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Introduction

To get maximum versatility from this machine all operators should carefully read and follow the instructions in this manual. Please keep this manual in a handy place near the machine.

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

Important

Parts of this manual are subject to change without prior notice. In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

Software Version Conventions Used in This Manual

- NetWare 3.x means NetWare 3.12 and 3.2.
- NetWare 4.x means NetWare 4.1, 4.11 and IntranetWare.

Trademarks

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Note

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

- Microsoft® Windows® 95 operating system
- Microsoft® Windows® 98 operating system
- Microsoft® Windows® Millennium Edition (Windows Me)
- Microsoft® Windows® 2000 Professional
- Microsoft® Windows® 2000 Server
- Microsoft® Windows NT® Server operating system Version 4.0
- Microsoft® Windows NT® Workstation operating system Version 4.0





How to Read This Manual

Symbols

In this manual, the following symbols are used:

 **WARNING:**

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

 **CAUTION:**

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

* The statements above are notes for your safety.

 **Important**

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

 **Preparation**

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

 **Note**

This symbol indicates precautions for operation, or actions to take after misoperation.

 **Limitation**

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

 **Reference**

This symbol indicates a reference.





[]

Keys that appear on the machine's panel display.

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

【 】

Keys built into the machine's operation panel.

Keys on the computer's keyboard.





1. Windows 2000 Print Server Configuration

Configuring the Protocols

Configuring TCP/IP and IPP for Printing

Follow these instructions to configure the Network Interface Board and Windows 2000 to use the TCP/IP protocol and IPP.

Configuring the printer

Configure the printer to use the TCP/IP protocol.

- Confirm that the TCP/IP protocol is set to be active. (The factory default is active.)
- Assign an IP address and make other settings required for using the TCP/IP protocol.

Reference

- For more information about how to make the above settings, see "*Windows 2000 Configuration*" in Printer Client Reference 1 that comes with this printer.
- If DHCP is used to assign IP addresses, see [p.173 "When Using DHCP"](#).

Note

- After setting the IP address, use the ping command to confirm that it has been set correctly.
 - ① Click **[Start]**, point to **[Programs]**, point to **[Accessories]** and then click **[Command Prompt]**.
 - ② Type the following. (Example IP address is 192.168.15.16)
C:> ping 192.168.15.16
If the address has been configured correctly, the following message appears.
Reply from 192.168.15.16 : bytes=32 time<10ms TTL=32
If the address has been configured incorrectly, the following message appears.
Request timed out.



Configuring a Windows 2000 computer

Follow these steps to configure a Windows 2000 computer to use the TCP/IP protocol.

- 1** Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Network and Dial-up Connections]**.
- 2** Click **[Local Area Connection]**. On the **[File]** menu, click **[Properties]**.
- 3** Confirm that "Internet Protocol (TCP/IP)" is selected in the **[Components checked are used by this connection:]** box under the **[General]** tab.

 **Note**

- If the check box of TCP/IP protocol is not selected, select the box.
 - If the TCP/IP protocol is not installed, click **[Install]** under the **[General]** tab and install it. For more information about installing the TCP/IP protocol, see Windows 2000 Help file.
- 4** Configure the TCP/IP protocols with the appropriate IP address, subnet mask and other settings.

Confirm with the network administrator that the settings are correct.





Configuring NetBEUI for Printing

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

Configuring the printer

Configure the printer to use the NetBEUI protocol.

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

Reference

- For more information about how to make the above settings, see "*Windows 2000 Configuration*" in Printer Client Reference 1 that comes with this printer.

Configuring a Windows 2000 computer

Follow these steps to configure a Windows 2000 computer to use the NetBEUI protocol.

- 1** Click **[Start]** on the taskbar, point to **[Settings]**, and then click **[Network and Dial-up Connections]**.
- 2** Click **[Local Area Connection]**. On the **[File]** menu, click **[Properties]**.
- 3** Confirm that "**NetBEUI Protocol**" is selected in the **[Components checked are used by this connection:]** box under the **[General]** tab.



 **Note**

- If the check box of the NetBEUI protocol is not selected, select the box.
- If the NetBEUI protocol is not installed, click **[Install]** under the **[General]** tab and install it. For more information about installing the NetBEUI protocol, see Windows 2000 Help file. "Network" installation installs the PCL 5c and RPCS printer driver and SmartNetMonitor for Client. When you print using TCP/IP, NetBEUI or IPP protocol in Peer-to-Peer Network, you must select this installation.





Installing Software

Preparation

- Select "Network" installation when you use the printer for direct printing.
- "Network" installation installs the PCL 5c and RPCS printer driver and SmartNetMonitor for Client. When you print using TCP/IP, NetBEUI or IPP protocol in Peer-to-Peer Network, you must select this installation.
- "Custom" installation allows to install SmartNetMonitor for Client separately.

Installing by "Network" installation

1 Close all applications that are running.

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

The installer will start by Auto Run.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch "INST-TOOL.EXE" located on the CD-ROM root directory.

3 Follow the instructions on the screen.

4 Select "Network" installation when the selection screen appears.

5 Follow the instructions on the screen.

6 Select a printer you want to use when the [Select Printer] dialog box appears.



7 Click **[Add..]** when the **[Select Port]** dialog box appear.

8 Select **[SmartNetMonitor for Client]** and then click **[OK]**.

Available printers will be listed.

9 Select a printer you want to use.

TCP/IP

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



Note

- Printers that respond to an IP broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]** and then type the IP address or host name.

NetBEUI

1 Click **[NetBEUI]**.

A list of printers that can be printed by the NetBEUI protocol appears.

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



Note

- Printers that respond to an broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]** and then type the NetBEUI address. Confirm the NetBEUI address on the network configuration page. For more information about the printing of configuration page, see [p.173 "When Using DHCP"](#).
- You cannot print to printers beyond routers.



IPP

- 1 Click [IPP].

The IPP setting dialog box appears.

- 2 In [Printer URL], type "`http://(printer's IP address)/printer`" as the IP address of the printer.
- 3 As necessary, type the names to distinguish the printer in [IPP Port Name]. Type a name differing from those of any existing port names.

If you omit this, the address entered in [Printer URL] will be set as the IPP port name.

(Example IP address is 192.168.15.16)

`http://192.168.15.16/printer`

- 4 If using a proxy server and IPP user name, click [Detailed Settings] and configure the necessary settings.



Note

- For more information about these setting, see the Help file.

- 10 Click [OK].

- 11 Confirm the selected port is highlighted, and then click [Next].

- 12 Click [Finish].



Note

- During installation, the [Digital Signature Not Found] dialog box may appear. In this case, click [Yes] to continue the installation.

- 13 Restart the computer after installation is complete.



14 Set up the options with the printer driver.

Note

- You can specify the "User Code" with the printer properties after installing the printer driver. See the Help file for the printer driver.
- You must set up the options when the bidirectional transmission is unable. For more information about the conditions of the bidirectional transmission, see [p.23 "The conditions of the bidirectional transmissions"](#).

Changing Port Settings

Follow the steps to change SmartNetMonitor for Client settings, such as the proxy server settings or IPP URL.

Note

- There are no settings for the NetBEUI protocol.

1 From the [Printers] window, click the icon of the printer you want to use. On the [File] menu, click [Properties].

2 Click the [Ports] tab, and then click [Configure Port].

The [Port Settings] dialog box appears

- For TCP/IP protocol, you can configure Timeout Settings.
- For IPP, you can configure User Settings, Proxy Settings and Timeout Settings.

Note

- For more information about these settings, see SmartNetMonitor for Client Help file.





Printing with a Standard TCP/IP Port

Preparation

- Select **[Typical]** installation when you use the printer with Standard TCP/IP port.
- [Typical]** installation installs the PCL 5c and RPCS printer driver.

Installing the Printer Driver

- 1** Close all applications that are running.
- 2** Insert the CD-ROM into the CD-ROM drive.

The installer will start by Auto Run.

Important

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch "INST-TOOL.EXE" located on the CD-ROM root directory.

- 3** Follow the instructions on the screen.
- 4** Select **[Typical]** installation, and then click **[Next]**.
- 5** Follow the instructions on the screen.





6 Select **[Standard TCP/IP]** when the "Select Port" dialog box appears, and then click **[Next]**.

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

8 Type the printer name or IP address in the "Printer Name or IP Address" box.

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

10 Confirm that the selected port has been displayed in the "Port" box, and then click **[Next]**.

 **Note**

- During installation, the **[Digital Signature Not Found]** dialog box may appear. In this case, click **[Yes]** to continue the installation.

11 Click **[Finish]**.

 **Note**

- You can specify the "User Code" with the printer properties after installing the RPCS printer driver. See the Help file for the printer driver.

12 Restart the computer after the installation is complete.

13 Set up the options with the printer driver.

14 You must set up the options when the bidirectional transmission is disabled.

 **Reference**

- For more information about the status of the bidirectional transmission, see [p.23 "The conditions of the bidirectional transmissions"](#).
- For more information about settings for options, see [p.22 "Setting Up Options"](#).





Configuring LPR Port Printing

Preparation

- Select **[Typical]** installation when you use the printer with the LPR port.
- [Typical]** installation installs the PCL 5c and RPCS printer driver.

Installing the Printer Driver

- 1** Close all applications that are running.
- 2** Insert the CD-ROM into the CD-ROM drive.

The installer will start by Auto Run.

Important

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch "INST-TOOL.EXE" located on the CD-ROM root directory.

- 3** Follow the instructions on the screen.
- 4** Select **[Typical]** installation, and then click **[Next]**.
- 5** Follow the instructions on the screen.





- 6** Select [LPR Port] when the "Select Port" dialog box appears, and then click [Next].
- 7** Type the printer's IP address in the "Name or address of server providing lpd" box.
- 8** Type "lp" in the "Name of printer or print queue on that server" box, and then click [OK].
- 9** Confirm that the selected port has been displayed in the "Port" box, and then click [Next].
- 10** Click [Finish].

 **Note**

- During installation, the [Digital Signature Not Found] dialog box may appear. In this case, click [Yes] to continue the installation.

11 Restart the computer after the installation is complete.

12 Set up the options with the printer driver.

 **Reference**

- For more information about settings for options, see [p.22 "Setting Up Options"](#).

 **Note**

- You can specify the "User Code" with the printer properties after installing the printer driver. See the Help file for the printer driver.
- You must set up the options when the bidirectional transmission is disabled. For more information about the status of the bidirectional transmission, see [p.23 "The conditions of the bidirectional transmissions"](#).



Setting Up Options

You must set up installed options, paper size and feed direction with the printer driver when the bidirectional transmission is disabled.

Limitation

- Changing the printer settings requires Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default. When you set up options, log on using an account that has Manage Printers permission.

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

The **[Printers]** window appears.

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

3 Click the **[Accessories]** tab.

Note

- If you use the RPCS printer driver, Click **[Change Accessories]** tab.
- If you use the PS printer driver, Click **[Device Settings]** tab.

4 Select options you have installed from the **[Options]** group and make any settings you require.

5 Click **[OK]** .



The conditions of the bidirectional transmissions

When the bidirectional transmissions is enabled, the information about the paper size and feed direction settings are automatically sent to the printer by the computer. You can also confirm the printer's condition from your computer.

- The bidirectional transmissions is supported by Windows 95/98/Me, Windows 2000 and Windows NT 4.0.
- If you use the RPCS printer driver and the bidirectional transmissions is enabled, the **[Change Accessories]** tab are grayed out.

Note

- The RPCS printer driver supports the bidirectional transmission and update the printer status automatically.
- The PCL 5c printer driver supports the bidirectional transmission, you can update the printer status manually.
- The PostScript 3 printer driver does not supports the bidirectional transmission.

To support the bidirectional transmissions, the following conditions below are required.

❖ Connecting with the parallel interface cable and the USB exchange cable.

- The computer supports the bidirectional transmissions.
- The Interface cable supports the bidirectional transmissions.
- The printer is connected to the computer using the standard parallel interface cable and the parallel connector.
- On Windows 2000, the **[Enable bidirectional support]** is selected and **[Enable printer pooling]** is not selected under the **[ports]** tab.





❖ Connecting with the network

- SmartNetMonitor for Client and the TCP/IP protocol are used.
- On Windows 2000, the **[Enable bidirectional support]** is selected and **[Enable printer pooling]** is not selected under the **[ports]** tab.
- SmartNetMonitor for Client included on the CD-ROM is installed.





Setting the Printer Shared

Limitation

- Changing the printer settings requires Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default. When you set up options, log on using an account that has Manage Printers permission.

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

The **[Printers]** window appears.

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

3 Select **[Shared as:]** under the **[Sharing]** tab.

4 Click **[OK]**.





2. Windows NT 4.0 Print Server Configuration

Configuring the Protocols

Configuring TCP/IP and IPP for Printing

Follow these instructions to configure the Network Interface Board and Windows NT to use the TCP/IP protocol and IPP.

Configuring the printer

Configure the printer to use the TCP/IP protocol.

- Confirm that the TCP/IP protocol is set to be active. (The factory default is active.)
- Assign an IP address and make other settings required for using the TCP/IP protocol.



Reference

- For more information about how to make the above settings, see "*Windows NT 4.0 Configuration*" in Printer Client Reference 1 that comes with this printer.
- If DHCP is used to assign IP addresses, see [p.37 "The conditions of the bidirectional transmissions"](#).



Note

- After setting the IP address, use the ping command to confirm that it has been set correctly.
 - ① Click **[Start]**, point to **[Programs]**, and then click **[Command Prompt]**.
 - ② Type the following. (Example IP address is 192.168.15.16)
C:> ping 192.168.15.16
If the address has been configured correctly, the following message appears.
Reply from 192.168.15.16 : bytes=32 time<10ms TTL=32
If the address has been configured incorrectly, the following message appears.
Request timed out.



Configuring a Windows NT computer

Follow these steps to configure a Windows NT computer to use the TCP/IP protocol.

1 Open **[Control Panel]** and double-click the **[Network]** icon. Confirm that "TCP/IP Protocol" is listed in the **[Network protocols]** box under the **[Protocols]** tab.

 **Note**

- If the TCP/IP protocol is not installed, click **[Add]** under the **[Protocols]** tab and install it. For more information about installing the TCP/IP protocol, see Windows NT Help file.

2 Configure the TCP/IP protocols with the appropriate IP address, subnet mask and other settings.

Confirm with the network administrator that the settings are correct.

3 Click the **[Services]** tab, and confirm that "Microsoft TCP/IP Printing" is installed.

If "Microsoft TCP/IP Printing" is not installed, click **[Add]** under the **[Services]** tab, and install it. For more information about installing and configuring network services, see Windows NT Help file.





Configuring NetBEUI for Printing

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

Configuring the printer

Configure the printer to use the NetBEUI protocol.

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

Reference

- For more information about how to make the above settings, see "*Windows NT 4.0 Configuration*" in Printer Client Reference 1 that comes with this printer.

Configuring a Windows NT computer

Install the NetBEUI protocol on the Windows NT computer, and change the LAN adapter number (Lana Number).

- 1** Open [Control Panel] and double-click the [Network] icon. Confirm that "NetBEUI Protocol" is listed in the [Network Protocols] box under the [Protocols] tab.

Note

- If the NetBEUI protocol is not installed, click [Add...] under the [Protocols] tab, and install it. For more information about installing the NetBEUI protocol, see Windows NT Help file.

- 2** Change the Lana Number. Click the [Services] tab, click "NetBIOS Interface" in the [Network Services:] box, and click [Properties:].



3 Click the Lana Number corresponding the Nbf protocol of the [Network Route] headline, and click [Edit].

4 Type "0" as the Lana Number.

 **Note**

- If the other protocol's Lana Number is configured with "0", you must change the Lana Number a number other than "0".

5 Click [OK].

6 Click [Close], and close the [Network] dialog box.

7 After confirming the message to restart, click [Yes].

 **Note**

- After you change the Lana Number, you must restart the computer.





Installing Software

Preparation

- Select "Network" installation when you use the printer for direct printing.
- "Network" installation installs the PCL 5c and RPCS printer driver and SmartNetMonitor for Client. When you print using TCP/IP, NetBEUI or IPP protocol in Peer-to-Peer Network, you must select this installation.
- "Custom" installation allows to install SmartNetMonitor for Client separately.

Installing by "Network" installation

1 Close all applications that are running.

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

The installer will start by Auto Run.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch "INST-TOOL.EXE" located on the CD-ROM root directory.

3 Follow the instructions on the screen.

4 Select "Network" installation when the selection screen appears.

5 Follow the instructions on the screen.

6 Select a printer you want to use when the [Select Printer] dialog box appears.





7 Click **[Add..]** when the **[Select Port]** dialog box appear.

8 Select **[SmartNetMonitor for Client]** and then click **[OK]**.

Available printers will be listed.

9 Select a printer you want to use.

TCP/IP

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



Note

- Printers that respond to an IP broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]** and then type the IP address or host name.

NetBEUI

1 Click **[NetBEUI]**.

A list of printers that can be printed by the NetBEUI protocol appears.

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



Note

- Printers that respond to an broadcast from the computer will be displayed. To print to a printer not listed here, click **[Specify Address]** and then type the NetBEUI address. Confirm the NetBEUI address on the network configuration page. For more information about the printing of configuration page, see [p.37 "The conditions of the bidirectional transmissions"](#).
- You cannot print to printers beyond routers.



IPP

- 1 Click [IPP].

The IPP setting dialog box appears.

- 2 In [Printer URL], type "`http://(printer's IP address)/printer`" as the IP address of the printer.
- 3 As necessary, type the names to distinguish the printer in [IPP Port Name]. Type a name differing from those of any existing port names.

If you omit this, the address entered in [Printer URL] will be set as the IPP port name.

(Example IP address is 192.168.15.16)

`http://192.168.15.16/printer`

- 4 If using a proxy server and IPP user name, click [Detailed Settings] and configure the necessary settings.



Note

- For more information about these setting, see the Help file.

- 10 Click [OK].

- 11 Confirm the selected port is highlighted, and then click [Next].

- 12 Click [Finish].

Note

- During installation, the [Digital Signature Not Found] dialog box may appear. In this case, click [Yes] to continue the installation.

- 13 Restart the computer after installation is complete.



14 Set up the options with the printer driver.

Note

- You can specify the "User Code" with the printer properties after installing the printer driver. See the Help file for the printer driver.
- You must set up the options when the bidirectional transmission is unable. For more information about the conditions of the bidirectional transmission, see [p.37 "The conditions of the bidirectional transmissions"](#)

Changing Port Settings

Follow the steps to change SmartNetMonitor for Client settings, such as the proxy server settings or IPP URL.

Note

- There are no settings for the NetBEUI protocol.

1 From the [Printers] window, click the icon of the printer you want to use. On the [File] menu, click [Properties].

2 Click the [Ports] tab, and then click [Configure Port].

The [Port Settings] dialog box appears

- For TCP/IP protocol, you can configure Timeout Settings.
- For IPP, you can configure User Settings, Proxy Settings and Timeout Settings.

Note

- For more information about these settings, see SmartNetMonitor for Client Help file.





Configuring LPR Port Printing

Preparation

- Select **[Typical]** installation when you use the printer with the LPR port.
- [Typical]** installation installs the PCL 5c and RPCS printer driver.

Installing the Printer Driver

- 1** Close all applications that are running.
- 2** Insert the CD-ROM into the CD-ROM drive.

The installer will start by Auto Run.

Important

- Never have two versions of the same printer driver installed on your system at the same time. When upgrading to a new version of the printer driver, delete the old version, and then install the new one.

Note

- Auto Run might not automatically work with certain OS settings. In this case, launch "INST-TOOL.EXE" located on the CD-ROM root directory.

- 3** Follow the instructions on the screen.
- 4** Select **[Typical]** installation, and then click **[Next]**.
- 5** Follow the instructions on the screen.





- 6** Select [LPR Port] when the "Select Port" dialog box appears, and then click [Next].
- 7** Type the printer's IP address in the "Name or address of server providing lpd" box.
- 8** Type "lp" in the "Name of printer or print queue on that server" box, and then click [OK].
- 9** Confirm that the selected port has been displayed in the "Port" box, and then click [Next].
- 10** Click [Finish].

 **Note**

- During installation, the [Digital Signature Not Found] dialog box may appear. In this case, click [Yes] to continue the installation.

11 Restart the computer after the installation is complete.

12 Set up the options with the printer driver.

 **Reference**

- For more information about settings for options, see [p.36 "Setting Up Options"](#).

 **Note**

- You can specify the "User Code" with the printer properties after installing the printer driver. See the Help file for the printer driver.
- You must set up the options when the bidirectional transmission is disabled. For more information about the status of the bidirectional transmission, see [p.37 "The conditions of the bidirectional transmissions"](#).



Setting Up Options

You must set up installed options, paper size and feed direction with the printer driver when the bidirectional transmission is disabled.

Limitation

- Changing the printer settings requires Full Control Access permission. Members of the Administrators and Power Users groups have Full Control Access permission by default. When you set up options, log on using an account that has Full Control Access permission.

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

The **[Printers]** window appears.

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

3 Click the **[Accessories]** tab.

Note

- If you use the RPCS printer driver, Click **[Change Accessories]** tab.
- If you use the PS printer driver, Click **[Device Settings]** tab.

4 Select options you have installed from the **[Options]** group and make any settings you require.

5 Click **[OK]** .



The conditions of the bidirectional transmissions

When the bidirectional transmissions is enabled, the information about the paper size and feed direction settings are automatically sent to the printer by the computer. You can also confirm the printer's condition from your computer.

- The bidirectional transmissions is supported by Windows 95/98/Me, Windows 2000 and Windows NT 4.0.
- If you use the RPCS printer driver and the bidirectional transmissions is enabled, the **[Change Accessories]** tab are grayed out.

Note

- The RPCS printer driver supports the bidirectional transmission and update the printer status automatically.
- The PCL 5c printer driver supports the bidirectional transmission, you can update the printer status manually.
- The PostScript 3 printer driver does not supports the bidirectional transmission.

To support the bidirectional transmissions, the following conditions below are required.

❖ Connecting with the parallel interface cable and the USB exchange cable.

- The computer supports the bidirectional transmissions.
- The Interface cable supports the bidirectional transmissions.
- The printer is connected to the computer using the standard parallel interface cable and the parallel connector.
- On Windows NT 4.0, the **[Enable bidirectional support]** is selected and **[Enable printer pooling]** is not selected under the **[ports]** tab.





❖ Connecting with the network

- SmartNetMonitor for Client and the TCP/IP protocol are used.
- On Windows NT 4.0, the **[Enable bidirectional support]** is selected and **[Enable printer pooling]** is not selected under the **[ports]** tab.
- SmartNetMonitor for Client included on the CD-ROM is installed.





Setting the Printer Shared

Limitation

- Changing the printer settings requires Full Control Access permission. Members of the Administrators and Power Users groups have Full Control Access permission by default. When you set up options, log on using an account that has Full Control Access permission.

Use the **[Printers]** window to set up the printer.

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

The **[Printers]** window appears.

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

3 Select **[Shared]** in the **[Sharing]** tab.

Note

- If you use alternate drivers for Windows 95/98/Me client, service pack 4 or more is required. And install the appropriate printer driver for each client.

4 Click **[OK]**.

The printers attached to the network are displayed.





3. NetWare Configuration

This chapter describes how to configure the printer to use as a print server or a remote printer in a NetWare environment.

Note

- ❑ NetWare must be set to active using the operation panel of the printer. For more information about how to set it, see Administrator Reference 1 that comes with this printer.

❖ SmartNetMonitor for Admin

To use a printer in a NetWare environment, configure the NetWare printing environment by using SmartNetMonitor for Admin.

Note

- ❑ If you configure NetWare printing environment by using SmartNetMonitor for Admin under following environment, NetWare Client which is provided by Novell is required.
 - NDS mode in Windows 95/98
 - NDS or Bindary mode in Windows 2000/Windows NT4.0

❖ Printers listed by SmartNetMonitor for Admin

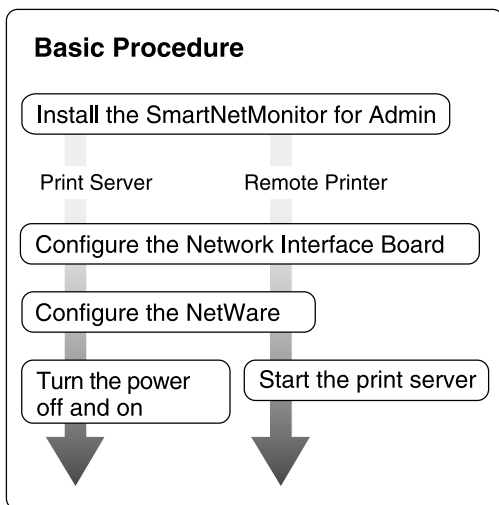
SmartNetMonitor for Admin displays a list of printers, which are connected to the network.

If you cannot find out the printer from the displayed list, refer to the configuration page printed from the printer. For more information about printing a configuration page, see [p.81 “Printing a Configuration Page”](#).



NetWare 3.x - Advanced Settings

The actual procedures for configuring the printer differ depending on whether the Network Interface Board is configured as a print server or as a remote printer. This section describes how to configure it in the NetWare 3.x environment.



 **Note**

- This section assumes NetWare is functional and that the necessary environment for the NetWare Print Service is available.





Installing SmartNetMonitor for Admin

1 Close all applications that are running.

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

The installer will start by Auto Run.

 **Note**

- Auto Run might not automatically work with certain OS settings. In this case, launch "INST-TOOL.EXE" located on the CD-ROM root directory.

3 Follow the instructions on the screen.

4 Select "Custom" installation and then click [Next].

5 Remove the check mark from the RPCS Printer Driver and PCL 5c Printer Driver.

6 Click to select [SmartNetMonitor for Admin], and then click [Install].

7 Click [OK].

8 Follow the instructions on the screen.

After installation is completed, see [p.43 "Setting Up as a Print Server"](#) when you use the printer as a print server.

See [p.45 "Setting Up as a Remote Printer"](#) when you use the printer as a remote printer.

 **Note**

- If you require restarting the computer after installation of SmartNetMonitor for Admin was completed, restart the computer and continue to configuration.





Setting Up as a Print Server

1 Log on to the file server as a Supervisor or a Supervisor equivalent.

2 Run SmartNetMonitor for Admin.

3 Click the [Group] menu and click [Open LAN] and select [IPX/SPX].

A list of printers appears

 **Note**

- If you cannot identify which printer to configure from the list of printers, print Configuration Page from the printer and find the desired printer. For more information about printing Configuration Page, see [p.81 "Printing a Configuration Page"](#).
- If no printer name appears in the list, match the frame types of the IPX/SPX protocol between the computer and printer. Use the [Network] dialog box of Windows to change the frame type of the computer. For more information about changing the frame type of equipment, see "*Configuring the Printer for the Network*" in Administrator Reference 1.

4 Click to select the printer you want to configure, and then click [NIB Setup Tool] on the [Tools] menu.

5 Click to select [Wizard], and then click [OK].

6 Type the device name into the [Device Name] box and comment into the [Comment] box as necessary, and then click [Next].

7 Select the [NetWare] check box, and then click [Next].



8 Click to select **[Bindery Mode]**, type the file server name into the **[File Server Name:]** box, and then click **[Next]**.

In the **[File Server Name:]** box, type the name of the file server in which a print server is to be created. You can also select a file server from the list that appears by clicking **[Browse]**.

9 Type the print server name into the **[Print Server Name]** box, printer name into the **[Printer Name]** box, and print queue name into the **[Print Queue Name]** box, and then click **[Next]**.

- In the **[Print Server Name]** box, type the name of the NetWare print server within 47 characters.
- In the **[Printer Name]** box, type the name of the NetWare printer.
- In the **[Print Queue Name]** box, type the name of the print queue to be added to NetWare.

10 After confirming the settings, click **[Next]**.

The settings take effect, and the NIB setup tool exits.

11 Exit SmartNetMonitor for Admin.

12 Turn the printer power off and on.

 **Note**

- To confirm that the printer is configured correctly, type as follows from the command prompt.

F:> USERLIST

- If the printer works as configured, the name of the print server appears as an attached user.



Setting Up as a Remote Printer

1 Log on to the file server as a Supervisor or a Supervisor equivalent.

2 Run the SmartNetMonitor for Admin.

3 Click the [Group] menu and click [Open LAN] and select [IPX/SPX].

A list of printers appears.

 **Note**

- If you cannot identify which printer to configure from the list of printers, print Configuration Page from the printer and find the desired printer. For more information about printing Configuration Page, see [p.81 "Printing a Configuration Page"](#).
- If no printer name appears in the list, match the frame types of the IPX/SPX protocol between the computer and printer. Use the [Network] dialog box of Windows to change the frame type of the computer. For more information about changing the frame type of equipment, see "*Configuring the Printer for the Network*" in Administrator Reference 1.


4 Click to select the printer you want to configure, and then click [NIB Setup Tool] on the [Tools] menu.

5 Click to select [Property Sheet] and click [OK].

6 Click the [NetWare] tab, and make the following settings.

- 1** In the [Print Server Name] box, type the name of the print server.
- 2** In the [File Server Name] box, type the name of the file server in which a print server is to be created.

Clicking [Browse], you can select a file server among those listed in the [Browse] dialog box.



- 3 In the [Print Server Operation Mode] group, click [As Remote Printer].
- 4 In the [Remote Printer No.] box, type the printer number.

 **Important**

- Use the same printer number as that to be created in the printer server.

- 5 Click [OK] to close the property sheet.
- 6 After a confirmation dialog box appears, click [OK].
- 7 On the [NIB] menu, click [Exit] to exit the NIB Setup Tool.

- 8 Type "PCONSOLE" from the command prompt.

```
F :> PCONSOLE
```

- 9 Create a print queue as follows.

 **Note**

- If you use a currently defined print queue, go to step 10.
- 1 From the [Available Options] menu, select [Print Queue Information] and press [ENTER].
 - 2 Press [INSERT] and type a print queue name.
 - 3 Press [ESC] to return to the [Available Options] menu.

- 10 Create a printer as follows.

- 1 From the [Available Options] menu, select [Print Server Information] and press [ENTER].
- 2 To create a new print server, press [INSERT] and type a print server name.

If you use an currently defined print server, select one of the print servers shown in the [Print Server] list.

 **Important**

- Use the same name as that specified in the NIB Setup Tool. (Step 6).



- ③ From the [Print Server Information] menu, select [Print Server Configuration].
- ④ From the [Print Server Configuration] menu, select [Printer Configuration].
- ⑤ Select the printer which is indicated as "Not Installed".

Important

- Use the same number as that specified as Remote Printer No. using the NIB Setup Tool. (Step [6-4](#)).

- ⑥ If you change the name of the printer, type a new name.

A name "Printer x" is assigned to the printer. x stands for the number of the selected printer.

- ⑦ As type, select [Remote Parallel, LPT1].

The IRQ, Buffer size, Starting form, and Queue service mode are automatically configured.

- ⑧ Press the [ESC] key, and click [Yes] in the confirmation dialog box.

- ⑨ Press the [ESC] key to return to [Print Server Configuration Menu].

11 Assign print queues to the created printer as follows.

- ① From [Print Server Configuration Menu], select [Queues Serviced By Printer].

- ② Select the printer created in step [10](#).

- ③ Press the [INSERT] key to select a queue serviced by the printer.

Note

- You can select more than one queue at a time.

- ④ Follow the instructions on the screen to make other necessary settings.

When you have finished the above steps, confirm that the queues are assigned.

12 Press the [ESC] key until "Exit?" appears, and select [Yes] to exit PCONSOLE.



13 Start the print server by typing the following from the console of the NetWare Server.

If it is running, restart it after exiting it.

❖ **To exit**

```
CAREE: unload pserver
```

❖ **To start**

```
CAREE: load pserver print_server_name
```

 **Note**

- If the printer works as configured, "Waiting for job" appears.



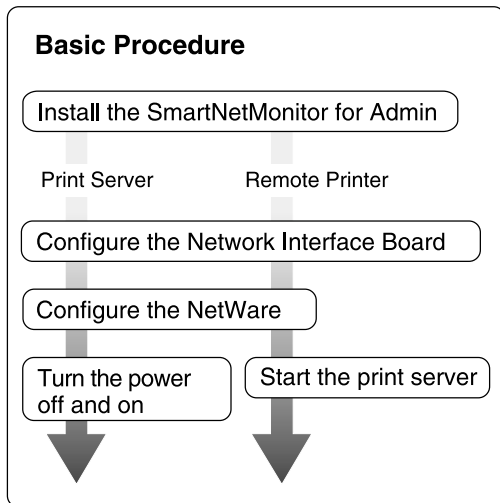


NetWare 4.x, 5 - Advanced Settings

The actual procedures for configuring the printer differ depending on whether the Network Interface Board is configured as a print server or as a remote printer. This section describes how to configure it in the NetWare 4.x, 5 environment.

❖ To use NetWare 5

- If you use Pure IP, use the printer as a print server. You cannot use the printer as a remote printer when you use Pure IP.
- If you use Pure IP, configure the printer to use the TCP/IP protocol. For more information about how to make the settings, see "*Configuring the printer for the Network*" in Administrator Reference 1 that comes with this printer.





Installing SmartNetMonitor for Admin

1 Close all applications that are running.

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

The installer will start by Auto Run.

 **Note**

- Auto Run might not automatically work with certain OS settings. In this case, launch "INST-TOOL.EXE" located on the CD-ROM root directory.

3 Follow the instructions on the screen.

4 Select "Custom" installation and then click [Next].

5 Remove the check mark from the RPCS Printer Driver and PCL 5c Printer Driver.

6 Click to select [SmartNetMonitor for Admin], and then click [Install].

7 Click [OK].

8 Follow the instructions on the screen.

After installation is completed, see [p.43 "Setting Up as a Print Server"](#) when you use the printer as a print server.

See [p.45 "Setting Up as a Remote Printer"](#) when you use the printer as a remote printer.

 **Note**

- If you require restarting the computer after installation of SmartNetMonitor for Admin was completed, restart the computer and continue to configuration.





Setting Up as a Print Server

- 1** Log on to the file server as a Supervisor or a Supervisor equivalent.
- 2** Run SmartNetMonitor for Admin.
- 3** Click the [Group] menu and click [Open LAN] and select [IPX/SPX] or [TCP/IP].

A list of printers appears

 **Note**

- If you use Pure IP, select [TCP/IP].
- If you cannot identify which printer to configure from the list of printers, print Configuration Page from the printer and find the desired printer. For more information about printing Configuration Page, see [p.81 "Printing a Configuration Page"](#).
- If no printer name appears in the list, match the frame types of the IPX/SPX protocol between the computer and printer. Use the [Network] dialog box of Windows to change the frame type of the computer. For more information about changing the frame type of equipment, see "*Configuring the Printer for the Network*" in Administrator Reference 1.

- 4** Click to select the printer you want to configure, and then click [NIB Setup Tool] on the [Tools] menu.

 **Note**

- If you use Pure IP, see [p.53 "Using Pure IP in the NetWare 5 environment"](#)

- 5** Click to select [Wizard], and then click [OK].
- 6** Type the device name into the [Device Name] box and comment into the [Comment] box as necessary, and then click [Next].





7 Select the [NetWare] check box, and then click [Next].

8 Click to select [NDS Mode], type the file server name into the [File Server Name:] box, the NDS tree name into the [NDS Tree:] box and the context into the [NDS Context:] box, and then click [Next].

In the [File Server Name:] box, type the name of the file server in which a print server is to be created. You can also select a file server from the list that appears by clicking [Browse].

Clicking [Browse], you can select a NDS context among those listed in the [Browse] dialog box.

As a context, object names are typed from a lower object and divided by a period. For example, if you want to create a print server into NET under DS, type "NET.DS".

9 Type the print server name into the [Print Server Name] box, printer name into the [Printer Name] box, print queue name into the [Print Queue Name] box, and print queue volume into the [Print Queue Volume], and then click [Next].

- In the [Print Server Name] box, type the name of the NetWare print server within 47 characters.
- In the [Printer Name] box, type the name of the NetWare printer.
- In the [Print Queue Name] box, type the name of the print queue to be added to NetWare.
- In the [Print Queue Volume], type the volume of print queue. As a volume, object names are typed from a lower object and divided by a period. You can select a volume by clicking [Browse].

10 After confirming the settings, click [Next].

The settings take effect, and the NIB setup tool exits.

11 Exit SmartNetMonitor for Admin.



12 Turn the printer power off and on.

 **Note**

- To confirm that the printer is configured correctly, type as follows from the command prompt.

```
F :> NLIST USER /A/B
```

- If the printer works as configured, the name of the print server appears as an attached user.

Using Pure IP in the NetWare 5 environment

1 Log on to the file server as an Admin or an Admin equivalent.

2 Run SmartNetMonitor for Admin.

3 Click [Property Sheet] and click [OK].

The [NIB Setup Tool] dialog box appears.

4 Click the [NetWare] tab, and make the following settings.

1 In the [Print Server Name:] box, type the name of the print server.

2 In the [File Server Name:] box, type the name of the file server in which a print server is to be created.

Clicking [Browse], you can select a file server among those listed in the [Browse File Server] dialog box.



- 3 In the [NDS Context:] box, type the context of the print server.

Clicking [**Browse**], you can select a NDS tree and a NDS context among those listed in the [**Browse Context**] dialog box.

As a context, object names are typed from a lower object and divided by a period. For example, if you want to create a print server into NET under DS, type "NET.DS".



- 4 In the [Print Server Operation Mode] group, click [As Print Server].
 - 5 Click [OK] to close the property sheet.
 - 6 After a confirmation dialog box appears, click [OK].
- 5 Exit SmartNetMonitor for Admin.

After this step, go to step 12 on p.51 “Setting Up as a Print Server”.



Setting Up as a Remote Printer

- 1** Log on to the file server as an Admin or an Admin equivalent.
- 2** Run the SmartNetMonitor for Admin.
- 3** Click the [Group] menu and click [Open LAN] and select [IPX/SPX].


A list of printers appears.

 **Note**

- If you cannot identify which printer to configure from the list of printers, print Configuration Page from the printer and find the desired printer. For more information about printing Configuration Page, see [p.81 "Printing a Configuration Page"](#).
- If no printer name appears in the list, match the frame types of the IPX/SPX protocol between the computer and printer. Use the [Network] dialog box of Windows to change the frame type of the computer. For more information about changing the frame type of equipment, see "*Configuring the Printer for the Network*" in Administrator Reference 1.

- 4** Click to select the printer you want to configure, and then click [NIB Setup Tool] on the [Tools] menu.
- 5** Click to select [Property Sheet] and click [OK].
- 6** Click the [NetWare] tab, and make the following settings.
 - 1** In the [Print Server Name] box, type the name of the print server.
 - 2** In the [File Server Name] box, type the name of the file server in which a print server is to be created.

Clicking [Browse], you can select a file server among those listed in the [Browse] dialog box.





- 3 In the [NDS Context] box, type the context in which the print server is to be created.**

Clicking [**Browse**], you can select a context among those listed in the [**Browse**] dialog box.

As an context, object names are typed from a lower level object and divided by a period. For example, if you want to create a print server into NET under DS, type "NET.DS".



- 4 In the [Print Server Operation Mode] group, click [As Remote Printer].**
- 5 In the [Remote Printer No.] box, type the number of the printer.**

Important

- Use the same number as that of the printer to be created in the print server.

- 6 Click [OK] to close the property sheet.**

- 7 On the [NIB] menu, click [Exit] to exit the NIB Setup Tool.**

- 8 From Windows, run NW Admin.**

Reference

- For more information about NWAdmin, see the documentation that comes with the NetWare.

- 9 Create a print queue as follows.**

- 1 Select the container object the print queue is located in among those in the directory tree, and click [Create] on the [Object] menu.**
- 2 In the [Class of new object] box, click "Print Queue", and click [OK].**



- ③ In the [Print Queue name] box, type the name of the print queue.
- ④ In the [Print Queue Volume] box, click [Browse] button.
- ⑤ In the [Available objects] box, click the volume in which the print queue is created, and click [OK].
- ⑥ After confirming the settings, click [Create].

10 Create a printer as follows.

- ① Select the container object the printer is located in, and click [Create] in the [Object] menu.
- ② In the [Class of new object] box, click "Printer", and click [OK]. When you are using NetWare 5, click "Printer (Non NDPS)".
- ③ In the [Printer name] box, type the name of the printer.
- ④ Click [Define additional properties] to check a box, and click [Create].

11 Assign print queues to the created printer as follows.

- ① Click [Assignments], and click [Add] in the [Assignments] group.
- ② In the [Available objects] box, click the queue created in step 9, and click [OK].
- ③ Click [Configuration], and in the [Printer type] box, select [Parallel] using the drop-down menu, and then click [Communication].
- ④ Click [Manual load] in the [Communication type] group, and click [OK].
- ⑤ After confirming the settings, click [OK].

12 Create a print server as follows.

- ① Select the context specified using the NIB Setup Tool (Step 6-1), and on the [Object] menu, click [Create].
- ② In the [Class of new object] box, click "Print Server", and click [OK]. When you are using NetWare 5, click "Print Sever (Non NDPS)".



- 3 In the [Print Server name] box, type the name of the print server.

 **Important**

- Use the same name as that specified using the NIB Setup Tool. (Step 6)

- 4 Click [Define additional properties] to check a box, and click [Create].

- 13 Assign the printer to the created print server as follows.

- 1 Click [Assignments], and click [Add] in the [Assignments] group.
- 2 In the [Available objects] box, click the queue created in the step 10, and click [OK].
- 3 In the [Printers] group, click the printer assigned in step 2, and click [Printer Number].
- 4 Type the printer number and click [OK].

 **Important**

- Use the same number as that specified as Remote Printer No. using the NIB Setup Tool. (Step 6-5).

- 5 After confirming the settings, click [OK].

- 14 Start the print server by typing the following from the console of the NetWare Server.

If it is running, restart it after exiting it.

❖ **To exit**

```
CAREE: unload pserver
```

❖ **To start**

```
CAREE: load pserver print_server_name
```



4. Monitoring and Configuring the Printer

Changing Names and Comments

You can change printer names and make a comment on printers to ease your identifying the printers listed on SmartNetMonitor for Client.

The following utilities are used to change printer names and comments.

❖ SmartNetMonitor for Admin

Allows you to change names and comments when the TCP/IP protocol or IPX/SPX protocol is available. You can install SmartNetMonitor for Admin from the CD-ROM that comes with the printer. For more information about installing SmartNetMonitor for Admin, see [p.50 “Installing SmartNetMonitor for Admin”](#).

❖ Web Browser


Allows you to change names and comments when the TCP/IP protocol is available.

Note

- Each of the names, in a TCP/IP protocol form (printer name) and in a NetBEUI protocol form, is changed individually. Comments are, however, common to both of them.
- The factory default name consists of "RNP" and the last 3 bytes of the MAC address of the network interface board. For example, when the MAC address is 00:00:74:62:7D:D5, the factory default name is "RNP627DD5". Comments are not configured.




SmartNetMonitor for Admin

- 1** Run SmartNetMonitor for Admin.
- 2** Click the **[Group]** menu, point to **[Open LAN]**, and select **[TCP/IP]** or **[IPX/SPX]**. A list of printers appears.
 -  **Note**
 - Select the protocol of the printer you want to change the settings.
- 3** On the list, click to select the printer whose network interface board you want to change the settings.
- 4** From the **[Tools]** menu, select **[NIB Setup Tool]**.

The NIB Setup Tool starts up.
- 5** Select **[Property Sheet]**, and then click **[OK]**.

TCP/IP

- 1** Click the **[General]** tab, and then type the name into the **[Device Name]** box and comment into the **[Comment]** box.
 - In the **[Device Name]** box, type the name of the printer within 47 characters. The factory default name consists of "RNP" and the last 3 bytes of the MAC address of the network interface board. For example, when the MAC address is 00:00:74:62:7D:D5, the factory default name is "RNP627DD5". No name of 9 characters is permitted if prefixed with "RNP". Also, when DHCP is selected as an IP address setting, the number of characters is limited to within 13 characters.
 - In the **[Comment]** box, type any comment on printers within 31 characters.
- 



NetBEUI

1 Click the [General] tab, and then type the comment into the [Comment] box.

In the **[Comment]** box, type any comment on printers within 31 characters.

2 Click the [NetBEUI] tab.

3 Type the name into the [Computer Name] box.

- In the **[Computer Name]** box, type the name that helps you to identify printers using the NetBEUI protocol. The factory default name consists of "RNP" and the last 3 bytes of the MAC address of the network interface board. For example, when the MAC address is 00:00:74:62:7D:D5, the factory default name is "RNP627DD5". A maximum of 13 characters of capital English letters, numeric, or symbols (except "*+/,;<=>?[\]|. and space) can be used. No name is permitted if prefixed with "RNP". You must avoid the duplication of the same name on a network.
- In the **[Comment]** box, type any comment on printers within 31 characters.

6 Click [OK].

The NIB Setup Tool exits, and the setting is transmitted to the printer.

7 Exit SmartNetMonitor for Admin.





Web Browser

- 1** Run the Web browser.
- 2** Type the address "http:// (IP address of the printer you want to change the settings)".
The status of the selected printer is displayed on the Web browser.
- 3** Click **[Configuration]**.
A dialog box that prompts you to type the user name and password appears.
- 4** Type the user name and password, and then click **[OK]**.
Type only the password in this dialog box. The factory default password is "password".
- 5** Change names and comments.

TCP/IP

- 1** Click the **[General]** tab, and then type the name into the **[Printer Name]** box and comment into the **[Comment]** box.
 - In the **[Printer Name]** box, type the name of the printer within 47 characters. The factory default name consists of "RNP" and the last 3 bytes of the MAC address of the network interface board. For example, when the MAC address is 00:00:74:62:7D:D5, the factory default name is "RNP627DD5". No name of 9 characters is permitted if prefixed with "RNP". Also, when DHCP is selected as an IP address setting, the number of characters is limited to within 13 characters.
 - In the **[Comment]** box, type any comment on printers within 31 characters.



NetBEUI

① Click **[NetBEUI]**.

② Type the name into the **[Computer Name]** box and comment into the **[Comment]** box.

- In the **[Computer Name]** box, type the name that helps you to identify printers using the NetBEUI protocol. The factory default name consists of "RNP" and the last 3 bytes of the MAC address of the network interface board. For example, when the MAC address is 00:00:74:62:7D:D5, the factory default name is "RNP627DD5". A maximum of 13 characters of capital English letters, numeric, or symbols (except "*+;/:;<=>?[\\]|. and space) can be used. No name is permitted if prefixed with "RNP". You must avoid the duplication of the same name on a network.
- In the **[Comment]** box, type any comment on printers within 31 characters.

⑥ Click **[Apply]**.

The setting is transmitted to the printer.

⑦ Exit the Web browser.





Displaying the Status of Printer

You can view the status of printers using SmartNetMonitor for Admin, SmartNetMonitor for Client, or Web browser.

SmartNetMonitor for Admin

1 Run SmartNetMonitor for Admin.

2 Click the [Group] menu, point to [Open LAN], and select [TCP/IP] or [IPX/SPX].

The status of printers is indicated with an icon in the list.

 **Note**

For more information about the status icons, see the Help file.

3 To get further information, click the desired printer to select from the list, and then click [Open] on the [Device] menu.

The status of the printer is displayed on a dialog box.

 **Note**

For more information about each item on the dialog box, see the Help file.





SmartNetMonitor for Client

To view the status of printers using SmartNetMonitor for Client, you must, in advance, configure SmartNetMonitor for Client so it monitors the printer whose status you want to view.

Monitoring Printers

1 Run SmartNetMonitor for Client.

The SmartNetMonitor for Client icon appears at the right end of the taskbar.

2 Right-click the SmartNetMonitor for Client icon, and check if the desired printer is configured on the pop-up menu that appears.

If it is configured, see [p.66 “Displaying the Status of Printers”](#).

3 If the desired printer is not configured, click [Options] on the pop-up menu.

The [SmartNetMonitor for Client - Options] dialog box appears.


4 Click the printer to be monitored, and select the [To Be Monitored] check box from the [Monitoring Information Settings] group.

 **Note**

- Selecting the [Displayed on Task Bar] check box will bring up the status of a printer with an icon on the SmartNetMonitor for Client icon on the task tray.

5 Click [OK].

The dialog box closes and the configured printer is monitored.





Displaying the Status of Printers

1 Run SmartNetMonitor for Client.

2 The status of printers is displayed on the SmartNetMonitor for Client icon on the task tray.

 **Note**

- For more information about the status icons, see the Help file.

3 To get further information on the status, right-click the SmartNetMonitor for Client icon and click the desired printer.

The status of the printer is displayed on a dialog box.

 **Note**

- For more information about each item on the dialog box, see the Help file.

Web Browser

1 Run the Web browser.

2 Type the address "`http:// (IP address of the printer whose status you want to view)`".

The status of the selected printer is displayed on the Web browser.

3 Click [Status] and you can check the status of the printer.

 **Note**

- For more information about each item, see the Help file.
- 



5. Making Printer Settings with the Operation Panel

Menu Chart

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

Category	Function menu	
Sample Print *1	Select Action / Error File(s)	
Locked Print *1	Select Action / Error File(s)	
Paper Input ⇒ p.73	Bypass Size	
	Tray Paper Size	
	Paper Type	
	Tray Locking	
	Tray Priority	
List/Test Print ⇒ p.80	Config. Page	
	Menu List	
	Color Demo Page	
	PS Config. Page	
	PCL Config. Page	
	Hex Dump	
Maintenance ⇒ p.87	Color Regist.	
	Image Density	
	Registration	Prt. Test Sheet
		Adjustment
	HDD Format	
	Menu Protect *2	



Category	Function menu	
System ⇒ p.93	MisfeedRecovery	
	Prt. Err Report	
	Auto Continue	
	Memory Overflow	
	Sub Paper Size	
	Page Size	
	Duplex	
	Output Tray	
	Job Separation	
	Energy Saver 1	
	Energy Saver 2	
	B&W Page Detect	
	Unit of Measure	
	Resolution	
	PCL	
PS3		



Category	Function menu	
Host Interface ⇒ p.102	I/O Buffer	
	I/O Timeout	
	Network Setup	IP Address
		Subnet Mask
		Gateway Address
		Access Control
		Access Mask
		Network Boot
		Frame Type (NW)
		Active Protocol
Ethernet		
PCL Menu ⇒ p.109	Orientation	
	Form Lines	
	Font Source	
	Font Number	
	Point Size	
	Font Pitch	
	Symbol Set	
Language ⇒ p.115		

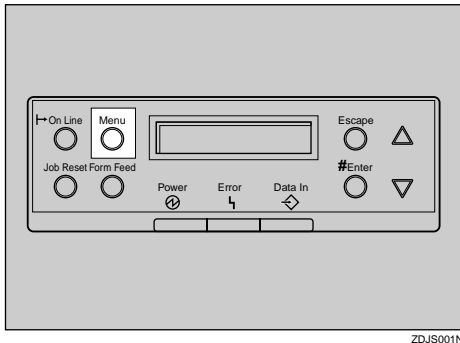
*1 The "Sample Print" menu and the "Locked Print" menu appear only when the optional Hard Disk Drive is installed.

*2 While the printer is **On Line**, press **[Enter]**, and then press **[Escape]**, finally press **[Menu]**. You can access the "Menu Protect" on the panel display.



Accessing the Main Menu

Press **[Menu]**, and "Menu" appears on the panel display.



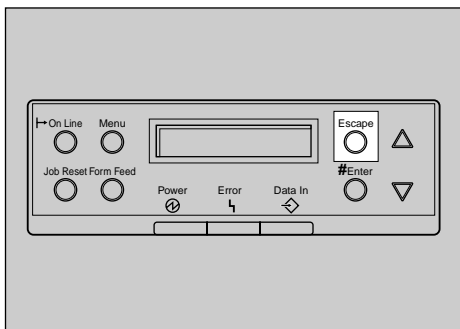
This menu shows the following 9 items which can be displayed one by one pressing **[▲]** or **[▼]**.

- Sample Print
- Locked Print
- Paper Input
- List/Test Print
- Maintenance
- System
- Host Interface
- PCL Menu
- Language



Note

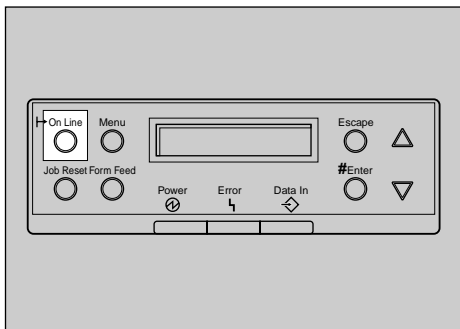
- If the optional Hard Disk Drive is not installed, the "Sample Print" menu and the "Locked Print" menu cannot be displayed on the operation panel.
- 【▼】**: Press to go to the next page.
- 【▲】**: Press to go back to the previous page.
- After making the printer settings, be sure to return to the previous menu by pressing **【Escape】**.



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- ❑ After making the printer settings, press **[On Line]** to return to the "Ready " condition.



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- ❑ The revised settings are not canceled even if the power switch is turned off.





Paper Input Menu

There are 5 menu items in the "Paper Input" menu.


- Bypass Size
- Tray Paper Size
- Paper Type
- Tray Locking
- Tray Priority




Reference

- For more information about loading paper in the tray, see the Setup Guide.



Paper Input Parameters

Menu	Description
Bypass Size	The paper size for the bypass tray. For more information about paper sizes that can be set in the bypass tray, see " <i>Paper and Other Media</i> " in Maintenance Guide 2.
Tray Paper Size	The paper size for Tray 2, optional tray 3 and tray 4. For more information about paper sizes that can be set in each tray, see Maintenance Guide 2.  Note <input type="checkbox"/> Only the installed trays appear on the panel display.



Menu	Description
Paper Type	<p>If you use different kinds of paper, you set the paper type for Tray 1, Tray 2, Tray 3 or Bypass Tray.</p> <p>For more information about paper sizes that can be set in each tray, see Maintenance Guide 2.</p> <p>❖ Tray 1, Tray 2, Tray 3, Tray 4 Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Pre-printed, Prepunched, Bond Paper, Cardstock</p> <p>❖ Bypass Tray Plain Paper, Recycled Paper, Special Paper, Color Paper, Letterhead, Pre-printed, Prepunched, Bond Paper, Cardstock, Transparency, Thick Paper, Plain:Dup.Back, Thick:Dup.Back</p> <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default : Plain Paper<input type="checkbox"/> Only the installed trays appear on the panel display.



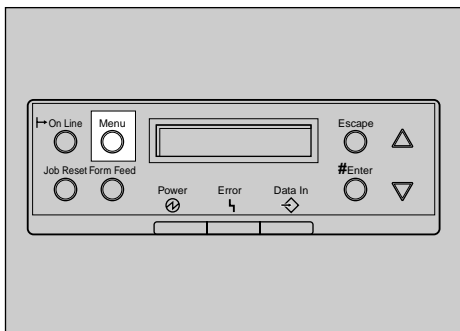
Menu	Description
Tray Locking	<p>If you use different kinds of paper, you can lock a tray to prevent printing on wrong paper such as letterhead or colored paper. When "Auto Select" is selected in the Paper Source selections from the printer driver, the locked tray will not be used. You can select each tray set to on or off.</p> <p>Tray 1, Tray 2, Tray 3, Tray 4</p> <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default : Off<input type="checkbox"/> Only the installed trays appear on the panel display.<input type="checkbox"/> You can lock multiple trays.<input type="checkbox"/> If you want to use the locked tray, you must select the tray from the printer driver.<input type="checkbox"/> When a locked tray is selected from the printer driver, the printer does not search for another tray.
Tray Priority	<p>You can set which tray should be checked first when "Auto tray Select" is selected in the Paper Source selections from the printer driver. When printing from DOS, the tray selected here is used when no tray is selected for a print job.</p> <p>Tray 1, Tray 2, Tray 3, Tray 4</p> <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default : Tray 1<input type="checkbox"/> Only the installed trays appear on the panel display.<input type="checkbox"/> It is recommended that you load paper of the size and direction you most frequently use in the tray selected with "Tray Priority".



Changing the Paper Input Menu

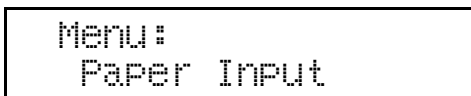
Tray Locking

1 Press [Menu].



"Menu" appears on the panel display.

2 Press [▲] or [▼] to display "Paper Input", and then press [Enter].





3 Press **[▲]** or **[▼]** to display "Tray Locking", and then press **[Enter]**.

```
Paper Input:
Tray Locking
```

4 Press **[▲]** or **[▼]** to display the tray to change the tray locking off, and then press **[Enter]**.

```
Tray Locking:
Tray 1
```

 **Note**

Bypass Tray would not be locked.

5 Press **[▲]** or **[▼]** to display "Off", and then press **[Enter]**.

```
Tray 1:
*Off
```

Wait for two seconds.

"Menu" appears on the panel display.

6 Press **[On Line]**.

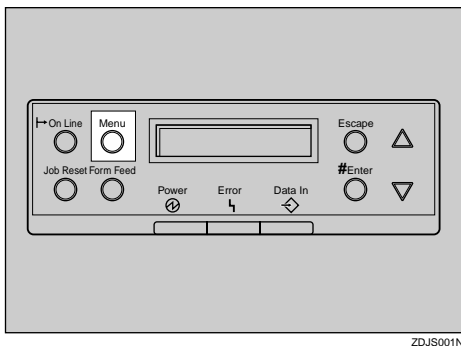
"Ready " appears on the panel display.





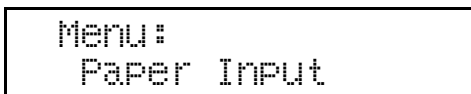
Tray Priority

1 Press **[Menu]**.

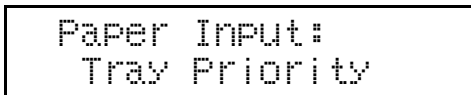


"Menu" appears on the panel display.

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



3 Press **[▲]** or **[▼]** to display "Tray Priority", and then press **[Enter]**.

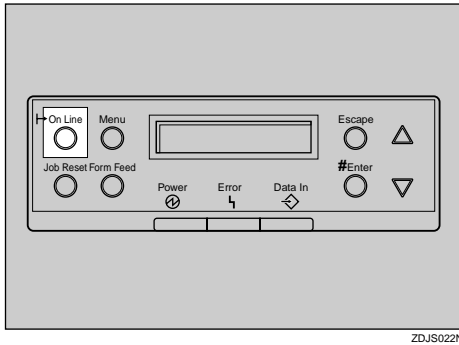


4 Press **[▲]** or **[▼]** to select the tray type you want to use.



5 Press **[Enter]**. Wait for two seconds.
"Menu" appears on the panel display.

6 Press **[On Line]**.



"Ready " message appears on the panel display.





List/Test Print Menu

There are 6 menu items in the "List/Test Print" menu.

- Config. Page
- Menu List
- Color Demo Page
- PS Config. Page
- PCL Config. Page
- Hex Dump

List/Test Print Parameters

Menu	Description
Config. Page	You can print the current configuration of the printer. See p.81 “Printing a Configuration Page” .
Menu List	You can print the Menu List which shows the function menus of this printer.
Color Demo Page	You can print the Color Demo Page.
PS Config. Page	You can print a list of the installed PS Fonts.
PCL Config. Page	You can print the current configuration of the PCL.
Hex Dump	You can print the Hex Dump.



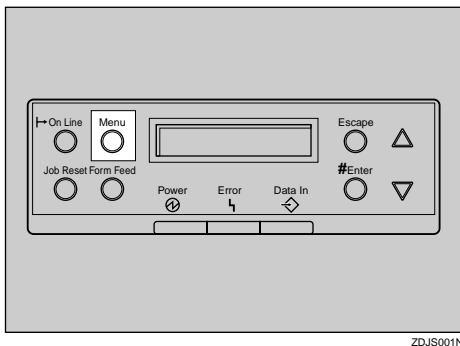


Printing a Configuration Page

Reference

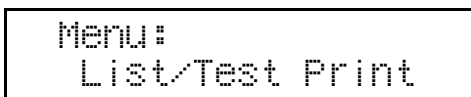
- ☐ For more information, see p.84 "Interpreting the Configuration Page".

1 Press **[Menu]**.



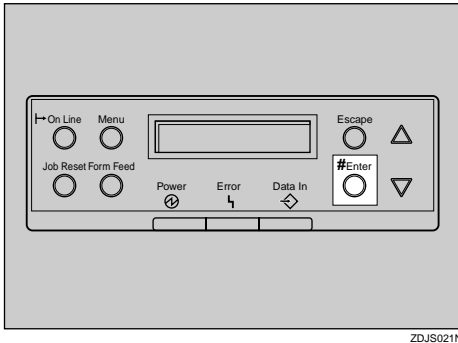
"Menu" appears on the panel display.

2 Press **[▼]** or **[▲]** to display "List/Test Print" menu.

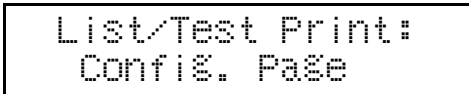




3 Press [Enter].

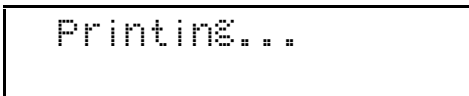


The following message appears on the panel display.



4 Press [Enter].

The following message appears on the panel display.



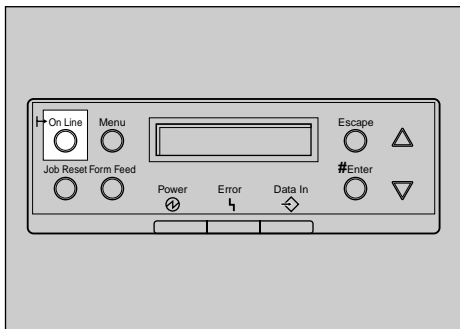
In a short time, the printing a configuration page will start.

Important

- If you cannot complete printing a configuration page correctly, make sure an error message appears on the panel display. For more information about error messages, see "*Troubleshooting*" in Maintenance Guide 2.



5 Press **[On Line]**.



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"Ready " message appears on the panel display.





Interpreting the Configuration Page

System Reference

- ❖ **Printer ID**
Shows the serial number assigned to the board by its manufacturer.
- ❖ **Firmware Version**
Shows the version number of the printer controller firmware.
- ❖ **Engine Version**
Shows the version number of the printer engine.
- ❖ **Pages Printed**
Shows the total number of pages printed by the printer to date.
- ❖ **NCS Version**
Shows the version number of the Network Interface Board.
- ❖ **Total Memory**
Shows the total amount of memory (SDRAM) installed on the printer.
- ❖ **Printer Language**
Shows the version number of the printer language.
- ❖ **Printer Hard Disk Drive**
Shows "Installed" when the Printer Hard Desk Drive is installed properly.





❖ IEEE 1394

Shows "Installed" when the IEEE 1394 Interface Unit Type 1045 is installed properly.

❖ Accounting Module

Shows "Installed" when the User Account Enhance Unit TypeB is installed properly.

❖ Options

Shows the options that you installed.

Paper Input

Shows the settings made under the "Paper Input" menu.

Reference

For more information, see [p.73 "Paper Input Menu"](#).

System

Shows the settings made under the "System" menu.

Reference


For more information, see [p.93 "System Menu"](#).

PCL Menu

Shows the settings made under the "PCL Menu".

Reference

For more information, see [p.109 "PCL Menu"](#).





Host Interface

Shows the settings made under the "Host Interface" menu.

When DHCP is active on the network, the actual IP Address, Subnet Mask and Gateway Address appear in parentheses on the configuration page.



Reference

- For more information about "Host Interface" menu, see [p.102 "Host Interface Menu"](#).

Error Log

Shows the log of printer errors.





Maintenance Menu

There are 5 menu items in the "Maintenance" menu.



- Color Regist.
- Image Density
- Registration
- HDD Format
- Menu Protect

Note



- This "HDD Format" appears only when the Hard Disk Drive is installed. For more information, see "*Installing the Printer Hard Disk Type 3800C*" in the Setup Guide.



Maintenance Menu Parameters

Menu	Description
Color Regist.	You can adjust the color alignment for each color (CMYK) -7 to +7
Image Density	You can select the print image density. -3 to +3
Registration	<p>❖ Prt. Test Sheet You can print the registration test sheet. Tray 3, Tray 4, Duplex.Backside</p> <p> Note <input type="checkbox"/> Only the installed trays appear on the panel display.</p> <p>❖ Adjustment You can select the start position for printing on page. Vert.:Tray 3, Vert.:Tray 4, Vert.:Dup.Bak -4 to +4 (by 0.5 mm)</p> <p> Note <input type="checkbox"/> The registration value are not default. <input type="checkbox"/> Only the installed trays appear on the panel display.</p>



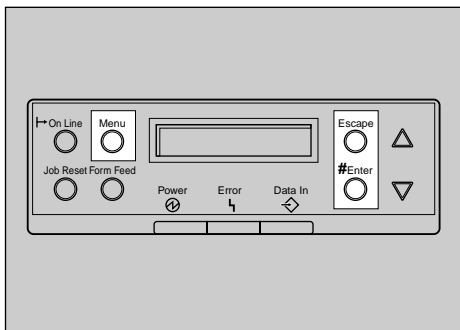
Menu	Description
HDD Format	<p>You can format the Hard Disk Drive.</p> <p>Available when the Hard Disk Drive is installed.</p> <p> Reference</p> <ul style="list-style-type: none"><input type="checkbox"/> For more information about formatting the Hard Disk Drive, see <i>"Installing the Hard Disk Type 3800C"</i> in the Setup Guide.
Menu Protect	<p>This procedure lets you protect menu settings against accidental changes. It makes it impossible to change the menu settings you make with the normal procedure unless you perform the required key operation. In a network environment, protecting settings restricts changes to menu settings to network administrators.</p> <ul style="list-style-type: none">• Level 1• Level 2• Off <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> While the printer is Online, press [Enter], and then press [Escape], finally press [Menu]. You can access the "Menu Protect" menu on the panel display.<input type="checkbox"/> You can protect the "Maintenance", "System", "Host Interface" and "Language" menu on Level 1.<input type="checkbox"/> You can protect the "Paper Input", "Maintenance", "System", "Host Interface" and "Language" menu on Level 2.



Changing the Maintenance Menu

Protecting the menus

- 1** Check if the On Line indicator is on. If not, press **[On Line]** to enter the "Ready " condition.
- 2** Press **[Enter]**, then **[Escape]**, and then **[Menu]**.



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"Menu" appears on the panel display.

- 3** Press **[▲]** or **[▼]** to display the "Maintenance" menu, and then press **[Enter]**.

The following message appears on the panel display.





4 Press **[▲]** or **[▼]** to display "Menu Protect".

```
Maintenance:
Menu Protect
```

5 Press **[Enter]**.

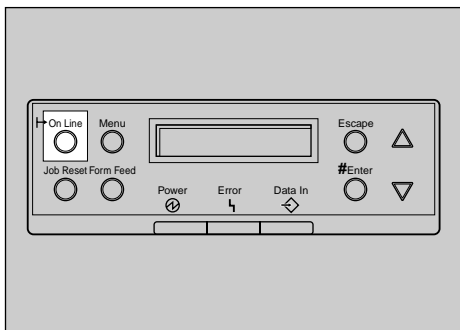
The following message appears on the panel display.

```
Menu Protect:
*Off
```

6 Press **[▲]** or **[▼]** to select the levels desired, and then press **[Enter]**. Wait for two seconds.

"Menu" appears on the panel display.

7 Press **[On Line]**.



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"Ready " message appears on the panel display.



Removing Protect

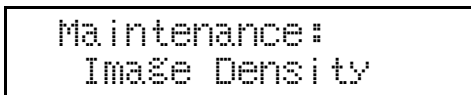
1 Check if the On Line indicator is on. If not, press **[On Line]** to enter the "Ready " condition.

2 Press **[Enter]**, then **[Escape]**, and then **[Menu]**.

"Menu" appears on the panel display.

3 Press **[▲]** or **[▼]** to display "Maintenance" menu, and then press **[Enter]**.

The following message appears on the panel display.



4 Press **[▲]** or **[▼]** to display the "Menu Protect", and then press **[Enter]**.

5 Press **[▲]** or **[▼]** to display "Off", and then press **[Enter]**. Wait for two seconds.

"Menu" appears on the panel display.

6 Press **[On Line]**.

"Ready " message appears on the panel display.





System Menu



There are 14 menu items in the "System" menu.

- MisfeedRecovery
- Prt. Err Report
- Auto Continue
- Memory Overflow
- Sub Paper Size
- Page Size
- Duplex
- Output Tray
- Job Separation
- Energy Saver 1
- Energy Saver 2
- B&W Page Detect
- Unit of Measure
- Resolution











System Parameters

Menu	Description
MisfeedRecovery	<p>You can select whether Misfeed Recovery is enabled. When it is on, printing restarts after the misfed paper has been cleared.</p> <ul style="list-style-type: none">• On• Off <p> Note</p> <p><input type="checkbox"/> Default: On</p>
Prt. Err Report	<p>You can select whether or not to have a error report printed when a printer error or memory error occurs.</p> <ul style="list-style-type: none">• On• Off <p> Note</p> <p><input type="checkbox"/> Default: Off</p>






Menu	Description
Auto Continue	<p>You can set whether Auto Continue is enabled. When it is on, printing continues after a system error occurs.</p> <ul style="list-style-type: none">• Off• 0 minute• 1 minute• 5 minutes• 10 minutes• 15 minutes <p> Note</p> <p><input type="checkbox"/> Default: Off</p>
Memory Overflow	<p>You can select whether the memory overflow error report should be printed.</p> <ul style="list-style-type: none">• Not Print• Error Report <p> Note</p> <p><input type="checkbox"/> Default: Not Print</p>
Sub Paper Size	<p>You can enable the Sub Paper Size feature. When you select "Auto", the printer substitutes the paper of a certain size which is to be an alternative if the paper currently specified is not loaded. When you select "Off", the printer uses the paper in the current specified paper input tray regardless of its size.</p> <ul style="list-style-type: none">• Auto• Off <p> Note</p> <p><input type="checkbox"/> Default: Auto</p>





Menu	Description
Page Size	<p>You can specify the default paper size.</p> <p>11 x 17, 8 1/2 x 14, 11 x 8 1/2, 8 1/2 x 11, 5 1/2 x 8 1/2, 7 1/4 x 10 1/2, 10 1/2 x 7 1/4, 8 x 13, 8 1/2 x 13, 8 1/4 x 13, A3 (297x420), B4 JIS(257x364), A4 (297 x 210), A4 (210 x 297), B5 JIS(257x182), B5 JIS(182x257), A5 (210 x 148), A5 (148 x 210), A6 (105 x 148), 8K (267x390), 16K (195 x 267), 16K (267 x 195), 4 1/8 x 9 1/2, 3 7/8 x 7 1/2, C5 Env (162x229), C6 Env (114x162), DL Env (110x220), Custom Size</p> <p> Note</p> <p><input type="checkbox"/> Default: Auto</p>
Duplex	<p>You can select whether you want to print on both sides of each page.</p> <ul style="list-style-type: none">• Off• Short Edge Bind• Long Edge Bind <p> Note</p> <p><input type="checkbox"/> Default: Off</p> <p><input type="checkbox"/> This menu appears only when the optional Duplex Unit is installed.</p>
Output Tray	<p>You can select the default output tray. When you select "Auto Tray SW", the printer automatically changes to another output tray if the output tray become full. This function is available only when the Mailbox is installed.</p> <p>Standard Tray, External Tray, Mailbox Tray 2, Mailbox Tray 3, Finisher Tray 1, Finisher Tray 2, Auto Tray SW</p> <p> Note</p> <p><input type="checkbox"/> Default: Standard Tray</p> <p><input type="checkbox"/> Only the installed trays appear on the panel display.</p>



Menu	Description
Job Separation	<p>You can enable Job Separation.</p> <ul style="list-style-type: none">• Off• On <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: Off<input type="checkbox"/> This menu appears only when the optional 2 Tray Finisher is installed.
Energy Saver 1	<p>You can set On/Off for the Energy Save Mode level 1. This is preheat mode.</p> <ul style="list-style-type: none">• On• Off <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: On<input type="checkbox"/> When the printer switches to Energy Saver mode, the Power indicator turns off, while the On Line indicator stays on.
Energy Saver 2	<p>You can set how many minutes the printer wait before switching to Energy Saver mode. Energy Saver mode reduces electric power consumption.</p> <ul style="list-style-type: none">• On 5 minutes, 15 minutes, 30 minutes, 45 minutes, 60 minutes.• Off <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: On (60 minutes)<input type="checkbox"/> When the printer switches to Energy Saver mode, the Power indicator turns off, while the Online indicator stays on and "Energy Save Mode " is displayed on the panel display.



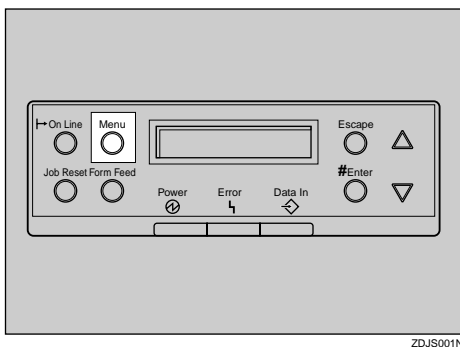
Menu	Description
B&W Page Detect	<p>You can specify whether the Black & White Page Detect feature is enabled.</p> <p>Even if color is specified for the printer driver Color Mode, every page will be printed in Black and White Mode if the print job is black and white. In this case, the consumables needed in the Color Mode will not be used.</p> <ul style="list-style-type: none">• On• Off <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: On<input type="checkbox"/> If the print job contains a color page, the remaining pages will be printed in Color Mode even if some or all of them are black and white.<input type="checkbox"/> If the first page of the print job is color and the remaining pages are black and white, the whole print job will be printed in Color Mode.<input type="checkbox"/> Depending on the kind of data, the print job may not be done properly even if the function is specified.
Unit of Measure	You can select "mm" or "inch" for the custom paper size.
Resolution	<p>You can set the print resolution in dots per inch.</p> <ul style="list-style-type: none">❖ PCL 300 x 300 dpi, 600 x 600 dpi❖ PS 600 x 600 dpi, 1200 x 600 dpi, 1200 x 1200 dpi <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: PCL 600 x 600 dpi, PS 600 x 600 dpi



Changing the System Menu

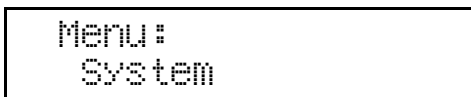
The following examples changing the settings for "Energy Saver 2".

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



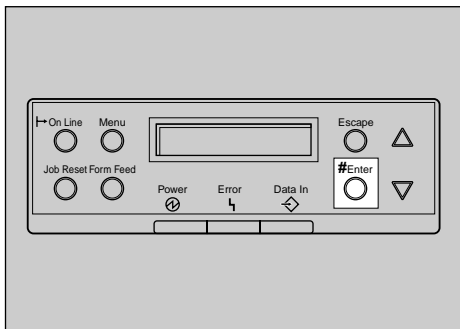
"Menu" appears on the panel display.

- 2** Press **[▲]** or **[▼]** to display "System".





3 Press **[Enter]**.

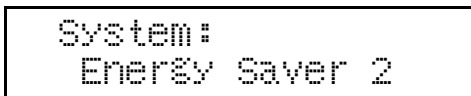


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The following message appears on the panel display.

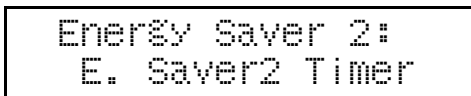


4 Press **[▲]** or **[▼]** to display "Energy Saver 2", and press **[Enter]**.



5 Press **[▲]** or **[▼]** to display "E. Saver2 Timer", and press **[Enter]**.

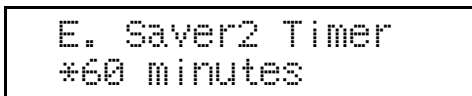
The following message appears on the panel display.





- 6** Press **[▲]** or **[▼]** to select how many minutes the printer waits before switching to Energy Saver mode.

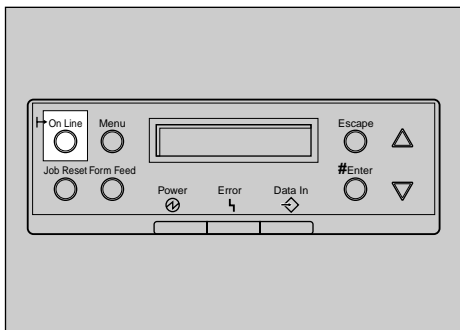
The following message appears on the panel display.



- 7** Press **[Enter]**. Wait for two seconds.

"Menu" appears on the panel display.

- 8** Press **[On Line]**.



ZDJS022N

"Ready " message appears on the panel display.





Host Interface Menu



There are 3 menu items in the "Host Interface" menu.

- I/O Buffer
- I/O Timeout
- Network Setup







 **Note**

- The "Network Setup" appears only when the optional Network Interface Board is installed. For more information about the "Network Setup", see "*Configuring the power for the Network with the Operation Panel*" in the Setup Guide.






Host Interface Parameters

Menu	Description
I/O Buffer	You can set the size of the I/O Buffer. Normally it is not necessary to change this setting. 128 KB, 256 KB, 512 KB  Note <input type="checkbox"/> Default: 128 KB
I/O Timeout	You can set how many seconds the printer should wait before ending a print job. If data from other port often appears in the middle of the print job, you should increase the timeout value. 10 seconds, 15 seconds, 20 seconds, 25 seconds, 60 seconds  Note <input type="checkbox"/> Default: 15 seconds






Menu	Description
Network Setup	<p>❖ IP Address You can set the IP Address.</p> <p> Note <input type="checkbox"/> Default: All zero</p> <p> Reference <input type="checkbox"/> See "<i>Configuring the Printer for the Network with the Operation Panel</i>" in the Setup Guide.</p> <p>❖ Subnet Mask You can set the Subnet Mask.</p> <p> Note <input type="checkbox"/> Default: All zero</p> <p> Reference <input type="checkbox"/> See "<i>Configuring the Printer for the Network with the Operation Panel</i>" in the Setup Guide.</p> <p>❖ Gateway Address You can set the Gateway Address.</p> <p> Note <input type="checkbox"/> Default: All zero</p> <p> Reference <input type="checkbox"/> See "<i>Configuring the Printer for the Network with the Operation Panel</i>" in the Setup Guide.</p>



Menu	Description
	<ul style="list-style-type: none"><li data-bbox="463 258 916 321">❖ Access Control You can set the Access Control Address.<li data-bbox="500 346 727 409"> Note <input type="checkbox"/> Default: All zero<li data-bbox="463 447 889 510">❖ Access Mask You can set the Access Control Mask.<li data-bbox="500 535 727 598"> Note <input type="checkbox"/> Default: All zero<li data-bbox="463 636 1232 699">❖ Network Boot You can set how the Network Interface Board acquires TCP/IP settings.<li data-bbox="500 724 702 787"> Note <input type="checkbox"/> Default: None<li data-bbox="500 812 1269 913"> Reference <input type="checkbox"/> See "<i>Configuring the Printer for the Network with the Operation Panel</i>" in Administrator Reference 1.<li data-bbox="463 945 926 1008">❖ Frame Type (NW) You can set the Frame Type for NetWare.<li data-bbox="500 1033 692 1096"> Note <input type="checkbox"/> Default: Auto





Menu	Description
	<p>❖ Active Protocol You can set the active protocol. TCP/IP, NetWare, NetBEUI, AppleTalk</p> <p> Note <input type="checkbox"/> Default: All Active</p> <p>❖ Ethernet You can select the speed of the network that the printer is connected to. Auto, 10 Mbps, 100 Mbps</p> <p> Note <input type="checkbox"/> Default: Auto</p> <p> Reference <input type="checkbox"/> See "<i>Configuring the Printer for the Network with the Operation Panel</i>" in Administrator Reference 1.</p>

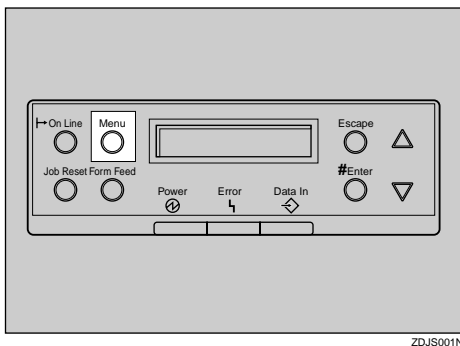




Changing the Host Interface Menu

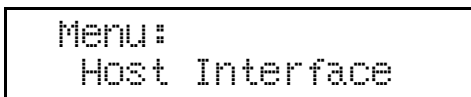
The following example describes changing the setting for "I/O Timeout".

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



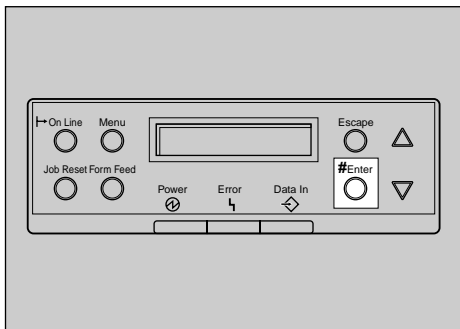
"Menu" appears on the panel display.

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



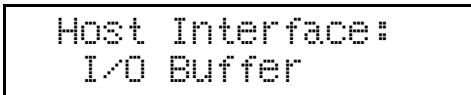


3 Press **[Enter]**.

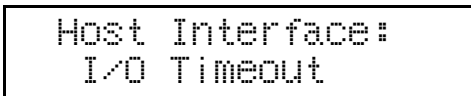


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The following message appears on the panel display.

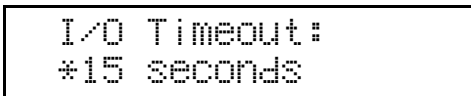


4 Press **[▲]** or **[▼]** to display "I/O Timeout".



5 Press **[Enter]**.

The following message appears on the panel display.



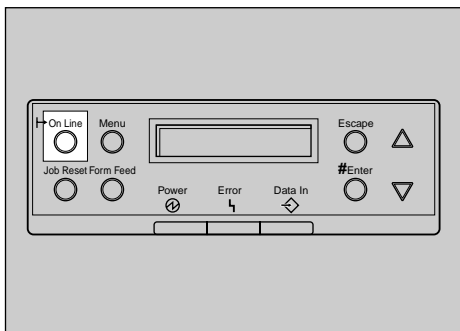


6 Press **[▲]** or **[▼]** to select how many minutes the printer waits before ending a print job.

7 Press **[Enter]**. Wait for two seconds.

"Menu" appears on the panel display.

8 Press **[On Line]**.



ZDJS022N

"Ready " message appears on the panel display.







PCL Menu




There are 7 menu items in the "PCL Menu".

- Orientation
- Form Lines
- Font Source
- Font Number
- Point Size
- Font Pitch
- Symbol Set



PCL Parameters

Menu	Description
Orientation	You can set the page orientation. <ul style="list-style-type: none">• Portrait• Landscape  Note <input type="checkbox"/> Default: Portrait
Form Lines	You can set the number of lines per page. 5-128  Note <input type="checkbox"/> Default: 64 (Metric version), 60 (Inch version)



Menu	Description
Font Source	<p>You can set the location of the default font.</p> <ul style="list-style-type: none">• Resident• RAM• HDD <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: Resident<input type="checkbox"/> When you select "RAM", you can select only fonts downloaded to printer RAM.
Font Number	<p>You can set the ID of the default font you want to use.</p> <ul style="list-style-type: none">• 0 to 50 (for Internal)• 1 to n (for Download source) <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: Internal<input type="checkbox"/> Default: 0
Point Size	<p>You can set the point size you want to use for the default font. 4 to 999.75 by 0.25</p> <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: 12.00<input type="checkbox"/> This setting is effective only for a variable-space (proportional) font.



Menu	Description
Font Pitch	<p>You can set the number of characters per inch you want to use for the default font. 0.44 to 99.99 by 0.01</p> <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: 10.00<input type="checkbox"/> This setting is effective only for a fixed-space (monospace) font.
Symbol Set	<p>You can specify the set of print characters for the default font. The available options are as follows.</p> <p>Roman-8, ISO L1, ISO L2, ISO L5, PC-8, PC-8 D/N, PC-850, PC-852, PC8-TK, Win L1, Win L2, Win L5, Desktop, PS Text, VN Intl, VN US, MS Publ, Math-8, PS Math, VN Math, Pifont, Legal, ISO 4, ISO 6, ISO 11, ISO 15, ISO 17, ISO 21, ISO 60, ISO 69, Win 3.0</p> <p> Note</p> <ul style="list-style-type: none"><input type="checkbox"/> Default: Roman-8

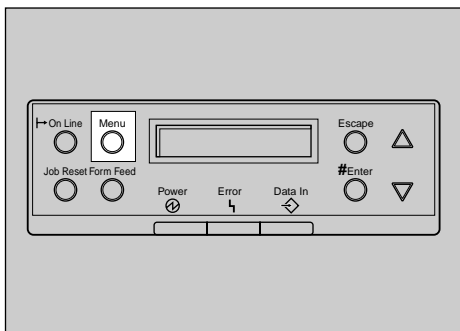




Changing the PCL Menu

The following example describes changing the setting for "Orientation".

1 Press **[Menu]**.

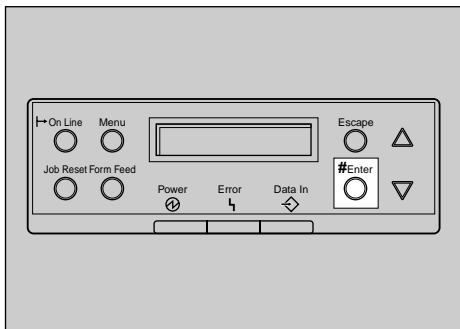


ZDJS001N

"Menu" appears on the panel display.

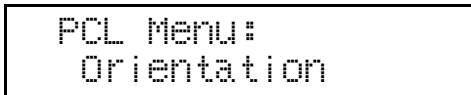


2 Press **[▲]** or **[▼]** to display "PCL Menu", and then press **[Enter]**.

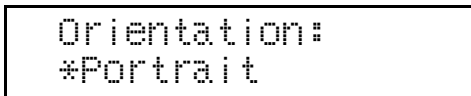


ZDJS021N

The following message appears on the panel display.



3 Press **[Enter]**.



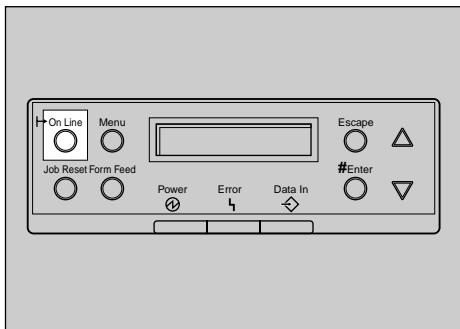
4 Press **[▲]** or **[▼]** to select the orientation desired, and then press **[Enter]**. Wait for two seconds.

"Menu" appears on the panel display.





5 Press **[On Line]**.



ZDJS022N

"Ready " message appears on the panel display.





Language Menu

You can select the language you use. Available language are as follows.

English, French, German, Italian, Spanish, Dutch, Swedish, Norwegian, Danish, Finnish, Portuguese, Czech, Polish and Hungarian.

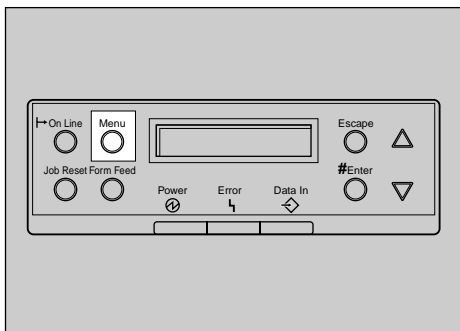
Note

- Default: English

Changing the Language Menu

You can change the language by the following procedures below.

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

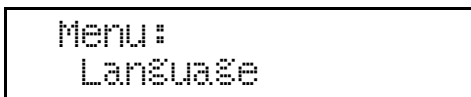


ZDJS001N

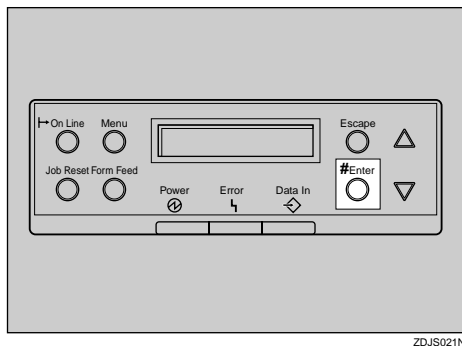
"Menu" appears on the panel display.



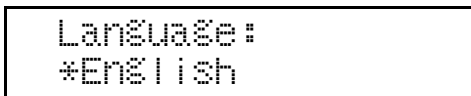
2 Press **[▲]** or **[▼]** to display "Language".



3 Press **[Enter]**.



The following message appears on the panel display.



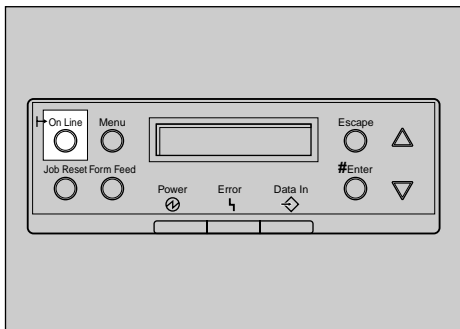
4 Press **[▲]** or **[▼]** until the language you want to select appears on the panel display.

5 Press **[Enter]**. Wait for two seconds.

"Menu" appears on the panel display.



6 Press [On Line].



ZDJS022N

"Ready " message appears on the panel display.





6. Appendix

Configuring the Printer using SmartNetMonitor for Admin


Using SmartNetMonitor for Admin, you can not only monitor the status of network printers but also allows you to change the configurations of the network interface board using the TCP/IP protocol or IPX/SPX protocol.

OS	Protocol Stack
Microsoft Windows 95/98/Me	TCP/IP provided with Windows 95/98/Me IPX/SPX provided with Windows 95/98/Me NetWare network client provided with Windows 95/98 Novell Client for Windows 95/98
Microsoft Windows 2000	TCP/IP provided with Windows 2000 IPX/SPX provided with Windows 2000 NetWare Client provided with Windows 2000 Novell Client for Windows NT/2000
Microsoft Windows NT4.0	TCP/IP provided with Windows NT IPX/SPX provided with Windows NT Client Service for NetWare provided with Windows NT Novell Client for Windows NT/2000

The following describes the method of changing the network interface board configuration.



Changing the Network Interface Board Configuration

- 1** Run SmartNetMonitor for Admin.
- 2** Click the [Group] menu, point to [Open LAN], and select [TCP/IP] or [IPX/SPX]. A list of printers appears.
 -  **Note**
 - Select the protocol of the printer you want to change the configure.
- 3** On the list, click to select the printer you want to change the configure.
- 4** From the [Tools] menu, select [NIB Setup Tool].

The NIB Setup Tool starts up.
- 5** Select [Wizard] or [Property Sheet], and then click [Next].
 - When configuring the network interface board for the first time, select [Wizard].
 - When changing the configuration of the network interface board or configuring it in detail, select [Property Sheet].


Selecting [Wizard]

- 1** Fill in the necessary items, and then click [Next].

Selecting [Property Sheet]


- 1** A configuration list appears on the dialog box.

For more information about each item on the dialog box, see the Help file.





Locking the Menus on the Printer's Operating Panel

- 1** Run SmartNetMonitor for Admin.
- 2** Click the [Group] menu, point to [Open LAN], and then select [TCP/IP] or [IPX/SPX].
A list of printer appears.
 **Note**
 - Select the protocol of the printer you want to change the configuration.
- 3** Click to select the desired printer.
- 4** From the [Tools] menu, select [Lock Menu of Device Option Panel].
The Web browser starts up, and the screen that prompts you to type the user name and a password appears.
- 5** Type the user name and password, and then click [OK].
The general configuration window appears.
- 6** From the [Lock Menu of Device Option Panel] pull down menu, select [Apply].
- 7** Click [Refresh].
- 8** Exit the Web browser.





Changing the Paper Type

1 Run SmartNetMonitor for Admin.

2 Click the [Group] menu, point to [Open LAN], and select [TCP/IP] or [IPX/SPX].

A list of printer appears.

 **Note**

- Select the protocol of the printer you want to change the configuration.

3 On the list, click to select the printer whose paper type you want to change.

4 From the [Tools] menu, select [Paper Type Settings].

The Web browser starts up, and the screen that prompts you to type the user name and a password appears.

5 Type the user name and a password, and then click [OK].

The paper type configuration window appears.

6 Select the sheet type, and then click [Apply].

7 Exit the Web browser.





Managing the Number of Copies to be Printed

Preparation

- Optional User Account Enhance Unit TypeB must be installed to manage the number of copies to be printed. For more information about installing User Account Enhance Unit TypeB, see "*Installing the User Account Enhance Unit TypeB*" in the Setup Guide.

1 Run SmartNetMonitor for Admin.

2 Click the [Group] menu, point to [Open LAN], and then select [TCP/IP] or [IPX/SPX].

A list of printer appears.

Note

- Select the protocol of the printer you want to change the configuration.

3 On the list, click to select the printer whose statistics information you want to manage.

4 From the [Tools] menu, select [User Management Tool].

The screen that prompts you to type a password appears.


5 Type a password, and then click [OK].

Note

- The factory default password is "password".

The User Code Maintenance Tool starts up.

For more information about using the User Management Tool, see the Help file for SmartNetMonitor for Admin.





Configuring the Energy Save Mode

1 Run SmartNetMonitor for Admin.

2 Click the [Group] menu, point to [Open LAN], and select [TCP/IP] or [IPX/SPX].

A list of printer appears.

 **Note**

- Select the protocol of the printer you want to change the configuration.

3 Click [Group], point to [Energy Save Mode], and select any energy saver mode from the menu that appears.

For more information about settings, see the Help file for SmartNetMonitor for Admin.





Configuring the Network Interface Board with a Web Browser

The Network Interface Board functions as a Web server in addition to allowing a printer to function as a network printer. You can use a Web Browser to view the printer status and configure the Network Interface Board.

❖ Configuring the printer

This requires the TCP/IP protocol to be installed. After the printer has been configured to use the TCP/IP protocol, it will be possible to adjust the settings using a Web Browser.



Reference

- For more information about configuring the printer to use the TCP/IP protocol, see Printer Client Reference 1 that comes with this printer.

❖ Operating system browser requirements

OS	Browser
Windows 95/98/Me	Microsoft Internet Explorer 3.02/4.0 or later Netscape Navigator 3.0/4.0 or later
Windows 2000	
Windows NT 4.0	
Mac OS 7.6.1 ~ 9.0	
Solaris 2.5 ~ 8	



Limitation

- Sometimes after clicking **[Back]** , the previous page may not appear. In this case, click **[Refresh]** or **[Reload]** .
- The text on the screen may disappear or be aligned incorrectly if the font size settings of the browser are too large. It is recommended that you use a font size equal to or smaller than "10 point" with Netscape Navigator, and "Medium" or smaller with Internet Explorer.

Going to the Top Page

After launching the Web Browser, type the IP address of the printer. See the example below. This example is for the English version.

http://192.168.15.16/

(In this example, the IP address of the Network Interface Board is 192.168.15.16.)

Note

- If a DNS server is used on the network, you can type the host name as an URL. For example, `http://webmonitor.netprinter.com/`. In order to do this, you must the register the IP address and host name of the Network Interface Board with the DNS server. Consult the network administrator for information about how to do this.
- If the network uses proxy servers, the browser may run slowly.



1. Header Buttons

You can register favorite URLs with **[URL]**. To view the Help section, click **[Help]**.

Important

- It costs to use the browser to access a web-site.

Note

- The Help file is stored in the following folder on the CD-ROM in HTML format. The third folder, "(Language)" may be substituted by an appropriate language name.

`\HELP\WSMHLP\ (Language) \`

2. Menu Buttons


Buttons to configure the Network Interface Board and confirm the status of the printer.

Note

- When you click **[Network Config]**, a dialog box appears requesting the user name and password. Type only the password in this dialog box. The factory default password is "password".
- The password is the same as that used for remote maintenance and that used in the NIB Setup Tool. If you change a password with the Web Browser, the other passwords are also changed.


3. Status

Displays the name and comments of the Network Interface Board, and the printer status.



Linking the address (URL) to the [Help] button

You can link the address (URL) of the **[Help]** button to the Help files on the computer or on a Web server.


- ① Copy the Help files on the CD-ROM to the desired location. The Help files are located in folders labeled with abbreviated language names. For example, English Help files are in the **[EN]** folder. Be sure to copy the entire **[EN]** folder to the new location.
 - ② Using a Web Browser, navigate to the Top Page and click **[Network config]**.
 - ③ Type your password, (it is not necessary to type a user name) and click **[OK]**.
 - ④ Type the path to the Help files in the **[Help URL]** box.
If you copied the Help files to "C:\HELP\EN", type "file://C:/HELP/". For example if you copied the files to a web server and the index URL is "http://a.b.c.d/HELP/EN/index.html", type "http://a.b.c.d/HELP/".
 - ⑤ Click **[Apply]**.
When a warning message appears, select to continue configuration.
- 







SNMP

The Network Interface Board functions as a SNMP (Simple Network Management Protocol) agent using the UDP and IPX protocols. Using the SNMP manager you can get information about the printer. The factory default community names are "public" and "admin". You can get MIB information using these community names.

-  **Reference**
- For more information about configuring the community name, see [p.138 "SNMP"](#) in "Remote Maintenance by telnet".

-  **Limitation**
- The kinds of supported MIBs differ depending on the printer.

-  **Supported MIBs**
- MIB-II
 - PrinterMIB
 - HostResourceMIB
 - RicohPrivateMIB





Remote Maintenance by telnet

You can view the printer status and configure the Network Interface Board using telnet.

Note

- You should specify a password so that only the network administrator, or a person having network administrator privileges, can use remote maintenance.

Using telnet

The following is a sample procedure in using telnet.

Limitation

- Only one person at a time can be logged on to do remote maintenance.

1 Using the IP address or host name of the printer, start telnet.

```
% telnet IP_address
```

Note

- In order to use the host name instead of the IP address, you must write it to the /etc/hosts file.

2 Type the password.

Note

- The factory default is "password".

3 Type a command.

Reference

- For more information about telnet commands, see [p.130 "Commands List"](#).





4 Exit telnet.

```
msh> logout
```

When the configuration is changed, a confirmation message requests whether or not the changes should be saved.

5 Type "yes" to save the changes, and press [ENTER].

If you do not want to save the changes, type "no" and press [ENTER]. If you want to make additional changes, type "return" at the command line, and press [ENTER].

Note

- If the "Can not write NVRAM information" message appears, the changes are not saved. Repeat the steps above.
- The Network Interface Board is reset automatically when the settings are changed.
- When the Network Interface Board is reset, the active print job which has already been sent to the printer will finish printing. However, jobs that have not been sent yet will be canceled.

Commands List

This is a list of commands that can be used via remote maintenance.

Note

- Type "help" to see a list of commands that can be used.

```
msh> help
```

- Type "help command_name" to display information about the syntax of that command.

```
msh> help command_name
```



TCP/IP address

Use the `ifconfig` command to configure TCP/IP for the printer (IP address, subnet mask, broadcast address, default gateway address).

❖ Reference

```
msh> ifconfig
```

❖ Configuration

```
msh> ifconfig nafo parameter address
```

Parameter	Meaning
(no parameter)	IP address
netmask	subnet mask
gateway	default gateway address
broadcast	broadcast address

The following is an example for configuring an IP address of 192.168.15.16.

```
msh> ifconfig nafo 192.168.15.16
```

The following is an example for configuring a subnet mask of 255.255.255.0.

```
msh> ifconfig nafo netmask 255.255.255.0
```

Note

- This affects the configuration of the Network Interface Board of the IP address that is used.
- To type an address using hexadecimal, prefix it by "0x".





Address

❖ Subnet Mask

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

❖ Default Gateway Address

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



Note

- To get the above addresses, contact your network administrator.

Access Control

Use the access command to view and configure access control.

❖ Reference

```
msh> access
```

❖ Configuration

```
msh> access parameter address
```

Parameter	Meaning
control	Access Control Address
mask	Access Control Mask



 **Note**

- The Access Control Address and the Access Control Mask are used to limit access to the computer used for printing by denying access to users based on their IP address. If it is not necessary to limit access, set the Access Control Mask to "0.0.0.0".
- When the Access Control Address matches the masked result of the IP address computer attempting to print, print jobs from that IP address will be accepted by the Network Interface Board.
- For example, if you assign 192.168.15.16 as the Access Control Address of the Network Interface Board, the IP addresses that can print are as follows. XXX means any number from 1 to 254 is acceptable.

Access Control Mask	IP addresses that can access the printer
0 . 0 . 0 . 0	XXX.XXX.XXX.XXX
255 . 0 . 0 . 0	192.XXX.XXX.XXX
255.255 . 0 . 0	192.168.XXX.XXX
255.255.255 . 0	192.168 . 15.XXX
255.255.255.255	192.168 . 15 . 16





Network Boot

Use the set command to configure the boot method.

```
msh> set parameter {on | off}
```

"on" means active and "off" means inactive.

Parameter	Meaning
dhcp	DHCP (Dynamic Host Configuration Protocol)

 **Note**

- When you use DHCP, the server also needs to be configured.
- DHCP takes precedence over all other settings.





Protocol

Use the set command to allow/prevent remote access for each protocol.

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

Protocol	
appletalk	"up" means active and "down" means inactive.
tcpip	
netware	
netbeui	
lpr	
ftp	
rsh	
diprint	
web	
snmp	
ipp	

 **Note**

- If you prohibit remote access using TCP/IP and then log out, you cannot use remote access. If this was a mistake, you can use the printer operation panel to allow access by TCP/IP.
- When you prevent access via TCP/IP, you are also prevented from using lpr, ftp, rsh, diprint, web, snmp and ipp.





Printer status

The following commands can be used to get information about the current status of the printer.

msh> *command*

Command	Information that is displayed
status	Status of printer. Information about the print jobs.
info	Information about the paper tray, output tray, printer language of printer.
prnlog [ID]	Lists the last 16 print jobs.

 **Note**

- More information about any print job is displayed when the ID number is added after the prnlog command.

 **Reference**

- For more information about the meaning of the data returned with these commands, see [p.130 "Commands List"](#).





Network Interface Board configuration settings information

Use the show command to display the Network Interface Board configuration settings.

```
msh> show [-p]
```

Note

- Add "-p" to the show command to have the information displayed one screen at a time.

Reference

- For more information about the meaning of the data returned with this command, see [p.130 "Commands List"](#).

System log information

Use the syslog command to display information stored in the printer's system log.

```
msh> syslog
```

Reference

- For more information about the displayed information, see [p.130 "Commands List"](#).





SNMP

Use the `snmp` command to display and edit SNMP configuration settings such as the community name.

 **Note**

- You can configure from ten SNMP access settings numbered 1–10.
- Default access settings 1 and 2 are as follows.

Number	1	2
Community name	public	admin
IP address	0.0.0.0	0.0.0.0
Access type	read-only trap off	read-write trap off

❖ **Display**

Shows the SNMP information and available protocols.

```
msh> snmp ?  
msh> snmp [-p] [registered_number]
```

 **Note**


- If the `-p` option is added, you can view the settings one by one.
- Omitting the number displays all access settings.

❖ **Community name configuration**

You can set the community name of the Network Interface Board.

```
msh> snmp number name community_name
```

 **Note**

- The community name must consist of 15 characters or less.
- 



❖ Access type configuration

You can select the access type from those listed below.

```
msh> snmp number type access_type
```

Access type	Type of access which is permitted
read	Read only
write	Read and write
trap	User is notified of trap messages.
no	All access is denied.

❖ Protocol configuration

You should use the following command to set the protocols to active or inactive. If you set a protocol to inactive, all access settings set to use that protocol are disabled.

```
msh> snmp {ip | ipx} {on | off}
```

- "on" means active and "off" means inactive

To change the protocol of an access settings, use the following command. However, if you disabled a protocol with the above command, making it active here will have no effect.

```
msh> snmp number active {ip | ipx} {on | off}
```



❖ Access configuration

You can configure an address of a host depending on the protocols used.

The Network Interface Board accepts requests only from hosts having addresses with access types of "read-only" or "read-write". Type "0" to have the Network Interface Board accept requests from any host without requiring a specific type of access.

Command syntax:

```
msh> snmp number {ip | ipx} address
```

Note

- To specify the TCP/IP protocol, type ip followed by a space and then the IP address.
- To specify the IPX/SPX protocol, type ipx followed by a space and then the IPX address followed by a decimal and then the MAC address of the Network Interface Board.

The following is an example of how to configure registration number 3 with the IP address 192.168.15.16.

```
msh> snmp 3 ip 192.168.15.16
```

The following is an example of how to configure registration number 3 with the IPX address 7390A448, and the MAC address 00:00:74:62:5C:65.

```
msh> snmp 3 ipx 7390A448:000074625C65
```



IPP

Use the `ipp` command to configure the IPP settings.

❖ Viewing setting

The following command displays the current IPP settings.

```
msh> ipp
```

Example output:

```
timeout=900(sec)
```

```
auth basic
```

- The "timeout" setting specifies how many seconds the computer keeps trying to access the network printer to send print jobs when no connection could be made.
- The "auth" setting indicates the user authorization mode.

❖ IPP timeout configuration

Specify how many seconds to wait before canceling a print job if it has been interrupted for some reason. The range of time can be changed between 30 to 65535 seconds.

```
msh> ipp timeout {30 -65535}
```

❖ IPP user authorization configuration

Use the IPP user authorization to restrict users that can print with IPP. The factory default is "off" .

```
msh> ipp auth {basic|digest|off}
```

- "basic" and "digest" are user authorization setting.
- "off" removes a user's authorization.

Note

- If you select "basic" or "digest", see next section "*Configuring IPP user authorization*" for how to configure the user name. Up to ten user names are available.



❖ Configuring IPP user authorization

Use the following command:

```
msh> ipp user
```

The following message appears.

```
msh> Input user number (1 to 10):
```

Type the number, user name and password.

```
msh> IPP user name:user1
```

```
msh> IPP password:*****
```

After configuring the settings, the following message appears.

```
User configuration changed.
```

SMB

Use the smb command to configure or delete the computer name or workgroup name for NetBEUI.

```
msh >smb parameter
```

Parameter	Settings
smb comp	Your computer name consisting of up to 13 characters
smb group	Workgroup name consisting of up to 15 characters
smb comment	Comment consisting of up to 31 characters
smb clear comp	Clears complete name
smb clear group	Clears Workgroup name
smb clear comment	Clears comment



ROUTE

Use the route command to control the routing table.

This command allows you to configure and display routing information. You can change the network configuration from remote PC using this command.

 **Note**

- The maximum number of routing tables are 16.

Parameter	Topics of setting
route add {host net} destination gateway	Adds a host/network route to "destination", and a gateway address to "gateway" in the table. Host becomes the default setting.
route delete {host net} destination	Deletes a host/network route from the table. Host becomes the default setting.
route get {destination }	Displays only route information corresponding to a specified destination. When the destination is unspecified, all routing information is displayed.
route active {host net} destination *1 on/off	You can turn the specified destination on or off. Host becomes the default setting.
route flush	Deletes all routing information.

*1 IP address





SLP

Use this command to configure SLP settings.

You can search the NetWare server using SLP in the PureIP environment of NetWare5. To use the `slp` command, you can configure the value of TTL which can be used by SLP multi-cast-packet.

 **Note**

- The default value of TTL is "1". A search is executed only within a local segment. If the router does not support multi-cast, the settings are not available even if the TTL value is increased.
- The acceptable TTL value is 1 - 255.

```
msh> slp ttl {1 -255}
```

Changing the password

Use the `passwd` command to change the remote maintenance password.

 **Important**

- Be sure not to forget or lose the password.

 **Note**

- The default factory password is "password".

1 Type "passwd".

```
msh> passwd
```

2 Type the current password.

```
Old password:
```




3 Type the new password.

New password:

Note

- The password must consist of 3 to 8 alphanumeric characters and symbols. Upper and lower case characters are considered unique. For example, R is different from r.
- The password is the same as that used in the configuration of the Network Interface Board using a Web Browser and that used in the NIB Setup Tool. If you change a password from telnet, the other passwords are also changed.

4 Type the new password once again.

Retype new password:





Getting Printer Information over the Network

Printer current status

You can check the printer's status using the telnet command.

❖ telnet

Use the status command.

Messages	Description	Comments
Call Service Center	There is a malfunction in the printer.	Turn the printer off and on.
Call Service Center: SC***_*	An error has occurred in the printer.	First, turn the power switch off and then on. If the message appears again, call your sales or service representative.
Cover Open: Duplex Unit	The cover of the optional Duplex Unit is open.	Close the cover of the optional Duplex Unit.
Cover Open: Front Cover	Close the front cover.	Close the front cover.
Cover Open: Mailbox	The cover of the Mailbox is open.	Close the cover of the Mailbox cover.
Empty: Black Toner	The toner cartridge is empty.	Replace the new toner cartridge.
Empty: Cyan Toner	The toner cartridge is empty.	Replace the new toner cartridge.
Empty: Magenta Toner	The toner cartridge is empty.	Replace the new toner cartridge.
Empty: Yellow Toner	The toner cartridge is empty.	Replace the new toner cartridge.
Energy Saver Mode	The printer is in Energy Save Mode.	Wait for a while.



Messages	Description	Comments
Error: Command Transmission	An error has occurred in the engine or controller.	First, turn the power switch off and then on. If the message appears again, call your sales or service representative.
Error: DIMM Value	An error has occurred in the DIMM.	First, turn the power switch off and then on. If the message appears again, call your sales or service representative.
Error: Ethernet Board	An error has occurred in the Network Interface Board.	First, turn the power switch off and then on. If the message appears again, call your sales or service representative.
Error: HDD Board	An error has occurred in the optional Hard Disk Drive.	First, turn the power switch off and then on. If the message appears again, call your sales or service representative.
Error: IEEE 1394 Board	An error has occurred in the optional 1394 Interface Unit.	First, turn the power switch off and then on. If the message appears again, call your sales or service representative.
Error: Memory Switch	An error has occurred in printer.	First, turn the power switch off and then on. If the message appears again, call your sales or service representative.
Error: Optional RAM	An error has occurred in the optional Memory Unit.	First, turn the power switch off and then on. If the message appears again, call your sales or service representative.



Messages	Description	Comments
Error: Parallel I/F Board	An error has occurred in the parallel interface board.	First, turn the power switch off and then on. If the message appears again, call your sales or service representative.
Full: Finisher	All output trays of the optional Finisher are full.	Remove paper from the Finisher.
Full: Finisher Tray 1	Output tray 1 of the optional Finisher is full.	Remove paper from the Finisher.
Full: Finisher Tray 2	Output tray 2 of the optional Finisher is full.	Remove paper from the Finisher.
Full: Hole Punch Receptacle	Hole Punch Receptacle of the optional Finisher is full.	Remove Hole Punch Receptacle from the Finisher.
Full: Mailbox	All output trays of the optional Mailbox are full.	Remove paper from the Mailbox.
Full: Mailbox Tray 1	The output tray 1 of the optional Mailbox is full.	Remove paper from the output tray 1 of the optional Mailbox.
Full: Mailbox Tray 2	The output tray 2 of the optional Mailbox is full.	Remove paper from the output tray 2 of the optional Mailbox.
Full: Mailbox Tray 3	The output tray 3 of the optional Mailbox is full.	Remove paper from the output tray 3 of the optional Mailbox.
Full: Mailbox Tray 4	The output tray 4 of the optional Mailbox is full.	Remove paper from the output tray 4 of the optional Mailbox.
Full: Output Tray(s)	All output trays are full.	Remove paper from all output trays.
Full: Standard Tray	The standard tray is full.	Remove paper from standard trays.



Messages	Description	Comments
Full: Waste Toner	The waste toner is full	Replace a new waste toner.
Hex Dump Mode	The printer is in Hex Dump Mode.	Wait for a while. If the "Hex Dump Mode" message does not change, on the panel display press [On Line] to return to the "Ready " condition.
Low: Black Toner	The toner cartridge is not set correctly or toner is almost running out.	Set the toner cartridge correctly.
Low: Cyan Toner	The toner cartridge is not set correctly or toner is almost running out.	Set the toner cartridge correctly.
Low: Magenta Toner	The toner cartridge is not set correctly or toner is almost running out.	Set the toner cartridge correctly.
Low: Yellow Toner	The toner cartridge is not set correctly or toner is almost running out.	Set the toner cartridge correctly.
Low: Staples	The staple is not set correctly or staple is almost running out.	Set the staple cartridge correctly.
Malfunction: Duplex Unit	An error has occurred in the optional Duplex Unit.	First, turn the power switch off and then on. If the message appears again, call your sales or service representative.
Malfunction: Finisher	An error has occurred in the optional Finisher.	First, turn the power switch off and then on. If the message appears again, call your sales or service representative.
Malfunction: Input Tray(s)	An error has occurred in the Input Tray(s).	First, turn the power switch off and then on. If the message appears again, call your sales or service representative.



Messages	Description	Comments
Malfunction: Output Shift	An error has occurred in the output tray when use the output shift feature.	First, turn the power switch off and then on. If the message appears again, call your sales or service representative.
Malfunction: Punch Unit	An error has occurred in the optional Punch Unit.	First, turn the power switch off and then on. If the message appears again, call your sales or service representative.
Malfunction: Stapler	An error has occurred in the optional Staple Unit.	First, turn the power switch off and then on. If the message appears again, call your sales or service representative.
Malfunction: Tray 1	An error has occurred in the tray 1.	First, turn the power switch off and then on. If the message appears again, call your sales or service representative.
Malfunction: Tray 2	An error has occurred in the tray 2.	First, turn the power switch off and then on. If the message appears again, call your sales or service representative.
Malfunction: Tray 3	An error has occurred in the tray 3.	First, turn the power switch off and then on. If the message appears again, call your sales or service representative.
Malfunction: Upper Tray 4	An error has occurred in the tray 4.	First, turn the power switch off and then on. If the message appears again, call your sales or service representative.



Messages	Description	Comments
Mismatch: Paper Size	The paper size setting of the tray differs from that of actual paper size in the tray.	Load paper of the indicated paper size into the paper tray being used. See " <i>Paper and Other Media</i> " in Maintenance Guide 2.
Mismatch: Paper Size and Type	The paper type setting of the tray differs from that of actual paper type in the tray.	Load paper of the indicated paper size and type into the paper tray being used. See " <i>Paper and Other Media</i> " in Maintenance Guide 2.
Mismatch: Paper Type	The paper type setting of the tray differs from that of actual paper type in the tray.	Load paper of the indicated paper type into the paper tray being used. See " <i>Paper and Other Media</i> " in Maintenance Guide 2.
Nearly Full: Waste Toner Bottle	The waste toner is full nearly	Replace a new waste toner.
No Paper: Bypass Tray	There is no paper in the bypass tray.	Load paper into the bypass tray. See Maintenance Guide 2.
No Paper: Input Tray(s)	There is no paper in the paper tray.	Load paper into the paper tray. See Maintenance Guide 2.
No Paper: Selected Tray	There is no paper in the current tray.	Load paper into the current tray. See Maintenance Guide 2.
No Paper: Tray 1	There is no paper in the paper tray (Tray1).	Load paper into the bypass tray. See Maintenance Guide 2.
No Paper: Tray 2	There is no paper in the optional Paper Feed Unit (Tray2).	Load paper into the bypass tray. See Maintenance Guide 2.
No Paper: Tray 3	There is no paper in the optional Paper Feed Unit (Tray3).	Load paper into the bypass tray. See Maintenance Guide 2.



Messages	Description	Comments
No Paper: Tray 3(LCT)	There is no paper in the optional LCT (Tray3).	Load paper into the bypass tray. See Maintenance Guide 2.
No Paper: Tray 4	There is no paper in the optional Paper Feed Unit (Tray4).	Load paper into the bypass tray. See Maintenance Guide 2.
No Paper: User Selected Tray	There is no paper in the selected tray.	Load paper into the selected tray. See Setup Guide.
Not Detected: Duplex Unit	The optional Duplex Unit is not set correctly.	Set the optional Duplex Unit correctly. If the message appears again, call your sales or service representative.
	An error has occurred in the Duplex Unit.	
Not Detected: Fusing Unit	The fusing unit is not set correctly.	Set the fusing unit correctly. If the message appears again, call your sales or service representative.
Not Detected: Input Tray(s)	The input tray is not set correctly.	Set the input tray correctly. If the message appears again, call your sales or service representative.
Not Detected: Black Toner	The toner cartridge is not set correctly.	Set the toner cartridge correctly. If the message appears again, call your sales or service representative.
Not Detected: Cyan Toner	The toner cartridge is not set correctly.	Set the toner cartridge correctly. If the message appears again, call your sales or service representative.
Not Detected: Magenta Toner	The toner cartridge is not set correctly.	Set the toner cartridge correctly. If the message appears again, call your sales or service representative.



Messages	Description	Comments
Not Detected: Yellow Toner	The toner cartridge is not set correctly.	Set the toner cartridge correctly. If the message appears again, call your sales or service representative.
Not Detected: Tray 1	The paper tray (Tray 1) is not set correctly.	Set the paper tray (Tray 1) correctly. If the message appears again, call your sales or service representative.
Not Detected: Tray 2	The paper tray (Tray 2) is not set correctly.	Set the paper tray (Tray 2) correctly. If the message appears again, call your sales or service representative.
Not Detected: Tray 3	The optional Paper Feed Unit (Tray 3) is not set correctly.	Set the optional Paper Feed Unit (Tray 3) correctly. If the message appears again, call your sales or service representative.
Not Detected: Tray 3(LCT)	The optional LCT (Tray 3) is not set correctly.	Set the optional LCT (Tray 3) correctly. If the message appears again, call your sales or service representative.
Not Detected: Tray 4	The optional Paper Feed Unit (Tray 4) is not set correctly.	Set the optional Paper Feed Unit (Tray 4) correctly. If the message appears again, call your sales or service representative.
Not Detected: User Selected Tray	The selected tray is not set correctly.	Set the selected tray correctly. If the message appears again, call your sales or service representative.
Offline	The printer is Offline.	If you want to change into On Line, press [On Line] .



Messages	Description	Comments
On Line	The printer is Online.	You can print the job data.
Online		
Paper in Finisher	There is paper in the optional Finisher.	Remove the paper. See Maintenance Guide 2.
Paper Misfeed: Duplex Unit	There is misfeed in the Duplex Unit.	Remove the misfed paper. See Maintenance Guide 2.
Paper Misfeed: Front Cover	There is misfeed in the printer.	Remove the misfed paper. See Maintenance Guide 2.
Paper Misfeed: Input Tray	There is misfeed in the printer.	Remove the misfed paper. See Maintenance Guide 2.
Paper Misfeed: Mailbox	There is misfeed in the Mailbox.	Remove the misfed paper.
Paper Misfeed: Output Tray	There is misfeed in output tray.	Remove the misfed paper.
Printing...	---	Wait for a while.
Warming Up/Adjusting...	The printer is warming up or toner is being supplied.	Wait until the panel display change the "Ready".



Printer configuration

You can check the printer configuration using telnet.

❖ telnet

Use the info command.

Note

- "*" (asterisk) is displayed with the current setting.
- Regarding *1 - *5, see below table.

Item	Description
Input Tray	
No.	ID number of the paper tray
Name	Name of the paper tray* ¹
PaperSize	Paper size loaded in the paper tray* ²
Status	Current status of the paper tray* ³
Output Tray	
No.	ID number of the output tray
Name	Name of the output tray* ⁴
Status	Current status of the output tray* ⁵
Printer Language	
No.	ID number of the printer language used by the printer
Name	Name of the printer language used in the printer
Version	Version of the printer language



❖ *1 Input Tray: Name

Name	Description
Tray X	Name of installed paper tray. (X is the number of tray.)
Bypass Tray	Bypass Tray

❖ *2 Input Tray: Paper Size

Paper Size	Description
A3 (297 × 420 mm)	A3 (297 × 420)
B4JIS (257 × 364 mm)	B4 (257 × 364)
A4 (297 × 210 mm)	A4 (297 × 210)
A4 (210 × 297 mm)	A4 (210 × 297)
B5JIS (257 × 182 mm)	B5 (257 × 182)
B5JIS (182 × 257 mm)	B5 (182 × 257)
A5 (210 × 148 mm)	A5 (210 × 148)
A5 (148 × 210 mm)	A5 (148 × 210)
A6 (105 × 148 mm)	A6 (105 × 148)
11 × 17	DL (11 × 17)
8 1/2 × 14	LG (8 1/2 × 14)
11 × 8 1/2	LT (11 × 8 1/2)
8 1/2 × 11	LT (8 1/2 × 11)
5 1/2 × 8 1/2	HL (5 1/2 × 8 1/2)



Paper Size	Description
Custom(XXXxYYY mm)	Custom Size
10 1/2 × 7 1/4	10 1/2 × 7 1/4
7 1/4 × 10 1/2	7 1/4 × 10 1/2
8 1/4 × 13	8 1/4 × 13
8 1/2 × 13	8 1/2 × 13
4 1/8 × 9 1/2	4 1/8 × 9 1/2
3 7/8 × 7 1/2	3 7/8 × 7 1/2
DL (110 × 220 mm)	DL (110 × 220)
C5 Env (162 × 229 mm)	C5 Env (162 × 229)
8 × 13	8×13
C6 Env (114 × 162 mm)	C6 Env (114 × 162)
8K (267 × 390 mm)	8K (267 × 390)
16K (267 × 195 mm)	16K (267 × 195)
16K (195 × 267 mm)	16K (195 × 267)
NCS	There is no tray.
**	The paper size is not selected.





❖ *3 Input Tray: Status

Status	Description
Normal	—
NoTray	There is no paper tray
PaperEnd	There is no paper in the paper tray

❖ *4 Output Tray: Name

Name	Description
Standard Tray	Output Tray
Mailbox Tray 1- 4	Mailbox output tray 1- 4

❖ *5 Output Tray: Status

Status	Description
Normal	----
PaperExist	There is paper in the output tray
OverFlow	Output tray is full of paper
Error	Other error





Understanding the Displayed Information

This section describes how to read status information returned by the Network Interface Board.

Print Job Information

The status of the print job can be viewed using the following commands.

- telnet : Use the status command. ⇒ p.130 “Commands List”

Item name	Meaning
Rank	Status of print job. <ul style="list-style-type: none">• Active Printing or preparing for printing.• Waiting Waiting to be transferred to the printer.
Owner	Print request user name.
Job	Print request number.
Files	The name of the document.
Total Size	The size of the data (spooled). Always displayed "0 bytes".





Print Log Information

This is a record of the most recent ten jobs that have been printed.

This log can be displayed with the following commands.

- telnet : Use the prnlog command. ⇒ p.130 “Commands List”

Name	Meaning
ID	Print request ID.
User	Print request user name.
Page	The number of pages that is printed.
Time	The time when the print request was received
User ID	User id that is to be configured in the printer driver.
JobName	The name of the document for printing.





Item name	Meaning
NetWare EncapType RPRINTER number Print server name File server name Context name Switch Mode NDS/Bindery Packet negotiation Print job timeout	Frame type. Remote printer number. Print server name. Name of the connect file server. Context of print server. Active mode. (this value is fixed) Time of the job timeout.
NetBEUI Switch Mode Direct print Notification Workgroup name Computer name Comment Share name[1]	(this value is fixed) (this value is fixed) Notification of print job completion. Name of the workgroup. Name of the computer. Comment. Share name (name of the printer type).
Shell mode	Mode of remote maintenance tool.





Message List

This is a list of messages written to the printer's system log. The system log can be viewed using the syslog command.

System Log Information

You can use the following methods to view the system log.

- telnet : Use the syslog command. ⇒ p.130 “Commands List”

Message	Description and Solutions
Access to NetWare server "file server name" denied. Either there is no account for this print server on the NetWare server or the password was incorrect.	(In print server mode) Cannot log in to the file server. Confirm that the print server is registered on the file server. If a password is specified for the print server, delete it.
add_sess: community<community name> already defined.	The same community name already exists. Use another community name.
add_sess: session<community name> not defined.	A requested community name is not defined.
add_sess: bad trap addr:<IpAddress>, community:<community name>	The IP address (0.0.0.0.) is unavailable when the community access type is TRAP. Specify the host IP address for the TRAP destination.
add_sess_ipx: bad trap addr: <IPX address>, community:<community name>	The IPX address (00:00:00:00:00:00) is unavailable when the community access type is TRAP. Specify the host IPX address for the TRAP destination.
add_sess_ipx: community <community name> already defined.	The same community name already exists. Use another community name.
add_sess_ipx: session_ipx<community name> not defined.	A requested community name is not defined.



Message	Description and Solutions
ANONYMOUS FTP LOGIN FROM <IP address>, <password>	An anonymous login has been made with a password <password> from the host <IP address>.
anpd start. (AppleTalk)	An anpd (AppleTalk Network Package Daemon) has started.
Attach FileServer="file server name"	Attached to the file server as a nearest server.
Attach to print queue "print queue name"	(In print server mode) Attached to the print queue name.
Cannot create service connection	(In remote printer mode) Cannot establish a connection with the file server. The number of file server users may exceed the maximum number that the file server can handle.
Cannot find rprinter ("print server name"/"printer number")	The printer having the number displayed on the print server does not exist. Confirm the number of the printer registered to the print server.
Change IP address from DHCP Server.	The IP address changes when DHCP LEASE is renewed. To always assign the same IP address, set a static IP address to the DHCP server.
child process exec error! (process name)	Failed to start the network service. Turn the printer off and then on. If this does not work, contact your service or sales representatives.
Connected DHCP Server(<DHCP server address>).	The IP address was successfully received from the DHCP server.
connection from <IP address>	Logged on from the host <IP address>.
Could not attach to FileServer <error number>	(In remote printer mode) Cannot attach to the file server. For some reason, the file server refuses the connection. Check the file server configuration.



Message	Description and Solutions
Could not attach to PServer <print server>	(In remote printer mode) Cannot attach to the print server. For some reason, the print server refuses the connection. Check the print server configuration.
Current Interface Speed:xxxMbps	The speed of the network (10 Mbps or 100 Mbps).
Current IP address <current IP address>	The IP address <current IP address> was received from the DHCP server.
Current IPX address	The current IPX address.
DHCP lease time expired.	DHCP lease time has expired. The printer tries to discover the DHCP server again. The IP address used up to now becomes invalid.
DHCP server not found.	The DHCP server cannot be found. Make sure the DHCP server is running on the network.
dhcpcd start.	A dhcpcd (DHCP client service) has started.
diprinted started	Direct print service has started.
Duplicate IP=(IP address>(from <MAC address>).	The same IP address is used. An IP address must be unique. Check the address of the device indicated in The same IP address is used. An IP address must be unique. Check the address of the device indicated in <MAC address>.
Established SPX Connection with PServer,(RPSocket=(socket number>), connID=<connection ID>	(In remote printer mode) A connection with the print server has been established.
Exit pserver	(In print server mode) Exits the print server because the necessary print server settings have not been made.
Frametype="frame type name"	The "frame type name" is configured to be used on NetWare.



Message	Description and Solutions
httpd start.	An httpd has started.
inetd start.	An inetd has started.
ipp disable.	Printing with ipp is disabled.
ipp enable	Printing with ipp is enabled.
LeaseTime=<lease time>(sec), RenewTime=<renew time>(sec).	The resource lease time that was received from the DHCP server is in seconds. The renewal time is also in seconds.
Login to fileserver "file server name" ("NDS BIND-ERY")	(In print server mode) Logged in to the file server with NDS or BINDERY mode.
multid start.	Data transmission service for multiprotocols has started.
nbstart start. (NetBEUI)	The service for NetWare protocol stack setting has started.
NBT Registration Broadcast(<NetBIOS name>)	Use a local broadcast to map <NetBIOS name> with the IP address.
nptd start.	A nbtcd (NetBIOS over TCP/IP Daemon) has started. (Available only in DHCP mode)
NetBEUI Computer Name="computer name"	The NetBEUI Computer Name is defined as "computer name".
nmsd start. (NetBEUI)	A nmsd (Name Server Daemon) has started.
nprinter start. (NetWare)	(In remote printer mode) NetWare service has started in remote printer mode.
nwstart start. (NetWare)	The service for NetWare protocol stack setting has started.



Message	Description and Solutions
Open log file "file name"	(In print server mode) The specified log file has been opened.
pppd start.	AppleTalk print service has started.
phy release file open failed.	Replacing the Network Interface Board is required. Contact your sales or service representatives.
Print queue "print queue name" cannot be serviced by printer 0, "print server name"	(In print server mode) The print queue name cannot be serviced. Make sure that print queue volume exists on the specified file server.
Print server <print server name> has no printer.	(In print server mode) The printer object is not assigned to the print server <print server name>. Using NWAdmin, assign the printer object, and then restart the printer device.
Print session full	Cannot accept the print session.
Printer "printer name" has no queue	(In print server mode) The print queue is not assigned to the printer. Using NWAdmin, assign the print queue to the printer, and then restart it.
pserver start. (NetWare)	(In print server mode) NetWare service has started.
Required computer name (<Computer name>) is duplicated name	The same computer name is detected on the network. The start job determines the computer name by adding the computer name to the suffix (0,1,...). Configure a new computer name that is unique.
Required file server ("file server name") not found	Cannot find the required file server.
restarted.	LPD has started.



Message	Description and Solutions
sap enable, saptpe=<SAP type>, sapname=<sap name>	The SAP function has started. The SAP (SAP type and SAP name) packet is issued to advertise the service on the SAP table on the NetWare server.
Set context to <NDS context name>	A <NDS context name> has been set.
shutdown signal received. network service rebooting...	Rebooting the network service.
smbd start. (NetBEUI)	An smbd (SMB (Server Message Block) service) has started.
Snmpp over ip is ready.	Communication over TCP/IP with SNMP is available.
Snmpp over ipx is ready.	Communication over IPX with SNMP is available.
snmpd start.	SNMP service has started.
The print server received error "error number" during attempt to log in to the network. Access to the network was denied. Verify that the print server name and password are correct.	Cannot log in to the file server. The print server is not registered or the password is specified. Register the print server without specifying a password.



Precautions

Please pay attention to the following when using the Network Interface Board. When configuration is necessary, follow the appropriate procedures below.

Connecting a Dial Up Router to a Network

When the NetWare file server and the printer are on the opposite side of a router, packets are continuously sent back and forth, possibly causing communications charges to increase. Because the packet transmission is a specification of NetWare, you need to change the configuration of the router. If the network you are using does not allow you to configure the router, configure the printer.

Configuring the router

Filter the packets so that they do not pass over the dial up router.

 **Note**

- The MAC address of the printer doing the filtering is printed on the printer configuration page. For more information about printing a configuration page, see the Setup Guide that comes with the printer.
- For more information about configuring the printer if the router cannot be configured, see the instructions below.





Configuring the printer with NetWare

1 Following the setup method in this manual, configure the file server.

2 Set the frame type for a NetWare environment.

 **Reference**

- For more information about selecting a frame type, see Administrator Reference 1 that comes with the printer.

Configuring the printer without NetWare

1 While not printing, the Network Interface Board sends packets on the network. Set the NetWare to inactive.

 **Reference**

- For more information about selecting a protocol, see Administrator Reference 1 that comes with the printer.

PostScript Printing from Windows

When printing PostScript from Windows, see the PostScript 3 Operating Instruction Supplement provided as a PDF file on the CD-ROM labeled "Operating Instructions".





NetWare Printing


Form Feed

You should not configure the form feed on NetWare. The form feed is controlled by the printer driver on Windows. If the NetWare form feed is configured, the printer might not print properly. If you want to change the form feed setting, always configure it on Windows.

- With Windows 95/98/Me, clear the **[Form feed]** check box under the **[Printer Settings]** tab in the printer properties dialog box.
- With Windows 2000, clear the **[Form feed]** check box under the **[NetWare Settings]** tab in the printer properties dialog box.
- With Windows NT 4.0, clear the **[Form feed]** check box under the **[NetWare Settings]** tab in the printer properties dialog box.

Banner Page

You should not configure a banner page on NetWare. If you want to change the banner page setting, always configure it on Windows.

- With Windows 95/98/Me, clear the **[Enable banner]** check box under the **[Printer Settings]** tab in the printer properties dialog box.
 - With Windows 2000, clear the **[Enable banner]** check box under the **[NetWare Settings]** tab in the printer properties dialog box.
 - With Windows NT 4.0, clear the **[Enable banner]** check box under the **[NetWare Settings]** tab in the printer properties dialog box.
- 



Printing after resetting the printer

After resetting the remote printer, it will be cut off from the print server for about 30-40 seconds before connecting again. Due to the NetWare specification, print jobs may be accepted, but they will not be printed during this interval.

When using the printer as a remote printer, wait about 2 minutes after resetting the printer before attempting to print.

When Using DHCP

Note the following points when using DHCP (Dynamic Host Configuration Protocol).

Select "DHCP" for "Network Boot" on the panel display, If you use DHCP. See Administrator Reference 1 for more information.

Configure the printer with a reserved IP address

To always assign the same IP address, configure a reserved IP address using the DHCP server.

 **Note**

- When multiple DHCP servers are used, reserve the same address with each DHCP server. The Network Interface Board needs to receive information from the DHCP server that it contacts.
- If you do not know the MAC address, it can be found on the configuration page printed by the printer.
- For details about the settings for IP address, see the Help files for the operating system you use.
- When you select the printer in the DHCP environment using SmartNetMonitor for Client, use the printer name that is displayed with SmartNetMonitor for Admin or shown on the configuration page.



Additional information

- When the DHCP server does not assign an IP address, the Network Interface Board uses 11.22.33.44 as a temporary IP address. You can confirm the printer's IP address on the network configuration page.
- Because 11.22.33.44 is a special IP address, you cannot print using this address.
- When using the DHCP relay agent in a network environment that uses a dial up router to connect to the Network Interface Board, an increase in communication fees can occur.



Memory Capacity and Paper Size

Resolution	Paper Size	Non-Duplex Printing		Duplex Printing	
		Can be printed	Guarantee	Can be printed	Guarantee
600 × 600 dpi	A3/11×17	Guarantee 64 MB (Standard)	64 MB (Standard)	64 MB (Standard)	128 MB (Standard + 64 MB)
	B4/8 ¹ / ₂ ×11			Guarantee 64 MB (Standard)	
	8 ¹ / ₂ ×14				
	A4/8 ¹ / ₂ ×11				
	B5				
	A5				
1200 × 600 dpi	A3/11×17	64 MB (Standard)	128 MB (Standard + 64 MB)	64 MB (Standard)	192 MB (Standard + 128 MB)
	B4/8 ¹ / ₂ ×11	Guarantee 64 MB (Standard)		Guarantee 64 MB (Standard)	128 MB (Standard + 64 MB)
	8 ¹ / ₂ ×14				
	A4/8 ¹ / ₂ ×11				
	B5				
	A5				



Resolution	Paper Size	Non-Duplex Printing		Duplex Printing	
		Can be printed	Guarantee	Can be printed	Guarantee
1200 × 1200 dpi	A3/11×17	64 MB (Standard)	192 MB (Standard + 128 MB)	128 MB (Standard + 64 MB)	320 MB (Standard + 256 MB)
	B4/8 ¹ / ₂ ×11		128 MB		
	8 ¹ / ₂ ×14		128 MB (Standard + 64 MB)	64 MB (Standard)	192 MB (Standard + 128 MB)
	A4/8 ¹ / ₂ ×11				
	B5				
	A5	Guarantee 64 MB (Standard)			128 MB (Standard + 64 MB)



Moving and Transporting the Printer

CAUTION:

- *When moving the machine, each person should hold the handle, where two are located on opposite sides, and lift slowly and slowly. Lifting it carelessly or dropping it may cause an injury.*
- *When you move the printer, remember to unplug the power cord from the wall outlet to avoid a fire or an electric shock.*
- *When you pull out the plug from the socket, grip the plug to avoid damaging the cord and causing a fire or an electric shock.*

Note

- The printer weights approximately 82 kg (181 lbs).

Repack the printer in its original packing materials for transporting.

Important

- Be sure to disconnect all cables from the printer before transporting it.
- The printer is a precision piece of machinery. Take care to avoid damage during shipment.



Moving the Printer

CAUTION:

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

Note

- The machine weight is about 82 kg (181 lbs).

Moving the printer in the short distance

1 Be sure to check the following points:


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

2 If you installed external options, remove them.

3 Be sure to close the bypass tray and the front cover.

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

Important

- Be sure to move the printer horizontally. Moving the printer slowly avoiding the toner to scatter.
 - If the Paper Feed Unit(s) is installed, detach and move the printer separately.
- 



Specifications

Mainframe





❖ **Configuration:**

Desktop

❖ **Print Process:**

Laser beam scanning & Electrophotographic printing
Dual component toner development

❖ **Printing Speed:**

Monochrome: Maximum 38 pages per minute (A4 , 11× 8½ )
Color: Maximum 28 pages per minute (A4 , 11× 8½ )

❖ **Parallel Interface:**

Interface

Standard 36-pin printer cable and a parallel port on the host computer
IEEE 1284 I/F (Compatible, ECP, Nibble)

- Do not use a cable more than 2.5 meters (8.2 feet) long.

❖ **Resolution:**

1,200 × 1,200 dpi (RPCS, PostScript 3)
1,200 × 600 dpi (RPCS, PostScript 3)
600 × 600 dpi (PCL 5c, RPCS, PostScript 3)
300 × 300 dpi (PCL 5c) *monochrome only





❖ **Printer Language:**

PCL 5c, RPCS, Adobe PostScript Level 3

❖ **Fonts:**

PCL 5c

Agfa Font 35 Manager Intellifonts, 10 TrueType fonts, and 1 Bitmap font Agfa Font Manager available, 31 fonts.

PostScript 3

136 fonts (Type 2:24, Type 14:112)

❖ **Paper size:**

See "*Paper and Other Media*" in Maintenance Guide 2.

❖ **Paper Weight:**

See "*Paper and Other Media*" in Maintenance Guide 2.

❖ **Power Source:**

120 V, 60 Hz, 10 A

❖ **Power Consumption:**

Printing	1200 W or less
Energy Saver	45 W or less

❖ **Noise Emission *1:**

Sound Power Level

	Mainframe only
During Printing	68 dB (A)
Stand-by	42 dB (A)



Sound Pressure level *2

	Mainframe only
During Printing	55 dB (A)

*1 The preceding measurements made in accordance with ISO7779 are actual values.

*2 Measured at the position of a bystander.

❖ Dimensions:

	Width	Depth	Height
Printer only (tray not extended)	575 mm (22.7")	648 mm (25.6")	715 mm (28.2")
With full options	1,110 mm (44")	648 mm (25.6")	985 mm (38.9")

❖ Weight:

Approximately 82 kg (181 lbs) (toner cartridge and power cord included)

❖ Warm-up Time:

Less than 120 seconds (23°C, 73F)

❖ Paper Input Capacity:

Standard paper tray	500 sheets × 2 *1
Bypass tray *2	100 sheets *1
Optional Paper Feed Units	500 sheets × 1,500 sheets × 2 *1
Paper Bank PS470	2,000 sheets *1

*1 Paper weight: 60 - 105 g/m² (16 - 28 lb)

*2 You can load up to 10 envelopes at the same time.



❖ **Paper Output Capacity:**

Face down: 500 sheets (80 g/m², 20 lb)

Face up: 100 sheets (80 g/m², 20 lb)

❖ **Paper weight and number of sheets to be set:**

	Supported paper weight	Maximum number of sheets (plain paper)
Tray 1	60 - 105 g/m ² (16 - 28 lb)	550 (80 g/m ² , 20 lb)
Tray 2	60 - 105 g/m ² (16 - 28 lb)	550 (80 g/m ² , 20 lb)
Bypass Tray	52 - 162 g/m ² (14 - 42 lb)	100 (80 g/m ² , 20 lb)
PAPER FEED UNIT Type 3800C (500 × 1)	60 - 105 g/m ² (16 - 28 lb)	500 (80 g/m ² , 20 lb)
PAPER FEED UNIT Type 3800C (500 × 2)	60 - 105 g/m ² (16 - 28 lb)	500 (80 g/m ² , 20 lb)
Paper Bank PS470	60 - 105 g/m ² (16 - 28 lb)	2000 (80 g/m ² , 20 lb)

❖ **Memory:**

Standard 64 MB, up to 384 MB (with the optional Memory Unit)

❖ **Network:**

Topology: Ethernet (10BaseT/100BaseTX)

Protocol: TCP/IP, NetBEUI, IPX/SPX, AppleTalk




Options

PAPER FEED UNIT Type 3800C (500 × 1)

- ❖ **Dimensions (W×D×H):**
540 × 600 × 172 mm (21.3" × 23.7" × 6.8")
- ❖ **Paper Weight:**
60 - 105 g/m² (16 - 28 lb)
- ❖ **Paper Size:**
A5 (Long edge feed) - A3, 8¹/₂×11 - 11×17 (Short edge feed)

PAPER FEED UNIT Type 3800C (500 × 2)

- ❖ **Dimensions (W×D×H):**
540 × 600 × 270 mm (21.3" × 23.7" × 10.7")
 - ❖ **Paper Weight:**
60 - 105 g/m² (16 - 28 lb)
 - ❖ **Paper Size:**
A5 (Long edge feed) - A3, 8¹/₂×11 - 11×17 (Short edge feed)
- 



Paper Bank PS470 (Large capacity tray)

- ❖ **Dimensions (W×D×H):**
540 × 600 × 270 mm (21.3" × 23.7" × 10.7")
- ❖ **Paper Weight:**
60 - 105 g/m² (16 - 28 lb)
- ❖ **Paper Size:**
A4 (Long edge feed) or 8¹/₂×11 (Short edge feed)

SR770 (2 Tray Finisher)

- ❖ **Dimensions (W×D×H):**
680 × 620 × 1,030 mm (26.8" × 24.4" × 40.6")
- ❖ **Paper Size:**
A5 (Long edge feed) - A3, 8¹/₂×11 - 11×17 (Short edge feed)
- ❖ **Paper Weight:**
60 - 105 g/m² (16 - 28 lb)





❖ Stack Capacity:

- Upper Tray:
500 sheets (A4/11×8¹/₂/B5/A5 (Long edge feed) - 80 g/m², 20 lbs.)
- Lower Tray
2,000 sheets (A4/11×8¹/₂ (Long edge feed) - 80 g/m², 20 lbs.)
750 sheets (A3, B4, A4 (Short edge feed), B5, 8¹/₂×14, 11×17, 8¹/₂×11 (Short edge feed))
500 sheets (A5 (Long edge feed))

❖ Weight:

53 kg (116.9 lb)

Mail Bin Type 3800C (4bin Mail Box)

❖ Dimensions (W×D×H):

540 × 600 × 400 mm (21.3" × 23.6" × 15.8")

❖ Paper Size:

A5 (Long edge feed) - A3, 8¹/₂×11 - 11×17 (Short edge feed)

❖ Paper Weight:


60 - 105 g/m² (16 - 28 lb)

❖ Stack Capacity:

125 sheets / bin (A4 (Long edge feed) 80 g/m²)

❖ Weight:

7 kg (15.5 lb)





Duplex Unit Type 3800C

❖ Dimensions (W×D×H):

90 × 524 × 430 mm (3.6" × 20.7" × 17.0")

❖ Paper Size:

A5 (Long edge feed) - A3, 17×11 - 10¹/₂×7¹/₄ (Long edge feed)

❖ Weight:

8 kg (3.6 lb)

Printer Hard Disk Type 3800C

❖ Storage Capacity (Formatted):

20 GB, 40 GB

- Spool print data to collate
- Spool Sample/Locked Print data
- Store PostScript fonts
- Store log data

Note

- You can install PostScript fonts with this optional Hard Disk Drive. With Macintosh, types of fonts supported are PostScript Type 1 and PostScript Type 2. To download them, use Printer Utility for Mac.
- When you install optional scanner unit, 40 GB printer hard disk must be required to use document server function.



Memory Unit TypeB 64/128/256MB

- ❖ **Module Type:**
SO-DIMM (Small Outline Dual-in-line Memory Module)
- ❖ **Memory Type:**
SDRAM (Synchronous Dynamic RAM)
- ❖ **Number of Pins:**
144 pins

User Account Enhance Unit TypeB

- ❖ **Capacity:**
64 KB
 - Store User Code (Up to 400 users)

1394 Interface Unit Type 1045

- ❖ **Interface:**
IEEE Std 1394-1955 compliant, IEEE Std 1394-2000 compliant.
- ❖ **Interface Connector:**
IEEE 1394 (6 pin × 2)





❖ Required cable:

1394 interface cable (6 pin x 4 pin, 6 pin x 6 pin)

Important

- You cannot plug devices together so as to create loops.
- Do not use a cable more than 4.5 meters long.

❖ Connectable number of device in a bus:

Maximum 63

❖ Allowed cable hops in a bus:

Maximum 16

❖ Data Transmission:

400 Mbps (Maximum)

❖ Power supply:

Non power supply

Cable Power repeated (IEEE 1394a-2000 compliant)

Important

- In Windows 2000, the 1394 Interface Unit can only be used with Service Pack 1 or later. If the Service Pack is not installed, the connectable number of device in a 1394 bus is only one, and the client cannot access the 1394 Interface Unit without using an account has the Administrators permission.
- The optional 1394 Interface Unit is not supported by Windows 95/98/Me. If the "plug and play" function starts, click **[Cancel]** in the **[New Hardware Found]** or **[Device Driver Wizard]** dialog box.
- Do not plug or unplug the 1394 interface cable while installing the printer driver.
- Do not turn off or on the device while installing the printer driver.
- Do not uninstall the printer driver, when the 1394 Interface Unit is installed. Unplug the 1394 interface cable to uninstall the printer driver.



 **Note**

- The 1394 Interface Unit could not receive data from more than one PC at the same time. In this case, an error message appears. The printer can accept data sent from other PCs, after the first print job has finished.
- The bidirectional transmissions are not supported by the 1394 Interface Unit.
- When the 1394 Interface Unit is installed successfully, the printer icon automatically changes from "Use Printer Offline" to "Ready ", according to the 1394 interface cable plug.





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