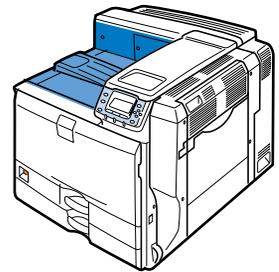


 Pitney Bowes

DP50S

Operating Instructions Software Guide



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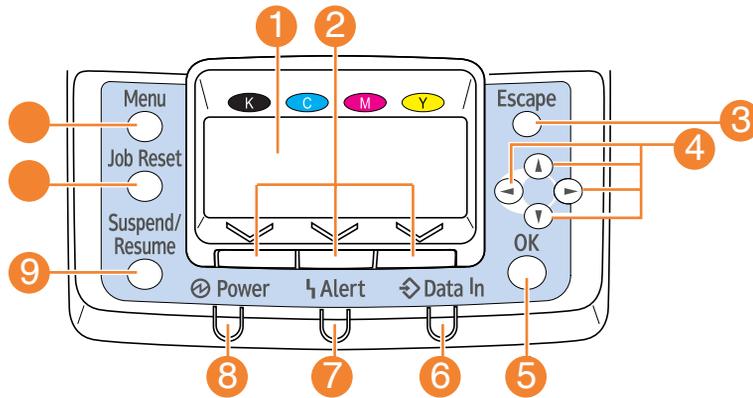
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Using Keys

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



BMV029S

1. Display

Displays current printer status and error messages.

When the printer enters energy saver mode, the display back light turns off. For details about energy saver mode, see “System Menu”.

2. Selection Keys

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

3. [Escape] Key

Press this key to return to previous display.

4. Scroll Keys

Press to move the cursor in each direction.

When the [▲] [▼] [◀] [▶] keys appear in this manual, press the scroll key of the same direction.

5. [OK] Key

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

6. Data In indicator

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

7. 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.

8. 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.

9. [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.

10. [Job Reset] Key

Press this key to cancel an ongoing print job.

11. [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.

Reference

- “System Menu”



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.

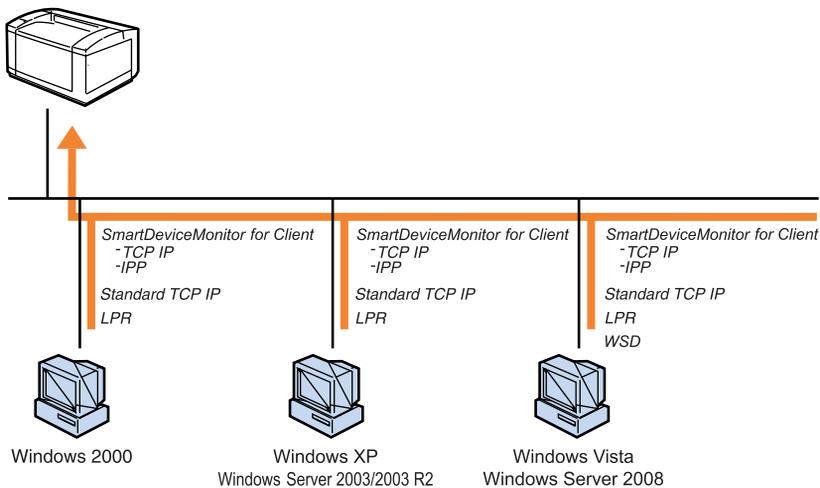
Network Connection

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.

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



BMU909S

Windows 2000/XP, Windows Server 2003/2003 R2

Connection Method	Available Ports
<ul style="list-style-type: none">• Ethernet	<ul style="list-style-type: none">• SmartDeviceMonitor for Client port• Standard TCP/IP port• LPR port

Windows Vista, Windows Server 2008

Connection Method	Available Ports
<ul style="list-style-type: none">• Ethernet	<ul style="list-style-type: none">• SmartDeviceMonitor for Client port• Standard TCP/IP port• LPR port• WSD port

Note

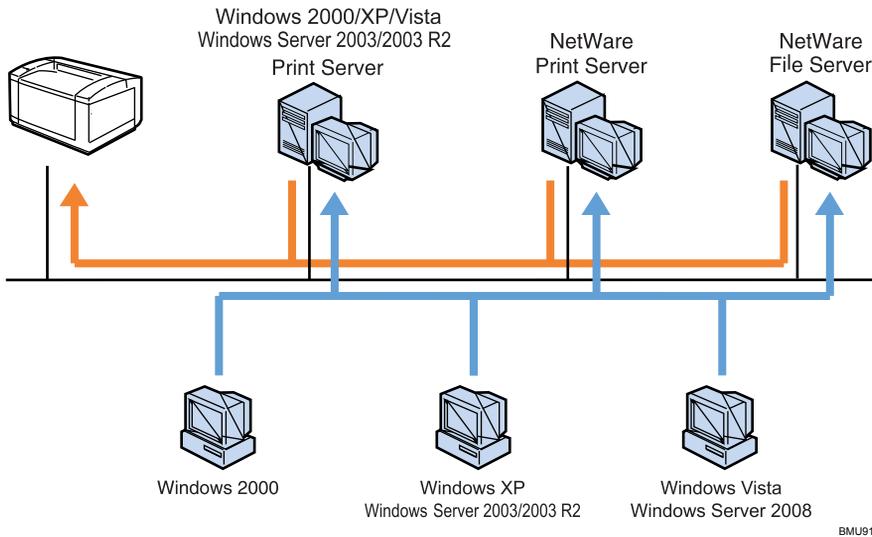
- See the explanation about how to install the printer driver for each type of ports.
- For details about the SmartDeviceMonitor for Client port, see “Installing the Printer Driver”.
- For details about the Standard TCP/IP port, see “Installing the Printer Driver”.
- For details about the LPR port, see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

Reference

- p.24 “Installing the Printer Driver”

Using as a network printer

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



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.41 “Using as a Windows Network Printer”
- p.44 “Using as a NetWare Print Server / Remote Printer”

Local Connection

Local connections can be established via parallel and USB.

Note

- 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.47 “Installing the Printer Driver Using USB”
- p.50 “Printing with Parallel Connection”

Installing the Printer Driver

1

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.

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 and RPCS printer drivers and DeskTopBinder- SmartDeviceMonitor for Client are installed under the network environment, and the TCP/IP port will be set.

★ Important

- 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.

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.

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.**↓ Note**

- To stop installation of the selected software, click [Cancel] before the installation is complete.
- Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.
- Select a printer to 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.47 "Installing the Printer Driver Using USB"
- p.59 "Making Option Settings for the Printer"

Installing the PostScript 3 printer driver (TCP/IP)

↓ Note

- 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.

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 machine not listed here, click [Specify Address], and then enter the IP address or host name of the machine.

11. Check that the name of the machine 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.

↓ Note

- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.
- Auto Run may not work with certain operating system settings. In that case, launch “Setup.exe” on the CD-ROM root directory.

Installing the PostScript 3 printer driver (IPP)

↓ Note

- 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.

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].

10. In the [Printer URL] box, enter "http://(machine'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://(machine'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://machine'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 machine.

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 name.

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.

Note

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

Using the Standard TCP / IP port

Using the Standard TCP/IP port

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

Important

- 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 or Power Users group member.
- In an IPv6 environment, you cannot use the Standard TCP/IP Port. Use the SmartDeviceMonitor for Client port.

Installing the PCL/RPCS Printer Drivers

1. Quit all applications currently running.

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

The installer starts.

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

The default interface language is English.

4. Click [PCL/RPCS Printer Drivers].

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.

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.

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:].

8. 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 "NetworkPrinter Driver C Model".

11. Click [Next >].

12. Click [Finish] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.

13. Check that the name of the machine whose driver you want to install is selected, and then click [Next >].

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.

Note

- 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.
- Auto Run may not work with certain operating system settings. In that case, launch “Setup.exe” on the CD-ROM root directory.
- 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.56 “Messages Displayed When Installing the Printer Driver”

Using the LPR port

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

Important

- 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 or Power Users 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/RPCS Printer Drivers

1. Quit all applications currently running.
2. Insert the CD-ROM into the CD-ROM drive.
The installer starts.
3. Select an interface language, and then click [OK].
The default interface language is English.
4. Click [PCL/RPCS Printer Drivers].
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.

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. Doubleclick 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 lpd] 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.

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. 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:].

8. 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.

10. Enter "lp" in the [Name of printer or print queue on that server box], and then click [OK].

11. Check that the name of the machine 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.

Note

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

- "Messages Displayed When Installing the Printer Driver"

Using as a Windows Network Printer

This describes how to install the PCL, RPCS 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.

★ Important

- 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 or Power Users 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 or RPCS Printer Drivers

1. Quit all applications currently running.
2. Insert the CD-ROM into the CD-ROM drive.
The installer starts.
3. Select an interface language, and then click [OK].
The default interface language is English.
4. Click [PCL/RPCS Printer Drivers].

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.

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 an RPCS printer driver, a user code can be set after the printer driver installation.

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.

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.

Note

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

- “Messages Displayed When Installing the Printer Driver”

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

- 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 Administrator or

★ Important

Power Users 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/RPCS Printer Drivers].

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.

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/Vista or Windows Server 2003/2003 R2/2008, launch the [Printers] window, and then open the printer properties.
18. Click the [NetWare setting] tab.
Under Windows 2000/Vista or Windows Server 2003/2003 R2/2008, 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.

↓ Note

- 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

★ Important

- 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

★ Important

- 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 [Search for a suitable driver for my device [recommended]], 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 is stored.

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

- RPCS
D:DRIVERSRPCSXP_VISTA(language)disk11111
- PCL5c
D:DRIVERSPCL5CXP_VISTA(language)disk11111
- PCL6
D:DRIVERSPCL6XP_VISTA(language)disk11111

- PostScript 3

D:DRIVERSPSXP_VISTA(language)disk11111

1

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.

 **Note**

- 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

 **Important**

- 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 [Cancel], and then [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:

- RPCS

D:DRIVERSRPCSXP_VISTA(language)disk11111

- PCL5c

D:DRIVERSPCL5CXP_VISTA(language)disk11111

- PCL6

D:DRIVERSPCL6XP_VISTA(language)disk11111

- PostScript 3

D:DRIVERSPSXP_VISTA(language)disk11111 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.

Note

- 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 the printer, reconnect the USB cable, and then turn it on again.
Windows has already configured the USB settings.	<p>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.</p> <p>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.</p>

Printing with Parallel Connection

This describes how to install the PCL, RPCS 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.

★ Important

- 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 or Power Users 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 or RPCS Printer Driver

1. Quit all applications currently running.
2. Insert the CD-ROM into the CD-ROM drive.
The installer starts.
3. Select an interface language, and then click [OK].
The default interface language is English.
4. Click [PCL/RPCS Printer Drivers].
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.
7. 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.

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 machine 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:

1. 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 machine 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.

 **Note**

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

- “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 a CD-ROM, the location of the driver is \DRIVERS(RPCS, PCL6, PCL5C, or PS)XP_VISTA(language)DISK1. If the installer starts, click [Cancel] to quit...

4. Specify a port.

Note

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

Reference

- "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 a CD-ROM, the location of the driver is \DRIVERS(RPCS, PCL6, PCL5C, or PS)XP_VISTA(language)DISK1. If the installer starts, click [Cancel] to quit...

4. Specify a port.

Note

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

Reference

- “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 a CD-ROM, the location of the driver is \DRIVERS(RPCS, PCL6, PCL5C, or PS)XP_VISTA(language)DISK1. If the installer starts, click [Cancel] to quit...

6. Specify a port.

Note

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

Reference

- “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 a CD-ROM, the location of the driver is \DRIVERS(RPCS, PCL6, PCL5C, or PS)XP_VISTA(language)DISK1. If the installer starts, click [Cancel] to quit...

6. Specify a port.

 **Note**

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

 **Reference**

- “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 RPCS printer driver and bidirectional communication is enabled under Windows 2000, the [Change 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 RPCS 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 RPCS 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 RPCS 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.

If Bidirectional Communication Is Disabled

Set up option settings when bidirectional communication is disabled.

 **Important**

- 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 or Power Users 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 [Change Accessories] tab.

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

If you are using the RPCS printer driver, click the [Change Accessories] tab.

5. Select options installed from the [Select printer 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.

7. Under [Paper source tray settings:], click the tray to be used, and then select the appropriate size, position, and type for the tray. Select the [Do not use Auto Tray Select] check box to exclude the tray from the targets of automatic tray selection.

8. Click [OK] to close the printer properties dialog 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.

Two Dialog Box Types

There are two dialog box types of the [Printer Properties] dialog box.

“Custom Setting” is used as an example in this manual. For details about changing the dialog box types, see the printer driver Help.

Multi-tab

This dialog box type is designed for users who often change print settings to perform various printing operations.

Custom Setting

This dialog box type is designed for users who rarely change print settings. This type of dialog box may vary depending on the installed options.

Displaying the Printer Driver Setting Screen

This describes how to launch printer driver's properties.

The following procedure explains how to make printer driver settings using Windows XP as an example. The procedure may differ depending on the version of the operating system you are using.

2

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 and Power Users groups 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.

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 [Properties].

The [Printer Properties] dialog box appears.

When you open the [Printer Properties] dialog box for the first time after installing the RPCS printer driver, a confirmation message appears. After you click [OK], the [Printer Properties] dialog box appears.

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

↓ Note

- Depending on the application, the settings you make here may not apply as the default settings.

Making printer default settings - printing preferences

★ Important

- The settings in the "Printing Settings" (Document Property) dialog box that can be modified and retained differ depending on the printer driver, printer icon, and the users registered for each printer icons.

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].

Note

- Depending on the application, the settings you make here may not apply as the default settings.

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].

Note

- 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.

Frequently Used Print Methods

This chapter explains how to use the various printing functions including specifying paper size and color, duplex printing, combine printing, and watermark/overlay printing.

Each function described in this chapter is configured and registered under “Custom Settings”. You can also change the parameters for each function by modifying “Custom Settings”.

↓ Note

- For details about Custom Settings, see “Using Custom Settings”.

▣ Reference

- “Using Custom Settings”

Standard Printing

This section explains how to print documents using the normal printing function with the

★ Important

- Before printing, make sure that the information on the installed options and loaded paper are correctly set in [Change Accessories] in the printer driver. For details about opening [Change Accessories], see “Making printer default settings - the printer properties”.

1. Create a document using an appropriate application. On the [File] menu, click [Printing Preference...].
2. Select [Color] or [Black and White] in the [Color/Black and White:] list.
Documents print faster when [Black and White] is selected instead of [Color].
3. When using paper with a different size from the document’s size, select the [Reduce/ Enlarge] check box, and then select one of the following options from the [Reduce/Enlarge] list:
 - To scale the document to the size of the paper used, select [Fit to paper size].
 - To scale the size of the printout by a specific percentage, select [Scale].
 - To scale the horizontal and vertical proportions of the printout independently, select [Directional Magnification].Select the size of the paper used to print in [Printout paper size:].
4. Select the orientation of the document by selecting [Portrait] or [Landscape] in [Original orientation] area.
5. When printing multiple copies, specify the number of sets in the [Copies] box.

6. Select the paper tray to be used and the type of the paper loaded in the specified tray in the [Paper source tray] and [Paper type] list.

When [Auto Tray Select] is selected in the [Paper source tray] list, the source tray is automatically selected according to the paper size and type specified.

7. Click [OK].
8. Print the document using the print function in the application.

↓ Note

- The types of the paper loaded in the paper trays are indicated on the printer's display. You can check the selected paper type is loaded in which tray. However, the paper type setting available in the printing preference dialog box may be different from the type indicated on the printer's display.
- If the paper tray loaded with the specified paper size and type is not available, a warning message appears on the machine's control panel. If this happens, follow the instruction displayed on the screen to specify a paper tray and perform force printing, or press the job reset button to cancel printing. For details, see "If Error Occurs with the Specified Paper Size and Type".
- If [Color] is selected in the [Color/Black and White:] list, you can print in color using all or some of the 4 available colors: cyan, magenta, yellow, and black. For details about selecting the colors, see "Printing with selected colors".

☐ Reference

- "Making printer default settings - the printer properties"
- "If Error Occurs with the Specified Paper Size and Type"
- "Printing with selected colors"

Printing with selected colors

This section explains how to specify which colors are used to print a document. The 4 colors you can specify are cyan, magenta, yellow, and black.

As an example, the following procedure explains how to print using only magenta and black.

1. Create a document using an appropriate application. On the [File] menu, click [Printing Preference...].
2. Click [Print Quality] tab.
3. Check [User settings], and then select the user you want to change.
4. Click [Change User Settings...].
5. Click [Misc.].
6. Uncheck [Cyan] and [Yellow] from [Separate into CMYK, then print in designated color only:].
7. Click [OK].

8. Print the document using the print function in the application.

Printing on both sides of sheets

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

★ Important

- When loading paper in the printer paper trays or the paper feed units, load at least 20 sheets. Also, adjust the side guide so that it lightly touches the paper.
 - Curled paper: If the paper is curled, flatten the paper before loading it.
 - If you are using thick paper with a smooth surface, paper jams or multiple feeding can occur. Fan the paper before loading it. If a paper jam or multiple feeding occurs even after you have fanned the paper, set the paper one sheet at a time

1. Create a document using an appropriate application. On the [File] menu, click [Printing Preference...].
2. When using the existing Custom Setting, click the icon in the [Custom Setting name] box.

If you do not wish to modify the custom settings already registered in the printer driver, change settings such as paper size and source tray as required, and then proceed to step 10.

3. Click [Add/Change Custom Settings...].
4. Click the [Edit] tab, if it is not already selected.
5. Select the [Duplex/Booklet] check box.
6. Click the desired icon to specify the direction which the pages open to.

If you want to add binding margins, select the [Header/Footer/Adjust image position/Binding margins] check box, and then click [Details].

7. Specify the margins on the front and back sides, and then click [OK].
8. Change other print settings if necessary, and then click [Save As...].

If you are modifying an existing setting and want to overwrite the previous setting, click the [Save] button and then proceed to step 10.

9. Specify a name easily recognizable in the [Custom Setting name] box, and then click [OK].
10. Click [OK] to close the printer preference dialog box.
11. Print the document using the print function in the application.

↓ Note

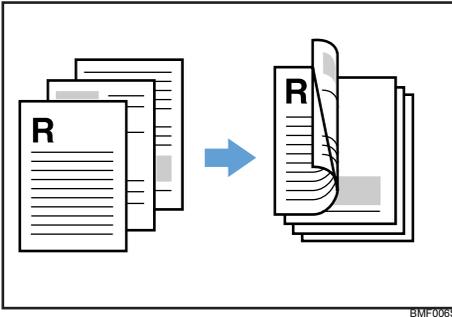
- If the document contains pages with different original sizes, page break may occur.

Types of duplex printing

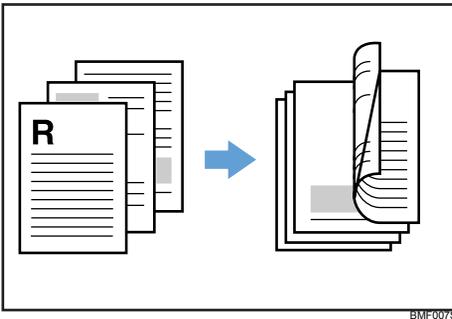
This section explains the binding directions available when using the duplex printing function. When using the duplex printing function, you can select whether to bind pages on an edge or in the center.

Bind on an edge

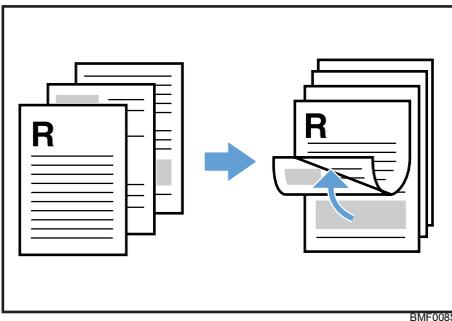
- Duplex (Open to Left)



- Duplex (Open to Right)

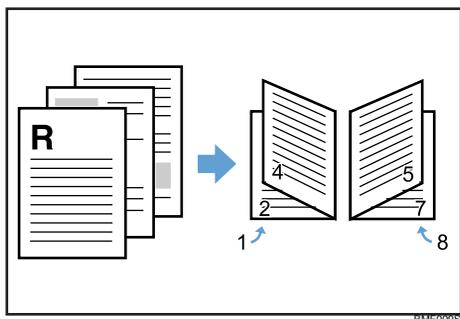


- Duplex (Open to Top)

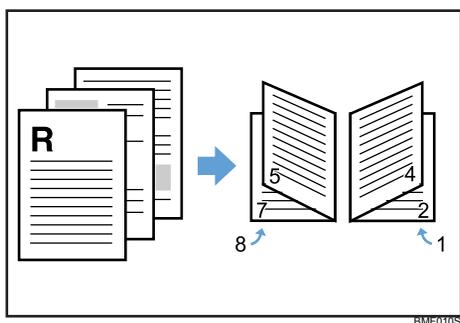


Bind in the center

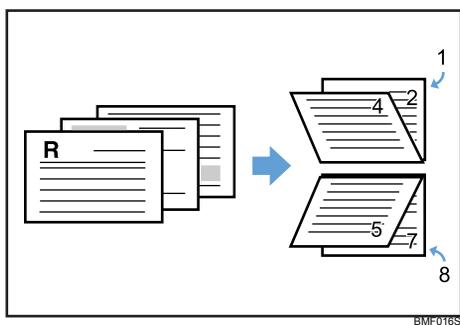
- Booklet1 (Open to Left)



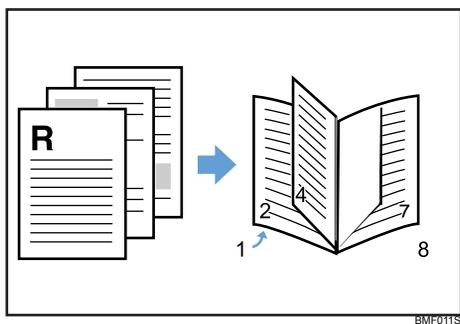
• Booklet1 (Open to Right)



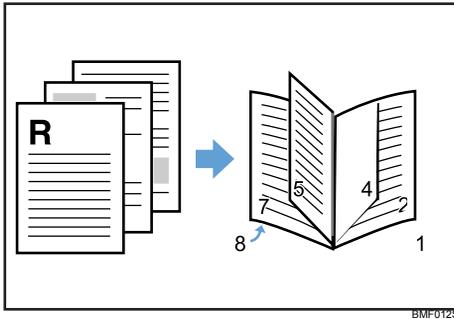
• Booklet1 (Open to Top)



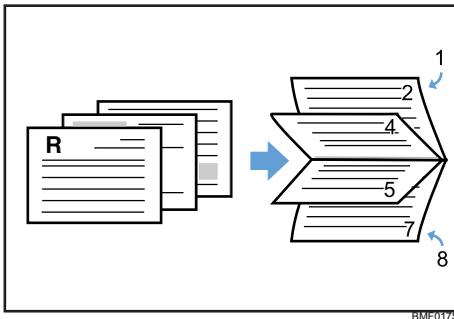
• Booklet2 (Open to Left)



- Booklet2 (Open to Right)



- Booklet2 (Open to Top)



Note

- To specify Booklet1 (Open to Top) and Booklet2 (Open to Top), [Landscape] must be selected in the [Original orientation].

Combining Multiple Pages into Single Page

This section explains how to combine multiple pages onto a single sheet of paper. When using the combine printing function, multiple pages can be scaled and combined onto a single sheet of paper.

Important

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

1. Create a document using an appropriate application. On the [File] menu, click [Printing Preference...].

2. When using the existing Custom Setting, click the icon in the [Custom Setting name] box.

If you do not wish to modify the custom settings already registered in the printer driver, change settings such as paper size and source tray as required, and then proceed to step 9.

3. Click [Add/Change Custom Settings...].

4. Click the [Edit] tab, if it is not already selected.
5. Select the [Layout/Poster] check box, and then select the method of combining pages from the list.
6. Specify the page order by selecting the desired icon.
7. Change other print settings if necessary, and then click [Save As...]

If you are modifying an existing setting and want to overwrite the previous setting, click the [Save] button and then proceed to step 9.

8. Specify a name easily recognizable in the [Custom Setting name] box, and then click [OK].
9. Click [OK] to close the printer preference dialog box.
10. Print the document using the print function in the application.

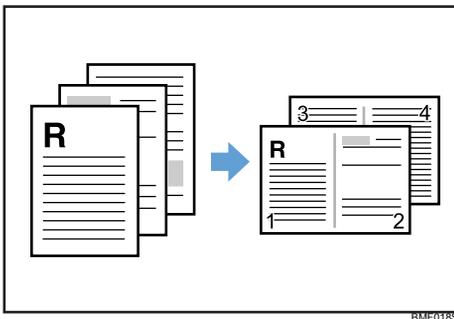
Note

- If the document contains pages with different original sizes, page break occurs.
- If the application you are using has the equivalent function, disable the function in the application. If the function is enabled in the application, undesirable result may occur.
- For details about the combine printing such as combining pages with different orientations, see the printer driver Help.

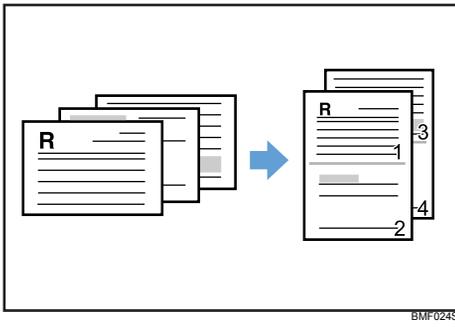
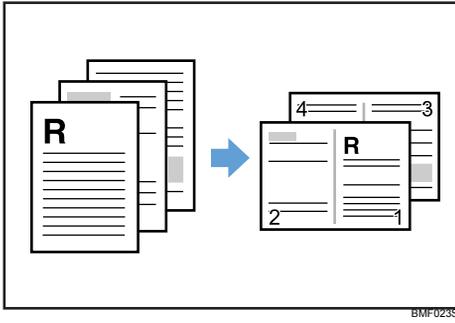
Types of combined printing

This section explains the different methods of the combine printing available. You can combine 2, 4, 9, or 16 pages onto a single sheet of paper. The page order can be specified from the following 4 patters.

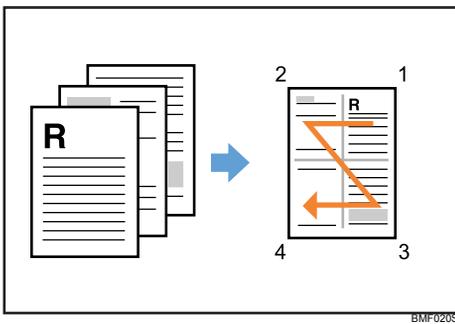
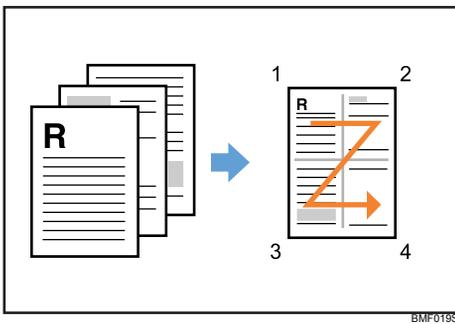
2 pages per sheet

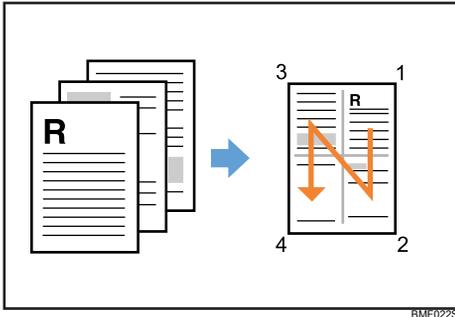
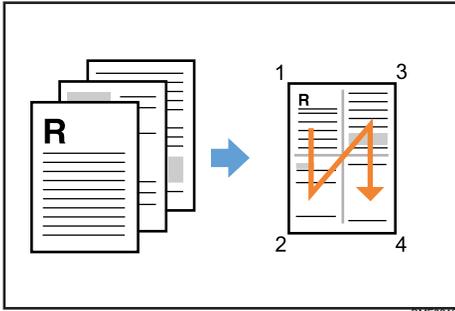


BMF018S



4 pages per sheet





Printing with Watermark/Overlay

This section explains how to print documents with text watermarks using the printer driver.

When the watermark function is enabled, image data or text string can be printed over document pages. There are two types of watermarks available. With “Image” watermark, a bitmap image (.bmp) is printed over the pages. “Text” watermark prints text string. You can specify only one kind of watermarks at a time.

1. Create a document using an appropriate application. On the [File] menu, click [Printing Preference...].

2. When using the existing Custom Setting, click the icon in the [Custom Setting name] box.

If you do not wish to modify the custom settings 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 [Add/Change Custom Settings...].

4. Click the [Edit] tab, if it is not already selected.

5. Select the [Watermarks/Overlay] check box, and then select the type of the watermarks from the list.

To change the watermarks setting, click [Edit].

6. Change other print settings if necessary, and then click [Save As...]

If you are modifying an existing setting and want to overwrite the previous setting, click the [Save] button and then proceed to step 8.

7. Specify a name easily recognizable in the [Custom Setting name] box, and then click [OK].
8. Click [OK] to close the printer preference dialog box.
9. Print the document using the print function in the application.

Note

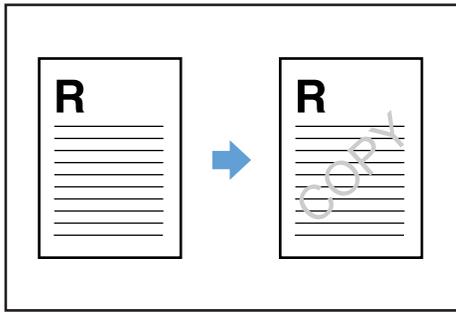
- Other than the watermarks already registered in the printer driver, you can create and apply your own watermarks.
- For details about creating original watermarks, see the printer driver Help.

Types of watermarks

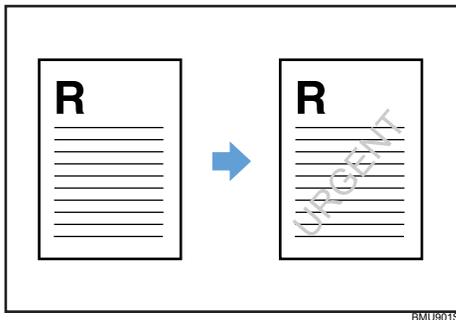
This section explains the types of watermarks available.

There are several text watermarks already registered in the printer driver. The following watermarks are available.

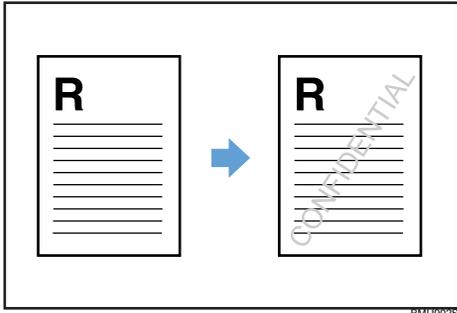
- COPY



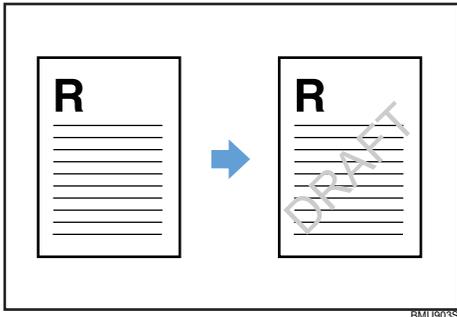
- URGENT



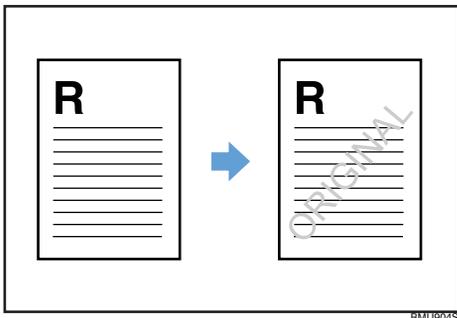
- CONFIDENTIAL



- DRAFT



- ORIGINAL



Using Custom Settings

This section explains how to register and use the Custom settings.

Each function explained in this chapter is preconfigured and registered under “Custom Settings” in the [Print Settings] tab.

You can apply the relevant setting by simply clicking on the custom setting name, and thereby eliminating the redundant procedure to make the required changes. It also helps to avoid incorrect settings and misprints.

Custom settings except [Normal Print] can be added, modified, and deleted as desired. It can also be shared and used among different users. By using the registered custom settings, the various printer functions can be utilized without the user having the expert knowledge of the printer driver.

When using custom settings, [Color] is selected by default. Be sure to change this setting to [Black and White] if you do not want to print in color.

For details about registering, modifying, and deleting custom settings, see the printer driver Help.

Advanced Printing

This chapter explains various printing functions available on the printer.

Other than the [Edit] tab in the printing preference dialog box, you can also modify print settings in the [Setup], [Finishing] and [Misc.] tabs. To change the settings explained in this section, click the following tabs.

2

Settings that Can Be Changed on Each Tab

This section provides an overview of the [Setup] tab, [Finishing] tab and [Misc.] tab.

[Setup] tab

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

- Cover sheets

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

- Slip Sheets

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

[Finishing] tab

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.

[Misc.] tab

You can change various settings for spool printing and other print options.

- Spool Printing

The print job is transmitted to the machine and temporarily stored when printing.

Printing on Cover Sheet

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

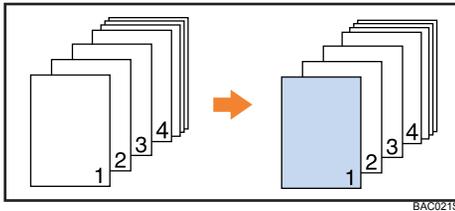
★ Important

- 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

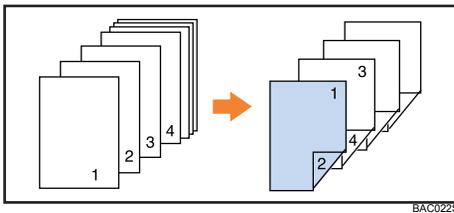
Prints on one side of the cover sheet only, even when duplex printing is selected.



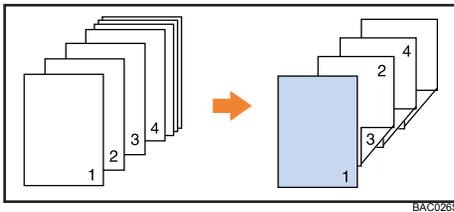
Print on both sides

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

- Cover sheet printed on both sides

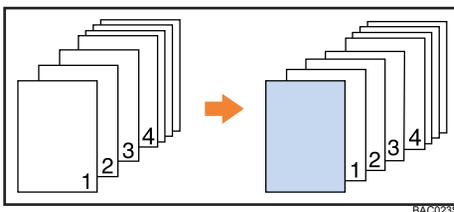


- Cover sheet printed on one side

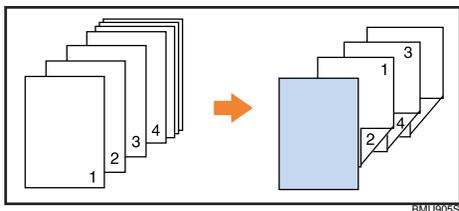


Blank

- When printing one side



- When printing both side



2

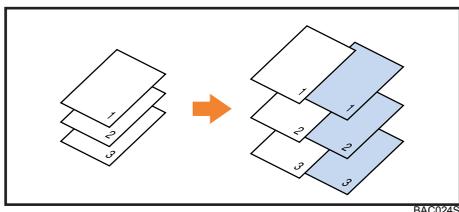
Note

- 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.

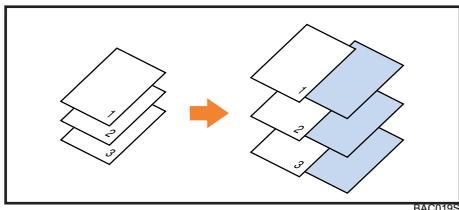
Inserting Slip Sheets

Inserting a slip sheet between each page

- Print

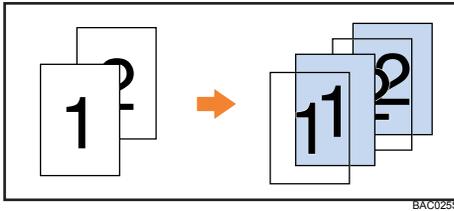


- Blank

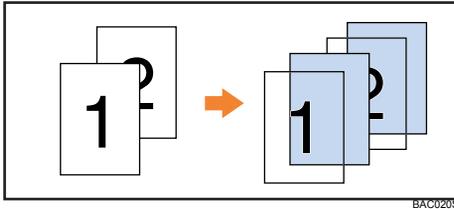


Inserting a slip sheet between OHP transparencies

- Print



- Blank



↓ 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 orientation. Therefore, when the slip sheet has been set to 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.

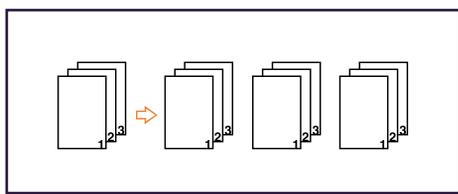
Using Collate Function

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

★ Important

- Up to 150 pages can be stored using RAM. 1,000 pages can be sorted on the hard disk.

Output can be assembled as sets in sequential order.



↓ Note

- If Auto Continue occurs on the first set, Collate will be canceled.
- If forced printing occurs on the first set, Collate will be canceled.

Memory Capacity and Paper Size

Additional memory apart from the standard memory may be required depending on the paper size and data type. The following tables provide primary examples of printable paper sizes.

One-sided printing (600 × 600 dpi)

Printable Paper Sizes

12" × 18" , A3, B4, A4, B5, A5, 11" × 17" ,
 8½" × 14", 8½" × 11", 216 × 432mm, 297 ×
 432 mm, 305 × 1260 mm

Duplex printing (600 × 600 dpi)

Memory Capacity	Printable paper sizes
<ul style="list-style-type: none"> • 1024 MB 	A3, B4, A4, B5, A5, 11" × 17" , 8½" × 14" , 8½" × 11"

Black and White [Printing] when [Photograph] or [DTP] is Selected for [Document type]

If you select [Photograph] or [DTP] for [Document type] in the [Printing Preferences] dialog box, black areas of text and line art might be detected as color images, depending on the application you are using. If this happens, the document might be printed and counted as a CMYK image.

To print and count the document as a Black and White image, use the following procedure to set the color to black and white in the printer driver.

1. In the printer driver's [Printing Preferences] dialog box, click the [Print Quality] tab.
2. Select the [User settings] check box.
3. In the list box, select a user setting.
4. Click [Change User Settings...].
5. On the [Image Adjustments] tab, select a document type in the [Load document types:] list.

The following document types are selectable:

[Photograph (Quality)], [Photograph (Speed)], [Photograph (High Speed)], [DTP (Quality)], [DTP (Speed)], and [DTP (High Speed)].

6. In the [Gray reproduction (Text/Line Art):] list, select [K (Black)].

The gray reproduction is set to pure black, and the [Load document types:] list becomes blank.

If you select the [Print as bitmap] check box on the [Misc.] tab, the gray reproduction setting is ignored, and black areas of text and line art are printed and counted as CMYK images.

7. Click [OK].

Note

- Black areas of text and line art that were produced using colors other than black and grey are printed out and counted as CMYK images even if they appear as black or grey on the screen.

If Error Occurs with the Specified Paper Size and Type

This section gives instructions for operating the printer when there is no tray for the selected paper size or type, or when paper loaded in the printer has run out.

★ Important

- The tray cannot be changed if the following functions are set:
 - Duplex Print to a tray that does not support duplex printing
 - Cover Sheet
 - Slip Sheet

↓ Note

- If form feed is selected for a tray with the following settings, you can change the tray by canceling the settings:
 - Duplex Print
 - Staple
- If [Auto Continue] is selected, form fed paper is printed after a set interval. For details, see System Menu.

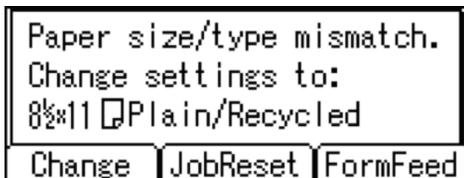
☐ Reference

- “System Menu”

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.

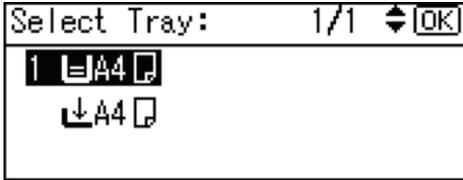
1. When the caution message appears, press [FormFeed].



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.



Note

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

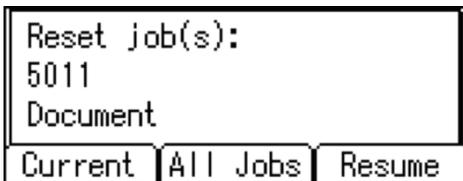
Canceling a Print Job

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

1. Press [JobReset].



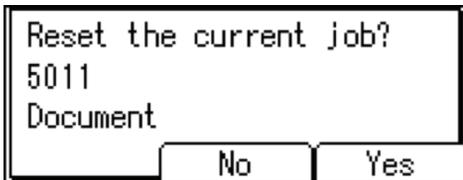
2. Press [Current].



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.

Note

- 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 "Waiting..." 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

- "Canceling a Print Job"



3. 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 2
Paper Size: Tray 3
Paper Size: Tray 4
Paper Size: Tray 5
Paper Type: Bypass Tray
Paper Type: Tray 1
Paper Type: Tray 2
Paper Type: Tray 3
Paper Type: Tray 4
Paper Type: Tray 5
Duplex Tray
Auto Tray Select
Tray Priority

Note

- Only installed trays appear on the display panel.

Maintenance

Menu
Quality Maintenance
General Settings
Timer Settings
HD Management

3

List/Test Print

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

System

Menu
Print Error Report
Auto Continue
Memory Overflow
Printer Language
Sub Paper Size
Default Printer Lang.
Energy Saver 1
Energy Saver 2
Print Compressed Data
Memory Usage
B&W Page Detect
Spool Printing
RAM Disk
Auto Email Notify

3

Print Settings

Menu
Machine Modes
PCL Menu
PS Menu
PDF Menu

Security Options

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

3

Note

- [Service Mode Lock] may not appear depending on the setting of the printer.
- [Machine Data Encryption] appears only when the optional HDD encryption unit is installed.

Host Interface

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

Note

- [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.

Note

- 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



3

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.

- : Auto Detect, A3 , A4, A5, A6 B4 JIS , B5 JIS, B6 JIS , C5 Env. , C6 Env. , DL Env., 12" × 18" , 11" × 17" , 8 $\frac{1}{2}$ " × 14" , 8 $\frac{1}{2}$ " × 13" , 8 $\frac{1}{2}$ " × 11" , 8 $\frac{1}{4}$ " × 13" , 8" × 13" , 7 $\frac{1}{4}$ " × 10 $\frac{1}{2}$ " , 5 $\frac{1}{2}$ " × 8 $\frac{1}{2}$ " , 4 $\frac{1}{8}$ " × 9 $\frac{1}{2}$ " , 3 $\frac{7}{8}$ " × 7 $\frac{1}{2}$ " , Custom Size
- : Auto Detect, 12" × 18" , 11" × 17" , 8 $\frac{1}{2}$ " × 14" , 8 $\frac{1}{2}$ " × 13" , 8 $\frac{1}{2}$ " × 11" , 8 $\frac{1}{4}$ " × 13" , 8" × 13" , 7 $\frac{1}{4}$ " × 10 $\frac{1}{2}$ " , 5 $\frac{1}{2}$ " × 8 $\frac{1}{2}$ " , 4 $\frac{1}{8}$ " × 9 $\frac{1}{2}$ " , 3 $\frac{7}{8}$ " × 7 $\frac{1}{2}$ " , A3, A4, A5, A6 , B4 JIS , B5 JIS, B6 JIS , C5 Env. , C6 Env. , DL Env. , 8K , 16K, Custom Size

↓ Note

- Default:
 - : Auto Detect
 - : Auto Detect

Paper Size: Tray 2 to 5

You can specify the paper size for Tray 2 to 5.

- : Auto Detect, A3 , A4, A5 , B4 JIS , B5 JIS, 11" × 17" , 8 $\frac{1}{2}$ " × 14" , 8 $\frac{1}{2}$ " × 13" , 8 $\frac{1}{2}$ " × 11" , 8 $\frac{1}{4}$ " × 13" , 8" × 13" , 7 $\frac{1}{4}$ " × 10 $\frac{1}{2}$ " , Custom Size
- : Auto Detect, 11" × 17" , 8 $\frac{1}{2}$ " × 14" , 8 $\frac{1}{2}$ " × 13" , 8 $\frac{1}{2}$ " × 11" , 8 $\frac{1}{4}$ " × 13" , 8" × 13" , 7 $\frac{1}{4}$ " × 10 $\frac{1}{2}$ " , A3 , A4, A5 , B4 JIS , B5 JIS, 8K , 16K, Custom Size

↓ Note

- Default:
 - : Auto Detect
 - : Auto Detect
- Only installed trays appear on the display panel.

Paper Type: Bypass Tray

No Display (Plain Paper), Recycled Paper, Special Paper 1, Special Paper 2, Special Paper 3, Color Paper, Letterhead, Label Paper, OHP (Transparency), Envelope, Coated Paper: Gloss Print, Coated Paper, Preprinted Paper, Bond Paper, Cardstock, Thin Paper, Middle Thick, Thick Paper 1, Thick Paper 2, Thick Paper 3, +Custom1, +Custom2, +Custom3, +Custom4, +Custom5, +Custom6, +Custom7, +Custom8

↓ Note

- 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.

Paper Type: Tray 1 to 5

No Display (Plain Paper), Recycled Paper, Special Paper 1, Special Paper 2, Special Paper 3, Color Paper, Letterhead, Label Paper, Coated Paper: Gloss Print, Coated Paper, Preprinted Paper, Bond Paper, Cardstock, Middle Thick, Thick Paper 1, Thick Paper 2, Thick Paper 3, +Custom1, +Custom2, +Custom3, +Custom4, +Custom5, +Custom6, +Custom7, +Custom8

↓ Note

- 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.

Duplex Tray

You can set each tray for duplex printing. Only installed trays appear on the display panel.

- Tray 1 to Tray 5
 - On
 - Off
- Default: On
- Bypass Tray
 - On
 - Off
- Default: Off

Auto Tray Select

You can select whether to assign each tray to automatically print the paper size and type set by printer driver.

- Default: On (Tray 1 to 5), Off (Bypass Tray)

↓ Note

- 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.
- Bypass Tray
 - On
 - Off
- Default: Off

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.

↓ Note

- 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.

↓ Note

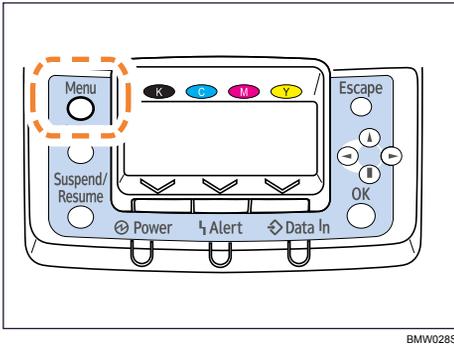
- JIS stands for “Japanese Industrial Standard”.

Changing the Paper Input Menu

Automatic tray selection

Follow the procedure below to change the automatic tray selection setting.

1. Press the [Menu] key.



The menu screen appears.

2. Press the [▲] or [▼] key to display [Paper Input], and then press the [OK] key.
3. Press the [▲] or [▼] key to display [AutoTray Select], and then press the [OK] key.
4. Press the [▲] or [▼] key to display the tray you want to select, and then press the [OK] key.
5. Press the [▲] or [▼] key to display [On], and then press the [OK] key.

Wait for one second. The [Auto Tray Select] screen appears.

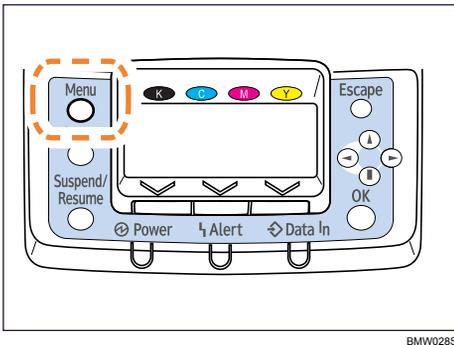
6. Press the [Menu] key.

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 display [Paper Input], and then press the [OK] key.
3. Press the [▲] or [▼] key to display [Tray Priority], and then press the [OK] key.

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

Color Registration

You can perform automatic adjustment of color registration.

Color Calibration

You can adjust the gradation of bright (highlighted parts) and medium areas (middle parts) for printing.

- Adjust Auto Density

You can print the gradation of auto density.

- Print Sheet 1

You can print gradation correction sheet 1.

- Print Sheet 2

You can print gradation correction sheet 2.

- Reset Setting

You can reset the gradation correction value to default.

↓ Note

- Only the installed trays appear on the display panel.

Registration

You can adjust the starting position of the printing page.

- Print Test Sheet

You can print the registration test sheet.

Tray 3, Tray 4, Tray 5

↓ Note

- 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: Tray 4, Horizontal: Tray 5

↓ Note

- Only the installed trays appear on the display panel.

4 Color Graphic Mode

This mode adjusts levels of toner color overlap. If characters or lines blur, setting priority on text may make them clearer. Under normal conditions, set priority on photo.

- Text Priority
- Photo Priority

↓ Note

- Default: Photo Priority

Image Area

You can select whether or not to enlarge print image to edges of paper.

- Do not enlarge
- Enlarge

↓ Note

- Default: Do not enlarge

General Settings

Plain Paper Setting

You can select the type of plain paper.

- Tray 1
Plain Paper 1, Plain Paper 2
- Tray 2
Plain Paper 1, Plain Paper 2
- Tray 3
Plain Paper 1, Plain Paper 2
- Tray 4
Plain Paper 1, Plain Paper 2
- Tray 5
Plain Paper 1, Plain Paper 2
- Bypass Tray
Plain Paper 1, Plain Paper 2

Note

- Default: Plain Paper 1

Letterhead Setting

You can select the letterhead printing mode.

- Tray 1
Letterhead 1, Letterhead 2, Letterhead 3
- Tray 2
Letterhead 1, Letterhead 2, Letterhead 3
- Tray 3
Letterhead 1, Letterhead 2, Letterhead 3
- Tray 4
Letterhead 1, Letterhead 2, Letterhead 3
- Tray 5
Letterhead 1, Letterhead 2, Letterhead 3
- Bypass Tray
Letterhead 1, Letterhead 2, Letterhead 3

Note

- Default: Letterhead 1

Coated Paper Setting

You can select the coated paper printing mode.

- Tray 1
Coated Paper 1, Coated Paper 2, Coated Paper 3, Coated Paper 4, Coated Paper 5, Coated Paper 6, Coated Paper 7
- Tray 2
Coated Paper 1, Coated Paper 2, Coated Paper 3, Coated Paper 4, Coated Paper 5, Coated Paper 6, Coated Paper 7
- Tray 3
Coated Paper 1, Coated Paper 2, Coated Paper 3, Coated Paper 4, Coated Paper 5, Coated Paper 6, Coated Paper 7
- Tray 4
Coated Paper 1, Coated Paper 2, Coated Paper 3, Coated Paper 4, Coated Paper 5, Coated Paper 6, Coated Paper 7
- Tray 5

Coated Paper 1, Coated Paper 2, Coated Paper 3, Coated Paper 4, Coated Paper 5,
Coated Paper 6, Coated Paper 7

- Bypass Tray

Coated Paper 1, Coated Paper 2, Coated Paper 3, Coated Paper 4, Coated Paper 5,
Coated Paper 6, Coated Paper 7

↓ Note

- Default: Coated Paper 1

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.

- Photoconductor Unit
Notify Sooner, Normal, Notify Later

↓ Note

- Default: Normal
- Intermediate Transfer Unit Notify
Sooner, Normal, Notify Later

↓ Note

- Default: Normal
- Fusing Unit
Notify Sooner, Normal, Notify Later

↓ Note

- Default: Normal

Supply End Option

You can specify whether or not to continue printing after the photoconductor exceeds its service life.

- Continue Printing
- Stop Printing

↓ Note

- Default: Continue Printing

Display Supply Info

You can select whether or not to display the amount of toner on the initial screen.

- On
- Off

Note

- Default: On Menu

Protect

You can select whether or not to protect menu. When you enable this setting, specify protection level.

- Level 1
- Level 2
- Off

Note

- Default: Level 2
- 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.

- On
- Off
- Default: Off

Note

- 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.

- mm
- inch

Note

- Default:
- mm ()
- inch ()

Panel Key Sound

You can select whether or not to enable the panel key sound.

- On
- Off

Note

- Default: Off

Warm-up Beeper

You can select whether or not to sound the beeper when the printer has completed a warm-up process.

- On
- Off

↓ Note

- Default: On

Display Contrast

You can specify the density of the display.

Key Repeat

You can specify whether or not to scroll the display panel when the [] or [] key is held down. When you enable this setting, specify the scroll speed. (If repeat time is set to “Long”, scroll speed becomes slow.)

- Do not Repeat
- Normal
- Repeat Time: Medium
- Repeat Time: Long

↓ Note

- Default: Normal

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.

- On
- Off

↓ Note

- Default: On (60 seconds)

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.

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.

Auto Delete Temporary Jobs

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.

- On
- Off

↓ Note

- Default: 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.

- On
- Off

↓ Note

- Default: On
- If you enable this setting, specify the timer in days. (Default: 3 days)

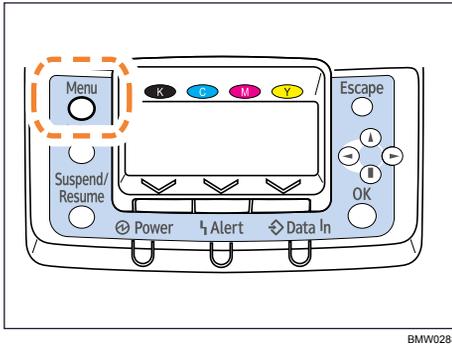
Changing the Maintenance Menu

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 display [Maintenance], and then press the [OK] key.
3. Press the [▼] or [▲] key to display [HD Management], and then press the [OK] key.
4. Press the [▼] or [▲] key to display [Auto Del. Temp. Print 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.

List/Test Print Menu

You can print lists showing configurations on printer or the paper printings.

Also, you can check the types and characters of all the printable fonts.

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.

Color Demo Page

You can print a color demonstration page.

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.

Hex Dump

You can print the data sent by the computer using Hex Dump.

Operations Test

Use this to check the printer and its options for operability, including paper feed and output. Only settings of installed options are displayed. If a specified function fails, the printer displays a message and stops printing. If the test is successful, the printer prints black frames.

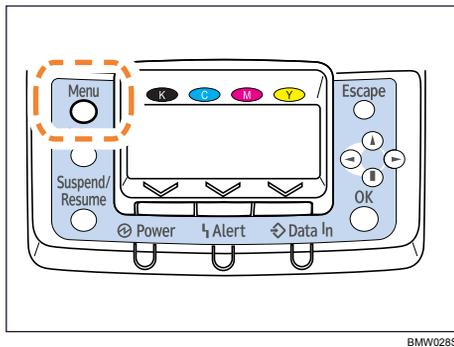
Printing a Configuration Page

Follow the procedure below to print the configuration page.

★ Important

- The configuration page is printed on A4 or Letter (8 $\frac{1}{2}$ "×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 display [List/Test Print], and then press the [OK] key.
3. Press the [▼] or [▲] key to display [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 Unit

Number

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.

Device Connection

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.

 **Reference**

- For details, see “Paper Input Menu”.

Maintenance

Shows the current Maintenance settings.

 **Reference**

- For details, see “Maintenance Menu”.

System

Shows the current System settings.

 **Reference**

- For details, see “System Menu”.

Machine Modes

Shows the current Machine Modes settings.

 **Reference**

- For details, see “Print Settings Menu”.

PCL Menu

Shows the current PCL settings.

 **Reference**

- For details, see “Print Settings Menu”.

PS Menu

Shows the current PS settings.

Reference

- For details, see “Print Settings Menu”.

PDF Menu

Shows the current PDF settings.

Reference

- For details, see “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.

Reference

- For details, see “Host Interface Menu”.

Interface Information

Interface information is 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.

- Off
- On

 **Note**

- Default: 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.

- Off
- Immediate
- 1 minute
- 5 minutes
- 10 minutes
- 15 minutes

 **Note**

- Default: Off
- 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.

- Do not Print
- Error Information

Note

- Default: Do not Print

Printer Language

You can specify the printer language.

- Auto
- PCL
- PS
- PDF

Note

- Default: Auto

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.

- Auto
- Off

Note

- Default: Off

Default Printer Lang.

Select the printer language to use when the printer fails to detect the printer language.

- PCL
- PS
- PDF

Note

- Default: PCL

Energy Saver 1

Select whether or not to switch to Energy Saver 1 mode.

- On
- Off

Note

- Default: On

- When set to on, the printer switches to Energy Saver 1 mode after printing is complete. Electric power consumption is greater than in Energy Saver 2 mode, but the printer returns to Ready mode in about 10 seconds.

Energy Saver 2

In Energy Saver 2 mode, electric power consumption is reduced. Energy

Saver On/Off

Select whether or not to switch to Energy Saver 2 mode.

- On
- Off

↓ Note

- Default: On
- When the printer switches to Energy Saver 2 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.

- 1 minute
- 5 minutes
- 15 minutes
- 20 minutes
- 30 minutes
- 45 minutes
- 60 minutes

↓ Note

- Default: 20 minutes

Print Compressed Data

Specify whether or not to print compressed data.

- On
- Off

↓ Note

- Default: Off

Memory Usage

Select memory to be used from Font Priority or Frame Priority.

- Font Priority
- Frame Priority

↓ Note

- Default : Frame Priority

B&W Page Detect

Specify whether to recognize black-and-white images by page or by document. Black-and-white recognition function allows the printer to print monochrome images in monochrome mode even if color printing is specified.

- Per Page
- Per Job

↓ Note

- Default : Per Job

Spool Printing

Specify whether or not to complete spooling before starting to print.

- On
- Off

↓ Note

- Default: Off
- Spooling stores a sent print job temporarily in the printer, and then prints it.

RAM Disk

- 0MB
- 2MB
- 4MB
- 8MB
- 16MB

★ Important

- When the amount of SDRAM is small and [RAM Disk] is set to [16MB], 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 [8MB] or less.

↓ Note

- Default: 4MB
- This menu appears only when the hard disk is not installed.
- For details about the optional SDRAM module, see Hardware Guide.

Auto Email Notify

Specify whether or not to send an error message to a preset e-mail address when an error occurs in the printer.

- On
- Off

★ Important

- After changing the setting, turn off the power of the printer briefly, and then turn it on again.

↓ Note

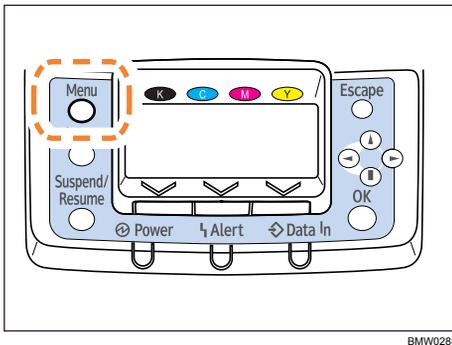
- Default: On
- For information, see Web Image Monitor Help.

Changing the System Menu

Follow the procedure below to change the settings for Energy Saver Timer.

3

1. Press the [Menu] key.



The menu screen appears.

2. Press [▲] or [▼] key to display [System], and then press the [OK] key.
3. Press [▲] or [▼] key to display [Energy Saver 2], 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 2 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.

220-240V: A3, A4, A5, A6, B4 JIS, B5 JIS, B6 JIS, C5 Env., C6 Env., DL Env., 12 × 18, 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, Custom Size

120V: 12 × 18, 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

Note

- Default:
 - **220-240V**: A4
 - **120V**: 8 1/2 × 11
- The default paper size is used when the paper size is not specified in the print data.

Edge to Edge Print

Select to whether or not to print using the whole area of paper, leaving no edge borders.

- On
- Off

Note

- Default: On

Duplex

Select whether or not to print on both sides of a sheet. When set to on, specify the binding method.

- Off
- Long Edge Bind
- Short Edge Bind

Note

- Default: Off

Output Tray

Specify output tray to be used when the output tray is not specified in the print data.

- Standard Tray

Note

- Default: Standard Tray

3

Job Separation

Select whether to use job separation function when paper is output to an output tray capable of job separation.

- On
- Off

Note

- Default: Off

Rotate by 180 Degrees

Select whether or not to rotate image by 180 degrees when printing.

- On
- Off

Note

- Default : Off

Blank Page Print

Select whether or not to print blank pages.

- On
- Off

Note

- Default: On Let-

Letterhead Setting

Specify whether or not to print with the letterhead printing mode.

- 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.

Note

- Default: Auto Detect

Bypass Tray Priority

When paper size/type setting does not match between the printer driver and the printer, you can select which setting is used.

- Driver/Command
- Machine Settings

Note

- Default: Driver/Command Tray

Switching

Select whether or not to automatically switch to a suitable tray when the setting of the current tray does not match the paper size/type specified by the printer driver.

- On
- Off

 **Note**

- Default: Off

Extend Auto Tray Switching

Select whether or not to automatically switch to a suitable tray when the current tray runs out of paper.

- On
- Off

Note

- Default: Off

PCL Menu

You can set conditions when using PCL for printing. Orientation

Select the page orientation.

- Portrait
- Landscape

Note

- Default: Portrait

Form Lines

Specify the number of lines per page between 5 and 128.

Note

- 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.

- Resident
- RAM
- HDD
- SD
- SD Font Download
- Default: Resident

Note

- 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.

- 0 to 63 (Resident)
- 1 to X (Download; “X” is the number of downloaded fonts)

↓ Note

- Default: 0

Point Size

Specify the point size you want to use for the default font between 4 and 999.75 in 0.25 increments.

↓ Note

- 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.

↓ Note

- 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

↓ Note

- Default: PC-8

Courier Font

Select the type of courier font.

- Regular
- Dark

↓ Note

- Default: Regular

Ext. A4 Width

Select whether or not to extend the width of the printable area of A4 sheets, by reducing side margins.

- Off
- On

Note

- Default: Off

Append CR to LF

Select whether or not to append a CR code to each LF code to print text data clearly.

- Off
- On

Note

- Default: Off

Resolution

You can specify the print resolution in dots per inch.

- 300dpi
- 600dpi Fast
- 600dpi Std.
- 600dpi Hq.

Note

- Default: 600dpi Std.

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.

- Use Driver/Command
- Use Machine Settings

Note

- Default: Use Driver/Command
- 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.

- Use Driver/Command
- Use Machine Settings

Note

- Default: Use Driver/Command
- 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.

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.

Note

- Default: Binary Data

Resolution

Select the resolution.

- 600dpi Fast
- 600dpi Std.
- 600dpi Hq.
- 1200dpi

Note

- Default: 600dpi Std.

Color Setting

Specify the RGB setting for the PDF file executing PDF Direct Print.

- None
- Fine
- Super Fine

Note

- Default: Super Fine

Color Profile

Specify the color profile for the PDF file executing PDF Direct Print.

- Auto

- Presentation
- Solid Color
- Photographic
- User Setting

Note

- Default: Auto

Process Color Model

Specify the color model.

- Color
- Black and White

Note

- Default: Color

Orientation Auto Detect

Specify auto detection of the print orientation.

- On
- Off

Note

- Default: On

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.

Important

- 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

Specify a group password specified using DeskTopBinder Lite.

Important

- If you do not set a PDF group password, this menu does not appear.
- When you use a group password, the optional data protection unit must be installed.
- 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.

- Default: no password set

Resolution

Specify the resolution for the PDF file executing PDF Direct Print.

- 600dpi Fast
- 600dpi Standard
- 600dpi High Quality
- 1200dpi

 **Note**

- Default: 600dpi (Standard)

Color Setting

Specify the RGB setting for the PDF file executing PDF Direct Print.

- None
- Fine
- Super Fine

 **Note**

- Default: Super Fine

Color Profile

Specify the color profile for the PDF file executing PDF Direct Print.

- Auto
- Presentation
- Solid Color
- Photographic
- User Setting

 **Note**

- Default: Auto

Process Color Model

Specify the color model.

- Color
- Black and White

 **Note**

- Default: Color

Orientation Auto Detect

Specify auto detection of the print orientation.

- On
- Off

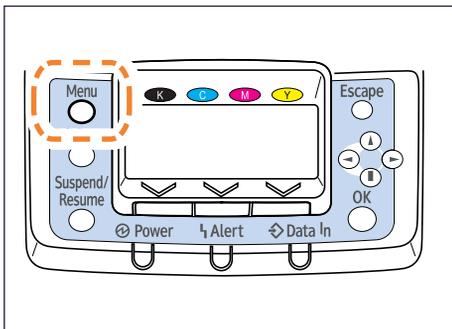
Note

- Default: On

Changing the Print Settings Menu

Follow the procedure below to change Bypass Tray Priority.

1. Press the [Menu] key.



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The menu screen appears.

2. Press [▲] or [▼] key to display [Print Settings], and then press the [OK] key.
3. Press [▲] or [▼] key to display [Machine Modes], and then press the [OK] key.
4. Press the [▲] or [▼] key to select [Bypass Tray Priority], and then enter the [OK] key.
5. 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.

6. 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.

- On
- Off

 **Note**

- Default: Off

Restrict User Info.Display

Select whether or not to display user information as "*****" when checking job information without being authenticated through user authentication.

- On
- Off

 **Note**

- Default: 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.

- On
- Off

 **Note**

- Default: Off

Settings by SNMPv1 and v2

Select whether or not to prohibit changes to the printer settings through access using SNMPv1, v2 protocol.

- Prohibit
- Do not Prohibit

↓ Note

- Default: Do not Prohibit

Simple Encryption

Select whether or not to use apply simple encryption (restrict usage) when enhanced encryption cannot be used.

- Restrict
- Do not Restrict

↓ Note

- Default: 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. • Login Privilege

- Access Privilege
- Off

↓ Note

- Default: 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

↓ Note

- Default: Do not Restrict

- Minimum Character No.
Between 0 to 32

 **Note**

- Default: 0
- If set to 0, minimum length is not specified.

@Remote Service

Select whether or not to prohibit @Remote Service.

- Prohibit
- Do not Prohibit

 **Note**

- Default: Do not Prohibit
- If you would like to set to Prohibit, contact your service representative.

3

Network Security Level

Specify the network security level.

- Level 0
- Level 1
- Level 2

 **Note**

- Default: Level 0

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.

- 128 KB
- 256 KB

Note

- Default: 128 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.

- 10 seconds
- 15 seconds
- 20 seconds
- 25 seconds
- 60 seconds

Note

- Default: 15 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.

Note

- Default: 11.22. 33.44

- Subnet M

Manually specify the subnet

Note

mask.

- Default: 0.0.0.0

- Gateway

Manually specify the gateway address.

Note

- Default: 0.0.0.0

IPv6 Stateless Setting

Select whether to enable or disable IPv6.

- Active
- Inactive

Note

- Default: Active

IPsec

This is a security function. For details, contact your administrator.

- Active
- Inactive

Note

- Default: Inactive

NW Frame Type

Specify the frame type for NetWare.

- Auto Select
- Ethernet II
- Ethernet 802.2
- Ethernet 802.3
- Ethernet SNAP

Note

- Default: Auto Select

Effective Protocol

Specify the effective protocol.

- IPv4

Active, Inactive

 **Note**

- Default: Active

- IPv6

Active, Inactive

 **Note**

- Default: Inactive

- NetWare Active,

 **Note**

Inactive

- Default: Inactive

- SMB

 **Note**

Active, Inactive

- Default: Active

- AppleTalk Active, Inactive

 **Note**

- Default: Inactive

Ethernet Speed

Specify the network speed to operate the printer.

- Auto Select
- 10Mbps Half Duplex
- 10Mbps Full Duplex
- 100Mbps Half Duplex
- 100Mbps Full Duplex

 **Note**

- Default: Auto Select

Parallel Interface

Specify parallel interface settings. This menu appears when the IEEE 1284 interface board is installed.

Parallel Timing

Specify the parallel interface timing.

- ACK inside
- ACK outside
- STB down

 **Note**

- Default: ACK outside

Parallel Communication Speed

Specify whether or not to use DMA transfer for receiving data.

- High Speed
- Standard

 **Note**

- Default: High Speed

Selection Signal Status

Specify the selection signal level of the parallel interface.

- High
- Low

Note

- Default: High

Input Prime

You usually do not need to change this setting.

- Active
- Inactive

Note

- Default: Inactive

Bidirectional Communication

Specify whether to enable or disable bidirectional communication.

- On
- Off

Note

- Default: On

- 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

Select channels: 1-14, 36,40,44,48 ()/1-11, 36,40,44,48 ()

 **Note**

- Default: 11

USB Settings

Select speed for USB interface.

USB Speed

- Auto
- Full Speed

 **Note**

- Default: Auto

Fixed USB Port

- Level 1

- Level 2
- Off

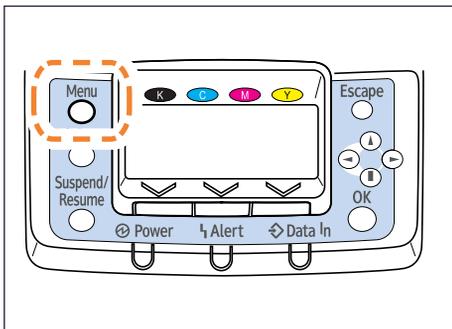
Note

- Default: Off

Changing the Host Interface Menu

Follow the procedure below to change the I/O Timeout setting.

1. Press the [Menu] key.



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The menu screen appears.

2. Press the [▼] or [▲] key to display [Host Interface], and then press the [OK] key.
3. Press the [▼] or [▲] key to display [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.

Language Menu

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.

Note

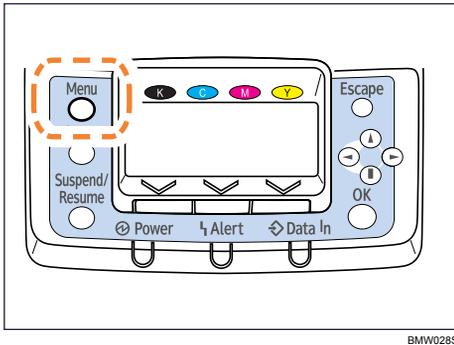
- Default: English

3

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 display [Language], and then press the [OK] key.
3. 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.

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

3

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.

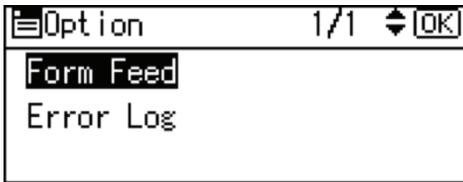
★ Important

- 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.

1. Press [Option].

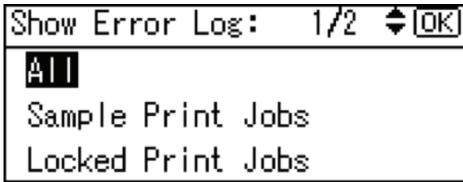


2. Select [Error Log] using the [▲] or [▼] key, and then press the [OK] key.



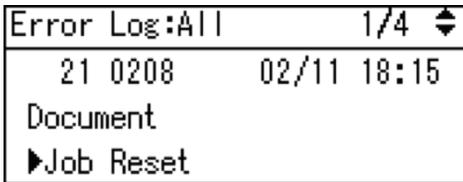
3. Select a type of print jobs using the [▲] or [▼] key, and then press the [OK] key.

If you select [All], all error logs appears.



4. Select the error log you want to check using the [▲] or [▼] key.

Press the [Menu] key until the initial screen appears after checking the log.



Note

- To print files that appear in the error log, resend them after stored files have been printed or deleted.

4. 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.

Note

- 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.
- You cannot access to the printer from 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.

Important

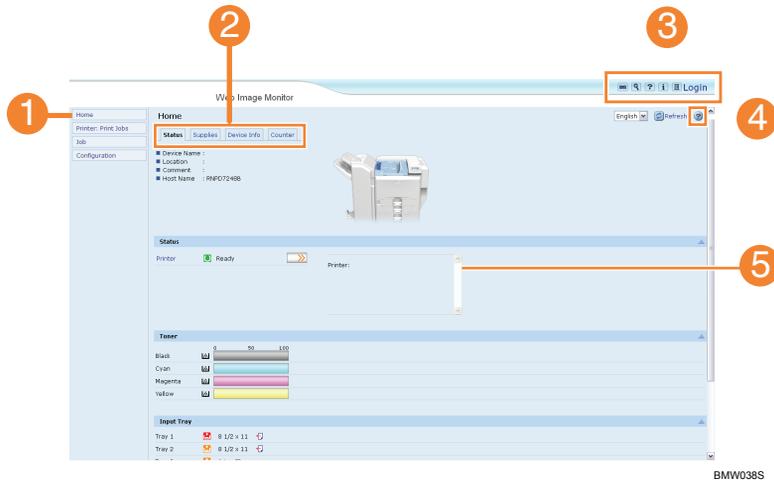
- When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10".

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.

Note

- 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].
2. Enter a login user name and password, and then click [Login].

For details about the login user name and password, contact your administrator.

Note

- 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.

Note

- When you log on and made the setting, always click [Logout].

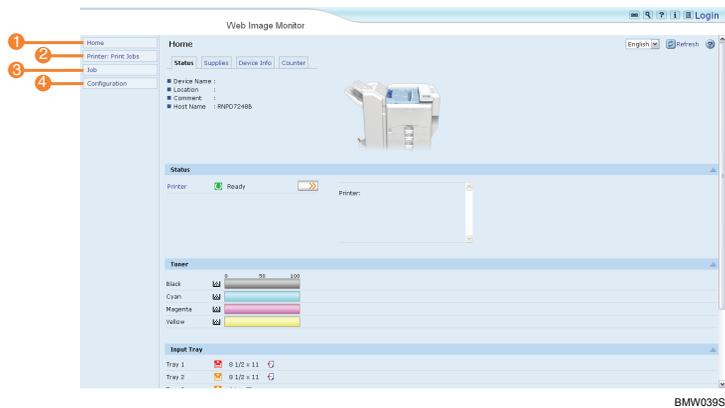
About Menu and Mode

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.



1. Home

The [Status], [Supplies], [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 list of Sample Print, Locked Print, Hold Print, and Stored Print jobs.

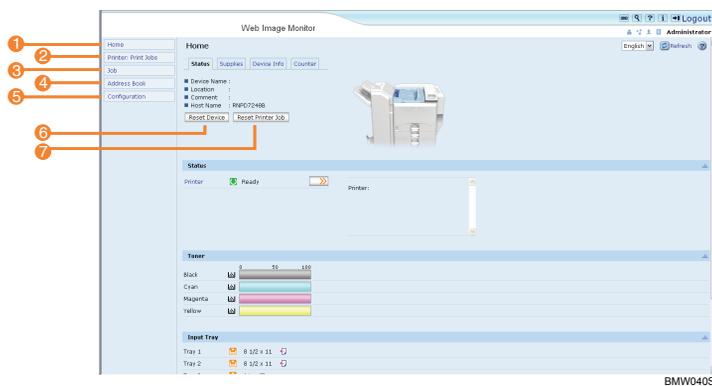
3. Job Display all print files.

4. Configuration

Display current printer and network settings.

Administrator mode

In the administrator mode, you can configure various printer settings.



1. Home

The [Status], [Supplies], [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 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.

Access in the Administrator Mode

4

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.

Default Login: admin

Leave the password blank or click [Login].

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.

Configuring E-mail Notification

★ Important

- 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.
- Service call.
- Toner is empty.
- Toner is nearly empty.
- Paper has jammed.
- Cover is open.
- Paper tray is empty.
- Paper tray is nearly empty.
- Paper tray error.
- Output paper tray is full.
- Unit connection error.
- Duplex unit error.
- Photoconductor unit needs replacing.
- Photoconductor unit needs replacing soon.
- Waste toner bottle is full.
- Waste toner bottle is nearly full.
- Stapler has no staples.
- Fusing unit needs replacing.
- Fusing unit needs replacing soon.
- Intermediate transfer unit needs replacing.
- Intermediate transfer unit needs replacing soon.
- Punch waste receptacle is full.

- Memory for file storage is full soon.
- Log error.

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, contact your administrator.

4. In the menu area, click [Configuration].

5. 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

1. 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 the 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]: If the authentication method is PLAIN, LOGIN, CRAM-MD5, or DIGEST-MD5.

[Active]: If the authentication method is CRAM-MD5 or DIGEST-MD5. [Inactive]: If the authentication method is PLAIN or LOGIN.

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:

Item	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: `devicestatus?parametername=parameter[&=parameter][& =parameter]...`

Subject field coding examples

Coding example	Action
<code>devicestatus?request=sysconfig&format=text&lang=en</code>	The device's system configuration information will be sent in an English text format.
<code>devicestatus?request=sysconfig</code>	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
Device status information	status

Parameters specifying the mail format

Mail format	Parameter
Text	text
HTML	html
XML	xml

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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

Language for mail body	Parameter
Czech	cs
Polish	pl
Hungarian	hu

Note

- 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.

appletalk

Use the “appletalk” command to view and configure Apple Talk parameters. View settings

```
msh> appletalk
```

- [2] means “active” and [0] means “inactive”.
- The default is [2].

Changing PAP timeout configuration

```
msh> appletalk ptimeout value > 0
```

- Timeout value becomes effective.

```
msh> appletalk ptimeout value = 0
```

- Timeout value becomes ineffective.

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
wlan	Wireless LAN interface

 **Note**

- 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 lpr [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).

Note

- 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

btconfig

Use the “btconfig” command to make Bluetooth settings.

View settings

Bluetooth settings are displayed.

```
msh> btconfig
```

Mode settings

You can set the Bluetooth operation mode to {private} or {public}.

```
msh> btconfig {private|public}
```

- The default is {public}.

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

Interface name	Interface configured
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 dhcp6 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 ooption 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.

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”.
- 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

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.

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 "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".

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.

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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

Interface name	Interface configured
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 a 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 255.255.255.0 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.

Note

- 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
```

Reference

- For details about displayed contents, see “Getting Printer Information over the Network”.

ipsec

Use the “ipsec” command to view and configure IPsec settings.

Viewing settings

The following command displays the current IPsec settings:

```
msh> ipsec
```

Note

- For details about displayed contents, see Security Guide.

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:

```
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}
```

lpr

Use the “lpr” command to view and configure LPR settings.

View setting

```
msh> lpr
```

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 prnrchk {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

Protocol	Set Protocol
ipx	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.
- Renter the new password to confirm it.

Changing the Password of the administrators using the supervisor

```
msh> passwd {Administrator ID}
```

- Enter the new password.
- Renter the new password to confirm it.

Note

- Be sure not to forget or lose the password.
- The password can be entered using up to 32 alphanumeric characters. Passwords 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.

Reference

- For details about displayed contents, see “Getting Printer Information over the Network”.

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.

Note

- “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}
```

- You can turn the specified destination on or off. Host becomes the default setting.

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.
- Host becomes the default setting.

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" "gateway"
```

- Specify the IPv6 address to destination and gateway.

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
```

Note

- 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 appletalk
```

```
msh> set netware
```

```
msh> set smb
```

```
msh> set protocol
```

- When protocol is specified, information about TCP/IP, Apple Talk, Netware, SCSI print, and SMB appears.

```
msh> set parallel msh>
```

```
set usb
```

```
msh> set bluetooth
```

```
msh> set lpr
```

```
msh> set lpr6
```

```
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 ssl
```

```
msh> set ssl6
```

```
msh> set nrs
```

```
msh> set rfu
```

```
msh> set rfu6
```

```

msh> set ipp
msh> set ipp6
msh> set http
msh> set http6
msh> set bonjour
msh> set bonjour6
msh> set nbt
msh> set ssdp
msh> set ssh
msh> set sftp
msh> set sftp6

```

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 rsh6 {up | down}
```

```
msh> set diprint {up | down}
```

```
msh> set diprint6 {up | down}
```

```
msh> set web {up | down}
```

```
msh> set snmp {up | down}
msh> set ssl {up | down}
msh> set ssl6 {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 rfu6 {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 ssh {up | down}
msh> set ssdp {up | down}
msh> set nbt {up | down}
msh> set sftp {up | down}
msh> set sftp6 {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.

Reference

- For details about the information displayed, see “Understanding the Displayed Information”.

slp

Use “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:00000000:000000000000 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

Access type	Type of access permission
read	read only
write	read and write
trap	user is notified of trapmessages

Protocol configuration

```
msh> snmp {ipv4|ipv6|ipx} {on|off}
```

- Use the following command to set protocols “active” or “inactive”: If you set a protocol “inactive”, all access settings for that protocol are disabled.
- 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

```
msh> snmp “number” active {ipv4|ipv6|ipx} {on|off}
```

- 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.

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 sys
```

Contact 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.

View settings

The Job Spool setting appears.

```
msh> spoolsw
```

Job Spool setting

```
msh> spoolsw spool {on | off}
```

Note

- 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.

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.

Deleting open key for ssh/sftp communication

```
msh> ssh delkey
```

Note

- 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
```

Reference

- For details, see "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
```

Reference

- For details about the information displayed, see "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 802.11ad hoc mode (802.11adhoc). The default is infrastructure mode.
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”.

Parameter	Value configured
key "key value" val {1 2 3 4}	<p>You can specify the WEP key when entering in hexadecimal.</p> <p>With a 64-bit WEP, you can use 10 digit hexadecimal. With a 128-bit WEP, you can use 26 digit hexadecimal.</p> <p>Up to four WEP keys can be registered. Specify the number to be registered with "val".</p> <p>When a WEP is specified by key, the WEP specified by key phrase is overwritten.</p> <p>To use this function, set the same key number and WEP key for all ports that transmit data to each other. Put "0x" on the front of WEP key.</p> <p>You can omit the numbers with "val". The key number is set to 1 when making these omissions.</p> <p>The default is blank.</p>
keyphrase "phrase" val {1 2 3 4}	<p>You can specify the WEP key when entering in ASCII.</p> <p>With a 64-bit WEP, you can use 10 digit hexadecimal. With a 128-bit WEP, you can use 26 digit hexadecimal.</p> <p>Up to four WEP keys can be registered. Specify the number to be registered with "val".</p> <p>When a WEP is specified by key phrase, the WEP specified by key is overwritten.</p> <p>To use this function, set the same key number and WEP key for all ports that transmit data to each other.</p> <p>You can omit the numbers with "val". The key number is set to 1 when making these omissions.</p>
encval {1 2 3 4}	<p>You can specify which of the four WEP keys is used for packet encoding. "1" is set if a number is not specified.</p>

Parameter	Value configured
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
rate [auto 11m 5.5m 2m 1m]	You can set the wireless LAN transmitting speed. The speed you specify here is the speed at which data is sent. You can receive data at any speed. auto: automatically set (default) 11m: 11 Mbps fixed 5.5m: 5.5 Mbps fixed 2m: 2 Mbps fixed 1m: 1 Mbps fixed
security {none wep wpa}	You can specify the security mode. none: No encryption (default) 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)
wpaauth {wpapsk wpa}	You can specify the WPA authentication mode when using WPA encryption. wpapsk: WPA-PSK authentication (default) wpa: WPA(802.1X) authentication
psk "character string"	You can specify the Pre-Shared key. Usable characters: ASCII 0x20-0x7e (8 to 63 bytes). The default is blank.

Parameter	Value configured
<p>eap {tls ttls leap peap} {chap mschap mschapv2 pap md5 tls}</p>	<p>You can specify the EAP authentication type.</p> <p>tls: EAP-TLS (default)ttls: EAP-TTLSSleap: LEAPpeap: PEAPchap, mschap, mschapv2, pap, md5, or tlasettings for the phase 2 method, and must be setwhen using EAP-TTLS or PEAP.</p> <p>Do not make these settings when using other EAPauthentication types.</p> <p>If you select EAP-TTLS, you can select chap,mschap, mschapv2, pap, or md5.</p> <p>If you select PEAP, you can select mschapv2 ortls.</p>
<p>username "character string"</p>	<p>You can specify the login user name for the Radius server.</p> <p>Usable characters: ASCII 0x20-0x7e(31 bytes) other than "@". The default is blank.</p>
<p>username2 "character string"</p>	<p>You can specify the phase 2 username for EAP-TTLS/PEAP phase 2 authentication.</p> <p>Usable characters: ASCII 0x20-0x7e (31 bytes) other than "@". The default is blank.</p>
<p>domain "character string"</p>	<p>You can specify the login domain name for the Radius server.</p> <p>Usable characters: ASCII0x20-0x7e (31 bytes) other than "@". The default is blank.</p>
<p>password "character string"</p>	<p>You can specify the login password for the Radius server.</p> <p>Usable characters: ASCII 0x20-0x7e(128bytes). The default is blank.</p>
<p>srvcert {on off}</p>	<p>You can set the server certificate. The default is"off".</p>

Parameter	Value configured
imca {on off}	You can enable or disable the certificate when the intermediate certificate authority is present. The default is "off".
srvld "character string"	You can set the server ID and subdomain of the certificate server.

↓ Note

- 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 WS-MFP 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".

WS-Device TCP port configuration

msh> wsmfp devport "port_number"

- The Default is 53000.

WS-Printer TCP port configuration

msh> wsmfp prnport "port_number"

- The Default is 53001.

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
```

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.

★ Important

- 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 XP/Vista:
 - Click the [Start] button.
 - Point to [SmartDeviceMonitor for Admin] on the [All Programs] menu.
 - Click [SNMP Setup Tool].

Supported MIBs(SNMPv1/v2)

- MIB-II
- PrinterMIB
- HostResourceMIB
- IPv6-TCP-MIB
- IPv6-UDP-MIB
- IPv6-MIB
- IPv6-ICMP-MIB
- RicohPrivateMIB

Supported MIBs(SNMPv3)

- MIB-II
- PrinterMIB
- HostResourceMIB
- IPv6-TCP-MIB
- IPv6-UDP-MIB
- IPv6-MIB

- IPv6-ICMP-MIB
- RicohPrivateMIB
- SNMP-FRAMEWORK-MIB
- SNMP-TARGET-MIB
- SNMP-NOTIFICATION-MIB
- SNMP-USER-BASED-SM-MIB
- SNMP-VIEW-BASED-ACM-MIB

Message List

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.

Message	Problem and solutions
Access to NetWare server <file server name>denied. Either there is no account for this print server on the NetWare server on the password was incorrect.	(In the print server mode) Login to the file server failed. Make sure that the print server is registered on the file server. If a password is specified for the print server, delete it.
account is unavailable: encryption is impossible.	Encryption is not possible and account is disabled. This could be because: <ul style="list-style-type: none"> • Security option is not installed. • Encryption password has not been specified.
account is unavailable: same account name beused.	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.
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_IPv4: community<community name>already defined.	The same community name already exists. Use another community name.
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.

Message	Problem and solutions
add_sess_IPv6: community <community name>already defined.	The same community name already exists. Use another community name.
add_sess_IPX: bad trap addr:<IPXaddress>community <community name>	The IPX address (00:00:00:00:00:00) isunavailable when the community access type is TRAP. Specify the host IPX address for the TRAPdestination.
add_sess_IPX: community <community name>already defined.	The same community name already exists. Use another community name.
adjust time server <NTP server> offset:XX sec.	ncsd tells you the timing of the NTP server andwhether or not the time system clock is set.
Attach FileServer =<file server>	Connection to the file server as the nearest serverhas been established.
Attach to print queue <print queue name>	(In the print server mode) Attached to the print-queue.
btd is disabled.	Communication via Bluetooth is unavailablebecause btd is disabled in the security mode. Enable the btd in the security mode.
centrod is disabled.	Communication via parallel connectionsunavailable because centrod is disabled in thesecurity mode. Enable centrod in the security mode.
child process exec error! (process name)	The network service failed to start. Turn the print-eroff and then on. If this does not work, contact yourservice or sales representative.
Connected DHCPv 6 server (IPv 6 address)	The IP address was successfully received from the DHCPv 6 server.
connection from <IP address>	A user logged in from the host <IP address>.
Could not attach to FileServer <error number>	(In the remote printer mode) Connection to the fileserver has not been established. The file server hasrefused the connection. Check the file serverconfiguration.

Message	Problem and solutions
Could not attach to PServer <printer server name>	(In the remote printer mode) Connection to the printserver has not been established. The print serverhas refused the connection. Check the print serverconfiguration.
Current Interface Speed: <Ehernetl/F speed>	Speed of the Ehernet interface (10Mbps, 100 Mbps, or 1Gbps).
Current IPX address <IPX address>	Current IPX address
DHCPv6 server not found.	The DHCPv6 server was not found. Make sure thatthe DHCPv6 is on the network.
Duplicate IP=<IP address>(from<MAC address>).	The same IP address (IPv4, or IPv6 address) wasused. Each IP address (IPv4, or IPv6 address) mustbe unique. Check the address of the deviceindicated in <MAC address>.
Established SPX Connection with PServer , (RPSocket=<socket number>,connID=<connection ID>)	(In the remote printer mode) Connection to the printserver has been established.
Exit pserver	(In the print server mode) The print server functionis disabled because the necessary print serversettings have not been made.
FrameType=<frame type name>	The frame type name is configured to be used on NetWare.
IEEE 802.11 <communication mode> mode	Displays Wireless LAN communication mode (infrastructure, or 802.11 ad hoc).
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'sfirmware.
IEEE 802.11 current channel <channel number>	Displays the current channel number of the activewireless card (in ad hoc and infrastructure mode).
IEEE 802.11 MAC Address = <MAC address>	Displays the MAC address of the wireless interface.

Message	Problem and solutions
IEEE 802.11 SSID <ssid> (AP MAC Address<MAC address>)	The MAC address and SSID of the access point are connected in infrastructure mode.
(IKE phase-1) mismatched authentication type:local=<authentication type 1>remote=<authentication type 2>	This machine's <authentication type 1> in IKE phase 1 does not match the communicating host's<authentication type 2>, Make sure this machine's ISAKMP SA authentication type matches that of the communicating host.
(IKE phase-1) mismatched DH group: local=<DHgroup number 1> remote=<DH group number 2>	This machine's ISAKMP SA Oakley group <DHgroup number 1> in IKE phase 1 does not match the communicating host's ISAKMP SA Oakley group <DH group number 2>, Make sure this machine's ISAKMP SA Oakley group matches that of the communicating host.
(IKE phase-1) mismatched encryption type:local=<encryption algorithm 1>remote=<encryption algorithm 2>	This machine'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 machine'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 machine'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 machine's ISAKMP SA Hash Algorithm matches that of the communicating host.
IKE[%s] is disable, set PSK text.	
inetd start.	The inetd service has started.
< Interface > started with IP: < IP address >	IP address (IPv4, or IPv4 address) has been set for the interface and is operating.
job canceled. jobid=<job ID>.	The spooled job was canceled due to error or user request.
LeaseTime=< 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.

Message	Problem and solutions
Login to fileserver <file server name>(<IPX IP>,<NDS BINDERY>)	(In the print server mode) Login to the file server is in the NDS or BINDERY mode.
Manual[%s] is disable, set authentication key.	
Manual[%s] is disable, set encryption key.	
Name registration failed. name=<NetBIOS name>	Name registration of <NetBIOSName> failed. Change to different NetBIOS name.
Name registration success . WINS Server =<WINSserver address> NetBIOS Name=<NetBIOSname>	Name registration of <NetBIOS Name> to <WINSserver address> was successful.
Name registration success in Broadcast name=<NetBIOS name>	Name registration by Broadcast name of <NetBIOS Name> was successful.
nprinter start. (NetWare)	(In the remote printer mode) The NetWare service has started.
Open log file <file name>	(In the print server mode) The specified log file has been opened.
Print queue <print queue name> cannot be serviced by printer 0, <print server name>	(In the print server mode) The print queue cannot be established. Make sure that print queue exists on the specified file server.
Print server <print server name> has no printer	(In the print server mode) The printer is not assigned to the print server. Using NWadmin, assign the printer, and then restart it.
print sessions full	No more print jobs can be accepted. Wait a while before sending any more print jobs.
Printer <printer name> has no queue	(In the print server mode) The print queue is not assigned to the printer. Using NWadmin, assign the print queue to the printer, and then restart it.
pserver start. (NetWare)	(In the print server mode) The NetWare service has started.
Required file server (<file server name>) not found	The required file server is not found.

Message	Problem and solutions
sap enable, satype=<SAP type>, sapname=<SAPname>	The SAP function has started. The SAP packet is issued to advertise the service on the SAP table on the NetWare server.
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>	An NDS context name has been set.
shutdown signal received. network service re-booting...	The smb service has started.
Smbd start. (NetBIOS)	SMBD (ServerMessageBlockDaemon) has been started.
SMTPC: failed to connect smtp server.	<p>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.</p> <p>Check the DNS Server's IP address and SMTP server's IP address, or the SMTP server name and</p> <p>SMTP port number, or the SMTP server's SMTP port number, or the network connection and configuration.</p>
SMTPC: failed to connect smtp server. timeout.	<p>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.</p>

Message	Problem and solutions
SMTPC: failed to get smtp server ip-address.	The SMTP server IP address could not be obtained. This could be because: <ul style="list-style-type: none"> • 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: no smtp server. connection close.	Connection to the SMTP server failed due to noresponse 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: 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: 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.
snmpd start.	The snmpd service has started.
The print server received error <error number> during attempt to log in to the network. Access to the network was denied . Verify that the print server name and password are correct .	Login to the file server failed. The print server is not registered or a password is specified. Register the print server without specifying a password.

Message	Problem and solutions
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.
Updated (option name) (value) via DHCPv6 Server	The parameter obtained from the DHCP server has been updated.
WINS name registration: No response to server (WINS server address)	There was no response from the WINS server. Check the correct WINS server address is entered. Alternatively, check the WINS server is functioning properly.
WINS wrong scopeID =< scopeID >	An invalid scope ID was used. 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 page that were spooled when the error occurred will be printed.
write error occurred.(fatal)	A fatal error occurred while the printer was writing to the spool file. Turn off the power of the printer, and then turn it on again. If the error recurs, contact your service representative. The print job that was being spooled when the error occurred will not be printed.

↓ Note

- For details about UNIX commands and parameters, see UNIX Supplement.

☐ Reference

- For details about “syslog” command, see “Remote Maintenance by telnet”.

Mac OS X

This section explains how to configure a Mac OS X to use AppleTalk and USB.

Follow the procedure below to configure Mac OS X 10.1. If you are not using Mac OS X 10.1, see the manual of the Mac OS X you are using for details.

★ Important

- For Mac OS X 10.1 or higher.

↓ Note

- 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.

★ Important

- You need an administrator name and a password (phrase). For details, contact 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.
 5. Double-click the installer icon.
 6. Follow the instructions on the screen.

5

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.

Mac OS X 10.5

Click [Default]. If the printer name is not displayed, select the icon that corresponds to your network environment such as AppleTalk.

When several AppleTalk zones exist on the network, select the zone the printer belongs to.

Mac OS X 10.4 or later

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 or later, 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.

A list of printer types appears.

4. Select the PPD file for the model you are using, and then click Add.**5. Quit Printer Setup Utility.**

Setting Up Options

1. Start System Preferences.**2. Click [Print & Fax].****3. In the [Printer] list, click the name of the printer you want to use, and then click [Printer Setup...].****4. Select the option you want to set up, and then select an appropriate setting for it.****5. Click [Apply Changes].**
 **Note**

- 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.**Mac OS X 10.5**

Click [Default].

Mac OS X 10.4 or later

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 or later, 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.

Note

- 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] 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.

Mac OS X 10.5

Click [Default]. If the printer name is not displayed, select the icon that corresponds to your network environment such as AppleTalk.

When several AppleTalk zones exist on the network, select the zone the printer belongs to.

Mac OS X 10.4 or later

Click a printer that has “Bonjour” indicated in the “Connection” column.

Other Mac OS X

Click [Rendezvous] on the pop-up menu.

3. Select the name of the connected printer from the list of printer models, and then click Add.

Under Mac OS X 10.4 or later, 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.

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] or [PS] before printing.

Changing to AppleTalk

Follow the procedure below to configure a Mac OS X to use AppleTalk.

Important

- You need an administrator name and a password (phrase). For details, contact your administrator.
1. Open [System Preference], and then click the Network icon.
 2. Click [Built-in Ethernet] in the [Show:] list box.
 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.
 6. When the settings are made, click [Apply Now].
 7. Quit [System Preference].

Note

- For information about installing applications required for AppleTalk, see the Mac OS manuals.

Configuring the Printer

Use the control panel to enable Apple Talk. (The default is active.)

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	[Job Type:] on [Job Log] in the print dialog box.
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.

↓ Note

- 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.

↓ Note

- 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.

↓ Note

- 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.

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.

 **Note**

- 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.

 **Note**

- 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.

5

Using sample print

 **Important**

- You need Mac OS X v10.2 or higher to use this function.
- 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.

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".

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

8. Select [Sample Print Jobs], and then press [Job List].

A list of sample print files stored in the printer appears.

User ID, Date/Time and File Name also appear.

9. Select the file you want to print by pressing it.

A list of print files stored in the printer appears.

10. Press [Print] to change the number of sets to be printed.

11. Enter the new number of sets using the number keys.

If you do not want to change the set quantity, perform the following steps.

You can enter up to 999 sets.

Press [Escape] to correct any entry mistakes.

12. Press [Print].

The remaining sets are printed.

Note

- Press [Cancel] to cancel printing.
- When printing finishes, the stored file is deleted.
- To stop printing after printing has started, press [JobReset]. The file will be deleted.
- If there is a print job outstanding, this is printed before the sample print job.

Reference

- “Sample Print” Deleting a Sample Print File

1. Press [Prt.Jobs].

A list of print files stored in the printer appears.

2. Select [Sample Print Jobs], and then press [Job List].

A list of sample print files stored in the printer appears.

3. Select the file you want to delete by pressing it. To cancel a selection, press the highlighted jobs again.

Only one file can be selected at a time.

4. Press [Delete].

A confirmation screen appears.

5. Press [Delete] to delete the file.

After the file is deleted, the printer screen reappears.

Note

- Press [Cancel] to cancel the delete request.

Using locked print

Important

- You need Mac OS X v10.2 or higher to use this function.
- 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.

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”.

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

7. Select [Locked Print Jobs], and then press [Job List].

A list of locked print files stored in the printer appears.

User ID, Date/Time and File Name also appear.

8. Select the file you want to print by pressing it.

A list of print files stored in the printer appears.

9. Press [Print].

The password screen appears.

10. Enter the password using the scroll keys, and then press [OK].

A confirmation screen appears.

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

11. Press [Print].

The locked file is printed.

Note

- Press [Cancel] to cancel printing.
- When printing finishes, the stored file is deleted.
- To stop printing after printing has started, press [JobReset]. The file will be deleted.

Reference

- “Locked Print”

Deleting a Locked Print File

1. Press [Prt.Jobs].

A list of print files stored in the printer appears.

2. Select [Locked Print Jobs], and then press [Job List].

A list of locked print files stored in the printer appears.

3. Select the file you want to delete by pressing it.

To cancel a selection, press the highlighted jobs again.

Only one file can be selected at a time.

4. Press [Delete].

A password screen appears.

5. Enter the password using the scroll keys, and then press [OK].

A confirmation screen appears.

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

When multiple files are selected, the printer deletes only files that correspond to the entered password.

The number of files to be deleted is displayed on the confirmation screen.

6. Press [Delete].

After the file is deleted, the printer screen reappears.

5

 Note

- Press [Cancel] to cancel the delete request.

Using hold print

 Important

- You need Mac OS X v10.2 or higher to use this function.
- 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 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.

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”.

1. On the printer’s control panel, press [Prt.Jobs].

A list of print files stored in the printer appears.

2. Select [Hold Print Jobs], and then press [Job List].

A list of hold print files stored in the printer appears.

User ID, Date/Time and File Name also appear.

3. Select the file you want to print by pressing it.

4. Press [Print].

The hold print file is printed.

Note

- Press [Cancel] to cancel printing.
- To stop printing after printing has started, press [JobReset]. The file will be deleted.
- When printing is completed, the stored file is deleted.

Reference

- “Hold Print” Deleting a Hold Print File

1. Press [Prt.Jobs].

A list of print files stored in the printer appears.

2. Select **[Hold Print Jobs]**, 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 by pressing it.

To cancel a selection, press the highlighted job again.

Only one file can be selected at a time.

4. Press **[Delete]**.

A confirmation screen appears.

5. Press **[Delete]**.

After the file is deleted, the printer screen reappears.

 **Note**

- Press **[Cancel]** to cancel the delete request.

Using stored print

 **Important**

- You need Mac OS X v10.2 or higher to use this function.
- 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.

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.

You can assign a password to a saved document, but password assignment is not mandatory.

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”.

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

A list of print files stored in the printer appears.

7. Select [Stored Print Jobs], and then press [Job List].

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

User ID, Date/Time and File Name also appear.

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

8. Select the file you want to print by pressing it.

9. Press [Print].

A confirmation screen appears.

If you have already set a password, proceed to the following step.

10. Enter the password using the scroll keys, and then press [OK].

A confirmation screen appears.

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

If you have not set the password, proceed to the following step.

11. Press [Print].

The Stored Print file is printed.

Note

- Press [Cancel] to cancel printing.
- Stored Print files sent to the printer is not deleted unless you delete them in the printer, or enable automatic deletion of Stored Print files.

Reference

- “Stored Print”

Deleting a Stored Print File

1. Press [Prt.Jobs].

A list of print files stored in the printer appears.

2. Select [Stored Print Jobs], and then press [Job List].

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

3. Select the file you want to delete by pressing it.

4. Press [Delete].

A confirmation screen appears.

5. Enter the password using the scroll keys, and then press [OK].

A confirmation screen appears.

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

6. Press [Delete].

After the file is deleted, the printer screen reappears.

Note

- Press [Cancel] to cancel the delete request.
- If you have already set a password in the printer driver, enter it to delete.

User Code

Use this to set a user code for print logging.

Enter a user code using up to eight digits. A user code identifies a group of users and allows you to check the number of sheets printed under each code with SmartDeviceMonitor for Admin. The following table shows the tabs or menus where you can select this function.

Mac OS	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.
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.

Note

- For details about the paper sizes supported by this printer, see 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.

Note

- For details about the paper sources, see Hardware Guide.

Resolution

Use this to set the resolution types.

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

Mac OS	[Resolution] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Resolution] on the [Features x] tab on [Printer Features] in the print dialog box.

Note

- For more information about the resolution types, see Hardware Guide.

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Orientation Override

Use this to set the paper orientation.

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

Mac OS	[Orientation Override] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Orientation Override] on the [Feature Sets: X] tab on [Printer Features] in the print dialog box.

You can select the following items:

- Off
- Landscape
- Portrait

Duplex Printing

Use this function to select duplex printing.

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

Mac OS	[Print on Both Sides] on [Layout] in the print dialogbox.
Mac OS X	<ul style="list-style-type: none"> • 10.3 or higher The [Two Sided Printing] check box on[Layout] in the print dialog box. • Other Mac OS X The [Print on both Sides] check box on[Duplex] in the print dialog box.

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.

Color Mode

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

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

Mac OS	[Color Mode] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Color Mode] on the [Features x] tab on [Printer Features] in the print dialog box.

Color

Prints color documents in full color.

Note

- Color images are printed using CMYK toner: Cyan, Magenta, Yellow, and Black. CMYK represents the three primary subtractive colors.

- If you want to adjust the print color, use the settings in the Advanced dialog box accessed from the Advanced button on the [Print Quality] tab.

Black and White

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

Gradation

Use this function to select a type of gradation suited to your requirements.

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

Mac OS	[Printer Specific Options] in the print dialog box.
Mac OS X	[Gradation] on the [Features x] tab on [Printer Features] in the print dialog box.

Fast

Prints quickly but loses smoothness.

Standard

Prints with good gradation.

Color Profile

Use this function to select the color profile pattern.

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

Mac OS	[Color Profile] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Color Profile] on the [Features x] tab on [Printer Features] in the print dialog box.

Auto

Use this setting to automatically configure the best color profile pattern based on the appearance of the document to be printed.

Photographic

Use this setting to enhance reproduction of photos and graphics that include midtones.

Presentation

Use this setting to enhance reproduction of documents containing text and graphics. This CRD is best for printing colored charts, graphs, presentation materials and so on. If you use this CRD for printing photographs, color and gradation might not reproduce so well.

Solid Color

Use this setting to print specific single colors, logos and so on.

User Setting

Use this setting to print images using a CRD downloaded from your application.

CLP Simulation

Prints the output colors similar to the colors displayed on the computer screen.

Note

- Use this function to select a color rendering dictionary (CRD). The CRD is referred to color matching, so you should select the appropriate CRD for the document you are printing. The selected CRD is also referred to when [Fine] or [Fine] is selected for "Colour Setting". The following items are available: [Auto], [Photographic], [Presentation], and [Solid Color].

Color Setting

Use this function to select the correction method used for color conversion.

Important

- The color rendering dictionary selected in the Color Profile setting is used. The following table shows the tabs or menus where you can select this function.

Mac OS	[Color Profile] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Color Profile] on the [Features x] tab on [Printer Features] in the print dialog box.

Off

No modification to the color setting.

Fine

Select this setting to perform color matching based on the printer's built-in color rendering dictionaries, and to perform CMYK conversion. This setting performs printing at an output target of Monitor $g = 1.8$.

Super Fine

Select this setting to use a color rendering dictionary similar to the Fine setting but is capable of producing output that is more vivid. Use this setting to emphasize lighter colors. This setting performs printing at an output target of Monitor g = 2.2.

Note

- Use this function to select a color rendering dictionary (CRD). The CRD is referred to color matching, so you should select the appropriate CRD for the document you are printing. The selected CRD is also referred to when [Fine] or [Super Fine] is selected for “Color Setting”. The following items are available: [Auto], [Photographic], [Presentation], and [Solid Color].

Toner Saving/Level Color

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	[Toner Saving] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Toner Saving] on the [Features: Set x] tab on [Printer Features] in the print dialog box.

5

Reference

- 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.

Important

- Make sure that the following check boxes have not been selected.
 - Mac OS
The [Collate] check box in the print dialog box.
 - Mac OS X
- The [Collate] check box on [Copies & Pages] in the printer dialog box. The following table shows the tabs or menus where you can select this function.

Mac OS	[Collate] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Collate] on the [Features: Set x] tab on [Printer Feature] 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 [Feature Set: x] tab on [Printer Features] in the print dialog box.

↓ Note

- For details about the media type supported by this printer, see Hardware Guide.

Black Over Print

Select whether or not to apply a black color over any other colors when printing.

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

Mac OS	[Black Over Print] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Black Over Print] on the [Features: Set x] tab on [Printer Features] in the print dialog box.

Image Smoothing

Use this to select the image smoothing type.

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

Mac OS	[Image Smoothing] on [Printer Specific Options] in the print dialog box.
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Mac OS X	[Image Smoothing] on the [Feature Set: x] tab on [Printer Features] in the print dialog box.
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Off

Disables image smoothing.

On

Performs image smoothing unconditionally.

Auto

Performs image smoothing automatically for images that have a resolution less than 25% of supported printer resolution.

Less than 90 ppi - Less than 300 ppi

Performs image smoothing only when the image has an image resolution (pixels per inch) less

Note

than the respective value you have selected in the list.

- When Auto is selected, data processing may take a long time.
- When [Image Smoothing] is used for a mask image, this function may have an undesired effect on the print result.

Separate into CMYK

Use this to select the print separation type.

You can separate the printing data into CMYK to specify a specific color combination.

Mac OS	[Separate into CMYK] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Separate into CMYK] on the [Features: Set x] tab on [Printer Features] in the print dialog box.

CMYK Simulation Profile

You can simulate the color tone of the printing ink.

You can select the printing ink standard from US OffsetPrint, Euroscale, JapanColor and Pal-etteColor.

Mac OS	[CMYK Simulation Profile] on [Printer Specific Options] in the print dialog box.
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Mac OS X	[CMYK Simulation Profile] on the [Features: Set x] tab on [Printer Features] in the print dialog box.
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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 printdialog box.
Mac OS X	Dithering: on the Feature Set: x 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.

Photographic

Performs dithering using an appropriate pattern for photographs.

Text

Performs dithering using an appropriate pattern for text.

User Setting

Use this setting to print images set in half tone in your application.

Gray Reproduction

Use this function to select Black Color mode for text and line art.

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

Mac OS	[Gray Reproductions (Text/LineArt)] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Gray Reproductions (Text/LineArt)] on the[Features: Set x] tab on [Printer Features] in the printdialog box.

Black by K

Select this setting to use a black toner.

Black/Gray by K

Black portions are printed in gray.

CMY+K

Select this setting to use all toners.

Black/Gray by K (Text only)

Prints black text in gray.

Black by K (Text only)

Prints text using black toner.

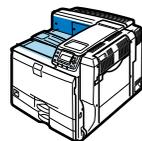
Color Matching

Use this function to select whether or not you want the colors in the documents to be adjusted before printing, so that the printed page matches the colors on the screen closer. Image Color Control

Open the [Image Color Matching] dialog box, and then click this button to specify exactly how you want the colors on your screen adjusted before printing.

MEMO

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Model No.



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