

Operating Instructions Software Guide



- 1 Preparing for Printing
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- 4 Making Printer Settings Using the Control Panel
- 5 Monitoring and Configuring the Printer
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Introduction

This manual contains detailed instructions and notes on the operation and use of this machine. For your safety and benefit, read this manual carefully before using the machine. Keep this manual in a handy place for quick reference.

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Copying or printing the following items is generally prohibited by local law:

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

The preceding list is meant as a guide only and is not inclusive. We assume no responsibility for its completeness or accuracy. If you have any questions concerning the legality of copying or printing certain items, consult with your legal advisor.

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.

For good copy quality, the supplier recommends that you use genuine print cartridges 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.

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.

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Manuals for This Printer

Read this manual carefully before you use this printer.

Refer to the manuals that are relevant to what you want to do with the printer.

- Media differ according to manual.
- The printed and electronic versions of a manual have the same contents.
- Adobe Acrobat Reader/Adobe Reader must be installed in order to view the manuals as PDF files.
- A Web browser must be installed in order to view the html manuals.

Safety Information

Contains information about safe usage of this printer.

To avoid injury and prevent damage to the printer, be sure to read this.

Quick Installation Guide

Contains procedures for removing the printer from its box, connecting it to a computer, and installing its driver.

Hardware Guide

Contains information about paper and procedures such as installing options, replacing consumables, responding to error messages, and resolving jams.

Software Guide (This manual)

Contains information about using this printer, its software, and its security functions.

Security Guide

Contains information for administrators of the printer. It explains security functions that the administrators can use to prevent data tampering or unauthorized use of the printer. Also refer to this manual for the procedure for registering an administrator, as well as setting user and administrator authentication.

UNIX Supplement

For "UNIX Supplement", please visit our Web site or consult an authorized dealer.

This manual includes descriptions of functions and settings that might not be available on this printer.



Manuals provided are specific to printer types.

How to Read This Manual

Symbols

This manual uses the following symbols:

Indicates points to pay attention to when using the printer, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

UNote

Indicates supplementary explanations of the printer's functions, and instructions on resolving user errors.

■ Reference

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[]

Indicates the names of keys on the printer's display or control panels.

Model-Specific Information

In this manual, the following symbols indicate information that relates to a specific printer model.

220-240V

This indicates information about the 220 to 240 V model printer.

Read if you have purchased this model.

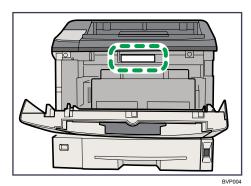
120V

This indicates information about the 120 V model printer.

Read if you have purchased this model.



• Check the label behind the front cover of the printer to identify the printer's model.



List of Options

This section provides a list of options for this printer, and how they are referred to as in this manual.

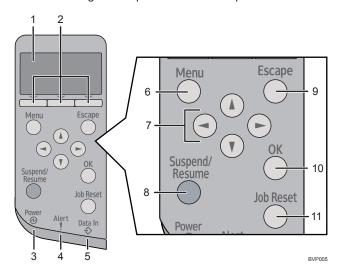
Option List	Referred to as
Duplex Unit Type AD610	Duplex unit
Hard Disk Drive Type 2670	Hard disk
120V IEEE 802.11a/g Interface Unit Type L	Wireless LAN interface unit
220-240V IEEE 802.11a/g Interface Unit Type M	Wireless LAN interface unit
IEEE 1284 Interface Board Type A	IEEE 1284 interface board
SD card for NetWare Printing Type C	NetWare card
HDD ENCRYPTION UNIT Type D	HDD encryption unit



• For details about the specifications of each option, see "Specifications", Hardware Guide.

Using Keys

This section explains names and usage of the parts of the control panel.



1. Display

Displays current printer status and error messages.

The display's back light turns off when the machine enters Energy Saver mode.

2. Selection Keys

Correspond to the function items shown on the bottom line of the display.

3. Power Indicator

Remains lit while the power is on. It is unlit when the power is off or while the printer is in energy saver mode.

4. Alert Indicator

Lights up in red or yellow when a printer error occurs.

Red: printing is not possible/possible but print quality cannot be ensured.

Yellow: printer requires maintenance, such as replacing consumables, shortly.

Follow the instructions that appear on the display.

5. Data In Indicator

Blinks when the printer is receiving data from a computer. Lights up if there is data to be printed.

6. [Menu] Key

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

While configuring settings, press this key to return to the initial screen.

7. Scroll Keys

Press to move the cursor in each direction.

When the $[^{\blacktriangle}] [^{\blacktriangledown}] [^{\blacktriangleright}]$ keys appear in this manual, press the scroll key of the same direction.

8. [Suspend/Resume] Key

Press this key to suspend a print job. The key lights up while the job is suspended. To resume the job, press this key again.

9. [Escape] Key

Press this key to return to the previous display.

10. [OK] Key

Use this key to confirm settings, or setting values, or move to the next menu level.

11. [Job Reset] Key

Press this key to cancel an ongoing print job.

1. Preparing for Printing

This chapter describes how to connect this printer to your computer, and install the printer driver.

Confirming the Connection Method

This printer supports network and local connections.

Before installing the printer driver, check how the printer is connected. Follow the driver installation procedure that is appropriate for the connection method.

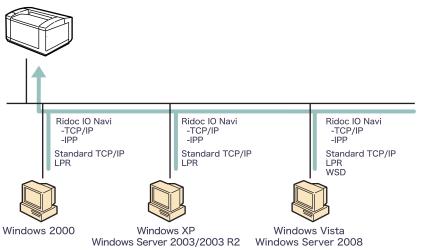
Network Connection

This printer can be used as a Windows printing port or network printer.

Using this printer as a Windows printing port

Network connections can be established through Ethernet and Wireless LAN.

Available ports are determined based on the combination of the Windows operating system version and connection method used.



BVN536

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Windows 2000/XP, Windows Server 2003/2003 R2

Connection Method	Available Ports
Ethernet Wireless LAN	 SmartDeviceMonitor for Client port Standard TCP/IP port LPR port

Windows Vista, Windows Server 2008

Connection Method	Available Ports
• Ethernet	SmartDeviceMonitor for Client port
Wireless LAN	Standard TCP/IP port
	• LPR port
	WSD port

U Note

- See the explanation about how to install the printer driver for each type of ports.
- For details about the SmartDeviceMonitor for Client port, see "Using the SmartDeviceMonitor for Client port".
- For details about the Standard TCP/IP port, see "Using the Standard TCP/IP port".
- For details about the LPR port, see "Using the LPR port".
- For details about the WSD port, see "Using the WSD port".

Reference

- p.21 "Using the SmartDeviceMonitor for Client port"
- p.29 "Using the Standard TCP/IP port"
- p.32 "Using the LPR port"
- p.35 "Using the WSD port"

Using as a network printer

This printer can be used as a Windows network printer, a NetWare print server, or a NetWare remote printer.

Mportant !

• IPX/SPX (NetWare) cannot be used under Windows Vista and Windows Server.

BVP501

U Note

- In an IPv6 environment, NetWare servers cannot be used.
- See the explanation about how to install the printer driver for each type of network printers.
- For details about Windows network printer, see "Using as a Windows Network Printer".
- For details about a NetWare print server and remote printer, see "Using as a NetWare Print Server/ Remote Printer".

Reference

- p.37 "Using as a Windows Network Printer"
- p.40 "Using as a NetWare Print Server / Remote Printer"

Local Connection

Local connections can be established via parallel and USB connections.

UNote

- See the explanation about how to install the printer driver for each connection method.
- For details about USB connections, see "Installing the Printer Driver Using USB".
- For details about parallel connections, see "Printing with Parallel Connection".

Reference

- p.43 "Installing the Printer Driver Using USB"
- p.46 "Printing with Parallel Connection"

Installing the Printer Driver

This section explains how to install the printer driver. There are two ways to install the printer driver: using Quick Install, which installs the settings at once, or installing the appropriate driver according to the port you want to use.

Downloading the Printer Driver

You can install the printer driver from the CD-ROM provided with this printer or download it from the supplier's Web site.

If your operating system is Windows XP Pro x64, Windows Vista x64, or Windows Server 2003/2003 R2/2008 x64, you must download the printer driver from the supplier's Web site. Select this printer and the operating system you are using, and then download it.

Quick Install

Users of Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008 can install this software easily using the supplied CD-ROM.

Using Quick Install, the PCL printer driver and DeskTopBinder-SmartDeviceMonitor for Client are installed under the network environment, and the SmartDeviceMonitor for Client port will be set.

- To install the printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008, you must have an account that has Manage Printers permission. Log on as an Administrator.
- If this printer is connected using USB, see "Installing the Printer Driver Using USB" and install the printer driver.
- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

3. Select an interface language, and then click [OK].

The default interface language is English.

4. Click [Quick Install].

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

- 5. After reading the agreement, click [I accept the agreement.] and then click [Next >].
- 6. Select the printer model you want to use in the [Select Printer] dialog box.

For network connection via TCP/IP, select the printer whose IP address is displayed in [Connect To].

For parallel connection, select the printer whose printer port is displayed in [Connect To].

7. Click [Install].

The printer driver installation starts.

The PCL6 printer driver is installed in the language specified by your operating system.

8. Click [Finish].

A message about restarting the computer appears. Restart the computer to complete the installation.

9. Click [Exit] in the first dialog box of the installer, and then take out the CD-ROM.

U Note

- To stop installation of the selected software, click [Cancel] before the installation is complete.
- Select a printer whose IP address is displayed in [Connect To] to install SmartDeviceMonitor for Client when using TCP/IP.
- Quick Install is not available unless bidirectional communication between the printer and computer
 is enabled via parallel connection. For details about bidirectional communication between the printer
 and computer, see "Making Option Settings for the Printer".

Reference

- p.43 "Installing the Printer Driver Using USB"
- p.52 "Making Option Settings for the Printer"

Installing the Printer Driver for the Selected Port

Using the SmartDeviceMonitor for Client port

Mportant !

- To install SmartDeviceMonitor for Client under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008, you must have an account that has Manage Printers permission. Log on as an Administrator.
- Install SmartDeviceMonitor for Client before installing the printer driver when using the SmartDeviceMonitor for Client port.

Installing SmartDeviceMonitor for Client

- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

1

3. Select an interface language, and then click [OK].

The default interface language is English.

- 4. Click [DeskTopBinder SmartDeviceMonitor for Client].
- The message to quit all other applications appears. Quit all applications, and then click [Next
].
- 6. The software license agreement appears in the [License Agreement] dialog box. After reading through its contents, click [Yes].
- 7. Click [Full install] or [Custom install].

[Full install] installs all required applications: DeskTopBinder Lite and SmartDeviceMonitor for Client.

[Custom install] installs selected applications.

- 8. Follow the instructions on the display and then click [Next >] to proceed to the next step.
- After the installation is completed, select one of the options to restart the computer either now or later, and click [Complete].

Restart the computer to complete the installation.



To stop installation of the selected software, click [Cancel] before the installation is complete.

Changing the port settings for SmartDeviceMonitor for Client

Follow the procedure below to change the SmartDeviceMonitor for Client settings, such as TCP/IP timeout, recovery/parallel printing, and printer groups.

Windows 2000:

1. On the [Start] menu, 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. On the [Ports] tab, click [Configure Port].

The [Configuration] dialog box appears.

Windows XP, Windows Server 2003/2003 R2:

1. On the [Start] menu, click [Printers and Faxes].

The [Printers and Faxes] window appears.

- 2. Click the icon of the printer you want to use. On the [File] menu, click [Properties].
- 3. Click the [Ports] tab, and then click [Configure Port].

The [Port Configuration] dialog box appears.

Windows Vista, Windows Server 2008:

1. On the [Start] menu, click [Control Panel].

The [Control Panel] window appears.

2. Click [Printer].

The [Printers] window appears.

- 3. Right-click the icon of the printer you want to use, and then click [Properties].
- 4. Click the [Ports] tab, and then click [Configure Port].

The [Port Configuration:] dialog box appears.

U Note

- User, proxy, and timeout settings can be configured for IPP.
- If no settings on the [Recovery/Parallel Printing] tab are available, follow the procedure below.
 - 1. Click [Cancel] to close the [Port Configuration:] dialog box.
 - 2. Start SmartDeviceMonitor for Client, and then right-click the SmartDeviceMonitor for Client icon on the task tray.
 - 3. Point to [Properties], and then click [Extended Features Settings].
 - 4. Select the Set [Recovery/Parallel Printing] for each port check box.
 - 5. Click [OK] to close the [Extended Features] dialog box.
- For details about these settings, see "Using SmartDeviceMonitor for Client", or SmartDeviceMonitor for Client Help.

Reference

• p.187 "Using SmartDeviceMonitor for Client"

Installing the PCL printer driver (TCP/IP)

- To install this printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008, you must have an account that has Manage Printers permission. Log on as an Administrators group member.
- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

1

3. Select an interface language, and then click [OK].

The default interface language is English.

- 4. Click [PCL Printer Driver].
- 5. The software license agreement appears in the [License Agreement] dialog box.

After reading the agreement, click [I accept the agreement.], and then click [Next >].

6. Select the printer driver you want to use in the [Select Program] dialog box.

You can select several printer drivers.

The PCL6 printer driver is installed in the language specified by your operating system.

- 7. Click [Next>].
- 8. Select the printer model you want to use.

The printer name can be changed in the [Change settings for 'Printer Name'] box.

9. Double-click the printer name to display the printer settings.

The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, printer model, and port.

- 10. Click [Port], and then click [Add].
- 11. Click [SmartDeviceMonitor], and then click [OK].
- 12. Click [TCP/IP], and then click [Search].

A list of printers using TCP/IP appears.

13. Select the printer you want to use, and then click [OK].

Only printers that respond to a broadcast from the computer appear. To use a printer not listed here, click [Specify Address], and then enter the IP address or host name of the printer.

- 14. Check that the port of the selected printer is displayed in [Port].
- 15. Set a user code, if necessary.

Up to 8 numeric characters can be entered. No alphabetic characters or symbols can be entered.

- 16. Select the [Default Printer] check box to configure the printer as default.
- 17. Click [Continue].

Installation starts.

18. After the installation is completed, select one of the options to restart the computer either now or later, and then click [Finish].



 Setting user codes allows a SmartDeviceMonitor for Admin user to check the number of sheets printed by each user. For details, see the manual provided with SmartDeviceMonitor for Admin. A message appears if there is a newer version of the printer driver already installed. If there is, you
cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add
Printer]. See "Messages Displayed When Installing the Printer Driver".

Reference

• p.49 "Messages Displayed When Installing the Printer Driver"

Installing the PostScript 3 printer driver (TCP/IP)

Mportant !

- Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.
- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

3. Select an interface language, and then click [OK].

The default interface language is English.

The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.

4. Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

Step 5 does not apply for Windows Vista users.

- 5. Click [Next>].
- 6. Click [Local printer] or [Local printer attached to this computer.], and then click [Next >].
 If you are using Windows Vista, you do not need to click [Next >].
- 7. Click [Create a new port:].
- 8. Click [DeskTopBinder SmartDeviceMonitor for Client], and then click [Next >].
- 9. Click [TCP/IP], and then click [Search].

A list of printers using TCP/IP appears.

10. Select the printer you want to use, and then click [OK].

Only printers that respond to a broadcast from the computer appear. To use a printer not listed here, click [Specify Address], and then enter the IP address or host name of the printer.

- Check that the name of the printer whose driver you want to install is selected, and then click
 [Next >].
- 12. Change the printer name if you want, and then click [Next >].

Select the [Yes] check box to configure the printer as default.

Step 13 does not apply for Windows Vista users.

- 13. Specify whether or not to share the printer, and then click [Next >].
- 14. Specify whether or not to print a test page.

If you are using other than Windows Vista, click [Next >].

15. Click [Finish].

The printer driver installation starts.



A user code can be set after the printer driver installation. For information about user code, see the
printer driver Help.

Installing the PCL printer driver (IPP)



- To install printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008, you must have an account that has Manage Printers permission. Log on as an Administrators Users group member.
- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

3. Select an interface language, and then click [OK].

The default interface language is English.

- 4. Click [PCL Printer Driver].
- 5. The software license agreement appears in the [License Agreement] dialog box.

After reading the agreement, click [I accept the agreement.], and then click [Next>].

6. Select a printer driver you want to use in the [Select Program] dialog box.

You can select several printer drivers.

The PCL6 printer driver is installed in the language specified by your operating system.

7. Select the printer model you want to use.

The printer name can be changed in the [Change settings for 'Printer Name'] box.

8. Double-click the printer name to display the printer settings.

The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, printer model, and port.

- 9. Click [Port], and then click [Add].
- 10. Click [SmartDeviceMonitor], and then click [OK].
- 11. Click [IPP].
- 12. In the [Printer URL] box, enter "http://(printer's IP address/printer)" as the printer's address.

If the server authentication is issued, to enable SSL (a protocol for encrypted communication), enter "https://printer's IP address/printer" (Internet Explorer 5.01, or a higher version must be installed). (example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer

You can enter "http://printer's IP address/ipp" as the printer's address.

 Enter a name for identifying the printer in [IPP Port Name]. Use a name different from the one of any existing ports.

If a name is not specified here, the address entered in the [Printer URL] box becomes the IPP port name.

14. Click [Detailed Settings] to make necessary settings.

For details about the settings, see SmartDeviceMonitor for Client Help.

- 15. Click [OK].
- 16. Check that the port of the selected printer is displayed in [Port].
- 17. Set a user code, if necessary.

Up to 8 numeric characters can be entered. No alphabetic characters or symbols can be entered.

- 18. Select the [Default Printer] check box to configure the printer as default.
- 19. Click [Continue].

Installation starts.

20. After the installation is completed, select one of the options to restart the computer either now or later, and then click [Finish].

Restart the computer to complete the installation.



- To stop installation of the selected software, click [Cancel] before the installation is complete.
- Setting a user code allows a SmartDeviceMonitor for Admin user to display and check statistics about
 the number of sheets which each user prints. For details, see the manual provided with
 SmartDeviceMonitor for Admin.

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A message appears if there is a newer version of the printer driver already installed. If there is, you
cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add
Printer]. See "Messages Displayed When Installing the Printer Driver".

Reference

• p.49 "Messages Displayed When Installing the Printer Driver"

Installing the PostScript 3 printer driver (IPP)

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- Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.
- 1. Quit all applications currently running.
- Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

3. Select an interface language, and then click [OK].

The default interface language is English.

The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala. Turkce.

4. Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

Step 5 does not apply for Windows Vista users.

- 5. Click [Next>].
- 6. Click [Local printer attached to this computer.], and then click [Next >].

If you are using Windows Vista, you do not need to click [Next >].

- 7. Click [Create a new port:].
- 8. Click [DeskTopBinder SmartDeviceMonitor], and then click [Next >].
- 9. Click [IPP].
- In the [Printer URL] box, enter "http://(printer's IP address or host name)/printer" as the printer's address.

If the server authentication is issued, to enable SSL (a protocol for encrypted communication), enter "https://(printer's IP address or host name)/printer" (Internet Explorer 5.01, or a higher version must be installed).

(example IP address: 192.168.15.16)

http://192.168.15.16/printer

https://192.168.15.16/printer

You can enter "http://printer's IP address or host name/ipp" as the printer's address.

If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the printer.

11. Enter a name for identifying the printer in [IPP Port Name]. Use a name different from the one of any existing port.

If a name is not specified here, the address entered in the [Printer URL] box becomes the IPP port

12. Click [Detailed Settings] to make necessary settings.

If you are using Windows 2000, click [OK] after making necessary settings.

For information about the settings, see DeskTopBinder-SmartDeviceMonitor for Client Help.

- 13. Click [OK].
- 14. Check that the name of the printer driver you want to install is selected, and then click [Next >].
- 15. Change the name of the printer if you want, and then click [Next >].

Select the [Yes] check box to configure the printer as default.

Step 17 does not apply for Windows Vista users.

- 16. Specify whether or not to share the printer, and then click [Next >].
- 17. Specify whether or not to print a test page, and then click [Next >].

If you are using other than Windows Vista, click [Next >].

18. Click [Finish].

The printer driver installation starts.



A user code can be set after the printer driver installation. For information about user code, see the
printer driver Help.

Using the Standard TCP/IP port

This describes how to install the PCL or PostScript 3 printer drivers using the TCP/IP port.



- To install this printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008, you must have an account that has Manage Printers permission. Log on as an Administrators group member.
- In an IPv6 environment, you cannot use the Standard TCP/IP Port. Use the SmartDeviceMonitor for Client port.

Installing the PCL Printer Driver

- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

3. Select an interface language, and then click [OK].

The default interface language is English.

- 4. Click [PCL Printer Driver].
- The software license agreement appears in the [License Agreement] dialog box.

After reading the agreement, click [I accept the agreement.], and then click [Next>].

6. Select a printer driver you want to use in the [Select Program] dialog box.

You can select several printer drivers.

The PCL6 printer driver is installed in the language specified by your operating system.

- 7. Click [Next>].
- 8. Select the printer model you want to use.

The printer name can be changed in the [Change settings for 'Printer Name'] box.

9. Double-click the printer name to display the printer settings.

The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, printer model, and port.

- 10. Click [Port], and then click [Add].
- 11. Click [Standard TCP/IP Port], and then click [OK].

Configure the Standard TCP/IP port settings. See Windows Help if [Standard TCP/IP Port] does not appear.

- 12. Click [Next >] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.
- 13. Enter the printer name or IP address in the [Printer Name or IP Address] box.

The [Port Name] text box automatically obtains a port name. Change this name if necessary.

When the device selection appears, select "RICOH NetworkPrinter Driver C Model".

- 14. Click [Next>].
- 15. Click [Finish] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.

The installation start dialog box reappears.

- 16. Check that the port of the selected printer is displayed in [Port].
- 17. Configure the default printer as necessary.

18. Click [Continue].

The printer driver installation starts.

19. After the installation is completed, select one of the options to restart the computer either now or later, and then click [Finish].

Restart the computer to complete the installation.

Installing the PostScript 3 Printer Driver

- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

3. Select an interface language, and then click [OK].

The default interface language is English.

The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.

4. Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

Step 5 does not apply for Windows Vista users.

- 5. Click [Next>].
- 6. Click [Local printer] or [Local printer attached to this printer], and then click [Next >].
 If you are using Windows Vista, you do not need to click [Next >].
- 7. Click [Create a new port:].
- Click [Standard TCP/IP Port], and then click [Next >].
 If you are using other than Windows 2000, [Standard TCP/IP Port] in [Create a new port].
- 9. Click [Next >] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.
- 10. Enter the printer name or IP address in the [Printer Name or IP Address] box.

The [Port Name] text box automatically obtains a port name. Change this name if necessary.

When screen for Device selection appears, select "RICOH NetworkPrinter Driver C Model".

- 11. Click [Next>].
- 12. Click [Finish] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.
- Check that the name of the printer whose driver you want to install is selected, and then click
 [Next >].

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14. Change the printer name if you want, and then click [Next >].

Select the [Yes] check box to configure the printer as default.

Step 15 does not apply for other than Windows 2000 users.

- 15. Click [Next>].
- 16. Specify whether or not to share the printer, and then click [Next >].
- 17. Specify whether or not to print a test page.

If you are using other than Windows Vista, click [Next >].

18. Click [Finish].

The printer driver installation starts.



- A user code can be set after the printer driver installation. For information about user code, see the
 printer driver Help.
- To stop installation of the selected software, click [Cancel] before the installation is complete.
- A message appears if there is a newer version of the printer driver already installed. If there is, you
 cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add
 Printer]. See "Messages Displayed When Installing the Printer Driver".

Reference

• p.49 "Messages Displayed When Installing the Printer Driver"

Using the LPR port

This describes how to install the PCL or PostScript 3 printer drivers using the LPR port.



- To install this printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008, you must have an account that has Manage Printers permission. Log on as an Administrators group member.
- If you are using other than Windows 2000 in an IPv6 environment, you cannot use the LPR Port. Use the DeskTopBinder-SmartDeviceMonitor port.

Installing the PCL Printer Driver

- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

3. Select an interface language, and then click [OK].

The default interface language is English.

- 4. Click [PCL Printer Driver].
- 5. The software license agreement appears in the [License Agreement] dialog box.

After reading the agreement, click [I accept the agreement.], and then click [Next >].

6. Select a printer driver you want to use in the [Select Program] dialog box.

You can select several printer drivers.

The PCL6 printer driver is installed in the language specified by your operating system.

7. Select the printer model you want to use.

The printer name can be changed in the [Change settings for 'Printer Name'] box.

- 8. Click [Next>].
- 9. Double click the printer name to display the printer settings.

The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, printer model, and port.

- 10. Click [Port], and then click [Add].
- 11. Click [LPR Port], and then click [OK].

If [LPR Port] does not appear, see Windows Help and install it.

- 12. Enter the printer's IP address in the [Name or address of server providing [pd] box.
- 13. Enter "lp" in the [Name of printer or print queue on that server] box, and then click [OK].
 The port is added.
- 14. Check that the port of the selected printer is displayed in [Port].
- 15. Configure the default printer as necessary.
- 16. Click [Continue].

The printer driver installation starts.

17. After the installation is completed, select one of the options to restart the computer either now or later, and then click [Finish].

Restart the computer to complete the installation.

Installing the PostScript 3 Printer Driver

- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

Select an interface language, and then click [OK].

The default interface language is English.

The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.

4. Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

Step 5 does not apply for Windows Vista users.

5. Select [My Computer], and then click [Next >].

If you are using Windows 2000, you can click [Next >] without selecting [My Computer].

- 6. Click [Local printer] or [Local Printer attached to this computer], and then click [Next >].
 If you are using other than Windows Vista, click [Next >]
- 7. Click [Create a new port:].
- Click [LPR Port], and then click [Next >].

If you are using other than Windows 2000, [Standard TCP/IP Port] in [Create a new port].

- 9. Enter the printer's IP address in the [Name or address of server providing lpd] box.
- Enter "Ip" in the [Name of printer or print queue on that server box], and then click [OK].
- Check that the name of the printer whose driver you want to install is selected, and then click
 [Next >].
- 12. Change the printer name if you want, and then click [Next >].

Select the [Yes] check box to configure the printer as default.

Step 13 does not apply for Windows Vista users.

- 13. Specify whether or not to share the printer, and then click [Next >].
- 14. Specify whether or not to print a test page.

If you are using other than Windows Vista, click [Next >].

15. Click [Finish].

The printer driver installation starts.



- A user code can be set after the printer driver installation. For information about user code, see the
 printer driver Help.
- To stop installation of the selected software, click [Cancel] before the installation is complete.
- A message appears if there is a newer version of the printer driver already installed. If there is, you
 cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add
 Printer]. See "Messages Displayed When Installing the Printer Driver".

■ Reference

• p.49 "Messages Displayed When Installing the Printer Driver"

Using the WSD port

This section explains installation when using the WSD port.

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- The WSD port can be used only under Windows Vista and Windows Server 2008.
- To install under Windows Vista and Windows Server 2008, you must have an account that has Manage Printers permission. Log on as an Administrator.
- You can connect to the printer only if both the printer and computer are on the same network segment, or "Network discovery" is enabled. For details, see Windows Help.

Installing the PCL Printer Driver

- 1. Quit all applications currently running.
- 2. On the [Start] menu, click [Network].

The [Network] window appears, and the device search begins automatically.

3. Right-click the printer's icon, and then click [Install].

If the [User Account Control] dialog box appears, click [Continue].

The [Found New Hardware] dialog box appears.

4. Click [Locate and install driver software (Recommended)].

If the [User Account Control] dialog box appears, click [Continue].

- 5. Click [Don't search online].
- 6. Click [Browse my computer for driver software (advanced)].
- 7. Insert the provided CD-ROM into the computer's CD-ROM drive.

If the [AutoPlay] dialog box appears, click the [close] button and then proceed to step 8.

8. Click [Browse...], and then specify a location for the printer driver.

If the CD-ROM drive letter is D, the printer driver's source files are stored in "D: \DRIVERS\(PCL6, or PCL5E)\XP_VISTA\MUI or (Language)\DISK1".

9. Click [Next].

If the [Windows can't verify the publisher of this driver software] message appears, click [Install this driver software anyway].

10. Click [Close].

If installation is successful, the icon of the printer connected to the "WSD" port is added to the [Printers] window.

Installing the PostScript 3 Printer Driver

- 1. Quit all applications currently running.
- 2. Click [Start], and then click [Network].

The [Network] window appears, and the device search begins automatically.

3. Using as the NetWare Print Server / Remote Printer

If the [User Account Control] dialog box appears, click [Continue].

The [Found New Hardware] dialog box appears.

4. Click [Locate and install driver software (Recommended)].

If the [User Account Control] dialog box appears, click [Continue].

The [Found New Hardware] window appears.

- Click [Don't search online].
- 6. Click [Browse my computer for driver software (advanced)].
- 7. Insert the provided CD-ROM into the computer's CD-ROM drive.

If the [AutoPlay] dialog box appears, click the [close] button and then proceed to step 8.

8. Click [Browse...], and then specify a location for the printer driver.

If the CD-ROM drive letter is D, the printer driver's source files are stored in "D:\DRIVERS\PS\XP_VISTA\(Language)\DISK1".

9. Click [Next].

If the [Windows can't verify the publisher of this driver software] message appears, click [Install this driver software anyway].

10. Click [Close].

If installation is successful, the icon of the printer connected to the "WSD" port is added to the [Printers] window.



- The port name that follows "WSD" uses random character strings. It cannot be changed freely.
- To stop the installation, click [Cancel] before the installation is complete. When re-installing the WSD
 Port, right-click the printer's icon in the [Network] window, and then click [Uninstall].

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Using as a Windows Network Printer

This describes how to install the PCL or PostScript 3 printer driver when using the printer as a Windows network printer.

To use the print server, install the printer driver by selecting "Network printer server", and then select the Windows 2000/XP/Vista, or Windows Server 2003/2003 R2/2008 shared printer.

This section assumes that the client has already been configured to communicate with a Windows 2000/XP/Vista, or Windows Server 2003/2003 R2/2008 print server. Do not begin the following procedure before the client is set up and configured correctly.

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- To install the printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008, you must have an account that has Manage Printers permission. Log on as an Administrators group member.
- If you print with a print server connected to the printer using the SmartDeviceMonitor port, Recovery
 Printing and Parallel Printing cannot be used from the client.
- If you print under Windows XP/Vista or Windows Server 2003/2003 R2/2008 print server, notification functions of SmartDeviceMonitor may not be used with the client.
- Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.
- If you print from a print server connected to the printer using the DeskTopBinder-SmartDeviceMonitor port, the client cannot use Recovery Printing and Parallel Printing.
- If you print with a Windows XP or Windows Server 2003/2003 R2/2008 print server,
 DeskTopBinder-SmartDeviceMonitor notification functions may not be possible for the client.
- You can install the printer driver from the CD-ROM provided with this printer or download it from the supplier's Web site.
- If your operating system is Windows XP Pro x64, Windows Vista x64 or Windows Server 2003/2003 R2/2008 x64, you must download the printer driver from the manufacturer's Web site. Select this printer and the operating system you are using, and then download it.

Installing the PCL Printer Driver

- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

3. Select an interface language, and then click [OK].

The default interface language is English.

- 4. Click [PCL Printer Driver].
- 5. The software license agreement appears in the [License Agreement] dialog box.

After reading the agreement, click [I accept the agreement.], and then click [Next >].

6. Select the printer driver you want to use in the [Select Program] dialog box.

You can select several printer drivers.

The PCL6 printer driver is installed in the language specified by your operating system.

- 7. Click [Next>].
- 8. Select the [Printer Name] check box to select the printer models you want to use.

The printer name can be changed in the [Change settings for 'Printer Name'] box.

9. Double-click the printer name to display the printer settings.

The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, printer model, and port.

- 10. Click [Port], and then click [Add].
- 11. Click [Network Printer], and then click [OK].
- 12. Double-click the computer name you want to use as a print server in the [Browse for Printer] window.
- 13. Select the printer you want to use, and then click [OK].
- 14. Check that the port of the selected printer is displayed in [Port].
- 15. Configure the user code as necessary.

For details about user code, see the printer driver Help.

- 16. Select the [Default Printer] check box to configure the printer as default.
- 17. Click [Continue].

The printer driver installation starts.

18. After the installation is completed, select one of the options to restart the computer either now or later, and then click [Finish].

Restart the computer to complete installation.

Installing the PostScript 3 Printer Driver

- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

3. Select an interface language, and then click [OK].

The default interface language is English.

The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.

4. Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

Step 5 does not apply for Windows Vista users.

- 5. Click [Next>].
- 6. Click [Network printer] or [A network printer, or a printer attached to another computer].
 If you are using other than Windows Vista, click [Next >].
- 7. Select [Browse for a printer], and then click [Next >].

If you are using Windows 2000, select the location method from the [Locate Your Printer] screen before clicking [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. The printer driver installation starts.
- 11. Click [Next>].

Select the [Yes] check box to configure the printer as default.

12. Click [Finish].

Restart the computer to complete installation.



- A user code can be set after the printer driver installation. For information about user code, see the
 printer driver Help.
- To stop installation of the selected software, click [Cancel] before installation is complete.
- A message appears if there is a newer version of the printer driver already installed. If there is, you cannot install the printer driver using Auto Run.
- If you still want to install the printer driver, use [Add Printer]. See "Messages Displayed When Installing
 the Printer Driver".

Reference

• p.49 "Messages Displayed When Installing the Printer Driver"

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Using as a NetWare Print Server / Remote Printer

This describes how to set up the Windows computer used as a NetWare client.

Important

- To install this printer driver under Windows 2000/XP, and Windows Server 2003/2003 R2, you
 must have an account that has Manage Printers permission. Log on as an Administrators group
 member.
- In an IPv6 environment, NetWare servers cannot be used.

The following explanation assumes NetWare Client is installed on the client computer and the NetWare server environment is correctly set up. Install all necessary client applications before following this procedure.

Set up the printer driver while logging on to the NetWare file server.

The following values are used in the example:

• NetWare version: 4.1

• File server name: CAREE

• Queue name: R-QUEUE

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

The installer starts.

Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

2. Select an interface language, and then click [OK].

The default interface language is English.

- 3. Click [PCL Printer Driver].
- 4. The software license agreement appears in the [License Agreement] dialog box.

After reading the agreement, click [I accept the agreement.], and then click [Next >].

5. Select the printer driver you want to use in the [Select Program] dialog box.

You can select several printer drivers.

The PCL6 printer driver is installed in the language specified by your operating system.

- 6. Click [Next>].
- 7. Select the [Printer Name] check box to select the printer model you want to use.

The printer name can be changed in the [Change settings for 'Printer Name'] box.

8. Double-click the printer name to display the printer settings.

The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, printer model, and port.

- 9. Click [Port], and then click [Add].
- 10. Click [Network Printer], and then click [OK].
- 11. Double-click the name of the NetWare file server on the network tree.

The created queue is displayed.

- 12. Select the print queue, and then click [OK].
- 13. Check that the port of the selected printer is displayed in [Port].
- 14. Click [Continue].

The printer driver installation starts.

- 15. Click [Finish] in the [Select Program] dialog box.
- 16. After the installation is completed, select one of the options to restart the computer either now or later, and then click [Finish].

Restart the computer to complete installation.

17. After restarting the computer, open the printer properties from the [Printers and Faxes] window.

Under Windows 2000 or Windows Server 2003/2003 R2, launch the [Printers] window, and then open the printer properties.

18. Click the [NetWare setting] tab.

Under Windows 2000 or Windows Server 2003/2003 R2, on the [Printer Settings] tab, clear the [Form Feed] and [Enable Banner] check boxes.

Do not select these check boxes since they are automatically selected by the printer driver. If you select the check boxes, the printer may not print correctly.

19. Click [OK] to close the printer properties dialog box.



- To stop installation of the selected software, click [Cancel] before installation is complete.
- The protocol is set to inactive as default. Enable it using SmartDeviceMonitor or Telnet.

When using the PostScript 3 Printer Driver



• In an IPv6 environment, NetWare servers cannot be used.

Follow the procedure below to set up the PostScript 3 printer driver.

- 1. In the [Printers] or [Printers and Faxes] window, open the printer properties.
- 2. Click the [PostScript] tab.

When using Windows 2000/XP/Vista, Windows Server 2003/2003 R2/2008, click the [Device Settings] tab, and then proceed to step to clear the check box.

- 3. Click [Advanced].
- 4. Clear the [Send CTRL+D before job] and [Send CTRL+D after job] check boxes, and then click [OK].
- 5. Click [OK] to close the printer properties dialog box.

Form Feed

Do not use NetWare to configure form feed. Form feed is controlled by the printer driver on Windows. If NetWare form feed is configured, the printer may not print properly.

Follow the procedure below to disable form feed according to the operating system used:

Under Windows 2000/XP/Vista, or Windows Server 2003/2003 R2/2008, clear the [Form feed] check box on the [NetWare Settings] tab in the printer properties dialog box.

Banner Page

Do not use NetWare to configure a banner page.

Follow the procedure below to disable banner pages according to the operating system used:

 Under Windows 2000/XP/Vista, or Windows Server 2003/2003 R2/2008, clear the [Enable banner] check box on the [NetWare Settings] tab in the printer properties dialog box.

Printing after Resetting the Printer

Printer to print server connection requires 30 to 40 seconds to resume after the printer is reset. During this period, jobs may be accepted (depending on NetWare specifications) but not printed.

To print after resetting the printer as a remote printer, check on the print server that the remote printer is disconnected, or wait for two minutes before trying to print.

Installing the Printer Driver Using USB

This section explains how to install printer drivers using USB.

Before installing, check that only the operating system is running on the computer and no print jobs are in progress.

The printer drivers can be installed from the CD-ROM provided with this printer.

Windows 2000/XP, Windows Server 2003/2003 R2 - USB

 Installing a printer driver requires Administrators permission. Log on using an account that has Administrators permission.

If the printer driver has already been installed, plug and play is enabled, and the icon of the printer connected to the "USB" port is added to the [Printers] window.

If the printer driver is not installed, follow the plug-and-play instructions of the printer to install it from the CD-ROM provided.

- 1. Check that the power of the printer is off.
- 2. Connect the printer and computer using the USB cable.

Connect the USB cable firmly.

3. Turn on the power of the printer.

Found New Hardware Wizard starts, and USB Printing Support is installed automatically.

4. In the Found New Hardware Wizard display, click [Install the software automatically [Recommended]], and then click [Next>].

When using Windows XP or Windows Server 2003/2003 R2, click [Install from a list or specific location [Advanced]], and then click [Next>].

- 5. Select the [Specify location] check box, and then click [Next >].
- 6. Insert the CD-ROM into the CD-ROM drive.

When Auto Run starts, click [Exit].

7. Specify the location where the source files of the printer driver are stored.

If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

- PCL5e
 - D:\DRIVERS\PCL5E\XP_VISTA\(language)\disk1
- PCL6

D:\DRIVERS\PCL6\XP_VISTA\MUI\disk1

PostScript 3

1

D:\DRIVERS\PS\XP_VISTA\(language)\disk1

The PCL6 printer driver is installed in the language specified by your operating system.

- 8. Check the printer driver location, and then click [OK].
- 9. Click [Next>].
- 10. Click [Finish].

If the printer driver has already been installed, plug and play is enabled, and the icon of the printer connected to the "USB001" port is added to the [Printers] window.



- To disable Auto Run, press the left Shift key when inserting the CD-ROM into the drive and keep it
 pressed until the computer finishes reading from the CD-ROM.
- The number after "USB" varies depending on the number of printers connected.

Windows Vista, Windows Server 2008 - USB



 Installing a printer driver requires Administrators permission. Log on using an account that has Administrators permission.

If the printer driver has already been installed, plug and play is enabled, and the icon of the printer connected to the "USB" port is added to the [Printers] window.

The printer drivers can be installed from the CD-ROM provided with this printer.

If the printer driver is not installed, follow the plug-and-play instructions of the printer to install it from the CD-ROM provided.

- 1. Check that the power of the printer is off.
- 2. Connect the printer and computer using a USB cable.

Connect the USB cable firmly.

3. Turn on the power of the printer.

Found New Hardware Wizard starts, and USB Printing Support is installed automatically.

- 4. In the Found New Hardware Wizard display, click [Search for a suitable driver for my device [recommended]], and then click [Next >].
- 5. Insert the CD-ROM into the CD-ROM drive.

If Auto Run starts, click [Exit].

6. Select the [Include this location in the search] check box under [Search for the best driver in these location], and then click [Browse] to select the printer driver location.

If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

PCL5e

D:\DRIVERS\PCL5E\XP_VISTA\(language)\disk1

PCL6

D:\DRIVERS\PCL6\XP_VISTA\MUI\disk1

• PostScript 3

D:\DRIVERS\PS\XP_VISTA\(language)\disk1

The PCL6 printer driver is installed in the language specified by your operating system.

- 7. Check the printer driver location, and then click [Next >].
- 8. Click [Continue].
- 9. Click [Finish].

If the installation is successful, the icon of the printer connected to the "USB001" port is added to the [Printers and Faxes] window.



- To disable Auto Run, press the left Shift key when inserting the CD-ROM into the drive and keep it pressed until the computer finishes reading from the CD-ROM.
- The number after "USB" varies depending on the number of printers connected.

Troubleshooting USB

Problem	Solutions
The printer is not recognized automatically.	Turn off the power of this printer, and then reconnect the USB cable. Make sure the cable is securely connected to the USB ports, and then turn on the power again.
Windows has already configured the USB settings.	Open Windows' Device Manager, and then, under [Universal Serial Bus controllers], remove any conflicting devices. Conflicting devices have a [!] or [?] icon by them. Take care not to accidentally remove required devices. For details, see Windows Help.
	When using Windows 2000/XP or Windows Server 2003/2003 R2/2008, an erroneous device is displayed under [USB Controller] in the [Device Manager] dialog box.

Printing with Parallel Connection

This describes how to install the PCL or PostScript 3 printer driver when using a parallel port.

To use a printer connected using a parallel interface, click [LPT1] when installing the printer driver.

Mportant (

- To install this printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008, you must have an account that has Manage Printers permission. Log on as an Administrators group member.
- You can install the printer driver from the CD-ROM provided with this printer or download it from the supplier's Web site.
- If your operating system is Windows XP Pro x64, Windows Vista x64, or Windows Server 2003/2003 R2/2008 x64, you must download the printer driver from the manufacturer's Web site.
 Select this printer and the operating system you are using, and then download it.

Installing the PCL Printer Driver

- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

3. Select an interface language, and then click [OK].

The default interface language is English.

- 4. Click [PCL Printer Driver].
- The software license agreement appears in the [License Agreement] dialog box.

After reading the agreement, click [I accept the agreement.], and then click [Next >].

6. Select the printer driver you want to use in the [Select Program] dialog box.

You can select several printer drivers.

The PCL6 printer driver is installed in the language specified by your operating system.

- Click [Next >].
- 8. Select the [Printer Name] check box to select the printer model you want to use.

The printer name can be changed in the [Change settings for 'Printer Name'] box.

9. Double-click the printer name to display the printer settings.

The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, printer model, and port.

10. Check that [LPT1:] is shown in [Port].

- 11. Select the [Default Printer] check box to configure the printer as default.
- 12. Click [Finish].

The printer driver installation starts.

13. After the installation is completed, select one of the options to restart the computer either now or later, and then click [Finish].

Restart the computer to complete installation.

Installing the PostScript 3 Printer Driver

- 1. Quit all applications currently running.
- 2. Insert the CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

3. Select an interface language, and then click [OK].

The default interface language is English.

The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.

4. Click [PostScript 3 Printer Driver].

Add Printer Wizard starts.

Step 5 does not apply for Windows Vista users.

5. Click [Next>].

The following procedure depends on your operation system.

Windows 2000:

1. [Local printer], and then click [Next>].

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

- 2. Select [LPT1] at the [Printer Port] dialog box, and then click [Next >].
- 3. Select whether or not to share the printer, and then click [Next >].
- 4. Select the name of the printer whose driver you want to install, and then click [Next>].
- 5. Specify whether or not to print a test page, and then click [Finish].

The printer driver installation starts.

Restart the computer to complete installation.

Other than Windows 2000:

Click [Local printer attached to this computer].

If you are using other than Windows Vista, click [Next >].

2. Select the port you want to use, and then click [Next >].

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

- 3. Select the name of the printer whose driver you want to install, and then click [Next >].
- 4. Click [Close] to close the [Printer Port] dialog box.
- 5. Click [Next>].
- 6. Change the printer name if you want, and then click [Next >].

Step 7 does not apply for Windows Vista users.

- 7. Select whether or not to share the printer, and then click [Next >].
- 8. Specify whether or not to print a test page, and then click [Finish].

The printer driver installation starts.

Restart the computer to complete installation.



- A user code can be set after the printer driver installation. For information about user code, see the
 printer driver Help.
- To stop installation of the selected software, click [Cancel] before installation is complete.
- A message appears if there is a newer version of the printer driver already installed. If there is, you cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add Printer]. See "Messages Displayed When Installing the Printer Driver".

■ Reference

• p.49 "Messages Displayed When Installing the Printer Driver"

Messages Displayed When Installing the Printer Driver

This section describes what to do if a message appears when installing the printer driver.

Message number 58 or 34 indicates that the printer driver cannot be installed using Auto Run. Install the printer driver using [Add Printer] or [Install Printer].

Message number 58 appears if there is a newer version of the printer driver already installed.

Windows 2000

This section describes the procedure under Windows 2000.

- 1. On the [Start] menu, point to [Settings], and then click [Printers].
- 2. Double-click the Add Printer icon.
- 3. Follow the instructions in Add Printer Wizard.

If the printer driver is on the CD-ROM, the location of the driver is \DRIVERS\(PCL6, PCL5E, or PS) \XP_VISTA\(language) or MUI\DISK1. If the installer starts, click [Cancel] to quit.

4. Specify a port.



 Available ports vary according to your Windows operating system or the type of interface. For details, see "Installing the Printer Driver".

Reference

• p.20 "Installing the Printer Driver"

Windows XP Professional or Windows Server 2003/2003 R2

This section describes the procedure under Windows XP Professional or Windows Server 2003/2003 R2.

- 1. On the [Start] menu, click [Printers and Faxes].
- 2. Click [Add a printer].
- 3. Follow the instructions in Add Printer Wizard.

If the printer driver is on the CD-ROM, the location of the driver is \DRIVERS\(PCL6, PCL5E, or PS) \XP_VISTA\(language) or MUI\DISK1. If the installer starts, click [Cancel] to quit.

4. Specify a port.



 Available ports vary according to your Windows operating system or the type of interface. For details, see "Installing the Printer Driver".

■ Reference

• p.20 "Installing the Printer Driver"

Windows XP Home Edition

This section describes the procedure under Windows XP Home Edition.

- 1. On the [Start] menu, click [Control Panel].
- 2. Click [Printer and Other Hardware].
- 3. Click [Printers and Faxes].
- 4. Click [Add a Printer].
- 5. Follow the instructions in Add Printer Wizard.

If the printer driver is on the CD-ROM, the location of the driver is \DRIVERS\(PCL6, PCL5E, or PS) \XP_VISTA\(language) or MUI\DISK1. If the installer starts, click [Cancel] to quit.

6. Specify a port.



 Available ports vary according to your Windows operating system or the type of interface. For details, see "Installing the Printer Driver".

Reference

• p.20 "Installing the Printer Driver"

Windows Vista, Windows Server 2008

This section describes the procedure under Windows Vista and Windows Server 2008.

- 1. On the [Start] menu, click [Control Panel].
- 2. Click [Hardware and Sound].
- 3. Click [Printers].
- 4. Click [Add a printer].
- 5. Follow the instructions in Add Printer Wizard.

If the printer driver is on the CD-ROM, the location of the driver is \DRIVERS\(PCL6, PCL5E, or PS) \XP_VISTA\(language) or MUI\DISK1. If the installer starts, click [Cancel] to quit.

6. Specify a port.

• Available ports vary according to your Windows operating system or the type of interface. For details, see "Installing the Printer Driver".

■ Reference

• p.20 "Installing the Printer Driver"

Making Option Settings for the Printer

Make option settings for the printer using the printer driver when bidirectional communication is disabled.

Conditions for Bidirectional Communication

Bidirectional communication allows information about paper size and feed direction settings to be automatically sent to the printer. You can check printer status from your computer.

- Bidirectional communication is supported by Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008.
- If you use the PCL printer driver and bidirectional communication is enabled under Windows 2000, the [Accessories] tab is unavailable.

To support bidirectional communication, the following conditions must be met:

When connected with parallel cables

- The computer must support bidirectional communication.
- The printer must support bidirectional communication.
- The interface cable must support bidirectional communication.
- The printer must be connected to a computer using the standard parallel cables and parallel connectors.
- Under Windows 2000, [Enable bidirectional support] must be selected, and [Enable printer
 pooling] must not be selected on the [Ports] tab with the PCL printer driver.

When connected with a network

- The printer must support bidirectional communication.
- The Standard TCP/IP port must be used.
- [Enable bidirectional support] must be selected, and [Enable printer pooling] must not be selected on the [Ports] tab with the PCL printer driver.
- In addition to the above, one of the following conditions must also be met:
 - The SmartDeviceMonitor for Client port and the TCP/IP protocol must be used. When using the IPP protocol, the IPP port name must include the IP address.
 - [Enable bidirectional support] must be selected, and [Enable printer pooling] must not be selected on the [Ports] tab with the PCL printer driver.

When connected with USB

- The printer must be connected to the computer's USB port using a USB interface cable (for Windows 2000/XP/Vista, Windows Server 2003/2003 R2/2008).
- The computer must support bidirectional communication.



- The PCL6 printer driver supports bidirectional communication and updates the printer status automatically.
- The PCL5e printer driver supports bidirectional communication. You can update the printer status manually.
- Install SmartDeviceMonitor for Client from the supplied CD-ROM.

If Bidirectional Communication Is Disabled

Set up option settings when bidirectional communication is disabled.

- Under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2/2008, Manage Printers
 permission is required to change the printer properties in the [Printers] folder. Log on as an
 Administrators group member.
- 1. On the [Start] menu, click [Printers and Faxes].

The [Printers and Faxes] window appears.

When using Windows 2000, point to [Settings] on the [Start] menu, and then click [Printers]. The [Printers] window appears.

When using Windows Vista and Windows Server 2008, click [Control Panel] on the [start] menu, and then click [Printer]. The [Printers] window appears.

- 2. Click the icon of the printer you want to use.
- 3. On the [File] menu, click [Properties].

When using Windows Vista and Windows 2008, right-click the icon of the printer you want to use, and then click [Properties].

4. Click the [Accessories] tab.

If options in the [Accessories] tab are disabled, bidirectional connection is enabled. In this case, no change is necessary for option settings.

- 5. Select options installed from the [Options] area, and then make the necessary settings.
- 6. Select the total amount of the memory in [Total Memory:] when the optional SDRAM module is added.
- Under [Input Tray Settings], click the tray to be used, and then select the appropriate size, position, and type for the tray.
- 8. Click [OK] to close the printer properties dialog box.

Installing Font Manager

☆ Important

- Under Windows 2000 /XP/Vista, and Windows Server 2003/2003 R2/2008, installing
 applications by Auto Run requires Administrator privilege. To install a printer driver by Auto Run, log
 on using an account that has Administrator privilege.
- 1. Quit all applications currently running.
- $\begin{tabular}{ll} \bf 2. & Insert the CD-ROM into the CD-ROM drive. \end{tabular}$

The installer starts.

- 3. Click [Font Manager].
- 4. Follow the instructions on the display.

Using Adobe PageMaker Version 6.0, 6.5, or 7.0

Under Windows 2000/XP with Adobe PageMaker, you need to copy PPD files to the PageMaker folder. PPD files have the .ppd extension in the folder "DRIVERS \ PS \ XP_VISTA \ (Language) \ DISK 1" on the CD-ROM.

The "XP_VISTA" folder inside the "PS" folder is for Windows 2000/XP, Windows Server 2003/2003 R2. Use the folder 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 .ppd file 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.



- If the driver is not set correctly after copying the ".ppd" file, printing may not be performed properly.
- When using PageMaker, the optional features that can be selected by the printer driver will not be
 active. The following procedure describes how to activate the optional printer features.
 - On the [File] menu, click [Print].
 The [Print Document] dialog box appears.
 - 2. Make the necessary settings in the [Features] box.

2. Printing Documents

This chapter explains how to print documents using the printer driver. It also describes the procedure for configuring PDF Direct Print and other printing functions.

Displaying the Printer Driver Settings Screen

This section explains how to open and configure the printer driver properties.

The following procedure explains how to configure the printer driver settings under Windows XP. If you are using another operating system, the procedure might vary slightly.

Making printer default settings - the printer properties

☆ Important

- To change the printer's default settings (including settings for options), log on using an account that
 has Manage Printers permission. Members of the Administrators group have Manage Printers
 permission by default.
- You cannot change the printer default settings for individual users. Settings made in the [Printer Properties] dialog box are applied to all users.
- On the [Start] menu, click [Printers and Faxes].
 The [Printers and Faxes] window appears.
- 2. Click the icon of the printer you want to use.
- On the [File] menu, click [Properties].
 The [Printer Properties] dialog box appears.
- 4. Make the settings you require, and then click [OK].



- The settings you make here are used as the default settings for all applications.
- For details, see the printer driver Help.

Making printer default settings - printing preferences



When the printer driver is distributed from the print server, the setting values specified by the server
are displayed as the default for [Printing Defaults...].

1. On the [Start] menu, click [Printers and Faxes].

The [Printers and Faxes] window appears.

- 2. Click the icon of the printer you want to use.
- 3. On the [File] menu, click [Printing Preferences...].

The [Printing Preferences] dialog box appears.

4. Make the settings you require, and then click [OK].



- The settings you make here are used as the default settings for all applications.
- For details, see the printer driver Help.

Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the [Printing Preferences] dialog box from that application. The following procedure explains how to make printer settings for a specific application using Windows XP WordPad as an example.

1. On the [File] menu, click [Print...].

The [Print] dialog box appears.

- 2. In the [Select Printer] list, select the printer you want to use.
- 3. Click [Preferences].

The [Printing Preferences] dialog box appears.

4. Make the settings you require, and then click [OK].



- Procedures for opening the [Printing Preferences] dialog box vary depending on the application. For
 details, see the manuals provided with the application.
- Any settings you make using this procedure apply to the current application only.
- General users can change the properties displayed in the [Print] dialog box of an application. Settings
 made here are used the defaults when printing from the application.
- For details, see the printer driver Help.

Frequently Used Print Methods

This chapter explains how to use the various printing functions including normal printing, duplex printing, and combine printing.

Each function described in this chapter is configured and registered under "One Click Presets". You can also change the parameters for each function by modifying "One Click Presets".



• For details about custom settings, see "Using One Click Presets".



• p.66 "Using One Click Presets"

Standard Printing

Use the following procedure to print documents using the normal printing function with the printer driver.



 Before printing, make sure that the settings for the installed options and loaded paper are correctly configured.

For the PCL 6 printer driver:

 After creating a document, open the Printing Preferences dialog box in the document's native application.

The [Printing Preferences] dialog box appears.

- 2. Click the [One Click Presets] tab, if it is not already selected.
- In the [Job Type:] list, select [Normal Print].
 If you want to print multiple copies, specify a number of sets in the [Copies:] box.
- 4. In the [Document Size:] list, select the size of the original to be printed.
- 5. In the [Orientation:] list, select [Portrait] or [Landscape] as the orientation of the original.
- In the [Input Tray] list, select the paper tray that contains the paper you want to print onto.
 - If you select [Auto Tray Select] in the [Input Tray] list, the source tray is automatically selected according to the paper size and type specified.
- 7. In the [Paper Type:] list, select the type of paper that is loaded in the paper tray.
- 8. To save current setting in the One Click Preset List, click [Register Current Settings...]. Enter a name and comment that describe the setting, and then click [OK].

The newly registered icon appears in the [One Click Preset List:] area.

- 9. Click [OK] to close the printer preferences dialog box.
- 10. Print the document using the print function in the document's native application.

For the PCL 5e printer driver:

 After creating a document, open the Printing Preferences dialog box in the document's native application.

The [Printing Preferences] dialog box appears.

- In the [Job Type:] list, select [Normal Print].If you want to print multiple copies, specify a number of sets in the [Copies:] box.
- 3. In the [Orientation:] list, select [Portrait] or [Landscape] as the orientation of the original.
- 4. Click the [Paper] tab.
- 5. In the [Document Size:] list, select the size of the original to be printed.
- In the [Input Tray:] list, select the paper tray that contains the paper you want to print onto.

If you select [Auto Tray Select] in the [Input Tray:] list, the source tray is automatically selected according to the paper size and type specified.

- 7. In the [Type:] list, select the type of paper that is loaded in the paper tray.
- 8. Click [OK] to close the printer preferences dialog box.
- 9. Print the document using the print function in the document's native application.



- The types of paper loaded in the paper trays are indicated on the printer's display. This allows you
 to see which tray the selected paper type is loaded in. However, the paper type setting available in
 the printing preference dialog box might be different from the type indicated on the printer's display.
- If a warning message appears notifying you of a paper type or size mismatch see "If Errors Occur with the Specified Paper Size and Type".

Reference

• p.92 "If Errors Occur with the Specified Paper Size and Type"

Printing on both sides of sheets

This section explains how to print on both sides of each page using the printer driver.

For the PCL 6 printer driver:

 After creating a document, open the Printing Preferences dialog box in the document's native application.

The [Printing Preferences] dialog box appears.

2. To use an existing One Click Presets, click the [One Click Presets] tab, and then click the icon in the [One Click Preset List:] box.

If you do not wish to modify a custom setting that is already registered in the printer driver, change settings such as paper size and source tray as required, and then proceed to step 8.

- 3. Click the [Detailed Settings] tab.
- 4. In the [Menu:] box, click the [Edit] icon.
- 5. In the [2 sided:] list, select [Open to Left] or [Open to Top].
- 6. Change any other print settings if necessary.
- To save current setting in the One Click Preset List, click [Register Current Settings...].Enter a name and comment that describe the setting, and then click [OK].

The newly registered icon appears in the [One Click Preset List:] area.

- 8. Click [OK] to close the printer preferences dialog box.
- 9. Print the document using the print function in the document's native application.

For the PCL 5e printer driver:

 After creating a document, open the Printing Preferences dialog box in the document's native application.

The [Printing Preferences] dialog box appears.

- 2. Click the [Setup] tab, if it is not already selected.
- 3. In the [Duplex:] list, [Open to Left], [Open to Top] or [Booklet].
- 4. Change any other print settings if necessary.
- 5. Click [OK] to close the printer preferences dialog box.
- 6. Print the document using the print function in the document's native application.



If the document contains pages with different original sizes, page breaks may occur.

Paper sizes and types supported by duplex printing function

This section explains the paper sizes and types that can be used with the duplex printing function.

Paper sizes supported by duplex printing function

- A3□
- A4D

- A4□
- A5□
- A5□
- B4D
- B5□
- B5□
- 11×17D
- $8^{1}/_{2} \times 14^{\square}$
- 8¹/₂×13[□]
- 8¹/₂×11□
- 8¹/₂×11□
- 8¹/₄×13[□]
- 8×13₽
- $7^{1}/_{4} \times 10^{1}/_{2}$
- 8K□
- 16K□
- 16K□

Paper types supported by duplex printing function

- Plain Paper
- Letterhead
- Special Paper 1
- Preprinted Paper
- Bond Paper
- Recycled Paper



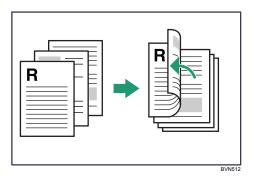
• Duplex printing is not possible if a custom paper size is selected.

Types of duplex printing

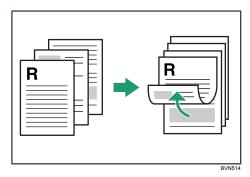
This section explains the binding directions available when using the duplex printing function. When using the duplex printing function, you can select whether to bind copies by edge or in the center.

Edge Binding

• Open to Left



· Open to Top



Combining Multiple Pages into Single Page

This section explains how to print multiple pages onto a single sheet. The combine printing function allows you to economize on paper by printing multiple sheets at reduced size onto a single sheet.



• The combine printing function is not available on a custom size paper. To use the combine printing function, specify a standard size paper.

For the PCL 6 printer driver:

- 1. After creating a document, open the Printing Preferences dialog box in the document's native application.
 - The [Printing Preferences] dialog box appears.
- 2. To use an existing One Click Presets, click the [One Click Presets] tab, and then click the icon in the [One Click Preset List:] box.
 - If you do not wish to modify a custom setting that is already registered in the printer driver, change settings such as paper size and source tray as required, and then proceed to step 8.
- 3. Click the [Detailed Settings] tab.
- 4. In the [Menu:] box, click the [Edit] icon.

- 5. In the [Layout:] list, select the combination pattern.
- 6. Change any other print settings if necessary.
- To save current setting in the One Click Preset List, click [Register Current Settings...].Enter a name and comment that describe the setting, and then click [OK].

The newly registered icon appears in the [One Click Preset List:] area.

- 8. Click [OK] to close the printer preferences dialog box.
- 9. Print the document using the print function in the document's native application.

For the PCL 5e printer driver:

 After creating a document, open the Printing Preferences dialog box in the document's native application.

The [Printing Preferences] dialog box appears.

- 2. Click the [Setup] tab, if it is not already selected.
- 3. In the [Layout:] list, select the combination pattern.
- 4. Change any other print settings if necessary.
- 5. Click [OK] to close the printer preferences dialog box.
- 6. Print the document using the print function in the document's native application.



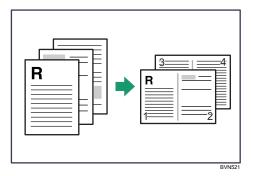
- If the document contains pages with different original sizes, page breaks may occur.
- If the application you are using also has a combine function, disable it. If the application's combine function is also enabled when the driver's combine function enabled, incorrect printing is likely.
- For details about combining pages with different orientations and other advanced functions, see the printer driver Help.

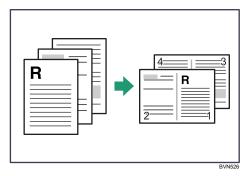
Types of combine printing

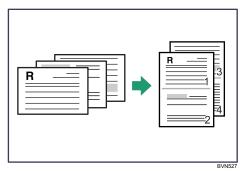
This section explains the different methods of combine printing that are available. For 2 pages per sheet combine, you can select from three patterns. When combining 4 or more pages onto a single sheet of paper, four patterns are available. The page order can be specified from the following four patterns:

9

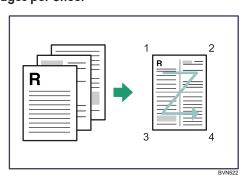
2 Pages per Sheet

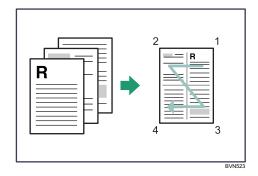


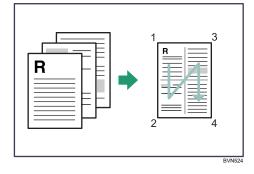


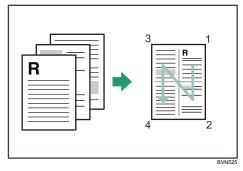


4 Pages per Sheet









Using One Click Presets

This section explains how to register and use one click presets.

Each function explained in this chapter is preconfigured and registered under [One Click Preset List:] on the [One Click Presets] tab.

You can apply the relevant setting simply by clicking on the one click preset name. This helps to avoid incorrect settings and misprints.

One click presets can be added, modified, and deleted as required. They can also be shared for use by different users. By using registered one click presets, users without in-depth knowledge of the printer driver can utilize advanced printing functions easily.

For details about registering, modifying, and deleting one click presets, see the printer driver Help.





• Only the PCL6 printer driver is supported.

Advanced Printing

This chapter explains the printer's advanced printing functions.

Other than the functions that can be configured in the [One Click Presets] tab, various print functions can be setup from each [Menu:] icon in the [Detailed Settings] tab. The settings for each function described in this section can be changed by using the following menus.

Using the PCL6 printer driver as an example, the following procedure explains how to configure the printer's advanced printing functions.

Menu Names and Brief Overview of Each Function

The following is an overview of the settings that are available on the [Paper] and [Finishing] menus.

[Paper] menu

You can enable/disable the cover and slip sheets function.

• Paper Type, Paper Size

You can specify the size and type of the paper you want to print on. If the machine's trays do not contain paper matching the settings of the print job, you can proceed with printing by using the bypass tray.

For details about this function, see "Specifying Printer Driver or Print Command Priority".

Front Cover

Using this function, you can insert cover sheets fed from a different tray to that of the main paper, and print on them. For details, see "Printing on Cover Sheet".

Slip Sheet

Using this function, you can insert slip sheets fed from a different tray to that of the main paper, and print on them. For details, see "Inserting Slip Sheets".

[Finishing] menu

You can enable/disable the collate function.

Collate

When printing multiple sets of documents such as handouts for meetings, you can have prints delivered in batches of ordered sets. For details about collate function, see "Using Collate Function".

[Effects] menu

You can enable/disable the Watermark function.

The Watermark function prints text under the main content of every page of a document. For details about this function, see "Printing with Watermarks".

■ Reference

- p.69 "Specifying Printer Driver or Print Command Priority"
- p.71 "Printing on Cover Sheet"
- p.72 "Inserting Slip Sheets"
- p.74 "Using Collate Function"
- p.74 "Printing with Watermarks"

Specifying Printer Driver or Print Command Priority

If you select [Any Size/Type] or [Any Custom Size/Type] for [Bypass Tray] in [Tray Setting Priority] under [Print Settings] using the control panel, you can print onto a specified paper without changing or confirming the paper settings for print jobs.

If the machine's trays do not contain paper matching the settings of the print job, you can proceed with printing by applying the paper settings specified in the print job to paper fed from the bypass tray. You do not need to change the paper settings using the control panel, even if you frequently use paper of different sizes, or if you are printing onto an unusual type of paper.

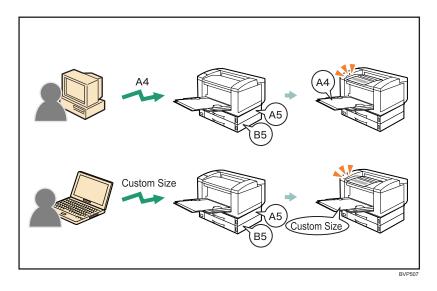
Mportant (

- To continue printing from the bypass tray onto all paper sizes, select [Any Size/Type] for [Bypass Tray] in [Tray Setting Priority] under [Print Settings]. To continue printing from the bypass tray onto custom size paper only, select [Any Custom Size/Type] for [Bypass Tray] in [Tray Setting Priority] under [Print Settings]. For details about each setting on the Print Settings menu, see "Print Settings Menu".
- Select [Auto Tray Select] in the printer driver. If [Auto Tray Select] is specified when a job is sent to
 the printer, the matching tray will be detected in the order specified in [Tray Priority] under [Paper
 Input]. If you select [Bypass Tray] for [Tray Priority], paper will always be fed from the bypass tray,
 as long as paper is loaded there. For details about printer driver settings, see "Menu Names and Brief
 Overview of Each Function". For details about the [Tray Priority] setting, see "Paper Input Menu
 Parameters".

If you select [Any Size/Type] or [Any Custom Size/Type] for the bypass tray, jobs will be printed in the following manner.

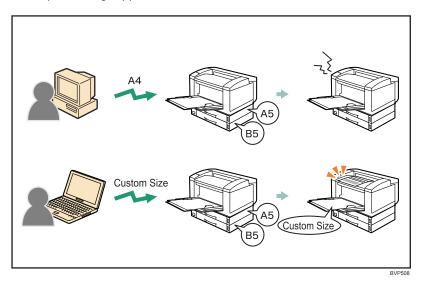
Any Size/Type

If the machine's trays do not contain paper matching the settings of the print job, printing can proceed from the bypass tray with the job's settings applied.



Any Custom Size/Type

If the machine's trays do not contain paper matching the settings of the print job but custom paper was specified using the printer driver or by print command, printing can proceed from the bypass tray with the job's settings applied.



- **₩**Note
 - When this function is enabled, printing may be slower than usual.
 - If paper is not loaded in the bypass tray when a job is received, a message prompting you to load paper will appear on the control panel. When this message appears, load paper of the indicated size and type print side up on the bypass tray.

• If a job features pages of different paper sizes that are not loaded in the trays, the entire job will be printed on paper fed from the bypass tray. If the printer's trays contain paper matching the required sizes, the relevant pages will be printed on paper fed from those trays.

■ Reference

- p.69 "Specifying Printer Driver or Print Command Priority"
- p.125 "Paper Input Menu"
- p. 146 "Print Settings Menu"

Printing on Cover Sheet

Using this function, you can insert cover sheets fed from a different tray to that of the main paper, and print on them.

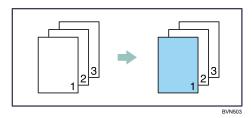
Mportant !

• To use this function, Collate must be set.

Prints the first page of the document on the sheet for the cover page.

Print on one side

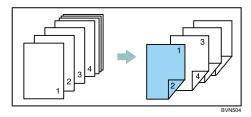
Prints on one side of the cover sheet only, even when duplex printing is selected.



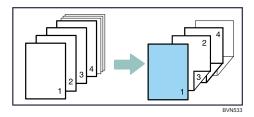
Print on both sides

Prints on both sides of the cover sheet when duplex printing is selected.

· Cover sheet printed on both sides

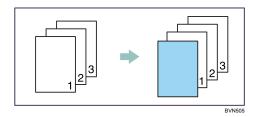


• Cover sheet printed on one side

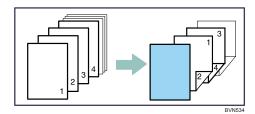


Blank

When printing one side



• When printing both side



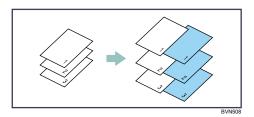
U Note

- The cover sheets should be the same size and orientation as the body of the paper.
- If Auto Tray Select is set for the body paper feed tray, body paper will be delivered from a tray that contains paper set in portrait orientation. Therefore, if the cover paper is set to landscape orientation, the orientation of the cover and body paper will be different.
- For printing methods, see the printer driver Help.

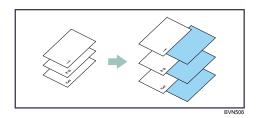
Inserting Slip Sheets

Inserting a slip sheet between each page

Print

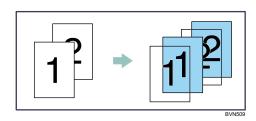


• Blank

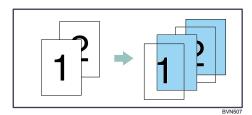


Inserting a slip sheet between OHP transparencies

Print



• Blank



U Note

- Collate cannot be set when using slip sheets.
- When the duplex printing or cover printing is set, you cannot insert slip sheets.
- The slip sheet should be the same size and orientation as the body paper.
- If "Auto Tray Select" has been set as the paper feed tray for the body paper, the paper will be delivered from a tray containing paper in \square orientation. Therefore, when the slip sheet has been set to \square orientation, the orientation of the output slip sheet and body paper will be different.
- The same paper feed tray cannot be set for the body of the document and slip sheets.

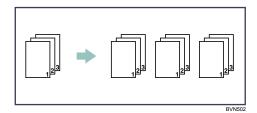
Using Collate Function

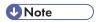
The Collate function allows you to print while sorting printouts into page-ordered sets, such as when printing multiple copies of meeting materials.



Up to 150 pages can be stored using RAM. If the optional hard disk is installed, up to 1,000 pages

Output can be assembled as sets in sequential order.





- If Auto Continue occurs on the first set, Collate will be canceled.
- If forced printing occurs on the first set, Collate will be canceled.
- When setting Collate in the printer driver settings, make sure that a collate option is not selected in the application's print settings. If a collate option is selected, printing will not be as intended.
- For details about printing method, see the printer driver Help.

Printing with Watermarks

Using this function, you can print documents with text watermarks.

This function increases a document's security and identifiability by embedding a specified text (watermark) on every page. You can specify only one type of watermark at a time.



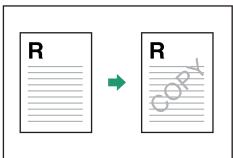
You can create and apply custom watermarks. For details about creating original watermarks, see
the printer driver Help.

Types of watermarks

This section explains the types of watermarks available.

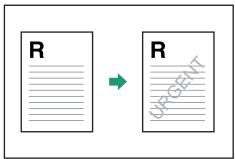
Following are the pre-registered text watermarks that are available:

COPY



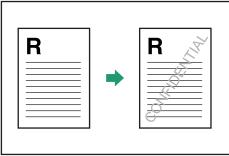
BMU900S

• URGENT



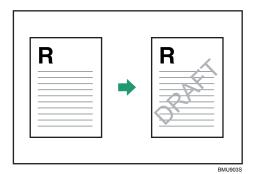
BMU901S

CONFIDENTIAL



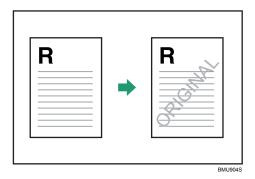
BMU902S

• DRAFT



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• ORIGINAL



Spool Printing

Spool Printing allows print jobs transferred from a computer to be temporarily stored, and then prints them after they are transferred. This shortens printing time as it maximizes printer efficiency.

With Spool Printing, the print data is saved in the hard disk before printing. To use this function, set it from the menu. See "Remote Maintenance by telnet".

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- To use this function, the optional hard disk must be installed on the printer.
- Use the "spoolsw clear job" telnet command to clear a spooled print job. Do not turn off the printer
 or computer while a print job is being spooled and the Data In is flashing. Print jobs that are interrupted
 in this way remain on the printer's hard disk and will finish printing out when the printer is turned back
 on.
- The Spool Printing function is available for data received using "diprint", "lpr", "ipp", "ftp", "sftp (TCP/IP (IPv6))", and "wsd (printer)".
- When using diprint, the Spool Printing function cannot be used with bidirectional communication.
- The domain reserved for spool printing is about 1 GB.
- When Spool Printing is on, the size of a single print job cannot exceed 500 MB.
- When receiving jobs from multiple computers, the printer can spool a maximum of ten lpr jobs, and
 only one "diprint", "ipp", "ftp", "sftp", "smb", or "wsd (printer)" job. If the printer's spooling capacity
 is exceeded, newer jobs cannot be printed. You must wait before sending further jobs.

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- Printing the first page with Spool Printing will be slow.
- The computer requires less print processing time when large amounts of data are spooled.
- Stored spool jobs can be viewed or deleted using Web Image Monitor.
- The list of spool jobs cannot be viewed from the printer's control panel.
- For information about the "spoolsw clear job" command on the telnet, see "Remote Maintenance by telnet".

Reference

• p.197 "Remote Maintenance by telnet"

Setting Spool Printing

Spool printing settings can be made using telnet or Web Image Monitor.

Using Web Image Monitor
 In [System] on the [Configuration] menu, click [Active] in [Spool Printing].

Using telnet

Enter "spoolsw spool on".



- For details about Web Image Monitor, see Web Image Monitor Help.
- For details about "spoolsw spool on", see "Remote Maintenance by telnet".

Reference

• p.197 "Remote Maintenance by telnet"

Viewing or Deleting spooled jobs using Web Image Monitor

Follow the procedure below to check or delete spooled jobs using Web Image Monitor.

- 1. Open a Web browser.
- 2. Enter "http://(printer's address)/" in the address bar to access the printer whose settings you want to change.

Top Page of Web Image Monitor appears.

3. Click [Login].

The window for entering the login user name and password appears.

4. Enter the login user name and password, and then click [Login].

Contact your administrator for information about the settings.

5. In the menu area, click [Job].

A submenu will appear.

6. On the [Printer] menu, click [Spool Printing].

A list of spooled jobs appears.

- 7. To delete a job, select the check box of the job you want to delete, and then click [Delete].
 The selected job is deleted.
- 8. Click [Logout].
- 9. Quit Web Image Monitor.



• For details about Web Image Monitor, see Web Image Monitor Help.

2

Printing a PDF File Directly

You can send PDF files directly to the printer for printing, without having to open a PDF application.

There are two methods of printing the PDF files directly, either using the DeskTopBinder Lite, or entering commands.



- This function is possible for genuine Adobe PDF files only.
- Version 1.3, 1.4, and 1.5 PDF files are compatible.
- PDF files created using Public-Key authentication of PDF version 1.5 Crypt Filter function cannot be printed.
- To print a document that contains data using the transparency function data, the optional memory
 unit must be installed. However, the operation might still fail, depending on the data contained in the
 document. If this happens, use the printer driver to print the document.
- To print a document that contains transparency function data, the optional hard disk must be installed.
 If it is not, transparent area data might not print out correctly.
- PDF files created using the color separation specification function cannot be printed.
- PDF files created using the trapping specification function cannot be printed.
- PDF files created using the OPI (Open Prepress Interface) specification function cannot be printed.
- PDF files created using the "content with marks" function cannot be printed.



Paper size errors may occur when printing on custom size paper.

Using DeskTopBinder Lite

Installing DeskTopBinder Lite

Use this procedure to install DeskTopBinder Lite.

- 1. Quit all applications currently running.
- 2. Insert the "Document Management Utility" CD-ROM into the CD-ROM drive.

The installer starts.

Auto Run may not work under certain operating system settings. In this case, launch "Setup.exe" located on the CD-ROM root directory.

3. Click [DeskTopBinder Lite].

The [DeskTopBinder Lite] dialog box appears.

- 4. Click [DeskTopBinder Lite], and then click [OK].
- 5. Follow the instructions on the display to install DeskTopBinder Lite.

If you are required to restart the computer after installing DeskTopBinder Lite, restart the computer and continue the configuration.

DeskTopBinder Lite enhancements

Follow the DeskTopBinder Lite enhancement procedure to print PDF files directly.

1. On the [Start] menu, point to [All Programs], [DeskTopBinder], and then click [Extended Features Wizard].

The [Extended Features Wizard] dialog box appears.

- Click [Start], and then click [Next>] repeatedly until the [Printing Function2] dialog box appears.
- 3. In the [Printing Function2] dialog box, click [Add...].

The [PDF Direct Print Properties] dialog box appears.

- 4. Click [Specify...], and then enter the IP address or host name of the printer.
- 5. Click [OK]

The [PDF Direct Print Properties] dialog box closes.

- 6. Click [Next>] repeatedly until [Finish] appears.
- 7. Click [Finish].

Function palette

The Function palette contains buttons for functions that are already configured through DeskTopBinder Lite enhancement. Using these buttons, you can print Windows files, preview printouts, convert images, and register scanners for documents without having to open DeskTopBinder Lite. You can also use these functions simply by dragging a target file to the button corresponding to the required function and dropping it there.

 On the [Start] menu, point to [All Programs], [DeskTopBinder], and then click [Function Palette].

An icon for the Function palette is added to the task tray displayed at the bottom right of the screen.

- 2. Right-click the new icon that has been added to the task tray, and then click [Properties...].

 The [Properties] dialog box appears.
- Click the [Contents] tab, select the [PDF Direct Print] check box at the center, and then click [OK].

The [Properties] screen closes and the [PDF Direct Print] icon is added to the palette.

PDF direct printing

Follow the procedure below to print PDF files directly.

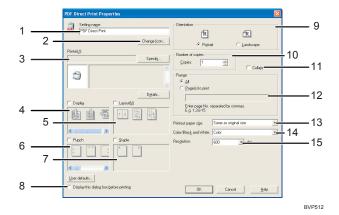
1. Drag the PDF file you want to print to the PDF Direct Printing icon in the palette and drop it there.

The [Output File List-PDF Direct Print] dialog box appears.

2. Highlight the PDF you want to print, and then click [OK].

The PDF file is printed.

PDF Direct Print Properties



1. Setting name:

Displays the plug-in configuration name (up to 63 single byte characters)

2. Change Icon...

Changes the icon displayed on the tool bar.

3. Printer:

Displays printer's IP address or hostname.

4. Duplex

Prints on both sides of sheets.

5. Layout

Prints multiple pages on a single sheet.

6. Punch (not supported for this printer)

Punches holes in printed sheets.

7. Staple (not supported for this printer)

Staples together printed sheets.

8. Display this dialog box before printing

Appears in PDF direct printing mode if this check box is selected.

9. Orientation:

Specify the original's orientation.

10. Number of copies

Specify the number of copies to print.

11. Collate

Sorts printed sheets.

12. Range:

Specify which paper to print.

13. Printout paper size:

Specify the paper size you want copies to be printed onto.

14. Color/Black and White: (not supported for this printer)

Specify color or black-and-white printing.

15. Resolution:

Specify a print resolution.

Using Commands to Print

To send PDF files directly to this printer for printing, use the "lpr" command.



For details about PDF direct print and the "lpr" command, see "Printing Files Directly from Windows".

Reference

p.318 "Printing Files Directly from Windows"

Sending a PDF file

Use the following procedure to send a PDF file to this printer using the "lpr" command.

Using the "lpr" command, you can specify the printer's IP address, the name of the PDF file, and the name of the virtual printer. The syntax is as follows.

C:\>lpr -S "printer's IP address" [-Poption] [-o 1]\path\file name



• "pdf" is configured and registered as the default virtual printer for PDF direct printing.

Entering the PDF Password

Use the following procedure to print a password protected PDF file directly.

To print a PDF file that is protected by a password, enter the password using the control panel, Web Image Monitor, or the PJL command. When the password is entered using the PJL command, the password entered using the control panel or Web Image Monitor is ignored.

Using the PJL command

To enter the password for a password protected PDF file, use the following command and value in conjunction with the PJL command.

- Command: SET
- Value: PDFPASSWORD
- Example: @PJL SET PDFPASSWORD=the PDF password

Up to 32 ASCII characters (0x20 - 0x7E (Except 0x22)) can be entered as the PDF password.

Using the Control Panel

To enter a PDF password using the control panel, select [Change PDF Password] on the [PDF Menu] in the [Print Settings] menu.

Using Web Image Monitor

To enter the PDF password using Web Image Monitor, select the [Set Password], and then set [PDF Temporary Password].

Specifying the Classification Code for a Print Job

When printing in an environment where classification codes are required, a classification code must be specified for each print job.



• The PostScript 3 printer driver does not support the classification codes and it cannot be used to print under environment which the classification codes are required.

For the PCL 6 printer driver:

- Open the printer properties dialog box after creating a document in an application.
- 2. Click the [Detailed Settings] tab.
- 3. In the [Menu:] box, click the [Job Setup] icon.
- 4. Enter the classification code in the [Classification Code:] box, and then click [OK].
 This code identifies the user. The classification code can contain up to 32 alphanumeric (a-z, A-Z, 0-9, "-") characters.
- 5. Make any other necessary print settings, and then click [OK].
- 6. A confirmation message appears. Read it, and then click [OK].
- 7. Execute the print command.
- 8. The print job is sent to the printer.

For the PCL 5e printer driver:

- Open the printer properties dialog box after creating a document in an application.
- 2. Click the [Valid Access] tab.
- Enter the classification code in the [Classification Code:] box.

This code identifies the user. The classification code can contain up to 32 alphanumeric (a-z, A-Z, 0-9, "-") characters.

- 4. Make any other necessary print settings, and then click [OK].
- 5. A confirmation message appears. Read it, and then click [OK].
- 6. Execute the print command.
- 7. The print job is sent to the printer.



- The specified classification code is stored in the printer driver.
- To switch between different classification codes, install the printer driver under different names, and specify different classification code for each driver.

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• For details about how to view the log collected using Classification Code, see the manual for the external log collection system.

Using the Virtual Printer

This section explains virtual printer functions.

A virtual printer is a pseudo printer that can only be recognized on a network. The virtual printer has various print options, such as feeding tray selection and duplex printing, which you can set in advance. You can also use the interrupt printing function. This function suspends the ongoing job and gives priority to a new job. The optional hard disk must be installed to use this function.

If you use the virtual printer under UNIX, Solaris, and other operating systems, various print functions are possible without having you manually enter usual print commands.

Adding a Virtual Printer

Use this procedure to add a virtual printer.



- Adding a virtual printer requires Administrators privilege. Log on using an account that has Administrators privilege.
- The following Virtual Printer protocols are available: "TCP/IP (Unspecified, Normal)", "TCP/IP (DIPRINT)", "TCP/IP (RHPP)", "TCP/IP (IPDS)", "Apple Talk", and "NetWare".
- 1. Log on to Web Image Monitor as an administrator.
- 2. In the menu area, click [Configuration], and then click [Virtual Printer Settings] in the "Printer" category.

A list of the available virtual printers appears.

3. Click [Add].

The screen for adding virtual printers appears.

- In [Virtual Printer Name], enter a name for the new printer, and then select the protocol in the [Protocol] list.
- 5. Click [OK].

The virtual printer is added.



- If you select [AppleTalk] or [NetWare] in the [Protocol] list, you cannot specify a virtual printer name.
- You can specify a virtual printer name using up to 47 characters.
- You can add up to 50 virtual printers. After 50 virtual printers have been added, [Add] will no longer be displayed.
- For details about login user names and passwords, see "Using Web Image Monitor".

■ Reference

• p.175 "Using Web Image Monitor"

Changing a Virtual Printer Configuration

Use this procedure to change a virtual printer configuration.



- You must have Administrators privilege to change the configuration of a virtual printer. Log on using an account that has Administrators privilege.
- 1. Log on to Web Image Monitor as an administrator.
- 2. In the menu area, click [Configuration], and then click [Virtual Printer Settings] in the "Printer" category.

A list of the available virtual printers appears.

- 3. Select the virtual printer whose configuration you want to change, and then click [Change].
 If you want to configure this virtual printer for an interrupt printer, select [TCP/IP (Unspecified, Priority)] in the protocol list.
- 4. Change the configuration as required.
- 5. Click [OK].



- For details about virtual printer configuration, see Web Image Monitor Help.
- For details about login user names and passwords, see "Using Web Image Monitor".

Reference

• p.175 "Using Web Image Monitor"

Confirming a Virtual Printer Configuration

Use this procedure to confirm a virtual printer configuration.

- 1. Start Web Image Monitor.
- 2. In the menu area, click [Configuration], and then click [Virtual Printer Settings] in the "Printer" category.

A list of available virtual printers appears.

Select the virtual printer whose configuration details you want to confirm, and then click [Details].

A configuration list for the selected virtual printer appears.



- [Details] is not displayed if you log on to Web Image Monitor as an administrator. To confirm a virtual printer configuration, click [Change].
- For details about login user names and passwords, see "Using Web Image Monitor".

Reference

• p.175 "Using Web Image Monitor"

Deleting a Virtual Printer

Use this procedure to delete a virtual printer.



- You must have Administrators privilege to delete a virtual printer. Log on using an account that has Administrators privilege.
- 1. Log on to Web Image Monitor as an administrator.
- 2. In the menu area, click [Configuration], and then click [Virtual Printer Settings] in the "Printer" category.

The list of available virtual printers appears.

Select the virtual printer that you want to delete, and then click [Delete].
 The delete confirmation screen appears.

4. Click [OK].



- You cannot delete this printer's default virtual printer.
- [Delete] appears only if you have already added a virtual printer.
- For details about login user names and passwords, see "Using Web Image Monitor".

■ Reference

• p.175 "Using Web Image Monitor"

Printing Using a Virtual Printer

To print directly from a specified virtual printer, assign the virtual printer in the print command. If you use the interrupt printing function, enter the name of the virtual printer that you configured for interrupt printing. Before printing for the first time, specify the virtual printer you want to use.

1. Log on to Web Image Monitor in administrator mode.

- In the menu area, click [Configuration], and then click [Printer Basic Settings] in the "Printer" category.
- 3. Select [Active] in [Virtual Printer], and then click [OK].
- 4. Send a command from your computer.

lpr

C:\>lpr -S "printer's IP address" [-PVirtual Printer Name] [-o I] \path\file name

rcp

C:> rcp [-b] \path name\file name [\path\file name...] printer's host name:["Virtual Printer Name"]

ftp

ftp> put \path\ file name Virtual Printer Name



- When the ongoing job meets any of the following conditions, interrupt printing is not possible even if
 you print with the virtual printer that is configured for interrupt printing. The printer waits to print a new
 job until it finishes printing the current job.
 - When the staple function is specified for the ongoing print jog
 - When the ongoing print job is performed using the bypass tray
 - When a function related to cover or slip paper is specified for the ongoing print job
- If a large amount of memory is used for the ongoing print job or a large number of sheets are being
 printed, there may not be enough memory to process an interrupt print job, or only part of the interrupt
 job may be printed. If this happens, certain functions for the interrupt job, such as stapling or storing
 data onto the printer, can be canceled or sheets can be sorted in a number smaller than the standard
 maximum capacity.
- For details about login user names and passwords, see "Using Web Image Monitor".

Reference

• p.175 "Using Web Image Monitor"

Memory Capacity and Paper Size

Additional memory apart from the standard memory may be required depending on the paper size and data type.



 When printing from the bypass tray, duplex printing will not be supported regardless of the memory capacity, and only one-side will be printed.

One-sided printing (600 × 600 dpi)

Memory Capacity	Printable paper sizes		
256 MB (standard)	A3, A4, A5, B4 JIS, B5 JIS, $11 " \times 17 "$, $8^1/_2 " \times 14 "$, $8^1/_2 " \times 11 "$, Postcard sized paper, Envelope sized paper, $297 \times 420 \text{ mm} (11.7 \times 16.6 \text{ inches})$, $305 \times 1200 \text{ mm} (12 \times 47.3 \text{ inches})$		
384 MB (standard and 128 MB)	A3, A4, A5, B4 JIS, B5 JIS, $11 " \times 17 "$, $8^1/_2 " \times 14 "$, $8^1/_2 " \times 11 "$, Postcard sized paper, Envelope sized paper, $297 \times 420 \text{ mm} (11.7 \times 16.6 \text{ inches})$, $305 \times 1200 \text{ mm} (12 \times 47.3 \text{ inches})$		
512 MB (standard and 256 MB)	A3, A4, A5, B4 JIS, B5 JIS, 11 " × 17 ", 8 ¹ / ₂ 14 ", 8 ¹ / ₂ " × 11 ", Postcard sized paper, Envelope sized paper, 297 × 420 mm (11.7 × 16.6 inches), 305 × 1200 mm (12 × 47.3 inch		

One-sided printing (1200 × 1200 dpi)

Memory Capacity	Printable paper sizes	
256 MB (standard)	A3, A4, A5, B4 JIS, B5 JIS, $11 " \times 17 "$, $8^{1}/_{2} " \times 14 "$, $8^{1}/_{2} " \times 11 "$, Postcard sized paper, Envelope sized paper, $297 \times 420 \text{ mm} (11.7 \times 16.6 \text{ inches})$, $305 \times 1200 \text{ mm} (12 \times 47.3 \text{ inches})$	

Memory Capacity	Printable paper sizes		
384 MB (standard and 128 MB)	A3, A4, A5, B4 JIS, B5 JIS, $11 " \times 17 "$, $8^1/_2 " \times 14 "$, $8^1/_2 " \times 11 "$, Postcard sized paper, Envelope sized paper, $297 \times 420 \text{ mm} (11.7 \times 16.6 \text{ inches})$, $305 \times 1200 \text{ mm} (12 \times 47.3 \text{ inches})$		
512 MB (standard and 256 MB)	A3, A4, A5, B4 JIS, B5 JIS, $11 \times 17 \times 17 \times 17 \times 14 \times 14 \times 17 \times 17 \times $		

 $^{*\,1}$ The paper size may not be printed, depending on the printing data.

Duplex printing (600 × 600 dpi)

Memory Capacity	Printable paper sizes		
256 MB (standard)	A3, A4, A5, B4 JIS, B5 JIS, 11 " × 17 ", 8 ¹ / ₂ "× 14 ", 8 ¹ / ₂ " × 11 "		
384 MB (standard and 128 MB)	A3, A4, A5, B4 JIS, B5 JIS, 11 " × 17 ", 8 ¹ / ₂ "× 14 ", 8 ¹ / ₂ " × 11 "		
512 MB (standard and 256 MB)	A3, A4, A5, B4 JIS, B5 JIS, 11 " × 17 ", 8 ¹ / ₂ "× 14 ", 8 ¹ / ₂ " × 11 "		

Duplex printing (1200 × 1200 dpi)

Memory Capacity	Printable paper sizes		
256 MB (standard)	A3, A4, A5, B4 JIS, B5 JIS, 11 " × 17 ", 8 ¹ / ₂ "× 14 ", 8 ¹ / ₂ " × 11 "		
384 MB (standard and 128 MB)	A3, A4, A5, B4 JIS, B5 JIS, 11 " × 17 ", 8 ¹ / ₂ "× 14 ", 8 ¹ / ₂ " × 11 "		
512 MB (standard and 256 MB)	A3, A4, A5, B4 JIS, B5 JIS, 11 " × 17 ", 8 ¹ / ₂ "× 14 ", 8 ¹ / ₂ " × 11 "		

If Errors Occur with the Specified Paper Size and Type

If no trays contain paper matching the specified size and type, or if the paper fed from the bypass tray does not match the size and type specified for the print job, a message warning you of the mismatch will appear on the control panel. Resolve the mismatch by following the message's instructions.

Changing the Paper Tray Settings

Use the following procedure to change the paper size and type specified for a tray and continue printing.

1. On the warning screen, press [Change].

The [Paper Input] screen appears.

- 2. Press the [▼] or [▲] key to select the tray whose paper size setting you want to change, and then press the [OK] key.
- 3. Press the [▼] or [▲] key to select the paper size you require, and then press the [OK] key.

P.Size:Tray1	3 /4 ♦ OK
A4□∂	A5 🖫
A5 □ ₽	A6 🗔
B4Jis 🖟	B5JIS 🖟

The [Paper Input] screen appears.

- 4. Press the [♥] or [♠] key to select the tray whose paper type you want to change, and then press the [OK] key.
- Press the [▼] or [▲] key to select the paper type you require, and then press the [OK] key.
 The [Paper Input] screen appears.
- 6. Press the [Escape] key

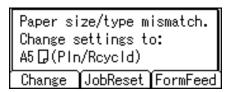
Printing starts if the selected tray contains paper matching the size and type settings specified in the print job.

2

Printing from a Selected Tray

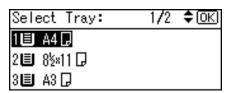
If the printer does not have a tray for the selected paper size or paper type, or if the selected paper loaded in the printer has run out, a caution message appears. If this message appears, do the following procedure.

1. When the caution message appears, press [FormFeed].



A confirmation message appears.

- 2. Press the [OK] key.
- 3. Select the tray for form feed using the [▼] or [▲] key from those that appear on the display panel, and then press the [OK] key.





• If a tray with a smaller paper size is selected, the print job may be cut short, or other problems may occur.

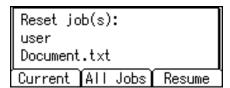
Canceling a Print Job

Follow this procedure for canceling the print job if the message prompting form feed appears.

1. Press [JobReset].



2. Press [Current].

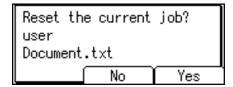


2

The confirmation message appears.

To resume printing jobs, press [Resume].

3. Press [Yes] to cancel the print job.



4. Press [No] to return to the previous display.



- If the printer is shared by multiple computers, be careful not to accidentally cancel someone else's print job.
- Under Windows, If the printer is connected to the computer using a parallel cable, sent print jobs may
 be canceled if the [Job Reset] key is pressed while "Please wait..." is displayed on the control panel.
 After the interval set in [I/O Timeout] in [Host Interface] has passed, the next print job can be sent. A
 print job sent from a different client computer will not be canceled in this case.
- You cannot stop printing data that has already been processed. For this reason, printing may continue
 for a few pages after you press the [Job Reset] key.
- A print job containing a large volume of data may take considerable time to stop.
- To stop data printing, see "Canceling a Print Job".

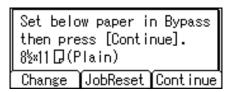
Reference

• p.117 "Canceling a Print Job"

Proceeding with Printing using the Bypass Tray

If you select [Any Size/Type] for the bypass tray, a warning message will appear whenever the paper fed from the source tray does not match the size or type specified in the print job.

When this warning message appears, check the size of the loaded paper and do the following.



- 1. Load paper of the size/type indicated in the message onto the bypass tray.
- 2. Press [Continue].

Printing resumes from the page in which the error occurred.

UNote

- The warning message might not appear, depending on the paper size specified in the printer driver.
- Any changes made to the paper size and type settings will not be applied to the job that is currently in process.
- To apply changes to the paper settings, cancel the job, and then print it again.
- For details about [Any Size/Type], see "Specifying Printer Driver or Print Command Priority" and "Print Settings Menu".

■ Reference

- p.69 "Specifying Printer Driver or Print Command Priority"
- p.146 "Print Settings Menu"

3. Printing Stored Documents

This chapter explains how to print documents stored in the printer.

Using the Print Job Function

This describes how to print or delete files stored in the printer. There are following types of print files: Sample Print, Locked Print, Hold Print, and Stored Print.

Print files sent from computers can be stored in the hard disk of the printer. Using the Print Job function, you can print or delete the print files.



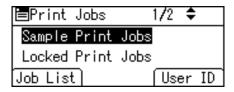
• To use this function, the optional hard disk must be installed on the printer.

Print Job screen

When the printer is turned on, the following screen appears if an optional hard disk is installed in the printer.



If you press [Prt.Jobs] on the initial screen, a screen prompting to select the type of print job appears.

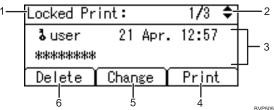


After selecting a type, you can select print files in the list by pressing:

- [Job List]
 Displays the Job List screen.
- [User ID]
 Displays the User ID screen.

If you select Sample Print, Locked Print, or Hold Print, the print files saved in the printer are deleted after printing is completed. If you select Stored Print, the files remain in the printer even after printing is finished.

Job List Screen



1. The type of print jobs

Displays the type of the print job you select.

2. Page number

Displays the current page number. Each time pressing the [▲] or [▼] key, the screen switches.

3. User ID, Date/Time, and File Name display

- User ID shows the user's ID set by the printer driver.
- Date and Time show the time at which the print job was stored in the printer.
- File name shows the name of the file. However, "****" is shown instead of the file name for a Locked Print file.

4. [Print]

Prints a selected file.

5. [Change]

Changes or clears the password of a file if a password is set. To change the password of a Locked/Stored Print job, press [Change], enter the current password, and then enter the new password on the confirmation screen. To clear the password, press [Change], leave the entering/confirming a new password box blank, and then press the [OK] key.

You can also set passwords to the Stored Print files that do not currently have passwords.

6. [Delete]

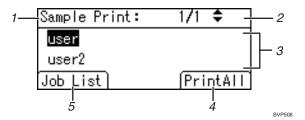
Deletes a selected file.



- When you press [Change] to change or clear a password, you must first enter the existing password. If the password you entered is incorrect, you cannot change or clear any current passwords.
- You can use [Change] to set or clear passwords only when Stored Print files are stored in the printer.

3

User ID Screen



1. The type of print jobs

Displays the type of the print job you select.

2. Page number

Displays the current page number. Each time pressing the [▲] or [▼] key, the screen switches.

3. User ID

- User ID shows the ID of the user who stored the selected type of files.
- User ID set by the printer driver is shown.

4. [PrintAll]

Prints all files stored by the user whose user ID has been selected.

5. [Job List]

Switches the screen to the [Job List] screen.

Displays the print jobs of the selected user only.

U Note

- To cancel selecting a file, press the [JobReset] key.
- The display is not updated if a new file is stored while the list of stored files is displayed. To update the display, press the [Menu] key to return to the initial screen, and then press [Prt.Jobs] again.
- If a large number of print jobs are stored in the printer, processing may slow temporarily, depending on which functions are used.

■ Reference

- For details about printing each type of print job, see the followings:
- p.100 "Sample Print"
- p.103 "Locked Print"
- p.106 "Hold Print"
- p.109 "Stored Print"

Printing from the Print Job Screen

This section gives instruction about Sample Print, Locked Print, Hold Print, and Stored Print.

Sample Print

Use this function to print only the first set of a multiple-set print job. After you have checked the result, remaining sets can be printed or canceled using the printer's control panel. This can reduce misprints due to mistakes in content or settings.



- A Sample Print file cannot be stored if:
 - the hard disk is not installed in the printer.
 - the total number of Sample Print, Locked Print, Hold Print, and Stored Print files in the printer is over 100. (The maximum number varies depending on the volume of data in files.)
 - the file contains over 1,000 pages.
 - sent or stored files in the printer contain over 9,000 pages in total.



- If a Sample Print file has not been stored properly, check the error log on the control panel.
- Even after you turn off the printer, stored documents in the printer remain. However, the [Auto Delete Temporary Jobs] or [Auto Delete Stored Jobs] settings are applied first.
- If the application has a collate option, make sure it is not selected before sending a print job. By default, Sample Print jobs are automatically collated by the printer driver. If a collate option is selected from the application's Print dialog box, more prints than intended may be produced.
- If the first set of the Sample Print files is not as you expected and you do not want to print remaining sets, delete the Sample Print file using the display panel. If you print the remaining sets of the Sample Print file, the job in the printer is deleted automatically.
- Sample Print files printed or deleted using Web Image Monitor, after you select [Sample Print] using
 the control panel will appear on the display panel. However, an error message will appear if you try
 to print or delete those Sample Print files.
- If stored files have similar and long file names, recognizing the file you want to print on the display panel may be difficult. Print the file you want to print either by checking the user ID or the time the file is sent, or by changing the file name to something that can be recognized easily.
- For details about the error log on the display panel, see "Checking the Error Log".
- For details about [Auto Delete Temporary Jobs] and [Auto Delete Stored Jobs], see "Maintenance Menu".

3



- p.130 "Maintenance Menu"
- p.173 "Checking the Error Log"

Printing a Sample Print file

The following procedure describes how to print a Sample Print file with the PCL 6/PCL5e or PostScript 3 printer driver.



- Applications with their own drivers, such as PageMaker, do not support this function.
- 1. From an application, select a command to print.

The Print dialog box appears.

2. Select the printer you want to use in the [Name] list, and then click [Properties].

The printer properties dialog box appears.

- 3. In the [Job Type:] list, click [Sample Print].
- 4. Click [Details...], and then enter a user ID in the [User ID:] box.

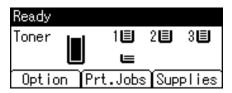
This is used to identify the user. The user ID can be entered using up to eight alphanumeric (a-z, A-Z, 0-9) characters.

5. Execute a command to print.

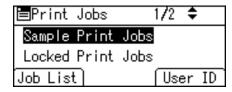
Make sure to set more than two copies.

The Sample Print job is sent to the printer, and the first set is printed.

6. On the printer's control panel, press [Prt.Jobs].



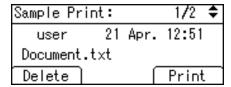
Select [Sample Print Jobs] using the [▼] or [▲] key, and then press [Job List].



A list of Sample Print files stored in the printer appears.

Depending on the security settings, certain print jobs may not be displayed.

You can print files also by pressing [User ID].



Enter the new number of sets using the scroll keys. You can enter up to 999 sets.

Press the [Escape] key to correct any entry mistakes.

9. Press [Print].

The remaining sets are printed.

To cancel printing, press [Cancel].



- If the set quantity is changed when [User ID] is pressed in step 7, the changed quantity is applied to all selected files.
- When printing is completed, the stored file will be deleted.
- To stop printing after printing has started, press the [Job Reset] key. The file will be deleted.
- For details about [User ID], see "Printing from the User ID Screen".

Reference

• p.114 "Printing from the User ID Screen"

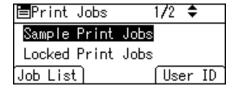
Deleting Sample Print files

If you are not satisfied with the sample printout, you can delete the Sample Print file, revise it and print it again until the settings are suitable.

1. Press [Prt.Jobs].



2. Select [Sample Print Jobs] using the [▼] or [▲] key, and then press [Job List].



A list of Sample Print files stored in the printer appears.

3

Depending on the security settings, certain print jobs may not be displayed.

Select the file you want to delete using the [▼] or [▲] key, and then press [Delete].

Sample Pr	int:		1/2	\$
user	21	Apr.	12:51	
Document.txt				
Delete			Print	

The delete confirmation screen will appear.

4. Press [Delete].

The selected file is deleted.

To cancel printing, press [Cancel].

Locked Print

Use this function to maintain privacy when printing confidential documents on the printer over a shared network. Usually, it is possible to print data using the display panel once it is stored in this printer. When using Locked Print, it is not possible to print unless a password is entered on the printer's display panel. Your confidential documents will be safe from being viewed by other people.



- A Locked Print file cannot be stored if:
 - the hard disk is not installed in the printer.
 - the total number of Sample Print, Locked Print, Hold Print, and Stored Print files in the printer is over 100. (The maximum number varies depending on the volume of data in files.)
 - the file contains over 1,000 pages.
 - sent or stored files in the printer contain over 9,000 pages in total.



- If a Locked Print file has not been stored properly, check the error log on the control panel.
- Even after you turn off the printer, stored documents remain. However, the [Auto Delete Temporary Jobs] or [Auto Delete Stored Jobs] settings are applied first.
- If the application has a collate option, make sure it is not selected before sending a print job. Locked
 Print jobs are automatically collated by the printer driver as default. If a collate option is selected in
 the application print dialog box, more sets than intended may be printed.
- After the Locked Print file is printed, the job is automatically deleted.
- Locked Print files printed or deleted using Web Image Monitor, after you select [Locked Print] using
 the control panel will appear on the display panel. However, an error message will appear if you try
 to print or delete those Locked Print files.

- For details about the error log on the display panel, see "Checking the Error Log".
- For details about [Auto Delete Temporary Jobs] and [Auto Delete Stored Jobs], see "Maintenance Menu".

Reference

- p.130 "Maintenance Menu"
- p.173 "Checking the Error Log"

Printing a Locked Print file

The following procedure describes how to print a Locked Print file with the PCL 6/PCL5e or PostScript 3 printer driver.

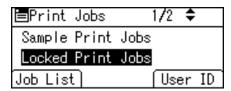
- Applications with their own drivers, such as PageMaker, do not support this function.
- Configure the Locked Print in the printer driver's properties.
 For details about configuring the printer drivers, see the corresponding Help files.
- 2. Start printing from the application's Print dialog box.

The Locked Print job is sent to the printer.

3. On the printer's control panel, press [Prt.Jobs].



Select [Locked Print Jobs] using the [▼] or [▲] key, and then press [Job List].



A list of Locked Print files stored in the printer appears.

Depending on the security settings, certain print jobs may not be displayed.

You can print files also by pressing [User ID].

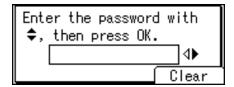
3

Select the file you want to print using the [▼] or [▲] key, and then press [Print].



The password screen appears.

6. Enter the password using the [▲], [▼], [◄] or [▶] key, and then press the [OK] key.



The print confirmation screen appears.

A confirmation screen will appear if the password is not entered correctly. Press [Clear] to enter the password again.

If you forget your password, contact your administrator for help.

7. Press [Print].

The remaining sets are printed.

To cancel printing, press [Cancel].



- When printing is completed, the stored file will be deleted.
- To stop printing after printing has started, press the [Job Reset] key. The file will be deleted.
- For details about [User ID], see "Printing from the User ID Screen".

Reference

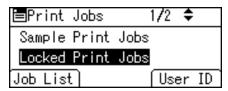
• p.114 "Printing from the User ID Screen"

Deleting Locked Print files

1. Press [Prt.Jobs].



2. Select [Locked Print Jobs] using the [$^{\blacktriangledown}$] or [$^{\blacktriangle}$] key, and then press [Job List].



A list of Locked Print files stored in the printer appears.

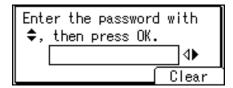
Depending on the security settings, certain print jobs may not be displayed.

3. Select the file you want to delete using the [▼] or [▲] key, and then press [Delete].



The password screen appears.

4. Enter the password using the [▲], [▼],[◀] or [▶] key, and then press the [OK] key.



The delete confirmation screen appears.

A confirmation screen will appear if the password is not entered correctly. Press [Clear] to enter the password again.

If you forget your password, contact your administrator for help.

5. Press [Delete].

The selected file is deleted.

To cancel printing, press [Cancel].

Hold Print

Use this function to temporarily hold a file in the printer, and print it from the computer or the printer's control panel later.



- A Hold Print file cannot be stored if:
 - the hard disk is not installed in the printer.

- the total number of Sample Print, Locked Print, Hold Print, and Stored Print files in the printer is over 100. (The maximum number varies depending on the volume of data in files.)
- the file contains over 1,000 pages.
- sent or stored files in the printer contain over 9,000 pages in total.



- If a Hold Print file has not been stored properly, check the error log on the control panel.
- Even after you turn off the printer, stored documents in the printer remain. However, the [Auto Delete Temporary Jobs] or [Auto Delete Stored Jobs] settings are applied first.
- If the application has a collate option, make sure it is not selected before sending a print job. By default, Hold Print jobs are automatically collated by the printer driver. If a collate option is selected from the application's Print dialog box, more prints than intended may be produced.
- Hold Print files printed or deleted using Web Image Monitor, after you select [Hold Print] using the
 control panel will appear on the display panel. However, an error message will appear if you try to
 print or delete those Hold Print files.
- If stored files have similar and long file names, recognizing the file you want to print on the display
 panel may be difficult. Print the file you want to print either by checking the user ID or the time the file
 is sent, or by changing the file name to something that can be recognized easily. If you enter the
 document name on the printer driver's [Details...], that name appears on the display panel.
- It is possible, but not required, to set a file name or a password to a Hold Print file.
- For details about the error log on the display panel, see "Checking the Error Log".
- For details about [Auto Delete Temporary Jobs] and [Auto Delete Stored Jobs], see "Maintenance Menu".

■ Reference

- p.130 "Maintenance Menu"
- p.173 "Checking the Error Log"

Printing a Hold Print file

The following procedure describes how to print a Hold Print file with the PCL 6/PCL5e or PostScript 3 printer driver.



- Applications with their own drivers, such as PageMaker, do not support this function.
- Configure Hold Print in the printer driver's properties.
 For details about configuring the printer drivers, see the relevant Help files.
- Click [Details...], and then enter a User ID in the [User ID:] box.
 You can also set a file name. The file name you set will be displayed on the printer's Job List screen.

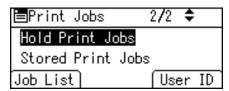
3. Start printing from the application's Print dialog box.

The Hold Print job is sent to the printer and stored.

4. On the printer's control panel, press [Prt.Jobs].



Select [Hold Print Jobs] using the [▼] or [▲] key, and then press [Job List].

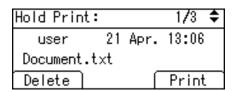


A list of Hold Print files stored in the printer appears.

Depending on the security settings, certain print jobs may not be displayed.

You can print files also by pressing [User ID].

6. Select the file you want to print using the [♥] or [♠] key, and then press [Print].



The confirmation screen appears.

7. Press [Print].

The Hold Print file is printed.

To cancel printing, press [Cancel].



- When printing is completed, the stored file will be deleted.
- To stop printing after printing has started, press the [Job Reset] key. The file will be deleted.
- For details about setting printer drivers, see the printer driver Help. You can also print or delete a Hold Print file from Web Image Monitor. For details, see Web Image Monitor Help.
- For details about [User ID], see "Printing from the User ID Screen".

Reference

• p.114 "Printing from the User ID Screen"

3

Deleting Hold Print files

1. Press [Prt.Jobs].



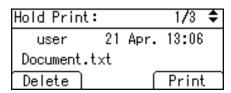
2. Select [Hold Print Jobs] using the [♥] or [♠] key, and then press [Job List].



A list of Hold Print files stored in the printer appears.

Depending on the security settings, certain print jobs may not be displayed.

3. Select the file you want to delete using the [▼] or [▲] key, and then press [Delete].



The confirmation screen appears.

4. Press [Delete].

The selected file is deleted.

To cancel printing, press [Cancel].

Stored Print

Use this function to store a file in the printer, and then print it from the computer or the printer's control panel later.

Jobs are not deleted after they are printed, so the same job need not be resent in order to print multiple copies.



- A Stored Print file cannot be stored if:
 - the hard disk is not installed in the printer.

- the total number of Sample Print, Locked Print, Hold Print, and Stored Print files in the printer is over 100. (The maximum number varies depending on the volume of data in files.)
- the file contains over 1,000 pages.
- sent or stored files in the printer contain over 9,000 pages in total.



- If a Stored Print file has not been stored properly, check the error log on the control panel.
- Even after you turn off the printer, stored documents in the printer remain. However, the [Auto Delete Temporary Jobs] or [Auto Delete Stored Jobs] settings are applied first.
- If the application has a collate option, make sure it is not selected before sending a print job. By default, Stored Print jobs are automatically collated by the printer driver. If a collate option is selected from the application's Print dialog box, more prints than intended may be produced.
- Stored Print files printed or deleted using Web Image Monitor, after you select [Stored Print] using
 the control panel will appear on the display panel. However, an error message will appear if you try
 to print or delete those Stored Print files.
- If stored files have similar and long file names, recognizing the file you want to print on the display panel may be difficult. Print the file you want to print either by checking the user ID or the time the file is sent, or by changing the file name to something that can be recognized easily.
- If you enter the document name on the printer driver's [Details...], that name appears on the display panel.
- For details about the error log on the display panel, see " Checking the Error Log".
- For details about [Auto Delete Temporary Jobs] and [Auto Delete Stored Jobs], see "Maintenance Menu".

Reference

- p.130 "Maintenance Menu"
- p.173 "Checking the Error Log"

Printing a Stored Print file

The following procedure describes how to print a Stored Print file with the PCL 6/ PCL5e or PostScript 3 printer driver.



- Applications with their own drivers, such as PageMaker, do not support this function.
- 1. Configure the Stored Print in the printer driver's properties.

You can select two ways for Stored Print:

[Stored Print]
 Stores the file in the printer and print it later using the control panel.

K

[Store and Normal Print] (or [Store and Print])
 Prints the file at once and also stores the file in the printer.

For details about configuring the printer drivers, see the relevant Help files.

2. Click [Details...], and then enter a User ID in the [User ID:] box.

You can also set a password. The same password must be entered when printing or deleting.

You can also set a file name. The file name you set will be displayed on the printer's Job List screen.

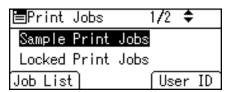
3. Start printing from the application's Print dialog box.

The Stored Print job is sent to the printer.

4. On the printer's control panel, press [Prt.Jobs].



5. Select [Stored Print Jobs] using the [▼] or [▲] key, and then press [Job List].



A list of Stored Print files stored in the printer appears.

You can print files also by pressing [User ID].

Select the file you want to print using the [▼] or [▲] key, and then press [Print].



The confirmation screen appears.

If you set a password in the printer driver, a password confirmation screen appears. Enter the password.

7. Press [Print].

The Stored Print file is printed.

To cancel printing, press [Cancel].



- When multiple files are selected without setting a quantity, one set less than the minimum number of all settings is applied. If the least number of settings is one set, all selected files will be printed at one set.
- If the number of set quantity is changed when [User ID] is pressed in step 5, the changed quantity is applied to all selected files.
- To stop printing after printing has started, press the [Job Reset] key. A Stored Print file is not deleted
 even if the [Job Reset] key is pressed.
- The Stored Print file that sent to the printer is not deleted unless you delete a file or select [Auto Delete Stored Jobs].
- You can set or delete a password after sending files to the printer. Select the file and press [Change]
 in the Print Job List screen. To set a password, enter the new password. To delete the password, leave
 the password box blank on entering or confirming the new password, and press the [OK] key.
- For details about the [Auto Delete Stored Jobs], see "Maintenance Menu".
- For details about [User ID], see "Printing from the User ID Screen".

Reference

- p.114 "Printing from the User ID Screen"
- p.130 "Maintenance Menu"

Deleting stored print files

1. Press [Prt.Jobs].



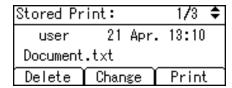
Select [Stored Print Jobs] using the [▼] or [▲] key, and then press [Job List].



A list of Stored Print files stored in the printer appears.

Depending on the security settings, certain print jobs may not be displayed.

3. Select the file you want to delete using the [▼] or [▲] key, and then press [Delete].



The delete confirmation screen will appear.

If you set the password in the printer driver, enter the password to delete.

If you forget your password, contact your administrator for help.

4. Press [Delete].

The selected file is deleted.

To cancel printing, press [Cancel].

Printing from the User ID Screen

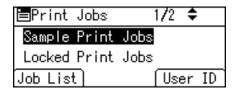
This describes how to print the files saved in the printer from the User ID screen.

Printing the Selected Print Job

1. On the initial screen, press [Prt.Jobs].

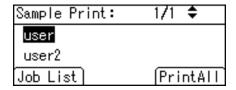


2. Press [User ID].



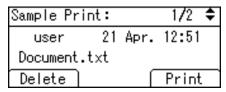
A list of user IDs whose files are stored in the printer appears.

3. Select the user ID whose file you want to print using the [▼] or [▲] key, and then press [Job List].



The print job list of the selected user ID appears.

4. Select the file you want to print using the [▼] or [▲] key, and then press [Print].



The confirmation screen appears.

5. Press [Print].

The selected file is printed.

To cancel printing, press [Cancel].

2



• If you print a Sample, Locked, or Hold Print file, the print file saved in the printer is deleted after printing is completed.

Reference

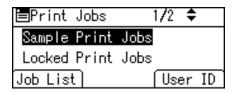
- For details about printing each type of print job, see the followings:
- p.100 "Sample Print"
- p.103 "Locked Print"
- p.106 "Hold Print"
- p.109 "Stored Print"

Printing All Print Jobs

1. On the initial screen, press [Prt.Jobs].

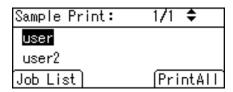


Select a type of print jobs you want to print using the [▼] or [▲] key, and then press [User ID].



A list of user IDs whose files are stored in the printer appears.

3. Select the user ID whose file you want to print using the [▼] or [▲] key, and then press [PrintAll].



The confirmation screen appears.

4. Press [Print].

The selected files are printed.

To cancel printing, press [Cancel].

U Note

- If you print a Sample, Locked, or Hold Print file, the print file saved in the printer is deleted after printing is completed.
- You cannot select a print job that is not stored under the selected user ID.
- When printing multiple Sample Print files without specifying the number of sets on the confirmation screen, one set less than the least number of set specified on the computer is applied for every selected document. If the number of sets specified on the computer is "1", one set each is printed for every document.
- When printing multiple Stored Print files without specifying the number of sets on the confirmation screen, the least number of set specified on the computer is applied for every selected document.
- If you select [Locked Print Jobs], enter the correct password. If there are multiple passwords, the printer prints only files that correspond to the entered password.
- If you select Stored Print files, and some of these require a password, the printer prints files that correspond to the entered password and files that do not require a password.

Reference

- For details about printing each type of print job, see the followings:
- p.100 "Sample Print"
- p.103 "Locked Print"
- p.106 "Hold Print"
- p.109 "Stored Print"

3

Canceling a Print Job

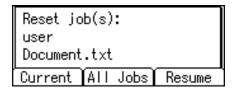
You can cancel printing from either the printer or a client computer. Since canceling procedures vary depending on the print job status, check the job status and cancel printing according to the following procedure.

Canceling a Print Job Using the Control Panel

1. Press [JobReset].

A confirmation message appears.

2. Press [Current].



To resume printing jobs, press [Resume].

3. Press [Yes] to cancel the print job.

```
Reset the current job?
user
Document.txt
No Yes
```

Press [No] to return to the previous display.

Windows - Canceling a Print Job from the computer

You can cancel a print job from the computer if transferring print jobs is not completed.

1. Double-click the printer icon on the Windows task tray.

A window appears, showing all print jobs currently queued for printing. 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].



• If the printer is shared by multiple computers, be careful not to accidentally cancel someone else's print job.

- You cannot stop printing data that has already been processed. For this reason, printing may continue
 for a few pages after you press [JobReset].
- A print job containing a large volume of data may take considerable time to stop.

Mac OS - Canceling a Print Job from the computer

1. Double-click the printer icon on the desktop.

A window appears showing all print jobs that are currently queuing to be printed. Check the current status of the job you want to cancel.

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.



- If the printer is shared by multiple computers, be careful not to accidentally cancel someone else's print job.
- If the printer is connected to the computer using a parallel cable, sent print jobs may be canceled if [JobReset] is pressed while "Please wait..." is displayed on the control panel. After the interval set in [I/O Timeout] in Printer Features has passed, the next print job can be sent. A print job sent from a different client computer will not be canceled in this case.
- You cannot stop printing data that has already been processed. For this reason, printing may continue
 for a few pages after you press [JobReset].
- A print job containing a large volume of data may take considerable time to stop.

3

4. Making Printer Settings Using the Control Panel

This chapter explains the menu displayed on the control panel and how to change the printer's settings.

Menu Chart

This section explains how to change the default settings of the printer and provides information about the parameters included in each menu.

Memory Erase Status

Displays data status inside the memory.

This menu can be selected only when the optional security card is installed.

Paper Input

Menu
Paper Size: Bypass Tray
Paper Size: Tray 1
Paper Size: Tray 2
Paper Size: Tray 3
Paper Type: Bypass Tray
Paper Type: Tray 1
Paper Type: Tray 2
Paper Type: Tray 3
Duplex Tray
Auto Tray Select
Tray Priority



• Only installed trays appear on the display panel.

Quality Maintenance
General Settings
Timer Settings
HD Management
Machine Settings Export

Menu

• [HD Management] appears only when the optional hard disk is installed.

List/Test Print

U Note

Menu
Multiple Lists
Config. Page
Error Log
Network Summary
Supply Info List
Menu List
PCL Config./Font Page
PS Config./Font Page
PDF Config./Font Page
IPDS Font List
Hex Dump

Note

• [IPDS Font List] appears only when the optional IPDS unit is installed.

System

Menu
Print Error Report
Auto Continue
Memory Overflow
Printer Language
Sub Paper Size
Default Printer Lang.
Energy Saver
Print Compressed Data
Memory Usage
Spool Printing
RAM Disk
Auto E-mail Notify



- [Spool Printing] appears only when the optional hard disk is installed.
- [RAM Disk] appears only when the optional hard disk is not installed.

Print Settings

Menu
Machine Modes
PCL Menu
PS Menu
PDF Menu
IPDS Menu



• [IPDS Menu] appears only when the optional IPDS unit is installed.

Menu
Extended Security
Service Mode Lock
Firmware Version
Network Security Level
Auto Erase Memory Setting
Erase All Memory
Transfer Log Setting
Machine Data Encryption



- [Service Mode Lock] may not appear depending on the setting of the printer.
- [Auto Erase Memory Setting] and [Erase All Memory] appear when the optional security card is installed.
- [Machine Data Encryption] appears only when the optional HDD encryption unit is installed.

Host Interface

Menu
I/O Buffer
I/O Timeout
Network
Parallel Interface
Wireless LAN
USB Settings

UNote

- [Parallel Interface] appears when the optional IEEE 1284 interface board is installed.
- [Wireless LAN] appears when the optional wireless LAN interface unit is installed.

Shutdown

Prepares the printer for power off. To prevent damage to the hard disk or memory leading to malfunction, be sure to shutdown the printer properly before turning off the power switch.



• For details about shutting down the printer, see "Turning off the Power", Hardware Guide.

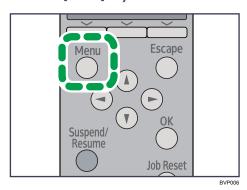
Language

Menu
English
German
French
Italian
Dutch
Swedish
Norwegian
Danish
Spanish
Finnish
Portuguese
Czech
Polish
Hungarian
Russian

Displays data status inside the memory.



- The Memory Erase Status menu appears only when the optional security card is installed.
- 1. Press the [Menu] key.



The menu screen appears.

- 2. Press the [▼] or [▲] key to select [Memory Erase Status], and then press the [OK] key.
- 3. The current memory status is displayed.

[Data to erase remaining.] : Data remain inside the memory.

[Currently no data to erase.]: No data remain inside the memory.

[Erasing Data...]: Data are being deleted.

4. Press the [OK] key.

The menu screen appears.

5. Press the [Menu] key.

The initial screen appears.

4

4

Paper Input Menu

This section explains about paper settings on the paper input menu such as paper sizes and types on each tray.

Paper Input Menu Parameters

This section explains about parameters that can be set on the paper input menu.

Paper Size: Bypass Tray

You can specify the paper size for Bypass Tray.

Default:

220-240V : A4D

120V : 8¹/₂ × 11 □

- **220-240V**: A3D, A4DD, A5DD, A6D B4 JISD, B5 JISDD, C5 Env.D, C6 Env.D, DL Env.D, 11 × 17D, $8^{1}/_{2}$ × 14D, $8^{1}/_{2}$ × 13D, $8^{1}/_{2}$ × 11DD, $8^{1}/_{4}$ × 13D, 8 × 13D, $7^{1}/_{4}$ × $10^{1}/_{2}$ DD, $5^{1}/_{2}$ × $8^{1}/_{2}$ D, $4^{1}/_{8}$ × $9^{1}/_{2}$ D, $3^{7}/_{8}$ × $7^{1}/_{2}$ D, 8KD, 16KDD, Custom Size
- 120V : $11 \times 17^{\text{D}}$, $8^{1}/_{2} \times 14^{\text{D}}$, $8^{1}/_{2} \times 13^{\text{D}}$, $8^{1}/_{2} \times 11^{\text{D}}$, $8^{1}/_{4} \times 13^{\text{D}}$, $8 \times 13^{\text{D}}$, $7^{1}/_{4} \times 10^{1}/_{2}^{\text{D}}$, $5^{1}/_{2} \times 8^{1}/_{2}^{\text{D}}$, $4^{1}/_{8} \times 9^{1}/_{2}^{\text{D}}$, $3^{7}/_{8} \times 7^{1}/_{2}^{\text{D}}$, A3D, A4DD, A5DD, A6D, B4 JISD, B5 JISDD, C5 Env.D, C6 Env.D, DL Env.D, 8KD, 16KDD, Custom Size

Paper Size: Tray 1

You can specify the paper size for Tray 1.

Default:

220-240V · △⊿□

120V : 8¹/₂ × 11 □

- $\boxed{\textbf{220-240V}}$: A3D, A4DD, A5D, B4 JISD, B5 JISDD, $11 \times 17D$, $8^1/_2 \times 14D$, $8^1/_2 \times 13D$, $8^1/_2 \times 11DD$, $8^1/_4 \times 13D$, $8 \times 13D$, $7^1/_4 \times 10^1/_2DD$, $5^1/_2 \times 8^1/_2D$, 8KD, 16KDD, Custom Size
- 120V : $11 \times 17^{\text{D}}$, $8^{1}/_{2} \times 14^{\text{D}}$, $8^{1}/_{2} \times 13^{\text{D}}$, $8^{1}/_{2} \times 11^{\text{D}}$, $8^{1}/_{4} \times 13^{\text{D}}$, $8 \times 13^{\text{D}}$, $7^{1}/_{4} \times 10^{1}/_{2}^{\text{D}}$, $5^{1}/_{2} \times 8^{1}/_{2}^{\text{D}}$, A3D, A4DD, A5D, B4 JISD, B5 JISDD, 8KD, 16KDD, Custom Size

Paper Size: Tray 2 to 3

You can specify the paper size for Tray 2 to 3.

Default:

220-240V : A⊿□

120V : 8¹/₂ × 11 □

- $\boxed{\textbf{220-240V}}$: A3D, A4DD, A5D, B4 JISD, B5 JISDD, C5 Env.D, C6 Env.D, DL Env.D, 11×17 D, $8^1/_2 \times 14$ D, $8^1/_2 \times 13$ D, $8^1/_2 \times 11$ DD, $8^1/_4 \times 13$ D, 8×13 D, $7^1/_4 \times 10^1/_2$ DD, $4^1/_8 \times 9^1/_2$ D, $3^7/_8 \times 7^1/_2$ D, 8KD, 16KDD, Custom Size
- 120V : $11 \times 17^{\text{D}}$, $8^{1}/_{2} \times 14^{\text{D}}$, $8^{1}/_{2} \times 13^{\text{D}}$, $8^{1}/_{2} \times 11^{\text{D}}$ D, $8^{1}/_{4} \times 13^{\text{D}}$, $8 \times 13^{\text{D}}$, $7^{1}/_{4} \times 10^{1}/_{2}$ DD, $4^{1}/_{8} \times 9^{1}/_{2}$ D, $3^{7}/_{8} \times 7^{1}/_{2}$ D, A3D, A4DD, A5D, B4 JISD, B5 JISDD, C5 Env.D, C6 Env.D, DL Env.D, 8KD, 16KDD, Custom Size

Paper Type: Bypass Tray

Default: [No Display (Plain Paper)]

For details about the types of paper that can be loaded in the Bypass Tray, see Hardware Guide.

Be sure to set a paper type using the control panel. If you do not set it, the printing result might not be proper.

No Display (Plain Paper), Recycled Paper, Special Paper 1, Special Paper 2, Special Paper 3, Colour Paper, Letterhead, Label Paper, OHP (Transparency), Envelope, Preprinted Paper, Bond Paper, Cardstock, Thick Paper 1, Thick Paper 2, +Custom1, +Custom2, +Custom3, +Custom4, +Custom5, +Custom6, +Custom7, +Custom8

Paper Type: Tray 1 to 3

Default: [No Display (Plain Paper)]

For details about the types of paper that can be loaded in each tray, see Hardware Guide.

Be sure to set a paper type using the control panel. If you do not set it, the printing result might not be proper.

Only installed trays appear on the display panel.

No Display (Plain Paper), Recycled Paper, Special Paper 1, Special Paper 2, Colour Paper, Letterhead, Label Paper, Envelope, Preprinted Paper, Bond Paper, Cardstock, Thick Paper 1, Thick Paper 2, +Custom1, +Custom2, +Custom3, +Custom4, +Custom5, +Custom6, +Custom7, +Custom8

Duplex Tray

You can set each tray for duplex printing. Only installed trays appear on the display panel.

• Tray 1 to Tray 3, Bypass Tray

Default: [On]

- On
- Off

Auto Tray Select

You can select whether to assign each tray to automatically print the paper size and type set by printer driver.

• Tray 1 to Tray 3, Bypass Tray

Default: [On]

- On
- Off



- When using custom size paper, if automatic tray selection is enabled, the size selected on the
 control panel has priority. If this setting is disabled, the size selected from the printer driver has
 priority.
- Only installed trays appear on the display panel.
- You can select multiple trays.
- If you need to have a tray locked, you must select the tray using both printer driver and control panel.

Tray Priority

You can set a tray to be checked first when automatic tray selection is enabled from the printer driver. The tray selected here is used when no tray is selected for a print job.

Default: [Tray 1]



- Only installed trays appear on the display panel.
- It is recommended that you load paper of the size and orientation you use most frequently in the tray selected in this setting.

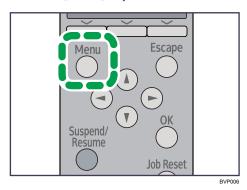


• JIS stands for "Japanese Industrial Standard".

Changing the Paper Input Menu

Automatic tray selection

Follow the procedure below to change the automatic tray selection setting.



The menu screen appears.

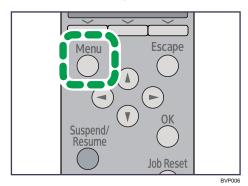
- 2. Press the [▼] or [▲] key to select [Paper Input], and then press the [OK] key.
- 3. Press the [▼] or [▲] key to select [Auto Tray Select], and then press the [OK] key.
- 4. Press the [♥] or [♠] key to select the tray you want to select, and then press the [OK] key.
- Press the [▼] or [▲] key to select [On], and then press the [OK] key.
 - Wait for one second. The [Auto Tray Select] screen appears.
- 6. Press the [Menu] key.

The initial screen appears.

Tray priority

Follow the procedure below to change the tray priority.

1. Press the [Menu] key.



The menu screen appears.

- 2. Press the [▼] or [▲] key to select [Paper Input], and then press the [OK] key.
- 3. Press the [▼] or [▲] key to select [Tray Priority], and then press the [OK] key.

4

4. Press the [▼] or [▲] key to select a tray you want to use, and then press the [OK] key.
Wait for one second. The [Paper Input] screen appears.

5. Press the [Menu] key.

The initial screen appears.

You can set printing conditions such as density and calibration, and printer management such as deleting temporary print jobs from the hard disk.

Maintenance Menu Parameters

This section explains about parameters that can be set on the maintenance menu.

Quality Maintenance

Image Density

Adjusting the print image density can prevent faint spots or smears appearing on printed pages.

You can specify a density value between -6 and +3.

- Denc. (Thick Ppr 2)
- Denc. (Excl. Thick Ppr 2)



- Only change this setting from its default value if necessary.
- For details about adjusting the print image density, see "Adjusting the Image Density", Hardware Guide.

Registration

You can adjust the starting position of the printing page.

Print Test Sheet

You can print the registration test sheet.

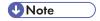
Tray 1 to 3, Bypass Tray, Duplex.Unit



- Only the installed trays appear on the display panel.
- Adjustment

You can select the start position for printing on a page.

Horizontal: Tray 3, Horizontal: Bypass Tray, Horizontal: Duplex.Back



• Only the installed trays appear on the display panel.

Curl Prevention

You can control the fuser temperature to prevent paper from curling.

4

Default: [Off]

- On
- Off



• Use this mode only when paper misfeed occurs frequently during duplex printing.

General Settings

Replacement Alert

Use this function to specify the timing to notify user when supplies need to be replaced. Settings can be made separately for photo conductor unit, intermediate transfer unit, or fusing unit.

• Fusing Unit

Default: [Normal]

- Notify Sooner
- Normal
- Notify Later

Supply End Option

You can specify whether or not to continue printing after the photoconductor exceeds its service life.

Default: [Continue Printing]

- Continue Printing
- Stop Printing

Display Supply Info

You can select whether or not the amount of toner is displayed on the initial screen.

Default: [On]

- On
- Off

Envelope Lever Alert

You can select whether or not the position of the envelope lever is displayed on the initial screen.

Default: [Display]

- Display
- Do not Display

Menu Protect

You can select whether or not to protect the menu settings. If you enable this setting, you must specify a protection level.

Default: [Level 2]

- Level 1
- Level 2
- Off



- If you would like to lower the protection level, disable this setting or select [Level 1].
- You may not be able to change this setting depending on the setting of the printer.

List/Test Print Lock

You can select whether or not to prohibit List/Test printing.

Default: [Off]

- On
- Off



• You may not be able to change this setting depending on the setting of the printer.

Unit of measure

You can specify the unit for measurement.

Default:

220-240V : [mm]
120V : [inch]

- mm
- inch

Panel Key Sound

You can select whether or not to enable the panel key sound.

Default: [On]

- On
- Off

Warm-up Beeper

You can select whether or not to sound the beeper when the printer has completed a warm-up process.

Default: [Off]

- On
- Off

Display Contrast

You can specify the density of the display.

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Key Repeat

You can specify whether or not to scroll the display panel when the $[\P]$ or [A] key is held down. When you enable this setting, specify the scroll speed. (If repeat time is set to "Long", scroll speed becomes slow.)

Default: [Normal]

Do not Repeat

Normal

Repeat Time: Medium

· Repeat Time: Long

Timer Settings

Auto Reset Timer

Specify whether or not to cancel settings made if no operation has been performed for a certain period of time while changing configuration using the control panel. When set to on, specify how long the printer is to wait before resetting configuration.

Default: [On] (60 seconds)

On

Off

Set Date

You can set the date of the printer's internal clock using the [▼] or [▲] key.

Set Time

You can set the time of the printer's internal clock using the [♥] or [▲] key.

HD Management

Specify the settings related to deletion of data saved on the hard disk. This menu appears only when the optional hard disk is installed.

Delete All Temporary Jobs

Use this function to delete all temporary documents saved on the hard disk (Sample Print, Locked Print and Hold Print data) at once.

Delete All Stored Jobs

Use this function to delete all Stored Print data saved on the hard disk at once.

Specify whether or not to automatically delete temporary documents saved on the hard disk (Sample Print, Locked Print and Hold Print data). When set to on, specify how long the printer is to wait before deleting the documents.

Default: [Off]

- On
- Off



• If you enable this setting, specify the timer in hours. (Default: 8 hours)

Auto Delete Stored Jobs

Specify whether or not to automatically delete Stored Print data saved on the hard disk. When set to on, specify how long the printer is to wait before deleting the documents.

Default: [On]

- On
- Off



• If you enable this setting, specify the timer in days. (Default: 3 days)

Reset IPDS Fonts

Use this page to delete all IPDS captured fonts.



This menu appears only when the optional IPDS unit is installed.

Machine Settings Export

Use this function to store the machine's configuration settings on an SD card. Information stored on the card can be used to restore the machine's configuration. The card can also be used to export this machine's configuration settings to another machine of the same manufacturer.

The settings under [Option], [Paper Input], [Maintenance], [System], [Print Settings], and [Host Interface] can be exported. Note that only settings common to both the source and target machines can be exported using the card. To import the stored settings, make sure the target printer's power is turned off, and then insert the SD card into slot of the target printer. Then, while pressing the [Job Reset] key, turn on the power of the target printer.



- For details about inserting the SD card and the location of the slot, see the manual that explains
 the features of your printer's hardware.
- For details about the machines to which settings can be exported using an SD card, consult your supplier.

4

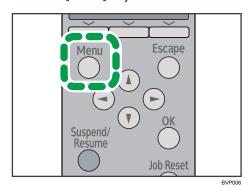
Changing the Maintenance Menu

This section explains changing the maintenance menu using examples.

Automatic deletion of temporary jobs in the hard disk

Follow the procedure below to set automatic deletion of temporary jobs stored in the hard disk.

1. Press the [Menu] key.



The menu screen appears.

- 2. Press the [▼] or [▲] key to select [Maintenance], and then press the [OK] key.
- 3. Press the [♥] or [▲] key to select [HD Management], and then press the [OK] key.
- Press the [▼] or [▲] key to select [Auto Delete Temporary Jobs], and then press the [OK] key.
- 5. Press the [▼] or [▲] key to select [On], and then press the [OK] key.
- 6. Press the [▼] or [▲] key to set automatic deletion timer in hours between 1 through 200.
- 7. Press the [OK] key.

Wait for one second. The hard disk management screen appears.

8. Press the [Menu] key.

The initial screen appears.

The list/test print menu allows you to print lists showing the printer configuration and the setting status of print-related conditions.

List/Test Print Menu Parameters

This section explains about parameters that can be set on the list/test print menu.

Multiple Lists

You can print the configuration page and error log, network summary and supply list.

Config. Page

You can print the current configuration of the printer.

Error Log

You can print an error report.

Network Summary

You can print the network device status.

Supply Info List

You can print the supply status.

Menu List

You can print a menu list showing all available menus.

PCL Config./Font Page

You can print the current configuration and installed PCL font list.

PS Config./Font Page

You can print the current configuration and installed PostScript font list.

PDF Config./Font Page

You can print the current configuration and installed PDF font list.

IPDS Font List

You can print a list of IPDS-supported fonts.

Hex Dump

You can print the data sent by the computer using Hex Dump.

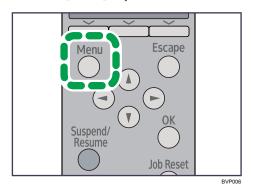
Printing a Configuration Page

Follow the procedure below to print the configuration page.

4

Mportant !

- The configuration page is printed on A4 or Letter (8¹/₂"×11") size paper, so load them in the same paper tray.
- 1. Press the [Menu] key.



The menu screen appears.

- 2. Press the [▼] or [▲] key to select [List/Test Print], and then press the [OK] key.
- Press the [▼] or [▲] key to select [Config. Page], and then press the [OK] key.
 After the configuration page is printed out, the screen returns to List/Test print menu.
- 4. Press the [Menu] key.

The initial screen appears.

Interpreting the Configuration Page

System Reference

Machine ID

Shows the serial number assigned to the board by its manufacturer.

Total Counter

Shows the total number of pages printed by the printer to date.

Firmware Version

- Printer
 - Shows the version number of the printer controller firmware.
- Engine

Shows the version number of the printer engine firmware.

NIB

Shows the version number of the network interface board.

Shows the names of device options installed in the printer.

HDD: Font / Macro Download

Shows the hard disk status.

Printer Language

Shows the version number of the printer language.

Attached Equipment

Shows the options attached to the printer.

Paper Input

Shows the current Paper Input settings.



• For details, see "Paper Input Menu".



• p.125 "Paper Input Menu"

Maintenance

Shows the current Maintenance settings.



• For details, see "Maintenance Menu".

■ Reference

• p.130 "Maintenance Menu"

System

Shows the current System settings.



• For details, see "System Menu".

■ Reference

• p.141 "System Menu"

Machine Modes

Shows the current machine modes settings.



• For details, see "Print Settings Menu".

Reference

• p.146 "Print Settings Menu"

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PCL Menu

Shows the current PCL settings.



• For details, see "Print Settings Menu".



• p.146 "Print Settings Menu"

PS Menu

Shows the current PS settings.



• For details, see "Print Settings Menu".



• p.146 "Print Settings Menu"

PDF Menu

Shows the current PDF settings.



• For details, see "Print Settings Menu".

Reference

• p.146 "Print Settings Menu"

IPDS Menu

Shows the current IPDS Menu.



• For details, see "Print Settings Menu".

Reference

• p.146 "Print Settings Menu"

Host Interface

Shows the current Host Interface settings.

When DHCP is active on the network, the IPv4 address, subnet mask and gateway address appear in parentheses.



• For details, see "Host Interface Menu".

Reference

• p.165 "Host Interface Menu"

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Interface Information

Interface information is displayed.

User Paper Type

Registered user paper types are displayed.

System Menu

The system menu allows you to set the printer's basic functions. Although you can operate the printer using the default settings, you can also change its settings to better suit your printing needs. Changes made to settings remain effective after power off.

System Menu Parameters

This section explains about parameters that can be set on the system menu.

Print Error Report

Select whether or not to print an error report when a printer error or memory error occurs.

Default: [Off]

- On
- Off

Auto Continue

Specify whether or not to continue printing after a system error. When you enable this setting, specify how long the printer is to display error before resuming print.

Default: [Off]

- Off
- Immediate
- 1 minute
- 5 minutes
- 10 minutes
- 15 minutes



When [Auto Continue] is set to on, and a certain error occurs in the printer while printing, the
job might be cancelled, or printing will not be as intended. When a job is cancelled due to error,
the printer automatically begins the next job in the queue.

Memory Overflow

You can specify whether or not to print a memory overflow error report.

Default: [Do not Print]

- Do not Print
- Error Information

Printer Language

You can specify the printer language.

Default: [Auto]

- Auto
- PCL
- PS
- PDF

Sub Paper Size

Specify whether or not to use paper of the alternate size automatically, if paper of the specified size is not loaded. When this setting is set to off, the printer uses paper of any size loaded in the specified tray.

Default: [Auto]

- Auto
- Off

Default Printer Lang.

Select the printer language to use when the printer fails to detect the printer language.

Default: [PCL]

- PCL
- PS
- PDF

Energy Saver

You can specify the number of minutes Energy Saver mode is applied.

Energy Saver On/Off

You can specify whether or not to switch Energy Saver.

Default: [On]

- On
- Off



 When the printer switches to Energy Saver mode, the Power indicator is unlit, but the Online indicator remains lit.

Energy Saver Timer

Specify the lead time needed to switch to Energy Saver mode.

Default: [1 minute]

- 1 minute
- 5 minutes
- 15 minutes

- 30 minutes
- 45 minutes
- 60 minutes

Print Compressed Data

Specify whether or not to print compressed data.

Default: [Off]

- On
- Off

Memory Usage

Select memory to be used from Font Priority or Frame Priority.

Default: [Frame Priority]

- Font Priority
- Frame Priority

Spool Printing

Specify whether or not to complete spooling before starting to print.

Default: [Off]

- On
- Off



- Spooling stores a sent print job temporarily in the printer, and then prints it.
- This menu appears only when the optional hard disk is installed.

RAM Disk

If the optional hard disk is not installed for PDF Direct Print, select a value of 2 MB or higher.

Default: [4 MB]

- O MB
- 2 MB
- 4 MB
- 8 MB
- 16 MB



When the amount of SDRAM is small and [RAM Disk] is set to [16 MB], printing may not be
possible depending on the print job and duplex printing may be canceled. If this happens,
increase the amount of SDRAM, or set [RAM Disk] to [8 MB] or less.



- This menu appears only when the optional hard disk is not installed.
- For details about the optional SDRAM module, see Hardware Guide.

Auto E-mail Notify

Specify whether or not to send an error message to a preset e-mail address when an error occurs in the printer.

Default: [On]

- On
- Off



After changing the setting, turn off the power of the printer briefly, and then turn it on again.

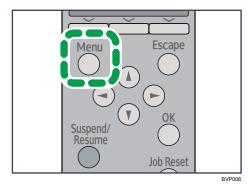


• For information, see Web Image Monitor Help.

Changing the System Menu

Follow the procedure below to change the settings for Energy Saver Timer.

Press the [Menu] key.



The menu screen appears.

- 2. Press the [▼] or [▲] key to select [System], and then press the [OK] key.
- 3. Press the [▼] or [▲] key to select [Energy Saver], and then press the [OK] key.
- 4. Press the [▼] or [▲] key to select [Energy Saver Timer], and then enter the [OK] key.
- 5. Press the [▼] or [▲] key to select the lead time needed to switch to Energy Saver mode.
- 6. Press the [OK] key.

Wait for one second. The Energy Saver screen appears.

7. Press the [Menu] key.

The initial screen appears.

Print Settings Menu

The system menu allows you to set conditions for printing.

Print Settings Menu Parameters

This section explains about parameters that can be set on the print settings menu.

Machine Modes

Copies

Specify the number of copies to print.

If the number of copies to print is specified by command or the printer driver, this setting is overridden.

• 1 to 999

Page Size

Specify the default paper size.

Default:

220-240V : A4

120V : $8^{1}/_{2} \times 11$



• The default paper size is used when the paper size is not specified in the print data.

220-240V: A3, A4, A5, A6, B4 JIS, B5 JIS, B6 JIS, C5 Env., C6 Env., DL Env., 11×17 , $8^{1}/_{2} \times 14$, $8^{1}/_{2} \times 13$, $8^{1}/_{2} \times 11$, $8^{1}/_{4} \times 13$, 8×13 , $7^{1}/_{4} \times 10^{1}/_{2}$, $5^{1}/_{2} \times 8^{1}/_{2}$, $4^{1}/_{8} \times 9^{1}/_{2}$, $3^{7}/_{8} \times 7^{1}/_{2}$, 8K, 16K, Custom Size

120V : 11 × 17, $8^{1}/_{2}$ × 14, $8^{1}/_{2}$ × 13, $8^{1}/_{2}$ × 11, $8^{1}/_{4}$ × 13, 8 × 13, $7^{1}/_{4}$ × $10^{1}/_{2}$, $5^{1}/_{2}$ × $8^{1}/_{2}$, $4^{1}/_{8}$ × $9^{1}/_{2}$, $3^{7}/_{8}$ × $7^{1}/_{2}$, A3, A4, A5, A6, B4 JIS, B5 JIS, B6 JIS, C5 Env., C6 Env., DL Env., 8K, 16K, Custom Size

Edge to Edge Print

Select to whether or not to print using the whole area of paper, leaving no edge borders.

Default: [Off]

- On
- Off

Duplex

Select whether or not to print on both sides of a sheet. When set to on, specify the binding method.

Default: [Off]

• Off

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- Long Edge Bind
- Short Edge Bind

Rotate by 180 Degrees

Select whether or not to rotate image by 180 degrees when printing.

Default: [Off]

- On
- Off

Blank Page Print

Select whether or not to print blank pages.

Default: [On]

- On
- Off

Edge Smoothing

Default: [On]

- On
- Off

Toner Saving

Default: [Off]

- On
- Off

Letterhead Setting

Specify whether or not to print with the letterhead printing mode.

Default: [Auto Detect]

Off

Not printing with the letterhead printing mode.

Auto Detect

Print with the letterhead printing mode when the letterhead printing mode is selected.

• On (Always)

Print with the letterhead printing mode regularly.

Tray Setting Priority

Specify whether the paper size and type settings that are applied are those specified using the control panel, printer driver, or print command.

• Bypass Tray

Specify whether the paper size and type settings applied for bypass Tray are those specified using the control panel, printer driver, or print command.

Default: [Driver/Command]

• Driver/Command

When the source paper tray is specified for a print job, the paper settings specified using the printer driver or by print command are applied, regardless of any settings specified using the control panel.

Machine Settings

The paper settings specified on the machine's control panel are applied to all print jobs. An error will occur if the paper settings specified using the printer driver or by print command do not match those specified using the control panel.

Any Size/Type

If the machine's trays do not contain paper matching the settings of the print job, printing can proceed from the bypass tray with the job's settings applied.

• Any Custom Size/Type

If the machine's trays do not contain paper matching the settings of the print job but custom paper was specified using the printer driver or by print command, printing can proceed from the bypass tray with the job's settings applied.

• Tray 1

Specify whether the paper size and type settings applied for Tray 1 are those specified using the control panel, printer driver, or print command.

Default: [Machine Settings]

- Driver/Command
- Machine Settings
- Tray 2

Specify whether the paper size and type settings applied for Tray 2 are those specified using the control panel, printer driver, or print command.

Default: [Machine Settings]

- Driver/Command
- Machine Settings
- Tray 3

Specify whether the paper size and type settings applied for Tray 3 are those specified using the control panel, printer driver, or print command.

Default: [Machine Settings]

- Driver/Command
- Machine Settings

Tray Switching

You can specify whether or not the machine automatically switches paper trays if paper of the specified size and type is not loaded in the driver-designated tray.

Default: [Off]

- On
- Off

Extend Auto Tray Switching

This setting enables the machine to switch paper trays automatically, regardless of whether the tray is manually or automatically selected.

Default: [Off]

- On
- Off

PCL Menu

You can set conditions when using PCL for printing.

Orientation

Select the page orientation.

Default: [Portrait]

- Portrait
- Landscape

Form Lines

Specify the number of lines per page between 5 and 128.

Default:

220-240V : 64 120V : 60

• The default paper size is used when the paper size is not specified in the print data.

Font Source

Specify the location of the default font.

Default: [Resident]

- Resident
- RAM
- HDD
- SD
- SD Font Download



- When you select [RAM], you can select only fonts downloaded to the printer RAM.
- When you select [HDD], you can select only fonts downloaded to the optional hard disk.
- When you select [SD Font Download], you can select only fonts downloaded to the SD card.

Font Number

Specify the ID of the default font you want to use.

Default: 0

- 0 to 63 (Resident)
- 1 to X (Download; "X" is the number of downloaded fonts)

Point Size

Specify the point size you want to use for the default font between 4 and 999.75 in 0.25 increments.

Default: 12.00 points



• This setting is effective only for a variable-space font.

Font Pitch

Specify the number of characters per inch you want to use for the default font between 0.44 and 99.99 in 0.01 increments.

Default: 10.00 pitch



• This setting is effective only for fixed-space fonts.

Symbol Set

You can specify the character set for the default font. Available sets 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

Default: [PC-8]

Courier Font

Select the type of courier font.

Default: [Regular]

- Regular
- Dark

Ext. A4 Width

Select whether or not to extend the width of the printable area of A4 sheets, by reducing side margins.

Default: [Off]

- On
- Off

Append CR to LF

Select whether or not to append a CR code to each LF code to print text data clearly.

Default: [Off]

- On
- Off

Resolution

You can specify the print resolution in dots per inch.

Default: [600dpi]

- 300dpi
- 600dpi

PS Menu

You can set conditions when using PostScript for printing.

Job Timeout

You can specify how long the printer waits (in seconds) before canceling the current job when the job is interrupted while being processed.

Default: [Use Driver/Command]

- Use Driver/Command
- Use Machine Settings



• If you select Use Machine Settings, enter a value between 0 and 999. (Default: 0)

Wait Timeout

You can specify how long the printer waits (in seconds) before it cancels receiving a job when the printer cannot detect the end of the job.

Default: [Use Driver/Command]

- Use Driver/Command
- Use Machine Settings



• If you select Use Machine Settings, enter a value between 0 and 999. (Default: 300)

Data Format

Select the data format from Binary Data or TBCP.

This setting is ineffective when using a parallel or EtherTalk connection.

When using a parallel or USB connection, the print job is canceled if binary data is sent from the printer driver.

Default: [TBCP]

When using an Ethernet connection, the print job is canceled if:

- The printer driver data format is TBCP and the data format selected using the control panel is Binary Data.
- The printer driver data format is binary and the data format selected using the control panel is TBCP.

Resolution

Select the resolution.

Default: [600dpi]

- 300dpi
- 600dpi
- 1200dpi

PDF Menu

You can set conditions when using PDF for printing.

Change PDF Password

Specify the password for the PDF file executing PDF Direct Print.



- If you do not set a PDF password, this menu does not appear.
- The password can be set using Web Image Monitor, but must be sent through the network.
 For increased security, use this menu on the control panel to set the password directly.

PDF Group Password

This setting is not available on this printer.

Resolution

Specify the resolution for the PDF file executing PDF Direct Print.

Default: [600dpi]

- 300dpi
- 600dpi
- 1200dpi

IPDS Menu

You can set conditions when using IPDS for printing.

Tray Form

Specify an IPDS form for each paper tray.

For each paper tray, select the IPDS form you want to allocate to it.

- Tray 1
- Tray 2
- Tray 3
- Bypass Tray



• Only installed trays appear on the display panel.

Emulation Mode

Specify the emulation mode.

Default: [Native]

- Native
- 4028

Print Mode

Specify the print mode.

Default: [Enhanced]

- Standard
- Enhanced

Def. Code Page

Specify the default code page.

Default: 37

- 37
- 38
- 260
- 273
- 274
- 276
- 277
- 278
- 280

- 281
- 284
- 285
- 286
- 287
- 288
- 290
- 297
- 420
- 423
- 424
- 500
- 870
- 871
- 875
- 880
- 892
- 893
- 905
- 1025
- 1026
- 1140
- 1141
- 1142
- 1143
- 1144
- 1145
- 1146
- 1147
- 1148
- 1149

Default FGID

Specify the default FGID (Font Typeface Global Identifier), which identifies the printer's default resident font.

Default: 416

- 3
- 11
- 12
- 18
- 19
- 46
- 85
- 86
- 92
- 111
- 112
- 159
- 164
- 203
- 221
- 223254
- 256
- 281
- 283
- 290
- 304
- 305
- 306
- 318
- 319
- 400
- 404
- 416

- 420
- 424
- 428
- 432
- 2304
- 2305
- 2306
- 2307
- 2308
- 2309
- 2310
- 2311
- 5687
- 5707
- 5815
- 5835
- 20224

Chara. Per Inch

Specify the number of characters per inch (pitch) for the default font. Valid values are 5.0 to 30.0 in units of one tenth of an inch.

Default: 10.0

Valid Prnt.Area

Enable or disable valid printable area checking.

Default: [On]

- On
- Off

Page

Specify how data is positioned on the page.

Default: [Whole]

- Whole
- Comp1
- Comp2
- Print

Edge to Edge

Enable or disable "Edge to Edge" printing.

Default: [Off]

- On
- Off

Font Substitution

Enables or disables font substitution.

Default: [Off]

- On
- Off

Caching

Specify whether or not to apply caching for repeated overlays.

Default: [Off]

- On
- Off

Font Capture

Enable or disable font capturing.

Default: [On]

- On
- Off



• This menu appears only when the optional hard disk is installed.

Resolution

Specify the resolution reported to the host in the "IPDS XOAOPC" command for raster coded fonts and IM1 image support.

Default: [300 dpi]

- Auto
- 240 dpi
- 300 dpi
- 600 dpi

Graph.Char.Str.

Specify the Graphic Character String (Graphic Character Sizing) processing method.

Default: [Auto]

- Auto
- Character Scale
- Font Activation

Bar Code

Specify the barcode level protocol.

Default: [Auto]

- Auto
- 4028
- Native

Box Draw

Specify the Box Draw processing.

Default: [Off]

- On
- Off

Clr. Simulation

Let you specify how color specification controls are processed on a monochromatic printer.

Default: [Fidelity]

- Fidelity
- Legacy

Text Colour Sim.

Specify how text color specification controls are processed on a monochrome laser printer.

Default: [On]

- On
- Off

Tray Mapping

Map the media source (input tray) to an ID the host uses for the media source.

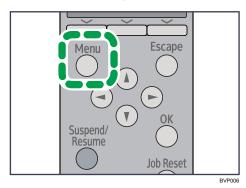
Default: [Auto]

- IPDS Tray
- Auto

Changing the Print Settings Menu

Follow the procedure below to change Tray Setting Priority.

1. Press the [Menu] key.



The menu screen appears.

- 2. Press the [▼] or [▲] key to select [Print Settings], and then press the [OK] key.
- 3. Press the [▼] or [▲] key to select [Machine Modes], and then press the [OK] key.
- 4. Press the [♥] or [▲] key to select [Tray Setting Priority], and then enter the [OK] key.
- Press the [▼] or [▲] key to select the tray whose paper type or size you want to change, and then press the [OK] key.
- 6. Press the [▼] or [▲] key to select the desired setting item, and then press the [OK] key.
 Wait for one second. The [Machine Modes] screen appears.
- 7. Press the [Menu] key.

The initial screen appears.

Security Options Menu

The system menu allows you to set conditions for printing.

Security Options Menu Parameters

This section explains about parameters that can be set on the security options menu.

Extended Security

Depending on the setting of the printer, some of the settings listed below may not appear.

Driver Encryption Key

Specify the driver encryption key.

Encrypt Address Book

Select whether or not to encrypt the printer's address book data.

Default: [Off]

- On
- Off

Restrict User Info.Display

Select whether or not to display user information as "****** when checking job information without being authenticated through user authentication.

Default: [Off]

- On
- Off

Enhance File Protection

Select whether or not to automatically lock password-protected print files if an invalid password is entered ten times. When a file is locked, you cannot select them even if the correct password is entered.

Default: [Off]

- On
- Off

Settings by SNMPv1 and v2

Select whether or not to prohibit changes to the printer settings through access using SNMPv1, v2 protocol.

Default: [Do not Prohibit]

Prohibit

Do not Prohibit

Simple Encryption

Select whether or not to use apply simple encryption (restrict usage) when enhanced encryption cannot be used.

Default: [Do not Restrict]

- Restrict
- Do not Restrict

Authenticate Current Job

Select whether or not authentication is required for operations such as canceling jobs. If set to [Login Privilege], only authorized users or your administrator can operate the printer. If set to [Access Privilege], users who sent a print job or your administrator can operate the printer.

Default: [Off]

- Login Privilege
- Access Privilege
- Off

Password Policy

Specify the format of passwords: types of characters to be used and minimum length.

Valid characters for passwords are upper-case letters, lower-case letters, decimal numbers, and symbols such as #. If complexity is set to [Level 1], passwords must use two types of these characters; if set to [Level 2], three types.

· Complexity Setting

Default: [Do not Restrict]

Minimum Character No.

Between 0 to 32

Default: 0



• If set to 0, minimum length is not specified.

@Remote Service

Select whether or not to prohibit @Remote Service.

Default: [Do not Prohibit]

- Prohibit
- · Do not Prohibit



• If you would like to set to Prohibit, contact your service representative.

Update Firmware

Select whether or not to prohibit Update Firmware.

Default: [Do not Prohibit]

- Prohibit
- Do not Prohibit



• If you would like to set to Prohibit, contact your service representative.

Change Firmware Structure

Select whether or not to prohibit Change Firmware Structure.

Default: [Do not Prohibit]

- Prohibit
- Do not Prohibit



• If you would like to set to Prohibit, contact your service representative.

Service Mode Lock

Select whether or not to prohibit entering service mode.

Default: [Off]

- On
- Off



• This setting may not appear depending on the setting of the printer.

Firmware Version

Display the firmware version of the printer.

Network Security Level

Specify the network security level.

Default: [Level 0]

- Level 0
- Level 1
- Level 2

Auto Erase Memory Setting

Select whether or not to automatically delete memory. When set to on, specify the overwrite times.

Default: [Off]

On

Number of Erase: Between 1 to 9

Off



· This setting appears only when the optional security card is installed.

Erase All Memory

Select to delete all data inside the memory. When deleting memory, specify the overwrite times.

• EraseNo.

Between 1 to 9



• This setting appears only when the optional security card is installed.

Transfer Log Setting

You can select whether or not to send log information to the log collection server.

Default: [Off]

- On (Only available from the log collection server.)
- Off

Machine Data Encryption

Encrypt data stored on the hard disk. Once you encrypt the data, the following menus appear on the control panel display.

• Update Encryption Key

Update the encryption key.

• Cancel Encryption

Cancel the encryption settings.

• Print Encryption Key

Print the encryption key.



• This setting appears only when the optional HDD encryption unit is installed.

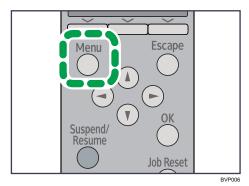
Changing the Security Options Menu

Follow the procedure below to erase data inside memory.



• This setting appears only when the optional security card is installed.

1. Press the [Menu] key.



The menu screen appears.

- 2. Press the [▼] or [▲] key to select [Security Options], and then press the [OK] key.
- 3. Press the [▼] or [▲] key to select [Extended Security], and then press the [OK] key.
- 4. Press the [♥] or [♠] key to select [Erase All Memory], and then press the [OK] key.
- 5. Press the [♥] or [♠] key to select [On], and then press [EraseNo.].
- 6. Press the [▼] or [▲] key to enter overwrite times, and then press the [OK] key.
- 7. Press the [▼] or [▲] key to select [On], and then press the [OK] key.
 Wait for one second. The [Security Options] menu appears.
- 8. Press the [Menu] key.

The initial screen appears.

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Host Interface Menu

You can set configurations about network connections and communication when using parallel connection between the printer and the computer. The changed configuration holds even if the printer is turned off.

Host Interface Menu Parameters

This section explains parameters that can be set on the host interface menu.

I/O Buffer

Select the size of I/O Buffer. Normally it is not necessary to change this setting.

Default: [128 KB]

- 128 KB
- 256 KB

I/O Timeout

Specify how many seconds the printer should wait before ending a print job. If printing operation is frequently interrupted by data from other ports, you can increase the timeout period.

Default: [15 seconds]

- 10 seconds
- 15 seconds
- 20 seconds
- 25 seconds
- 60 seconds

Network

You can make network-related settings.

Machine IPv4 Address

Select whether to set the IPv4 address automatically or manually.

- Auto-Obtain (DHCP)/Specify (Default: Auto-Obtain (DHCP))
 - When DHCP is set to on, the IPv4 address, subnet mask address, and gateway address cannot be changed. To change them, set DHCP to off. Contact your administrator for information about the network configuration.
- IP Add.

Manually specify the IPv4 address.

Default: 11.22. 33.44

Subnet M

Manually specify the subnet mask.

Default: 0.0.0.0

Gateway

Manually specify the gateway address.

Default: 0.0.0.0

IPv6 Stateless Setting

Select whether to enable or disable IPv6.

Default: [Active]

- Active
- Inactive

IPsec

This is a security function. For details, contact your administrator.

Default: [Inactive]

- Active
- Inactive

NW Frame Type

Specify the frame type for NetWare.

Default: [Auto Select]

- Auto Select
- Ethernet II
- Ethernet 802.2
- Ethernet 802.3
- Ethernet SNAP

Effective Protocol

Specify the effective protocol.

IPv4

Default: [Active]

- Active
- Inactive
- IPv6

Default: [Inactive]

- Active
- Inactive

• NetWare

Default: [Inactive]

- Active
- Inactive
- SMB

Default: [Active]

- Active
- Inactive
- AppleTalk

Default: [Inactive]

- Active
- Inactive

Ethernet Speed

Specify the network speed to operate the printer.

Default: [Auto Select]

- Auto Select
- 10Mbps Half Duplex
- 10Mbps Full Duplex
- 100Mbps Half Duplex
- 100Mbps Full Duplex

IEEE802.1X Auth.(Ethernet)

Specify IEEE 802.1X Ethernet authentication.

Default: [Inactive]

- Active
- Inactive



• For details about IEEE 802.1X authentication, see "Configuration", Hardware Guide.

Restr.IEEE802.1X Auth.Def.

Restore the default IEEE 802.1X setting.

LAN Type

Select Ethernet or Wireless LAN.

Default: [Ethernet]

• Ethernet

Wireless LAN



• This menu appears only when the optional wireless LAN interface unit is installed.

Parallel Interface

Specify parallel interface settings. This menu appears when the IEEE 1284 interface board is installed.

Parallel Timing

Specify the parallel interface timing.

Default: [ACK outside]

- ACK inside
- ACK outside
- STB down

Parallel Comm. Speed

Specify whether or not to use DMA transfer for receiving data.

Default: [High Speed]

- High Speed
- Standard

Selection Signal Status

Specify the selection signal level of the parallel interface.

Default: [High]

- High
- Low

Input Prime

You usually do not need to change this setting.

Default: [Inactive]

- Active
- Inactive

Bidirectional Comm.

Specify whether to enable or disable bidirectional communication.

Default: [On]

- On
- Off

Wireless LAN

Configure settings for wireless LAN. This menu appears only when the optional wireless LAN interface unit is installed.

Communication Mode

Specify the transmission mode for wireless LAN.

Default: [Infrastructure Mode]

- 802.11 Ad-hoc Mode
- Infrastructure Mode

SSID Setting

Specify an SSID in infrastructure mode and Ad-hoc Mode.

Default: blank (SSID)

SSID



- Select [?] to enter [/] for the SSID. Also, [\] appears when printing the configuration page, read it as [/].
- Characters used are ASCII 0x20-0x7e (32 bytes).
- An SSID is set automatically to the nearest access point if no SSID has been set.
- If no SSID has been set for Ad-hoc Mode, an SSID is set automatically and the same SSID is used for Ad-hoc Mode and infrastructure mode.
- If blank is specified in SSID for Ad-hoc Mode, "ASSID" appears.
- An SSID can also be set using Web Image Monitor. For details, see Web Image Monitor Help.

Ad-hoc Channel

IEEE 802.11a/b/g wireless LAN:

- 2412 2472 MHz (1 13 channels)
- 5180 5320 MHz (36, 40, 44, 48, 52, 56, 60, and 64 channels)

IEEE 802.11b/g wireless LAN:

• 2412 - 2462 MHz (1 - 11 channels)

The channel in use might differ depending on the country.

Security Method

Select whether to enable encryption and specify the security type when the encryption is enabled.

Default: [Off]

- Off
- WEP

Change (HEX), Change (ASCII)

WPA

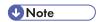
Encryption Method (TKIP, CCMP(AES)), Authentication Method (WPA-PSK, WPA), (WPA2-PSK), (WPA2)



• WPA appears only when the optional wireless LAN interface unit is installed.

Wireless LAN Signal

You can check the signal strength when using wireless LAN.



• This menu appears only when the optional wireless LAN interface unit is installed.

Restore Defaults

Reset the wireless LAN to default.

USB Settings

Select speed for USB interface.

USB Speed

Default: [Auto Select]

- Auto Select
- Full Speed

Fixed USB Port

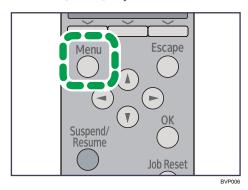
Default: [Off]

- Level 1
- Level 2
- Off

Changing the Host Interface Menu

Follow the procedure below to change the I/O Timeout setting.

1. Press the [Menu] key.



The menu screen appears.

- 2. Press the [▼] or [▲] key to select [Host Interface], and then press the [OK] key.
- 3. Press the [▼] or [▲] key to select [I/O Timeout], and then press the [OK] key.
- 4. Press the [▼] or [▲] key to select the lead time needed to end a printing operation, and then press the [OK] key.

Wait for one second. The [Host Interface] menu appears.

5. Press the [Menu] key.

The initial screen appears.

You can set a language to be displayed on the menu.

Language Menu Parameters

You can select the language you use. Available languages are as follows:

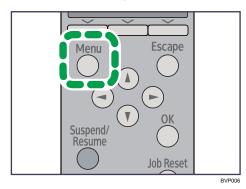
English, German, French, Italian, Dutch, Swedish, Norwegian, Danish, Spanish, Finnish, Portuguese, Czech, Polish, Hungarian, Russian.

Default: [English]

Changing the Language Menu

Follow the procedure below to change the interface language.

1. Press the [Menu] key.



The menu screen appears.

- 2. Press the [▼] or [▲] key to select [Language], and then press the [OK] key.
- Press the [▼] or [▲] key to select the language, and then press the [OK] key.
 Wait for one second. The [Language] menu screen appears.
- 4. Press the [Menu] key.

The initial screen appears.

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Options Menu

Using the options menu, you can configure settings related to form feeding and error logs. This section provides a list of the configurable settings and explains how to check error logs.

Options Menu Parameters

Form feed

Outputs data that are unprintable, due to errors such as the absence of a line-feed code.

Error log

If a document cannot be printed due to errors or other reasons, an error log is created. You can check the error log using the control panel.

- All
- Sample Print Jobs
- Locked Print Jobs
- Hold Print Jobs
- Stored Print Jobs

Checking the Error Log

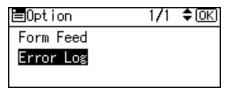
If files could not be stored due to printing errors, identify the cause of the errors by checking the error log on the control panel.

☆ Important

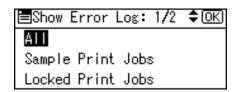
- The most recent 30 errors are stored in the error log. If a new error is added when there are 30 errors
 already stored, the oldest error is deleted. However, if the oldest error belongs to one of the following
 print jobs, it is not deleted. The error is stored separately until the number of those errors reaches 30.
 You can check any of these print jobs for error log information.
 - Sample Print Jobs
 - Locked Print Jobs
 - Hold Print Jobs
 - Stored Print Jobs
- If the main power switch is turned off, the log is deleted.



2. Select [Error Log] using the [▼] or [▲] key, and then press the [OK] key.

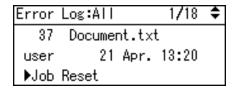


3. Select a type of print jobs using the [▼] or [▲] key, and then press the [OK] key. If you select [All], all error logs appears.



4. Select the error log you want to check using the [$^{\blacktriangledown}$] or [$^{\blacktriangle}$] key.

Press the [Menu] key until the initial screen appears after checking the log.





• To print files that appear in the error log, resend them after stored files have been printed or deleted.

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5. Monitoring and Configuring the Printer

This chapter explains how to use Web Image Monitor and other applications to monitor the printer or change its settings.

Using Web Image Monitor

Using Web Image Monitor, you can check the printer status and change settings.

Introduction to Web Image Monitor

Available operations

The following operations can be remotely performed using Web Image Monitor from a client computer.

- · Displaying printer status or settings
- Checking the print job status or history
- · Interrupting currently printing jobs
- Resetting the printer
- Managing the Address Book
- Making printer settings
- · Making network protocol settings
- Making security settings

Configuring the printer

To perform the operations from Web Image Monitor, TCP/IP is required. After the printer is configured to use TCP/IP, operations from Web Image Monitor become available.

Recommended Web browser

• Windows:

Internet Explorer 5.5 SP2 or higher

Firefox 1.0 or higher

• Mac OS:

Firefox 1.0 or higher

Safari 1.0, 1.2, 2.0 (412.2) or higher

Web Image Monitor supports screen reader software. We recommend JAWS 7.0 or a later version.



- Safari cannot be used on Mac OS X 10.4.1.
- Display and operation problems can occur if you do not enable JavaScript and cookies, or if you are
 using a non-recommended Web Browser.
- If you are using a proxy server, change the Web browser settings. Contact your administrator for information about the settings.
- If you click your browser's back button but the previous page does not appear, click the browser's refresh button and try again.
- Printer information is not automatically updated. To perform an update, click [Refresh] in the display area.
- We recommend using Web Image Monitor in the same network.
- If the printer is firewall-protected, it cannot be accessed from computers outside the firewall.
- When using the printer under DHCP, the IP address may be automatically changed by the DHCP server settings. Enable DDNS setting on the printer, and then connect using the printer's host name.
 Alternatively, set a static IP address to the DHCP server.
- If the HTTP port is disabled, connection to the printer using the printer's URL cannot be established. SSL setting must be enabled on this printer. For details, contact your administrator.
- When using the SSL encryption protocol, enter "https://(printer's IP address or host name)/".
- Internet Explorer must be installed on your computer. Use the most recent available version. We recommend Internet Explorer 6.0 or later.
- When you are using Firefox, fonts and colors may be different, or tables may be out of shape.
- When using a host name under Windows Server 2003/2003 R2/2008 or Windows Vista with IPv6 protocol, perform host name resolution using an external DNS server. The host file cannot be used.
- To use JAWS 7.0 under Web Image Monitor, you must be running Windows OS and Microsoft Internet Explorer 5.5 SP2, or a later version.

Displaying Top Page

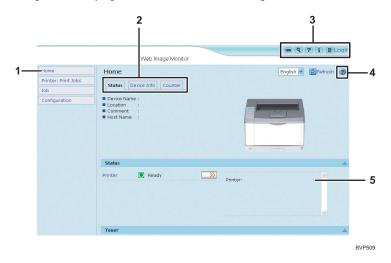
This section explains the Top Page and how to display Web Image Monitor.



- When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10".
- 1. Start your Web browser.
- 2. Enter "http://(printer's IP address or host name)/" in your Web browser's URL bar. Top Page of Web Image Monitor appears.
 If the printer's host name has been registered on the DNS or WINS server, you can enter it.

When setting SSL, a protocol for encrypted communication, under environment which server authentication is issued, enter "https://(printer's IP address or host name)/".

Every Web Image Monitor page is divided into the following areas:



1. Menu area

If you select menu, its content will be shown on the work area, or the sub area.

2. Tab area

Details about each menu appear.

3. Header area

The dialog box for switching to the user mode and administrator mode appears, and each mode's menu will be displayed.

The link to help and dialog box for keyword search appears.

4. Help

Use Help to view or download Help file contents.

5. Display area

Displays the contents of the item selected in the menu area.

Printer information in the display area is not automatically updated. Click [Refresh] at the upper right in the display area to update the printer information. Click the Web browser's [Refresh] button to refresh the entire browser screen.



• When using a host name under Windows Server 2003/2003 R2/2008 or Windows Vista with IPv6 protocol, perform host name resolution using an external DNS server. The host file cannot be used.

When User Authentication is Set

Login (using Web Image Monitor)

Follow the procedure below to log on when user authentication is set.

- 1. Click [Login].
- Enter a login user name and password, and then click [Login].
 For details about the login user name and password, contact your administrator.



- For user code authentication, enter a user code in [Login User Name], and then click [Login].
- The procedure may differ depending on the Web browser used.

Log off (using Web Image Monitor)

Click [Logout] to log off.



• When you log on and made the setting, always click [Logout].

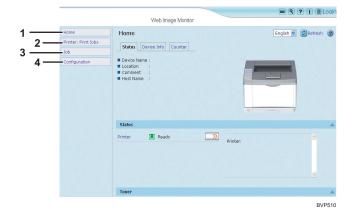
About Menu and Mode

There are two modes available with Web Image Monitor: guest mode and administrator mode.

Displayed Items may differ depending on the printer type.

Guest mode

In the guest mode, printer status, settings, and print job status can be viewed, but the printer settings cannot be changed.



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1. Home

The [Status], [Device Info], and [Counter] tab are displayed. Details of the tab menu are displayed on the work area.

2. Printer: Print Jobs

Allows you to display a list of Sample Print, Locked Print, Hold Print, and Stored Print jobs.

3. Job

Display all print files.

4. Configuration

Display current printer and network settings.

Administrator mode

In the administrator mode, you can configure various printer settings.



1. Home

The [Status], [Device Info], and [Counter] tab are displayed. Details of the tab menu are displayed on the work area.

2. Printer: Print Jobs

Allows you to display a list of Sample Print, Locked Print, Hold Print, and Stored Print jobs.

3. Job

Display all print files.

4. Address Book

User information can be registered, displayed, changed, and deleted.

5. Configuration

Make system settings for the printer, interface settings, and security.

6. Reset Device

Click to reset the printer. If a print job is being processed, the printer will be reset after the print job is completed. This button is located on Top Page.

7. Reset Printer Job

Click to reset current print jobs and print jobs in queue. This button is located on Top Page.



• For details about messages and settings, see Web Image Monitor Help.

Access in the Administrator Mode

Follow the procedure below to access Web Image Monitor in the administrator mode.

1. On Top Page, click [Login].

The window for entering the login user name and password appears.

2. Enter your login user name and password, and then click [Login].

For details about the login user name and password, contact your administrator.

Displaying Web Image Monitor Help

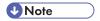
When using Help for the first time, clicking the icon marked "?" () makes the following screen appear, in which you can view Help in two different ways, as shown below:

Viewing Help on our Web site

Downloading Help to your computer.

Downloading and checking Help

You can download Help to your computer. As the Help URL, you can specify the path to the local file to view the Help without connecting to the Internet.



- By clicking "?" (3) in the header area, the contents of Help appear.
- By clicking "?" (?"), the Help icon in the display area, Help for the setting items in the display area appears.

Downloading Help

- 1. In the [OS] list, select the operating system.
- 2. In the [Language] list, select the language.
- 3. Click [Download].
- 4. Download Help by following the instructions on the screen.
- 5. Store the downloaded compressed file in a given location, and then decompress the file.

 To create a link for the Help button (???), save the downloaded Help files on a Web server.

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Linking the URL of the downloaded Help

You can link the URL of the help file on a Web server to the "?" button.

- 1. Log on to Web Image Monitor in the administrator mode.
- 2. In the menu area, click [Configuration].
- 3. Click [Webpage].
- 4. In the [Set Help URL Target] box, enter the URL of the help file.

If you saved the file to a Web server, and the URL of the index file is "http://a.b.c.d/HELP/EN/index.html", enter "http://a.b.c.d/HELP/".

5. Click [OK].



• If you save the Help files on your hard disk, you must access them directly - you cannot link to them using the Help button (??).

Registering Classification Codes

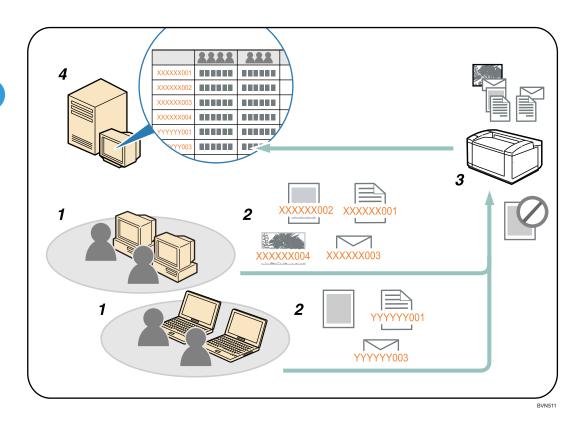
This section explains classification codes.

If you register classification codes, the printer logs the number of prints made under each code.

You can register classification codes to individual users and specified purposes, enabling you to monitor printer usage by each.

For example, you can manage accounts according to individual clients or account titles.

Classification Code - Based Process (example)



- 1. Divisions, sections, departments, project teams, users, etc., to be managed.
- 2. The appropriate classification code for the print job is entered.
- 3. The job is printed.

When printing in an environment where classification codes are required, print jobs that do not have a classification code cannot be printed.

For details, see "Configuring Classification Codes".

4. Classification codes are collected and managed by an external log collection system.

Configuring Classification Codes

Use Web Image Monitor to specify whether or not to apply classification code requirement to print jobs.

- The configuration page can be printed at any time.
- The default setting for classification code requirement is "Optional".
- 1. Start Web Image Monitor.
- 2. Click [Login].

A dialog box for entering the login user name and login password appears.

- Enter the login user name and password, and then click [Login].
 For details about the login user name and password, contact your administrator.
- 4. Click [Configuration] in the left area, and then click [Logs].
- Check that [Required] or [Optional] is selected for [Classification Code] in the [Common Settings for All Logs] column.

If "Required" is selected for the classification code requirement setting in Web Image Monitor, any print job without a classification code specified will not be printed.

- 6. Click [OK].
- 7. Click [Logout].
- 8. Quit Web Image Monitor.

Address Book Backup and Restore

Using Web Image Monitor, you can save or restore the printer's address book data.

Backing Up Address Book Data

Follow the procedure below to save a copy of the printer's address book data.

- Log on to Web Image Monitor in the administrator mode.
 For details about logging in, see "Monitoring and Configuring the Printer".
- 2. Click [Address Book].
- 3. Click [Maintenance].
- 4. Enter the encryption key and click [Backup].

Enter the encryption key that was set when the address book was encrypted. For details, contact your administrator.

Reference

• p.175 "Monitoring and Configuring the Printer"

Restoring Address Book Data

Follow the procedure below to restore previously saved address book data to the printer.

- Log on to Web Image Monitor in the administrator mode.
 For details about logging in, see "Monitoring and Configuring the Printer".
- 2. Click [Address Book].
- 3. Click [Maintenance].
- 4. Click [Restore].
- 5. Select the file to be restored by following the on-screen instructions.
- 6. Click [OK].

Restoration of the address data begins.

- 7. Confirm the message, and then click [OK].
- 8. Click [Back].
- 9. Click [Logout].



The backup will overwrite any address data currently on the printer. The backup will also reset all
user counters.

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• For details about restoring the address book data, see Web Image Monitor Help.



• p.175 "Monitoring and Configuring the Printer"

Using SmartDeviceMonitor for Admin

Using SmartDeviceMonitor for Admin, you can monitor and manage multiple devices connected to the network. Use of this software is recommended for administrators only.

You can download SmartDeviceMonitor for Admin from the supplier's Web site.

For details about SmartDeviceMonitor for Admin, see the manual supplied with the software.

Using SmartDeviceMonitor for Client

To view the status of printers using SmartDeviceMonitor for Client, configure SmartDeviceMonitor for Client beforehand.

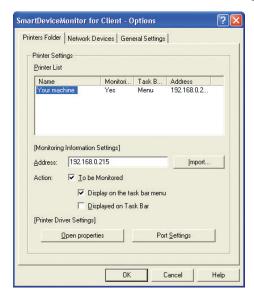
Monitoring Printers

Follow the procedure below to monitor the printer using SmartDeviceMonitor for Client.

 Right-click the SmartDeviceMonitor for Client icon, point to [Properties], and then click [Monitor Device Settings...].



2. On the [Printers Folder] tab, select the printer you want to monitor, and then select the [To Be Monitored] check box in the Monitoring Information Settings area.



To display the name of the monitored printer on the task bar, you must first select the [To be Monitored] check box, and then select the [Display on the task bar menu] check box.

3. Click [OK].

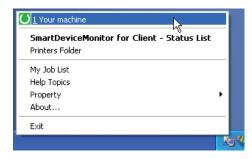
The dialog box closes and the configured printer is monitored.



• For details about status icons, see SmartDeviceMonitor for Client Help.

Follow the procedure below to check printer status using SmartDeviceMonitor for Client.

 Right-click the SmartDeviceMonitor for Client icon, and then click the printer name on the task bar.



The printer status appears in the dialog box.



• For details about items in the dialog box, see SmartDeviceMonitor for Client Help.

When Using IPP with SmartDeviceMonitor for Client

When using IPP with SmartDeviceMonitor for Client, note the following:

- The network printer can only receive one print job from SmartDeviceMonitor for Client at a time. While
 the network printer is printing, another user cannot access it until the job is finished. In this case,
 SmartDeviceMonitor for Client tries to access the network printer until the retry interval expires.
- If SmartDeviceMonitor for Client cannot access the network printer and times out, it will stop sending
 the print job. In this case, you should cancel the paused status from the print queue window.
 SmartDeviceMonitor for Client will resume access to the network printer. You can delete the print job
 from the print queue window, but canceling a print job printed by the network printer might cause the
 next job sent from another user to be incorrectly printed.
- If a print job sent from SmartDeviceMonitor for Client is interrupted and the network printer cancels the job because something went wrong, send the print job again.
- Print jobs sent from another computer do not appear in the print queue window, regardless of protocol.
- If various users send print jobs using SmartDeviceMonitor for Client to network printers, the printing order might not be the same as that in which the jobs were sent.
- An IP address cannot be used for the IPP port name because the IP address is used for the SmartDeviceMonitor for Client port name.
- When setting SSL, a protocol for encrypted communication, under environment which server
 authentication is issued, enter "https://(printer's IP address or host name)/". Internet Explorer must

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be installed on your computer. Use the highest version. Internet Explorer 6.0 or higher is recommended.

If the [Security Alert] dialog box appears when accessing the printer using IPP to create or configure
an IPP port, or when printing, install the certificate. To select the certificate store location when using
Certificate Import Wizard, click [Place all certificates in the following store], and then click [Local
Computer] under [Trusted Root Certification Authorities].



• For details about SSL settings, consult your administrator.

Printer Status Notification by E-Mail

Whenever a paper tray becomes empty or paper jams, a notification e-mail is sent to the registered addresses.

You can make the timing and content settings for notification e-mail.



Depending on your e-mail application, a phishing warning might appear after you receive an e-mail
message. To prevent phishing warnings appearing after you receive e-mail from a specified sender,
you must add the sender to your e-mail application's exclusion list. For details about how to do this,
see your e-mail application's Help.

The information that can be notified by auto e-mail notification is as follows:

- Call Service
- Paper Misfeed
- Cover Open
- · Out of Paper
- Almost Out of Paper
- Paper Tray Error
- Output Tray Full
- Unit Connection Error
- File Storage Memory Full Soon
- Log Error
- Device Access Violation
- Replacement Required: Unit
- Replacement Required Soon: Unit
- Replacement Required: Print Cartridge
- Replacement Required Soon: Print Cartridge
- 1. Open a Web browser, and then enter "http://(printer's address)/" in the address bar.

Top Page of Web Image Monitor appears.

When setting SSL, a protocol for encrypted communication, under environment which server authentication is issued, enter "https://(printer's address)/".

2. Click [Login] on Top Page of Web Image Monitor.

The window for entering the login user name and password appears.

3. Enter the user name and password, and then click [Login].

For details about the login user name and password, consult your administrator.

- 4. In the menu area, click [Configuration].
- On the [Device Settings] area, click [E-mail].
- 6. Make the following settings:
 - · Items in the Reception column: Make the necessary settings for sending and receiving e-mail.
 - Items in the SMTP column: Configure the SMTP server. Check your mailing environment, and then specify the necessary items. You can also perform mail authentication for the SMTP server.
 - Items in the POP before SMTP column: Configure the POP server. Check your mailing environment, and then specify the necessary items. You can also perform mail authentication for the POP server.
 - Items in the POP3/IMAP4 column: Configure the POP3 or IMAP4 server. Check your mailing environment, and then specify the necessary items.
 - Items in the E-mail Communication Port column: Configure the port to be used for access to the mail server.
 - Items in the E-Mail Notification Account column: Specify these items if you want to use on-demand e-mail notification.
- 7. Click [OK].

Auto E-mail Notification

1. Click [Configuration] in the menu area, and then click [Auto E-mail Notification] on the [Device Settings] area.

The dialog box for making notification settings appears.

- 2. Make the following settings:
 - Items in Notification Message column: You can set this according to your needs, for example, the printer's location, service representative contact information.
 - Items in the Groups to Notify column: E-mail notification addresses can be grouped as required.
 - Items in the Select Groups/Items to Notify column: Select groups for each notification type, such
 as printer status and error.

To make detailed settings for these items, click [Edit] next to [Detailed Settings of Each Item].

- 3. Click [OK].
- 4. Click [Logout].
- 5. Quit Web Image Monitor.

On-demand E-mail Notification

 Click [Configuration] in the menu area, and then click [On-demand E-mail Notification] on the [Device Settings] area.

The dialog box for making notification settings appears.

- 2. Make the following settings:
 - Notification Subject: Enter a text string to be added to the subject line of return e-mails.
 - Items in Notification Message column: You can set this according to your needs, for example, the printer's location, service representative contact information.
 - Items in the Access Restriction to Information column: Select whether to restrict accesses based on a specific category of information.
 - Items in the Receivable E-mail Address/Domain Name Settings column: Enter an e-mail address
 or domain name to use for requesting information by e-mail and to receive its return e-mail.
- 3. Click [OK].
- 4. Click [Logout].
- 5. Quit Web Image Monitor.

Mail authentication

You can configure mail authentication to prevent illegal use of the mail server.

SMTP authentication

Specify SMTP authentication.

When mail is sent to the SMTP server, authentication is performed using SMTP AUTH protocol by prompting the mail originator to enter the user name and password. This prevents illegal use of the SMTP server.

- 1. In the menu area, click [E-mail]
- 2. Make the following settings:
 - SMTP Authentication: Enable or disable SMTP authentication.
 - SMTP Auth. E-mail Address: Enter the e-mail address.
 - SMTP Auth. User Name: Enter the SMTP account name.
 - SMTP Auth. Password: To set or change the password for SMTP AUTH.
 - SMTP Auth. Encryption: Select whether to encrypt the password or not.

[Auto Select]: Select this setting when PLAIN, LOGIN, CRAM-MD5, or DIGEST-MD5 is specified as the authentication method.

[Active]: Select this setting when CRAM-MD5 or DIGEST-MD5 is specified as the authentication method.

[Inactive]: Select this setting PLAIN or LOGIN is specified as the authentication method.

- 3. Click [OK].
- 4. Click [Logout].
- 5. Quit Web Image Monitor.

POP before SMTP authentication

Select whether to log on to the POP3 server before sending e-mail.

- 1. In the menu area, click [E-mail].
- 2. Make the following settings:
 - POP before SMTP: Enable or disable POP before SMTP.
 - POP E-mail Address: Enter the e-mail address.
 - POP User Name: Enter the POP account name.
 - POP Password: To set or change the POP password.
 - Timeout setting after POP Auth.: Enter the time available before connecting to the SMTP server after logging on to the POP server.
- 3. Click [OK].
- 4. Click [Logout].
- 5. Quit Web Image Monitor.

Sending On-demand E-mail

To use on-demand e-mail notification, perform the following configuration tasks in Web Image Monitor.

- 1. In the menu area, click [E-mail].
- 2. Make the following settings:
 - E-mail Notification E-mail Address: Enter the address using alphanumeric characters.
 - Receive E-mail Notification: Specify whether to use on-demand e-mail notification.
 - E-mail Notification User Name: Enter the administrator's user name as the mail originator name.
 - E-mail Notification Password: Enter the password of the mail notification user.
- 3. Click [OK].
- 4. Click [Logout].
- 5. Quit Web Image Monitor.

Format of on-demand e-mail messages

To use mail notification, you need to send an on-demand e-mail message to this printer.

Using your mail software, enter the following:

ltem	Description
Subject (Referred to as Subject)	Enter a request regarding the device. For details, see the table below.
From (Referred to as From)	Specify a valid mail address. The device information will be sent to the address specified here.

Subject field

Format: device status?parameter name=parameter [&=parameter] [&=parameter] ...

Subject field coding examples

Coding example	Action
devicestatus?request=sysconfig& format=text& lang=en	The device's system configuration information will be sent in an English text format.
devicestatus?request=sysconfig	The device's system configuration information will be sent in a preset format and language.

Parameters

Parameter	Meaning	Default
request	Information to be obtained	Mandatory
format	Mail format	Mail will be sent in the format preset for each mail address.
lang	Language for mail body	Mail will be sent in the language preset for each mail address.

Parameters specifying the information to be obtained

Information to be obtained	Parameter
System configuration information	sysconfig
Network configuration information	netconfig
Printer configuration information	prtconfig
Supplies information	supply

Information to be obtained	Parameter
Device status information	status

Parameters specifying the mail format

Mail format	Parameter
Text	text
HTML	html
XML	xml

Parameters specifying the language for mail body

Language for mail body	Parameter
English	en
French	fr
German	de
Italian	it
Spanish	es
Dutch	nl
Danish	da
Finnish	fi
Norwegian	no
Portuguese	pt
Swedish	sv
Czech	CS
Polish	pl
Hungarian	hu

UNote

• A mail message must be within 1 MB in size.

- E-mail may be incomplete if sent immediately after power on.
- The Subject field is case-insensitive.
- Parameter names can be written in any order.
- HTML and XML can be selected for subject field, but output is text only.

Remote Maintenance by telnet

- Remote Maintenance should be password-protected so that access is allowed to administrators only.
- The password is the same as the one of Web Image Monitor administrator. When the password is changed using "mshell", other passwords change also.
- Some commands cannot be used depending on your printer.

Using telnet

Follow the procedure below to use telnet.



- Only one user at a time can log on to perform remote maintenance.
- If you are using Windows Vista, you must enable the telnet server and telnet client beforehand.
- 1. Use the IP address or the host name of the printer to start telnet.

```
% telnet "IP address"
```

2. Enter your user name and password.

Contact your administrator for information about the settings.

- 3. Enter a command.
- 4. Quit telnet.

msh> logout

The configuration message about saving the changes appears.

5. Enter "yes" to save the changes, and then press the [OK] key.

If you do not want to save the changes, enter "no", and then press the [OK] key. To make further changes, enter "return" at the command line, and then press the [OK] key.



- If the message "Can not write NVRAM information" appears, the changes are not saved. Repeat the
 procedure above.
- · When the changes are saved, the network interface board is reset automatically with that changes.
- When the network interface board resets, the print job in print process will be printed. However, print
 jobs in queue will be canceled.
- To use telnet under Windows Vista, SmartDeviceMonitor for Client must be installed.

8021x

Use the "8021x" commands to display IEEE 802.1x related information.

View settings

msh> 8021x

Configuration

msh> 8021x "parameter"

Parameter	Value configured
eap {tls ttls leap peap} {chap mschap	You can specify the EAP authentication type.
mschapv2 pap md5 tls }	tls: EAP-TLS (default)
	ttls: EAP-TTLS
	leap: LEAP
	peap: PEAP
	chap, mschap, mschapv2, pap, md5, or tls are settings for the phase 2 method, and must be set when using EAP-TTLS or PEAP.
	Do not make these settings when using other EAP authentication types.
	If you select EAP-TTLS, you can select chap, mschap, mschapv2, pap, or md5.
	If you select PEAP, you can select mschapv2 or tls.
username "character string"	You can specify the login user name for the Radius server.
	Usable characters: ASCII 0x20-0x7e (31 bytes).
	The default is blank.
username2 "character string"	You can specify the phase 2 username for EAP-TTLS/PEAP phase 2 authentication.
	Usable characters: ASCII 0x20-0x7e (31 bytes).
	The default is blank.

Parameter	Value configured
domain "character string"	You can specify the login domain name for the Radius server.
	The characters you can enter are ASCII 0x20-0x7e (31 bytes), but not "@" or "\".
	The default is blank.
password "character string"	You can specify the login for the Radius server.
	Usable characters: ASCII 0x20-0x7e (128 bytes). The default is blank.
srvcert {on off}	You can set the server certificate. The default is "off".
imca {on off}	You can enable or disable the certificate when the intermediate certificate authority is present. The default is "off".
srvid "character string"	You can set the server ID and subdomain of the certificate server.
	Usable characters: ASCII 0x20-0x7e (128 bytes). The default is blank.
clear {a each command all}	Returns the selected setting to its default value.
	If you specify "all", all settings will be restored to their default values. However, IEEE 802.1x Auth. status (enable or disable) for Ethernet and wireless LAN will not be initialized.

access

Use the "access" command to view and configure access control. You can also specify two or more access ranges.

View settings

msh> access

IPv4 configuration

msh> access [x] range "start-address end-address"

• [x] represents a target number between 1 and 5. (Up to five access ranges can be registered and selected.)

Example: to specify accessible IPv4 addresses between 192.168.0.10 and 192.168.0.20:

msh> access 1 range6 192.168.0.10 192.168.0.20

IPv6 configuration

msh> access [x] range6 "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 IPv6 addresses between 2001:DB8::100 and 2001:DB8::200.

msh> access 1 range6 2001:DB8::100 2001:DB8::200

IPv6 access mask configuration

msh> access [×] mask6 "base-address prefixlen"

• [×] represents a target number between 1 and 5. (Up to five access ranges can be registered and selected.)

Example: to specify accessible IPv6 addresses to 2001:DB8::/32

msh> access 1 mask6 2001:DB8:: 32

Access control initialization

msh> access flush

 Use the "flush" command to restore the default settings so that all access ranges become "0.0.0.0" for IPv4, and ":: " for IPv6.



- The access range restricts computers from use of the printer by IP address. If you do not need to restrict printing, make the setting "0.0.0.0" for IPv4, and "::" for IPv6.
- Valid ranges must be from lower (start address) to higher (end address).
- If you are running IPv4 or IPv6, up to five access ranges can be registered and selected.
- IPv6 can register and select the range and the mask for each access ranges.
- IPv6 mask ranges between 1 128 can be selected.
- Up to five access ranges can be specified. The entry is invalid if the target number is omitted.
- You cannot send print jobs, or access Web Image Monitor and diprint from a restricted IP address.

authfree

Use the "authfree" command to view and configure AuthFree parameters.

View settings

The following command displays the current AuthFree settings:

msh> authfree

 If print job authentication exclusion is not set, authentication exclusion control cannot be displayed.

IPv4 address settings

msh> authfree "ID" range_addr1 range_addr2

IPv6 address settings

msh> authfree "ID" range6_addr1 range6_addr2

IPv6 address mask configuration

msh> authfree "ID" mask6_addr1 masklen

Parallel/USB settings

msh> authfree [parallel | usb] [on|off]

To enable authfree, set to on. To disable authfree, set to off. Always specify the interface.

Authentication exclusion control initialization

msh> authfree flush

autonet

Use the "autonet" command to view and configure AutoNet parameters.

View settings

The following command displays the current AutoNet settings:

msh> autonet

Configuration

You can configure AutoNet settings.

msh> autonet {on|off}

• {on} means "active" and {off} means "inactive".

Current interface priority configuration display

msh> autonet priority

Interface priority configuration

msh> autonet priority "interface_name"

- You can give interface's AutoNet parameter priority.
- Priority settings are available when multiple interfaces are installed.
- wlan can be specified only when the wireless LAN interface unit is installed.

Interface name	Interface configured
ether	Ethernet interface

Interface name	Interface configured
wlan	Wireless LAN interface



- If an interface is not selected, the current interface connection settings remain in effect.
- For details about AutoNet, refer to autonet parameters.

bonjour

Use the "bonjour" command to display bonjour-related settings.

View settings

Bonjour settings are displayed.

msh> bonjour

Bonjour service name setting

You can specify the bonjour service name.

msh> bonjour cname "computer name"

• The computer name can be entered using up to 63 alphanumeric characters.

Bonjour Installation location information setting

You can enter information about the location where the printer is installed.

msh> bonjour location "location"

• Information about location can be entered using up to 32 alphanumeric characters.

Setting order of priority for each protocol

diprint

msh> bonjour diprint [0-99]

lpr

msh> bonjour 1pr [0-99]

ipp

msh> bonjour ipp [0-99]

You can specify the order of priority for "diprint", "lpr", and "ipp". Smaller numbers indicate higher priority.

IP TTL setting

msh> bonjour ip ttl {1-255}

You can specify the IP TTL (the number of routers a packet can pass through).



• The default is 255.

Resetting the computer name and location information

You can reset the computer name and location information.

msh> bonjour clear {cname | location}

• cname

Reset the computer name. The default computer name will be displayed when the computer is restarted.

location

Reset the location information. The previous location information will be deleted.

Interface configuration

msh> bonjour linklocal "interface_name"

- If many types of interface are installed, configure the interface that communicates with linklocal address.
- If you do not specify an interface, the Ethernet interface is automatically selected.
- wlan can be specified only when the wireless LAN interface unit is installed.

Interface	Interface configured
ether	Ethernet interface
wlan	Wireless LAN interface

devicename

Use the "devicename" command to display and change the printer name.

View settings

msh> devicename

Printer name configuration

msh> devicename name "string"

- Enter a printer name using up to 31 alphanumeric characters.
- Set single names for each printer.

Printer name initialization

msh> device name clearname

• Reset the printer name to its default.

dhcp

Use the "dhcp" command to configure DHCP settings.

View settings

The following command displays the current DHCP settings.

msh> dhcp

Configuration

You can configure DHCP.

msh> dhcp "interface_name" {on|off}

- Click {on} to enable DHCP. Click {off} to disable DHCP.
- If the DNS server address and domain name are obtained from DHCP, be sure to click {on}.
- wlan can be specified only when the wireless LAN interface unit is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	Wireless LAN interface

Current interface priority configuration display

msh> dhcp priority

Interface priority configuration

msh> dhcp priority "interface_name"

- You can select which interface has DHCP parameter priority.
- Priority settings are available when multiple interfaces are installed.

DNS server address selection

msh> dhcp dnsaddr {dhcp | static}

- Specify whether to obtain the DNS server address from the DHCP server or use the address set by a user.
- To obtain the DNS server address from the DHCP server, specify "dhcp". To use the address set by a user, specify "static".

Domain name selection

msh> dhcp domainname {dhcp | static}

- Specify whether to obtain the domain name from the DNS server or use the domain name set by a user.
- To obtain the domain name from the DHCP server, specify "dhcp". To use the domain name set by a user, specify "static".

dhcp6

Use the "dhcp6" command to display or configure DHCPv6 settings.

View settings

The following command displays the current DHCPv6 settings.

```
msh> dhcp6
```

DHCPv6-lite configuration and display

```
msh> dhcp6 "interface_name" lite {on|off}
```

Viewing and specifying DNS server address selection (obtained from the dhcpv6 server/user specified value)

```
msh> dhcp6 dnsaddr {dhcp|static}
```

DUID(DHCP unique ID) deletion and display

```
msh> dhcp6 duid clear
```

Viewing and specifying the time required to re-obtain the parameter obtained from dhcpv6

```
msh> dhcp6 option lifetime [0-65535]
```

- It can be entered between 0 and 65535 minutes.
- The default is 60 minutes.
- If you specify "0", you cannot re-obtain the value.

diprint

The direct printing port enables direct printing from a network-connected computer.

Use the "diprint" command to change 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 on

conn multi

apl async

- The "port" specifies the port number of the direct printing port.
- The "bidirect" setting indicates whether the direct printing port is bidirectional or not.

Setting timeout

msh> diprint timeout [30-65535]

- You can specify the timeout interval to use when the printer is expecting data from the network.
- The default is 300 seconds.

Specifying the number of concurrent connections

msh> diprint conn {multi|single}

- The above command specifies the number of concurrent diprint connections. Specify "multi" for multiple connections or "single" for a single connection.
- The default is "multi".

dns

Use the "dns" command to configure or display DNS (Domain Name System) settings.

View settings

The following command displays current DNS settings:

msh> dns

IPv4 DNS server configuration

The following command enables or disables the IPv4 DNS server address:

msh> dns "number" server "server address"

The following command displays a configuration using the IP address 192.168.15.16 on a DNS 1 server:

msh> dns 1 server 192.168.15.16

- You can register IPv4 DNS Server address.
- You can register up to three IPv4 DNS server numbers.
- You cannot use "255.255.255.255" as the DNS server address.

IPv6 DNS server configuration

The following command enables or disables the IPv6 DNS server address:

msh> dns "number" server6 "server address"

- You can register IPv6 DNS Server address.
- You can register up to three IPv6 DNS server numbers.

Dynamic DNS function setting

msh> dns "interface_name" ddns {on|off}

- You can set the dynamic DNS function "active" or "inactive".
- {on} means "active" and {off} means "inactive".

5

• wlan can be specified only when the wireless LAN interface unit is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	Wireless LAN interface

Specifying the record overlap operation

msh> dns overlap {update|add}

- You can specify operations performed when records overlap.
- update

To delete old records and register new records.

add

To add new records and store the old records.

• When CNAME overlaps, it is always changed, irrespective of settings.

CNAME registration

msh> dns cname {on|off}

- You can specify whether to register CNAME.
- {on} means "active" and {off} means "inactive".
- The CNAME registered is the default name beginning with rnp. CNAME cannot be changed.

A records registration

msh> dns arecord {dhcp|own}

• {dhcp}

You can specify the method of registering an A record when the dynamic DNS function is enabled and DHCP is used.

• {own}

To register an A record using the printer as the DNS client.

The DNS server address and the domain name already designated are used for the registration.

Record updating interval settings

msh> dns interval "time"

- You can specify the interval after which records are updated when using the dynamic DNS function.
- The updating interval is specified hourly. It can be entered between 1 and 255 hours.
- The default is 24 hours.

resolv.conf display

msh> dns resolv

Specifying the protocol when asking names during dual stacking

msh> dns resolv protocol {ipv4|ipv6}

• Appears during dual stacking only.

domainname

Use the "domainname" command to display or configure the domain name settings.

You can configure the Ethernet interface or wireless LAN interface.

View settings

The following command displays the current domain name:

msh> domainname

Interface domain configuration

msh> domainname "interface_name"

Setting the domain name

msh> domainname "interface_name" name "domain name"

- A domain name can be entered using up to 63 alphanumeric characters.
- The Ethernet interface and wireless LAN interface will have the same domain name.
- wlan can be specified only when the wireless LAN interface unit is installed.

Interface	Interface set
ether	Ethernet interface
wlan	Wireless LAN interface

Deleting the domain name

msh> domainname "interface_name" clear "name"

etherauth

Use the "ethernet" command to display or modify the authentication related parameters for Ethernet.

View settings

msh> etherauth

802.1x Configuration

msh> etherauth 8021x {on|off}

• {on} means "active" and {off} means "inactive".

etherconfig

Use the "etherconfig" command to view and configure the Ethernet parameters.

View settings

msh> etherconfig

Specify Ethernet Speed

msh> etherconfig speed {auto|10f|10h|100f|100h}

- auto = Auto Select
- 10f = 10 Mbps Full Duplex
- 10h = 10 Mbps Half Duplex
- 100f = 100 Mbps Full Duplex
- 100h = 100 Mbps Half Duplex

The default is "auto".

help

Use the "help" command to display the available command list and the procedures for using those commands.

Command list display

msh> help

Display of procedure for using commands

msh> help "command_name"

hostname

Use the "hostname" command to change the printer name.

View settings

msh> hostname

IPv4 Configuration

msh> hostname "interface_name" "printer_name"

- Enter the printer name using up to 63 alphanumeric characters.
- You cannot use a printer name starting with "RNP" or "rnp".

- The Ethernet interface and wireless LAN interface will have the same printer name.
- wlan can be specified only when the wireless LAN interface unit is installed.
- If you do not specify an interface, the Ethernet interface is selected automatically.

Interface name	Interface configured
ether	Ethernet interface
wlan	Wireless LAN interface

Initializing the printer name for each interface

msh>hostname "interface_name" clear "name"

ifconfig

Use the "ifconfig" command to view and configure TCP/IP (IP address, subnet mask, broadcast address, default gateway address) for the printer.

View settings

msh> ifconfig

IPv4 configuration

msh> ifconfig "interface_name" "parameter" "address"

- If you did not enter an interface name, it is automatically set to the Ethernet interface.
- wlan can be specified only when the wireless LAN interface unit is installed.

Interface name	Interface configured
ether	Ethernet Interface
wlan	wireless LAN Interface

The following explains how to configure an IPv4 address 192.168.15.16 on Ethernet interface.

msh> ifconfig ether 192.168.15.16

IPv6 configuration

msh> ifconfig ether inet6 "interface_name" "prefixlen"

The following explains how to configure an IPv6 address to 2001:DB8::100 with prefix length 64 on the Ethernet interface.

msh> ifconfig ether inet6 2001:DB8::100 64

Netmask configuration

msh> ifconfig "interface_name" netmask "address"

The following explains how to configure a subnet mask 255.255.250 on Ethernet interface.

msh> ifconfig ether netmask 255.255.255.0

Broadcast address configuration

msh> ifconfig "interface_name" broadcast "address"

Changing the interface

msh> ifconfig "interface" up

You can specify either the Ethernet interface or wireless LAN interface when using the optional wireless LAN interface unit is installed.



- To get the above addresses, contact your administrator.
- Use the default configuration if you cannot obtain setting addresses.
- The IP address, subnet mask and broadcast address are the same as that for the Ethernet interface and wireless LAN interface.
- TCP/IP configuration is the same for both Ethernet and wireless LAN interface. If interfaces are changed, the new interface inherits the configuration.
- Use "0x" as the initial two letters of a hexadecimal address.

info

Use the "info" command to display printer information such as paper tray, output tray, and printer language.

Printer information display

msh> info



• For details about displayed contents, see "Getting Printer Information over the Network".

Reference

• p.238 "Getting Printer Information over the Network"

ipds

Use the "ipds" command to view and configure ipds settings.

Viewing settings

The following command displays the current ipds settings:

msh> ipds

Changing rhpp port number

msh> ipds port [1024-65535]

• The default is 5001.



• Cannot use the port number of the 2501, 2601 and 9100.

Setting timeout

msh> ipds timeout [30-65535]

• The timeout function is disabled by default.

ipsec

Use the "ipsec" command to view and configure IPsec settings.

Viewing settings

The following command displays the current IPsec settings:

msh> ipsec

ipp

Use the "ipp" command to view and configure IPP settings.

Viewing settings

The following command displays the current IPP settings:

msh> ipp

IPP timeout configuration

Specify how many seconds the computer waits before canceling an interrupted print job. The time can be entered between 30 to 65535 seconds.

```
msh> ipp timeout [30 - 65535]
```

IPP user authorization configuration

Use IPP user authorization to restrict users to print with IPP. The default is "off".

msh> ipp auth {basic|digest|off}

- User authorization settings are "basic" and "digest".
- Use "off" to remove a user's authorization.
- If user authorization is specified, register a user name. You can register up to 10 users.

IPP user configuration

Configure IPP users according to the following messages:

5

```
msh> ipp user
The following message appears:
msh> Input user number (1 to 10):
Enter 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.

ipv6

Use the "ipv6" command to display and configure IPv6 settings.

View setting

msh> ipv6

IPv6 stateless address

```
msh> ipv6 stateless {on|off}
```

If "on" is selected, IPv6 requests information required for maintaining stateful connection to the router for as long as the printer power is turned on. This setting allows information from the router to be obtained constantly, and periodically refreshes the effective period of the stateless address.

logout

Use the "logout" command to save the changes and quit telnet.

Quit telnet

msh> logout

A confirmation message appears.

{yes|no|return}

Enter [yes], [no] or [return] by typing the word, and then press the [Enter] key.

To save the changes and quit telnet, enter [yes].

To discard the changes and quit telnet, enter [no].

To continue making changes, enter [return]

lpr

Use the "lpr" command to view and configure LPR settings.

View setting

msh> 1pr

Checking host name when deleting the job

```
msh> lpr chkhost {on|off}
```

If "on" is selected, you can delete print jobs only from the IP address of the host that sent the print job. If LPR is disabled, you can also delete print jobs sent from IP addresses other than that of the host.

Printer Error Detection Function

lpr prnerrchk {on|off}

If you set this to "on", the printer stops receiving data and will wait until the error is resolved before continuing processing a job.

netware

Use the "netware" command to configure the NetWare settings such as the print server name or file server name.

Netware printer server names

msh> netware pname "character string"

• Enter the NetWare print server name using up to 47 characters.

Netware file server names

msh> netware fname

• Enter the NetWare file server name using up to 47 characters.

Encap type

msh> netware encap {802.3|802.2|snap|ethernet2|auto}

Remote printer number

```
msh> netware rnum {0-254}
```

Timeout

msh> netware timeout {3-255}

Printer server mode

```
msh> netware mode pserver
msh> netware mode ps
```

Remote printer mode

```
msh> netware mode rprinter
msh> netware mode rp
```

NDS context name

msh> netware context "character string"

SAP interval

msh> netware "sap_interval"

Setting login mode for file server

msh> netware login server

Setting login mode for NDS tree

msh> netware login tree

Setting login mode for NDS tree name

msh> netware tree "NDS name"

File transfer protocol

msh> netware trans {ipv4pri|ipxpri|ipv4|ipx}

If you do not specify the protocol, the current setting is displayed.

Protocol	Set Protocol
ipv4pri	IPv4+IPX(IPv4)
ipxpri	IPv4+IPX(IPX)
ipv4	IPv4
ірх	IPX

passwd

Use the "passwd" command to change the remote maintenance password.

Changing the password

msh> passwd

- Enter the current password.
- Enter the new password.
- Re-enter the new password to confirm it.

Changing the Password of the administrators using the supervisor

msh> passwd {Administrator ID}

- Enter the new password.
- Re-enter the new password to confirm it.





- Be sure not to forget or lose the password.
- The password can be entered using up to 32 alphanumeric characters. Characters are case-sensitive.
 For example, "R" is not the same as "r".

pathmtu

Use the "pathmtu" command to display and configure the PathMTU Discovery service function.

View settings

msh> pathmtu

Configuration

msh> pathmtu {on|off}

- The default is "on".
- If the MTU size of the sent data is larger than the router's MTU, the router will declare it
 impassable, and communication will fail. If this happens, selecting the "pathmtu" to "off"
 optimized the MTU size and prevents data output failure.
- Depending on the environment, information might not be obtained from the router, and communication will fail. If this happens, select the "pathmtu" to "off".

prnlog

Use the "prnlog" command to obtain printer log information.

Print logs display

msh> prnlog

• Displays 16 previous print jobs.

msh> prnlog "ID Number"

 Specify the ID number of the displayed print log information to display additional details about a print job.



For details about displayed contents, see "Getting Printer Information over the Network".

Reference

p.238 "Getting Printer Information over the Network"

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rhpp

Use the "rhpp" command to view and configure RHPP settings.

View settings

msh> rhpp

Changing rhpp port number

msh> rhpp [1024-65535]

The default is 59100.

Setting timeout

msh> rhpp timeout [30-65535]

• The default is 300 seconds.



• "RHPP" is an abbreviation of "Reliable Host Printing Protocol", which is a manufacturer-original printing protocol.

route

Use the "route" command to view and control the routing table.

All route information display

msh> route get "destination"

• Specify the IPv4 address to destination.

"0.0.0.0" cannot be specified as destination address.

Enabling/disabling specified IPv4 destination

msh> route active {host|net} "destination" {on | off}

• When the {host | net} parameter is abbreviated, "host" is used by default.

Adding IPv4 Routing Table

msh> route add {host|net} "destination" "gateway"

- Adds a host or network route to "destination", and a gateway address to "gateway" in the table.
- Specify the IPv4 address to destination and gateway.
- When the {host | net} parameter is abbreviated, "host" is used by default.

Setting default IPv4 Gateway

msh> route add default gateway

Deleting specified IPv4 destination from Routing Table

msh> route delete {host|net} "destination"

- Host becomes the default setting.
- IPv4 address of destination can be specified.

Setting IPv6 Default Gateway

msh> route add6 default gateway

Adding a specified IPv6 destination to Routing Table

msh> route add6 "destination" "prefixlen[1-128]" "gateway"

- Specify the IPv6 address to destination and gateway.
- If the prefix of the address is between 1 and 127, the network is selected. If the prefix of the address is 128, the host is selected.
- You cannot register a record that has the same destination and prefix as a registered record.

Deleting a specified IPv6 destination from Routing Table

msh> route delete6 "destination" "prefixlen"

• Specify the IPv6 address to destination and gateway.

Display information about a specified IPv6 route information

msh> route get6 "destination"

Specify the IPv6 address to destination and gateway.

Enabling/disabling a specified IPv6 destination

msh> route active6 "destination" "prefixlen" {on | off}

Route initialization

msh> route flush



- The maximum number of IPv4 routing tables is 16.
- The maximum number of IPv6 routing tables is 2.
- Set a gateway address when communicating with devices on an external network.
- The same gateway address is shared by all interfaces.
- "Prefixlen" is a number between 1 and 128.

set

Use the "set" command to set the protocol information display "active" or "inactive".

View settings

The following command displays protocol information (active/inactive).

```
msh> set ipv4
msh> set ipv6
msh> set ipsec
msh> set appletalk
msh> set netware
msh> set smb
msh> set protocol
  • When protocol is specified, information about IPv4, IPv6, IPsec, Apple Talk, Netware, and SMB
    appears.
msh> set parallel
msh> set usb
msh> set lpr
msh> set 1pr6
msh> set ftp
msh> set ftp6
msh> set rsh
msh> set rsh6
msh> set diprint
msh> set diprint6
msh> set web
msh> set snmp
msh> set ipp
msh> set ipp6
msh> set http
msh> set http6
msh> set bonjour
msh> set bonjour6
msh> set ssl
msh> set ss16
msh> set nrs
msh> set rfu
msh> set rfu6
```

msh> set nbt

```
msh> set ssdp
msh> set ssh
msh> set sftp
msh> set sftp6
msh> set wsdev
msh> set wsdev6
msh> set wsprn
msh> set ipds
msh> set rhpp
msh> set rhpp6
```

Configuration

• Enter "up" enable protocol, and enter "down" to disable protocol.

You can set the protocol to "active" or "inactive".

```
msh> set ipv4 {up | down}
```

- If you disable IPv4, you cannot use remote access after logging off. If you did this by mistake, you can use the control panel to enable remote access via IPv4.
- Disabling IPv4 also disables lpr, ftp, rsh, diprint, web, snmp, ssl, ipp, http, bonjour, and sftp.
 msh> set ipv6 {up | down}
- If you disable IPv6, you cannot use remote access after logging off. If you did this by mistake, you can use the control panel to enable remote access via IPv6.
- Disabling IPv6 also disables lpr6, ftp6, rsh6, diprint6, ssl6, ipp6, http6, and sftp6.

```
msh> set appletalk {up | down}
msh> set netware {up | down}
msh> set smb {up | down}
msh> set lpr {up | down}
msh> set lpr6 {up | down}
msh> set ftp {up | down}
msh> set ftp6 {up | down}
msh> set rsh {up | down}
msh> set rsh {up | down}
msh> set rsh6 {up | down}
msh> set diprint {up | down}
msh> set diprint {up | down}
msh> set web {up | down}
msh> set web {up | down}
```

```
msh> set ipp {up | down}
msh> set ipp6 {up | down}
msh> set http {up | down}
msh> set http6 {up | down}
msh> set bonjour {up | down}
msh> set bonjour6 {up | down}
msh> set ssl {up | down}
msh> set ssl {up | down}
```

• If Secured Sockets Layer (SSL, an encryption protocol) function is not available for the printer, you cannot use the function by enabling it.

```
msh> set nrs {up | down}
msh> set rfu {up | down}
msh> set rfu {up | down}
msh> set ssh {up | down}
msh> set ssdp {up | down}
msh> set sdp {up | down}
msh> set nbt {up | down}
msh> set sftp {up | down}
msh> set sftp {up | down}
msh> set sftp6 {up | down}
msh> set wsdev {up | down}
msh> set wsdev {up | down}
```

• If "wsdev" and "wsdev6" are enabled simultaneously, both appear as "up" on the protocol information display, but both use IPv4 for WS-Device and WS-Printer.

```
msh> set wsprn {up | down}
msh> set ipds {up | down}
msh> set rhpp {up | down}
msh> set rhpp6 {up | down}
```

show

Use the "show" command to display network interface board configuration settings.

View settings

msh> show

• If "-p" is added, you can view settings one by one.

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Note

• For details about the information displayed, see "Understanding the Displayed Information".

Reference

• p.244 "Understanding the Displayed Information"

slp

Use the "slp" command to view and configure SLP settings.

msh> slp ttl "ttl_val"

- You can search the NetWare server using SLP in the PureIP environment of NetWare 5/5.1 and Netware 6/6.5. Using the "slp" command, you can configure the value of TTL which can be used by SLP multicast packet.
- The default value of TTL is 1. A search is executed only within a local segment. If the router does not support multicast, the settings are not available even if the TTL value is increased.
- The acceptable TTL value is between 1 and 255.

smb

Use the "smb" command to configure or delete the computer or workgroup name for SMB.

Computer Name settings

msh> smb comp "computer name"

 Set computer name using up to 15 characters. Names beginning with "RNP" or "rnp" cannot be entered.

Working Group Name settings

msh> smb group "work group name"

• Set workgroup name using up to 15 characters.

Comment settings

msh> smb comment "comment"

• Set comment using up to 31 characters.

Notify print job completion

msh> smb notif {on | off}

• To notify print job completion, specify "on". Otherwise, specify "off".

Deleting Computer Nam

msh> smb clear comp

Deleting Group Name

msh> smb clear group

Deleting Comment

msh> smb clear comment

View Protocol

msh> smb protocol

snmp

Use the "snmp" command to display and edit SNMP configuration settings such as the community name.

View settings

msh> snmp

• Default access settings 1 is as follows:

Community name:public

IPv4 address:0.0.0.0

IPv6 address:::

IPX address:00000000:00000000000

Access type:read-only

Effective Protocol: IPv4/IPv6/IPX

• Default access settings 2 is as follows:

Community name:admin

IPv4 address:0.0.0.0

IPv6 address:::

IPX address:00000000:000000000000

Access type:read-write

Effective Protocol: IPv4/IPv6/IPX

- If "-p" is added, you can view settings one by one.
- To display the current community, specify its registration number.

Display

msh> snmp ?

Community name configuration

msh> snmp "number" name "community_name"

• You can configure ten SNMP access settings numbered 1-10.

- The printer cannot be accessed from SmartDeviceMonitor for Admin or SmartDeviceMonitor for Client if "public" is not registered in numbers 1-10. When changing the community name, use SmartDeviceMonitor for Admin and SNMP Setup Tool to correspond with printer settings.
- The community name can be entered using up to 15 characters.

Deleting community name

msh> snmp "number" clear name

Access type configuration

msh> snmp "number" type "access_type"

Access type	Type of access permission
no	not accessible
read	read only
write	read and write
trap	user is notified of trapmessages

Protocol configuration

Use the following command to set protocols "active" or "inactive": If you set a protocol "inactive", all access settings for that protocol are disabled.

msh> snmp {ipv4|ipv6|ipx} {on|off}

- Specify "ipv4" for IPv4, "ipv6" for IPv6, or "ipx" for IPX/SPX.
- {on} means "active" and {off} means "inactive".
- All protocols cannot be turned off concurrently.

Configuration of protocol for each registration number

To change the protocol of access settings, use the following command. However, if you have disabled a protocol with the above command, activating it here has no effect.

msh> snmp "number" active {ipv4|ipv6|ipx} {on|off}

Access configuration

msh> snmp "number" {ipv4|ipv6|ipx} "address"

- You can configure a host address according to the protocol used.
- The network interface board accepts requests only from hosts that have IPv4, IPv6, and IPX
 addresses with access types of "read-only" or "read-write". Enter "0" to have network interface
 board accept requests from any host without requiring a specific type of access.
- Enter a host address to deliver "trap" access type information to.
- To specify IPv4 or IPv6, enter "ipv4" or "ipv6" followed by a space, and then the IPv4 or IPv6
 address.

• To specify IPX/SPX, enter "ipx" followed by a space, the IPX address followed by a decimal, and then the MAC address of the network interface board.

sysLocation configuration

msh> snmp location

Deleting sysLocation

msh> snmp clear location

sysContact setting

msh> snmp contact

Deleting sysContact

msh> snmp clear contact

SNMP v1v2 function configuration

msh> snmp v1v2 {on|off}

• Specify "on" to enable, and "off" to disable.

SNMP v3 function configuration

msh> snmp v3 {on|off}

• Specify "on" to enable, and "off" to disable.

SNMP TRAP configuration

 $msh > snmp trap \{v1|v2|v3\} \{on|off\}$

• Specify "on" to enable, and "off" to disable.

Remote Configuration Authorization configuration

msh> snmp remote {on|off}

• Specify "on" to enable, and "off" to disable the SNMP v1v2 setting.

SNMP v3 TRAP configuration display

msh> snmp v3trap
msh> snmp v3trap {1-5}

If a number from 1-5 is entered, settings are displayed for that number only.

Configuring a sending address for SNMP v3 TRAP

msh> snmp v3trap {1-5} {ipv4|ipv6|ipx} "address"

Configuring a sending protocol for SNMP v3 TRAP

msh> snmp v3trap {1-5} active {ipv4|ipv6|ipx} {on|off}

Configuring a user account for SNMP v3 TRAP

msh> snmp v3trap {1-5} account "account_name"

Enter an account name using up to 32 alphanumeric characters.

Deleting an SNMP v3 TRAP user account

msh> snmp v3trap {1-5} clear account

Configuring an SNMP v3 encryption algorithm

msh> snmp v3auth {md5|sha1}

Configuring SNMP v3 encryption

msh> snmp v3priv {auto|on}

Set "auto" for automatic encryption configuration.

Set "on" for mandatory encryption configuration.

sntp

The printer clock can be synchronized with a NTP server clock using Simple Network Time Protocol (SNTP). Use the "sntp" command to change SNTP settings.

View settings

msh> sntp

NTP server address configuration

You can specify the IP address of the NTP server.

msh> sntp server "IP address"

Interval configuration

msh> sntp interval "polling_time"

- You can specify the interval at which the printer synchronizes with the operator-specified NTP server. The default is 60 minutes.
- The interval can be entered from 0, or between 16 and 10,080 minutes.
- 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

msh> sntp timezone "+/-hour_time"

You can specify the time difference between the printer clock and NTP server clock. The values
are between -12:00 and +13:00.

spoolsw

Use the "spoolsw" command to view and configure Job Spool settings.

You can only specify diprint, lpr, ipp, ftp, smb and sftp protocol.

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 The "spoolsw" command for configuring Job Spool settings is available only when the optional hard disk is installed.

View settings

The Job Spool setting appears.

msh> spoolsw

Job Spool setting

msh> spoolsw spool {on | off}



• Specify "on" to enable Job Spool, or "off" to disable it.

Resetting Job spool setting

```
msh> spoolsw clear job {on | off}
```

• When the printer power is cut during job spooling, this determines whether to reprint the spooled job.

Protocol configuration

```
msh> spoolsw diprint {on | off}
msh> spoolsw lpr {on | off}
msh> spoolsw ipp {on | off}
msh> spoolsw smb {on | off}
msh> spoolsw ftp {on | off}
msh> spoolsw sftp {on | off}
```

• You can specify the settings for diprint, lpr, ipp, smb and sftp.

```
msh> spoolsw wsprn {on|off}
```

ssdp

Use the "ssdp" command to view and configure SSDP settings.

View settings

msh> ssdp

Setting effective time

msh> ssdp profile {1801-86400}

The default is 10800 seconds.

Advertise packet TTL settings

msh> ssdp ttl {1-255}

The default is 4.

ssh

Use the "ssh" command to view and configure SSH settings.

View settings

msh> ssh

Data compression communication settings

msh> ssh compression {on|off}

The default is "on".

SSH/SFTP communication port setting

msh> ssh port {22, 1024-65535}

The default is 22.

SSH/SFTP communication timeout setting

msh> ssh timeout {0-65535}

The default is 300.

SSH/SFTP communication login timeout setting

msh> ssh logintimeout {0-65535}

The default is 300.

Setting an open key for SSH/SFTP

msh> ssh genkey {512|768|1024} "character string"

Create an open key for SSH/SFTP communication.

Usable characters are ASCII 0x20-0x7e (32 bytes) other than "0".

The default key length is 1024, and the character string is blank.

If you do not specify this parameter, an open key with the default value will be created.

Deleting open key for ssh/sftp communication

msh> ssh delkey



• If you do not specify a character string, current setting is displayed.

status

Use the "status" command to display the printer status.

Messages

msh> status

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U Note

• For details, see "Getting Printer Information over the Network".

■ Reference

• p.238 "Getting Printer Information over the Network"

syslog

Use the "syslog" command to display the information stored in the printer's system log.

View message

msh> syslog



• For details about the information displayed, see "Message List".

■ Reference

• p.256 "Message List"

upnp

Use the "upnp" command to display and configure the universal plug and play.

Public URL display

msh> upnp url

Public URL configuration

Msh< upnp url "string"

• Enter the URL string in the character string.

web

Use the "web" command to display and configure parameters on Web Image Monitor.

View Settings

msh> web

URL Configuration

You can set URLs linked by clicking URL on Web Image Monitor.

Specify "1" or "2" for x as the number corresponding to the URL. Up to two URLs can be registered and specified.

msh> web url http://"The URL or IP address you want to register"/

Deleting URLs registered as link destinations

msh> web x clear url

Specify "1" or "2" for x as the corresponding number to the URL.

Link name configuration

You can enter the name for URL that appears on Web Image Monitor.

Specify "1" or "2" for x as the corresponding number to the link name.

msh> web name "Name you want to display"

Resetting URL names registered as link destinations

msh> web x clear name

Specify "1" or "2" for x as the number corresponding to the link name.

Help URL Configuration

You can set URLs linked by clicking [Help] or [?] on Web Image Monitor.

msh> web help http://"Help URL or IP address"/help/

Deleting Help URL

msh> web clear help

wiconfig

Use the "wiconfig" command to make settings for wireless LAN.

View settings

msh> wiconfig

View wireless LAN settings

msh> wiconfig cardinfo

• If wireless LAN is not working correctly, its information is not displayed.

Configuration

msh> wiconfig "parameter"

Parameter	Value configured
mode {ap 802.11adhoc}	You can set infrastructure mode (ap), or 802.11 ad hoc mode (802.11adhoc).
	The default is infrastructure mode.

Parameter	Value configured
ssid "ID value"	You can make settings for the SSID in the infrastructure mode.
	Usable characters are ASCII 0x20-0x7e (32 bytes).
	An SSID value is set automatically to the nearest access point if no setting is made.
	If no setting is made for the ad hoc mode, the same value as for the infrastructure mode or an ASSID value is automatically set. The default is blank.
channel "channel no."	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. The default is "11".
key "key value" val {1 2 3 4}	You can specify the WEP key when entering in hexadecimal.
	With a 64-bit WEP, you can use 10 digit hexadecimals. With a 128-bit WEP, you can use 26 digit hexadecimals.
	Up to four WEP keys can be registered. Specify the number to be registered with "val".
	When a WEP is specified by key, the WEP specified by key phrase is overwritten.
	To use this function, set the same key number and WEP key for all ports that transmit data to each other. Put "Ox" on the front of WEP key.
	You can omit the numbers with "val". The key number is set to 1 when making these omissions. The default is blank.

Parameter	Value configured
keyphrase "phrase" val {1 2 3 4}	You can specify the WEP key when entering in ASCII.
	With a 64-bit WEP, you can use 10 digit hexadecimals. With a 128-bit WEP, you can use 26 digit hexadecimals.
	Up to four WEP keys can be registered. Specify the number to be registered with "val".
	When a WEP is specified by key phrase, the WEP specified by key is overwritten.
	To use this function, set the same key number and WEP key for all ports that transmit data to each other.
	You can omit the numbers with "val". The key number is set to 1 when making these omissions.
encval {1 2 3 4}	You can specify which of the four WEP keys is used for packet encoding. "1" is set if a number is not specified.
wepauth [open shared]	You can set an authorization mode when using WEP. The specified value and authorized mode are as follows:
	open: open system authorized (default) shared: shared key authorized rate
security {none wep wpa}	You can specify the security mode. none: No encryption(default)S wep: WEP encryption wpa: WPA encryption
wpaenc {tkip ccmp}	You can specify WPA encryption key when using WPA encryption.
	tkip: TKIP (default) ccmp: CCMP (AES)

Parameter	Value configured
wpaauth {wpapsk wpa}	You can specify the WPA authentication mode when using WPA encryption. wpapsk: WPA-PSK authentication(default) wpa: WPA(802.1X) authentication wpa2psk: WPA2-PSK authentication wpa2: WPA2 authentication
psk "character string"	You can specify the Pre-Shared key. Usable characters: ASCII 0x20-0x7e (8 to 63 bytes). The default is blank.
eap {tls ttls leap peap} {chap mschap mschapv2 pap md5 tls}	You can specify the EAP authentication type. tls: EAP-TLS (default) ttls: EAP-TLS leap: LEAP peap: PEAP chap, mschap, mschapv2, pap, md5, or tls are settings for the phase 2 method, and must be set when using EAP-TTLS or PEAP. Do not make these settings when using other EAP authentication types. If you select EAP-TTLS, you can select chap, mschap, mschapv2, pap, or md5. If you select PEAP, you can select mschapv2 or tls.
username "character string"	You can specify the login user name for the Radius server. Usable characters: ASCII 0x20-0x7e(31 bytes) other than "@". The default is blank.
username2 "character string"	You can specify the phase 2 username for EAP-TTLS/PEAP phase 2 authentication. Usable characters: ASCII 0x20-0x7e (31 bytes) other than "@". The default is blank.

Parameter	Value configured
domain "character string"	You can specify the login domain name for the Radius server.
	Usable characters: ASCII0x20-0x7e (31 bytes) other than "@". The default is blank.
password "character string"	You can specify the login password for the Radius server.
	Usable characters: ASCII 0x20-0x7e(128 bytes). The default is blank.
srvcert {on off}	You can set the server certificate. The default is "off".
imca {on off}	You can enable or disable the certificate when the intermediate certificate authority is present. The default is "off".
srvid "character string"	You can set the server ID and subdomain of the certificate server.
connectinfo	Obtains connection information.
clear {a each command all}	Returns the selected setting to its default value. If you specify "all", all settings will be restored to their default values.
miccheck {on off}	You can enable or disable the MIC check function.
	The default setting is "On" (enabled).
	If you specify "Off", you cannot perform MIC checks. We recommend you specify "On" for the MIC check function when using this printer.



• You can use this command only when the wireless LAN interface unit is installed.

wins

Use the "wins" command to configure WINS server settings.

Viewing settings

msh> wins

If the IPv4 address obtained from DHCP differs from the WINS IPv4 address, the DHCP address
is the valid address.

Configuration

msh> wins "interface_name" {on | off}

- {on} means "active" and {off} means "inactive".
- Be sure to specify the interface.
- wlan can be specified only when the wireless LAN interface unit is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	Wireless LAN interface

Address configuration

Use the following command to configure a WINS server IP address:

msh> wins "interface_name" {primary|secondary} "IP address"

- Use the "primary" command to configure a primary WINS server IPv4 address.
- Use the "secondary" command to configure a secondary WINS server IPv4 address.
- Do not use "255.255.255.255" as the IPv4 address.

NBT (NetBIOS over TCP/IP) Scope ID Selection

You can specify the NBT scope ID.

msh> wins "interface_name" scope "scope ID"

- The scope ID can be entered using up to 31 alphanumeric characters.
- Be sure to specify the interface.
- wlan can be specified only when the wireless LAN interface unit is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	Wireless LAN interface

wsmfp

Use the "wsmfp" command to view and configure WSD (Device) and WSD (Printer) settings.

View settings

msh> wsmfp

Comment settings

msh> wsmfp comments "comment"

• If you do not specify a comment, current setting is displayed.

Location configuration

msh> wsmfp location "location"

• If you do not specify a comment, current setting is displayed.

Presentation URL configuration

msh> wsmfp url "URL"

• Enter the URL string in the "URL".

WSD (Device) TCP port configuration

msh> wsmfp devport [1024-65535]

• The Default is 53000.

WSD (Printer) TCP port configuration

msh> wsmfp prnport [1024-65535]

• The Default is 53001.

WSD (Printer) Timeout configuration

msh> wsmfp prntimeout [30-65535]

• The default is 900 seconds.

Comment initialization

msh> wsmfp clear comments

Location initialization

msh> wsmfp clear location

Presentation URL initialization

msh> wsmfp clear url

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SNMP

Using the SNMP manager, you can get information about the printer.

The SNMP agent operating on UDP and IPX is incorporated into the built-in Ethernet board and optional wireless LAN interface unit of this printer.

This printer also supports SNMPv3, which increases user authentication, data encryption, and access control security.

To encrypt communication by SNMPv3, you must specify the printer's encrypted password.



 If you changed the printer's community name, change the configuration of the connected computer accordingly, using SNMP Setup Tool. For details, see SNMP Setup Tool Help.

The default community names are [public] and [admin]. You can get MIB information using these community names.

Start SNMP Setup Tool

• Windows 2000:

Click the [Start] button.

Point to [SmartDeviceMonitor for Admin] on the [Programs] menu.

Click [SNMP Setup Tool].

• Windows XP/Vista, Windows Server 2003/2003 R2/2008:

Click the [Start] button.

Point to [SmartDeviceMonitor for Admin] on the [All Programs] menu.

Click [SNMP Setup Tool].

Getting Printer Information over the Network

This section explains details of each item displayed in the printer status and information.

Current Printer Status

The printer status can be checked using the following commands:

- UNIX: Use the "lpq" command and "rsh", "rcp", "ftp" and "sftp" parameters.

 Rsh/rcp cannot be used under Windows Vista and Windows Server 2008.
- mshell: Use the "status" command.

Messages	Description
Adjusting	The printer is initializing or calibrating.
Call Service Center	There is a malfunction in the printer.
Canceling Job	The job is being reset.
Cannot Eject Original Through	The original cannot be ejected.
Cannot multi-install: SD Card	The SD card has been configured using another device.
Configuring	Setting is being changed.
Cover Open: Duplex Unit	The cover of the duplex unit is open.
Cover Open: Exit/Rear Cover	The exit/rear cover is open.
Cover Open: Front Cover	The front cover is open.
Cover Open: Paper Exit Cover	The paper exit cover is open.
Current Job Suspended	Current jobs are suspended.
Energy Saver Mode	The printer is in Energy Saver Mode.
Envelope Setting Error: None	The envelope lever is raised but envelope printing is not selected.
Envelope Setting Error: Others	The envelope lever is lowered but envelope printing is selected.
Error: DIMM Value	A memory error occurred.

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Messages	Description
Error: Ethernet Board	An Ethernet board error has occurred.
Error: HDD Board	A hard disk board error has occurred.
Error: Media Link Board	An error has occurred on the file format converter.
Error: Optional Font	An error has occurred in the font file of the printer.
Error: Optional RAM	An error has occurred in the SDRAM module.
Error: Parallel I/F Board	An error has occurred in the parallel interface.
Error: PDL	An error has occurred in the page description language.
Error: Rem. Certificate Renewal	An error has occurred in the remote certificate renewal.
Error: USB Board	An error has occurred in the USB interface board.
Error: USB Interface	An error has occurred in the USB interface.
Error: Wireless Board	An error has occurred in the wireless LAN board.
Full: Log Data Capacity	Log data capacity is full.
Full: Standard Tray	Stacker tray is full.
Hex Dump Mode	It is a hex dump mode.
Independent-supplier Toner	Toner that is not recommended is set.
In Use: Input Tray	The input tray is being used by other functions.
Jobs Suspended	All jobs are suspended.
Log Data Transfer failed	Log transfer has failed.
Malfunction: Output Tray	There is a problem with the output tray.
Mismatch: Paper Size	The identified paper tray does not contain paper of the selected size.
Mismatch: Paper Size and Type	The identified paper tray does not contain paper of selected size and type.
Mismatch: Paper Size/Image Size	The identified paper tray does not contain paper that matches the image size.

Messages	Description
Mismatch: Paper Type	The identified paper tray does not contain paper of the selected type.
Near Replacing: Develop. Unit K	Prepare a new development unit (black).
Near Replacing: Fusing Unit	Prepare a new fusing unit.
Near Replacing: Int. Transfer	Prepare a new Transfer Roller.
Near Replacing: Print Cartridge	Prepare a new print cartridge.
Nearly Full: Log Data Capacity	Log data capacity is nearly full.
No Paper: Selected Tray	There is no paper in specified tray.
No Paper: Tray 1	There is no paper in tray 1.
No Paper: Tray 2	There is no paper in tray 2.
No Paper: Tray 3	There is no paper in tray 3.
Not Detected: B2 Lever	B2 lever is not correctly set.
Not Detected: Duplex Feed Unit	The duplex feed unit is not correctly set.
Not Detected: Duplex Unit	The duplex unit is not correctly set.
Not Detected: Fusing Unit	The fusing unit is not correctly set.
Not Detected: Input Tray	The paper feed tray is not correctly set.
Not Detected: Print Cartridge	The paper print cartridge is not correctly set.
Not Detected: Tray 1	Tray 1 is not correctly set.
Not Detected: Tray 2	Tray 2 is not correctly set.
Not Detected: Tray 3	Tray 3 is not correctly set.
Offline	Printer is offline.
Operating Thermo-range Error	The ambient temperature is outside the temperature range specified for the printer operation.
Paper Misfeed: Duplex Unit	The paper has jammed in the duplex unit.
Paper Misfeed: Input Tray	The paper has jammed in the input tray.

Messages	Description
Paper Misfeed: Internal/Output	The paper has jammed inside the printer.
Paper Misfeed: Output Tray	The paper has jammed in the output tray.
Printing	Printing is in progress.
Proxy Address/Port Incorrect	Proxy address or Port No. is incorrect.
Proxy User/Password Incorrect	Proxy user name or Password is incorrect.
RC Gate Connection Error	Connection with the RC Gate failed.
Readjusting	The printer is readjusting itself.
Ready	The printer is ready to print.
Renewing Remote Certificate	Remote Certificate is Renewing.
Replace Charger Kit	It is time to replace the charger kit.
Replace Cleaning Web	It is time to replace the Cleaning Web.
Replace Develop. Unit (Black)	It is time to replace the development unit (black).
Replace Fusing Unit	It is time to replace the fusing unit.
Replace Maintenance Kit	It is time to replace the Maintenance Kit.
Replace PCU	It is time to replace the photoconductor unit.
Replace Print Cartridge	It is time to replace the print cartridge.
Reset IPDS fonts	The IPDS fonts are being reset.
SD Card Authentication failed	SD card authentication failed.
SD Card not inserted	The printer is waiting for SD card.
Supplies Order Call failed	The supply order call has failed.
Tray Error: Chaptering	The paper feed tray specification error has occurred because chaptering as well as the normal paper use the same tray for printing.
Tray Error: Duplex Printing	Selected paper tray cannot be used for duplex printing.
Warming Up	The printer is warming up.

- **Note**
 - For details about UNIX commands, see UNIX Supplement.
 - Check the error contents that may be printed in the configuration page. For details about printing a configuration page, see "List/Test Print Menu".
- Reference
 - p.136 "List/Test Print Menu"

Printer Configuration

You can check the printer configuration using telnet.

This section explains the checking procedure for input/output tray and printer language.

- UNIX: Use the "info" command and "rsh", "rcp", "ftp" and "sftp" parameters.
- mshell: Use the "info" command.

Input Tray

ltem	Description
No.	ID number of the paper tray
Name	Name of the paper tray
PaperSize	Size of paper loaded in the paper tray
status	Current status of the paper tray Normal: Normal NolnputTray: No tray PaperEnd: No paper

Output Tray

ltem	Description
No.	ID number of the output tray
Name	Name of the output tray

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ltem	Description
status	Current status of the output tray
	Normal: Normal
	PaperExist: Paper exist
	OverFlow: Paper is full
	Error: Other errors

Emulation

ltem	Description
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



- For details about UNIX commands and parameters, see UNIX Supplement.
- For details about mshell "info" commands, see "Remote Maintenance by telnet".

■ Reference

• p.197 "Remote Maintenance by telnet"

Understanding the Displayed Information

This section explains how to read status information returned by the network interface board.

Print Job Information

Use the following command to display print job information:

- UNIX: Use the "info" command and "rsh", "rcp", and "ftp" parameters.
- mshell: Use the "info" command.

ltem	Description
Rank	Print job status.
	Active
	Printing or preparing for printing.
	• 1st, 2nd, 3rd, 4th
	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.



- For details about UNIX commands and parameters, see UNIX Supplement.
- For details about mshell "info" commands, see "Remote Maintenance by telnet".

Reference

• p.197 "Remote Maintenance by telnet"

Print Log Information

This is a record of the most recent 16 jobs printed.

Use the following command to display print log information:

• UNIX: Use the "prnlog" command and "rsh", "rcp", and "ftp" parameters.

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• telnet: Use the "prnlog" command. See "Remote Maintenance by telnet".

ltem	Description
ID	Print request ID.
User	Print request user name.
Page	Number of pages printed
	Print Request Result
	Communication Result
	• OK
	Print was completed normally. However, the print result may not be as required due to printer problems.
Result	• NG
	Printing was not completed normally.
	Canceled
	An "rcp", "rsh", or "lpr" command print request was canceled, possibly due to the printing application. Not applicable to the "ftp" or "rprinter" command.
Time	Time the print requested was received.
	Time of print request reception
11 12	Printer driver-configured User ID.
User ID	Appears when the print request ID is specified.
lobName	Name of the document for printing
Jobname	Appears when the print request ID is specified.



- For details about UNIX commands and parameters, see UNIX Supplement.
- For details about mshell "info" commands, see "Remote Maintenance by telnet".

■ Reference

• p.197 "Remote Maintenance by telnet"

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Configuring the Network Interface Board

Use the following command to display network interface board settings:

• telnet: Use the "show" command.

	ltem	Description
Com	nmon	
	Mode	
	Protocol Up/Down	Protocol Settings
	AppleTalk	
	IPv4	
	IPv6	
	IPsec	
	NetWare	
	SMB	
	Device Up/Down	Device Settings
	Parallel	
	USB	
	Ethernet interface	
	Syslog priority	
	NVRAM version	
	Device name	
	Comment	
	Location	
	Contact	
	Soft switch	
Арр	leTalk	AppleTalk settings

	ltem		Description
	Мс	ode	
	Ne	t	
	Ob	ject	
	Тур	pe	
	Zoı	ne	
TCI	P/IP		TCP/IP settings
	Mc	ode(IPv4)	
	Mc	ode(IPv6)	
		ftp	
		lpr	
		rsh	
		diprint	
		web	
		http	
		ftpc	
		snmp	
		ірр	
		autonet	
		bonjour	
		ssl	
		nrs	
		rfu	
		nbt	
		ssdp	
		ssh	

ltem		Description
	sftp	
	WSD (Device)	
	WSD (Printer)	
	ipds	
	rhpp	
IPv	4	
	DHCP	
	Address	
	Netmask	
	Broadcast	
	Gateway	
IPv	6	
	Stateless	
	Manual	
	Gateway	
	DHCPv6-lite	
	DUID	
	DHCPv6 option lifetime	
IPs	ec	
	Manual Mode	
	Excluded Protocol	
	https	
	dns	
	dhcp	
	wins	

ltem		Description
	EncapType	
	Host name	
	DNS Domain	
	Access Control	Access Control settings
	IPv4	
	AccessEntry[X]	X can be set between 1 and 5.
	IPv6	
	AccessEntry[X]	X can be set between 1 and 5.
	SNTP Server	Time settings
	Time Zone	
	SNTP Server polling time	
	SYSLOG server	Websys settings
	Home page URL1	
	Home page linkname 1	
	Home page URL2	
	Home page linkname2	
	Help page URL	
	IPDS Port	
	IPDS timeout	
	RHPP Port	
	RHPP timeout	
Ne	tWare	
	ЕпсарТуре	
	RPRINTER number	
	Print server name	

	ltem	Description
	File server name	
	Context name	
	Switch	
	Mode	
	NDS/Bindery	
	Packet negotiation	
	Login Mode	
	Print job timeout	
	Protocol	
	SAP interval time	
	NDS Tree Name	
	Transfer Protocol	
SM	MB	SMB settings
	Switch	
	Mode	
	Direct print	
	Notification	
	Workgroup name	
	Computer name	
	Comment	
	Share name[1]	
	Protocol	
Wi	ireless LAN	Wireless LAN settings
	Host Name	
	Communication Mode	

ltem		Description
	SSID	
	Channel	
	Security	
	WEP Authentication	
	WEP Encryption key number	
	WEP Encryption key number [X]	X can be set between 1 and 4.
	WPA Encryption	
	WPA Authentication	
	Pre-Shared Key	
	User name	
	Domain name	
	ЕАР Туре	
	Password	
	Phase 2 user name	
	Phase 2 Method TTLS	
	Phase 2 Method PEAP	
	Server cert.	
	IntermediateCA	
	Server ID	
	Sub domain	
	MIC check	
Ethe	ernet	802.1X Authentication
DNS		DNS settings
	IPv4	
	Server[X]	X can be set between 1 and 3.

ltem		ltem	Description
		Selected IPv4 DNS Server	
	IPv	6	
		Server[X]	X can be set between 1 and 3.
		Selected IPv6 DNS Server	
	Res	solver Protocol	
Do	Domain Name		
	eth	er	
	wlc	n	
DD	NS		
	eth	er	
	wlc	n	
WI	NS		WINS settings
	eth	er	
		Primary WINS	
		Secondary WINS	
	wlc	n	
		Primary WINS	
		Secondary WINS	
SSI	SSDP		SSDP settings
	UUID		
	Pro	file	
	TTL		
UPnP			UPnP settings
	UR	L	
Воі	Bonjour		Bonjour (Rendezvous) settings

	Item	Description
	Computer Name (cname)	
	Local Hostname (ether)	
	Local Hostname (wlan)	
	Location	
	Priority (diprint)	
	Priority (lpr)	
	Priority (ipp)	
	IP TTL	
	LinkLocal Route for Multil/F	
	IPP Port	
SNMP		SNMP settings
	SNMPv1v2	
	SNMPv3	
	protocol	
	v1Trap	
	v2Trap	
	v3Trap	
	SNMPv1v2 Remote Setting	
	SNMPv3 Privacy	
ssh		ssh settings
	Compression	
	Port	
	TimeOut	
	Login TimeOut	
AuthFree		Authfree settings

	IPv4 AuthFreeEntry[X]	
	AuthFreeEntry[X]	
	•	X can be set between 1 and 5.
	IPv6	
	AuthFreeEntry[X]	X can be set between 1 and 5
	Parallel	
	USB	
LPR		
	lprm check host	
	lpr prnerr chk	
Cert	ificate	
,	Verification	
WS-	MFP	
	Network Device Name	
	Comments	
	Location	
	Presentation URL	
,	WS-Device TCP Port	
,	WS-Printer TCP Port	
,	WS-Printer Job Timeout	
	MetadataVersion	
	UUID	
IEEE	802.1X	IEEE 802.1X settings
	User Name	
	Domain Name	
	ЕАР Туре	

ltem		Description
	Password	
	Phase 2 user name	
	Phase 2 Method TTLS	
	Phase 2 Method PEAP	
	Server cert	
	Intermediate CA	
	Server ID	
	Sub domain	
She	ell mode	Remote maintenance tool mode

This is a list of messages that appear in the printer's system log. The system log can be viewed using the "syslog" command.

System Log Information

Use the following command to display the system log information:

- UNIX: Use the "syslog" command and "rsh", "rcp", "ftp", and "sftp" parameters.
- telnet: Use the "syslog" command.

Access to NetWare server <file server name> denied. Either there is no account for this print server on the NetWare server on password was incorrect.

Login to the file server failed when the print server was online. Make sure the print server is registered in <file server name>. If a password is specified for the print server, delete the password.

account is unavailable: same account name be used.

User account is disabled. This could be because it uses the same account name as the administrator account.

account is unavailable: The authentication password is not set up.

User account is disabled. This could be because the authentication password is not set, and only the encryption account is set.

account is unavailable: encryption is impossible.

Encryption is not possible and account is disabled. This could be because:

- Security option is not installed.
- Encryption password has not been specified.

add_sess_IPv4: bad trap addr: <IPv4 address>, community: <community name>

The IPv4 address (0.0.0.0.) is unavailable when the community access type is TRAP. Specify the host IPv4 address for the TRAP destination.

add_sess_IPv6: bad trap addr: <IPv6 address>, community: <community name>

The IPv6 address [::] is unavailable when the community access type is TRAP. Specify the host IPv6 address for the TRAP destination.

add_sess_IPv4: community <community name> already defined.

The same community name already exists. Use another community name.

add_sess_IPv6: community <community name> already defined.

The same community name already exists. Use another community name.

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.

adjust time server <NTP server name> offset: xx sec.

ncsd tells you the timing of the NTP server and whether or not the time system clock is set.

- NTP Server: NTP server name
- offset: number of seconds of delay (minus number if a time in advance is specified)

Attach FileServer=<file server>

Connection to the file server as the negrest server has been established.

Attach to print queue <print queue name>

The system connects to the print queue when the print server goes online.

authenticating

The supplicant is authenticating with the access point (EAP or WPA).

authentication mode mismatch

The authentication mode of the access point is different from the authentication mode of the supplicant.

Use the authentication mode between the access point and the supplicant.

authenticated

The supplicant has been authenticated.

The authentication was successful. If authentication is successful, this message always appears at the end of the process.

centrod is disabled.

Parallel communication could not be established. Enable "centrod" in the security mode setting.

child process exec error!

The network service failed to start. Turn the printer off and then on. If this does not work, contact your service or sales representative.

cipher suite mismatch

The uni-cast / multi-cast suite (TKIP/AES/WEP) of the access point is different from the suite used by the supplicant.

client EAP method rejected

The authentication mode of the access point is different with the authentication mode of the supplicant.

Use the same authentication mode between the access point and the supplicant.

Client password rejected

The client's password was rejected. Check the client password.

Client TLS certificate rejected

The client's TLS certificate was rejected. Check the certificate.

connected DHCP server < DHCP server address> (< DHCP server address>)

The IP address was successfully received from the DHCP server.

connecting

The supplicant is establishing the wireless connection with the access point.

connected DHCPv6 server <IPv6 address>

The IP address was successfully received from the DHCPv6 server.

Could not attach to FileServer <error number>

Connection to the file server could not be established when the remote printer went online. The file server refused the connection for unknown reason. Check the file server's configuration.

Could not attach to PServer <print server>

Connection to the print server has not been established when the remote printer is turned on. The print server has refused the connection. Check the print server configuration.

connection from <IP address>

A user logged in from the host <IP address>.

Current Interface Speed: <Ethernet I/F Speed>

Speed of the network (10Mbps, 100 Mbps, or 1Gbps).

Current IP address (<current IP address>)

The <current IP address> was acquired from DHCP server.

Current IPX address <IPX address>

The current IP address is <IPX address>.

Duplicate IP=<IP address> (from<MAC address>).

A conflicting IPv4 or IPv6 address was used. Each IPv4 or IPv6 address must be unique.

Check the device address in [MAC address].

DHCPv6 server not found.

The DHCPv6 server was not found. Make sure that the DHCPv6 is on the network.

DHCP lease time expired.

DHCP lease time has expired. Carry out the DHCP Discover. The IP address you have used is no longer available.

disconnected

The supplicant has no connection.

Established SPX Connection with PServer, (RPSocket=<socket number>, connID=<connection ID>)

Connection to the print server was established when the remote printer went online.

exiting

The lpd service was completed and the process is exiting.

Exit pserver

(In the print server mode) The print server function is disabled because the necessary print server settings have not been made.

Frametype=<frametype name>

The specified frame type name <frame type name> is for NetWare use.

IEEE 802.11 Card does NOT support WPA.

A wireless card that does not support WPA is installed. Install a wireless card that supports WPA.

IEEE 802.11 Card Firmware REV.<version>

Displays the version number of the 802.11 card's firmware.

IEEE 802.11 current channel <channel number>

Displays the current channel number of the active wireless card (in ad hoc and infrastructure mode).

IEEE 802.11 MAC Address = <MAC address>

Displays the MAC address of the wireless interface.

IEEE 802.11 SSID <ssid> (AP MAC Address <MAC address>)

The MAC address and SSID of the access point are connected in infrastructure mode.

IEEE 802.11 <communication mode> mode

Displays IEEE 802.11 communication mode.

(IKE phase-1) mismatched authentication type: local=<authentication type 1> remote=<authentication type 2>

This printer's <authentication type 1> in IKE phase 1 does not match the communicating host's <authentication type 2>, Make sure this printer's ISAKMP SA authentication type matches that of the communicating host.

(IKE phase-1) mismatched encryption type: local=<encryption algorithm 1> remote=<encryption algorithm 2>

This printer's ISAKMP SA Oakley group <encryption algorithm 1> in IKE phase 1 does not match the communicating host's ISAKMP SA Oakley group < encryption algorithm 2>, Make sure this printer's ISAKMP SA Oakley group matches that of the communicating host.

(IKE phase-1) mismatched DH group: local=<DH group number 1> remote=<DH group number 2>

This printer's ISAKMP SA Oakley group <DH group number 1> in IKE phase 1 does not match the communicating host's ISAKMP SA Oakley group <DH group number 2>, Make sure this printer's ISAKMP SA Oakley group matches that of the communicating host.

(IKE phase-1) mismatched hash type: local=<Hash Algorithm 1> remote=<Hash Algorithm 2>

This printer's ISAKMP SA <Hash Algorithm 1> in IKE phase 1 does not match the communicating host's ISAKMP SA <Hash Algorithm 2>, Make sure this printer's ISAKMP SA Hash Algorithm matches that of the communicating host.

IKE [% s] is disable, set PSK text

The specified IKE entry is invalid. Enter the PSK text.

inetd start.

The inetd service has started.

Interface (interface name): Duplicate IP Address (<IP address>).

The same IP (IPv4 or IPv6) address was used. Each IP address must be unique. Check the address of the device indicated in [IP address].

<Interface name> card removed

The interface managed by the supplicant has been removed.

<Interface name> interface down

The interface managed by the supplicant is disabled, or cannot connect to the access point.

<Interface name> interface up

The interface managed by the supplicant is enabled, or is connected to the access point.

< Interface > started with IP: < IP address >

IP address (IPv4 or IPv6 address) has been set for the interface and is operating.

< Interface >: Subnet overlap.

The same IP address (IPv4, or IPv6 address) and the subnet mask is used with other device.

job canceled. jobid=%d.

The spooled job was canceled due to error or user request.

IPP cancel -job: permission denied.

The spooled job was canceled due to error or user request.

Lease Time=<lease time>(sec), RenewTime=<renew time>(sec).

The resource lease time received from the DHCP server is displayed in [lease time] in seconds. The renewal time is displayed in [renew time] in seconds.

LEAP challenge to access point failed

The LEAP challenge to the access point has failed.

Login to fileserver <file server name> (<IPX | IP>), <NDS | BINDERY>

When the print server was online, the system logged in to <file server> in NDS or BINDERY mode. The transfer protocol in use is also displayed.

Manual [% s] is disable, set authentication key

The specified manual SA entry is invalid. Set the authentication key.

Manual [% s] is disable, set encryption key

The specified manual SA entry is invalid. Set the authentication key.

MIC failure TKIP counter measures started

The supplicant using TKIP has detected two instances of tampering within 60 seconds and has started counter measures.

MIC failure TKIP counter measures stopped

Counter measures have stopped after 60 seconds (since the supplicant using TKIP started counter measures against tampering).

Name registration failed. name=<NetBIOS name>

Name registration of <NetBIOS Name> failed. Change to a different NetBIOS name.

Name registration success in Broadcast name=<NetBIOS name>

Name registration by <NetBIOS Name> broadcast was successful.

Name registration success. WINS server=<WINS server address> NetBIOS Name=<NetBIOS name>

Name registration of <NetBIOS Name> to <WINS server address> was successful.

npriter start. (NetWare) (In the remote printer mode)

The NetWare service has started.

nwstart start. (NetWare)

The NetWare protocol stack setup server has started.

no RADIUS / authentication server

The supplicant has received a message reporting that a usable RADIUS server cannot be found.

no WPA information element in probe response, rescanning

There is no WPA information on the response from the SSID probe of the access point you want to use.

The supplicant is rescanning.

Open log file <file name>

The specified log file was opened when the print server was online.

papd start. (AppleTalk)

The papd (Printer Access Protocol Daemon) has started.

permission denied.

The permission was denied after checking the user name and host address at the job cancel (except for the root permission).

pserver start. (NetWare)

NetWare service has started in print server mode at the print server operation.

Printer <printer name> has no queue

The print queue is not assigned to the printer when the print server was online. Assign the print queue to the printer using NetWare administrator account, and then restart the printer.

Printer queue <print queue name> cannot be serviced by printer 0, <print server name>

The print queue cannot be established when the print server is online. Make sure that the print queue exists on the specified file server.

Print server <print server name> has no printer

The printer was not assigned to the print server when the print server was online. Use the NetWare administrator account to assign the printer, and then restart the printer.

Print sessions full

No more print jobs can be accepted. Wait a while before sending any more print jobs.

Required file server (<file server name>) not found

The required file server <file server name> could not be found.

restarted.

The LPD has started.

sap enable, saptype=<SAP type>, sapname=<SAP name>

The SAP function was started. The SAP packet is issued to advertise the service in the SAP table on the NetWare server.

server certificate invalid

The server ID is disabled. Check the server authentication.

server identity invalid

The server ID is disabled. Check the server name authentication.

server not trusted

The RADIUS server cannot be trusted.

session IPv4 <community name> not defined.

The requested community name is not defined.

session IPv6 <community name> not defined.

The requested community name is not defined.

session_IPX <community name> not defined.

The requested community name is not defined.

Set context to <NDS context name>

The NDS context name < NDS context name > has been set.

shutdown signal received. network service rebooting...

The network reboot process is starting.

Smbd start. (NetBIOS)

SMBD (Server Message Block Daemon) has been started.

Snmpd Start.

The snmpd has started. This message is displayed only when the power is turned ON.

SMTPC: failed to get smtp server ip-address.

The SMTP server IP address could not be obtained. This could be because:

- The specified DNS server could not be found.
- No connection to the network has been established.
- The specified DNS server could not be found.
- An incorrect DNS server is specified.
- The specified SMTP server IP address could not be found in the DNS server.

SMTPC: failed to connect smtp server. timeout.

Connection to the SMTP server failed due to timeout. This could be because the specified SMTP server name is incorrect, or no connection to the network has been established, or the network configuration is

incorrect, so there is no response from the SMTP server. Check the SMTP server name, or the network connection and configuration.

SMTPC: refused connect by smtp server.

Connection to the SMTP server is denied. This could be because server other than the SMTP server has been specified, or the specified SMTP server port number is incorrect. Check the SMTP server name, port number, or the SMTP server port number.

SMTPC: no smtp server. connection close.

Connection to the SMTP server failed due to no response from SMTP. This could be because a server other than the SMTP server has been specified, or the specified SMTP server port number is incorrect. Check the SMTP server name, port number, or the SMTP server port number.

SMTPC: failed to connect smtp server.

Connection to the SMTP server failed. This could be because no connection to the network has been established, or the network configuration is incorrect, so there is no response from the SMTP server, or the specified SMTP server name is incorrect, or the specified SMTP server IP address could not be found in the DNS server, or a server other than the SMTP server has been specified, or the specified SMTP server port number is incorrect. Check the DNS Server's IP address and SMTP server's IP address, or the SMTP server name and SMTP port number, or the SMTP server's SMTP port number, or the network connection and configuration.

SMTPC: username or password wasn't correct. [response code] (information)

Connection to the SMTP server failed, because the specified SMTP user name is incorrect, or the specified SMTP password is incorrect. Check the SMTP user name and password.

Snmp over IPv4 is ready

Communication over IPv4 with snmp is available.

Snmp over IPv6 is ready.

Communication over IPv6 with snmp is available.

Snmp over IPX is ready.

Communication over IPX with snmp is available.

started.

The direct printing service has started.

started.

The IKE service has started.

Started.

The bonjour (rendezvous) function has started.

stopped

The supplicant has just stopped.

success key received

The supplicant received the EAP-Success key.

success but invalid key

The supplicant received a message reporting that EAP authentication was successful, but the EAPOL key was invalid.

supplicant unbound

The supplicant is not connected to the unbound access point.

supplicant started

The supplicant has just started.

terminated.

IKE service has stopped because any configurations for the manual SA and IKE does not exist.

Terminated.

The bonjour (rendezvous) function is disabled.

There is problem in dhcp server operation.

There is a problem with the DHCP server.

If multiple DHCP servers are active on the network, check that they are assigning unique IP addresses to each machine.

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.

Login to the file server failed when the print server was online. The print server is not registered or a password is specified. Register the print server without specifying a password.

trap account is unavailable.

v3Trap cannot be sent. This could be because the Trap destination account is different from the account specified by the printer.

unauthenticated

The authentication failed. The supplicant was denied access to the access point, or was not authenticated.

Updated (option name) (value) via DHCPv6 Server

The parameter obtained from the DHCP server has been updated.

usbd is disabled.

Plug and Play is unavailable because the machine is in security mode. Enable USBD in Security Mode.

The supplicant is waiting for the session key.

WINS name registration: No response to server (WINS server address)

There was no response from the WINS server. Check that the correct WINS server address is entered. Also, check that the WINS server is functioning properly.

WINS wrong scope ID=<scope ID>

The scope ID is invalid. Use a valid scope ID.

write error occurred. (diskfull)

A "diskfull" error occurred while the printer was writing to the spool file. Wait for the current print job to finish. When it finishes, more HDD space will be available. Only pages that were spooled when the error occurred will be printed.

write error occurred. (fatal)

A "diskfull" error occurred while the printer was writing to the spool file. Wait for the current print job to finish. When it finishes, more HDD space will be available. Only pages that were spooled when the error occurred will be printed.

WSD (Device) started.

WS-Device has started.

WSD (Printer) started.

WS-Printer has started.

Note

• For details about UNIX commands and parameters, see UNIX Supplement.

6. Using a Printer Server

This chapter explains how to configure this printer to work as a network printer.

Preparing Printer Server

This section explains how to configure the printer as a Windows network printer. The printer is configured to enabling network clients to use it. When the network printer is connected via SmartDeviceMonitor for Client, you can set the printing notification function to notify clients of the results of their print jobs.

Mportant (

- Under Windows XP Professional or Windows Server 2003/2003 R2, to change printer properties
 in the [Printer] folder, you need Printer Management access authentication; under Windows Vista or
 Windows Server 2008, Full Control access authentication. Log on to the file server as an Administrator
 group.
- Open the [Printers and Faxes] window from the [Start] menu.
 The [Printers and Faxes] window appears.
- 2. Click the icon of the printer you want to use. On the [File] menu, click [Properties]. The printer properties appear.
- 3. On the [Sharing] tab, click [Share this printer].
- To share the printer with users using a different version of Windows, click [Additional Drivers...].
 - If you have installed an alternative driver by selecting [Share As:] during the printer driver installation, this step can be ignored.
- 5. On the [Advanced] tab, click the [Printing Defaults...] button. Specify the default values for the printer driver that will be distributed to client computers, and then click [OK].
- 6. Click [OK], and then close the printer properties.

Printing notification via SmartDeviceMonitor for Client

Follow the procedure below to configure the printer to use the printing notification function of SmartDeviceMonitor for Client.

Setting the print server



 Under Windows XP Professional or Windows Server 2003/2003 R2, to change printer properties in the [Printer] folder, you need Printer Management access authentication; under Windows Vista or

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Windows Server 2008, Full Control access authentication. Log on to the file server as an Administrator group.

 On the [Start] menu, point to [All Programs], [DeskTopBinder], [SmartDeviceMonitor for Client], and then click [Print Server Setting].

The print server setting dialog box appears.

2. Select the [Notify client PCs of printout/data-transmission] check box, and then click [OK].

After print server setting is made, a dialog box appears. Confirm the dialog box content, and click [OK].

Click [Cancel] to interrupt the procedure.

A dialog box appears for client setting.

3. Click [OK].

The print server setting is completed. Each client must be set to receive print notification.



- Current printing jobs restart from the beginning after the spooler pauses briefly.
- When the expansion function is not used, the function is automatically set as available.
- If you log on using an account that does not have Administrator privileges, the client may not be notified.
- For details, see "Using SmartDeviceMonitor for Client".



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Setting a client

 On the [Start] menu, point to [All Programs], [DeskTopBinder], [SmartDeviceMonitor for Client], and then click [Extended Features Settings].

A dialog box for setting the expansion function appears.

- 2. Select the [Notify of printout/data-transmission when using print server] check box.
- 3. Click [OK].

The client setting is completed.



 Set the printing notification function on the printer driver as well as on SmartDeviceMonitor for Client.

6

Using NetWare

This section describes the setting procedure for network printers in the NetWare environment. In the NetWare environment, you can connect the printer as a "print server" or "remote printer".



IPvó cannot be used on this function.

Setting procedure

- When using the printer as a print server
 - 1. Install the network interface board.
 - 2. Turn the printer off and then back on.
- · When using the printer as a remote printer
 - 1. Install the network interface board.
 - 2. Configure NetWare.
 - 3. Start the print server.



- This procedure assumes an environment is already prepared for normal NetWare running the printing service setting.
- The procedure is explained with the following example settings:
 - File server name ... CAREE
 - Print server name ... PSERV
 - Printer name ...R-PRN
 - Queue name ...R-QUEUE

Setting Up as a Print Server (NetWare 3.x)

Follow the procedure below to connect the printer as a print server using NetWare 3.x.

- 1. Start Web Image Monitor.
- 2. Click [Login].

A dialog box for entering the login user name and password appears.

- Enter the login user name and password, and then click [Login].
 For details about the login user name and password, consult your administrator.
- 4. Click [Configuration] in the left area, and then click [NetWare Print Settings].
 - Print Server Name: Enter the NetWare print server name. To use the interface board as a print server, enter the name of a print server that is not active on the file server. Use up to 47 characters.

- Logon Mode: Specify whether to designate a file server or NDS tree when logging on to NetWare.
- File Server Name: When a file server name is entered here, only the specified file server is searched for. This item is mandatory. Use up to 47 characters.
- NDS Tree: To enable NDS mode, enter the name of the NDS tree you want to log on to. Use up to 32 alphanumeric characters.
- NDS Context Name: To enable NDS mode, enter the print server context. Use up to 127 characters.
- Operation Mode: Specify whether to use the interface board as a print server or a remote printer.
- Remote Printer No.: This item is effective when the interface board is specified as a remote printer.
 Enter the same number as the number of the printer to be created on the print server (0 to 254 characters).
- Job Timeout: When the interface board is used as a NetWare remote printer, the printer cannot
 detect when a print job ends. Therefore, the printer terminates printing when a certain period of
 time has elapsed since it last received print data (i.e., when it has not received print data for a
 certain period of time). Specify here this period of time (3 to 255 seconds). The initial value is
 15 (seconds).
- Frame Type: Select the frame type from the drop-down menu.
- Print Server Protocol: Select the protocol for NetWare from the drop-down menu.
- NCP Delivery Protocol: Select the protocol for NCP delivery.
- 5. Confirm the settings, and then click [Device Name].

Configuration is now complete. Wait several before restarting Web Image Monitor.

6. Click [Logout].



To check the configuration is correct, enter the following from the command prompt:

F:> USFRIIST

- If the printer works as configured, the name of the print server appears as a connected user.
- If you cannot identify the printer you want to configure, check the printer name against the
 configuration page printed from the printer. For details about printing a configuration page, see "Test
 Printing", Quick Installation Guide.
- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer.

 Use the [Network] dialog box of Windows to change the frame type of the computer.
- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about the login user name and password, consult your administrator.

■ Reference

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Setting Up as a Print Server (NetWare 4.x, 5 / 5.1, 6 / 6.5)

Follow the procedure below to connect the printer as a print server using NetWare 4.x, NetWare 5 / 5.1, or NetWare 6 / 6.5.

Mportant (

- When using the printer as a print server in NetWare 4.x, NetWare 5 / 5.1, or NetWare 6 / 6.5, set it to the NDS mode.
- When using NetWare 5 / 5.1 or NetWare 6 / 6.5, set the printer as a print server.
- 1. Start Web Image Monitor.
- 2. Click [Login].

A dialog box for entering the login user name and password appears.

- Enter the login user name and password, and then click [Login].
 For details about the login user name and password, consult your administrator.
- 4. Click [Configuration] in the left area, and then click [NetWare Print Settings].
- Confirm the settings, and then click [Device Name].
 Configuration is now complete. Wait several minutes before restarting Web Image Monitor.
- 6. Click [Logout].
- 7. Quit Web Image Monitor.



- To check the configuration is correct, enter the following from the command prompt:
 - F:> USERLIST
- If the printer works as configured, the name of the print server appears as a connected user.
- If you cannot identify the printer you want to configure, check the printer name against the
 configuration page printed from the printer. For details about printing a configuration page, see "Test
 Printing", Quick Installation Guide.
- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer.

 Use the [Network] dialog box of Windows to change the frame type of the computer.
- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about the login user name and password, consult your administrator.

Reference

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Using Pure IP in the NetWare 5 / 5.1 or 6 / 6.5 Environment

Follow the procedure below to connect the printer as a print server in a pure IP environment of NetWare 5 / 5.1 or NetWare 6 / 6.5.

- When creating a queued print server in a pure IP environment of NetWare 5 / 5.1 or NetWare 6 / 6.5, create a print queue on the file server using NetWare Administrator.
- This printer is not available as a remote printer for use in a pure IP environment.
- To use the printer in a pure IP environment, set it to IPv4.

Setting up using NWadmin

- 1. From Windows, start NWadmin.
 - For details about NWadmin, see the NetWare manuals.
- Select the object in which the print queue is located in the directory tree, and then click [Create] on the [Object] menu.
- 3. In the [Class of new object] box, click [Print Queue], and then click [OK].
- 4. In the [Print Queue Name] box, enter the name of the print queue.
- 5. In the [Print Queue Volume] box, click [Browse].
- 6. In the [Available objects] box, click the volume in which the print queue is created, and then click [OK].
- 7. Check the settings, and then click [Create].
- 8. Select the object in which the printer is located, and then click [Create] on the [Object] menu.
- In the [Class of new object] box, click [Printer], and then click [OK]. For NetWare 5, click [Printer (Non NDPS)].
- 10. In the [Printer name] box, enter the printer name.
- Select the [Define additional properties] check box, and then click [Create].
- 12. Click [Assignments], and then click [Add] in the [Assignments] area.
- 13. In the [Available objects] box, click the queue you created, and then click [OK].
- 14. Click [Configuration], click [Parallel] in the [Printer type] list, and then click [Communication].
- 15. Click [Manual load] in the [Communication type] area, and then click [OK].
- 16. Check the settings, and then click [OK].
- 17. Select a context specified, and then click [Create] on the [Object] menu.
- 18. In the [Class of new object] box, click [Print Server], and then click [OK]. For NetWare 5, click [Print Server (Non NDPS)].

- 19. In the [Print Server Name] box, enter the print server name.
- 20. Select the [Define additional properties] check box, and then click [Create].
- 21. Click [Assignments], and then click [Add] in the [Assignments] area.
- 22. In the [Available objects] box, click the queue you created, and then click [OK].
- 23. Check the settings, and then click [OK].
- 24. Start the print server by entering the following from the console of the NetWare server.

If the print server is in operation, quit and restart it.

To quit

CAREE: unload pserver

To start

CAREE: load pserver print_server_name

Setting up using Web Image Monitor

- 1. Start Web Image Monitor.
- 2. Click [Login].

A dialog box for entering the login user name and login password appears.

3. Enter the user login user name and password, and then click [Login].

For details about the login name and password, consult your administrator.

- 4. Click [Configuration] in the left area, and then click [NetWare Print Settings].
- 5. Confirm the settings, and then click [Device Name].

Configuration is now complete. Wait several minutes before restarting Web Image Monitor.

- 6. Click [Logout].
- 7. Quit Web Image Monitor.



- If you cannot identify the printer you want to configure, check the printer name against the
 configuration page printed from the printer. For details about printing a configuration page, see "Test
 Printing", Quick Installation Guide.
- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer.

 Use the [Network] dialog box of Windows to change the frame type of the computer.
- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about the login user name and password, consult your administrator.

■ Reference

• p.175 "Using Web Image Monitor"

Setting Up as a Remote Printer (NetWare 3.x)

Follow the procedure below to use the printer as a remote printer under NetWare 3.x.

Setting up using PCONSOLE

1. Enter "PCONSOLE" from the command prompt.

F:> PCONSOLE

2. Create a print queue.

When using the existing print queue, go to the procedure for creating a printer.

- From the [Available Options] menu, select [Print Queue Information], and then press the [Enter] key.
- 4. Press [Insert] key, and then enter a print queue name.
- 5. Press [Esc] key to return to the [Available Options] menu.
- 6. Set up the network connection to a printer.
- 7. On the [Available Options] menu, click [Print Server Information], and then press the [Enter] key.
- 8. To create a new print server, press the [Insert] key, and then enter a print server name.

 For a currently defined print server, select a print server in the [Print Server] list.
- 9. From the [Print Server Information] menu, select [Print Server Configuration].
- 10. From the [Print Server Configuration] menu, select [Printer Configuration].
- 11. Select the printer indicated as [Not Installed].
- 12. To change the printer name, enter a new name.

A name "printer x" is assigned to the printer. The "x" stands for the number of the selected printer.

13. As type, select [Remote Parallel, LPT1].

The IRQ, Buffer size, Starting form, and Queue service mode are automatically configured.

- 14. Press the [Esc] key, and then click [Yes] on the confirmation message.
- 15. Press the [Esc] key to return to [Print Server Configuration Menu].
- 16. Assign print queues to the created printer.
- 17. From [Print Server Configuration Menu], select [Queues Serviced By Printer].
- 18. Select the printer created.
- 19. Press the [Insert] key to select a queue serviced by the printer.

You can select several queues.

20. Follow the instructions on the screen to make other necessary settings.

Following these steps, check that the queues are assigned.

- 21. Press the [Esc] key until "Exit?" appears, and then select [Yes] to exit PCONSOLE.
- 22. Start the print server by entering the following from the console of the NetWare server.

If the print server is in operation, quit and restart it.

To quit

CAREE: unload pserver

To start

CAREE: load pserver print_server_name

If the printer works as configured, the message "Waiting for job" appears.

Setting up using Web Image Monitor

- 1. Start Web Image Monitor.
- 2. Click [Login].

A dialog box for entering the login user name and login password appears.

3. Enter the login user name and password, and then click [Login].

For details about the login user name and password, consult your administrator.

- 4. Click [Configuration] in the left area, and then click [NetWare Print Settings].
- 5. Confirm the settings, and then click [Device Name].

Configuration is now complete. Wait several minutes before restarting Web Image Monitor.

- 6. Click [Logout].
- 7. Quit Web Image Monitor.



- If you cannot identify the printer you want to configure, check the printer name against the
 configuration page printed from the printer. For details about printing a configuration page, see "Test
 Printing", Quick Installation Guide.
- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer.

 Use the [Network] dialog box of Windows to change the frame type of the computer.
- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about the login user name and password, consult your administrator.

Reference

p.175 "Using Web Image Monitor"

Setting Up as a Remote Printer (NetWare 4.x, 5 / 5.1, 6 / 6.5)

Follow the procedure below to use the printer as a remote printer under NetWare 4.x, 5 / 5.1 and 6 / 6.5.

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- To use the printer as a remote printer under NetWare 4.x, 5 / 5.1, 6 / 6.5, set it to NDS mode.
- Do not use the printer as a remote printer when Pure IP is used.

Setting up using NWadmin

- From Windows, start NWadmin.
 For details about NWadmin, see the NetWare manuals.
- 2. Set up the network connection to a print queue. Select the object in which the print queue is located in the directory tree, and then click [Create] on the [Object] menu.
- 3. In the [Class of new object] box, click [Print Queue], and then click [OK].
- 4. In the [Print Queue Name] box, enter the name of the print queue.
- 5. In the [Print Queue Volume] box, click [Browse].
- 6. In the [Available objects] box, click the volume in which the print queue is created, and then click [OK].
- 7. Check the settings, and then click [Create].
- 8. Set up the network connection to a printer. Select the object in which the printer is located, and then click [Create] on the [Object] menu.
- 9. In the [Class of new object] box, click [Printer], and then click [OK]. For NetWare 5, click [Printer (Non NDPS)].
- 10. In the [Printer name] box, enter the printer name.
- 11. Select the [Define additional properties] check box, and then click [Create].
- Assign print queues to the created printer. Click [Assignments, and then click [Add] in the [Assignments] area.
- 13. In the [Available objects] box, click the queue you created, and then click [OK].
- Click [Configuration], click [Parallel] in the [Printer type] list, and then click [Communication].
- 15. Click [Manual load] in the [Communication type] area, and then click [OK]. Check the settings, and then click [OK].
- 16. Set up the network connection to a print server. Select a context specified, and then click [Create] on the [Object] menu.
- 17. In the [Class of new object] box, click [Print Server], and then click [OK]. For NetWare 5, click [Print Server (Non NDPS)].
- 18. In the [Print Server Name:] box, enter the print server name.
- 19. Select the [Define additional properties] check box, and then click [Create].
- 20. Assign the printer to the created print server. Click [Assignments], and then click [Add] in the [Assignments] area.

- 21. In the [Available objects] box, click the queue you created, and then click [OK].
- 22. In the [Printers] area, click the printer you assigned, and then click [Printer Number].
- 23. Enter the printer number, and then click [OK]. Check the settings, and then click [OK].
- 24. Start the print server by entering the following from the console of the NetWare server.

If the print server is in operation, quit and restart it.

To exit

CAREE: unload pserver

To start

CAREE: load pserver print_server_name

- 25. Enter the printer server name as the context name, and then press the [Enter] key.
- 26. Select the printer name on the context menu, and then press the [Enter] key.

Setting up using Web Image Monitor

- 1. Start Web Image Monitor.
- 2. Click [Login].

A dialog box for entering the login user name and login password appears.

3. Enter the user login name and password, and then click [Login].

For details about the login user name and password, consult your administrator.

- 4. Click [Configuration] in the left area, and then click [NetWare Print Settings].
- 5. Confirm the settings, and then click [Device Name].

Configuration is now complete. Wait several minutes before restarting Web Image Monitor.

- 6. Click [Logout].
- 7. Quit Web Image Monitor.



- If you cannot identify the printer you want to configure, check the printer name against the
 configuration page printed from the printer. For details about printing a configuration page, see "Test
 Printing", Quick Installation Guide.
- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer.

 Use the [Network] dialog box of Windows to change the frame type of the computer.
- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about the login user name and password, consult your administrator.

■ Reference

• p.175 "Using Web Image Monitor"

7. Mac OS Configuration

This chapter explains how to use this printer with a Mac.

Mac OS

This section explains how to configure a Mac OS to use EtherTalk and USB.

The following explains how to configure Mac OS 9.1. If you are not using Mac OS 9.1, see the manual of the Mac OS you are using for details.



For Mac OS 8.6 and higher. (Mac OS X Classic environment is supported.)

Installing the PPD Files

It is necessary to install a PostScript Printer Description (PPD) files to print from a Mac OS.

Follow the procedure below to install a PPD file into a Mac OS using Mac OS 8.6 and higher.

- 1. Double-click the CD-ROM drive 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 the [Disk1] folder.
- 6. Drag the PPD file into [Printer Descriptions] in [Extensions] under [System Folder].
- 7. Restart the Mac OS.

Setting Up PPD Files



- Make sure that the printers are connected to an Apple Talk network before performing the following procedure.
- 1. On the [Apple] menu, click [Chooser].
- 2. Click the LaserWriter 8 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].

Creating a Desktop Printer Icon



Make sure that printers are connected to the USB before performing the following procedure.

To use a printer connected by USB, create a desktop printer icon.

- 1. Double-click [Utilities] folder under the [Applications (Mac OS 9)] folder.
- 2. Double-click [Desktop Printer Utility].
- Click [LaserWriter 8] in [With], click [Printer (USB)] Create Desktop, and then click [OK].
- 4. Click [Change] in [USB Printer Selection].
- 5. Select the model you are using in [Select a USB Printer:], and then click [OK].
- 6. Click [Create].
- 7. Enter the printer name, and then click [Save].
- 8. Quit Desktop Printer Utility.

Setting Up Options

- 1. On the [Apple] menu, click [Chooser].
- 2. Click the LaserWriter 8 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 an appropriate setting for it.
- 6. Click [OK].

The list of options closes.

7. Click [OK].

The [Chooser] dialog box appears.

8. Close the [Chooser] dialog box.



• If the option you want to select is not displayed, PPD files may not be set up correctly. To complete the setup, check the name of the PPD file displayed in the dialog box.

Changing to EtherTalk

Follow the procedure below to configure to a Mac OS to use EtherTalk.

- 1. Open [Control Panel], and then double-click the Apple Talk icon.
- 2. On the [Connect via:] pop-up menu, click [Ethernet].
- 3. If you change zones, select a name on the [OK] pop-up menu.
- 4. Close the Apple Talk control panel.
- 5. Restart the computer.



- The procedures used to configure Mac OS may vary depending on the Mac OS version. The
 following describes how to configure Mac OS 9.1. If you are using a different version of Mac
 OS, use the following procedures as a reference and see the manuals for your Mac OS version.
- Confirm the Connection to the Printer with TCP/IP.
- For information about installing applications required for EtherTalk, see the Mac OS manuals.

This section explains how to configure a Mac OS X to use EtherTalk, USB, and TCP/IP.

Follow the procedure below to configure Mac OS X 10.3.8. If you are not using Mac OS X 10.3.8, see the manual of the Mac OS X you are using for details.



• For Mac OS X 10.1 or higher.



• The PPD files are stored in "Mac OS X:PPD Installer" on the CD-ROM.

Installing the PPD Files

Follow the procedure below to install a PPD file to print from Mac OS X.

- You need an administrator name and a password (phrase). For details, consult your administrator.
- 1. Insert the CD-ROM into the CD-ROM drive.
- 2. Double-click the CD-ROM drive icon.
- 3. Double-click the [Mac OS X] folder.
- 4. Double-click the [MacOSX PPD Installer] folder.
- Double-click the installer icon.
- 6. Follow the instructions on the screen.

Setting Up the PPD File

1. Start Printer Setup Utility.

Under Mac OS X 10.5, start System Preferences and click [Print & FAX].

2. Click [Add] or [+] button.

Mac OS X 10.5

Click [Default]. If the printer name is not displayed, select the icon that corresponds to your network environment (AppleTalk, etc.).

If several AppleTalk zones exist on the network, select the zone the printer belongs to.

Mac OS X 10.4

Click [More Printers...]. Then select the zone from the second pop-up menu.

Other Mac OS X

Click [AppleTalk] on the first pop-up menu.

If the zone is set, select the zone from the second pop-up menu.

3. Select the printer, and then select its manufacturer from the [Printer Model:] pop-up menu.

Under Mac OS X 10.4, select the printer you are using from the [Print Using] popup menu.

Under Mac OS X 10.5, select the printer you are using from the [Printer Name] list.

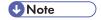
- 4. Select the PPD file for the model you are using, and then click [Add].
- 5. Quit Printer Setup Utility or System Preferences.

Setting Up Options

- 1. Start [System Preferences].
- 2. Click [Print & Fax].
- In the [Printer] list, click the name of the printer you want to use, and then click [Printer Setup...].

Under Mac OS X 10.5, click [Options & Supplies...] and then select [Driver].

- 4. Select the option you want to set up, and then select an appropriate setting for it.
- 5. Click [Apply Changes] or [OK].



• If the option you want to select is not displayed, PPD files may not be set up correctly. To complete the setup, check the name of the PPD file displayed in the dialog box.

Using USB Interface

Follow the procedure below to setup USB connection.

1. Start Printer Setup Utility.

Under Mac OS X 10.5, start System Preferences and click [Print & FAX].

2. Click [Add] or [+] button.

Mac OS X 10.5

Click [Default].

Mac OS X 10.4

Click a printer that has "USB" indicated in the "Connection" column.

Other Mac OS X

Click [USB] on the pop-up menu.

The connected printer appears.

3. Select the printer, and then select its manufacturer from the [Printer Model:] pop-up menu.

Under Mac OS X 10.4, select the printer you are using from the [Print Using] pop-up menu.

A list of printer types appears.

Under Mac OS X 10.5, select the printer you are using from the [Printer Name] list, and [kind] of USB.

- 4. Select the connected printer from the list of printer models, and then click [Add].
- 5. Quit Printer Setup Utility or System Preferences.



- When printing with a USB connection to a Macintosh computer, printer language does not change automatically. Use the control panel on this printer to change printer language to [Auto Detect] or [PS] before printing.
- USB2.0 can be used only with Mac OS X 10.3.3 or higher.

Using Bonjour

Follow the procedure below to print using Bonjour under Mac OS X 10.2.3 or higher. Ethernet, wireless LAN connections can also be used.

1. Start [Printer Setup Utility].

Under Mac OS X 10.5, start System Preferences and click [Print & FAX].

2. Click [Add] or [+] button.

Mac OS X 10.5

Click [Default]. If the printer name is not displayed, select the icon that corresponds to your network environment (AppleTalk, etc.).

If several AppleTalk zones exist on the network, select the zone the printer belongs to.

Mac OS X 10.4

Click a printer that has "Bonjour" indicated in the "Connection" column.

Other Mac OS X

Click [Rendezvous] on the pop-up menu.

Select the name of the connected printer from the list of printer models, and then click [Add].

Under Mac OS X 10.4, Installable Options window appears. Select the option you want to set up, and then select an appropriate setting for it, and then [Continue].

Under Mac OS X 10.5, select the printer you are using from the [Printer Name] list, and [kind] of bonjour.

4. Quit Printer Setup Utility or System Preferences.

When printing with a Rendezvous connection to a Macintosh computer, printer language does not change automatically. Use the control panel on this printer to change printer language to [Auto Detect] or [PS] before printing.

Changing to EtherTalk

Follow the procedure below to configure a Mac OS X to use EtherTalk.



- You need an administrator name and a password (phrase). For details, consult your administrator
- 1. Open [System Preference], and then click the Network icon.
- 2. Click [Built-in Ethernet] or [Ethernet] in the list box.
 Under Mac OS X 10.5, Click [Advanced...].
- 3. Click the [AppleTalk] tab.
- 4. Select the [Make AppleTalk Active] check box.
- 5. To change Apple Talk zones, select a name from the [AppleTalk Zone:] pop-up menu.
- When the settings are made, click [Apply Now] or [OK].Quit [System Preference].



For information about installing applications required for EtherTalk, see the Mac OS manuals.

Configuring the Printer

Use the control panel to enable Apple Talk. (The default is Active.)

7

Using PostScript 3

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.

Mac OS X [Job Type:] on [Job Log] in the print dialog box.

You can select the following items:

Normal Print

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

Sample Print

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

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



- The "User ID:" can contain up to eight alphanumeric (a- z, A- Z, 0- 9) characters.
- Entering the "User ID:" helps you distinguish your print job from others.

Locked Print

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



- The "User ID:" can contain to eight alphanumeric (a-z, A-Z, 0-9) characters. The "Password" must be 4-8 digits.
- Entering the "User ID:" helps you distinguish your print job from others.

Hold Print

Use this function to temporarily hold a file in the printer, and print it from the computer or the printer's control panel later.



- The "User ID:" can contain up to eight alphanumeric (a- z, A- Z, 0- 9) characters.
- The "File Name:" can contain to 16 alphanumeric (a-z, A-Z, 0-9) characters.
- Entering the "User ID:" helps you distinguish your print job from others.

Use this function to store a file in the printer, and then print it from the computer or the printer's control panel later.



- The "User ID:" can contain up to eight alphanumeric (a- z, A- Z, 0- 9) characters. The "Password" must be 4-8 digits.
- The "File Name:" can contain to 16 alphanumeric (a-z, A-Z, 0-9) characters.
- You can assign a password to a saved document, but password assignment is not mandatory.
- Entering the "User ID:" helps you distinguish your print job from others.

Store and Print

Use this function to prints the file at once and also stores the file in the printer.



- The "User ID:" can contain up to eight alphanumeric (a-z, A-Z, 0-9) characters. The "Password" must be 4-8 digits.
- The "File Name:" can contain to 16 alphanumeric (a-z, A-Z, 0-9) characters.
- You can assign a password to a saved document, but password assignment is not mandatory.
- Entering the "User ID:" helps you distinguish your print job from others.

Using sample print



- You need Mac OS X v10.2 or higher to use this function.
- To use this function, the optional hard disk must be installed on the printer.
- The number of pages the printer can save varies depending on the contents of the print images. At
 most, the printer can save 100 jobs or 9,000 pages for Sample Print, Locked Print, Hold Print and
 Stored Print.
- Sample Print files will not appear on the display panel if they have already been executed or deleted
 using the Web browser before you select [Sample Print] from the control panel.
- Sample Print files printed or deleted using Web Image Monitor after you select [Sample Print] using
 the control panel will appear on the display panel. However, an error message will appear if you try
 to print or delete those Sample Print files.
- 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.
- Print jobs are not saved on the hard disk in the following cases. You can check the error log for jobs not saved.

- When there are 100 Sample Print, Locked Print, Hold Print and Stored Print jobs saved on the hard disk.
- When the total number of pages saved on the hard disk exceeds 9,000 pages.

Sending a Sample Print file

1. In the application, on the [File] menu, click [Print].

The [Print] dialog box appears.

2. Set the number of copies to two or more.

The sample print job is sent to the printer, and one set is printed.

- 3. In the pop-up menu, click [Job Log].
- 4. On the [Job Type:] pop-up menu, select [Sample Print].
- 5. In the [User ID:] box, enter a user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters.

The user ID associates the user with his/her jobs.

6. Check the printed output to make sure the settings are correct.

If the settings are correct, perform the following steps to print the remaining sets.

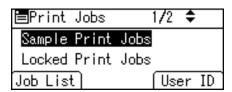
If you want to delete a saved job, see "Sample Print".

Printing a selected Sample Print file

1. Press [Prt.Jobs].



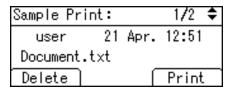
2. Select [Sample Print Jobs] using the [▼] or [▲] key, and then press [Job List].



A list of Sample Print files stored in the printer appears.

Depending on the security settings, certain print jobs may not be displayed.

You can print files also by pressing [User ID].



Enter the new number of sets using the scroll keys. You can enter up to 999 sets.

Press the [Escape] key to correct any entry mistakes.

4. Press [Print].

The remaining sets are printed.

To cancel printing, press [Cancel].



- If the set quantity is changed when [User ID] is pressed in step 7, the changed quantity is applied to all selected files.
- When printing is completed, the stored file will be deleted.
- To stop printing after printing has started, press the [Job Reset] key. The file will be deleted.
- For details about [User ID], see "Printing from the User ID Screen".

Reference

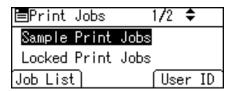
- p.100 "Sample Print"
- p.114 "Printing from the User ID Screen"

Deleting a selected Sample Print file

1. Press [Prt.Jobs].



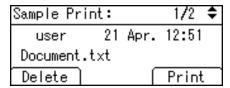
2. Select [Sample Print Jobs] using the [▼] or [▲] key, and then press [Job List].



A list of Sample Print files stored in the printer appears.

Depending on the security settings, certain print jobs may not be displayed.

Select the file you want to delete using the [▼] or [▲] key, and then press [Delete].



The delete confirmation screen will appear.

4. Press [Delete].

The selected file is deleted.

To cancel printing, press [Cancel].

Using locked print



- You need Mac OS X v10.2 or higher to use this function.
- To use this function, the optional hard disk must be installed on the printer.
- The number of pages the printer can save varies depending on the contents of the print images. At
 most, the printer can save 100 jobs or 9,000 pages for Sample Print, Locked Print and Hold Print.
- Locked Print files will not appear on the display panel if they have already been printed or deleted using Web Image Monitor before you select [Locked Print] using the control panel.
- Locked Print files printed or deleted using Web Image Monitor after you have selected [Locked Print]
 using the control panel will still appear on the display panel. However, an error message will appear
 if you try to print or delete those Locked Print files.
- 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.
- Print jobs are not saved on the hard disk in the following cases. You can check the error log for jobs not saved.
 - When there are 100 Sample Print, Locked Print, Hold Print and Stored Print jobs saved on the hard disk.
 - When the total number of pages saved on the hard disk exceeds 9,000 pages.

Sending a Locked Print file

1. In the application, click [Print] on the [File] menu.

The [Print] dialog box appears.

- 2. In the pop-up menu, click [Job Log].
- 3. On the [Job Type:] pop-up menu, click [Locked Print].

4. In the [User ID:] box, enter a user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters, and then enter a 4-8 digit password in the [Password:] box.

The user ID associates the user with his/her jobs.

5. After making the necessary settings, click [Print].

The document file is saved in the printer.

To print the document, perform the following steps.

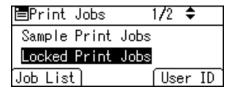
To delete the document, see "Locked Print".

Printing a selected Locked Print file

1. Press [Prt.Jobs].



Select [Locked Print Jobs] using the [▼] or [▲] key, and then press [Job List].



A list of Locked Print files stored in the printer appears.

Depending on the security settings, certain print jobs may not be displayed.

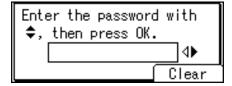
You can print files also by pressing [User ID].

Select the file you want to print using the [▼] or [▲] key, and then press [Print].



The password screen appears.

Enter the password using the [▲], [▼], [◄] or [▶] key, and then press the [OK] key.



The print confirmation screen appears.

A confirmation screen will appear if the password is not entered correctly. Press [Clear] to enter the password again.

If you forget your password, contact your administrator for help.

5. Press [Print].

The remaining sets are printed.

To cancel printing, press [Cancel].



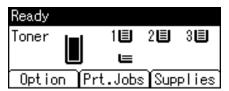
- When printing is completed, the stored file will be deleted.
- To stop printing after printing has started, press the [Job Reset] key. The file will be deleted.
- For details about [User ID], see "Printing from the User ID Screen".

Reference

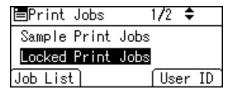
- p.103 "Locked Print"
- p.114 "Printing from the User ID Screen"

Deleting a selected Locked Print file

1. Press [Prt.Jobs].



2. Select [Locked Print Jobs] using the [▼] or [▲] key, and then press [Job List].



A list of Locked Print files stored in the printer appears.

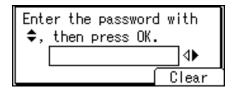
Depending on the security settings, certain print jobs may not be displayed.

3. Select the file you want to delete using the [▼] or [▲] key, and then press [Delete].



The password screen appears.

Enter the password using the [▲], [▼], [◄] or [▶] key, and then press the [OK] key.



The delete confirmation screen appears.

A confirmation screen will appear if the password is not entered correctly. Press [Clear] to enter the password again.

If you forget your password, contact your administrator for help.

5. Press [Delete].

The selected file is deleted.

To cancel printing, press [Cancel].

Using hold print

Mportant !

- You need Mac OS X v10.2 or higher to use this function.
- To use this function, the optional hard disk must be installed on the printer.
- The number of pages the printer can save varies depending on the contents of the print images. At
 most, the printer can save 100 jobs or 9,000 pages for Sample Print, Locked Print and Hold Print.
- Hold Print files will not appear on the display panel if they have already been printed or deleted using
 Web Image Monitor before you select [Hold Print] using the control panel.
- Hold Print files printed or deleted using Web Image Monitor after you have selected [Hold Print] using
 the control panel will still appear on the display panel. However, an error message will appear if you
 try to print or delete those Hold Print files.
- If the application has a collate option, make sure that it is not selected before sending a print job. By
 default, Hold 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.
- Print jobs are not saved on the hard disk in the following cases. You can check the error log for jobs
 - When there are 100 Sample Print, Locked Print, Hold Print and Stored Print jobs saved on the hard disk.
 - When the total number of pages saved on the hard disk exceeds 9,000 pages.

Sending a Hold Print file

1. In the application, click [Print] on the [File] menu.

The [Print] dialog box appears.

- 2. In the pop-up menu, click [Job Log].
- 3. On the [Job Type:] pop-up menu, click [Hold Print].
- 4. In the [User ID:] box, enter a user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters. File Name can also be set.

The user ID associates the user with his/her jobs.

5. After making the necessary settings, click [Print].

The document file is saved in the printer.

To print the document, perform the following steps.

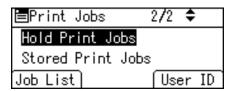
To delete the document, see "Hold Print".

Printing a selected Hold Print file

1. Press [Prt.Jobs].



2. Select [Hold Print Jobs] using the [▼] or [▲] key, and then press [Job List].



A list of Hold Print files stored in the printer appears.

Depending on the security settings, certain print jobs may not be displayed.

You can print files also by pressing [User ID].

3. Select the file you want to print using the [▼] or [▲] key, and then press [Print].



The confirmation screen appears.

4. Press [Print].

The Hold Print file is printed.

To cancel printing, press [Cancel].



- When printing is completed, the stored file will be deleted.
- To stop printing after printing has started, press the [Job Reset] key. The file will be deleted.
- For details about setting printer drivers, see the printer driver Help. You can also print or delete a Hold Print file from Web Image Monitor. For details, see Web Image Monitor Help.
- For details about [User ID], see "Printing from the User ID Screen".

■ Reference

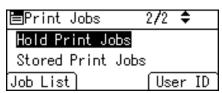
- p.106 "Hold Print"
- p.114 "Printing from the User ID Screen"

Deleting a selected Hold Print file

1. Press [Prt.Jobs].



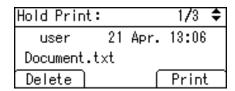
2. Select [Hold Print Jobs] using the [▼] or [▲] key, and then press [Job List].



A list of Hold Print files stored in the printer appears.

Depending on the security settings, certain print jobs may not be displayed.

Select the file you want to delete using the [▼] or [▲] key, and then press [Delete].



The confirmation screen appears.

4. Press [Delete].

The selected file is deleted.

To cancel printing, press [Cancel].

Using stored print



- You need Mac OS X v10.2 or higher to use this function.
- To use this function, the optional hard disk must be installed on the printer.
- Stored Print files will not appear on the display panel if they have already been printed or deleted using Web Image Monitor before you select [Stored Print] using the control panel.
- Stored Print files printed or deleted using Web Image Monitor after you have selected [Stored Print]
 using the control panel will still appear on the display panel. However, an error message will appear
 if you try to print or delete those Stored Print files.
- If the application has a collate option, make sure that it is not selected before sending a print job. By
 default, Stored 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.
- Print jobs are not saved on the hard disk in the following cases. You can check the error log for jobs not saved.
 - When there are 100 Sample Print, Locked Print, Hold Print and Stored Print jobs saved on the hard disk.
 - When the total number of pages saved on the hard disk exceeds 9,000 pages.

Sending a Stored Print file

1. In the application, click [Print] on the [File] menu.

The [Print] dialog box appears.

- 2. In the pop-up menu, click [Job Log].
- 3. On the [Job Type:] pop-up menu, click [Stored Print] or [Store and Print].
 - [Stored Print]

Stores the file in the printer and print it later using the control panel.

• [Store and Print]

Prints the file at once and also stores the file in the printer.

4. In the [User ID:] box, enter a user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters, and then enter a 4-8 digit password in the [Password:] box. File Name can also be set.

The user ID associates the user with his/her jobs.

The password must be entered when printing or deleting.

5. After making the necessary settings, click [Print].

The document file is saved in the printer.

To print the document, perform the following steps.

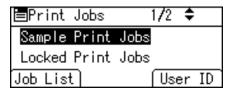
To delete the document, see "Stored Print".

Printing a selected Stored Print file

1. Press [Prt.Jobs].



2. Select [Stored Print Jobs] using the [▼] or [▲] key, and then press [Job List].



A list of Stored Print files stored in the printer appears.

You can print files also by pressing [User ID].

3. Select the file you want to print using the [▼] or [▲] key, and then press [Print].



The confirmation screen appears.

If you set a password in the printer driver, a password confirmation screen appears. Enter the password.

4. Press [Print].

The Stored Print file is printed.

To cancel printing, press [Cancel].



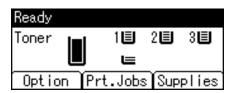
- When multiple files are selected without setting a quantity, one set less than the minimum number of all settings is applied. If the least number of settings is one set, all selected files will be printed at one set.
- If the number of set quantity is changed when [User ID] is pressed in step 5, the changed quantity is applied to all selected files.
- To stop printing after printing has started, press the [Job Reset] key. A Stored Print file is not deleted even if the [Job Reset] key is pressed.
- The Stored Print file that sent to the printer is not deleted unless you delete a file or select [Auto Delete Stored Jobs].
- You can set or delete a password after sending files to the printer. Select the file and press [Change] in the Print Job List screen. To set a password, enter the new password. To delete the password, leave the password box blank on entering or confirming the new password, and press the [OK] key.
- For details about the [Auto Delete Stored Jobs], see "Maintenance Menu".
- For details about [User ID], see "Printing from the User ID Screen".



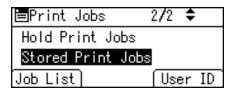
- p.109 "Stored Print"
- p.114 "Printing from the User ID Screen"
- p.130 "Maintenance Menu"

Deleting a selected Stored Print file

1. Press [Prt.Jobs].

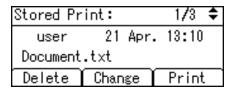


2. Select [Stored Print Jobs] using the [▼] or [▲] key, and then press [Job List].



A list of Stored Print files stored in the printer appears.

Depending on the security settings, certain print jobs may not be displayed.



The delete confirmation screen will appear.

If you set the password in the printer driver, enter the password to delete.

If you forget your password, contact your administrator for help.

4. Press [Delete].

The selected file is deleted.

To cancel printing, press [Cancel].

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 Web Image Monitor.

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

Mac OS X	Select the [Enable User Code] check box, and then
	enter a user code in the [User Code] box on [Job
	Log] in the print dialog box.

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.

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.



 For details about the paper sizes supported by this printer, see "Paper and Other Media", Hardware Guide.

Fit to Paper

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

Mac OS	[Fit to Paper] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Fit to Paper] on the [Features x] tab on [Printer Features] in the print dialog box.

Prompt User

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

Nearest Size and Scale

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

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

Nearest Size and Crop

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

Input Slot

Use this to select the paper sources.

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

Mac OS	[Paper Source:] on [General] in the print dialog box.
Mac OS X	[Paper Feed] in the print dialog box.



• For details about the paper sources, see "Paper and Other Media", Hardware Guide.

Duplex Printing

Use this function to select duplex printing.

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

None

Disables duplex printing.

Flip on Long Edge

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

Flip on Short Edge

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

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.

Mac OS	[Print Mode] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Print Mode] on the [Feature Set: x] tab on [Printer Features] in the print dialog box.



• For details about this function, see printer driver Help.

Collate

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



Make sure that the following check boxes have not been selected.

Mac OS

The [Collate] check box in the print dialog box.

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

Mac OS	[Collate] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Collate] check box on [Copies & Pages] in the printer dialog box.

Paper Type

Use this to select the paper type.

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

Mac OS	[Paper Type:] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Paper Type] on the [General 1] tab on [Printer Features] in the print dialog box.



• For details about the media type supported by this printer, see "Paper and Other Media", Hardware Guide.

Dithering

Use this function to set the Image Rendering mode.

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

Mac OS	[Dithering]: on [Printer Specific Options] in the print dialog box.
Mac OS X	[Dithering]: on the [General 1] tab on Printer Features in the print dialog box.

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.

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Photographic

Performs dithering using an appropriate pattern for photographs.

Text

Performs dithering using an appropriate pattern for text.

/

Printer Utility for Mac

By using Printer Utility for Mac, you can download fonts, change the name of the printer and so on.



• If a Macintosh and printer are connected by USB, you cannot use Printer Utility for Mac.



- Printer Utility for Mac is included on the CD-ROM labeled "Printer Drivers and Utilities".
- Printer Utility for Mac requires Mac OS 7.6.1-9.x, or Mac OS X 10.1.x or 10.2.1. Mac OS X 10.0.x and 10.2 are not supported.

Installing Printer Utility for Mac

Follow these steps to install Printer Utility for Mac on the printer.

- 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.

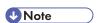
The contents of the CD-ROM appear.

4. Double-click the [Mac OS 8 and 9] icon to open it.

Under Mac OS X, double-click the [Mac OS X] folder.

- 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.
- 6. Drag the CD-ROM icon and drop it into [Trash] to eject the CD-ROM.

Printer Utility for Mac is installed.



- 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 higher. (Mac OS X Classic environment is supported.)
- Printer Utility for Mac cannot use Mac OS X (native mode).

Starting Printer Utility for Mac

Mac OS



- Before starting Printer Utility for Mac, make sure the printer is selected in [Chooser] on the Apple menu.
- 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.

Mac OS X

1. Double-click the Printer Utility for Mac icon.

The [Printer Utility for Mac] dialog box appears.

- 2. Click [OK].
- 3. In the [Available Printers:] box, select the printer you want to use.

If you change zones, select a name from [Available Network Zones:].

Click [Choose Printer...] on the Printer Utility for Mac menu if you want to change the printer.

4. Select the printer you want to use.

Printer Utility for Mac will take a few seconds to start.

5. Click [Choose].

Printer Utility for Mac Functions

Downloading PS fonts

You can download the PS fonts to the printer memory or hard disk.

- The following procedure to download the fonts assumes that you are an administrator. If you are not, be sure to consult your administrator.
- During the download, do not turn off the power switch, operate the panel or open or close the cover.
- If the printer restarts, all the printer settings return to the defaults.

- Confirm that a Macintosh and the printer are connected with Apple Talk.
- 1. Select [Download PS Fonts...] on the [File] menu.
- 2. Click [Add to list].

The dialog box to select fonts appears.

3. 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.

- 6. When the completion message appears, click [OK].
- 7. Click [Cancel].



- Some fonts cannot be downloaded.
- Before downloading, read the documentation about the fonts you want to use.

Displaying printer fonts

You can display the available fonts currently downloaded to the printer. Fonts in the printer memory and hard disk can be displayed.

1. Select [Display Printer's Fonts...] on the [File] menu.

A dialog box appears.

- 2. Select [Printer's memory] or [Printer's disk].
- Click [OK].



• The fonts displayed in italics are the default fonts.

Deleting fonts

You can delete fonts from the printer's memory or hard disk.



- You cannot delete the fonts displayed in italic.
- 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.
- 4. Click [Delete].

A confirmation message appears.

- 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 hard disk, all the fonts downloaded to the printer hard disk are deleted. Before initializing, be sure to check the fonts on the hard disk.

Mportant !

- When initializing the printer hard disk from the control panel, all of the data on the printer hard disk
 is deleted. Before initializing, be sure to check the data on the hard disk.
- Do not turn off the power switch until initializing is completed, otherwise the hard disk might be damaged.
- 1. Select [Initialize Printer's Disk...] on the [File] menu.

The confirmation message appears. To cancel initialization, click [Cancel].

2. Click [Execute].

Initializing starts.

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. Select the paper size.
- 3. Click [OK].

Printing font catalog

You can print the names of fonts available on the printer.

1. Select [Print Fonts Catalog...] on the [File] menu.

2. Click [Print].



• The paper selected under [Page Setup] is used.

Printing font sample

You can print samples of fonts downloaded to the hard disk or memory.

- 1. Select [Print Fonts Sample...] on the [File] menu.
- 2. Click [Print].



• Print by using the paper selected on [Page Setup].

Renaming the printer

You can change the printer name displayed under Apple Talk. 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].



- You can enter up to 31 digits and letters.
- Do not use symbols, for example "*", ":", "=", "@", "~".

Mac OS

- 1. On the [File] menu, click [Rename Printer...].
- 2. In the [New Name:] filed enter a new name.
- 3. Click [Rename].

The printer name is changed.

- 4. Click [OK].
- 5. On the Apple menu, click [Chooser].
- 6. Click the [LaserWriter 8] icon.
- 7. Select the printer whose name you changed, and then close the [Chooser] dialog box.
 If there are several Apple Talk zones, select the zone the printer belongs to.

Mac OS X

- 1. On the [File] menu, click [Rename Printer...].
- 2. In the [New Name:] filed enter a new name.

The printer name is changed.

- 4. Click [OK].
- 5. On the [Printer Utility for Mac] menu, click [Choose Printer...].
- 6. In the [Available Network Zones:] list, select the zone for the Macintosh in use.
- In the [Available Printers:] list, select the printer whose name you changed, and then click [Choose].

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.

The fonts downloaded in the printer memory will be deleted.

If the printer restarts, all the printer settings return to the defaults.

Downloading PS files

You can download a PS file to the printer.

- 1. Select [Download PostScript File...] on the [Utility] menu.
- 2. Select the file name to download, click the file name, and then click [Open].
- 3. Type the log file name, and then click [Save].

The selected file is downloaded.

Errors are recorded in the log file.

Selecting the zone

You can change the zone to which the printer belongs under Apple Talk.

Confirm that a Macintosh and printer are connected with Apple Talk.

Mac OS

1. On the [Utility] menu, click [Select Zone...].

The zone to which the printer belongs and the available zone list appear.

2. Select the zone in which you want to locate the printer, and then click [Change].

A confirmation message appears.

3. Click [Continue].

A confirmation message appears.

- 4. Click [OK].
- 5. On the Apple menu, click [Chooser].
- 6. Click the [LaserWriter 8] icon.
- 7. In the [AppleTalk zone:] list, select the zone you changed.
- 8. In the [Select a PostScript Printer:] list, select the printer you want to use.
- 9. Close the [Chooser] dialog box.

Mac OS X

1. On the [Utility] menu, click [Select Zone...].

The zone to which the printer belongs and the available zone list appear.

2. Select the zone which you want to locate the printer in, and then click [Change].

A confirmation message appears.

3. Click [Continue].

A confirmation message appears.

- 4. Click [OK].
- 5. On the [Printer Utility for Mac] menu, click [Choose Printer...].
- 6. In the [Available Network Zones:] list, select the zone you changed.
- In the [Available Printers:] list, select the model of printer in use, and then click [Choose].

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 status and available space on the hard disk. You can also confirm the zone to which the printer belongs.

3. Click [OK].

Launching the dialogue console

You can create and edit a PS file for printing, and then download it to the printer.

- "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.

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.

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.

8. Appendix

Software and Utilities Included on the CD-ROM

This section explains the software and utilities included on the "Printer Drivers and Utilities" CD-ROM that comes with this printer.

Font Manager

For installing new screen fonts, or organizing and managing fonts already in the system. For details about Font Manager, see the manual on the CD-ROM labeled "Printer Drivers and Utilities".

DeskTopBinder - SmartDeviceMonitor for Client

For users to manage their network print status.

Printer Utility for Mac

This utility allows users to download and manage a variety of fonts as well as manage printers. For details about this utility, see "Printer Utility for Mac".



- Some documentation about using the printer is included on the CD-ROM in PDF format. For details
 about using Adobe Acrobat Reader/Adobe Reader, see Adobe Acrobat Reader/Adobe Reader
 online Help.
- For details, see "Printer Utility for Mac".

Reference

• p.305 "Printer Utility for Mac"

Viewing the Contents of the CD-ROM

This section explains how to view the contents of the CD-ROM.

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

The installer starts.

2. Click [Browse This CD-ROM].

Explorer starts and displays the contents of the CD-ROM.

Printer Drivers for This Printer

This section explains printer drivers for this printer.

 You can install the PCL printer drivers (PCL 5e and PCL 6), and the PostScript printer drivers from the CD-ROM provided with this printer or download them from the supplier's Web site. If your operating system is Windows XP x64/Vista x64, Windows Server 2003/2003 R2/2008 x64, you must download the printer drivers from the supplier's Web site. Select this printer and the operating system you are using, and then download them.

Printing requires installation of a printer driver for your operating system. The following drivers are included on the CD-ROM labeled "Printer Drivers and Utilities".

Operating System	PCL 6	PCL 5e	PostScript 3
Windows 2000 * 1	ОК	OK	ОК
Windows XP *2	OK	OK	ОК
Windows Vista *3	OK	OK	ОК
Windows Server 2003 *4	ОК	OK	ОК
Windows Server 2008 *5	ОК	OK	ОК
Mac OS *6	_	_	ОК
Mac OS X *7	_	_	OK

- * 1 Microsoft Windows 2000 Professional / Microsoft Windows 2000 Server/Microsoft Windows 2000 Advanced Server
- *2 Microsoft Windows XP Professional/Microsoft Windows XP Home Edition
- *3 Microsoft Windows Vista Ultimate/Microsoft Windows Vista Enterprise/Microsoft Windows Vista Business/ Microsoft Windows Vista Home Premium/Microsoft Windows Vista Home Basic
- *4 Microsoft Windows Server 2003 Standard Edition/Microsoft Windows Server 2003 Enterprise Edition/ Microsoft Windows Server 2003 R2 Standard Edition/Microsoft Windows Server 2003 R2 Enterprise Edition/
- *5 Microsoft Windows Server 2008 Standard / Microsoft Windows Server 2008 Enterprise/
- *6 Versions 8.6 to 9.2 of the Mac OS (Mac OS X Classic mode is supported.)
- *7 Mac OS X 10.1 or later (Native mode)

PCL printer drivers

Two kinds of PCL printer driver (PCL 5e and PCL 6) are included. These drivers allow your computer to communicate with this printer via a printer language. To use these drivers, the Printer Enhance Option is required.

PostScript Printer Drivers and PPD files

PostScript printer drivers allow the computer to communicate with the printer using a printer language. PPD files allow the printer driver to enable specific printer functions.

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PPD files

PPD files allow the printer driver to enable specific printer functions.



- Some applications may require installation of the PCL 5e printer driver. In this case, you can install PCL 5e without having to install PCL 6.
- For details, see "Installing the Printer Driver".



• p.20 "Installing the Printer Driver"

DeskTopBinder - SmartDeviceMonitor for Client

This section describes the file path and system requirements of DeskTopBinder-SmartDeviceMonitor for Client.

SmartDeviceMonitor for Client has the following functions. We recommend that users install this application.

- Printing in a peer-to-peer network, using TCP/IP, and IPP from Windows 2000/XP/Vista or Windows Server 2003/2003 R2/2008.
- Constantly monitoring the status of devices on the network using TCP/IP and IPX/SPX.

File path

 $SmartDevice Monitor\ for\ Client\ is\ stored\ in\ the\ following\ folder\ on\ the\ CD-ROM.$

NETWORK\DEVMON\CLIENT\DISK1

Operating system	Protocol stack
Windows 2000	TCP/IP provided with Windows 2000
	IPX/SPX provided with Windows 2000
	NetWare Client provided with Windows 2000
	Novell Client provided with Windows 2000
Windows XP	TCP/IP provided with Windows XP
	IPX/SPX provided with Windows XP
	NetWare Client provided with Windows XP
	Novell Client provided with Windows XP
Windows Vista	TCP/IP provided with Windows Vista
	Novell Client provided with Windows Vista

Operating system	Protocol stack
Windows Server 2003/2003 R2/2008	TCP/IP provided with Windows Server 2003/2003 R2/2008 IPX/SPX provided with Windows Server 2003/2003 R2/2008
	NetWare Client provided with Windows Server 2003/2003 R2/2008
	Novell Client provided with Windows Server 2003/2003 R2/2008

Available functions

SmartDeviceMonitor for Client has the following functions.

- Peer-to-peer print function
 - Prints directly on the network printer without sending any data to a print server.
 - Prints on a substitute printer when there are too many jobs waiting on the specified printer, or when an error disables printing (Recovery Printing).
 - Allocates multiple print jobs to multiple printers (Parallel Printing).
 - Executes prior group registration of printers specified for Recovery Printing or Parallel Printing.
- Notification function
 - Displays an error message when there is an error on the specified printer while transferring or printing data.
 - Notifies a print completion. You can also be notified of the print condition, such as displaying the notice only when Recovery Printing is executed.
- Monitoring function
 - Checks printer supplies such as paper or toner.
 - Simultaneously monitors multiple printers in use.
 - Checks the printer's network settings and detailed information of printers.
 - Enables you to check the print job log using the user ID.

Manuals

The supplied "Manuals" CD-ROMs contain HTML format manuals and PDF manuals.

Depending on the printer model, PDF manuals may not be supplied.

HTML Format Manuals

File path: MANUAL_HTML

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PDF Format Manuals

File path: MANUAL_PDF

Printing Files Directly from Windows

You can print files directly using Windows commands. For example, you can print PS files for PS3.

Windows 2000/XP/Vista, Windows Server 2003/2003 R2/2008

You can print files directly using "lpr", "rcp", or "ftp" command.



• To use "sftp" commands, use an sftp client software that is compatible with ssh v2.

Setup

Follow the procedure below to make network environment settings.

 Enable TCP/IP with the control panel, and then set up the printer's network environment about TCP/IP including IP addresses.

TCP/IP of the printer is set as default.

2. Install a TCP/IP in Windows to set up the network environment.

Consult the administrator for the local setting information.

 To print under Windows 2000/XP/Vista or Windows Server 2003/2003 R2/2008, install "Printing service for UNIX" as the network application.



- For details about setting up IPv4 address, see "Configuration", Hardware Guide.
- For details about setting the IPv4 address of the printer using DHCP, see "Using DHCP".



p.325 "Using DHCP"

Using a Host Name Instead of an IPv4 Address

When a host name is defined, you can specify a printer by host name instead of IPv4 address. The host names vary depending on the network environment.

When using DNS

Use the host name set to the data file on the DNS server.

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When setting the IPv4 address of a printer using DHCP

Use the printer name on the configuration page as the host name.

For details about printing a configuration page, see "List/Test Print Menu".



• p.136 "List/Test Print Menu"

In other cases

Add the IPv4 address and host name of the network printer to the hosts file on the computer used for printing. Methods of addition vary depending on operating systems.

Windows 2000/XP/Vista, Windows Server 2003/2003 R2/2008

1. Open the hosts file using memo pad files, for instance.

The hosts file is in the following folder:

\WINNT\SYSTEM32\DRIVERS\ETC\HOSTS

"\WINNT" is the directory of the installation destination for Windows 2000/XP/Vista, Windows Server 2003/2003 R2/2008.

2. Add an IPv4 address and host name to the hosts file using the following format:

192.168.15.16 host # NP

"192.168.15.16" is the IPv4 address, "host" is the printer's host name, and "#NP" is replaced by comments. Insert a space or tab between "192.168.15.16" and "host", between "host" and "#NP" respectively, using one line for this format.

3. Save the file.



 When using a host name under Windows Server 2003/2003 R2 with IPv6 protocol, perform host name resolution using an external DNS server. The host file cannot be used.

Printing Commands

The following explains printing operations using the "lpr", "rcp", and "ftp" commands.

Enter commands using the command prompt window. The location of the command prompts varies depending on operating systems:

Windows 2000

[Start] - [Programs] - [Accessories] - [Command Prompt]

Windows XP, Windows Vista, Windows Server 2003/2003 R2/2008

[Start] - [All Programs] - [Accessories] - [Command Prompt]



- Match the data format of the file to be printed with the emulation mode of the printer.
- If the message "print requests full" appears, no print jobs can be accepted. Try again when sessions end. For each command, the amount of possible sessions is indicated as follows:
 - lpr: 10
 - rcp, rsh: 5
 - ftp: 3
- Enter the file name in a format including the path from the directory executing commands.
- The "option" specified in a command is an intrinsic printer option and its syntax is similar to printing from UNIX. For details, see UNIX Supplement.

lpr

When specifying a printer by IP address

c:> lpr -Sprinter's IP address [-Poption] [-o 1] \path\file name

When using a host name instead of an IP address

c:> lpr -Sprinter's host name [-Poption] [-o 1] \path\file name

When printing a binary file, add the "-o l" option (lowercase O, and lowercase L).

When using a printer with the host name "host" to print a PS file named "file 1" located in the "C:\PRINT" directory, the command line is as follows:

c:> lpr -Shost -Pfiletype=RPS -o 1 C:\PRINT\file1

rcp

First, register the printer's host name in the hosts file.

c:> rcp [-b] \path\file name [path\file name...] printer's host name:[option]

When using a printer with the host name "host" to print a PostScript file named "file 1" or "file 2" located in the "C:\PRINT" directory, the command line is as follows:

c:> rcp -b C:\PRINT\file1 C:\PRINT\file2 host:filetype=RPS



- In file names, "*" and "?" can be used as wild cards.
- When printing a binary file, add the "-b" option.

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ftp

Use the "put" or "mput" command according to the number of files to be printed.

When one file is printed

ftp> put \path\file name [option]

When multiple files are printed

ftp> mput \path\file name [\path\file name...] [option]

 Formulate the printer's IP address or the host name of the hosts file printer as an argument and use the "ftp" command.

% ftp printer's IP address

2. Enter the user name and password, and then press the [Enter] key.

For details about the user name and password, consult your administrator.

User:

Password:

3. When printing a binary file, set the file mode to binary.

ftp> bin

When printing a binary file in ASCII mode, print may not come out correctly.

4. Specify files to be printed.

The following shows the examples of printing a PS file named "file 1" in the "C:\PRINT" directory and printing file 1 and file 2.

```
ftp> put C:\PRINT\file1 filetype=RPS
ftp> mput C:\PRINT\file1 C:\PRINT\file2
```

5. Quit ftp.

ftp> bye



- "=", ",", "_", and ";"cannot be used for filenames. File names will be read as option strings.
- · For "mput" command, option cannot be defined.
- For "mput" command, "*" and "?" can be used as wild cards in file names.
- When printing a binary file in ASCII mode, print may not come out correctly.

sftp

To use the "sftp" command, a client software is required.

Use the client software that is compliant with ssh ver2.

1. Start the client software.

"psftp>open" host name"" appears.

2. Enter the host name, and then press the [Enter] key.

"Login as: "user name"" appears.

3. Enter the user name, and then press the [Enter] key.

When you access the "sftp" command initially, "Store key in cache? (y/n)" message appears. Select whether or not to store the key and key information, and then press the [Enter] key.

The entered "user name" and "host name" appears.

4. Enter the password, and then press the [Enter] key.

The entered password will not appear.



- Not all client can use this function.
- For details, see the client software help or the manual help.

When Using Windows Terminal Service/Citrix Presentation Server/Citrix XenApp

The following explains how to use Windows Terminal Service and Maintenance.

Operating Environment

The following operating systems and Citrix Presentation Server/Citrix XenApp versions are supported.

Windows 2000 Server / Advanced Server

- Citrix Presentation Server 4.0
- Citrix XenApp 4.5

Windows server 2003/2003 R2

- Citrix Presentation Server 4.0
- Citrix XenApp 4.5

Supported Printer Drivers

When Windows Terminal Service is operating

- PCL drivers
- PostScript 3

Limitations

The following limitations apply to the Windows Terminal Service environment.

These limitations are built in Windows Terminal Service or Citrix Presentation Server/Citrix XenApp.

Windows Terminal Service

In the Windows Terminal Service environment, some of the printer driver's functions are unavailable. In an environment where Windows Terminal Service is installed, some of the printer driver's functions are available, even if any function of Windows Terminal Service is not used. When you install SmartDeviceMonitor for Client in an environment where the Terminal Service is running on the Windows 2000 Server family computer, be sure to install it using the install mode. The following are the two methods of installation using the install mode:

- 1. Use [Add/Remove Programs] in [Control Panel] to install SmartDeviceMonitor for Client.
- Enter the following command in the MS-DOS command prompt: CHANGE USER / INSTALL

To quit the install mode, enter the following command in the MS-DOS command prompt.

CHANGE USER /EXECUTE

Citrix Presentation Server/Citrix XenApp [Auto-creating client printers]

Using [Auto-creating client printers] can select a logical printer created by copying the client's local printer data to the MetaFrame server. We strongly recommend testing this function in your network environment before using it for your work.

- The settings for optional equipment will not be stored in the server after the equipment is
 disconnected. The settings for optional equipment will be restored to its defaults each time the
 client computer logs on to the server.
- When printing a large number of bitmap images or using the server in a WAN environment over dial-up lines such as ISDN, printing may not be possible or errors may occur, depending on data transfer rates.

Citrix Presentation Server/Citrix XenApp [Printer driver replication]

Using [Printer driver replication] can distribute printer drivers across all servers in a server farm. We strongly recommend testing this function in your network environment before using it for your work.

• If the printer drivers are not properly copied, install them directly onto each server.

Using DHCP

You can use the printer in a DHCP environment. You can also register the printer NetBIOS name on a WINS server when it is running.

- Printers that register the printer NetBIOS name on a WINS server must be configured for the WINS server.
- Supported DHCP servers are Microsoft DHCP Server included with Windows 2000 Server, Windows Server 2003/2003 R2/2008, and the DHCP server included with NetWare and UNIX.
- If you do not use the WINS server, reserve the printer's IP address in the DHCP server so the same IP address is assigned every time.
- To use the WINS server, change the WINS server setting to "active" using the control panel.
- Using the WINS server, you can configure the host name via the remote network printer port.
- DHCP relay-agent is not supported. If you use DHCP relay-agent on a network via ISDN, it will result
 in increased line charges. This is because your computer connects to the ISDN line whenever a packet
 is transferred from the printer.
- If there is more than one DHCP server, use the same setting for all servers. The printer operates using data from the DHCP server that responds first.
- DHCP servers can operate in an IPv6 environment, but they cannot be configured to allocate IPv6 addresses or obtain host names.

Using AutoNet

If the printer IPv4 address is not automatically assigned by the DHCP server, a temporary IP address starting with 169.254 and not used on the network can be automatically selected by the printer.



- The IP address assigned by the DHCP server is given priority over that selected by AutoNet.
- You can confirm the current IPv4 address on the configuration page. For more information about the configuration page, see Quick Installation Guide.
- When AutoNet is running, the NetBIOS name is not registered on the WINS server.
- The printer cannot communicate with devices that do not have the AutoNet function. However, this printer can communicate with Macintosh computers running Mac OS X 10.2.3. or higher.

Configuring the WINS Server

The printer can be configured to register its NetBIOS name with a WINS server when the power is turned on. This enables the NetBIOS name of the printer to be specified from Web Image Monitor even in a DHCP environment.

This section explains configuring the WINS server.



- The WINS server is supported with Windows 2000 Servers WINS Manager.
- For details about the WINS server settings, see Windows Help.
- If there is no reply from the WINS server, the NetBIOS name is registered by broadcast.
- The NetBIOS name can be entered using up to 13 alphanumeric characters.

Using Web Image Monitor

- 1. Start a Web browser.
- 2. Enter "http://(printer's IP address or host name) /" in the address bar to access the printer whose settings you want to change.

Top Page of Web Image Monitor appears.

3. Click [Login].

The dialog box for entering the user name and password appears.

4. Enter the user name and password, and then click [Login].

Contact your administrator for information about the settings.

- 5. In the left area, click [Configuration], and then click [Network].
- 6. Click [TCP/IP].
- Check that [Enable] is selected for [WINS] in the [Ethernet + Wireless LAN] column, and then
 enter the WINS server IPv4 address in [Primary WINS Server] and [Secondary WINS
 Server].
- 8. Click [Apply].
- 9. Quit Web Image Monitor.

Using telnet

You can also use telnet to configure WINS.

Using the Dynamic DNS Function

Dynamic DNS is a function which dynamically updates (registers and deletes) records (A record, AAAA record, CNAME, and PTR record) managed by the DNS server. When a DNS server is part of the network environment to which this printer, a DNS client, is connected, records can be dynamically updated using this function.

Updating

Updating procedure varies depending on whether the printer IP address is static or acquired by DHCP.



• Dynamic update using message authentication (TSIG, SIG(0)) is not supported.

For a static IPv4 setting

If the IP address or host name is changed, the A and PTR records are updated. If the A record is registered, CNAME is also registered. CNAMEs that can be registered are as follows:

Ethernet and wireless LAN
 RNPXXXXXX (XXXXXX represents the last 3 hexadecimal bytes of the MAC address)

 However, if CNAME (PRNXXXXXX) overlaps with the host name, CNAME will not be registered.

For DHCPv4 settings

As a substitute for the printer, the DHCP server updates the record, and one of the following occurs:

- When the printer acquires the IP address from the DHCP server, the DHCP server updates the A
 and PTR records.
- When the printer acquires the IP address from the DHCP server, the printer updates the A record, and the DHCP server updates the PTR record.

If the A record is registered, CNAME is also registered. CNAMEs that can be registered are as follows:

Ethernet and wireless LAN

RNPXXXXXX (XXXXXX represents the last 3 hexadecimal bytes of the MAC address)

For IPv6 settings

This printer updates the AAAA record and PTR record.

It also updates CNAME when the AAAA record is updated.

When a stateless address is newly set, it is automatically registered on the DNS server also.



- When the dynamic DNS function is not used, records managed by the DNS server must be updated manually, if the printer's IP address is changed.
- To update the record using the printer, the DNS server has to have one of the following:

- No security settings made.
- If security settings are made, an IP-specified client (this printer) permits updating.

DNS Servers Targeted for Operation

For static IP setting

- Microsoft DNS servers with standard Windows 2000 Server/Windows Server 2003/2003 R2/2008 features
- BIND 8.2.3 or higher

For DHCP setup, when the printer updates the A record

- Microsoft DNS servers with standard Windows 2000 Server/Windows Server 2003/2003 R2/2008 features
- Microsoft DNS servers with standard Windows 2000 Server/Windows Server 2003/2003 R2/2008 features

For DHCP setup, when the DHCP server updates records

- Microsoft DNS servers with standard Windows 2000 Server/Windows Server 2003/2003 R2/2008 features
- BIND 8.2.3 or higher
- DNS servers with standard NetWare 5 (or a higher version) features

For IPv6 setting

- Microsoft DNS servers with standard Windows Server 2003/2003 R2/2008 features
- BIND 9.2.3 or higher

DHCP Servers Targeted for Operation

As a substitute for the printer, DHCP servers capable of updating the A record and PTR record are as follows:

- Microsoft DHCP servers with standard Windows 2000 Server (Service Pack 3 or higher versions)/ Windows Server 2003/2003 R2/2008 features
- ISC DHCP 3.0 or higher
- DHCP server with standard NetWare 5 features

Setting the Dynamic DNS Function

Make settings with telnet using the "dns" command.

- Note
 - For details, see "Remote Maintenance by telnet".
- **■** Reference
 - p.197 "Remote Maintenance by telnet"

Precautions

Please pay attention to the following when using the network interface board. When configuration is necessary, follow the appropriate procedures below.

Connecting a Dial-Up Router to a Network

When using NetWare (file server)

If the NetWare file server and printer are on opposite sides of a router, packets are sent back and forth continuously, possibly incurring communications charges. Because packet transmission is a feature 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 instead.

Configuring the router

Filter packets so they do not pass over the dial-up router.

Configuring the printer with NetWare

- 1. Following the setup method described earlier in this manual, configure the file server.
- 2. Set the frame type for NetWare environment.

Configuring the printer without NetWare

 When not printing, the network interface board sends packets over the network. Set NetWare to "inactive".

U Note

- The MAC address of the filtering printer is printed on the printer configuration page. For more information about printing a configuration page, see "Test Printing", Quick Installation Guide.
- For more information about configuring the printer if the router cannot be configured, see the following
 instructions.
- For more information about selecting a frame type, see "Ethernet Configuration", Hardware Guide.
- For more information about selecting a protocol, see "Ethernet Configuration", Hardware Guide.

When the Wireless LAN Interface Unit Is Installed

When using the wireless LAN interface on the network, note the following:

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If the network area provides poor radio environment

Where radio wave conditions are bad, the network may not function due to interrupted or failed connections. When checking the wireless LAN signal and the access point, follow the procedure below to improve the situation:

- Position the access point nearer to the printer.
- Clear the space between access point and printer of obstructions.
- Move radio wave generating appliances, such as microwaves, away from the printer and access
 point.



- For information about how to check radio wave status, see "Wireless LAN Configuration", Hardware Guide.
- · For more information about access point radio wave conditions, refer to the access point manual.

Security Measures Provided by this Printer

Using Authentication and Managing Users

This section explains how to improve this printer's security.

The setting can be done only by the administrator.

Enabling Authentication

To control administrators' and users' access to the printer, perform administrator authentication and user authentication using login user names and login passwords. To perform authentication, the authentication function must be enabled.

Specifying Authentication Information to Log on

Users are managed using the personal information managed in the printer's address book.

Enabling user authentication limits usage of printer to people registered in the address book to use the printer. Users can be managed in the address book by the administrator.

Specifying Which Functions are Available

This can be specified by the administrator. Specify the functions available to registered users. By making this setting, administrators can limit the functions available to users.

Preventing Information Leaks

Printing confidential files

Using the printer's Locked Print, files can be stored in the printer as confidential files and then print them. Those file can be printed using the printer's control panel and collected on the spot to prevent others from seeing it.

Protecting Registered Information in the Address Book

This function allows administrator to specify which users have permission to access the data in the address book. Usage of the data in the address book by unregistered users can be prevented.

Administrator can also encrypt the data in the address book to protect the data from unauthorized reading.

Managing Log Files

Data security can by improved by deleting log files stored in the printer. By transferring the log files, administrator can check the history data and identify unauthorized access.

To transfer the log data, the log collection server is required.

Overwriting the Data on the Hard Disk

Before disposing of the printer, make sure all data on the hard disk is deleted. Prevent data leakage by automatically deleting transmitted printer jobs from memory.

To overwrite the hard disk data, the optional Data overwrite security unit is required.

Limiting and Controlling Access

Preventing Modification or Deletion of Stored Data

Users with access permission to stored files can be specified. Permit selected users who have to access permissions to stored files to modify or delete the files.

Preventing Modification of Printer Settings

The printer settings that can be modified depend on the type of administrator account.

Register the administrators so that users cannot change the administrator settings.

Limiting Available Functions

This function allows administrator to specify which users have accessibility to each of the printer's functions, to prevent unauthorized operation.

Enhanced Network Security

Preventing Unauthorized Access

Limit IP addresses or disable ports to prevent unauthorized access over the network and protect the address book, stored files, and default settings.

Encrypting Transmitted Passwords

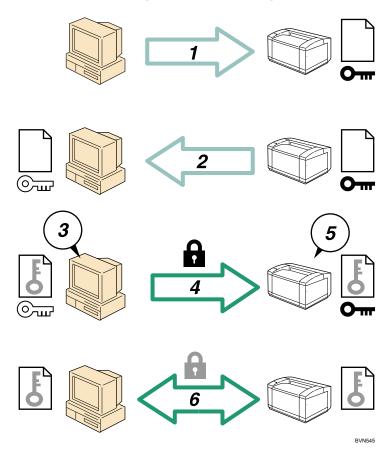
Prevent login passwords, group passwords for PDF files, and IPP authentication passwords being revealed by encrypting them for transmission.

Also, encrypt the login password for administrator authentication and user authentication.

Configuring SSL Encryption

When you access the printer using a Web Image Monitor or IPP, you can establish encrypted communication using SSL.

SSL (SSL (Secure Sockets Layer)Secure Sockets Layer)



- 1. To access the printer from a user's computer, request for the SSL server certificate and public key.
- 2. The server certificate and public key are sent from the printer to the user's computer.
- 3. Create shared key from the user's computer, and then encrypt it using public key.
- 4. The encrypted shared key is sent to the printer.
- 5. The encrypted shared key is decrypted in the printer using private key.
- 6. Transmit the encrypted data using the shared key, and then decrypt the data at the printer to attain secure transmission.

Q

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