and PostScript Printer Description (PPD) files are included on the CD-ROM labeled "Printer Drivers and Utilities".
*10 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.181 “Windows 95/98/Me - Accessing the Printer Properties”
⇒ p.183 “Windows 2000 - Accessing the Printer Properties”
⇒ p.187 “Windows XP - Accessing the Printer Properties”
⇒ p.190 “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.194 “Windows 95/98/Me - Accessing the Printer Properties”
⇒ p.197 “Windows 2000 - Accessing the Printer Properties”
⇒ p.200 “Windows XP - Accessing the Printer Properties”
⇒ p.203 “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.206 “Windows 95/98/Me - Accessing the Printer Properties”
⇒ p.209 “Windows 2000 - Accessing the Printer Properties”

⇒ p.212 “Windows XP - Accessing the Printer Properties”
⇒ p.215 “Windows NT 4.0 - Accessing the Printer Properties”
⇒ p.218 “Macintosh - 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.218 “Macintosh - Setting up for Printing”.

SmartNetMonitor for Admin

SmartNetMonitor 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

SmartNetMonitor 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 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?

SmartNetMonitor 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.

Note

❒ Using this function requires the User Account Enhance Unit Type B.

Reference

For the operations of the system administrator, see "Using SmartNetMonitor for Admin" in the Administrator Reference.

For more information about using SmartNetMonitor for Admin, see the SmartNetMonitor for Admin Help file.

SmartNetMonitor for Client

SmartNetMonitor 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, Windows 2000, Windows XP, 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

SmartNetMonitor for Client is stored in the following folder on the CD-ROM.

NETWORK\NETMON\CLIENT\DISK1

OS	Protocol Stack
Microsoft Windows 95/98/Me	TCP/IP provided with Windows 95/98/Me IPX/SPX provided with Windows 95/98/Me 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

OS	Protocol Stack
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 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?

SmartNetMonitor for Admin

- 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.

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 SmartNetMonitor for Client, See the SmartNetMonitor for Client Help file.

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].**

   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.

- 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.

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.

- 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 - 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 **[Pritners 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.

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.

- 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 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.

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.

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]**.

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\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 - 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 **[Pritners 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 **[Pritners 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.

   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].**

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.

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.

- 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 - 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.

- 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.

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.

- 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.**

Macintosh - 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]*1 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 Macintosh 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

Windows 95/98/Me, Windows 2000, Windows XP, Windows NT 4.0 - Canceling a Print Job

1 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.

2 Select the name of the job you want to cancel.

3 On the [Document] menu, click [Cancel Printing].

Note

❒ You can also open the print job queue window by double-clicking the printer icon in the **[Printer]** window.

4 Press 【Job Reset】 on the control panel.

The message appears on the panel display indicating that the print job is being canceled.

Important

❒ When the printer is being shared by multiple computers, be careful not to accidentally cancel someone else's print job.

Note

❒ This procedure cancels the print job that is being processed by the printer. In some cases, the printer may already be processing data for the next series of print jobs following the one currently being output. In this case, the next print jobs are also canceled when you press 【Job Reset】.

❒ A print job that contains a large volume of data may take considerable time to stop.

Macintosh - Canceling a Print Job

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.

4 Press【Job Reset】on the control panel.

The message appears on the panel display indicating that the print job is being canceled.

Important

❒ When the printer is being shared by multiple computers, be careful not to accidentally cancel someone else's print job.

Note

❒ This procedure cancels the print job that is being processed by the printer. In some cases, the printer may already be processing data for the next series of print jobs following the one currently being output. In this case, the next print jobs are also canceled when you press【Job Reset】.

❒ A print job that contains a large volume of data may take considerable time to stop.

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.

Important

- If you turn off the power switch, the job that was saved on the Hard Disk Drive will be deleted.

Limitation

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

Reference

For more information about settings for printer driver, see the printer driver's Help file.

Note

- You can identify the file you want to print by the User ID and the time when the job was stored.
- 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.
- 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.
- 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 Macintosh, see the PostScript 3 Supplement.

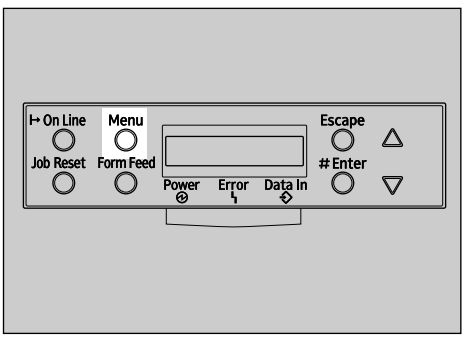
1. **From an application, select the menu command to print.**
   The **[Print]** dialog box appears.
2. **Select the printer you want to use in the [Name] list box, and then click [Properties].**
   The Printer Properties dialog box appears.
3. **From the [Job Type:] box, select [Sample Print].**
4. **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.224 “Printing the Remaining Sets”
   ⇒ p.226 “Deleting a Sample Print File”

Printing the Remaining Sets

1 Press [Menu].



"Menu" appears on the panel display.

2 Press [▲] or [▼] to display "Sample Print", and then press [Enter #].

```
Menu:
 Sample Print
```

The User ID and the time when the job was stored are displayed.

3 Press [▲] or [▼] to display the file you want to print, and then press [Enter #].

```
Sample Print
 08:56 ABCD1234
```

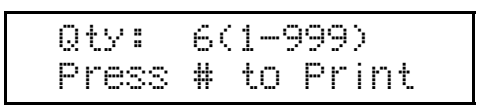
4 Confirm that "Print File" is displayed, and then press [Enter #].

The remaining sets are displayed.

Note

❒ To cancel printing, press [Escape].

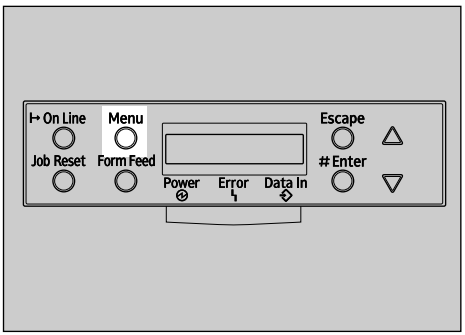
5 Press [Enter #]. To change the number of sets you want to print, press [▲] or [▼] and select the number of sets, and then press [Enter #].



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】.**



"Menu" appears on the panel display.

2 **Press 【▲】 or 【▼】 to display the "Sample Print" menu, and then press 【Enter #】.**

```
Menu:
 Sample Print
```

3 **Press 【▲】 or 【▼】 to display the file you want to delete, and then press 【Enter #】.**

The following message appears on the panel display.

```
Sample Print:
 08:56 ABCD1234
```

4 **Press [▲] or [▼] to display "Delete File", and then press [Enter #].**

Note

❒ If you want to cancel the deletion of a Sample Print file, press [Escape].

5 **Press [Enter #] to delete the file.**

The following message appears on the panel display.

6 **Press [On Line].**

"Ready" appears on the panel display.

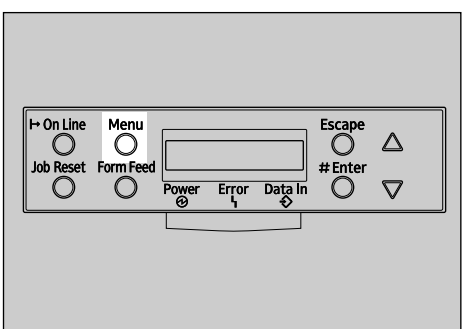
Checking the Error Log

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].



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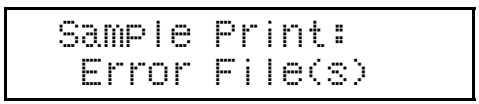
"Menu" appears on the panel display.

2 Press [▲] or [▼] to display "Sample Print", and then press [Enter #].

The User ID and the time when the job was stored are displayed.

3 **Press [▲] or [▼] to display "Error File(s)", and then press [Enter #].**



4 **Press [▲] or [▼] to check the log.**

After you finish checking the error log, press **[Escape]**.

The display returns to the Sample Print job selection menu.

Note

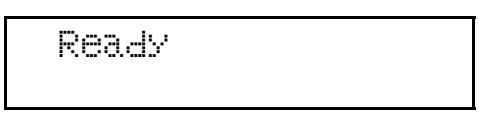
❒ To print a document with an error, either print or delete the job saved on the Hard Disk Drive, and then printing command the host computer to print again.

5 **When you finish checking the error log, press [Escape].**

The display returns to the Sample Print job selection menu.

6 **Press [On Line].**

"Ready" appears on the panel display.



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.

Important

- If you turn off the power switch, the job that was saved on the Hard Disk Drive will be deleted.

Limitation

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

Reference

For more information about printer driver settings, see the printer driver's Help file.

Note

- You can identify the file you want to print by the User ID and the time when the job was stored.
- 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.
- 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 Macintosh, see the PostScript 3 Supplement.

After the Locked Print file is printed, the job in the printer is deleted automatically.

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.232 “Entering the Password”

⇒ p.234 “Deleting the Locked Print File”

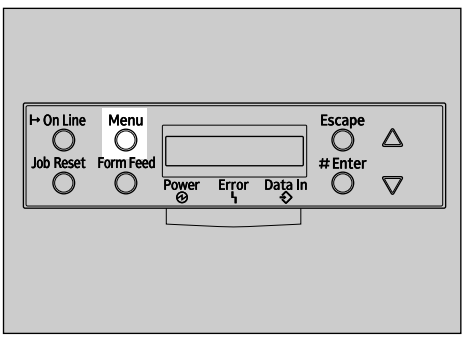
Limitation

❒ 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].**



"Menu" appears on the panel display.

2 **Press [▲] or [▼] to display "Locked Print", and then press [Enter #].**

```
Menu:
 Locked Print
```

The User ID and the time when the job was stored are displayed.

3 **Press [▲] or [▼] to display a file you want to print, and then press [Enter #].**

```
Locked Print
 08:56   ABCD1234
```

4 **Enter the password.**

❶ **Press【▲】or【▼】to enter the left most digit of the password, and then press【Enter #】.**

```
Password:
[0---]
```

❷ **The next digit appears.**

```
Password:
[*0--]
```

❸ **Enter the remaining digit of the password, and then press【Enter #】.**

5 **Confirm that "Print File" is displayed, and then press【Enter #】.**

```
Select Action:
 Print File
```

Note

❒ If you want to cancel printing, press【Escape】.

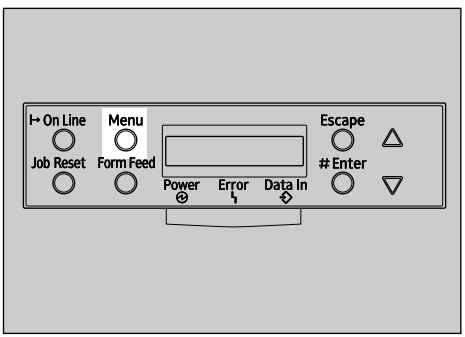
6 **Press【Enter #】.**

```
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】.**



"Menu" appears on the panel display.

2 **Press【▲】or【▼】to display the "Locked Print" menu, and then press【Enter #】.**

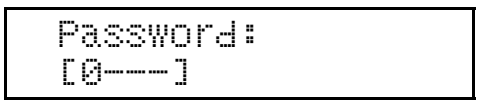
```
Menu:
 Locked Print
```

3 **Press【▲】or【▼】to display a file you want to delete.**

```
Locked Print
 08:56  ABCD1234
```

4 **Enter the password of the Locked Print file.**

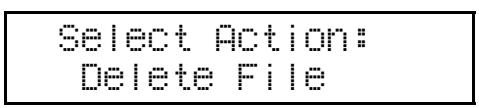
❶ **Press【▲】or【▼】to enter the left most digit of the password, and then press【Enter #】.**



❷ **The next digit appears.**

❸ **Repeat steps ❶ and ❷ to enter the remaining password digits, and then press【Enter #】.**

5 **Press【▲】or【▼】to display "Delete File", and then press【Enter #】.**



Note

❒ If you want change the Locked Print file, press【Escape】.

6 **Press【Enter #】.**

"Deleted" appears on the panel display, and then the printer returns to the previous menu.

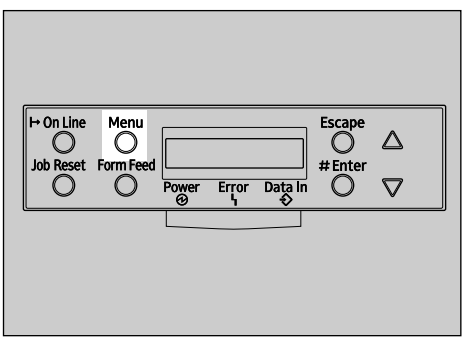
Checking the Error log

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].



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"Menu" appears on the panel display.

2 Press [▲] or [▼] to display "Locked Print", and then press [Enter #].

The User ID and the time when the job was stored are displayed.

3 **Press [▲] or [▼] to display "Error File(s)", and then press [Enter #].**

4 **Press [▲] or [▼] to check the log.**

After you finish checking the error log, press **[Escape]**.

The display returns to the Locked Print job selection menu.

Note

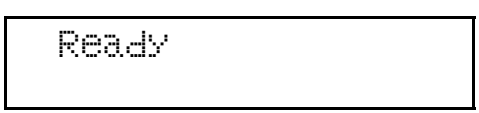
❒ To print a document with an error, either print or delete the job saved on the Hard Disk Drive, and then printing command the host computer to print again.

5 **When you finish checking the error log, press [Escape].**

The display returns to the Sample Print job selection menu.

6 **Press [On Line].**

"Ready" appears on the panel display.



Checking the Printer Status

SmartNetMonitor for Client

1. **Start up SmartNetMonitor for Client.**
2. **Right-click the SmartNetMonitor for Client icon from the task bar, and then point and left-click [Options] from the displayed menu.**

   The **[SmartNetMonitor 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 SmartNetMonitor 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 SmartNetMonitor for Client Help file.

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

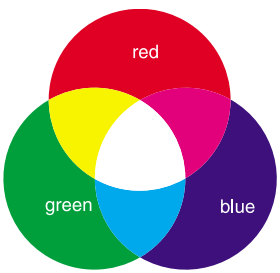
❒ For more information about how to use each item, see the Web Status Monitor Help file.

Color Guide

Color Printing Basics

Additive (Emitted) and Subtractive (Reflected) Color Models

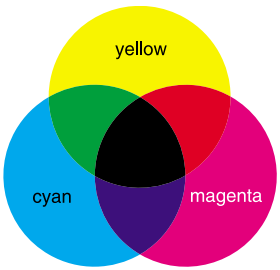
All lights are a mixture of red, green, and blue, which are normally called the RGB color model. When red, green, and blue are of equal intensities, the RGB color model produces white.



Note

❒ RGB is also called additive or emitted color. The colors on your computer screen are produced by varying the intensities of RGB.

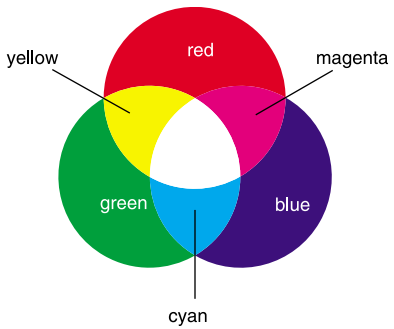
Printed color is a mixture of cyan, magenta, and yellow, which are normally called the CMY color model. When mixed in equal proportions the CMY color model produces black.



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.

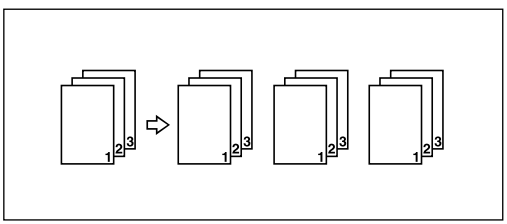
Collate

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 128 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 1000 pages can be sorted.

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