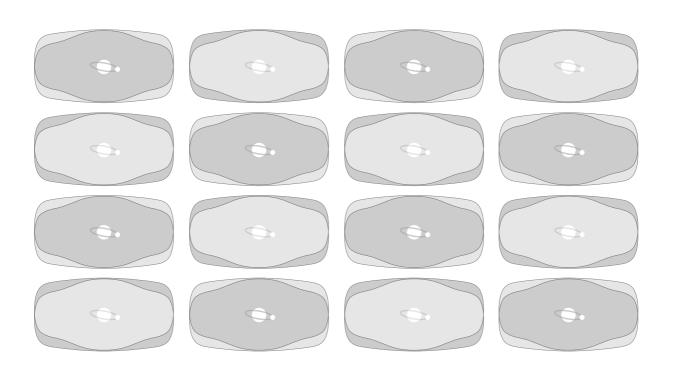
Canon



Large Format Printer

W8200

Network Guide



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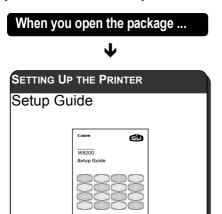
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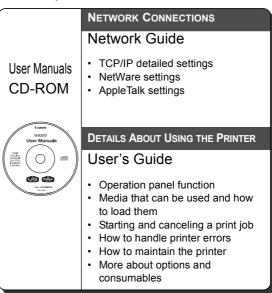
About These Manuals

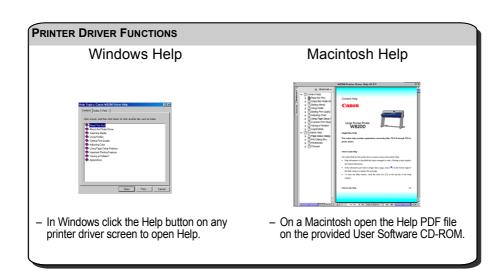
These manuals are provided for your reference to ensure safe, reliable operation of the W8200 printers. Read them as required to achieve maximum performance with the W8200 printer.



- Making sure that you have everything
- · Setting up the printer
- · Loading paper
- · Confirming printer operation
- Installing the printer driver (TCP/IP, USB, IEEE1394 connection)

Mount the User Manuals CD-ROM in your computer's CD-ROM drive, then open the CD-ROM window in "My Computer". Open the [English] folder, then double-click the PDF file to open.





Notations About Text

Conventions

To ensure the safe and most efficient use of this printer, important information is provided under the headings listed below. Before you use this guide, make sure that you understand what these headings mean and remember the important information described under these headings.



Warning

• Failure to follow these instructions could result in fatal or serious injury. Always remember and follow the guidelines and advice described under this heading to ensure your own safety and the safety of other people working around the printer.



Caution

• Failure to follow these instructions could lead to mistakes in the use of printer and result in minor injury or serious damage to the printer. Always remember and follow the guidelines and advice described under this heading to ensure safe use of the printer.



Important

• Instructions and guidelines for operation of the printer provided under this heading describe restrictions and other important information which if ignored could cause minor damage to the printer or other equipment or result in the loss of valuable data. Always remember and follow the guidelines and advice under this heading to avoid mistakes in procedure.

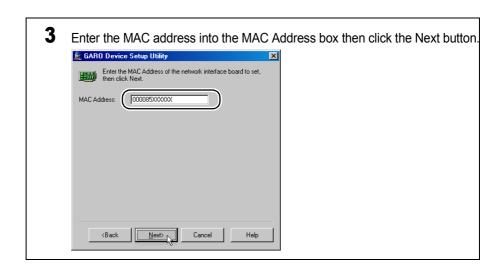


• Information under this heading includes tips and hints that will help you avoid minor problems and use the printer more efficiently.

Screen Examples

The screenshots provided as examples in operational procedures may be slightly different, depending on the operating system in use.

A button or item to press or select in a procedure appears enclosed with a circular mark in the screen sample. If a procedure requires more than one button press or selection, all the items are marked, so be sure to select them as described in the procedure.



Abbreviations

Throughout this document the following abbreviations are used in text.

- Microsoft[®] Windows[®] Millennium Edition is abbreviated as "Windows Me"
- Microsoft® Windows® 98 is abbreviated as "Windows 98"
- Microsoft® Windows® 95 is abbreviated as "Windows 95"
- Microsoft[®] Windows[®] XP is abbreviated as "Windows XP"
- Microsoft® Windows® 2000 is abbreviated as "Windows 2000"
- Microsoft® Windows NT® is abbreviated as "Windows NT"
- Microsoft[®] Windows[®] is abbreviated as "Windows"
- The term "GARO", used in the name of this printer driver, is an acronym for "Graphic Arts Language with Raster Operations", a printer language of creating raster images.

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1 Before

Before You Begin

This chapter describes the network, network environment, and other important information that you should confirm before you begin.

Required System Environment

This section describes the system environments that are supported by the network interface of the printer.

System Environment Required for Printing

The lists below describe the system environments required to support the network in use.

■ Using a TCP/IP Network for Printing

- Compatible Operating Systems:
 - Windows Me/Windows 98/Windows 95
 - Windows NT 4 0
 - Windows 2000
 - · Windows XP
- Compatible Computers:
 - IBM PC or IBM compatible PC

Important

• If you are using Windows NT 4.0, install Service Pack 6 or later.

■ Using an AppleTalk Network for Printing

- Compatible Computer
 - A Macintosh Series computer equipped with a Power PC processor.
- Compatible Operating Systems
 - Mac OS 8.6 or later
 - Mac OS x 10.1 or later
- Compatible AppleTalk
 - · EtherTalk Phase 2
- Required Memory
 - 24 MB or more for Mac OS 8.6, 32 MB or more for Mac OS 9



• This printer is not compatible with a Macintosh Local Network.

■ Using a NetWare[®] Network for Printing

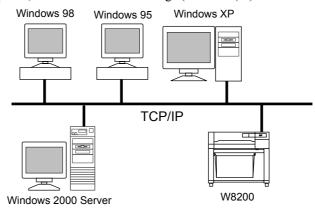
- Compatible Servers
 - Novell NetWare® Version 4.2/5.1
- Compatible Clients
 - Windows Me/Windows 98/Windows 95
 - Windows XP Professional
 - Windows 2000 Server
 - Windows 2000 Professional
 - Windows NT Server 4.0
 - Windows NT Workstation 4.0
- Compatible Computers
 - IBM PC or IBM compatible PC

The Network Environment

Use the diagrams below as reference to determine the type of network where the printer is connected, and then follow the required procedure.

Windows Network Examples

If you are using Windows network, you can use TCP/IP as the protocol. (→ Chapter 2, "TCP/IP Network Settings (Windows)")



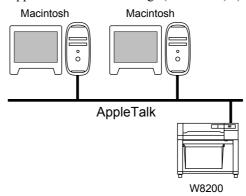


- After performing the settings for a TCP/IP network with a Windows computer, every computer on the network can print with every printer connected directly to the network. Also, setting up a Windows XP, Windows 2000, or Windows NT computer as a server greatly improves the efficiency of managing network printers. For more details about how to set up a server, see "Setting the Printer for Sharing". (→ P.2-15)
- The NetBIOS protocol cannot be used with this printer.

Macintosh Network Examples

For a Macintosh computer, the AppleTalk (EtherTalk) protocol is used.

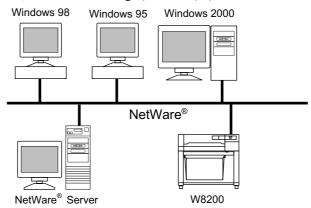
(→ Chapter 3, "AppleTalk Network Settings (Macintosh)")



NetWare® Network Examples

If the network is like the network environment shown in the illustration below, you can print using NetWare[®] protocol. NetWare[®] client software must be installed on every server computer and client computer.

(→Chapter 4, "NetWare® Settings (Windows)")





• You can use TCP/IP or AppleTalk in common even in a network environment where there is a NetWare[®] server. In such a case, perform the settings for the protocol to use.

TCP/IP Network Settings (Windows)

This chapter describes the setting methods and procedures for connecting the printer to a TCP/IP network.

Procedures Required for a TCP/IP Network

Here is a summary of the procedures required to set the printer for use on a TCP/IP network.

Connect the network cable.

→ Setup Guide

Follow the instructions in the Setup Guide to connect the network cable.

2 Setting the Printer IP Address

→P.2-3

Setting the IP address allows setting the printer protocol to enable communication between the printer and the computer . You can use one of the methods below to set the protocol:

- GARO Device Setup Utility (Canon software application provided with the printer)
- · ARP/PING command
- · Printer operation panel

3 Setting TCP/IP Protocol for the Printer

→P.2-8

Perform this procedure to set the printer protocol. You can perform these settings with the web browser from a computer on the network:

• Web browser (Remote UI)

4 Setting the Computer

→P.2-13

This procedure is performed for each computer to be used for printing.

Important

- Steps 1, 2, and 3 should be performed by the network system administrator.
- An LPD connected print application can be used to print on the TCP/IP network.
- This printer is not compatible with RAW protocol. If you are using Windows XP or Windows 2000, you must set and use LPR protocol.

Setting the Printer IP Address

Before setting the printer protocol, you must set the IP address to enable communication between the printer and the computer. You can use one of the methods below to set the IP address. Use whichever method is easiest:

- GARO Device Setup Utility (→ P.2-4)
- ARP/PING command (\rightarrow P.2-6)
- Printer operation panel (→ Setup Guide, Chapter 2, "Doing the settings on the Printer Operation Panel")

Important

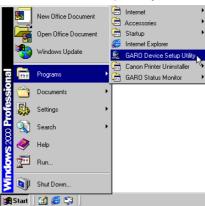
- When you use the GARO Device Setup Utility to perform the settings, you must make the settings from a computer in the same subnet as the printer.
- When you use the GARO Device Setup Utility to perform the printer network settings, the subnet mask and gateway address settings are set to 0.0.0.0, so use the Remote UI or printer operation panel to make the settings for your network.
- If you are using an operating system that is not compatible with the GARO Device Setup Utility, use another computer on the network, use the ARP/PING command, or use the printer operation panel to perform the settings.
- The GARO Device Setup Utility must be installed on your computer in order to use this utility to make the settings. Ask your system administrator to install the GARO Device Setup Utility on your computer. (→ Setup Guide)
- Before setting the IP address, confirm that the printer is switched on and connected to the network.
- The MAC address is required to perform the setting with the GARO Device Setup Utility or the ARP/PING command. If you need to confirm the MAC address, use the printer operation panel to print a Status Print.
 - 1. Press Online to display MAIN MENU.
 - 2. Press ≺ or ➤ to select Test Print then press ∨.
 - 3. Press ≺ or ➤ to select Status Print then press Enter.

Setting the IP Address with GARO Device Setup Utility

If you are using Windows, use the GARO Device Setup Utility, the software utility provided with the printer, to perform the printer network settings.



- If you are using a Macintosh computer, use the printer operation panel to perform the settings. (→ Setup Guide, Chapter 2, "Doing the settings on the Printer Operation Panel")
- 1 On the desktop, click the Start button, point to Programs, then click GARO Device Setup Utility.



2 Click the Settings button.



3 Enter the MAC address into the MAC Address box then click the Next button.

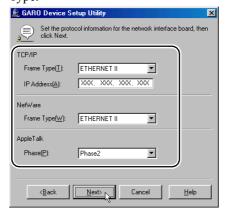


The utility searches for the printer on the network and when the printer is found, the protocol settings dialog box opens.

Important

- If the printer cannot be found, make sure that the computer and the printer are in the same subnet. If you use the GARO Device Setup Utility to perform the settings, you must make the settings from a computer in the same subnet as the printer.
- 4 For the TCP/IP Frame Type, select ETHERNET II from the list, enter the IP address allocated for the printer into the IP Address box, then click the Next button.

When printing via AppleTalk, select Phase2 for AppleTalk Phase. When printing with NetWare[®], select the frame type in use for NetWare Frame Type.



5 Confirm the settings then click the Finish button.

The network interface settings are changed.



 The subnet mask and gateway address settings have been set to 0.0.0.0. After completing the above settings, use the Remote UI or the printer operation panel to perform the subnet mask and gateway address settings for your network. (→ P.2-8)

This completes preparation for selecting the printer protocol. Now you are ready to select the printer protocol. $(\rightarrow P.2-8)$

Setting the IP Address with the ARP/PING Command

The examples of entries and settings below are for the English operating system.

- 1 Start at the MS-DOS prompt or command line.
- **2** Execute the following commands, and add the static entry to the arp table.

```
arp -s <IP address> <MAC address>
```

IP address:

Set the IP address assigned to the printer. The IP address consists of four decimal numbers (within the range 0 to 255) separated by dots.

MAC address:

Set the MAC address of the printer. In the MAC address every two numbers is separated by a hyphen (-).

```
arp -s XXX.XXX.XXX.XXX 00-00-XX-XX-XX
```

3 Execute the following commands to set the IP address for the printer.

```
ping <IP address> -1 479
```

IP address:

Set the same address entered at Step 2.

Sample:

ping XXX.XXX.XXX.XXX -1 479

Note

- The -l entry is the alphabetic lower case "L" (not the number "1").
- The subnet mask and gateway address settings have been set to 0.0.0.0. After completing the above settings, use the Remote UI or the printer operation panel to perform the subnet mask and gateway address settings for your network. (→ P.2-8)

This completes preparation for the protocol setting.

Setting TCP/IP Protocol for the Printer

You can use your Web browser on your computer with the Remote UI, the software built into the network interface, to perform the printer protocol settings.

Setting up with a Web Browser (Remote UI)

1 Start the Web Browser, enter the following URL for the Address, then press the Enter key.

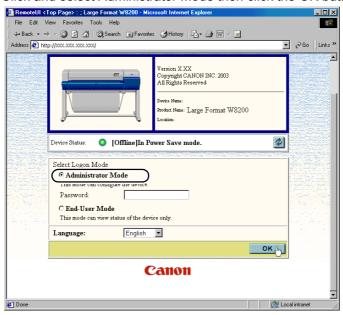
http://<Printer IP address or name>/

Example: http://xxx.xxx.xxx/

Important

- For the Web Browser, use Netscape Navigator/Communicator 4.04 or later, or use Internet Explorer 4.01SP1 or later. However, Netscape Navigator Version 6 or later is not compatible.
- A connection through a Proxy Server cannot be used. If you are using a network
 environment with a Proxy Server, use the "Proxies" server setting in the Web
 Browser to add the printer IP address to the "Exceptions" text box (the address not
 used by the Proxy Server). (Performing this setting may differ, depending on the
 network environment.)
- Use the Web Browser to enable JavaScript and Cookie so these features can be used
- If more than one Remote UI is being used, then the most recently used settings remain enabled. Starting and using only one Remote UI at a time is recommended.

2 Click and select Administrator Mode then click the OK button.

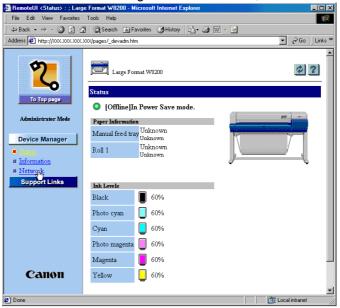


The Remote UI starts.



• If a password has been set for the printer, enter the password and click the OK button. If no password has been set, then a password entry is not required.

3 From the Device Manager menu on the left, select Network.



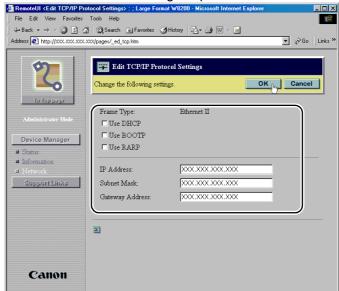
The Network page opens.

4 Click the Edit button to the right of TCP/IP.



The Edit TCP/IP Protocol Settings page opens.

5 Select the method for setting the printer IP address.



To set the IP address, first click all the buttons off. If the IP address is to be acquired automatically, click on the button for the method to be used: DHCP, BOOTP, or RARP.



- If you select DHCP, BOOTP, or RARP to select the IP address, make sure that the IP address can be set by DHCP, BOOTP, or RARP at power on or after a reset. After confirming which setting can be used, the IP address is assigned. If the check box for DHCP, BOOTP, or RARP is clicked off, the check is not performed with that function. If none of these methods can be used, then perform the IP address setting then enter the IP address into the "IP Address" text box.
- The check to determine whether DHCP, BOOTP, or RARP can be used requires about 1 or 2 minutes to execute. Clicking off the check boxes for a method that cannot be used is recommended.
- In order to have DHCP, BOOTP, or RARP assign the IP address, the DCHP, BOOTP, or RARP must be booted.
- **6** Enter the IP Address, Subnet Mask, and Gateway Address in the appropriate text box.

For the "IP Address" enter the IP address of the printer. For "Subnet Mask" and "Gateway Address" enter the settings for the TCP/IP network.



 When using DHCP, BOOTP, or RARP you cannot select more than one. The value acquired from DHCP, BOOTP, or RARP is used.

- **7** Press the OK button.
- **8** When you return to Network of Device Manager, click the Reset button.



The new settings are enabled when the network interface is restarted.

This completes the printer protocol settings.

Setting the Computer

After completing the protocol settings, perform the computer settings.

TCP/IP network settings

The TCP/IP client software must be installed on all computers on the network that are to be used for printing. For details, refer to your operating system instructions.

• Installing the Printer Driver and Setting the Port In order to print, the appropriate printer driver must be installed and the connection point for the printer must be set. The LPD connection port, the port that is normally used by TCP/IP, is selected as the connection point for this printer.



• Setting a Windows XP, Windows 2000 or Windows NT computer on the network as the print server improves the efficiency of managing the network printer. For more details, see "Setting the Printer for Sharing" (\rightarrow P.2-15).

■ Windows Me, Windows 98, and Windows 95 Settings

For Windows Me, Windows 98, or Windows 95 use LPR Port provided on the provided software CD-ROM to set up the LPD connection. First, install LPR Port, then when you install the printer driver add the LPD connection printer port and select this port as the output destination. (\rightarrow) Setup Guide, Chapter 3, "Installing the Software")

■ Windows XP and Windows 2000 Settings

For Windows XP and Windows 2000, you must use the standard operating system TCP/IP port to perform the settings for the LPD connection. Add the printer port for the network connection during the printer driver installation, and select the output destination port. (→ Setup Guide, Chapter 3, "Installing the Software")

■ Windows NT 4.0 Settings

For Windows NT 4.0, use the "Microsoft TCP/IP Printing" feature of the operating system to perform the settings for the LPD connection. First, confirm that "Microsoft TCP/IP Printing" is installed, add the printer port, then select the port as the output destination for the printer driver. (> Setup Guide, Chapter 3, "Installing the Software")

Setting the Printer for Sharing

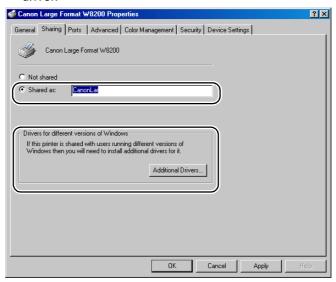
Follow the procedure below to improve the efficiency of printer management by setting up a print server on a network with Windows XP, Windows 2000 or Windows NT. With a print server set on the network, all print jobs are managed by the print server. All the printer software can be installed once onto the representative print server so each computer connected to the network can install the printer drivers through the network.

- 1 Open the Sharing sheet of the Printer Properties dialog box.
 - On the desktop, click the Start button, point to Settings, then click Printers.
 - Click the icon of the printer to use, then from the File menu select Sharing.



- **2** Perform the settings to share the printer.
 - ✓ In the "Shared as" text box, enter the desired name for the printer.
 - ▼ From Alternate Drivers select the name of the printer driver to install. (If you are not using Windows XP or Windows 2000, click the Additional Drivers button then select the printer driver to install.)

Click the OK button. If alternate printer drivers are being installed, then a screen opens that allows you to select the location of the files. Mount the provided User Software CD-ROM and open the folder on the CD-ROM that holds the printer driver.



Important

 If you are using Windows NT 4.0, Service Pack 6 or later must be installed for Windows NT in order to use alternate drivers.

This completes setting the printer for sharing.

To install the printer driver on another computer, at the printer connection screen in the Printer Wizard just select "Network Printer" then select the name of the shared printer for the computer designated as the print server.



• When the printer sharing settings have been performed for Windows XP or Windows 2000 where IIS is installed, and after the "DSE (Device Status Extension)" has been installed from the provided User Software CD-ROM, then you can use a Web Browser from a Client computer to display printer information and manage print jobs. For more details about how to install DSE, open the DSE folder on the User Software CD-ROM and read to the Readme.txt file.

Managing the Printer from a Computer

You can use your Web browser on your computer with the Remote UI, the software built into the network interface, to manage the printer. For more details about how to set up and use the Remote UI feature, see Step 1 of "Setting up with a Web Browser (Remote UI)" (→ P.2-8)

AppleTalk Network Settings (Macintosh)

This chapter describes the setting methods and procedures for connecting the printer to an AppleTalk network.

Procedures Required for an AppleTalk Network

Here is a summary of the procedures required to set the printer for use on an AppleTalk network.

Connect the Network Cable

→Setup Guide

Follow the instructions in the Setup Guide to connect the network cable.

2 Setting a Macintosh

→ P.3-3

Confirm the network settings for the Macintosh.

3 Setting the Printer Protocols

→ P.3-5

Normally, the printer can be used with AppleTalk protocol without any changes. Use the Web browser to select the name and zone settings after entering the IP address with the printer operation panel.

4 Installing the Printer Driver

→ P.3-9

Install the Macintosh printer driver.

Important

• Steps 1 and 3 above should be performed by the network system administrator.



 This section describes the printer connection to a Macintosh computer equipped with a standard Ethernet port built in. If the printer is connected to an expansion network interface board, be sure to select the name of the port.

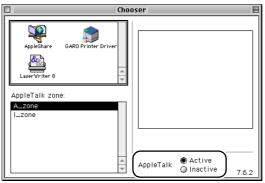
Setting a Macintosh

Setting the Network Functions

■ Mac OS 8.6/9.x

Use the Chooser and the AppleTalk item of the Control Panel to confirm the Macintosh network settings.

- Confirm that AppleTalk can be used.
 - ▼ From the Apple menu select Chooser.
 - ▼ Confirm that Active is selected for AppleTalk. If the setting is Inactive, select Active.



- Confirm that Ethernet is selected for the AppleTalk connection.
 - ▼ Start AppleTalk on the Control Panel.
 - Select Built-in Ethernet.



Close AppleTalk to save the setting.

This completes the network settings for a Macintosh.

Important

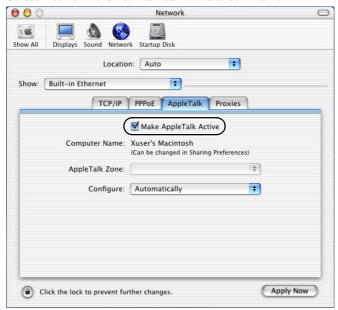
• Be sure to select the Printer Port if Ethernet is connected via LocalTalk.

■ Mac OS X

Confirm the AppleTalk settings with the Network setting of the System Preferences.

- 1 On the System Preferences panel, open Network.
- **2** For Display select Built-in Ethernet.
- 3 Select the AppleTalk sheet and confirm that Make AppleTalk Active is selected.

Select Active if it is not marked with a check mark.



4 Close Network to save the settings.

This completes the network settings for a Macintosh.

Setting the Printer Protocols

Use the Web browser (Remote UI) from your computer to perform the protocol settings. To perform the settings, first enter the IP address with the printer operation panel, then use the Web browser to set the protocol. (→ Setup Guide Chapter 2, "Doing the settings on the Printer Operation Panel")

Setting up with a Web Browser (Remote UI)

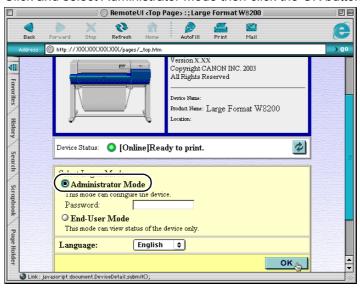
Start the Web Browser, enter the following URL for the Address, then press the Enter key.

http://<Printer IP address or name>/ Example: http://xxx.xxx.xxx/

Important

- For the Web Browser, use Netscape Navigator/Communicator 4.04 or later, or use Internet Explorer 4.01SP1 or later. However, Netscape Navigator Version 6 or later is not compatible.
- A connection through a Proxy Server cannot be used. If you are using a network environment with a Proxy Server, use the "Proxies" server setting in the Web Browser to add the printer IP address to the "Exceptions" text box (the address not used by the Proxy Server). (Performing this setting may differ, depending on the network environment.)
- Use the Web Browser to enable JavaScript and Cookie so these features can be used.
- If more than one remote UI is being used, then the most recently used settings remain enabled. Starting and using only one Remote UI at a time is recommended.

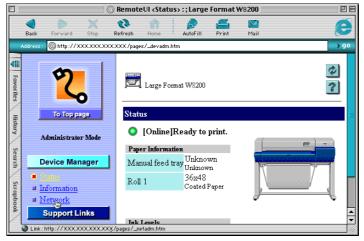
2 Click and select Administrator Mode then click the OK button.



The Remote UI starts.



- If a password has been set for the printer, enter the password and click the OK button. If no password has been set, then a password entry is not required.
- 3 From the Device Manager menu on the left, select Network.



The Network page opens.

4 Click the Edit button to the right of AppleTalk.



The Edit AppleTalk Protocol Settings page is displayed.

5 For the Phase Type item, select Phase 2.





- If Disabled is selected, the printer will not be recognized on the AppleTalk network.
- **6** Enter the name of the printer in Name box.

 Enter the printer name displayed in Chooser for Mac OS 8/9 or the name displayed in Print Center for Mac OS X.

Important

• If more than one printer is in the same zone, be sure to assign a unique name for each printer.

Note

- The initial name for the Name setting is "Canon NB-12FB", the name of the network interface.
- When you change the name, you can enter a name up to 15 characters long. However, @ *; and = cannot be used in the name.
- **7** When a zone is set on the network, enter the name of the printer's zone.

If no zone is set, then leave the asterisk (*) entry as it is.

Important

- If a zone is set, the zone name must be entered. If the name of a zone where the
 printer is not located is entered, then the Macintosh computer can no longer
 recognize the printer. Contact your network system administrator for more details
 about the zone name.
- 8 Click the OK button.
- **9** When you return to the Network screen of the Device Manager, click the Reset button.

The printer network interface restarts and enables the settings.

This completes the printer protocol settings.

Installing the Printer Driver

After completing the printer protocol settings, install the printer driver on every Macintosh that will be used for printing and perform the print destination settings. The printer driver for the printer must be installed for printing. Install the printer driver. (→ Setup Guide)

Follow the instructions in the Setup Guide to install the printer driver. Selecting the printer in the Chooser completes the printer driver installation for Mac OS 8/9. For Mac OS X, open Print Center and use the Add Printer feature to add the printer and complete the printer driver installation.

NetWare[®] Settings (Windows)

The chapter describes the setting methods and procedures for connecting the printer to a NetWare[®] network.

Procedures Required for a NetWare® Network

Here is a summary of the procedures required to set the printer for use on a NetWare[®] network.

Connect the network cable

→Setup Guide

Follow the instructions in the Setup Guide to connect the network cable.

2 Setting the Printer Frame Type

→P.4-3

Set the frame type to select the printer protocol. Then perform the communication setup between your printer and computer using the following software.

• GARO Device Setup Utility (Canon software application provided with the printer.)

3 Setting Up a NetWare® Print Service

→P.4-6

Perform the settings for the NetWare[®] service. You can perform these settings on the computer with one of the following applications:

• NWADMIN or PCONSOLE (Novell software application provided with NetWare®)

4 Setting NetWare[®] Printer Protocol

→P.4-11

Perform this procedure to set the printer protocol. You can perform these settings with the web browser from a computer on the network:

• Web Browser (Remote UI)

5 Setting the Computer for NetWare[®]

→P.4-18

Perform these settings on every computer to be used with the printer.

Important

• Steps 1, 2, 3, 4 should be performed by the network system administrator.

Setting the Printer Frame Type

Before setting the printer protocol, you must follow the procedure below to set the printer frame type to enable communication between the computer in use and the printer. Use the software application below.

• GARO Device Setup Utility (→ P.4-4)

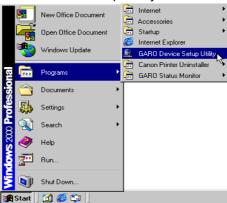
Important

- The GARO Device Setup Utility must be installed on your computer in order to use this utility to make the settings. Ask your system administrator to install the GARO Device Setup Utility on your computer. (→ Setup Guide)
- Before setting the Frame Type, confirm that the printer is switched on and connected to the network.
- The MAC address is required to perform the setting with the GARO Device Setup Utility. If you need to confirm the MAC address, use the printer operation panel to print a Status Print.
 - 1. Press Online to display MAIN MENU.
 - 2. Press ≺ or ➤ to select Test Print then press ∨.
 - 3. Press ≺ or ➤ to select Status Print then press Enter.

Setting the frame type with GARO Device Setup Utility

If you are using Windows, use the GARO Device Setup Utility, the software utility provided with the printer, to perform the printer network settings.

1 On the desktop, click the Start button, point to Programs, then click GARO Device Setup Utility.



2 Click the Settings button.

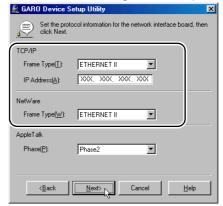


3 Enter the MAC address into the MAC Address box then click the Next button.



The utility searches for the printer on the network and when the printer is found, the protocol settings dialog box opens.

4 For the NetWare Frame Type, select the frame type in use from the list, for TCP/IP Frame Type select ETHERNET II, for IP Address enter the IP address assigned to the printer, then click the Next button.





- The IP address setting is required here to enable the printer protocol setting to be conducted with the Web browser (Remote UI).
- **5** Confirm the settings then click the Finish button. The printer frame type protocol settings are changed.

Setting Up a NetWare® Print Service

In order to print on a NetWare[®] network, you must set the printer server, queue, and other settings. You can use the software applications below to perform the print service settings from the computer that you are using.

 NWADMIN or PCONSOLE (Novell software applications provided with NetWare[®])

Important

- If you perform the print service settings with NWADMIN, Novell Client (the Novell NetWare[®] client) must be installed as the client software application.
- The following procedure describes the print service settings for NetWare[®]. The procedure may be slightly different for your network environment.

Types of Print Services

Before performing the print service settings, be sure to read the description below then select the printer service type.



- You can also NDPS as the print service for NetWare[®] 5.xJ. If you use NDPS as the print service, for the gateway use the Novell printer gateway provided by Novell. The setup procedure for NDPS is not described in this manual, so please refer to your NetWare[®] instructions for details.
- NDS (Novell Directory Service) and Bindery
 Both NDS and Bindery are compatible. You can select either, depending on the requirements of your network environment.
- Queue server mode and remote printer mode
 The queue server mode and the remote printer mode are both compatible.
- Queue server mode

When the queue server mode is used, the hardware and software for other print servers is not required because queue server mode contains all the print server functions. In NDS queue server mode (NDS PServer), the NDS print server is used to print. In the bindery queue server mode (Bindery PServer), the bindery print server is used to print. In the queue server mode, one NetWare[®] license is required for every network interface used in the network.

Remote printer mode

When the remote printer mode is used, the printer is controlled by the NetWare[®] print server, so a NetWare[®] print server is required. An NDS print server is used to print in the NDS remote printer mode (NPrinter), and a bindery print server is used to print in the bindery remote printer mode (RPrinter).

Setting Up a NetWare® Server with NWADMIN and PCONSOLE

■ Using NDS Queue Server Mode/Remote Printer Mode

1 Log into NetWare[®] as the System Administrator, or as a user with equivalent access rights, then start NWADMIN.

2 Execute a quick setup.

- ▼ From the Tools menu select Print Services Quick Setup.
- ▼ For Print Server name enter the desired name. To use an existing name, click the button on the right, then select the name from the list.
- ▼ For Name of the printer, enter the desired name.
- ▼ To use the queue server mode, select Other/Unknown for Type. To use the remote printer mode, select Parallel for Type, click the Communication button, select LPT1 for Port, then select Manual Load for Connection type.
- ▼ For Name of the print queue, enter the desired name.
- For Volume, enter the volume object (the physical volume to be designated on the network) that the queue will be created.
 Click the button on the right and select it from the list.
- ▼ Make the other settings, then click the OK button.



- Make a note to record the print server name. You will need to know the print server name when you perform the printer protocol settings.
- When a quick setup is executed, the printer is assigned the number "0". To use the printer in the queue server mode, do not change "0" to any other number.

3 Set the password.

- Select the print server created in Step 2, then right-click Details.
- Click the Change Password button to open the password entry screen, then enter the desired password.
- ▼ Click the OK button to close the password entry screen.
- ▼ Click the OK or Cancel button to close the Details screen.

- **4** To use the remote printer mode, use the following procedure to start the print server.
 - ▼ To use the NetWare[®] file server as the print server, on the file server enter LOAD PSERVER.NLM then press the Enter key.



• This procedure is not required for the queue server mode.

This completes the settings for NetWare® Print Service. Now, you are ready to set the printer protocol settings. (→ P.4-11, "Setting NetWare® Printer Protocol")

■ Using Bindery Queue Server/Remote Printer Mode

- Log into NetWare[®] as the Supervisor, then start PCONSOLE.
- **2** Follow the procedure below to create the print server if one has not been created.
 - ▼ From Available Options select Quick Setup, then press the Enter key.
 - ▼ Enter the name of the print server to create and enter the names of the new printer and the queue.



- Make a note to record the print server name. You will need to know the print server name when you perform the printer protocol settings.
- Set the printer type.
 - ▼ To use the queue server mode, select Other/Unknown for Printer type. To use the remote printer mode, select Parallel for Printer type, then select Manual Load for Location.
 - Press the ESC key.
 - ▼ When the confirmation box is displayed, click Yes then press the Enter key.

- **4** Set the password.
 - ▼ From Available Options select Print Servers, then press the Enter key.
 - ▼ Select the print server created in Step 2, then press the Enter key.
 - ▼ Select Password, then press the Enter key. When the password entry screen opens, enter the desired password, then press the Enter key.
- **5** Press ESC several times to display the confirmation to close PCONSOLE, then click Yes to close PCONSOLE.

This completes the settings for NetWare® Print Service. Now, you are ready to set the printer protocol settings. (→ P.4-11 "Setting NetWare® Printer Protocol")

Setting NetWare® Printer Protocol

To perform the printer protocol settings, use your Web browser on your computer with the Remote UI, the software built into the network interface. Perform the protocol settings on Web browser, after you finish setting the IP address for the printer on the operation panel. (\rightarrow Setup Guide, Chapter 2, "Setting the Printer Network Information")

Setting up with a Web Browser (Remote UI)

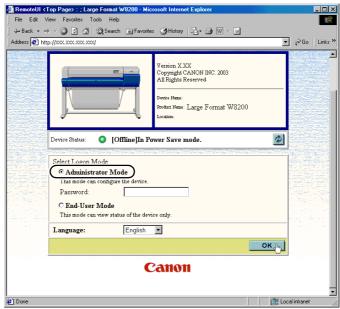
Start the Web Browser, enter the following URL for the Address, then press the Enter key.

http://<Printer IP address or name>/ Example: http://xxx.xxx.xxx/

Important

- For the Web Browser, use Netscape Navigator/Communicator 4.04 or later, or use Internet Explorer 4.01SP1 or later. However, Netscape Navigator Version 6 or later is not compatible.
- A connection through a Proxy Server cannot be used. If you are using a network environment with a Proxy Server, use the "Proxies" server setting in the Web Browser to add the printer IP address to the "Exceptions" text box (the address not used by the Proxy Server). (Performing this setting may differ, depending on the network environment.)
- Use the Web Browser to enable JavaScript and Cookie so these features can be used.
- If more than one Remote UI is being used, then the most recently used settings remain enabled. Starting and using only one Remote UI at a time is recommended.

Click and select Administrator Mode then click the OK button.



The Remote UI starts.



• If a password has been set for the printer, enter the password and click the OK button. If no password has been set, then a password entry is not required.

From the Device Manager menu on the left, select Network.



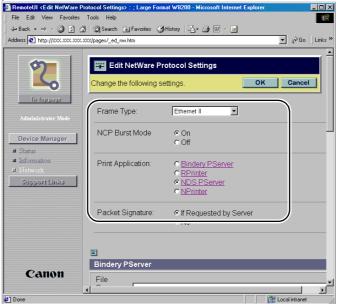
The Network page opens.

Click the Edit button to the right of NetWare.



The Edit NetWare Protocol settings page opens.

5 Check the Frame Type box and make sure the setting is correct for your NetWare[®] network.



6 If you intend to use the burst mode, select On for NCP Burst Mode.

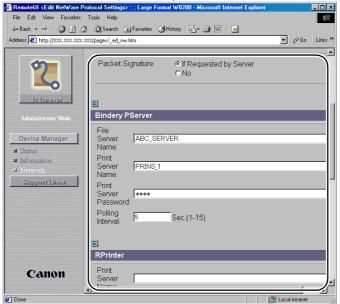


- The burst mode is used in the queue server mode to transfer data rapidly at very high speed during printing.
- Normally, leave this setting on.
- **7** For Print Application select the service to use.



• Only one service can be selected here and enabled. More than one service cannot be enabled at the same time here.

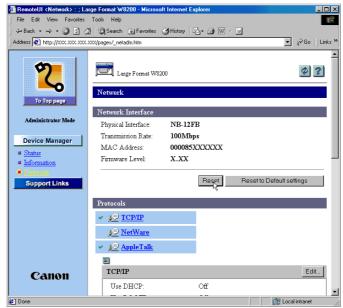
8 When using the Packet Signature settings, for Packet Signature be sure to select If Requested by Server.



- **9** Perform the following settings as required for the selected service.
 - BINDERY PSERVER Selected: Queue Server Mode (Using a Bindery Print Server)
 - ▼ Enter the file server name into File Server Name.
 - For Print Server Name, enter the name of the print server created in "Setting Up a NetWare® Print Service" (→ P.4-6).
 - For Print Server Password, enter the print server password created in "Setting Up a NetWare[®] Print Service" (→ P.4-6).
 - ▼ Set value for Polling Interval. Set the interval that the printer will confirm with the NetWare[®] print queue.

- RPRINTER Selected: Remote Printer Mode (Using a Bindery Print Server)
 - For Print Server Name, enter the advertising name for the print server created in "Setting Up a NetWare[®] Print Service"
 (→ P.4-6). The advertising name is normally set the same name as Print Server Name.
 - For Printer Number, enter the same printer number that you entered in "Setting Up a NetWare[®] Print Service" (→ P.4-6).
- NDS PSERVER Selected: Queue Server Mode (Using an NDS Print Server)
 - ▼ For Tree Name and Context Name, enter the tree name and context name of the print server. Context Name is limited to 255 characters.
 - For Print Server Name, enter the name of the print server created in "Setting Up a NetWare[®] Print Service" (→ P.4-6).
 - For Print Server Password, enter the print server password created in "Setting Up a NetWare® Print Service" (→ P.4-6).
 - ▼ Set value for Polling Interval. Set the interval that the printer will confirm with the NetWare[®] print queue.
- NPRINTER Selected: Remote Printer Mode (Using an NDS Print Server)
 - For Print Server Name setting, enter the advertising name for the created print server in "Setting Up a NetWare[®] Print Service" (→ P.4-6). The advertising name is normally set the same name as Print Server Name.
 - For Printer Number, enter the same printer number that you entered in "Setting Up a NetWare[®] Print Service" (→ P.4-6).
- **10** Click the OK button.

11 When you return to Network of Device Manager, click the Reset button.



The new settings are enabled when the network interface is restarted.

This completes the NetWare® protocol settings.

Setting the Computer for NetWare®

Perform these settings for each computer after you have selected the NetWare[®] print service and protocol.

Connecting to a NetWare® Network

Install the NetWare® Client software on every computer to be used for printing then log onto the NetWare® server or tree. For details about the how to connect, refer to your NetWare® or operating system instructions.

Installing the Printer Driver

The printer driver is required for printing. Install the printer driver retaining the network administrator's instruction.

When you install the printer driver, be sure to select Network Printer and select the print queue that you created with the NetWare® print service settings.

Setting the Printer Port

On the desktop, click the Start button, point to Settings, then click Printers. Click the printer icon, then from the File menu select Properties. Click the Details or Port tab, then for the destination port select the print queue that you created with the NetWare[®] print service settings. $(\rightarrow P.4-6)$



• This procedure is not required if you selected the port connection during the printer driver installation.

5 Troubleshooting

This chapter describes how to solve problems that may occur during operation of the printer.

When You Cannot Use GARO Device Setup Utility

This section describes how to solve problems with the GARO Device Setup Utility.

GARO Device Setup Utility does not recognize printer

Problem 1: The printer is not switched on.

Solution: Check the printer power cord connection and the connection to the power source, then press the Power button on the printer.

Problem 2: The printer LAN port and cable are not connected correctly.

Solution: Confirm that the connection of the cable that connects the printer to the network is secure, then press the Power button to cycle the printer off and on again. (\(\rightarrow\) Setup Guide).

Problem 3: The printer cannot recognize automatically the LAN communication method.

Solution: Set the DIP SW on the back of the printer to the correct position for the LAN in use. (→ Setup Guide)

Problem 4: The computer and printer are not in the same subnet.

Solution: Install the GARO Device Setup Utility on the computer in the same subnet as the printer, then perform the network settings. For details about the computer network settings, contact your system administrator.

When You Cannot Print

This section describes how to solve printing problems.

Cannot print for a TCP/IP network.

Problem 1: The LAN port and network cable are not connected correctly.

Solution: Make sure that the correct type of cable is used to connect the printer to the network. Cycle the printer off and on then try again. (→ Setup Guide)

Problem 2: The printer cannot recognize automatically the LAN communication method.

Solution: Set the DIP SW on the back of the printer to the correct position for the LAN in use. (→ Setup Guide)

Problem 3: The TCP/IP network is not set correctly.

Confirm that the Frame Type and IP Address settings are correct. Solution:

Problem 4: The computer settings on the computer used for printing are not set correctly.

Solution: Check the following points:

- Make sure that the correct printer driver has been installed. In order to perform print jobs with Windows, the correct printer driver and the LPR port must be installed for each operating system. (→ Setup Guide)
- Make sure that correct printer port (print output destination) has been selected for the printer to be used for printing. In the Control Panel open the Printer folder and then check the output destination.
- If you are using Windows XP or Windows 2000, click the Configure Port button on the Port sheet of the Printer Properties then confirm that LPR protocol is selected. This printer does not support the RAW protocol.

Problem 5: The print file name is too long.

Solution: Normally, LPR (with Windows NT: Microsoft TCP/IP printing) sends a job file name, created from the name of the application software used for printing or the name of printed file. However, if the length of this job name exceeds 255 bytes, the job cannot be sent normally. To correct this, shorten the file name of the file selected for printing.

Cannot print from an AppleTalk network.

Problem 1: The LAN port and network cable are not connected correctly.

Solution: Make sure that the correct type of cable is used to connect the printer to the network. Cycle the printer off and on then try again. (→ Setup Guide)

Problem 2: The printer cannot recognize automatically the LAN communication method.

Solution: Set the DIP SW on the back of the printer to the correct position for the LAN in use. (→ Setup Guide)

Problem 3: The AppleTalk network is not set correctly.

Solution: With the Remote UI confirm that each AppleTalk item is set correctly. Pay special attention to the following settings:

- Phase Type: A phase type must be enabled.
- Zone: The name of the zone where the printer is located must be entered.

Problem 4: The settings for the computer used for printing are not set correctly.

Solution: If you are using Mac OS 8.6/9.x, confirm the following points:

- Make sure that the correct printer driver is installed in the Chooser.
- In the Chooser, make sure that the correct printer is selected as the print destination.
- In the Chooser, make sure that AppleTalk is Active.
- In the AppleTalk item of the Control Panel, make sure that Built-in Ethernet is selected as the AppleTalk connection method. If network interface board has been added to the Macintosh, make sure that the correct name of the port where the printer is connected is selected.

Solution: If you are using Mac OS X, confirm the following points:

- Make sure AppleTalk is Active for the Built-in Ethernet setting under Network on the System Preferences panel.
- Make sure that printer driver for this printer is installed correctly.
- In the Print Center confirm that this printer is selected as the default printer.

Cannot Print from the NetWare® Network

Problem 1: The LAN port and network cable are not connected correctly.

Solution: Make sure that the correct type of cable is used to connect the printer to the network. Cycle the printer off and on then try again. (→ Setup Guide)

Problem 2: The printer cannot recognize automatically the LAN communication method.

Set the DIP SW on the back of the printer to the correct position for the Solution: LAN in use. (→ Setup Guide)

Problem 3: The NetWare® network is not set correctly.

Check the following points: Solution:

- Make sure that the NetWare® file server is running.
- Make sure that sufficient disk space is available on the NetWare® file server. If sufficient space is not available, then large print jobs cannot be executed.
- Start NWADMIN or PCONSOLE and confirm (1) that the print service is set correctly, and (2) that the print queue has been enabled for use. ("Setting Up a NetWare[®] Print Service" (\rightarrow P.4-6))
- Make sure that the network settings for the printer are correct. (→ "Setting the Printer Frame Type" (→ P.4-3), "Setting NetWare[®] Printer Protocol" (\rightarrow P.4-11)) Confirm that the frame type selection specifies an enabled frame type.

Problem 4: The computer used to start the print job is not set up correctly.

Solution: Confirm the following points:

- Make sure that the correct printer driver has been installed. In order to perform print jobs, the correct printer driver must be installed for each operating system. (→ Setup Guide)
- Make sure that correct printer port has been selected for the printer to be used for printing. In the Control Panel open the Printer folder and then check the connection with the Properties command in the File menu.
- Problem 5: A print job data stream cannot be sent from the NetWare® server to a printer in another subnet.

When a print job data stream is sent from the NetWare® server, the data is Solution: sent in the NCP burst mode, and the data transfer to a printer on another subnet may fail, depending on the network environment that you are using. In this case, at the printer protocol setting, set the NCP burst mode to off.

Problem 6: When using the queue server mode, the printer type setting appears set for Parallel.

Solution: Select Other/Unknown for the Printer Type setting.

6 Other Important Information

This chapter contains additional information for your reference.

Initializing Network Settings

Follow the procedure below to use the Web browser (Remote UI) to restore all the network settings to the default values set before shipping the printer from the factory.

Note

- In addition to using the Web browser to restore the initial settings, you can also use the printer operation panel to restore the network default settings.
- 1 Start the Web Browser, enter the following URL for the Address, then press the Enter key.

http://<Printer IP address or name>/
Example: http://XXX.XXX.XXX.XXX/

2 Click and select Administrator Mode then click the OK button. The Remote UI starts.

Note

- If a password has been set for the printer, enter the password and click the OK button. If no password has been set, then a password entry is not required.
- **3** From the Device Manager menu on the left, select Network.
- 4 Click the Reset to Default settings button.
- **5** Confirm the message then click the OK button.

 All the network information is restored to the factory default settings.

List of Network Settings

If you are using a Web browser (Remote UI), you can change the settings of the network interface board. The settings that can be changed are listed in the tables below.

■ General Settings

Item	Description	Initial Value
Device Name	Device name (Range: 0 to 32 chars.)	Blank
Location	Device location (Range: 0 to 32 chars.)	Blank
Administrator	Name of Administrator for the device (Range: 0 to 32 chars.)	Blank
Phone	Telephone number of the Administrator (Range: 0 to 32 chars.)	Blank
Comment (E-mail)	Administrator Comments (Range: 0 to 32 chars.)	Blank
Password	Device password (Range: 0 to 15 chars.)	Blank

■TCP/IP Settings

Item	Description	Initial Value
Address for DHCP	The setting in the IP address that determines whether DHCP is used.	Off
Address for BOOTP	The setting in the IP address that determines whether BOOTP is used.	Off
Address for RARP	The setting in the IP address that determines whether RARP is used.	Off
IP Address	The IP address of the printer.	192.168.0.215
Subnet Mask	The subnet mask	255.255.255.0
Gateway Address	The gateway address.	0.0.0.0

■ AppleTalk Settings

Item	Description	Initial Value
Phase Type	The name of the phase type in use (determines whether Apple Talk is used)	Phase 2
Name	The name of the printer displayed in the Chooser or the Print Center. Name length: 1 to 31 characters.	Canon NB-12FB
Zone	The name of the printer zone. Name length: 1 to 31 characters.	*

■ NetWare[®] Settings

Item	Description	Initial Value
Frame Type	The frame type used by NetWare [®] .	Disabled
NCP Burst Mode	Determines whether the NCP burst mode is used. (Normally, leave this setting on.)	ON
Print Application	The print service to use. (Only one print service can be selected and enabled.)	NDS PServer
Packet Signature	Determines whether the packet signature is used. (Normally leave set to "If Requested by Server".)	If Requested by Server
Bindery PServer		
Print Server Name	Name of the NetWare [®] printer server in use. (Range: 0 to 47 chars.)	Blank
File Server Name	Name of the NetWare [®] file server of the NetWare [®] print server. (Range: 0 to 47 chars.)	Blank
Print Server Password	The password required by the print server setting. (0 to 20 chars.)	Blank
Polling Interval	The time interval between job confirmations. (Range: 1 to 15 sec.)	5

Item	Description	Initial Value	
NDS PServer			
Print Server Name	The name of the NetWare® print server in use. (Range: 0 to 64 chars.)	Blank	
Tree Name	The name of the NDS tree of the NetWare® print server. (Range: 0 to 32 chars.)		
Context Name	The name of the context of the NetWare [®] Print server. (Range: 0 to 255 chars.)		
Print Server Password	The password required by the print server setting. (0 to 20 chars.)	Blank	
Polling Interval	The time interval between job confirmations. (Range: 1 to 255 sec.)	5	
RPrinter			
Print Server Name	The name of the NetWare® print server in use. (Range: 0 to 47 chars.)	Blank	
Printer Number	The number used for the printer connection to the NetWare® print server. (Range: 0 to 15)		
NPrinter			
Print Server Name	The name of the NetWare® print server in use. (Range: 0 to 64 chars.)		
Printer Number	The number used for the printer connection to the NetWare [®] print server. (Range: 0 to 254)		

Software Applications that Use Network Settings

Network settings can be performed with the software applications listed in the table below.

Setting	GARO Device Setup Utility	Web Browser (Remote UI)	ARP/PING Command	Printer Operation Panel
Setting IP Addresses (→ P.2-3)	Yes	Yes	Yes	Yes
TCP/IP Protocol Settings (→ P.2-8)	Yes*1	Yes	No	No
AppleTalk Protocol Settings (→ P.3-3)	Yes*1	Yes	No	No
NetWare [®] Print Service Settings (→ P.4-6)	No	No	No	No
NetWare [®] Protocol Settings (→ P.4-11)	Yes*1	Yes	No	No

^{*1.} Only these can be set: IP Address, Frame Type, Phase.

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