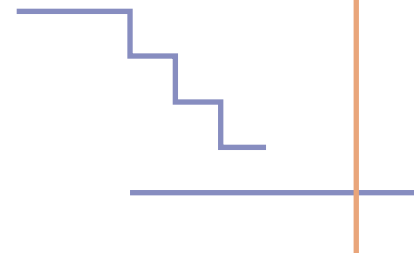




# Color Controller RC-200

## OPERATING INSTRUCTIONS



## **Introduction**

This manual contains detailed instructions on the operation and maintenance of this machine. To get maximum versatility from this machine all operators should carefully read and follow the instructions in this manual.

Please read the Safety Information in the "Copy Reference" 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.

## **Trademarks**

RICOH-SCRIPT2® is a registered trademark of Ricoh Company.

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

Ethernet® is a registered trademark of Xerox Corporation.

Adobe®, PostScript®, Acrobat® and PageMaker® are registered trademarks of Adobe System Incorporated.

AppleTalk, Apple, Macintosh, TrueType, LaserWriter and ColorSync are registered trademarks of Apple Computer, Incorporated.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights in those marks.

## **Warning:**

Use of controls or adjustment or performance of procedures other than those specified in this manual might result in hazardous radiation exposure.

## **Notes:**

Some illustrations might be slightly different from your machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

## **Note**

The proper names of Windows operating system are as follows:

- Microsoft® Windows® 95 operating system
- Microsoft® Windows® 98 operating system
- Microsoft® Windows NT® Server operating system Version 4.0
- Microsoft® Windows NT® Workstation operating system Version 4.0

## Note to users in the United States of America

### Notice:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one more of the following measures:

**Reorient or relocate the receiving antenna.**

**Increase the separation between the equipment and receiver.**

**Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.**

**Consult the dealer or an experienced radio/TV technician for help.**

### Warning

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### Caution (in case of 100BASE-TX environment):

Properly shielded and grounded cables (STP) and connectors must be used for connections to host computer (and/or peripheral) in order to meet FCC emission limits.

STP with ferrite core must be used for RF interference suppression.

### Declaration of Conformity

Product Name: Printer Controller

Model Number: Color Controller RC-200

Responsible party: Ricoh Corporation

Address: 5 Dedrick Place, West Caldwell, NJ 07006

Telephone number: 973-882-2000

This device complies with part 15 of FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

### Note to users in Canada

#### Note:

This Class B digital apparatus complies with Canadian ICES-003.

#### Remarque concernant les utilisateurs au Canada

#### Avertissement:

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

# Manuals for this Machine

There are five manuals that describe the operational procedures separately for the operation and maintenance of the machine.

This manual, the Printer Reference, contains detailed instructions for using this machine as a printer.

To ensure safe and efficient operation of the machine, all users should read and follow the instructions contained in the following manuals.

- ❖ **Operating Instructions that Describes the Copy Functions**

Describes the procedures and functions for using this machine as a copier.

- ❖ **Printer Reference Provided as a Paper Manual**

Describes the system settings, procedures and functions for using this machine as a printer. (This Manual)

- ❖ **Printer Reference Provided as a PDF File**

Describes the procedures and provides necessary information on using this machine as a printer. The manual is included as a PDF file in the CD-ROM.

- ❖ **RICOH-SCRIPT2 Operating Instructions**

Describes the menus and features you can set using the RICOH-SCRIPT2 printer driver. The manual is included as a PDF file in the CD-ROM.

- ❖ **Network Interface Board Operating Instructions**

Describes the procedures and provides necessary information on setting up and using the printer under the network environment. The manual is included as a PDF file in the CD-ROM.

# How to Read this Manual

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## Symbols

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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.

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## 2. Configuring the Printer for the Network with the Operation Panel

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## 3. Installing the Printer Driver and Software

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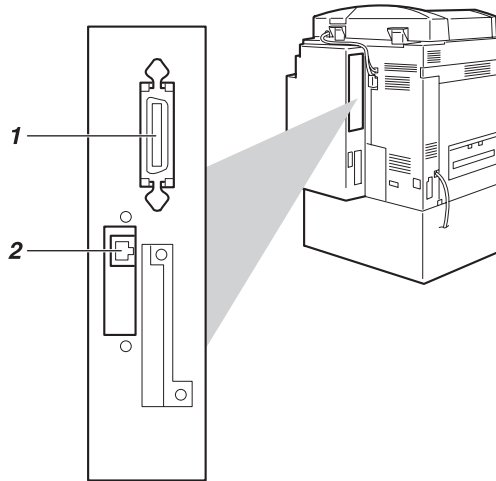
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# 1. Getting Started

## Connecting the Machine

Confirm that the shape and the position of the connectors are as shown in the illustration.



TBEH010N

1. Parallel Port

2. 10BASE-T/100BASE-TX

---

## Requirements

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### Requirements

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Before using this machine, confirm that all the environmental and electrical requirements have been met. Connect the machine to your host computer using the Parallel Port, Network Interface Board, or both.

Confirm that all the cables, connectors, and electrical outlets necessary to attach the machine to your host computer or network are present.

### Reference

For more information on using the Parallel Port, see P.4 *“Connecting the Machine to the Host Using a Parallel Cable”*

For more information on using a network, see P.2 *“Network connections”*



**Network connections**

The Network Interface Board supports 10BASE-T or 100BASE-TX connections.

You can use the machine in the following network environments:

- Using the appropriate network management software and printer driver.
- Attaching the machine to a networked computer set up as a server.

<b>Client</b>	Windows 95, 98, NT 4.0 *1 , Mac OS 7.6~8.6 *2
<b>Driver</b>	IPDL-C, RICOH-SCRIPT2
<b>File Server</b>	NetWare 3.x, NetWare 4.x, NetWare 5
<b>Protocol</b>	IPX/SPX, TCP/IP, AppleTalk, NetBEUI *3

\*1 Under Windows NT 4.0, only x86 CPU is supported.

\*2 Only RICOH-SCRIPT2 is available.

\*3 Under Windows 95/98/NT 4.0 only.

In a mixed network environment, the protocol switches automatically.

 **Reference**

For more information on resolving network connection problems, see the "Operating Instructions" of Network Interface Board included as a PDF file in the CD-ROM.

 **Note**

- Consult your network administrator before connecting the machine to a network.

 **Important**

- Rating voltage of the 10BASE-T/100BASE-TX connector; Max. DC 5V.

**Parallel cable requirements**

Connect the machine to the host computer using a Parallel Port. This machine does not provide the parallel cable to connect the machine to the host computer.

The machine's parallel interface is a standard bi-directional interface. It requires a standard 36-pin parallel cable compliant with IEEE 1284 and a Parallel Port available on the host computer.

 **Note**

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

 **Important**

- Rating voltage of the parallel interface connector for the computer; Max. DC 5V.

## Connecting the Machine Using the Network Interface Board

Connect the machine to the network using the Network Interface Board.

Follow these steps to connect the machine.

### 1 Confirm that you have the correct cable.

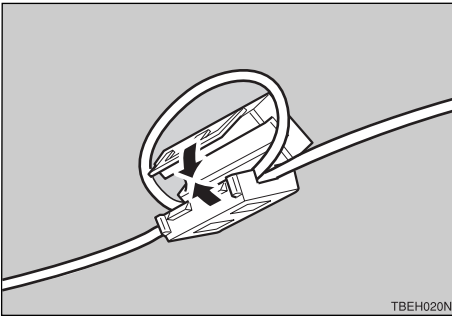
#### Note

- In a 100BASE-TX environment, be sure to use a properly shielded and grounded cable (STP) for the connection to your host computer (and/or HUB) in order to meet FCC and EMC Directive 89/336/EEC emission guidelines.

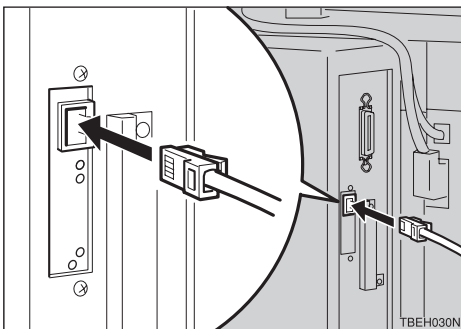
### 2 Confirm that the machine is turned off.

### 3 Loop the network interface cable. The loop should be about 15 cm (6") from the end of the cable on the end closest to the printer.

### 4 Attach the ferrite core to the loop.



### 5 Attach the network interface cable to the 10BASE-T/100BASE-TX port on the printer.



#### Reference

See P.1 "Connecting the Machine" to be sure of the position of the 10BASE-T/100BASE-TX port.

 **Note**

- Confirm that the cable is connected to the 10BASE-T/100BASE-TX port.

 **Important**

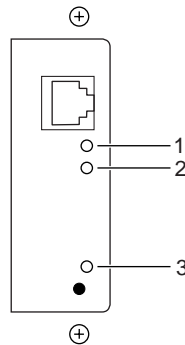
- Rating voltage of the 10BASE-T/100BASE-TX connector; Max. DC 5V.

**6** Connect the other end of the cable to the network.

---

### Indicators on the Network Interface Board

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**1. Indicator (green)**

Is on while the machine is in a network environment.

**2. Indicator (green)**

Is on while the 100BASE-TX is working.  
Stays off while 10BASE-T is working.

**3. Indicator (orange)**

Is on while the Network Interface Board is working.

---

### Connecting the Machine to the Host Using a Parallel Cable

---

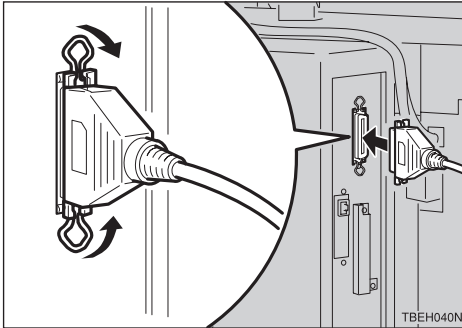
Connect the machine to the host computer using a parallel cable compliant with IEEE 1284 (supplied by you).

Follow these steps to connect the machine to your host computer.

**1** Confirm that you have the correct cable.

**2** Confirm that both the machine and the host computer are turned off.

- 3 Plug the 36-pin end of the parallel cable into the Parallel Port of the printer.



#### Reference

See P.1 "Connecting the Machine" to be sure of the position of the Parallel Port.

#### Important

- Rating voltage of the parallel interface connector for the computer; Max. DC 5V.

- 4 Squeeze the wire clips on each side of the connector together until they snap into place. The clips hold the cable securely in place.
- 5 Plug the other end of the parallel cable into the computer's Parallel Port.

# Features of this Machine

This printer is designed especially for office workgroups, both for shared usage within a network environment, and for one-to-one usage by being connected directly to your computer.

## ❖ Effective Performance with Windows

This printer provides you with rapid and high quality color printing under the Windows environment.

## ❖ PostScript Capabilities

Using RICOH-SCRIPT2 provides your printer with PostScript capabilities. You can use the printer in Windows or Macintosh environments.

## ❖ Time Saving

You can reduce the amount of time you spend printing.

- Printing Speed <sup>\*1</sup>

	Simplex machine	Duplex machine
Monochrome	14 ppm	18 ppm
Full color	4 ppm	4 ppm

<sup>\*1</sup> A4  $\square$ , 8<sup>1</sup>/<sub>2</sub>" $\times$ 11"  $\square$ , maximum printing speed.

## ❖ Network Connectivity

The printer is network ready with the Network Interface Board.

## ❖ Easy Handling for Administration

You can set up User Codes for individuals or as a unit of a department. This allows you to keep records of the printing done for each User Code. You can also set up a User ID for each print job. To print a job log or a statistics report shows you color category, result and status of printing per each User Code and User ID. Viewing the contents of a job log or a statistics report through the PRINTER MANAGER is available.

Maximum 100 User Code and 64 User ID can be set.

## ❖ Major Specifications

Maximum Print Quality	600 dpi resolutions
Printer Language	IPDL-C RICOH-SCRIPT2 <sup>*1</sup>
Maximum Input Paper Size	Paper Type: A3, 11" $\times$ 17" Bypass Tray: 12" $\times$ 18"(DL+)
Standard and Maximum Memory Size	96MB

<sup>\*1</sup> Emulations

## Printer Drivers for this Machine

Printing requires installation of a printer driver for your operating system. The following drivers are included in the CD-ROM that comes with this machine.

Operating system	Printer Language	IPDL-C	RPS2 *1
Windows 95 *2		√	√
Windows 98 *3		√	√
Windows NT 4.0 *4		√	√
Mac OS *5			√

\*1 RICOH-SCRIPT2

\*2 Microsoft Windows 95 operating system

\*3 Microsoft Windows 98 operating system

\*4 Microsoft Windows NT Server operating system version 4.0, Microsoft Windows NT Workstation operating system version 4.0

\*5 Required system is 7.6 ~ 8.6.

### ❖ IPDL-C printer drivers

IPDL-C printer drivers are included in the CD-ROM that comes with this machine. IPDL-C printer drivers allow the computer to communicate with the printer via a printer language.

⇒ P.23 *“Installing the IPDL-C Printer Driver”*

⇒ P.24 *“Windows NT 4.0 - Installing the IPDL-C Printer Driver”*

### ❖ RICOH-SCRIPT2 Printer Drivers and PPD (PostScript Printer Description) files

RICOH-SCRIPT2 printer drivers and the PPD files are included in the CD-ROM that comes with this machine. RICOH-SCRIPT2 printer driver allows the computer to communicate with the printer via a printer language. The PPD files allow the printer driver to enable printer specific functions.

⇒ P.25 *“Windows 95/98 - Installing the RICOH-SCRIPT2 Printer Driver”*

⇒ P.27 *“Windows NT 4.0 - Installing the RICOH-SCRIPT2 Printer Driver”*

⇒ P.31 *“Macintosh”*

## Software and Utilities Included in the CD-ROM

### ❖ PRINTER MANAGER FOR ADMINISTRATOR

A utility for the system administrator to manage printers on the network.

#### Reference

For the name of the PRINTER MANAGER FOR ADMINISTRATOR, see the “Operation Instructions” for the Network Interface Board included as a PDF file in the CD-ROM.

See the PRINTER MANAGER FOR ADMINISTRATOR Online Help for details on using the PRINTER MANAGER FOR ADMINISTRATOR.

❖ **PRINTER MANAGER FOR CLIENT**

A utility for users to manage their own print jobs on the network.

 **Reference**

For the name of the PRINTER MANAGER FOR CLIENT, see the “Operation Instructions” for the Network Interface Board included as a PDF file in the CD-ROM.

See the PRINTER MANAGER FOR CLIENT Online Help for details on using the PRINTER MANAGER FOR CLIENT.

❖ **Multidirect Print**

A utility for printing on a "Peer-to-Peer" network.

 **Reference**

For more information on Multidirect Print, see the “Operating Instructions” for Network Interface Board included as a PDF file in the CD-ROM.

❖ **Acrobat Reader**

A utility that allows you to read PDF (Portable Document Format) files.

 **Note**

- Documentation on using the printer is included in the CD-ROM in PDF format. For details, see the Readme text in the CD-ROM or “*Manuals for this Machine*” in this manual.

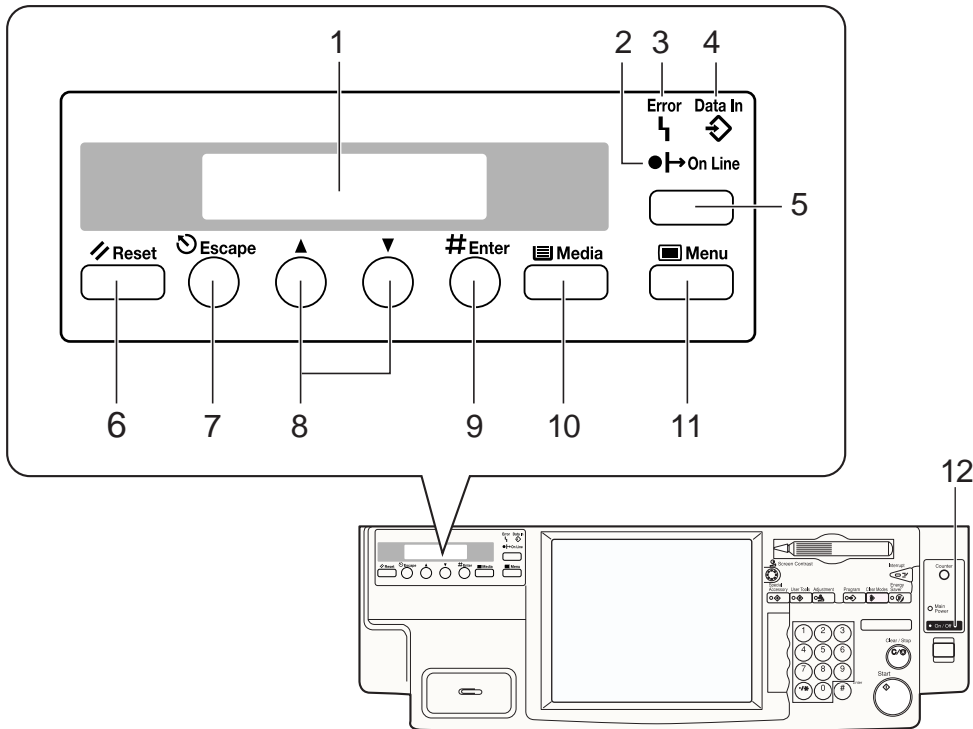
# Guide to this Machine

## Operation Panel

1

### Important

- ❑ Do not press any operation panel keys while the **Data In** indicator is flashing on the operation panel.



TBEH050N

### 1. Panel Display

The display shows the current status of the printer and error messages.

### 2. On Line Indicator

Tells you whether the printer is online or offline.

Is on while the printer is online (a state in which the printer can receive data from the computer).

Is off when the printer is offline (a state in which printer cannot receive data).

### 3. Error Indicator

Lights up whenever any printer error occurs. A message describing the cause of the error also appears on the panel display.

### 4. Data In Indicator

Blinks while the printer is receiving data from a computer.

Is on if there is data to be printed.



**5. [On Line] key**

Press this key to switch the printer between online and offline.

**6. [Reset] key**

Pressing this key when the printer is offline resets the printer to its power on default settings.

Pressing this key during the online condition cancels the ongoing print job.

**7. [Escape] key**

Press this key to return to the previous condition on the panel display.

**8. [▲][▼] keys**

Use these keys to increase or decrease values on the panel display when making settings.

**9. [# Enter] key**

Press this key to execute menu items selected on the panel display.

**10. [Media] key**

Use this key to select a tray, change the paper size, and to make other settings for printing.

**11. [Menu] key**

Press this key to make and check the printer settings.

**12. Power Indicator**

Stays on while the power is on. Stays off when the power is turned off or while the machine is in the Energy Saver mode.

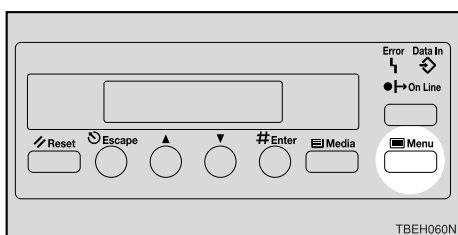
---

**Selecting the printer language**

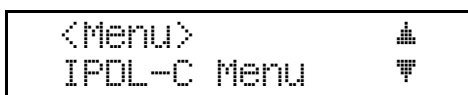

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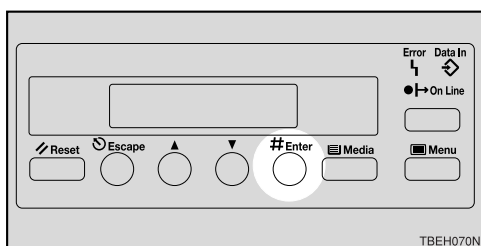
This shows how to select the printer language on the operation panel. Selecting the IPDL-C or the RICOH-SCRIPT2 (RPS2) printer language is required when you set the “menu” for each printer language.

The printer language changes automatically when printing is processed.

**1** Press [Menu].

The following message appears on the panel display.

**2** Press [▲] or [▼] to display “System Menu”.

**3** Press [# Enter].

The following message appears on the panel display.

```
<System Menu>  ▲
1.Paper Tray   ▼
```

**4** Press [▲] or [▼] to display "8. PrinterLang.".

```
<System Menu>  ▲
8.PrinterLang. ▼
```

**5** Press [# Enter].

The following message appears on the panel display.

```
<PrinterLang.> ▲
*IPDL-C        ▼
```

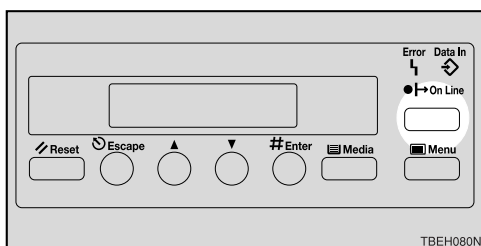
**6** Press [▲] or [▼] to display "RPS2".

```
<PrinterLang.> ▲
*RPS2          ▼
```

**7** Press [# Enter].

The following message appears on the panel display.

```
<System Menu>  ▲
8.PrinterLang. ▼
```

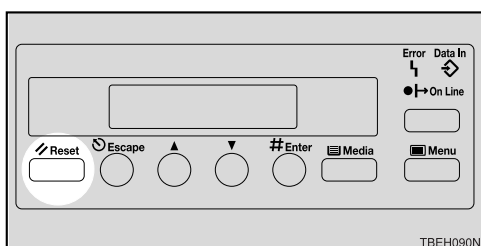
**8** Press **[On Line]**.

The following message appears on the panel display.

```
Take Offline  
Then Press Reset
```

**9** Press **[On Line]** to enter the offline mode.

The **On Line** indicator turns off.

**10** Press **[Reset]**.

The printer resets and enters the RICOH-SCRIPT2 mode.

# 2. Configuring the Printer for the Network with the Operation Panel

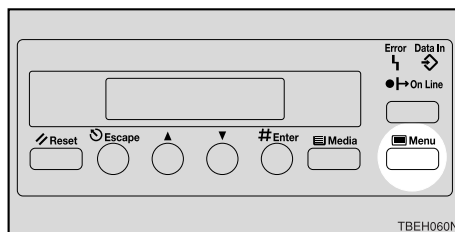
## Configuring the Printer for the Network with the Operation Panel

Configure the printer for the network using the printer's operation panel.

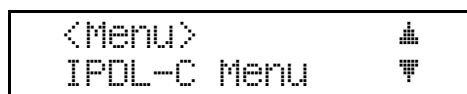
The following table shows the operation panel settings and their default settings. These are included in the "System Menu".

	Items	Default
32	IP Address	011.022.033.044
33	Subnet Mask	000.000.000.000
34	Gateway Add (Gateway Address)	000.000.000.000
35	Access CTL. (Access Control Address)	000.000.000.000
36	Access Mask (Access Control Mask)	000.000.000.000
37	Net Boot (Network Boot)	None
38	Frame NW (Frame type NetWare)	Auto Select
39	Active PTL. (Active Protocol)	All Active

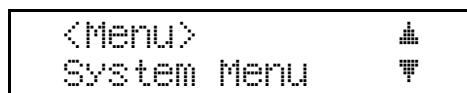
**1** Press **[Menu]**.



The following message appears on the panel display.

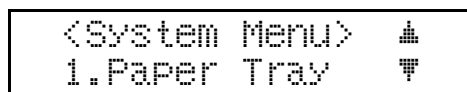


**2** Press **[▲]** or **[▼]** to display "System Menu".



**3** Press **[# Enter]**.

The following message appears on the panel display.



**4** Select the protocol you want to use. You can select one of the items on the table below.

Menu item on the panel display	Active Protocol			
	TCP *1	NW *2	ET *3	NB *4
All Active (Default Setting)	✓	✓	✓	✓
None				
TCP/IP Only	✓			
NetWare Only		✓		
TCP & NetWare	✓	✓		
EtherTalk Only			✓	
TCP & Ether-Talk	✓		✓	
NetW & Ether-Talk		✓	✓	
TCP & NW & Ether Talk	✓	✓	✓	
NetBEUI Only				✓
TCP & NetBEUI	✓			✓
NetW & Net-BEUI		✓		✓
TCP & NW & NB	✓	✓		✓
ETalk & Net-BEUI			✓	✓
TCP & ETK & NB	✓		✓	✓
NW & ETK & NB		✓	✓	✓

- ✓ means that this protocol is active.
- Blank cell means that this protocol is not active.

\*1 TCP/IP  
 \*2 NetWare  
 \*3 Ether Talk  
 \*4 NetBEUI

**Note**

❑ You should not select protocols that are not used on your network.

**1** Press [▲] or [▼] to display "39.Active PTL."



**2** Press [# Enter].

The current setting appears on the panel display.



**3** Press [▲] or [▼] to display the protocol you want to use.

**4** Press [# Enter].

The actual procedure may differ depending on the protocol you use. Follow the appropriate procedure.

TCP/IP	5▶6▶7▶8▶10
NetWare	9▶10
AppleTalk	10
NetBEUI	10

**5** If you use TCP/IP, you should assign the IP address to the printer.

**Note**

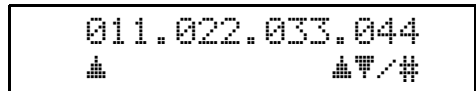
❑ To get the IP address for the printer, contact your network administrator.

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

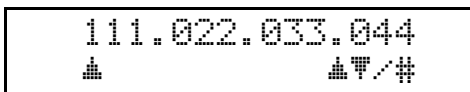


**2** Press [# Enter].

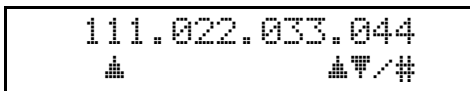
The current IP address appears on the panel display.



- 3 Press [▲] or [▼] to set the left-most digit of the IP address.



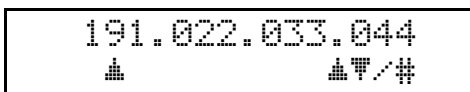
- 4 Press [# Enter].  
The pointer (▲) moves to the next digit as shown.



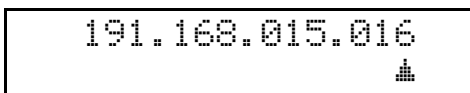
**Note**

- You can return the pointer (▲) to the previous (left) digit by pressing [Escape].
- If you press [Escape] when the pointer (▲) is on the left-most position, the selected IP address is reset.

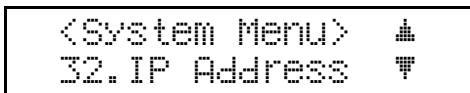
- 5 Press [▲] or [▼] to set the second digit of the IP address.



- 6 Press [# Enter].
- 7 Repeat steps 5 and 6 to set the rest digit of the IP address.



Check if the pointer (▲) is at the rightmost digit, and press [# Enter] to register the IP address you selected.



- 6 If you use TCP/IP, you should assign "33.Subnet Mask" and "34.Gateway Add" following the same procedure for setting the IP address.

- 7 If you use TCP/IP, set the "35.Access CTL." and "36.Access Mask" following the same procedure for setting the IP address, if necessary.

- 8 If you use TCP/IP, you should make settings for "37.Net Boot".

You can select how to assign the printer's address using the computer. Select one of the items on the table below.

Menu item on the panel display	Available method			
	AR *1	RA *2	BO *3	DH *4
None (Default Setting)				
RARP+TFTP		✓		
BOOTP			✓	
RARP & BOOTP		✓	✓	
DHCP				✓
ARP+PING	✓			
ARP & RARP	✓	✓		
ARP & BOOTP	✓		✓	
ARP & RARP & BOOTP	✓	✓	✓	

\*1 ARP+PING  
\*2 RARP+TFTP  
\*3 BOOTP  
\*4 DHCP

**Note**

- You must configure your server to use "RARP+TFTP", "BOOTP" or "DHCP".

- 1 Press **[▲]** or **[▼]** to display "37.Net Boot".



- 2 Press **[# Enter]**.  
The current setting appears on the panel display.



- 3 Press **[▲]** or **[▼]** to display the method you want to use.
  - 4 Press **[# Enter]**.
- 9 If you use NetWare, select the frame type for NetWare.

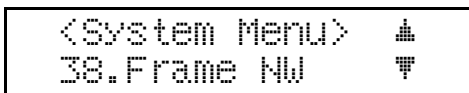
Select one of items below if necessary.

- Auto Select (Default)
- Ethernet 802.3
- Ethernet 802.2
- Ethernet 2
- EthernetSNAP

**Note**

Usually, use the default setting ("Auto Select"). However, if you select "Auto Select", the frame type detected by the printer first is adopted. If your network can use more than two frame types, the printer may fail to select the correct frame type, if "Auto Select" is selected. In this case, select the appropriate frame type.

- 1 Press **[▲]** or **[▼]** to display "38.Frame NW".



- 2 Press **[# Enter]**.  
The current setting appears on the panel display.



- 3 Press **[▲]** or **[▼]** to display the frame type you want to use.
  - 4 Press **[# Enter]**.
- 10 Reset the printer to apply the settings.

- 1 Press **[On Line]** to enter the offline condition.  
The On Line indicator turns off.

- 2 Press **[Reset]**.

- 11 Print the configuration page to check settings you have made.

- 1 Press **[Menu]**.
- 2 Press **[▲]** or **[▼]** to display "List Print".
- 3 After confirming that "Config.Page" is on the display, press **[# Enter]**.
- 4 Press **[# Enter]**.

The configuration page is now printed. Check the contents of the configuration page.

- 5 Press **[On Line]**.  
The "Ready" message appears on the panel display.

 **Address**
**❖ Subnet Mask**

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

**❖ 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 addresses, contact your network administrator.

**❖ Access Control Address and Access Control Mask**

Access Control Address and Access Control Mask are used to control the IP addresses that have access to the computer used for printing, with the IP address. If it is not necessary for you to control the access rights, select “0.0.0.0”.

 **Note**

- When the Access Control Address settings coincide with the masked result of the IP address of the computer, print jobs from that IP address can be accepted by the Network Interface Board.
- For example, if you assign 192.168.15.16 as the Access Control Address to the Network Interface Board, the combination of the Access Control Mask and IP address that can have access are as follows. (xxx : for any numerical value)

Access Control Mask	IP Address that have access
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



2

# 3. Installing the Printer Driver and Software

All of the procedures in this manual assume that you are familiar with general Windows procedures and practices. If you are not, see the documentation that comes with Windows for details.

Some applications require their own specific settings, which may be different from those provided by the printer driver. Be sure to check the documentation that comes with your applications for detail.

Considerable hard disk space is required on your computer for printing complex documents.

# Before Installing

## ❖ PRINTER MANAGER

Installable PRINTER MANAGER may differ depending on the machine. See the table below.

Name of machine	Name of PRINTER MANAGER
Ricoh Aficio Color 3006, 4006, 4106	Aficio Manager for Admin
	Aficio Manager for Client
Gestetner CS206, CS206d, CS206de Savin SDC306, SDC306A, SDC306E	Net Vision for Admin
	Net Vision for Client
Lanier 5706AG, 5706AH, 5806AG, 5806AH, 5806E AG, 5806E AH	Lanier Net Manager for Admin
	Lanier Net Manager for Client

### Note

- Do not install another version of “Administrator” or “Client” at the same time.

## ❖ User Code

- With the IPDL-C printer driver, if you want to set a User Code, you must do it when installing the printer driver.
- With the RICOH-SCRIPT2 printer driver, only **[Off]** or **[On]** can be selected. The numerical value cannot be changed. If **[On]** is selected, “99999999” is automatically set as a default. So if you want to distinguish between the RICOH-SCRIPT2 and the IPDL-C printer drivers, set the different User Code in the IPDL-C printer driver.
- In Windows 95/98, if you want to change the User Code, reinstalling the printer driver is required.
- In Windows 95/98, changing the printer name makes the User Code ineffective. If you want to set the User Code again, reinstalling the printer driver is required.

# Auto Run Program

You can install the printer driver and utilities by using the Auto Run program. Auto Run is available for the following operating systems:

- Windows 95/98
- Windows NT 4.0

If you install the RICOH-SCRIPT2 (RPS2) printer driver, Auto Run is not available.

See P.25 “*Installing the RICOH-SCRIPT2 Printer Driver*”

## Important

- Before starting this installation, close all documents and applications. In a network environment, confirm that users who are logged on are disconnected. Be sure to do this when it creates the least interference with other users.

## Reference

For more information on the software and utilities included in the CD-ROM, see P.7 “*Software and Utilities Included in the CD-ROM*”.

## Note

- The Auto Run program might not automatically work with certain OS settings. In this case, start "Insttool.EXE" to install the printer driver on the root.
- If you want to cancel the Auto Run program, insert the CD-ROM while pressing the **[SHIFT]** key until your computer finishes accessing the CD-ROM.
- Recommended PC requirements.
  - Memory: 32MB or more
  - CPU: Pentium® 100MHz or more
  - Free Hard disk space: 100MB or more

---

## Installing by Auto Run

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Follow these steps to install the printer driver and utilities on Windows 95/98/Windows NT 4.0.

## 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

- If the "plug and play" function is started by Auto Run, click **[Cancel]** in the **[New Hardware Found]** dialog box or **[Device Driver Wizard]**, and then insert the CD-ROM. **[New Hardware Found]** or **[Device Driver Wizard]** appears depending on the version of Windows 95/98.

**1** Close all applications that are currently running.

**2** Insert the CD-ROM in the CD-ROM drive.

**3** Select a language.

 **Note**

- The IPDL-C Printer Driver supports English, French, German, Italian or Dutch. If you have selected any other language, English Printer Driver will be installed. After installation, you can switch to another language in the Printer Properties.

**3**

**4** Follow the instructions on the screen.

**5** Restart your computer after installation is complete.

**6** You should set up the options with the printer driver.

# Installing the IPDL-C Printer Driver

## Windows 95/98 - Installing the IPDL-C Printer Driver

### Installing the printer driver

Install the driver in accordance with the steps explained. ⇒ P.21 "Installing by Auto Run"

### Setting up options

#### Note

- When setting up options, you should access the **[Configure Printer]** dialog box from Windows. You cannot set up options when accessing the **[Configure Printer]** dialog box from an application.

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

The **[Printers]** window appears.

**2** Select the icon of the printer you want to use by clicking it. On the **[File]** menu, click **[Properties]**.

**3** Click the **[Setup]** tab, and then click **[Configure Printer]**.

The **[Setup - Configure Printer ]** dialog box appears.

**4** Use the **[Option Selection]** list box to select the optional tray and sorter unit <sup>\*1</sup>.  
Selecting the wrong tray here will make it impossible to use your tray correctly.

<sup>\*1</sup> Among the optional sorter units, the 3-bin sorter does not support  $5\frac{1}{2}'' \times 8\frac{1}{2}''$   (HalfLetter).

#### Important

- If the optional tray is selected, be sure of the paper direction and paper size.
- With a duplex machine, select a duplex tray.

**5** Click **[OK]** to close the dialog box.

**6** Click **[OK]** to close the printer's Properties dialog box.

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## Windows NT 4.0 - Installing the IPDL-C Printer Driver

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### Limitation

- Installing a printer driver requires Full Control access permission. Members of the Administrators, Server Operators, Print Operators, and Power Users groups have Full Control permission by default. When you install a printer driver, log on using an account that has Full Control permission.

---

### Installing the printer driver

---

Install the driver in accordance with the steps explained. ⇒ P.21 *“Installing by Auto Run”*

Install the printer driver of Windows 95/98 for the alternative driver from the following folder in the CD-ROM: DRIVERS\IPDL\_C\WIN95\_98\DISK1

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### Setting up options

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- 1** Click [Start], point to [Settings], and then click [Printers].

The [Printers] window appears.

- 2** Select the icon of the printer you want to use by clicking it. On the [File] menu, click [Properties].

- 3** Click the [Configure Printer] tab.

- 4** Use the [Option Selection] list box to select the optional tray and sorter unit <sup>\*1</sup>.  
Selecting the wrong tray here will make it impossible to use your tray correctly.

<sup>\*1</sup> Among the optional sorter units, the 3-bin sorter does not support 5<sup>1</sup>/<sub>2</sub>" × 8<sup>1</sup>/<sub>2</sub>"  (HalfLetter).

### Important

- If the optional tray is selected, be sure of the paper direction and paper size.
- With a duplex machine, select a duplex tray.

- 5** Click [OK] to close the printer properties.

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# Installing the RICOH-SCRIPT2 Printer Driver

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## Windows 95/98 - Installing the RICOH-SCRIPT2 Printer Driver

---

With Windows 95/98, you should install both the Windows 95/98 PostScript printer driver and the PPD file.

### Note

- Be sure to install the PPD file for Windows 95/98. Be careful not to install the PPD file for Windows NT 4.0 accidentally.

---

## Installing the printer driver

---

### Preparation

The Windows 95/98 operating system CD-ROM or diskettes are required for installation.

The following procedure describes installation when the printer is connected to the computer via a parallel interface.

**1** Close all applications that are currently running.

**2** Click [Start], point to [Settings], and then click [Printers].

The [Printers] window appears.

**3** Double-click the [Add Printers] icon.

[Add Printer Wizard] starts.

**4** Click [Next].

**5** Check [Local printer], and click [Next].

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

**6** Click [Have Disk].

A dialog box for installing a driver from a disk appears.

**7** Insert the CD-ROM in the CD-ROM drive, while pressing the [SHIFT] key until the computer finishes accessing the CD-ROM.

If the Auto Run program starts, click [Cancel].

**8** Click [Browse].

### Note

- The Windows 95/98 printer driver is on the following folder in the CD-ROM: \DRIVERS\RPS2\WIN95\_98\*(language)*



- 9** Use the **[Drives:]** list box to select the CD-ROM drive.
- 10** In the **[Folders]** box, double-click **[DRIVERS]**, **[RPS2]** <sup>\*1</sup> and **[WIN95\_98]**. Then double-click the folder of the appropriate language. Finally, click **[OK]**.

\*1 RPS2 is the short name of RICOH-SCRIPT2.

- 11** Click **[OK]**.

- 12** Select the name of the printer whose driver you want to install by clicking it, and then click **[Next]**.

The port selection dialog box appears.

 **Note**

- If the printer is a **simplex** machine, select "Color Controller RC-200".
- If the printer is a **duplex** machine, select "Color Controller RC-200(D)".

- 13** In the **[Available ports]** box, select the printer port by clicking it, and then click **[Next]**.

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

- 15** Select whether or not you want to print a test page, and then click **[Finish]**.

The installer copies the printer driver files from the CD-ROM to your computer's hard disk.

- 16** If you are asked to insert the Windows 95/98 system disk, insert it in the computer, and then click **[OK]**.

- 17** If you are asked to provide the location of the required file for Windows 95/98, do the following:

- Select the folder **[WIN95]** or **[WIN98]** in the system disk.
- Navigate to the folder where Windows is installed. Then, select the appropriate folder. The location of the appropriate folder may differ depending on the version of your operating system. The following are examples:  
   \WINDOWS\SYSTEM\OPTION\CABS  
   \WINDOWS\OPTION\CABS

- 18** If you are asked if you want to restart Windows, select **[Yes]**. If you are not asked, restart Windows after completing the installation.

- 19** After Windows restarts, set up any options you have installed to the printer.

 **Reference**

⇒ P.27 "Setting up options"

---

## Setting up options

---

- 1** Click **[Start]**, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

- 2** Select the icon of the printer you want to use by clicking it. On the **[File]** menu, click **[Properties]**.

The Printer Properties appears.


- 3** Click the **[Device Options]** tab.

- 4** In the **[Installable Options]** box, select the options you have installed on the printer.

The current settings are displayed in the **[Change settings for:]** list box.

### Note

- The following items are available here: **[Paper feed Tray]**, **[Sorter]** <sup>\*1</sup>.

<sup>\*1</sup> Among the optional sorter units, the 3-bin sorter does not support 5<sup>1</sup>/<sub>2</sub>" × 8<sup>1</sup>/<sub>2</sub>"  (HalfLetter).

- 5** Use the **[Change settings for:]** list box to select the appropriate setting for the selected option.

- 6** Click **[Apply]** to apply the settings you made.

- 7** After configuring the appropriate settings, click **[OK]** to close the Printer Properties dialog box.

### Reference

You can confirm that the options are properly set by printing a configuration page.

---

## Windows NT 4.0 - Installing the RICOH-SCRIPT2 Printer Driver

---

With Windows NT 4.0, you should install both the Windows NT 4.0 PostScript driver and the PPD file.

### Limitation

- Installing a printer driver requires Full Control access permission. Members of the Administrators, Server Operators, Print Operators, and Power Users groups have Full Control permission by default. When you install a printer driver, log on using an account that has Full Control permission
- We recommend that you upgrade your Windows NT 4.0 operating system to the latest version before installing the printer driver. Contact your Windows retailer for details about the latest version available.
- Be sure to install the PPD file for Windows NT 4.0. Do not accidentally install the PPD file for Windows 95/98.

---

## Installing the printer driver

---

### Preparation

The CD-ROM containing the Windows NT Server operating system version 4.0, or the Windows NT Workstation operating system is required for installing the printer driver.

The following procedure describes installation when the printer is connected to the computer via a parallel interface.

**1** Close all applications that are currently running.

**2** Click **[Start]**, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

**3** Double-click the **[Add Printer]** icon.

**[Add Printer Wizard]** starts.

**4** After confirming that the **[My Computer]** option is selected, click **[Next]**.

A dialog box for selecting the printer port appears.

**5** Check the check box of the port you want to use, and then click **[Next]**.

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

**6** Click **[Have Disk]**.

A dialog box for installing a driver from a disk appears.

**7** Insert the CD-ROM in the CD-ROM drive, while pressing the **[SHIFT]** key until the computer finishes accessing the CD-ROM.

If the Auto Run program starts, click **[Cancel]**.

**8** Change the drive name in the list box to the name of the CD-ROM drive, and then click **[Browse]**.

#### Note

The Windows NT 4.0 printer driver is in the following folder on the CD-ROM: `\DRIVERS\RPS2\NT4\`(language).

**9** In the **[Folders]** box, double-click **[DRIVERS]**, **[RPS2]** and **[NT4]**. Then double-click the folder of the appropriate language. Finally, click **[Open]**.

**10** Click **[OK]**.

A printer model selection dialog box appears.

**11** Select the name of the printer whose driver you want to install by clicking it, and then click **[Next]**.

A dialog box for changing the printer name appears.

 **Note**

- If the printer is a **simplex** machine, select "Color Controller RC-200".
- If the printer is a **duplex** machine, select "Color Controller RC-200(D)".

**12** Change the name of the printer if you want, and then click **[Next]**.

**13** Click **[Next]**.

**14** In the next dialog box asking if you want to print a test page, select **[No]** and then click **[Finish]**.

The installer copies the printer driver files from the CD-ROM to your computer's hard disk.

 **Note**

- Print a test page after completing installation and restarting Windows.

**15** If you are asked to insert the Windows NT 4.0 system disk, insert it in the computer, and then click **[OK]**.

**16** If you are asked to provide the drive of the system disk, use the drive containing the Windows NT 4.0 system disk.

**17** If you are asked to provide the location of the required file, select the appropriate folder. The location of the appropriate folder may differ depending on the version of your operating system. The following is an example:

- folder named **[i386]** of the Windows NT 4.0 system disk.

After installation is completed, the **[Printers]** window appears with the icon of the newly installed printer.

**18** If you are asked if you want to restart Windows, select **[Yes]**. If you are not asked, restart Windows after completing the installation.

**19** After Windows restarts, set up any options you have installed to the printer.

 **Reference**

⇒ P.29 "Setting up options"

---

## Setting up options

---

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

The **[Printers]** window appears.

**2** Select the icon of the printer you want to use by clicking it. On the **[File]** menu, click **[Properties]**.

The Printer Properties appears.


**3** Click the **[Device Settings]** tab.

**4** Under **[Installable Options]**, select the options you have installed on the printer.

The current settings are displayed in the **[Change Setting]** box in the lower part of the tab.

 **Note**

The following items are available here: **[Paper feed Tray]** and **[Sorter]** <sup>\*1</sup>.

<sup>\*1</sup> Among the optional sorter units, the 3-bin sorter does not support 5<sup>1</sup>/<sub>2</sub>" × 8<sup>1</sup>/<sub>2</sub>"  (HalfLetter).

**5** Use the **[Change Setting]** box to select the appropriate setting for the selected option.

**6** After making the settings you want, click **[OK]** to register the settings and close the Printer Properties dialog box.

 **Reference**

You can confirm that the options are properly set by printing a configuration page.

---

## Using Adobe PageMaker Version 6.0 or 6.5 in Windows

---

You should install the PPD file for PostScript printing with Adobe PageMaker.

---

### Installing the PPD files

---

**1** Close Adobe PageMaker if it is currently running.

**2** Insert the CD-ROM in the CD-ROM drive, while pressing the **[SHIFT]** key until the computer finishes accessing the CD-ROM.

If the Auto Run program start, click **[Cancel]**.

**3** Select the CD-ROM drive.

**4** In the **[Folders]** box, double-click **[DRIVERS]**, **[RPS2]** and **[WIN95\_98]**. Then double-click the folder of the appropriate language.

You can see the PPD file.

 **Note**

For Windows 95/98/NT 4.0, use the same PPD file included in the folder named `DRIVERS\RPS2\WIN95_98\language` in the CD-ROM that comes with the printer.

If the printer is a **simplex** machine, select "ricrc202.ppd".

If the printer is a **duplex** machine, select "ricrc2D2.ppd".

**5** Copy the PPD file into the appropriate folder. The location of the appropriate folder may differ depending on the version of software or how you installed the software on your operating system. The following are examples:

- Adobe PageMaker version 6.0: PM6\RSRC\PPD4
- Adobe PageMaker version 6.5: PM65\RSRC\<(language)\PPD4

---

### Selecting the PPD files

---

**1** Launch Adobe PageMaker.

**2** On the [File] menu, click [Print].

The [Print Document] dialog box appears.

**3** From the [Printers] list box, select the printer you want to use.

 **Note**

- Confirm that "RPS" is shown after the printer name.

**4** In the [PPD] list box, select the printer you want to use.

---

## Macintosh

---

Use the Macintosh LaserWriter 8 driver that comes with your operating system.

 **Important**

- See the documentation that comes with your operating system for details on the functions of the LaserWriter 8 printer driver.
- The PPD file is not compatible with QuickDrawGX.
- The LaserWriter printer driver for a Macintosh does not come with this printer. Use the appropriate printer driver that comes with the Macintosh operating system you are using.

 **Reference**

This manual describes only the settings specific for this printer. Settings actually may differ depending on the version of the LaserWriter driver you are using. See the documentation that comes with the Macintosh for details on the LaserWriter functions.

 **Note**

- The versions of the LaserWriter driver are separated into two categories. "LaserWriter 8.3x or earlier" refers to the LaserWriter 8.3x driver and all drivers before that. "LaserWriter 8.4x or later" refers to LaserWriter 8.4x, 8.5x and 8.6x. LaserWriter 8.5x was used to make this manual. The settings may differ depending on the version of the LaserWriter driver being used.

---

## Installing the PPD files

---

### Limitation

- Be sure to install the PPD file correctly. Otherwise, you cannot use the option, even though it is physically installed to the printer.

**1** Start the Macintosh.

**2** Double-click the icon of your hard disk to open it, and then open the [Extensions] folder inside the [System Folder] by double-clicking it.

**3** Insert the CD-ROM in the CD-ROM drive.

**4** Double-click the CD-ROM icon.

The contents of the CD-ROM appear.

**5** Double-click the [Printer Description] folder in the CD-ROM, and then double-click the folder having the appropriate language name to open it.

**6** Select the appropriate PPD file for the printer.

### Note

- If the printer is a **simplex** machine, install the PPD file named Printer Description:(language):Color Controller RC-200 in the CD-ROM.
- If the printer is a **duplex** machine, install the PPD file named Printer Description:(language):Color Controller RC-200(D) in the CD-ROM.

**7** Copy the PPD file in the [Printer Descriptions] folder located inside the [Extensions] folder.

The PPD file is installed.

---

## Installing the ColorSync profiles

---

ColorSync profiles make it possible for the printer to print colors of similar intensity to those that appear on your computer display. You must install the ColorSync profiles to use this feature.

### Note

- The ColorSync profiles conform with the color characteristics defined by the International Color Consortium (ICC).
- Some computer displays may require particular settings to be controlled by ColorSync. See the documentation that comes with your display for details.

The following profiles are provided for the printer.

**❖ RC-200 Transparency**

Adjusts the image density to optimize the output for the OHP projection. This profile is selected automatically whenever **[OHP Transparency]** is selected as the paper type.

**❖ RC-200 Presentation**

Enhances the reproduction of documents that contain text and graphics. This profile is best for printing charts, colored graphs, presentation materials and so on.

**❖ RC-200 Photograph**

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

**❖ RC-200 Solid Color**

Use this profile for printing specific colors, logos and so on.

The following procedure shows how to install the ColorSync Profiles.

**1 Start the Macintosh.****2 Double-click the icon of the hard disk to open it, and then open the appropriate folder for installing the ColorSync profiles.****Note**

The location of the appropriate folder may differ depending on the version of the operating system. The following are examples:

- System:Preferences:ColorSync Profiles
- System:ColorSync Profiles

**3 Insert the CD-ROM in the CD-ROM drive.**

The icon of the CD-ROM appears.

**4 Double-click the CD-ROM icon.**

The contents of the CD-ROM appear.

**5 Double-click the [ColorSync™ Profiles] folder in the CD-ROM to open it.****6 Copy all four files in the [ColorSync™ Profiles] folder.**

The ColorSync profiles are installed.

---

**Setting up PPD file**

---

**Preparation**

Confirm that the printer is connected to an AppleTalk network before performing the following procedure.

**1 On the Apple menu, select [Chooser].**



**2** Click the [LaserWriter 8] icon.

**3** In the [Select a PostScript Printer] list, select the name of the printer you want to use by clicking it, and then click [Create].

 **Note**

- If your network has multiple zones, click the name of the zone the printer belongs to in the [AppleTalk Zones] list in the lower left side of the [Chooser] dialog box.

**4** Select the name of the printer by clicking it, and then click [Select].

 **Note**

- Be sure to select the PPD file correctly. Otherwise, you may not use options because options that you can use depend on the printer.

The PPD file is set up and the LaserWriter 8 icon appears at the left of the printer name in the list. Next, follow the procedure on P.34 “Setting up options” to make the option settings, or to close the [Chooser] dialog box.

---

## Setting up options

---

**1** On the Apple menu, select [Chooser].

**2** Click the [LaserWriter 8] icon.

**3** In the [Select a PostScript Printer] list, select the name of the printer you want to use by clicking it, and then click [Setup].

 **Note**

- If your network has multiple zones, click the name of the zone the printer belongs to in the [AppleTalk Zones] list in the lower left side of the [Chooser] dialog box.

**4** Click [Configure].

A list of options appears.

**5** Select the option you want to set up and the appropriate settings for it.

 **Note**

- If the option you want to set up does not appear, the PPD file has not been set up correctly. Check the name of the PPD file shown in the dialog box.

 **Reference**

For more information on setting up options, see the “Operating Instructions” for RICOH-SCRIPT2 provided as a PDF file which is included in the CD-ROM.

**6** Click [OK].

The list of options closes.

**7** Click [OK].

The [Chooser] dialog box appears.

---

## Installing screen fonts

---

The screen fonts described below can be found in the CD-ROM, in the folder named [Fonts].

Screen fonts are 10, 12, 14, 18 and 24 point bitmap fonts. Other sizes make characters appear with ragged edges on your computer screen, but they print with smooth edges.

 **Note**

- The screen fonts included in the CD-ROM are as follows: AG-Ricoh, HN-Ricoh, CS-Ricoh, BM-Ricoh, ZC-Ricoh, ZD-Ricoh.

**1** Start the Macintosh.**2** Insert the CD-ROM in the CD-ROM drive.

The CD-ROM icon appears.

**3** Double-click the CD-ROM icon.

The contents of the CD-ROM appear.

**4** Copy the fonts you want to install in the [System] folder.

A confirmation dialog box appears.

**5** Click [OK].

The fonts are installed.

**6** Restart the Macintosh. **Note**

- The names of the fonts you have installed appear in the pull-down menu when you select fonts with applications.

 **Screen Fonts**

Screen fonts are bitmap fonts, which are formed by grouping dots together. Because of this, screen fonts appear jagged on your computer screen when you enlarge or reduce them. It is recommended that you install as many different sizes as possible for each font to avoid such jagged appearances. Screen fonts are provided for this printer in 10, 12, 14, 18 and 24 point sizes.

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A decorative graphic on the left side of the page. It features a vertical orange line. To its left, there are several blue squares of varying sizes and a blue step-like line at the bottom. To its right, there are several colored squares (green, blue, yellow, orange) and a green curved line.

# Color Controller RC-200

## PRINTER REFERENCE



Read this manual carefully before you use this product and keep it handy for future reference.  
For safety, please follow the instructions in this manual.

## **Introduction**

This manual contains detailed instructions on the operation and maintenance of this machine. To get maximum versatility from this machine all operators should carefully read and follow the instructions in this manual.

Please read the Safety Information in the "Copy Reference" 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.

## **Trademarks**

RICOH-SCRIPT2® is a registered trademark of Ricoh Company.

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

Ethernet® is a registered trademark of Xerox Corporation.

PostScript® and Acrobat® are registered trademarks of Adobe System Incorporated.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights in those marks.

## **Warning:**

Use of controls or adjustment or performance of procedures other than those specified in this manual might result in hazardous radiation exposure.

## **Notes:**

Some illustrations might be slightly different from your machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

## **Note**

The proper names of Windows operating system are as follows:

- Microsoft® Windows® 95 operating system
- Microsoft® Windows® 98 operating system
- Microsoft® Windows NT® Server operating system Version 4.0
- Microsoft® Windows NT® Workstation operating system Version 4.0

# Manuals for this Machine

There are five manuals that describe the operational procedures separately for the operation and maintenance of the machine.

This manual, the Printer Reference, contains detailed instructions for using this machine as a printer.

To ensure safe and efficient operation of the machine, all users should read and follow the instructions contained in the following manuals.

- ❖ **Operating Instructions that Describes the Copy Functions**

Describes the procedures and functions for using this machine as a copier.

- ❖ **Printer Reference Provided as a Paper Manual**

Describes the system settings, procedures and functions for using this machine as a printer.

- ❖ **Printer Reference Provided as a PDF File**

Describes the procedures and provides necessary information on using this machine as a printer. The manual is included as a PDF file in the CD-ROM. (This Manual)

- ❖ **RICOH-SCRIPT2 Operating Instructions**

Describes the menus and features you can set using the RICOH-SCRIPT2 printer driver. The manual is included as a PDF file in the CD-ROM.

- ❖ **Network Interface Board Operating Instructions**

Describes the procedures and provides necessary information on setting up and using the printer under the network environment. The manual is included as a PDF file in the CD-ROM.

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# 1. Uninstalling the Printer Driver and Software

## Uninstalling the IPDL-C Printer Driver

This section provides basic procedures for uninstalling the IPDL-C printer driver. The actual procedure may differ depending on your operating system.

Follow the procedure below.

---

### Windows 95/98 - Uninstalling the IPDL-C Printer Driver

---

- 1** Close all applications that are currently running.
- 2** Click [Start], point to [Settings] and click [Printers].  
The [Printers] window appears.
- 3** Select the icon of the printer you want to remove by clicking it.
- 4** On the [File] menu, click [Delete].  
A confirmation dialog box appears.
- 5** Click [Yes] to delete the printer driver.

---

### Windows NT 4.0 - Uninstalling the IPDL-C Printer Driver

---

#### Limitation

- Uninstalling a printer driver requires Full Control access permission. Members of the Administrators, Server Operators, Print Operators, and Power Users groups have Full Control permission by default. When you uninstall a printer driver, log on using an account that has Full Control permission.

- 1** Close all applications that are currently running.
- 2** Click [Start], point to [Settings] and click [Printers].  
The [Printers] window appears.
- 3** Select the icon of the printer you want to remove by clicking it.
- 4** On the [File] menu, click [Delete].  
A confirmation dialog box appears.
- 5** Click [Yes] to delete the printer driver.

# Uninstalling the RICOH-SCRIPT2 Printer Driver

1

This section provides basic procedures for uninstalling the RICOH-SCRIPT2 printer driver. The actual procedure may differ depending on your operating system.

Follow the procedure below.

---

## Windows 95/98 - Uninstalling the RICOH-SCRIPT2 Printer Driver

---

- 1** Close all applications that are currently running.
- 2** Click [Start] on the taskbar, point to [Settings], and then click [Printers].  
The [Printers] window appears.
- 3** Select the icon of the printer you want to remove by clicking it.
- 4** On the [File] menu, click [Delete].
- 5** Click [Yes] to delete the printer driver.

---

## Windows NT 4.0 - Uninstalling the RICOH-SCRIPT2 Printer Driver

---

### Limitation

- Uninstalling a printer driver requires Full Control access permission. Members of the Administrators, Server Operators, Print Operators, and Power Users groups have Full Control permission by default. When you uninstall a printer driver, log on using an account that has Full Control permission.

- 1** Close all applications that are currently running.
- 2** Click [Start] on the taskbar, point to [Settings], and then click [Printers].  
The [Printers] window appears.
- 3** Select the icon of the printer you want to remove by clicking it.
- 4** On the [File] menu, click [Delete].
- 5** Click [Yes] to delete the printer driver.

---

## Macintosh - Uninstalling the RICOH-SCRIPT2 Printer Driver

---

This section provides basic procedures for uninstalling the PPD File. The actual procedure may differ depending on the operating system.

Follow the procedure below.

- 1** Drag the “Color Controller RC-200” or “Color Controller RC-200(D)” file inside [Printer Descriptions] in the [Extensions] folder in [System folder] to [Trash].

1

# 2. Setting up the Printer Driver and Canceling a Print Job

## IPDL-C Accessing the Printer Properties

---

### Windows 95/98 - Accessing the Printer Properties

---

There are two methods you can use to open the Printer Properties.

---

#### Making default printer settings

---

To make the default printer settings, first open the **[Printer Properties]** dialog box from the **[Printers]** window.

#### Note

- With some applications, the printer driver's settings are not used, and the application's own initial default settings are applied.
- The following tabs are standard Windows tabs. For more information on these tabs, see the documentation that comes with the Windows operating system.
  - Windows 95:  
**[General]**, **[Details]** and **[Sharing]**
  - Windows 98:  
**[General]**, **[Details]**, **[Color Management]** and **[Sharing]**

#### Note

- Profiles set in the **[Color Management]** tab are not supported.

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

The **[Printers]** window appears.

**2** Select the icon of the printer whose default settings you want to change by clicking it.

**3** On the **[File]** menu, click **[Properties]**.

**4** Make settings and click **[OK]**.

---

#### Making printer settings from an application

---

To make the printer settings from an application, open the **[Printer Properties]** dialog box from that application. The following example describes how to make settings for the WordPad application that comes with Windows 95.

 **Note**

- The actual procedure you should follow to open **[Printer Properties]** may differ depending on the application. For more information, see the documentation that comes with the application you are using.
- With some applications, the printer driver's settings are not used, and the application's own initial default settings are applied.
- Any settings you make in the following procedure are valid for the current application only.

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

The **[Print]** dialog box appears.

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

The Printer Properties dialog box appears.

**3** Make settings, and click **[OK]**.

**4** Click **[OK]** to start printing.

---

## Windows NT 4.0 - Accessing the Printer Properties

---

### Making default printer settings - Printer Properties

---

 **Limitation**

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

 **Note**

- With some applications, the printer driver's settings are not used, and the application's own initial default settings are applied.
- The following tabs are standard Windows tabs. For more information on these tabs, see the documentation that comes with the Windows operating system.
  - **[General]**, **[Ports]**, **[Scheduling]**, **[Sharing]** and **[Security]**

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

The **[Printers]** window appears.

**2** Select the icon of the printer you want to use by clicking it.

**3** On the **[File]** menu, click **[Properties]**.

The Printer Properties dialogue box appears.

**4** Make settings and click **[OK]**. **Note**

- The settings you make here are used as the default settings for all applications.

---

**Making default printer settings – Default Document Properties**

---

 **Limitation**

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

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

The **[Printers]** window appears.

**2** Select the icon of the printer you want to use by clicking it.**3** On the **[File]** menu, click **[Document Defaults]**.

The Default Document Properties dialogue box appears.

**4** Make settings and click **[OK]**. **Note**

- Settings you make here are used as the default settings for all applications.

---

**Making printer settings from an application**

---

To make the printer settings from an application, open the **[Document Properties]** dialog box from that application. The following example describes how to make settings for the WordPad application that comes with Windows NT 4.0.

 **Note**

- The actual procedures you should follow to open the **[Document Properties]** dialog box may differ depending on the application. For more information, see the documentation that comes with the application you are using.
- With some applications, the printer driver's settings are not used, and the application's own initial default settings are applied.
- Any settings you make in the following procedure are valid for the current application only.

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

The **[Print]** dialog box appears.



- 2** Select the printer you want to use from the [Name] list box, and then click [Properties].

The Document Properties dialog box appears.

- 3** Make settings, and click [OK].

- 4** Click [OK] to start printing.

# RICOH-SCRIPT2 - Setting up for Printing

---

## Windows 95/98 - Accessing the Printer Properties

---

There are two methods you can use to open the Printer Properties dialog box.

---

### Making default printer settings

---

To make the default printer settings for printing from applications, open the Printer Properties dialog box from the **[Printers]** window.

#### Note

- The following tabs are standard Windows tabs. For more information on these tabs, see the documentation that comes with the Windows operating system.
- **Windows 95:**  
**[General]**, **[Details]** and **[Sharing]**
- **Windows 98:**  
**[General]**, **[Details]**, **[Color Management]** and **[Sharing]**

#### Note

- Profiles set in the **[Color Management]** tab are not supported.

- 1** Click **[Start]**, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

- 2** Select the icon of the printer you want to use by clicking it. On the **[File]** menu, click **[Properties]**.

The Printer Properties dialog box appears.

#### Reference

For more information on making default printer settings, see the "Operating Instructions" of RICOH-SCRIPT2 (RPS2) that is included in this CD-ROM.

---

### Making printer settings from an application

---

The contents of the tabs are the default settings made in the Printer Properties dialog box opened from the **[Printers]** window. You can make any changes you want for printing from the application you are currently running. Any settings you make in these tabs are valid for the current application only.

- 1** Open the application's print menu.

The **[Print]** dialog box appears.

 **Note**

- You can use this dialog box to make basic settings, such as the number of copies and the print range.

**2** Select the printer you want to use from the [Name] list box of the [Printer] group, and then click [Properties].

The Printer Properties dialog box for the printer you selected appears.

 **Reference**

For more information on each tab, see the “Operating Instruction” of RICOH-SCRIPT2 that is included in this CD-ROM.

---

## Windows NT 4.0 - Accessing the Printer Properties

---

---

### Making default printer settings - Printer Properties

---

 **Limitation**

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

 **Note**

- With some applications, the printer driver's settings are not used, and the application's own initial default settings are applied.
- The following tabs are standard Windows tabs. For more information on these tabs, see the documentation that comes with the Windows operating system.
  - [General], [Ports], [Scheduling], [Sharing] and [Security]

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

The [Printers] window appears.

**2** Select the icon of the printer you want to use by clicking it. On the [File] menu, click [Properties].

The Printer Properties dialog box appears.

 **Reference**

For more information on making default printer settings, see the “Operating Instructions” of RICOH-SCRIPT2 (RPS2) that is included in this CD-ROM.

 **Note**

- Settings you make here are used as the default settings for all applications.

---

## Making printer default settings - Default Document Properties

---

- 1 Click **[Start]**, point to **[Settings]**, and then click **[Printers]**.

The **[Printers]** window appears.

- 2 Select the icon of the printer you want to use by clicking it. On the **[File]** menu, click **[Document Defaults]**.

The Default Document Properties dialog box appears.

### Reference

For more information on making printer default settings, see the "Operating Instructions" of RICOH-SCRIPT2 (RPS2) that is included in this CD-ROM.

### Note

- Settings you make here are used as the default settings when printing from applications.

---

## Making printer settings from an application

---

### Note

- General users can change the settings in an application's **[Print]** dialog box.

- 1 Select the application's **[Print]** command on the **[File]** menu.

The **[Print]** dialog box appears.

- 2 Confirm that the displayed printer name is the printer you want to use, and then click **[Properties]**.

The Document Properties dialog box appears.

- 3 Make settings, and click **[OK]**.

- 4 Click **[OK]** to start printing.

---

## Macintosh - Setting up for Printing

---

---

### Making paper settings from an application

---

- 1 Open the file you want to print.

- 2 On the **[File]** menu, click **[Page Setup]**.

The **[LaserWriter 8 Page Setup]** dialog box appears.

**3** Confirm that the printer you want to use is shown in **[Format for:]**. Then, use **[Paper]** to select the paper size you want to use.

 **Note**

If the printer is now shown in the **[Format for:]** box, use the pop-up menu to display a list of available printers.

 **Reference**

The actual appearance of the **[Page Setup]** dialog box depends on the application you are using. See the documentation that comes with the Macintosh for details.

**4** After configuring the settings, click **[OK]**.

---

 **Small Size Print Area**

This printer supports printing on print areas such as “A4 Small” and “Letter Small” when printing from a Macintosh, only with specific versions of the driver. Printing with the LaserWriter 8.4x (or later) driver supports printing on both standard and small print areas. However, with the LaserWriter 8.3x (or earlier), the small print area options are not displayed.

With LaserWriter 8.3x (or earlier), select A4, for example, and click **[Options]** in the **[Page Setup]** dialog box, then use the **[Larger Print Area]** option. Checking **[Larger Print Area]** produces the same printing result as the LaserWriter 8.4x (or later) standard A4 print area. Unchecking the **[Larger Print Area]** produces the same result as the LaserWriter 8.4x (or later) “A4 Small” print area.

---

**Setting up for printing from an application**

---

**1** Open the file you want to print.

**2** On the **[File]** menu, click **[Print]**.

The **[Printer]** dialog box appears.

**3** Confirm that the printer is selected in the **[Printer]** box, and then make the printer settings you want.

 **Reference**

For more information on setting up for printing from an application, see the “Operating Instructions” of RICOH-SCRIPT2 (RPS2) that is included in this CD-ROM.

**4** After configuring the settings, click **[Print]**.

---

# Canceling a Print Job

---

---

## Windows 95/98 - Canceling a Print Job

---

**1** Double-click the printer icon on the Windows taskbar.

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

**2** Select the name of the job you want to cancel.**3** On the [Document] menu, click [Cancel Printing]. **Note**

- You can also open the print job queue window by double-clicking the printer icon in the [Printer] window.

**4** Confirm that the printer's on line indicator is lit, and press [Reset] on the machine's operation panel.

The message appears on the operation panel display indicating that the print job is being cancelled.

 **Important**

- The preceding procedure cancels the print job that is being processed by the printer. In some cases, the printer may already be processing data for the next print job following the one currently being output. In such a case, the next print job is also canceled when you press [Reset].
- When the printer is being shared by multiple computers, be careful not to accidentally cancel someone else's print job.

 **Note**

- You cannot stop printing data that has already been processed internally by the printer. Because of this, printing may continue for a few pages after you press [Reset].
- A print job that contains a large volume of data may take considerable time to stop.

---

## Windows NT 4.0 - Canceling a Print Job

---

**1** Double-click the printer icon on the Windows taskbar.

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

**2** Select the name of the job you want to cancel.

**3** On the **[Document]** menu, click **[Cancel Printing]**.

 **Note**

- You can also open the print job queue window by double-clicking the printer icon in the **[Printer]** window.

**4** Confirm that the printer's **On Line** indicator is lit, and press **[Reset]** on the machine's operation panel.

The message appears on the operation panel display indicating that the print job is being cancelled.

 **Important**

- The preceding procedure cancels the print job that is being processed by the printer. In some cases, the printer may already be processing data for the next print job following the one currently being output. In such a case, the next print job is also canceled when you press **[Reset]**.
- When the printer is being shared by multiple computers, confirm that you do not accidentally cancel someone else's print job.

 **Note**

- You cannot stop printing data that has already been processed internally by the printer. Because of this, printing may continue for a few pages after you press **[Reset]**.
- A print job that contains a large volume of data may take considerable time to stop.

---

## Macintosh - Canceling a Print Job

---

**1** Double-click the printer's icon on the desk top.

A window appears, showing all the print jobs that are currently queuing to be printed.

**2** Check the current status of the job you want to cancel.

**3** Select the name of the job you want to cancel.

**4** Click **[Pause Button]**, and then click **[Trash Button]**.

**5** Press **[Reset]** on the machine's operation panel.

The message appears on the operation panel display indicating that the print job is being cancelled.

 **Important**

- The preceding procedure cancels the print job that is being processed by the printer. In some cases, the printer may already be processing data for the next print job following the one currently being output. In such a case, the next print job is also canceled when you press **[Reset]**.

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

 **Note**

- You cannot stop printing data that has already been processed internally by the printer. Because of this, printing may continue for a few pages after you press **[Reset]**.
- A print job that contains a large volume of data may take considerable time to stop.


















# 3. Troubleshooting

## Error & Status Messages on the Operation Panel

### Error & Status Messages on the Operation Panel

Message	Description	Comments
Add Fuser Oil	The fuser oil is empty.	Replace the fuser oil. Contact your sales or service representative.  <b>Reference</b> See the operating instructions that describes copy functions.
Add Staples	Stapler is almost empty.	Add staples.  <b>Reference</b> See the operating instructions that describes copy functions.
Add Toner xxx	The indicated toner is empty.	Replace the indicated toner cartridge.  <b>Reference</b> See the operating instructions that describes copy functions.
Call Service	There is a malfunction in the printer.	Turn the power off and on. If this does not clear the problem, contact your sales or service representative.
Close Door(s)/ Cover(s)	Doors or covers are open.	Close doors or covers. The operation panel of the copier displays which doors or covers are open.  <b>Reference</b> See the operating instructions that describes copy functions.

Message	Description	Comments
Initializing	RICOH-SCRIPT2 is initializing.	It is not an error message. Process of initializing starts up in the RICOH-SCRIPT2 mode.
Low on: xxx	Toner is almost empty.	<p>Replace the indicated toner cartridge.</p> <p> <b>Note</b></p> <p><input type="checkbox"/> xxx is the color of the toner, and CMYK is the combination.</p> <p> <b>Reference</b></p> <p>See the operating instructions that describes copy functions.</p>
Load Paper	There is no paper in the Bypass Tray.	Load paper in the Bypass Tray.
Load YYY	There is no indicated paper size in the tray.	<p>Load the indicated paper size in the tray.</p> <p> <b>Note</b></p> <p><input type="checkbox"/> YYY is the paper size.</p> <p> <b>Reference</b></p> <p>See the operating instructions that describes copy functions.</p>
Offline	Printer status is offline. The printer cannot accept or print data.	To put the printer online, press <b>[Online]</b>
Clear Misfeed(s)	Paper jam has occurred in the printer.	<p>Remove the jammed paper. The operation panel of the copier displays where the paper jam has occurred.</p> <p> <b>Reference</b></p> <p>See the operating instructions that describes copy functions.</p>
Please wait	The printer is preparing for printing.	Wait until the printer is warmed up.
	The printer adjusts itself regularly to maintain print quality. (This message might appear while printing.)	It is not an error message. The printer is working properly. Just wait a while.

Message	Description	Comments
Power Off / On No : XXX-YYYYYYYY	There is communication error between the engine and the controller.	Turn the power off and on. If this does not clear the problem, contact your sales or service representative.
Printing ...	Doing print job.	Wait for a while.   <b>Note</b> <input type="checkbox"/> This message appears only in the RICOH-SCRIPT2 mode.
Processing	Print data is being processed.	Wait for a while.
Ready	The printer is ready for printing.	It is not an error message. The printer is working properly.
Remove Paper From Duplex Tray	Paper is left in the Duplex tray.	Remove the paper from the Duplex tray.   <b>Reference</b> See the operating instructions that describes copy functions.
Remove Paper From Sorter	Paper is left in the sorter bin.	Remove the paper from the sorter bin.   <b>Reference</b> See the operating instructions that describes copy functions.
Reset Paper Tray Correctly	The paper tray is not installed correctly.	Install the paper tray correctly.   <b>Reference</b> See the operating instructions that describes copy functions.
Resetting ...	A print job was interrupted by pressing <b>[Reset]</b> .	Wait for a while.
Waiting	Printer is waiting for the next data to print. The menu is about to be set on the printer's operation panel.	Wait for a while.

Message	Description	Comments
Warming Up	The printer is preparing for printing.	Wait until the printer is warmed up.
Waste Toner is Full	The waste toner bottle is full.	Replace the waste toner bottle. Contact your sales or service representative.
A3:Error	There is too much data for the I/O buffer to handle.	Check if the interface cable is inserted into the printer and your computer securely.
		Check if the interface cable is not damaged or broken.
		Increase the size of I/O buffer.
A6:Error	There is not enough printer memory to print one or more of the pages in the print job.	Change the Color Level using the printer driver to set the image resolution to <b>[Fast]</b> , or change the Color Level to <b>[1 bit]</b> . Turn on "Image Memory" using the printer's "System Menu" to turn on "Image Memory".
AB:Error	The printer is unable to process the data you are trying to print.	Reduce the amount of data being sent to the printer.
B1:Error	An error has occurred in the standard parallel interface.	Contact your sales or service representative.
B3:Error	The printer setting is wrong.	Reset the printer using "Menu Reset" of the "Maintenance" menu. ⇒ P.63 "Resetting Menus"
B4:Error	An error has occurred in the IC card slot.	Contact your sales or service representative.
B5:Error	An error has occurred in the RICOH-SCRIPT2 module.	Contact your sales or service representative.
B7:Error	An error has occurred in the network interface board.	Turn the printer's power switch off and on. Contact your sales or service representative.
85:Error	An error has occurred in the printer's standard memory.	Turn off and on the printer's power switch. Contact your sales or service representative.

Message	Description	Comments
86:Error	You may be trying to print with the wrong printer driver.	Confirm that you are using the correct printer driver.
	You might not be using the correct interface cable.	Confirm that you are using the correct interface cable.
91:Error	An error has occurred in the printer's standard memory.	Turn off and on the power switch.
94:Error	An error has occurred in the printer's standard memory.	Turn off and on the power switch. Contact your sales or service representative.

### Note

- If you cannot solve the problem by taking above actions, turn the power off and then on again. If this does not clear the error message, write down the error number and the message, and contact your sales or service representative.

## Getting Printer Information over the Network



### Printer current status

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

#### ❖ telnet

Use status command. For more information, see "Remote Maintenance by telnet (mshell)" in the "Operating Instructions" of Network Interface Board included in the CD-ROM.

Message	Description	Comments
Call Service	There is malfunction in the printer.	Turn the printer off and then on. If this does not clear the problem, contact your sales or service representative.
Close Front Cover	The front cover is open.	Close the front cover.
Close Bank Cover	The bank cover is open.	Close the bank cover.
Close Sorter Cover	The sorter cover is open.	Close the sorter cover.
Close Right Cover	The right cover is open.	Close the right cover.
Close Left Cover	The left cover is open.	Close the left cover.
Duplex Tray: Not Set Correctly	The duplex tray is not installed correctly.	Install the duplex tray correctly.

Message	Description	Comments
Energy Save Mode	The printer is in Energy Save mode.	Wait for a while.
Fuser Oil is Empty	Fuser oil is empty.	Replace the fuser oil . Contact your sales or service representative.
No Paper	There is no paper of the indicated paper size in the paper tray being used.	Load paper of the indicated paper size into the paper tray being used.   <b>Reference</b> See the operating instructions that describes copy functions.
No Staple	There is no staple.	Replace staples.   <b>Reference</b> See the operating instructions that describes copy functions.
Paper in Duplex Tray	There is paper left in the duplex tray.	Remove the paper from the duplex tray.
Paper on Sorter Bin	There is paper left in the sorter bin.	Remove the paper from the sorter bin.
Paper Tray: Not Set Correctly	The paper tray is not installed correctly.	Install the paper tray correctly.
Low on XXX Toner	The indicated toner is low or has run out.	Replace the toner cartridge.
XXX Toner is Empty	The indicated toner is empty.	Replace the toner cartridge.
WarmUp	The printer is preparing for printing.	Wait until the printer is warmed up.
Waste Toner is Full	The waste toner bottle is full.	Replace the waste toner bottle. Contact your sales or service representative.

## Printer configuration

You can check the printer configuration using telnet.

### ❖ telnet

Use info command. For more information, see “Remote Maintenance by Telnet (mshell)” in the “Operating Instructions” of Network Interface Board included as a PDF file in the CD-ROM.

### Note

- "\*" (asterisk) is displayed with the current setting.
- Regarding \*1–\*6, see the attached table.

Item	Description
Printer System	Version of the printer
Network Board	Version of the network board
Input Tray	
No.	ID number of the paper tray
Name	Name of the paper tray* <sup>1</sup>
PageSize	Paper size loaded in the paper tray* <sup>2</sup>
Status	Current status of the paper tray* <sup>3</sup>
Output Tray	
No.	ID number of the output tray
Name	Name of the output tray* <sup>4</sup>
Status	Current status of the output tray* <sup>5</sup>
Emulation	
No.	ID number of the emulation used by the printer
Name	Name of the emulation used in the printer* <sup>6</sup>
Version	Version of the emulation
Program	
No.	ID number of the program
Name	Name of the program (The fixed name is blank.)























❖ \*1 Input Tray: Name

Name	Description
Tray1	Name of installed paper tray
Tray2	
Tray3	
Tray4	
Manual Tray	Bypass Tray

3

❖ \*2 Input Tray: Paper Size

Paper Size	Description
A3R	A3 
B4R	B4 
A4R	A4 
A4	A4 
B5R	B5 JIS 
B5	B5 JIS 
A5R	A5 
A5	A5 
B6R	B6 JIS 
A6R	A6 
DL+	12"×18" 
DLR	11"×17" 
LGR	8 <sup>1</sup> / <sub>2</sub> "×14" 
F4R	8 <sup>1</sup> / <sub>2</sub> "×13" 
LTR	8 <sup>1</sup> / <sub>2</sub> "×11" 
LT	11"×8 <sup>1</sup> / <sub>2</sub> " 
FLR	8 <sup>1</sup> / <sub>4</sub> "×13" 
FR	8"×13" 
HLR	5 <sup>1</sup> / <sub>2</sub> "×8 <sup>1</sup> / <sub>2</sub> " 
HLT	8 <sup>1</sup> / <sub>2</sub> "×5 <sup>1</sup> / <sub>2</sub> " 

## ❖ \*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	Standard Tray Proof Tray; if the sorter is installed
Bin 1 ~ Bin 20	Sorter

## ❖ \*5 Output Tray: Status

Status	Description
Normal	Normal
PaperExist	There is paper in the output tray
OverFlow	Output tray is full of paper


## ❖ \*6 Emulation: Name

Emulation Name	Description
RWC (IPDL-C)	IPDL-C
RPS (RicohScript2)	RICOH-SCRIPT2

# Machine Does not Print

3

Possible Cause	Solutions
Is the power on?	Confirm that the power cord is securely plugged into the wall socket. Turn on the power switch.
Is the interface cable properly connecting the printer to your computer connected securely?	Connect the interface cable properly. If there are any connectors or screws, confirm that they are fastened securely.
Are you using a correct interface cable?	The type of interface cable you should use depends on your computer. Be sure to use the correct one. If the cable is damaged or worn, replace it with a new one.
Does the <b>On Line</b> indicator stay on?	Press <b>[On Line]</b> to light it up.
Is the paper set?	Load paper into the paper tray or on the bypass tray.
Is paper left in the sorter bin?	Remove paper from the sorter bin.
Is the machine working as a copier?	It may not be able to use the machine as a printer when the machine is working as a copier.
Does the <b>Error</b> indicator stay red?	Check the error message on the panel display and take the required action.

Possible Cause	Solutions
<p>Is the <b>Data In</b> indicator blinking or lit after starting the print job?</p>	<p>If not, the data is not being sent to the printer, or the printer may be resetting the print job because there was a long delay in receiving the data from the computer.</p> <ul style="list-style-type: none"> <li>❖ <b>If the printer is using "I/O Timeout"</b>            Increase the value of the "I/O Timeout" setting of the "IP-DL-C Menu" or "RPS2 Menu". Or set the "I/O Timeout" value to "0" (this is the off setting).            Set a longer <b>[Wait timeout]</b> period accessing the printer properties when the RICOH-SCRIPT2 printer driver is selected.</li> <li>❖ <b>If the printer is connected to the computer using the interface cable</b>            Confirm that the printer port settings are correct. For a parallel port connection, port LPT1 or LPT2 should be set.</li> </ul> <p> <b>Reference</b>            For more information on the printer port settings, see the notes after this table.</p> <ul style="list-style-type: none"> <li>❖ <b>Network Connection</b>            Contact your network administrator.</li> </ul> <p>If the <b>Data In</b> indicator is blinking or lit.            The printer may be resetting the print job. Take the following steps to correct the situation.</p> <ul style="list-style-type: none"> <li>• Increase the "Job Timeout" setting of the "IPDL-C Menu" or "RPS2 Menu".</li> <li>• Confirm that the printer driver settings are correct.</li> <li>• Change the "Transfer" setting of the "System Menu".</li> <li>• Confirm that the "Parallel" of the "System Menu" is correct.</li> </ul>

Possible Cause	Solutions
Is the <b>Data in</b> indicator off after blinking or lit for a while?	<p>It might occur when the printer does not have enough memory to print a page.</p> <p>The following are the actions you should take when you encounter memory shortage problems. If these actions do not solve the problem individually, try them in combination with each other.</p> <ol style="list-style-type: none"> <li>① Change the Color Level to <b>[1 bit]</b>. Use the printer property to change the Color Level to <b>[1 bit]</b>.</li> <li>② Turn on "Image Memory". Use the printer's "System Menu" to turn on "Image Memory".</li> </ol>
Can you print a test page (configuration page)?	<p>If you cannot print a test page, it probably indicates a printer malfunction. You should contact your sales or service representative.</p> <p>If you can print a test page but cannot get the printer to print when you issue a print command from your computer, it probably means there is a problem with your computer.</p> <p>Also keep in mind that large, complex data might take a long time for the printer process.</p>

If you cannot solve the problem by taking the above actions, contact your sales or service representative.

 **Note**



- **Windows 95/98**
  - ① Click **[Start]**, point to **[Settings]**, and then click **[Printers]**.
  - ② Select the icon of the printer by clicking it. Next, on the **[File]** menu, click **[Properties]**.
  - ③ Click the **[Details]** tab.
  - ④ Check the **[Print to the following port]** box to confirm that the correct port is selected.
- **Windows NT 4.0**
  - ① Click **[Start]**, point to **[Settings]**, and then click **[Printers]**.
  - ② Select the icon of the printer by clicking it. Next, on the **[File]** menu, click **[Properties]**.
  - ③ Click the **[Port]** tab.
  - ④ Check the **[Print to the following port]** box to confirm that the correct port is selected.
- **Macintosh**
  - ① Click **[Apple Menu]**, point to **[Control Panel]** and then click **[Apple Talk]**.
  - ② In the **[connect via.]** list box, select **[Ethernet]**.

# Other Printing Problems

## Note


- For more information on IPDL-C, see the printer driver's Help.
- For more information on RICOH-SCRIPT2, see the "Operating Instructions" included as a PDF file in the CD-ROM.

Status	Possible Causes, Descriptions, and Solutions
The <b>Data in</b> indicator will be off after blinking or lit for a while.	<p>It might occur when the printer does not have enough memory to print a page.</p> <p>The following are the actions you should take when you encounter memory shortage problems. If these actions do not solve the problem individually, try them in combination with each other.</p> <ol style="list-style-type: none"> <li>① Change the Color level to <b>[1 bit]</b>. Use the printer property to change the Color Level to <b>[1 bit]</b>.</li> <li>② Turn on "Image Memory". Use the printer's "System Menu" to turn on "Image Memory".</li> </ol>
Image is printed on the reverse side of the paper.	<p>The paper in the paper tray is upside down.</p> <ul style="list-style-type: none"> <li>• Standard Tray (Tray 1~ 4) Load paper with the print side down.</li> <li>• Bypass Tray Load paper with the print side up.</li> </ul>
Paper misfeeds occur frequently.	Check if the paper tray is set correctly. If not, set it correctly.
	Paper is not loaded correctly in the paper tray. Remove the paper from the tray and reload it correctly.
	Check the paper type settings. The type of paper set with the printer driver might be different from the actual paper or media type. Make the correct paper or media type setting.
	You might use paper not supported by this machine. Use the appropriate type of paper. For more information on supported paper by this machine, see the operating instructions that describes the copy functions.

Status	Possible Causes, Descriptions, and Solutions
It takes too much time to print the first page.	The data is so large or complex that it takes time to process it. If the <b>Data In</b> indicator is blinking, the data processing is being done. Just wait until it resumes.
	The Energy Saver mode might be enabled. In the Energy Saver mode, it takes time for the machine to warm up.
It takes too much time to print.	Photographs and other data intensive pages take a long time for the printer to process, so simply wait when printing such data.  You can also speed up printing by using the printer driver to select <b>[1 bit]</b> as the print mode.
	The printer takes more time to print documents that contain a large volume of data. A blinking or lit <b>Data In</b> indicator means that data is reaching the printer, so just wait for the data to be processed and printed.
	If "Please Wait" appears on the panel display, the printer is now warming up or busy. Wait for a while.
	The printer takes more time to print if the "Interleave Print" is set to on in the copy function. For more information, see the operating instructions that describes copy functions.
It takes too much time to perform black and white printing.	<p><b>[Color]</b> is selected on the printer driver. Change this setting to <b>[Black and White]</b> in the <b>[Color Mode]</b>.</p> <p> <b>Note</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Some applications ignore the color mode setting made with the printer driver.</li> </ul>
Paper is not fed from the desired paper tray.	The printer driver setting is not correct. Change the setting. See the printer driver's Help for further details.
Desired paper size is not used for the output.	The printer driver setting is not correct. Change the setting. See the printer driver's Help for further details.
	<p>Specified paper is not loaded correctly in the paper tray. Remove the paper from the tray and reload the specified paper correctly.</p> <p> <b>Note</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> If you select Bypass Tray to print with IPDL-C, you must set the paper size both on the printer driver and on the operation panel.</li> <li><input type="checkbox"/> If you select Bypass Tray to print with RPS2, you can set the paper size on the operation panel.</li> </ul>

Status	Possible Causes, Descriptions, and Solutions
The area on the page that should be white or free of toner is a hazy gray.	Check the image density setting.
	Adjust the Color Calibration.
Image density is too light.	Turning on <b>[Toner Saving]</b> can cause the output to be blurred and result in very thin lines not printing at all. With color printing, toner saving can cause abnormal coloring. Try printing again after turning <b>[Toner Saving]</b> off. See the printer driver's online help for details about changing the settings on this tab.
	If the message "Add Toner XXX" is on the panel display, replace the toner cartridge for the indicated color. For more information on replacing the toner cartridge, see the operating instructions that describes copy functions.
	You might be using paper not supported by this printer. Use the appropriate type of paper. For more information of supported paper, see the operating instructions that informs the copy functions.
Toner is not fused well when printing on thick paper or OHP transparencies.	The printer is not in the "Thick Paper" or "OHP Transparency" mode. Select <b>[Thick Paper]</b> , <b>[OHP Transparency]</b> (IPDL-C) or <b>[OHP]</b> (RPS2) in the <b>[Paper Type]</b> box of the printer driver.
The color of the printout is different from the color on the computer's display.	The toner based color system used by the printer is different from the light based color system of the computer screen. ⇒ P.73 "Color Guide"
	Turning on the <b>[Toner Saving]</b> can cause color irregularities.
	Check the settings of the printer driver's <b>[Color Setting]</b> tab and restore the default settings.
	Adjusting the color calibration.⇒ P.33 "Adjusting the Color Calibration of the Printer"



Status	Possible Causes, Descriptions, and Solutions
<p>The printout is different from the image on the computer screen.</p>	<p>Certain applications or image creation methods produce images that cannot be printed exactly as they appear on the computer screen.</p> <p>With IPDL-C, checking the <b>[Print as bitmap]</b> item of the printer driver's <b>[Setup]</b> tab causes the print data to be converted to image data before it is sent to the printer, which produces a printout that is closest to what appears on your computer screen.</p> <p> <b>Note</b></p> <p><input type="checkbox"/> The setting also causes large-volume print jobs which take longer to print because of the required conversion process.</p>
<p>Changing the color settings with the printer driver causes a drastic change in printout color.</p>	<p>With IPDL-C, do not make radical changes in the settings of the <b>[Color Setting]</b> tab.</p> <p>Also note that the sample shown by the printer driver is intended to show what processes are being applied, not exactly what your printout will look like.</p>
<p>Photograph printing looks rough.</p>	<p>With IPDL-C, select <b>[Fine]</b> on the <b>[Print Quality]</b> tab.</p> <p>Printing from some applications results in a loss of resolution.</p>
<p>Color documents are printed in black and white.</p>	<p>The printer driver is not set up for color printing. Select <b>[Color]</b> in the <b>[Color Mode]</b> on the printer driver.</p> <p>Some applications normally print color text as black and white.</p>
<p>Fine dot pattern does not print.</p>	<p>With IPDL-C, select <b>[Photographic]</b> in the <b>[Dithering]</b> list box.</p>
<p>Solid area, line or text are shiny or glossy, when created as a mixture of cyan, magenta, yellow.</p>	<p>With IPDL-C, select <b>[K]</b> on the printer driver's <b>[Graphic Mode]</b>. See the printer driver's online help for details about changing the settings on this tab.</p>
<p>Black gradation is not natural.</p>	<p>With IPDL-C, select <b>[CMY + K]</b> on the printer driver's <b>[Graphic Mode]</b>.</p>
<p>When printing on OHP transparencies, a sheet of paper is not placed between printed OHP transparencies.</p>	<p>The size and direction of the paper loaded in the paper tray are different from those of the OHP transparency. Load the same size and direction paper as the OHP transparency into the paper tray.</p> <p>The "OHP Slip" setting is set to "Off". Change the setting with operation panel.</p>

If you cannot solve the problem by taking the above actions, contact your sales or service representative.

# 4. Adjusting the Color Calibration of the Printer

To maintain a constant print quality, color calibration is important for color printers. Color output may change after many prints, after a new toner cartridge is installed or with changes in temperature and atmospheric conditions.

This section provides instructions on printer color calibration.

## Important

- In order to do a full color calibration, you have to do the “Auto Color Calibration” in the copy mode at first, then in the printer mode.
- Color calibration should be done separately to match the printer driver's settings. You can select among 3 Color Levels <sup>\*1</sup> from the printer properties.

<sup>\*1</sup> 1 bit, 2 bit, 4 bit (High Quality)

## Note

- The adjustment of the color calibration affects the output of all of the users who use the same printer.
- Use the same type of paper for each print of the test pattern. An inaccurate adjustment can occur if the scanned paper type is different from the output paper type.

# Operation on the Copy Function Mode

## Preparation

The operation panel of the copy machine must be used to follow the procedure.

**1** Press **[User Tools]**.

**2** Press **[Auto Color Calibration]** and select **[Printer Mode]**.

### Note

If the machine is a **simplex** machine with the hard key type, select **[Copy features]**, select **[Image Adjustment]** and select **[Auto Color Cal.]**.

**3** Press **[Start]**.









### Note

If the machine is a **simplex** machine with the hard key type, press **[OK]**.

**4** Press **[Print Start]** to print the test pattern.

### Note

If the machine is a **simplex** machine with the hard key type, press **[Print]**.

The test pattern is printed on A4 , 11"×8<sup>1</sup>/<sub>2</sub>" . If A4 , 11"×8<sup>1</sup>/<sub>2</sub>"  is not available, the test pattern is printed on either B4 , 8<sup>1</sup>/<sub>2</sub>"×14"  or A3 , 11"×17" .

The test pattern is not counted on the counter.

**5** Place the test pattern on the exposer glass (platen glass) and place a few pieces of blank paper on the back of the test pattern.

### Limitation

Do not place them in the document feeder. Put them on the exposure glass (platen glass). Using the document feeder may cause a misoperation.

**6** Press **[Scan Start]** to adjust the color calibration.

### Note

If the machine is a **simplex** machine with the hard key type, press **[Scan]**.

**7** Press **[User Tools]**.

# Operation on the Printer Function Mode

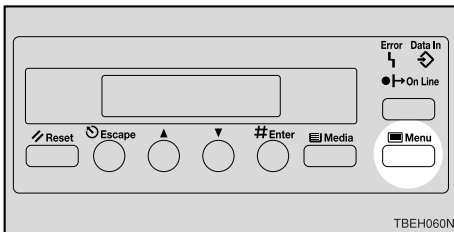
## Preparation

The printer operation panel must be used to do the following procedure.

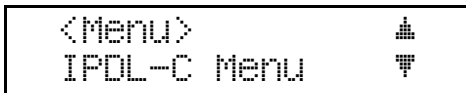
Confirm that a tray for either A4 size paper or not less than 8<sup>1</sup>/<sub>2</sub>"×11" paper is selected.

Selecting a paper tray is necessary if one has not yet been selected.

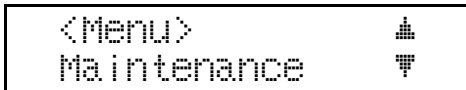
### **1** Press [Menu].



The Menu appears on the panel display.

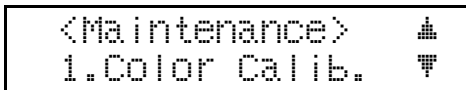


### **2** Press [▲] or [▼] to display "Maintenance".



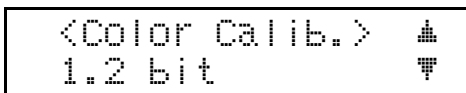
### **3** Press [# Enter].

The following message appears on the panel display.



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

The following message appears on the panel display.



**5** Press **[# Enter]**.

The following message appears on the panel display.

```
<2 bit>      ▲
1.Test Pattern ▼
```

**6** Press **[# Enter]**.

The following message appears and the test pattern begins being printed.

```
<Test Pattern>
Press # key
```

4

**7** Press **[# Enter]**

The following message appears while the test pattern is being printed.

```
Printing...
Test Pattern
```

The following message appears on the panel display after printing the test pattern.

```
Set Pattern on
Glass, Press #
```

**8** Place the test pattern on the exposure glass (platen glass) and place a few pieces of blank paper on the back of the test pattern.

📌 **Limitation**

- Do not place them in the document feeder. Put them on the exposure glass (platen glass). Using the document feeder may cause a misoperation to occur.

**9** Press **[# Enter]** to adjust the color calibration.

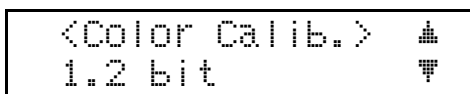
The following message appears on the panel display during calibration.

```
Calibrating...
```

The following message appears after the adjustment of the color calibration has been completed.

```
Completed
```

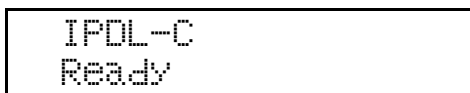
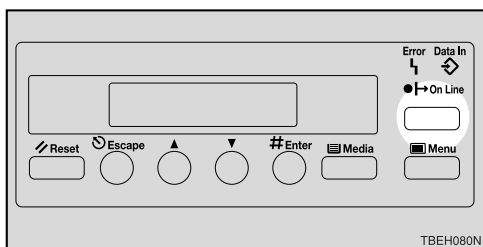
The menu **[Color Calib.]** appears.



 **Note**

- Adjust the color calibration for both the 1 bit and 4 bit (High Quality) modes following steps 8 to 9.

**10** Press **[On Line]** to return to the “Ready” display.



# Restoring Previous Color Calibration Settings

This machine can store the current and previous color calibration settings. In order to restore the previous setting, you should delete the current one.

## Operation on the Copy Function Mode

### Preparation

The operation panel of the copy machine must be used to follow the procedure.

4

**1** Press **[User Tools]**.

**2** Press **[Auto Color Calibration]** and **[Printer Mode]**.

#### Note

- If the machine is a **simplex** machine with the hard key type, select **[Printer Mode]**, select **[Image Adjustment]**.

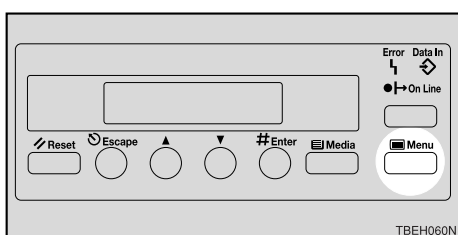
**3** Press **[Prev. Setting]**.

#### Note

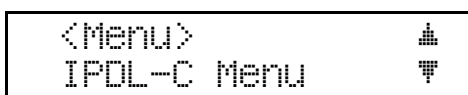
- If the machine is a **simplex** machine with the hard key type, select **[Previous]**.

## Operation on the Printer Function Mode

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



The Menu appears on the panel display.



- 2** Press **[▲]** or **[▼]** to display “Maintenance”.

<Menu>	▲
Maintenance	▼

- 3** Press **[# Enter]**.

The following message appears on the panel display.

<Maintenance>	▲
1.Color Calib.	▼

- 4** Press **[# Enter]**.

The following message appears on the panel display.

<Color Calib.>	▲
1.2 bit	▼

- 5** Press **[▲]** or **[▼]** to display the color level which you want to restore.

<Color Calib.>	▲
2.4 bit	▼

- 6** Press **[# Enter]**.

<4 bit>	▲
1.Test Pattern	▼

- 7** Press **[▲]** or **[▼]** to display “Restore”.

<4 bit>	▲
3.Restore	▼

- 8** Press **[# Enter]**.

The following message appears on the panel display.

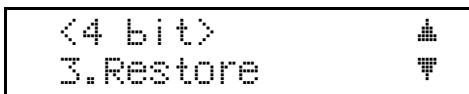
<Restore>
Press # key

- 9** Press **[# Enter]** to restore the previous color calibration setting again.

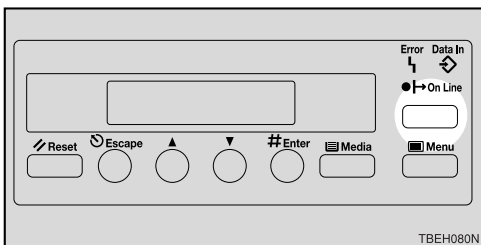
Restored
----------



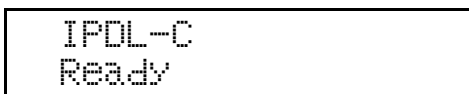
The following message appears on the panel display.



**10** Press **[On Line]** to return to the "Ready" display.



4



# 5. Using the Operation Panel

Though the factory default settings of the printer are suitable for most printing jobs, the Printer Menu gives you access to a number of settings that control basic printer operations. Printer Menu settings you make are retained even when you turn off the printer.

This section provides the following Printer Menu information.

## ❖ **Setting Menus**

Describes the basic procedures for changing Printer Menu settings.

## ❖ **Protecting the Menus**

Describes how to protect System Menu settings against accidental changes.

## ❖ **Menu Table**

A table chart that shows all of the Printer Menu.

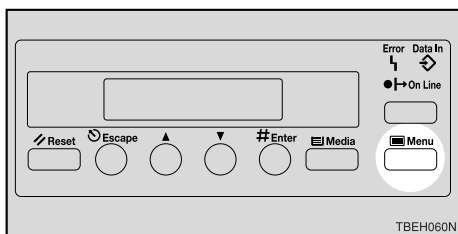
## **Note**

### ❖ **【Menu】 and 【Media】 setting priorities**

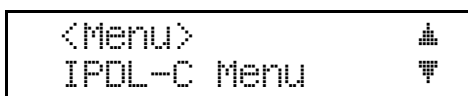
Some of the settings accessed by **【Menu】** can be accessed by **【Media】**. Settings made by **【Menu】** take priority over settings by **【Media】**.

# Setting Menu

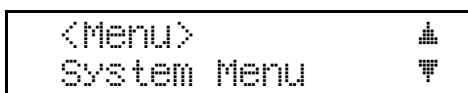
- 1 Press **[Menu]**.



The following message appears on the panel display.

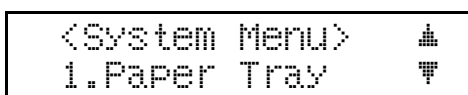


- 2 Press **[▲]** or **[▼]** to display the setting you want to change.



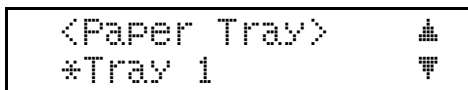
- 3 Press **[# Enter]**.

The following message appears on the panel display.



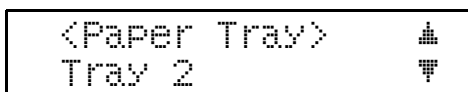
- 4 Press **[# Enter]**.

The following message appears on the panel display.



An asterisk "\*" is indicated at the left side of the currently selected item.

- 5 Press **[▲]** or **[▼]** to display the menu item you want to change.



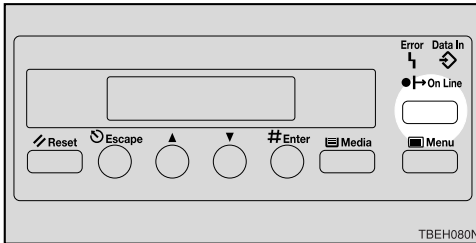
**6** Press **[# Enter]**.



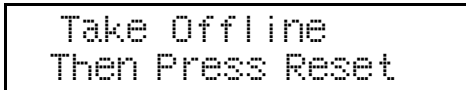
This registers the setting.

**7** Repeat steps **3** to **6** to change the settings of other items.

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



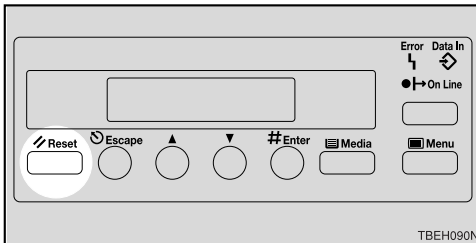
The following message appears on the panel display.



**9** Press **[On Line]** to enter the offline condition.

The On Line indicator stays off.

**10** Press **[Reset]**.



This restarts the printer with the new settings.

**Note**

- You can check the current Menu settings by printing a configuration page.  
⇒ P.58 "Printing the Configuration Page"

# Protecting the Menus

This procedure lets you protect System Menu settings against accidental changes. It makes it impossible to change the System Menu settings you make with the normal procedure unless you perform the required key operation. In a network environment, protecting settings restricts changes to the System Menu settings to network administrators.

---

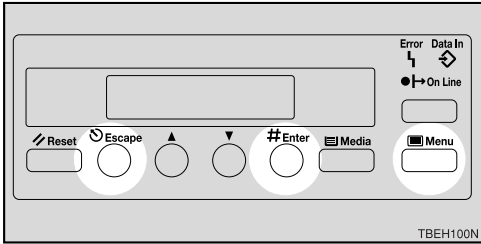
## Protecting the Menus

---

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

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

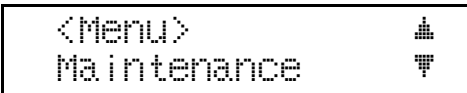
5



The following message appears on the panel display.

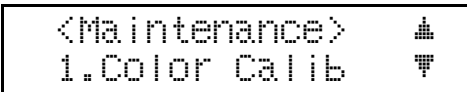


**3** Press **[▲]** or **[▼]** to display "Maintenance".



**4** Press **[# Enter]**

The following message appears on the panel display.



**5** Press **[▲]** or **[▼]** to display "3.Menu Protect".



**6** Press **[# Enter]**.

The following message appears on the panel display.

```
<Menu Protect>  ▲
Off             ▼
```

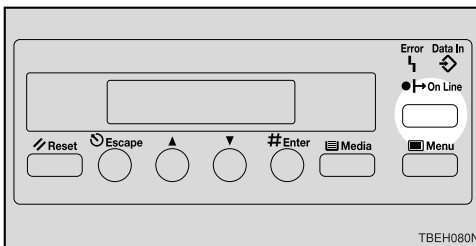
**7** Press **[▲]** or **[▼]** to display “On”.

```
<Menu Protect>  ▲
On             ▼
```

**8** Press **[# Enter]**.

This registers the setting. The “Maintenance” menu appears.

```
<Maintenance>  ▲
3.Menu Protect ▼
```

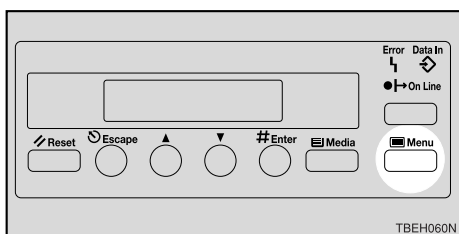
**9** Press **[On Line]**.

The “Ready” message appears on the panel display.

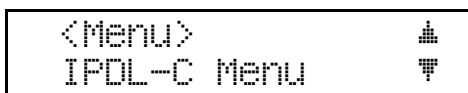
```
IPDL-C
Ready
```

## Changing the Menu Settings without Removing Protect

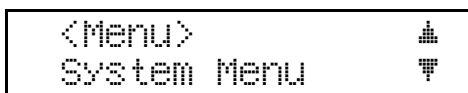
This procedure allows you to change System Menu settings without turning off menu protection. The changes you make are automatically protected as soon as you register them.

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

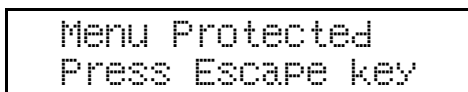
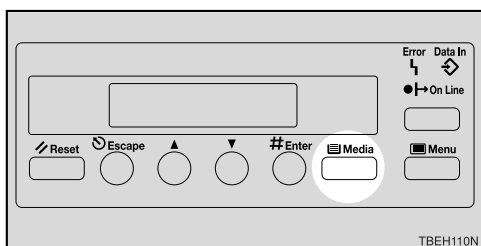
The following message appears on the panel display.

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

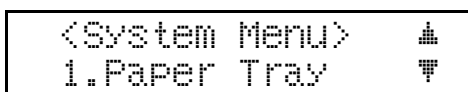
5

**3** Press **[# Enter]**.

A message that System Menu settings are protected appears.

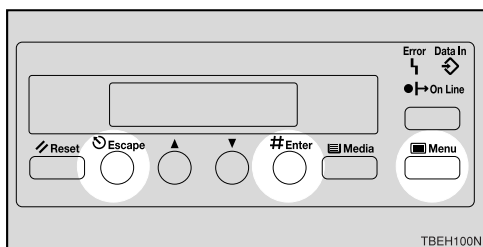
**4** Press **[Media]**.

The following message appears on the panel display.

**5** Change the setting following the normal procedure. ⇒ P.42 "Setting Menu"

## Removing Protect

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



The following message appears on the panel display.

```
<Menu>      ▲
IPDL-C Menu ▼
```

- 3** Press **[▲]** or **[▼]** to display "Maintenance".

```
<Menu>      ▲
Maintenance ▼
```

- 4** Press **[# Enter]**.

The following message appears on the panel display.

```
<Maintenance> ▲
1.Color Calib. ▼
```

- 5** Press **[▲]** or **[▼]** to display "3.Menu Protect".

```
<Maintenance> ▲
3.Menu Protect ▼
```

- 6** Press **[# Enter]**.

The following message appears on the panel display.

```
<Menu Protect> ▲
On ▼
```



**7** Press **[▲]** or **[▼]** to display "Off".

```

<Menu Protect> ▲
Off ▼
  
```

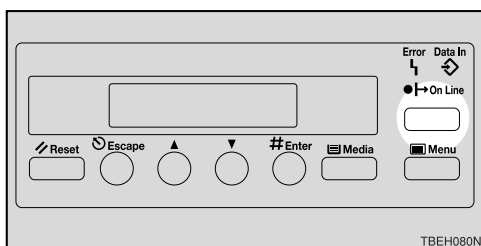
**8** Press **[# Enter]**.

This turns off protection and the "Maintenance" menu appears.

```

<Maintenance> ▲
3.Menu Protect ▼
  
```

**9** Press **[On Line]**.



The "Ready" message appears on the panel display.

```

IPDL-C
Ready
  
```

# Menu Table

IPDL-C Menu	1. Job Timeout
	2. I/O Timeout
RPS2 Menu	1. Color Level
	2. Color Mode
	3. Color Set
	4. Color Profile
	5. Smoothing
	6. Toner Saving
	7. Dithering
	8. Paper Type
	9. Auto Tray SW
	A. Auto Duplex <sup>*1</sup>
	B. Duplex Bind <sup>*2</sup>
	C. Collate / Stack <sup>*3</sup>
	D. Face Up / Down <sup>*4</sup>
	E. Job Timeout
	F. I/O Timeout
	G. Feed timeout
H. Print Error	
I. Ktalk Mode	
J. Parallel IF1	

<sup>\*1</sup> This menu appears when the machine is a duplex machine.  
<sup>\*2</sup> This menu appears when the machine is a duplex machine and has the optional 10-bin or 20-bin sorter installed.  
<sup>\*3</sup> This menu appears when the machine has the optional 10-bin or 20-bin sorter installed.  
<sup>\*4</sup> This menu appears when the machine has the optional 10-bin or 20-bin sorter installed.

System Menu	1. Paper Tray
	2. I/O Buffer
	3. Transfer
	4. Image Memory
	5. Parallel
	6. Bi-direction
	7. OHP Slip
	8. PrinterLang. (Printer Language)
	9. Language
	32. IP Address
	33. Subnet Mask
	34. Gateway Add (Gateway Address)
	35. Access CTL. (Access Control)
	36. Access Mask
	37. Net Boot (Network Boot)
38. Frame NW (Frame Type NW)	
39. Active PTL.	
Maintenance	1. Color Calib.⇒ P.33
	2. Menu Reset⇒ P.63
	3. Menu Protect *1 ⇒ P.44
	4. Log Protect *2
	5. Log Clear *3 ⇒ P.67
List Print	1. Config.Page⇒ P.58
	2. Job Log⇒ P.69
	3. Statistics⇒ P.65

\*1 This menu appears when **[# Enter]**, **[Escape]** and **[Menu]** are pressed while the printer is **On Line**.

\*2 This menu appears when **[# Enter]**, **[Escape]** and **[Menu]** are pressed while the printer is **On Line**.

\*3 If "Log Protect" is set to **On**, "Log Clear" will not appear.

---

## IPDL-C Menu

---

The following are the settings you can make with the “IPDL-C Menu”.

 **Note**

Italicized settings indicate default settings.

❖ **1. Job Timeout**

You can set how long the printer waits before terminating a print job when the printer doesn't receive the end of that print job.

- *000 Off*
- 0 (Off) to 999 seconds

❖ **2. I/O Timeout**

You can set how long the printer waits for more print data before ending its waiting period for data and terminating a job.

- *300 Sec*
- 0 (Off) to 999 seconds

5

---

## RICOH-SCRIPT2 Menu

---

Settings that you can select are described below. Settings made with the printer driver normally take priority, except when a printer driver setting is set to use the printer's settings.

 **Note**

Italicized settings indicate default settings.

❖ **Color Level**

Use this setting to select the number of colors used per dot to [**1 bit**], [**2 bit**] or [**4 bit**].

- 1 bit
- *2 bit*
- 4 bit

❖ **Color Mode**

Use this setting to select either monochrome or color printing.

- *Color*
- Black & White

❖ **Color Set (Color Setting)**

Use this setting to select the correction method used for converting the RGB data to CMYK data.

- Off  
No modification to the color setting.

- *Vivid*  
Select this setting to perform CMYK conversion with enhanced saturation and brightness to print vivid colors.
- Super Vivid  
Select this setting to perform CMYK conversion. The colors printed with this setting are more vivid than those printed with the "Vivid" setting. All of the colors in the image, especially the lighter ones, are emphasized.
- Fine  
Select this setting to perform color matching based on the printer's built-in color rendering dictionaries, and perform CMYK conversion. It makes it possible to print colors that are close to the displayed colors on the computer screen.  
The color rendering dictionaries refer to the contents selected by the Color Profile. This setting is useful when the application and printer driver do not support the color matching features.

 **Note**

- The color rendering dictionary that is selected on the Color Profile settings is used.

- Super Fine  
Like the "Fine" setting, the color rendering dictionary is used, however, output is more vivid. This setting is enabled to make light colors print more vivid.

❖ **Color Profile**

Use this setting to select the color rendering dictionary (CRD). The CRD is referred to for color matching, so you should select the appropriate CRD for the document you are printing. The CRD you select is also referred to when "Fine" or "Super Fine" is selected for the "Color Setting".

 **Note**

- When selecting **[OHP]** as the paper type, the CRD automatically adjusts to use a color profile specifically for OHP. Even though the color profile has been optimized for OHP, the adjustments are automatic and are not indicated on any of the dialog boxes. In this case, this setting is not enabled.

- Photograph  
Use this setting to enhance the reproduction of photos and graphics that include midtones.
- *Presentation*  
Use this setting to enhance the reproduction of documents that contain text and graphics. This CRD is best for printing colored charts, graphs, presentation materials and so on. If you use this CRD for printing photographs, color gradations might not be reproduced well.
- Solid Color  
Use this setting to print specific colors, logos and so on.

## ❖ Smoothing

Use this setting to select whether Smoothing is available or not.

- Off
- *Auto*

### 📍 Limitation

- When the Color Level is set to **[1 bit]**, Smoothing is enabled.
- When Toner Saving is selected, Smoothing is not enabled.

## ❖ Toner Saving

Use this setting to select whether Toner Saving is available or not.

- *Off*
- On

### 📎 Note

- Turning on toner saving can cause the output to become blurred and result in very thin lines not printing at all. In the case of color printing, toner saving can cause colors to be different from those expected. Because of this, use toner saving only for proofing and intermediate drafts, and turn it off for final prints when top quality is important.

## ❖ Dithering

Use this setting to select the image mode that is best for the type of data you are printing.

- *Auto*  
Select this setting to set automatically a mode that is suitable for printing.
- Photographic  
Select this setting to print photographs.
- Text  
Select this setting to print text.

## ❖ Paper Type

Use this setting to select the paper type for printing as: Plain Paper, Thick Paper, or OHP Transparency.

- *Plain Paper*
- OHP
- Thick Paper

Selecting an OHP Transparency as the paper type automatically adjusts internal settings to use a color profile specifically for OHP. Even though the color profile has been optimized for OHP, the adjustments are automatic and are not indicated on any of the dialog boxes. In this case, the **[Color Profile]** setting is not enabled.

### ❖ **Auto Tray SW (Auto Tray Switch)**

Use this setting to make the printer automatically switch to the other tray if it has the same paper size as the current tray when paper runs out while printing.

- *On*
- *Off*

To use this feature, the optional tray unit should be installed on the printer, and paper having the same size and direction should be loaded in both the standard and optional trays.

### ❖ **Auto Duplex**

Use this setting to select duplex print.

This item can be used only a duplex machine.

- *Off*
- *On*

### ❖ **Duplex Bind**

Use this setting to select the binding position of duplex prints.

- *Short Edge*
- *Long Edge*

### ❖ **Sort/Stack**

Use this setting to select sort or stack.

- *Off*
- *Sort*
- *Stack*

### ❖ **Face Up/Down**

Use this setting to select face-down or face-up printing. This setting can be used only when [**3 bin Sorter**] is selected. If [**Long Edge**] or [**Short Edge**] is selected in **Auto Duplex**, this selection will be ignored.

- *Face Down*
- *Face Up*

### ❖ **Job Timeout**

Use this setting to set how long the printer waits before terminating a print job when the printer does not receive the end of the current print job. You can set a time ranging from 1 to 999 seconds, or you can turn this feature off (no time limit = 0 second).

- *000 Off*
- *0 (Off) to 999 seconds*

**❖ I/O Timeout**

Use this setting to set how long the printer waits for more print data before ending its wait period and terminating a job. The job is automatically cancelled if no data is received for the selected time.

- *300 Sec*
- 0 (Off) to 999 seconds

**❖ Feed timeout**

Use this setting to set how long the printer waits for the correct paper size loaded, when paper runs out while printing. The job is printed with the paper currently loaded if the correct size is not loaded within the selected time.

- *60 Sec*
- 0 (Off) to 999 seconds

**❖ Print Errors**

Use this setting to select if an error report should be printed from the current tray when a PostScript error occurs while printing.

- *Off*
- On

**❖ Ktalk Mode**

This setting is not available.

**❖ Parallel IF**

Use this setting to select the parallel interface timing. When “System Default” is selected, the setting in the “System Menu” is used.

- *System Default*
- ACK Inside
- ACK Outside

---

## System Menu

---

The following are the settings you can make with the “System Menu”.

** Note**

Italicized settings indicate default settings.

**❖ 1. Paper Tray**

You can select the default paper tray whenever you turn on the printer. Only available trays will be displayed.

- *Tray 1*
- Tray 2
- Tray 3
- Tray 4
- Bypass



**❖ 2. I/O Buffer**

You can select the size of the I/O buffer. Normally it is not necessary to change this setting.

- 16KB
- 32KB
- 64KB
- *128KB*
- 256KB
- 512KB

**❖ 3. Transfer**

You can select the data transfer speed of the parallel interface. If you are having trouble with data transfers, try changing this setting to "Normal".

- *Hi-speed*
- Normal

**5****❖ 4. Image Memory**

This setting controls what the printer does when the printer memory is not enough to print a certain page.

- *Off*
- On

**❖ 5. Parallel**

You can select the parallel interface timing setting. Normally it is not necessary to change this setting.

- ACK Inside
- *ACK Outside*
- STB Down

**❖ 6. Bi-direction**

You can select the printer response mode for status fetch requests when the standard parallel interface is being used. Use the "Standard" setting when you are experiencing problems while the printer is connected to another manufacturer's print box.

- *Original Mode*
- Standard

**❖ 7. OHP Slip**

The OHP Slip is a sheet of paper placed between printed OHP transparencies. You can set this option to off or on.

- *On*
- Off

**❖ 8. PrinterLang.**

You can select the printer language that is automatically used when the printer is turned on. Selecting IPDL-C or RPS is required when you set the menu for each printer language.

- *IPDL-C*
- RPS (RICOH-SCRIPT2)

**❖ 9. Language**

You can select the language of the text that appears on the panel display.

- *English*
- French
- German
- Italian
- Dutch
- Japanese

**❖ 32. IP Address– 39. Active PTL**

You can configure the printer for the network.

** Reference**

For more information on configuring the printer for the network, see the “Printer Reference” that is provided as a paper manual.

## Printing the Configuration Page

Use the following procedure to print the configuration page which shows the current printer settings.

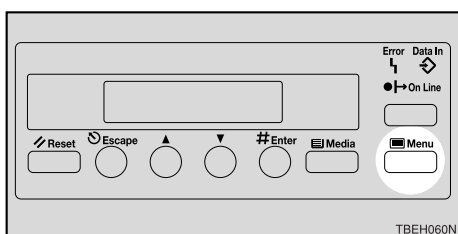
### Note

- If you want to print the configuration page in the RICOH-SCRIPT2 mode, confirm that the printer language is set to the RPS2 mode. Normally the printer is set to the IPDL-C mode. Follow the procedure below from **2**.

### Reference

For more information on selecting a printer language, see the "Printer Reference" that is provided as a paper manual.

#### 1 Press [Menu].



The following message appears on the panel display.

```
<Menu>
IPDL-C Menu
```

#### 2 Press [▲] or [▼] to display "List Print".

```
<Menu>
List Print
```

#### 3 Press [# Enter].

The following message appears on the panel display.

```
<List Print>
1. Config. Page
```

#### 4 Press [# Enter].

The following message appears on the panel display.

```
<1. Config. Page>
Press # key
```

**5** Press **[# Enter]**.

This starts printing the configuration page.

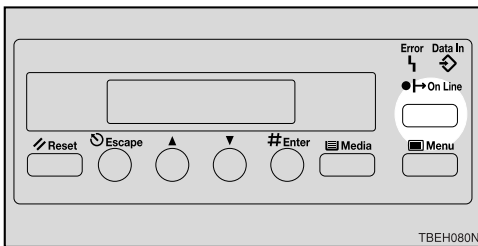
The following message appears while printing the configuration page.



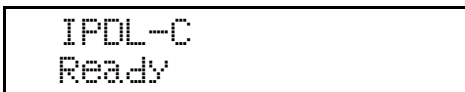
The "List Print" menu appears after printing the configuration page.



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



The "Ready" message appears on the panel display.



# Interpreting the Configuration Page

## Interpreting the Configuration Page/IPDL-C

### Reference

#### ❖ Firmware Version

This shows the version of the printer firmware.

#### ❖ Total Installed RAM
















This is the total amount of memory installed in the printer.






### Printer information

#### ❖ Tray 1–4, Bypass Tray

This table shows the paper sizes for each tray. Only the available trays are shown.

#### Note

Paper Size	Indicated on the Configuration Page
A3 	A3R
B4 	B4R
A4 	A4R
A4 	A4
B5 JIS 	B5R
B5 JIS 	B5
A5 	A5R
A5 	A5
B6 JIS 	B6R
A6 	A6R
12"×18" 	DL+
11"×17" 	DLR
8 <sup>1</sup> / <sub>2</sub> "×14" 	LGR
8 <sup>1</sup> / <sub>2</sub> "×13" 	F4R
8 <sup>1</sup> / <sub>2</sub> "×11" 	LTR

Paper Size	Indicated on the Configuration Page
11"×8 <sup>1</sup> / <sub>2</sub> " 	LT
8 <sup>1</sup> / <sub>4</sub> "×13" 	FLR
8"×13" 	FR
5 <sup>1</sup> / <sub>2</sub> "×8 <sup>1</sup> / <sub>2</sub> " 	HLR
8 <sup>1</sup> / <sub>2</sub> "×5 <sup>1</sup> / <sub>2</sub> " 	HLT

#### ❖ Pages Printed

This is the total number of pages printed by the printer to date.

#### ❖ Printer Error

This shows information on the status of consumable items and so on.

---

### Status list

---

#### ❖ IPDL-C

This shows current "IPDL-C" settings.

#### ❖ System

This shows current "System Menu" settings.

#### ❖ Network

These are the settings and status of the Network Interface Board.

---

### Error log

---

This is a log of printer errors.

---

## Interpreting Configuration Page/RICOH-SCRIPT2

---

#### ❖ Reference

Shows the printer system version, ID and so on. You can also see the status of the paper tray and the total number of pages printed to date.

#### ❖ Tray Status

Shows the status of the paper trays.

#### ❖ RPS2 Status

Shows the current settings for the RPS2 mode.

#### ❖ Memory Status

Shows the amount of printer memory, VM area and so on.

❖ **Font Status**

This is not used for this printer.

❖ **Installed Fonts**

Shows the fonts installed on the printer.

❖ **Interface Status**

Shows that the Network Interface Board is installed.

❖ **Network & TCP/IP Status**

Shows the network and TCP/IP items and their settings.

❖ **NetWare Status**

Shows the NetWare items and their settings.

❖ **NetBEUI Status**

Shows the NetBEUI items and their settings.

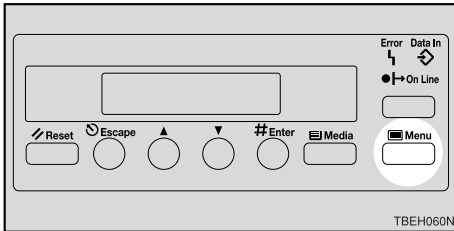
❖ **AppleTalk Status**

Shows the AppleTalk items and their settings.

# Resetting Menus

Use the following reset procedure to return the settings of all menus to their initial default settings.

- 1** Turn on the power switch.
- 2** Press **[Menu]**.



The following message appears on the panel display.

```
<Menu>      ▲
IPDL-C Menu  ▼
```

- 3** Press **[▲]** or **[▼]** to display "Maintenance".

```
<menu>      ▲
Maintenance ▼
```

- 4** Press **[# Enter]**.

The following message appears on the panel display.

```
<Maintenance> ▲
1.Color Calib. ▼
```

- 5** Press **[▲]** or **[▼]** to display "2.Menu Reset".

```
<Maintenance> ▲
2.Menu Reset  ▼
```

- 6** Press **[# Enter]**.

The following message appears on the panel display.

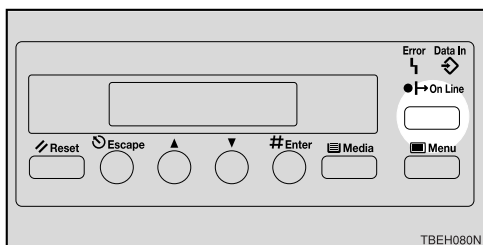
```
<Menu Reset>
Press # Key
```



**7** Press **[# Enter]**.

The following message appears on the panel display.

```
Take Offline
Then Press Reset
```

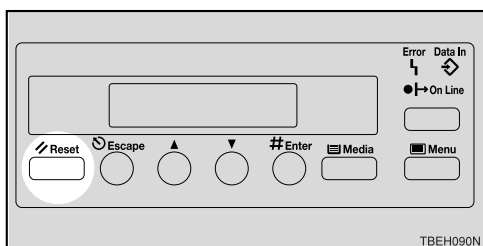
**8** Press **[On Line]**.

The “Ready” message appears on the panel display.

```
IPDL-C
Ready
```

**9** Press **[On Line]** to enter the offline condition.

The **On Line** indicator stays off.

**10** Press **[Reset]**.

This resets all menus to their initial factory defaults, and returns to the “Ready” display.

```
IPDL-C
Ready
```

# Administering Printing by User Code

This printer keeps a record of the number of pages printed for each User Code set in the printer driver. Using an 8 digit code allows you to keep a record of the number of prints made by each user code for 3 types of printing. You can monitor, black and white, 3 or 4 colors and other print jobs. \*<sup>1</sup> You can view the contents of a statistics report through the PRINTER MANAGER for ADMIN.

You can also set the same User Code within a department in the office. Up to 100 User Codes are available.

\*<sup>1</sup> Other means black and an additional color, or two colors neither of which is black.

- With Windows 95/98, you can set the User Code during driver installation.
- With Windows NT 4.0, you can set the User Code from the Printer Properties after installing the printer driver.
- With RICOH-SCRIPT2, you can only select whether or not to use the fixed User Code.

## Important

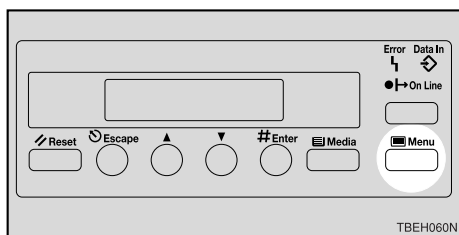
- With Windows 95/98, changing the User Code can only be done after reinstalling the printer driver.
- With Windows 95/98, if the printer name is changed after installing the printer driver, the User Code will be cancelled.

5

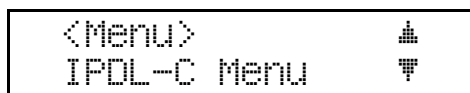
## Viewing the Number of Pages Printed for Each User Code

The following procedure shows how to print the list of User Codes and the number of pages printed for each User Code.

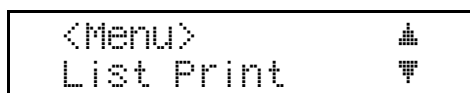
### **1** Press [Menu].



The Menu appears.



### **2** Press [▲] or [▼] to display "List Print".



**3** Press **[# Enter]**.

The following message appears on the panel display.

```
<List Print> ▲
1.Config.Pa&e ▼
```

**4** Press **[▲]** or **[▼]** to display “3.Statistics”.

```
<List Print> ▲
3.Statistics ▼
```

**5** Press **[# Enter]**.

The following message appears on the panel display.

```
<3.Statistics>
Press # key
```

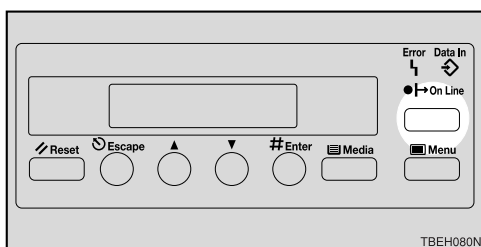
Press **[# Enter]**.

The following message appears while printing the statistics report.

```
Printing...
Statistics
```

The “List Print” menu appears after printing the statistics report.

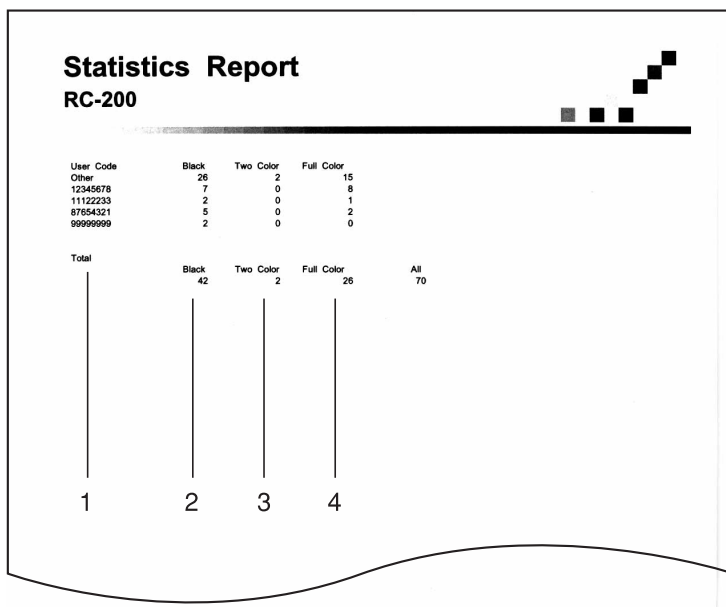
```
<List Print> ▲
3.Statistics ▼
```

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

The “Ready” message appears on the panel display.

```
IPDL-C
Ready
```

## Reading the Statistics Report



5

### 1. User Code

Shows a list of User Codes. However, if User Codes have not been configured, “other” appears.

With RICOH-SCRIPT2, User Code is fixed to “99999999”.

### 2. Black

Indicates the number of pages printed in black and white.

### 3. Two Color

Indicates the number of pages printed with two colors or less (excluding Black and White).

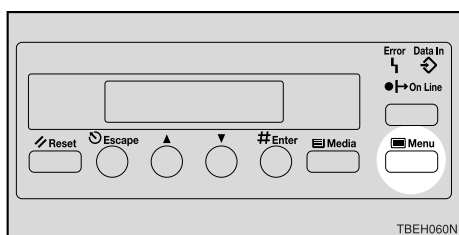
### 4. Full Color

Indicates the number of pages printed with three or four colors.

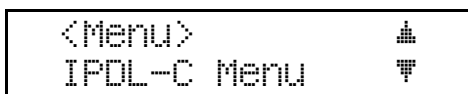
## Deleting the User Code Record

The following procedure shows how to delete the User Code record.

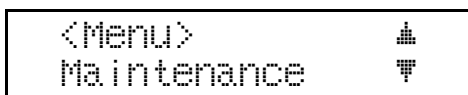
**1** Press **[Menu]**.



The Menu appears.

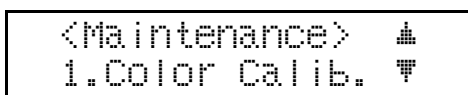


**2** Press **[▲]** or **[▼]** to display “Maintenance”.



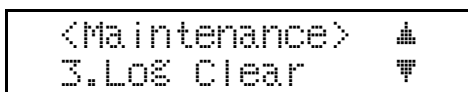
**3** Press **[# Enter]**.

The following message appears on the panel display.



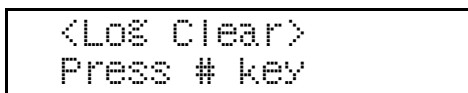
**5**

**4** Press **[▲]** or **[▼]** to display “Log Clear”.



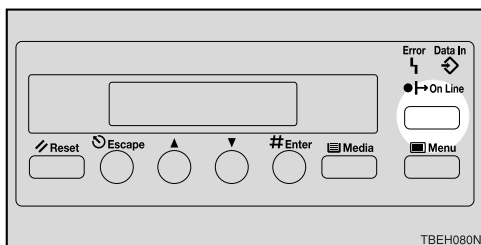
**5** Press **[# Enter]**.

The following message appears on the panel display.

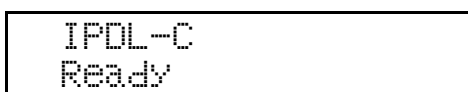


**6** Press **[# Enter]** to delete the User Code record.

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



The “Ready” message appears on the panel display.



# Using the Job Log

This printer records a Job Log which shows the time of each print job, the number of pages, and the current print status of each job. The Job Log also shows User ID for each job, making it easy to find the job in the log.

You can set up a User ID using 8 characters or less, which can help you to find your own job log among many who share the same User Code. Up to 64 User IDs are available.

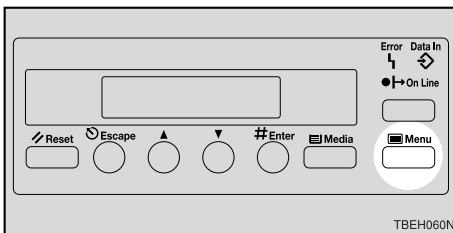
## Note

- Set up a User ID with the printer driver when you print.
- You can change the User ID every time you print.
- You can also browse the job log on your computer by accessing PRINTER MANAGER FOR ADMIN/CLIENT.
- Turning off the power or resetting the printer deletes the job log.

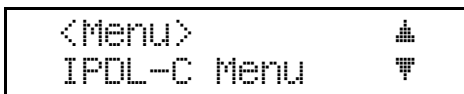
5

## Printing the Job Log

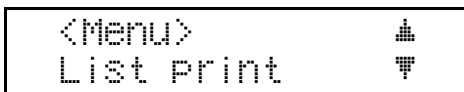
### 1 Press [Menu].



The Menu appears.

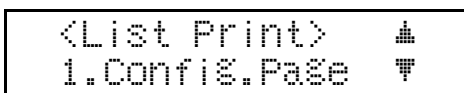


### 2 Press [▲] or [▼] to display "List Print".



### 3 Press [# Enter].

The following message appears on the panel display.



**4** Press **[▲]** or **[▼]** to display “Job Log”.

```
<List Print> ▲
2.Job Lo% ▼
```

**5** Press **[# Enter]**.

The following message appears on the panel display.

```
<2.Job Lo%>
Press # Key
```

**6** Press **[# Enter]**.

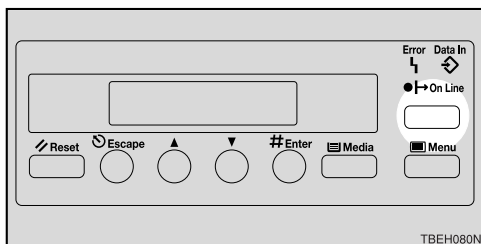
The following message appears while printing the job log.

```
Printing...
Job Lo%
```

The “Print List” menu appears after printing the job log.

```
<List Print> ▲
2.Job Lo% ▼
```

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



The “Ready” message appears on the panel display.

```
IPDL-C
Ready
```

## Reading the Job Log

**Job Log**  
RC-200

	User ID	Printer Language	Request Time	Black	Two Color	Full Color	Status
1:	?	IPDL-C	99/08/31 15:16	0	0	1	Print Complete
2:	123	IPDL-C	99/08/31 15:16	1	0	0	Print Complete
3:	?	IPDL-C	99/08/31 15:16	1	0	0	Print Complete
4:	?	IPDL-C	99/08/31 15:22	0	0	1	Print Complete
5:	RPS2	RicoHScript2	99/08/31 15:25	0	0	1	Print Complete
6:	A123	IPDL-C	99/08/31 15:25	0	0	1	Print Complete
7:	RPS2	RicoHScript2	99/08/31 15:25	0	0	1	Print Complete
8:	A2534	IPDL-C	99/08/31 15:25	1	0	0	Print Complete
9:	A2534	IPDL-C	99/08/31 15:27	0	0	1	Print Complete
10:	A2534	IPDL-C	99/08/31 15:29	1	0	0	Print Complete
11:	ACC01	IPDL-C	99/08/31 15:41	1	0	0	Print Complete
12:	RPS2	RicoHScript2	99/08/31 15:41	1	0	0	Print Complete
13:	?	IPDL-C	99/08/31 15:42	1	0	0	Print Complete

1      2      3      4      5      6      7

### 1. User ID

Indicates the User ID. "?" appears when the User ID is not set up. If the "Statistics Code" is set to **[On]** in the RICOH-SCRIPT2 mode, the fixed User ID of RPS2 will appear.

### 2. Printer Language

Indicates the printer Language, either IPDL-C or RICOH-SCRIPT2 (RPS2).

### 3. Request Time

Indicates the time when the job was requested by the printer driver.

### Note

- It is not available with RPS2.

### 4. Black

Indicates the number of pages printed in black and white.

### 5. Two Color

Indicates the number of pages printed with two colors or less (excluding Black and White).

### 6. Full Color

Indicates the number of pages printed with three or four colors.

### 7. Status

Indicates the current status of each job.





## Color Guide

---

### Color Printing Basics

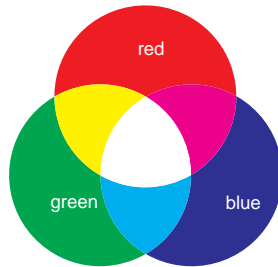
---

---

#### Additive (Emitted) and Subtractive (Reflected) Color Models

---

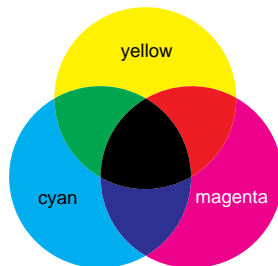
All light is a mixture of red, green, and blue, which is normally called the RGB model. When red, green, and blue are of equal intensities, the RGB color model produces white.



 **Note**

- RGB is also called additive or emitted color. The colors on your computer screen are produced by varying the intensities of RGB.

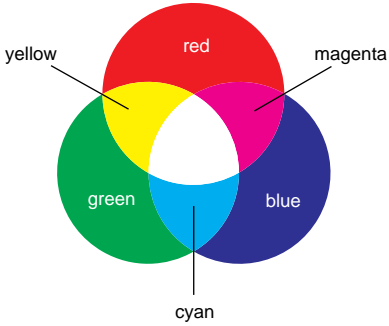
Printed color is a mixture of cyan, magenta, and yellow, which is normally called the CMY color model. When mixed in equal proportions the CMY color model produces black.



 **Note**

- CMY is also called subtractive or reflective color. The printer uses CMY toner plus K (black) toner (CMYK color model) to provide full color printing.

The colors of the RGB color model can be mixed to produce the cyan, magenta, and yellow of the CMY color model and vice versa. Two colors of one model are mixed to produce the color of the other model (mixing blue and green produces cyan, for example). The remaining color is the complement of the color produced (red in this example). Complimentary colors are: red and cyan, green and magenta, blue and yellow.



---

### Printed Color

---

The printer produces full-color output using four toner colors: cyan, magenta, yellow, and black. These four colors make up the CMYK color model.

 **Note**

- ❑ Mixing CMY in equal proportions should hypothetically produce pure black, but imperfections in the ink cause an equal measure of these colors to produce a muddy or dark brown. Black toner is added to the color model in order to make it possible to produce pure black.

# Paper Size and Color Level




The following table shows the correspondence between the color level selected in the printer driver and the available paper size to be printed.

Paper Size	1 bit	2 bit	4 bit
12"×18"	√		
A3, 11"×17"	√	√	
B4, 8 <sup>1</sup> / <sub>2</sub> "×14"	√	√	
A4, 8 <sup>1</sup> / <sub>2</sub> "×11" or smaller	√	√	√

- √ means the printing can be accomplished with both black and white and color modes.
- Blank cell means the printing may not be completed, if the document contains a large volume of data.

# Specifications

This section contains the electrical and hardware specifications for the printer controller.

Component	Specification								
Resolution	600 dpi								
Printing Speed	14 ppm (Monochrome) / 4 ppm (Color) : Simplex machine 18 ppm (Monochrome) / 4 ppm (Color) : Duplex machine (A4  , 8 1/2"×11"  )								
Parallel Interface	IEEE1284B Standard 36-pin printer cable and a parallel port on the host computer   <b>Note</b> <input type="checkbox"/> Do not use a parallel cable that is longer than 2.5 meters (8.2 feet).								
Network Interface	10BASE-T/100BASE-TX shielded twisted-pair (STP) cable and category / Type 5 cable								
Page description language	IPDL-C RICOH-SCRIPT2								
Fonts	39 Roman fonts (RICOH-SCRIPT2)								
Memory	Standard and Maximum : 96 MB								
Operation System Supported by this printer	Windows 95/98 Windows NT 4.0 MacOS 7.6~8.6								
Network	<b>Topology</b> : Ethernet 10BASE-T/100BASE-TX <b>Protocol</b> : IPX/SPX, NetBEUI, TCP/IP, AppleTalk								
Supported Copier Models	<table border="1"> <tbody> <tr> <td>Ricoh Aficio Color</td> <td>3006, 4006, 4106</td> </tr> <tr> <td>Gestetner</td> <td>CS206, CS206d, CS206de</td> </tr> <tr> <td>Savin</td> <td>SDC306, SDC306A, SDC306E</td> </tr> <tr> <td>Lanier</td> <td>5706AG, 5706AH, 5806AG, 5806AH 5806E AG, 5806E AH</td> </tr> </tbody> </table>	Ricoh Aficio Color	3006, 4006, 4106	Gestetner	CS206, CS206d, CS206de	Savin	SDC306, SDC306A, SDC306E	Lanier	5706AG, 5706AH, 5806AG, 5806AH 5806E AG, 5806E AH
Ricoh Aficio Color	3006, 4006, 4106								
Gestetner	CS206, CS206d, CS206de								
Savin	SDC306, SDC306A, SDC306E								
Lanier	5706AG, 5706AH, 5806AG, 5806AH 5806E AG, 5806E AH								

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## Note to users in the United States of America

### Notice:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one more of the following measures:

**Reorient or relocate the receiving antenna.**

**Increase the separation between the equipment and receiver.**

**Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.**

**Consult the dealer or an experienced radio/TV technician for help.**

### Warning

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### Caution (in case of 100BASE-TX environment):

Properly shielded and grounded cables (STP) and connectors must be used for connections to host computer (and/or peripheral) in order to meet FCC emission limits.

STP with ferrite core must be used for RF interference suppression.

### Declaration of Conformity

Product Name: Printer Controller

Model Number: Color Controller RC-200

Responsible party: Ricoh Corporation

Address: 5 Dedrick Place, West Caldwell, NJ 07006

Telephone number: 973-882-2000

This device complies with part 15 of FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

### Note to users in Canada

#### Note:

This Class B digital apparatus complies with Canadian ICES-003.

#### Remarque concernant les utilisateurs au Canada

#### Avertissement:

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.







# RICOH-SCRIPT2

## OPERATING INSTRUCTIONS



Read this manual carefully before you use this product and keep it handy for future reference.

For safety, please follow the instructions in this manual.

## **Introduction**

Please read the Safety Information in the "Operating Instructions" that comes with the printer 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.

## **Trademarks**

RICOH-SCRIPT2<sup>®</sup> is a registered trademark of Ricoh Company.

Microsoft<sup>®</sup>, Windows<sup>®</sup> and MS-DOS<sup>®</sup> are registered trademarks of Microsoft Corporation in the United States and/or other countries.

Adobe<sup>®</sup> and PostScript<sup>®</sup> are registered trademarks of Adobe System Incorporated.

AppleTalk, Apple, Macintosh, TrueType, LaserWriter and ColorSync are registered trademarks of Apple Computer, Incorporated.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights in those marks.

## **Note**

The proper names of Windows operating system are as follows:

- Microsoft<sup>®</sup> Windows<sup>®</sup> 95 operating system
- Microsoft<sup>®</sup> Windows<sup>®</sup> 98 operating system
- Microsoft<sup>®</sup> Windows NT<sup>®</sup> Server operating system Version 4.0
- Microsoft<sup>®</sup> Windows NT<sup>®</sup> Workstation operating system Version 4.0

# How to Read this Manual

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## Symbols

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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.

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# 1. Using RICOH-SCRIPT2 with Windows

## Using RICOH-SCRIPT2 with Windows 95/98

For operation under Windows 95/98, you should install both the Windows 95/98 PostScript printer driver and the PPD file.

### Note

- Be sure to install the PPD file for Windows 95/98. Do not install the PPD file for Windows NT 4.0 accidentally.

---

## Printer Properties Tabs and Their Settings

---

This section describes the Printer Properties tabs and the settings that are specific for this printer. The **[General]**, **[Details]**, **[Sharing]**, and **[Color Management]** tabs are standard Windows tabs.

### Reference

See the documentation that comes with your Windows operating system for details.

---

## **[Paper]** Tab

---

### ❖ Paper size

Use this to select the size of paper you want to use.

### ❖ Layout

Use this to select the layout which can combine the original document.

### ❖ Orientation

Use this to select **[Portrait]**, **[Landscape]** or **[Rotated]**.

### Note

- [Rotated]** becomes effective only when **[Landscape]** is selected.

### ❖ Paper source

Use this to select the paper tray you want to use. Available choices here are: **[AutoSelect Tray]**, **[Bypass Tray]**, **[Tray 1]**, **[Tray 2]**, **[Tray 3]** or **[Tray 4]**.

### Note

- If the paper tray you want to use is not available here, even though it is physically installed, use the **[Device Options]** tab to make the printer recognize the tray correctly.

❖ **Copies**

Use this to set the number of copies of a print job.

 **Note**

- With some applications, the number of copies specified with the application takes priority over the number of copies specified with the printer driver.

❖ **Unprintable Area**

Use this to set the unprintable area of paper.

❖ **More Options**

Click to open the **[More Paper Options]** dialog box. You can specify the paper type in this dialog box. The following paper types are available: **[Plain Paper]**, **[OHP Transparency]**, **[Thick Paper]**, **[Plain (Duplex Backs)]** or **[Thick (Duplex Backs)]**.

 **Note**

- Selecting **[OHP Transparency]** as the paper type automatically adjusts internal settings to use a color profile specifically for an OHP Transparency. Even though the color profile has been optimized for OHP, the adjustments are automatic and are not indicated on any of the dialog box. In this case, the **[Color Profile]** setting on the **[Device Options]** tab is not enabled.

❖ **About**

Click to display the printer driver copyright and version information.

---

**[Graphics] Tab**

---

❖ **Resolution**

Resolution is fixed at 600 dpi.

❖ **Color control**

Use this to select whether or not you want the colors in your documents to be adjusted before printing so that the printed page more closely matches the colors on your screen.

❖ **Halftoning**

Select the halftone pattern you want to use for printing. The following items are available: **[Use printer's setting]** and **[Use settings below]**.

 **Note**

- [Use settings below]** cannot be used to modify the values for **[Screen frequency]** or for **[Screen angle]**.

❖ **Special**

Use this to control the print image. Checking a check box changes the icon on the left so that it reflects the option you select.

- **Print as a negative image**

Select this option to print a negative image, which is produced by replacing the three primary colors with their complementary colors, and by reversing black and white.

 **Note**

- Using negative image printing to output a color image might produce unexpected results.

- **Print as a mirror image**

Select this option to print a mirror image of your document by reversing the horizontal coordinates.

❖ **Scaling**

Use this to enlarge or reduce the original document.

## [Fonts] Tab

Use this tab to select the TrueType font printing method.

If you select **[Send TrueType fonts to printer according to the font Substitution Table]**, you can edit **[Font Substitution Table]**. Clicking **[Edit the Table]** on the **[Fonts]** tab displays the **[Font Substitution Table]** dialog box. You can use this dialog box to specify which TrueType fonts should be replaced with built-in printer fonts.

❖ **Using the [Font Substitution Table]**

- ① Open the **[Font Substitution Table]** dialog box.
- ② In the **[For this TrueType font:]** list in the upper part of the dialog box, click to select the TrueType font which you want to use as a substitution font.
- ③ Use the **[Printer font for:]** list box to select the printer font you want to use.
- ④ Click **[OK]**.

## [Device Options] Tab

This tab includes settings that should be made after the printer driver is installed. These settings optimize the printer configuration.

❖ **Available printer memory**

Shows the amount of memory installed on the printer. You normally do not need to change this setting.

❖ **Printer features**

Shows settings that are specific for your printer. These features can be changed using the **[Change settings for:]** list box. The following is a list of available settings.

- **Auto Tray Switch**

Turning on this setting tells the printer to automatically switch to the other tray if it has the same paper size as the current tray when paper runs out while printing.



- **Color Level**

Use this to set the number of colors used per dot to **[1 bit]**, **[2 bit]** or **[4 bit (High Quality)]**.

- **Color Mode**

Use this to set the output color to **[Black and White]** or **[Color]**.

- **Color Setting**

Use this to set the correction method used for the color conversion. The following items are available: **[Off]**<sup>\*1</sup>, **[Vivid]**<sup>\*2</sup>, **[Super Vivid]**<sup>\*3</sup>, **[Fine]**<sup>\*4</sup>, **[Super Fine]**<sup>\*5</sup>.

<sup>\*1</sup> No modification to the color setting.

<sup>\*2</sup> Select this setting to perform CMYK conversion with enhanced saturation and brightness to print vivid colors.

<sup>\*3</sup> Select this setting to perform CMYK conversion. The colors printed with this setting are more vivid than those printed with the "Vivid" setting. All of the colors in the image, especially the lighter ones, are emphasized.

<sup>\*4</sup> Select this setting to perform color matching based on the printer's built-in color rendering dictionaries, and perform CMYK conversion. It makes it possible to print colors that are close to the displayed colors on the computer screen.

The color rendering dictionaries refer to the contents selected by the Color Profile. This setting is useful when the application and printer driver do not support the color matching features.

<sup>\*5</sup> Like the "Fine" setting, the color rendering dictionary is used, however, output is more vivid. This setting is enabled to make light colors print more vivid.

 **Note**

The color rendering dictionary that is selected on the Color Profile settings is used.

- **Color Profile**

Use this to select a color rendering dictionary (CRD). The CRD is referred to for color matching, so you should select the appropriate CRD for the document you are printing. The CRD you select is also referred to when "Fine" or "Super Fine" is selected for the "Color Setting". The following items are available: **[Photograph]**<sup>\*1</sup>, **[Presentation]**<sup>\*2</sup>, **[Solid Color]**<sup>\*3</sup>.

 **Note**

When selecting **[OHP]** as the paper type, the CRD automatically adjusts to use a color profile specifically for OHP. Even though the color profile has been optimized for OHP, the adjustments are automatic and are not indicated on any of the dialog boxes. In this case, this setting is not enabled.

<sup>\*1</sup> Use this setting to enhance the reproduction of photos and graphics that include midtones.

<sup>\*2</sup> Use this setting to enhance the reproduction of documents that contain text and graphics. This CRD is best for printing colored charts, graphs, presentation materials and so on. If you use this CRD for printing photographs, color or gradations might not be reproduced well.

<sup>\*3</sup> Use this setting to print specific colors, logos and so on.

- **Smoothing**

Use this to set Smoothing to **[Off]** or **[Auto]**.

### 📌 Limitation

- When the Color Level is set to **[1 bit]**, Smoothing is enabled.
- When Toner Saving is selected, Smoothing is not enabled.

### • Toner Saving

Use this to set Toner Saving to **[On]** or **[Off]**.

### 📝 Note

- Turning on toner saving can cause the output to become blurred and result in very thin lines not printing at all. In the case of color printing, toner saving can cause colors to be different from those expected. Because of this, use toner saving only for proofing and intermediate drafts, and turn it off for final prints when top quality is important.

### • Dithering

Use this to set the image mode. The following items are available: **[Auto]**, **[Photographic]** and **[Text]**.

### • Face-down Print

Use this to set Face-down print to **[On]** or **[Off]**. This setting can be used only when **[3-bin Sorter]** is selected. If **[Long Edge]** or **[Short Edge]** is selected in Auto Duplex, this selection will be ignored.

### • Collate/Stack

Use this to set **[Collate]**, **[Stack]** or **[Off]**. This selection cannot be used if the sorter is not selected in Configure Printer or Bypass Tray is selected in Paper Tray.

### • Staple

Use this to set the position of the staple. The following items are available: **[Off]**, **[Top Left]**, **[Top Right]**, **[Bottom Left]** or **[Bottom Right]**.

### 📝 Note

- This selection cannot be used if Sorter is selected for **[None]** or **[3-bin Sorter]**.
- If Staple is selected, Sort command will be selected automatically.
- In order to staple in the correct page order using the 10-bin or 20-bin sorter, "Reverse order" must be selected from the application.
- The position of the staple refers to the Portrait orientation. In the case of Landscape orientation, the position of the staple will be different and depends on the rotation of the driver and application.⇒ P.25

### • Statistics Code

Use this to set **[Off]** or **[On]**.

If "On" is selected, User Code "99999999" and User ID "RPS2" will be fixed. If "Off" is selected, User Code "Other" and User ID "?" will be set.

### 🔍 Reference

For more information, see the "Printer Reference" that is provided as a paper manual and the "Printer Reference" included as a PDF file in the CD-ROM.

❖ **[Installable Options]**

This box shows the options installed in the printer.

When selecting an option inside the upper list of this group, its current setting appears in the **[Change setting for:]** box. The following settings are available in the **[Change settings for:]** box.

For the optional tray unit: **[None]**, **[2 Trays]**, **[3 Trays]**.

For the optional sorter unit: **[None]**, **[3-bin Sorter]**, **[10-bin Sorter]**, **[20-bin Sorter]**.

---

**[PostScript] Tab**

---

Use this tab to set the output format of the PostScript files and the data processing method.

On the **[PostScript]** tab, click **[Advanced]** to display the **[Advanced PostScript Options]** dialog box.

❖ **When the printer is connected to the network.**

Clear both **[Send CTRL+D before job]** and **[Send CTRL+D after job]**.

❖ **When the printer is connected to your computer via a parallel interface cable.**

Select both **[Send CTRL+D before job]** and **[Send CTRL+D after job]**. Also, confirm that **[ASCII data]** is selected. If it is not selected, select it.

 **Reference**

For more information on the network. ⇒ P.14 *"Windows Network Environment"*

For more information on the PostScript headers. ⇒ P.15 *"Windows Headers"*

# Using RICOH-SCRIPT2 with Windows NT 4.0

For operation under Windows NT 4.0, you should install both the Windows NT 4.0 PostScript printer driver and the PPD file.

## Limitation

- Installing a printer driver requires Full Control access permission. Members of the Administrators, Server Operators, Print Operators, and Power Users groups have Full Control permission by default. When you install a printer driver, log on under Full Control permission.
- We recommend that you upgrade your Windows NT 4.0 operating system to the latest version before installing the printer driver. Contact your Windows retailer for details about the latest version available.
- Be sure to install the PPD file for Windows NT 4.0. Do not accidentally install the PPD file for Windows 95/98.

---

## Printer Properties Tabs and Their Settings

---

This section describes the settings of the tabs that are specific for this printer.

### Limitation

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

### Reference

The **[General]**, **[Port]**, **[Scheduling]**, **[Sharing]**, and **[Security]** tabs are Windows NT 4.0 standard tabs. See the documentation that comes with your Windows operating system for details.

---

## **[Device Settings] Tab**

---

The current setting appears in the lower part of the dialog box when you click a setting item. Select the setting you want to use for the selected item.

### Available PostScript Memory

Shows the amount of memory installed on the printer. You normally do not need to change this setting.

#### Note

- You can change this setting by changing the memory setting in **[Installable Options]**.

### ❖ Halftone

Select the halftone pattern you want to use for printing. The following items are available: **[Use Printer Halftone]** and **[Use System Halftone]**.

#### Note

- [Use settings below]** cannot be used to modify the values for **[Screen frequency]** or for **[Screen angle]**.

### ❖ Halftone Setup

You can change the halftone settings.

### ❖ Form to Tray Assignment

You normally do not need to change this setting.

#### Note

- If the paper tray you want to use is not available here, even though it is physically installed, use **[Device Settings]** tab to make the printer recognize the tray correctly.

### ❖ Font Substitution Table

Use this to edit the TrueType font substitution table. Under **[Font Substitution Table]**, the TrueType fonts installed on the computer are displayed. Select the setting you want to use from **[Change Setting]** for each TrueType font.

### ❖ Job Timeout

Use this to set a job timeout period in the range of 0 to 32767 seconds. Setting the value to 0 turns the job timeout off.

### ❖ Wait Timeout

Use this to set a wait timeout period in the range of 0 to 32767 seconds. Setting the value to 0 turns the wait timeout off.

### ❖ Option

- Paper feed Tray  
Use this to select whether or not the optional tray unit is installed on the printer. The following settings are available: **[None]**, **[2 Trays]** and **[3 Trays]**.
- Sorter  
Use this to select whether or not the optional sorter unit is installed on the printer. The following settings are available: **[None]**, **[3-bin Sorter]**, **[10-bin Sorter]** and **[20-bin Sorter]**.

## Default Document Properties Tabs and Their Settings

### Limitation

- Changing the setting of the printer requires Full Control access permission. Members of the Administrators, Server Operators, Print Operators, and Power Users groups have Full Control permission by default. When you set up options, log on using an account that has Full Control permission.
- General users can change the settings in an application's **[Print]** dialog box.

### [Page Setup] Tab

#### ❖ Page Size

Shows the currently selected paper size. You can use the list box to select another paper size if you want.

#### Note

- All paper sizes that can be used with Windows NT 4.0 are displayed, however, only the paper sizes supported by the printer can be selected.

Supported Paper
A3, A4, A5, A6, Hagaki, B4(JIS), B5(JIS), B6(JIS), Legal, Letter, HalfLetter, 8×13, 8.25×13, 8.5×13, 11×17, 12×18

#### ❖ Paper Source

Use this to select the tray from which you want paper to be fed for printing. The following items are available: **[Automatically Select]**, **[Bypass Tray]**, **[Tray 1]**, **[Tray 2]**, **[Tray 3]** or **[Tray 4]**.

#### Note

- If you cannot select an option tray even though it is physically installed on the printer, use **[Installable Options]** on the **[Device Settings]** tab to correctly set up the option.

#### ❖ Copy Count

Use this to set the number of copies of a print job.

#### Important

- With some applications, the number of copies specified with the application takes priority over the number of copies specified with the printer driver.

#### ❖ Orientation

Use this to select how the document is positioned on the page. The following settings are available: **[Portrait]**, **[Landscape]** and **[Rotated]**.

❖ **Print on Both Side [Duplex Printing]**

Use this to set the duplex printing.

The following settings are available: **[None]**, **[Short Side]** and **[Long Side]**.

❖ **Color Appearance**

Use this to set the output color. The following settings are available: **[Gray Scale]** and **[Color]**.

 **Note**

- Some files which include the JPEG, BMP or PSD (Photoshop) data might be printed in color even though Grayscale is selected in Color Appearance. In this case, if you want to print a whole document in the grayscale mode, you must select **[Black and White]** in **[Change 'Color Mode' Setting]** in the **[Advanced]** tab.

---

**[Advanced] Tab**

---

The current setting appears in the lower part of the dialog box by clicking a setting item. Select the setting you want to make for the selected item.

❖ **Graphic**

- **Resolution**  
Resolution is fixed to 600 dpi.
- **Color Appearance**  
Use this to set the output color. The following settings are available: **[Gray Scale]**, **[Color]**.
- **Scaling**  
Use this to enlarge or reduce the original document.
- **TrueType Font**  
Use this to set the TrueType font printing method. Selecting **[Substitute with Device Font]** causes TrueType fonts to be replaced with the printer's fonts in accordance with the font substitution table.

❖ **Document Options**

- **Mirrored Output**  
Select this option to print a mirror image of your document by reversing the horizontal coordinates.
- **Negative Output**  
Select this option to print a negative image, which is produced by replacing the three primary colors with their complementary colors, and by reversing black and white.

 **Note**

- Using negative image printing to output a color image might produce unexpected results.

- **Send CTRL-D Before Each Job and Send CTRL-D After Each Job**  
When the printer is connected to the network, select **[No]** for both **[Send CTRL-D Before Each Job]** and **[Send CTRL-D After Each Job]**  
When the printer is connected to your computer via parallel interface cable, select **[Yes]** both for **[Send CTRL-D Before Each Job]** and **[Send CTRL-D After Each Job]**.
- **Halftone Color Adjustment**  
Use this to adjust the halftone settings.

## ❖ Printer Features

- **Auto Tray Switch**  
Turning on this setting tells the printer to automatically switch to the other tray if it has the same paper size as the current tray when paper runs out while printing.
- **Color Level**  
Use this to set the number of colors used per dot to **[1 bit]**, **[2 bit]** or **[4 bit (High Quality)]**.
- **Color Mode**  
Use this to set the output color to **[Black and White]** or **[Color]**.
- **Color Setting**  
Use this to set the correction method used for the color conversion. The following items are available: **[Off]**<sup>\*1</sup>, **[Vivid]**<sup>\*2</sup>, **[Super Vivid]**<sup>\*3</sup>, **[Fine]**<sup>\*4</sup>, **[Super Fine]**<sup>\*5</sup>.
  - <sup>\*1</sup> No modification to the color setting.
  - <sup>\*2</sup> Select this setting to perform CMYK conversion with enhanced saturation and brightness to print vivid colors.
  - <sup>\*3</sup> Select this setting to perform CMYK conversion. The colors printed with this setting are more vivid than those printed with the "Vivid" setting. All of the colors in the image, especially the lighter ones, are emphasized.
  - <sup>\*4</sup> Select this setting to perform color matching based on the printer's built-in color rendering dictionaries, and perform CMYK conversion. It makes it possible to print colors that are close to the displayed colors on the computer screen.  
The color rendering dictionaries refer to the contents selected by the Color Profile. This setting is useful when the application and printer driver do not support the color matching features.
  - <sup>\*5</sup> Like the "Fine" setting, the color rendering dictionary is used, however, output is more vivid. This setting is enabled to make light colors print more vivid.

### Note

- The color rendering dictionary that is selected on the Color Profile settings is used.
- **Color Profile**  
Use this to select a color rendering dictionary (CRD). The CRD is referred to for color matching, so you should select the appropriate CRD for the document you are printing. The CRD you select is also referred to when "Fine" or "Super Fine" is selected for the "Color Setting". The following items are available: **[Photograph]**<sup>\*1</sup>, **[Presentation]**<sup>\*2</sup>, **[Solid Color]**<sup>\*3</sup>.



 **Note**

- When selecting **[OHP]** as the paper type, the CRD automatically adjusts to use a color profile specifically for OHP. Even though the color profile has been optimized for OHP, the adjustments are automatic and are not indicated on any of the dialog boxes. In this case, this setting is not enabled.

\*1 Use this setting to enhance the reproduction of photos and graphics that include midtones.

\*2 Use this setting to enhance the reproduction of documents that contain text and graphics. This CRD is best for printing colored charts, graphs, presentation materials and etc. If you use this CRD for printing photographs, color or gradations might not be reproduced well.

\*3 Use this setting to print specific colors, logos and so on.

- **Smoothing**

Use this to set smoothing to **[Off]** or **[Auto]**.

 **Limitation**

- When the Color Level is set to **[1 bit]**, Smoothing is enabled.

- When Toner Saving is selected, Smoothing is not enabled.

- **Toner Saving**

Use this to set Toner Saving to **[On]** or **[Off]**.

 **Note**

- Turning on toner saving can cause the output to become blurred and result in very thin lines not printing at all. In the case of color printing, toner saving can cause colors to be different from those expected. Because of this, use toner saving only for proofing and intermediate drafts, and turn it off for final prints when top quality is important.

- **Dithering**

Use this to select the image mode. The following items are available: **[Auto]**, **[Photographic]**, **[Text]**.

- **Paper Type**

Use this to select the paper type as **[Plain Paper]**, **[Thick Paper]**, **[OHP Transparency]**, **[Plain (Duplex Backs)]** or **[Thick (Duplex Backs)]**.

 **Note**

- Selecting **[OHP Transparency]** as the paper type automatically adjusts internal settings to use a color profile specifically for OHP. Even though the color profile has been optimized for an OHP transparency, the adjustments are automatic and are not indicated on any of the dialog box. In this case, the **[Color Profile]** setting on the **[Advanced]** tab is not enabled.

- **Face-down Print**

Use this to set Face-down print to **[On]** or **[Off]**. This setting can be used only when **[3-bin Sorter]** is selected. If **[Long Edge]** or **[Short Edge]** is selected in Auto Duplex, this selection will be ignored.

- **Collate/Stack**

Use this to set **[Collate]**, **[Stack]** or **[Off]**. This selection cannot be used if the sorter is not selected in Configure Printer or Bypass Tray is selected in Paper Tray.

- **Staple**

Use this to set the position of the staple. The following items are available: **[Off]**, **[Top Left]**, **[Top Right]**, **[Bottom Left]** or **[Bottom Right]**.

 **Note**

- This selection cannot be used if Sorter is selected **[None]** or **[3-bin Sorter]**.
- If Staple is selected, Sort command will be selected automatically.
- In order to staple in the correct page order using the 10-bin or 20-bin sorter, "Reverse order" must be selected from the application.
- The position of the staple refers to the Portrait orientation. In the case of Landscape orientation, the position of the staple will be different and depends on the rotation of the driver and application.⇒ P.25

- **Statistics Code**

Use this to set **[Off]** or **[On]**.

If "On" is selected, User Code "99999999" and User ID "RPS2" will be fixed. If "Off" is selected, User Code "Other" and User ID "?" will be set.

 **Reference**

For more information, see the "Printer Reference" that is provided as a paper manual and the "Printer Reference" included as a PDF file in the CD-ROM.

 **Note**

- [Paper Size]**, **[Paper Source]** and **[Copy Count]** settings are linked to the settings on the **[Page Setup]** tab.

# Windows Network Environment

1

PostScript data sent to the printer is processed by an interpreter. The interpreter translates programs written in the ASCII code line-by-line into a form that can be recognized by the printer.

When the printer is connected to the computer via a parallel interface cable, PostScript data is processed in units called “jobs”, and each job should have an EOF (End Of File = Ctrl+D) to indicate the end of the data to the printer. The printer continues to perform processing with the interpreter until receiving the EOF.

When the printer is connected to a network, because the network protocol controls the transferred data of jobs, the EOF is not required. Be sure to turn off the EOF.

## ❖ Windows 95/98

Open the **[PostScript]** tab of the Printer Properties. Click **[Advanced]**. Uncheck both **[Send CTRL+D after job]** and **[Send CTRL+D before job]**.

## ❖ Windows NT 4.0

Open the **[Advanced]** tab of the Default Document Properties. Under **[Post-Script Options]**, select **[No]** for both **[Send CTRL-D After Each Job]** and **[Send CTRL-D Before Each Job]**.

# Windows Headers

Headers are appended to the print data, and contain RICOH-SCRIPT2 commands required for proper printing. The default setting appends the headers to the data automatically for each print job, so you can print without worrying about the header data. You can configure how header data is sent to the printer with Windows 95/98.

## Important

- Changing header settings should be performed by system administrators who are familiar with the functions of PostScript.

---

## Sending Header Data

---

There are two methods for sending header data.

### ❖ Send header data for each print job (default)

Use this setting when printing data to a file and when printing to a shared network printer. Select **[Download header with each print job]** in the **[PostScript]** tab to enable this method.

### ❖ Send header to printer only once

This setting causes the header data to be stored in the printer memory, so jobs sent after the header data has already been sent are printed more quickly. Select **[Assume header is downloaded and retained]** in the **[PostScript]** tab to enable this method. To use this setting, you should send the header data to the printer in advance, so click **[Send Header Now]**.

#### Note

- Header data in the printer memory is cleared whenever the printer power is turned off, the printer is reset, or you switch to another type of the printer language. Printing without header data results in an error, so be careful when sending header data individually.

#### Note

- When the header data is sent to the printer, a message to inform you that the header has been sent is printed.
- If you send a print job to the printer without the header, a message to inform you to send the header is printed. In this case, select **[Assume header is downloaded and retained]** or **[Send Header Now]** to send the header data to the printer. If the header has already been stored in the printer memory, a message is printed informing you that it has been stored.



# 2. Using RICOH-SCRIPT2 with a Macintosh

## Using RICOH-SCRIPT2 with a Macintosh

You can use the LaserWriter printer driver that comes with your Macintosh when printing from a Macintosh. However, if you use the LaserWriter driver alone, you lose some printer functions. The lost printer functions can be added by installing the PPD file.

---

### Option Setup Dialog

---

#### **Note**


- Be sure to configure the options correctly. Otherwise, you cannot use the option, even though it is physically installed to the printer.

#### ❖ **Paper feed Tray**

Use this to select whether or not the optional tray unit is installed on the printer. The following settings are available: **[None]**, **[2 Trays]** and **[3 Trays]**.

#### ❖ **Sorter**

Use this to select whether or not the optional sorter unit is installed on the printer. The following settings are available: **[None]**, **[3-bin Sorter]** <sup>\*1</sup>, **[10-bin Sorter]** and **[20-bin Sorter]**.

<sup>\*1</sup> Among the optional sorter units, the 3-bin sorter does not support 5<sup>1</sup>/<sub>2</sub>" × 8<sup>1</sup>/<sub>2</sub>"  (HalfLetter).

# Setting up for Printing

## Setting up for Print Options

### LaserWriter 8.3x or earlier

With the LaserWriter 8.3x or earlier driver, clicking **[Options]** on the **[Printer]** dialog box displays the settings specific for this printer.

#### **Note**

- Selecting **[Printer's Default]** means selecting the items set with the printer's operation panel.

#### **Reference**

For more information on the LaserWriter 8.3x or earlier, see the documentation that comes with your Macintosh.

#### ❖ **Clicking [Option] on the [Printer] dialog box shows the following items:**

- **Auto Tray Switching**  
Turning on this setting tells the printer to automatically switch to the other tray when it has the same size of paper as the current tray when paper runs out while printing.
- **Color Level**  
Use this to set the number of colors used per dot to **[1 bit]**, **[2 bit]** or **[4 bit (High Quality)]**.
- **Color Mode**  
Use this to set the output color to **[Color]** or **[Black and White]**.
- **Color Setting**  
Use this to set the correction method used for the color conversion. The following items are available: **[Off]**<sup>\*1</sup>, **[Vivid]**<sup>\*2</sup>, **[Super Vivid]**<sup>\*3</sup>, **[Fine]**<sup>\*4</sup>, **[Super Fine]**<sup>\*5</sup>.

<sup>\*1</sup> No modification to the color setting.

<sup>\*2</sup> Select this setting to perform CMYK conversion with enhanced saturation and brightness to print vivid colors.

<sup>\*3</sup> Select this setting to perform CMYK conversion. The colors printed with this setting are more vivid than those printed with the "Vivid" setting. All of the colors in the image, especially the lighter ones, are emphasized.

<sup>\*4</sup> Select this setting to perform color matching based on the printer's built-in color rendering dictionaries, and perform CMYK conversion. It makes it possible to print colors that are close to the displayed colors on the computer screen.

The color rendering dictionaries refer to the contents selected by the Color Profile. This setting is useful when the application and printer driver do not support the color matching features.

<sup>\*5</sup> Like the "Fine" setting, the color rendering dictionary is used, however, output is more vivid. This setting is enabled to make light colors print more vivid.

 **Note**

- The color rendering dictionary that is selected on the Color Profile settings is used.

- **Color Profile**

Use this to select a color rendering dictionary (CRD). The CRD is referred to for color matching, so you should select the appropriate CRD for the document you are printing. The CRD you select is also referred to when “Fine” or “Super Fine” is selected for the “Color Setting”. The following items are available: **[Photograph]** <sup>\*1</sup>, **[Presentation]** <sup>\*2</sup>, **[Solid Color]** <sup>\*3</sup>.

 **Note**

- When selecting **[OHP]** as the paper type, the CRD automatically adjusts to use a color profile specifically for OHP. Even though the color profile has been optimized for OHP, the adjustments are automatic and are not indicated on any of the dialog boxes. In this case, this setting is not enabled.

<sup>\*1</sup> Use this setting to enhance the reproduction of photos and graphics that include midtones.

<sup>\*2</sup> Use this setting to enhance the reproduction of documents that contain text and graphics. This CRD is best for printing colored charts, graphs, presentation materials and etc. If you use this CRD for printing photographs, color or gradations might not be reproduced well.

<sup>\*3</sup> Use this setting to print specific colors, logos and so on.

- **Smoothing**

Use this to set smoothing to **[Off]** or **[Auto]**.

 **Limitation**

- When the Color Level is set to **[1 bit]**, Smoothing is enabled.
- When Toner Saving is selected, Smoothing is not enabled.

- **Toner Saving**

Use this to set Toner Saving **[On]** or **[Off]**.

 **Note**

- Turning on toner saving can cause the output to become blurred and result in very thin lines not printing at all. In the case of color printing, toner saving can cause colors to be different from those expected. Because of this, use toner saving only for proofing and intermediate drafts, and turn it off for final prints when top quality is important.

- **Dithering**

Use this to select the image mode. The following items are available: **[Auto]**, **[Photographic]** and **[Text]**.

- **Paper Type**

Use this to select the paper type. The following items are available: **[Plain Paper]**, **[Thick Paper]**, **[OHP Transparency]**, **[Plain (Duplex Backs)]** and **[Thick (Duplex Backs)]**.



 **Note**

- Selecting **[OHP Transparency]** as the paper type automatically adjusts internal settings to use a color profile specifically for OHP. Even though the color profile has been optimized for OHP, the adjustments are automatic and are not indicated on any of the dialog boxes. In this case, the **[Color Profile]** setting on **[Option]** is not enabled.

- **Face-down Print**

Use this to set Face-down print to **[On]** or **[Off]**. This setting can be used only when **[3-bin Sorter]** is selected. If **[Long Edge]** or **[Short Edge]** is selected in Auto Duplex, this selection will be ignored.

- **Collate/Stack**

Use this to set **[Collate]**, **[Stack]** or **[Off]**. This selection cannot be used if the sorter is not selected in Configure Printer or Bypass Tray is selected in Paper Tray.

- **Staple**

Use this to set the position of the staple. The following items are available: **[Off]**, **[Top Left]**, **[Top Right]**, **[Bottom Left]** or **[Bottom Right]**.

 **Note**

- This selection cannot be used if Sorter is selected for **[None]** or **[3-bin Sorter]**.
  - If Staple is selected, Sort command will be selected automatically.
  - In order to staple in the correct page order using the 10-bin or 20-bin sorter, "Reverse order" must be selected from the application.
  - The position of the staple refers to the Portrait orientation. In the case of Landscape orientation, the position of the staple will be different and depends on the rotation of the driver and application.⇒ P.25
- **Statistics Code**

Use this to set **[Off]** or **[On]**.

If "On" is selected, User Code "99999999" and User ID "RPS2" will be fixed. If "Off" is selected, User Code "Other" and User ID "?" will be set.

 **Reference**

For more information, see the "Printer Reference" that is provided as a paper manual and the "Printer Reference" included as a PDF file in the CD-ROM.

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**LaserWriter 8.4x or later**

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The following describes the settings specific for this printer using LaserWriter 8.4x or later.

 **Reference**

For more information on LaserWriter 8.4x or later, see the documentation that comes with your Macintosh.

❖ **Selecting [Color Matching] in the [Printer] dialog box shows the following items:**

- **Print Color**

You can specify the method and the color conversion settings for printing. The following items are available.

- **[Black and White]**

Select this for monochrome printing.

- **[Color/GrayScale]**

If you select this item, the color profile you select in the **[Color Profile]** of the **[Printer Specific Options]** becomes effective.

- **[ColorSync Color Matching]**

If you select **[ColorSync Color Matching]**, **[Printer Profile]** becomes active in the same dialog box. Select the ColorSync profile specific for your printer. Your Macintosh converts the print data from RGB to CMYK data, and sends it to the printer.

- **[PostScript Color Matching].**

If you select **[PostScript Color Matching]**, **[Printer Profile]** becomes active in the same dialog box. Select the ColorSync profile specific for your printer. Your Macintosh prepares the color rendering dictionary (CRD) based on the selected profile and attaches the CRD to the print data. The print data is sent to the printer with the CRD. The printer converts the print data from RGB to CMYK based on the attached the CRD.

 **Note**

- The CRD is referred to for color matching, so you should select the appropriate CRD for the document you are printing. The CRD you select is also referred to when “Fine” or “Super Fine” is selected for the “Color Setting”.

❖ **Selecting [Error Handling] in the [Printer] dialog box shows the following item:**

- **If there is a PostScript error**

You can select **[No special report]**, **[Summarize on screen]** or **[Print detailed report]**.

- **If the cassette is out of paper**

You can use this setting to select auto tray switching, which tells the printer to automatically switch to the other tray if it has the same paper size as the current tray when paper runs out while printing.

❖ **Selecting [Printer Specific Option] in the [Printer] dialog box shows the following items:**

- **Color Level**

Use this to set the number of colors used per dot to **[1 bit]**, **[2 bit]** or **[4 bit (High Quality)]**.

- **Color Mode**

Use this to set the output color to **[Color]** or **[Black and White]**.

- **Color Setting**

Use this to set the correction method used for the color conversion. The following items are available: **[Off]** <sup>\*1</sup>, **[Vivid]** <sup>\*2</sup>, **[Super Vivid]** <sup>\*3</sup>, **[Fine]** <sup>\*4</sup>, **[Super Fine]** <sup>\*5</sup>.

<sup>\*1</sup> No modification to the color setting.

<sup>\*2</sup> Select this setting to perform CMYK conversion with enhanced saturation and brightness to print vivid colors.

<sup>\*3</sup> Select this setting to perform CMYK conversion. The colors printed with this setting are more vivid than those printed with the "Vivid" setting. All of the colors in the image, especially the lighter ones, are emphasized.

<sup>\*4</sup> Select this setting to perform color matching based on the printer's built-in color rendering dictionaries, and perform CMYK conversion. It makes it possible to print colors that are close to the displayed colors on the computer screen.

The color rendering dictionaries refer to the contents selected by the Color Profile. This setting is useful when the application and printer driver do not support the color matching features.

<sup>\*5</sup> Like the "Fine" setting, the color rendering dictionary is used, however, output is more vivid. This setting is enabled to make light colors print more vivid.

 **Note**

The color rendering dictionary that is selected on the Color Profile settings is used.

- **Color Profile**

Use this to select a color rendering dictionary (CRD). The CRD is referred to for color matching, so you should select the appropriate CRD for the document you are printing. The CRD you select is also referred to when "Fine" or "Super Fine" is selected for the "Color Setting". The following items are available: **[Photograph]** <sup>\*1</sup>, **[Presentation]** <sup>\*2</sup>, **[Solid Color]** <sup>\*3</sup>.

 **Note**

When selecting **[OHP]** as the paper type, the CRD automatically adjusts to use a color profile specifically for OHP. Even though the color profile has been optimized for OHP, the adjustments are automatic and are not indicated on any of the dialog boxes. In this case, this setting is not enabled.

<sup>\*1</sup> Use this setting to enhance the reproduction of photos and graphics that include midtones.

<sup>\*2</sup> Use this setting to enhance the reproduction of documents that contain text and graphics. This CRD is best for printing colored charts, graphs, presentation materials and so on. If you use this CRD for printing photographs, color or gradations might not be reproduced well.

<sup>\*3</sup> Use this setting to print specific colors, logos and so on.

- **Smoothing**

Use this to set Smoothing to **[Off]** or **[Auto]**.

 **Limitation**

When the Color Level is set to **[1 bit]**, Smoothing is enabled.

When Toner Saving is selected, Smoothing is not enabled.

- **Toner Saving**

Use this to set Toner Saving to **[On]** or **[Off]**.

 **Note**

- Turning on toner saving can cause the output to become blurred and result in very thin lines not printing at all. In the case of color printing, toner saving can cause colors to be different from those expected. Because of this, use toner saving only for proofing and intermediate drafts, and turn it off for final prints when top quality is important.

- **Dithering**

Use this to select the image mode. The following items are available: **[Auto]**, **[Photographic]** and **[Text]**.

 **Note**

- When you use the printer that does not support **[Auto]**, the default setting is **[Photographic]**.

- **Paper Type**

Use this to select the paper type. The following items are available: **[Plain Paper]**, **[Thick Paper]**, **[OHP Transparency]**, **[Plain (Duplex Backs)]** or **[Thick (Duplex Backs)]**.

 **Note**

- Selecting **[OHP Transparency]** as the paper type automatically adjusts internal settings to use a color profile specifically for OHP. Even though the color profile has been optimized for OHP, the adjustments are automatic and are not indicated on any of the dialog box. In this case, the **[Color Profile]** setting on **[Printer Specific Option]** is not enabled.

- **Face-down Print**

Use this to set Face-down print to **[On]** or **[Off]**. This setting can be used only when **[3-bin Sorter]** is selected. If **[Long Edge]** or **[Short Edge]** is selected in Auto Duplex, this selection will be ignored.

- **Collate/Stack**

Use this to set **[Collate]**, **[Stack]** or **[Off]**. This selection cannot be used if the sorter is not selected in Configure Printer or Bypass Tray is selected in Paper Tray.

 **Note**

- You must set **[Collate]** to **[Off]** in any other tabs except **[Printer Specific Options]**.

- **Staple**

Use this to set the position of the staple. The following items are available: **[Off]**, **[Top Left]**, **[Top Right]**, **[Bottom Left]** or **[Bottom Right]**.

 **Note**

- This selection cannot be used if Sorter is selected for **[None]** or **[3-bin Sorter]**.
- If Staple is selected, Sort command will be selected automatically.
- In order to staple in the correct page order using the 10-bin or 20-bin sorter, "Reverse order" must be selected from the application.

- The position of staple refers to the Portrait orientation. In the case of Landscape orientation, the position of the staple will be different and depends on the rotation of the driver and application.⇒ P.25

- **Statistics Code**

Use this to set **[Off]** or **[On]**.

If "On" is selected, User Code "99999999" and User ID "RPS2" will be fixed. If "Off" is selected, User Code "Other" and User ID "?" will be set.

- **Reference**

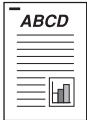

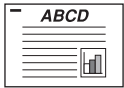



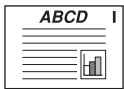

For more information, see the "Printer Reference" that is provided as a paper manual and the "Printer Reference" included as a PDF file in the CD-ROM.

# 3. Appendix

## Staple Position

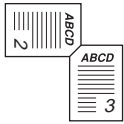

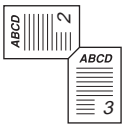
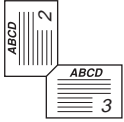

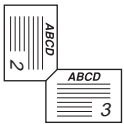
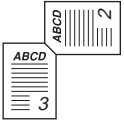

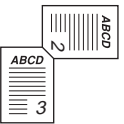
The following tables show the outputs of staple positions depending on each condition.

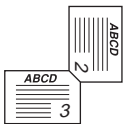
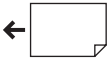
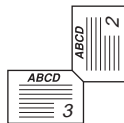
### Simplex Printing

Output of Staple Position	OS <sup>*1</sup>	Staple Setting	Paper Feed
		Top Left	
	Windows 95/98 Windows NT 4.0	Bottom Left	
	Mac OS 7.1 ~ 8.6	Top Right	
		Top Right	
	Windows 95/98 Windows NT 4.0	Top Left	
	Mac OS 7.1 ~ 8.6	Top Right	

<sup>\*1</sup> The position of the staple will be different depending on the rotation of the driver and application.

## Duplex Printing

Output of Staple Position	OS *1	Binding	Staple Setting	Paper Feed
		Long edge	Top Left	
		Short edge		
	Windows 95/ 98 Windows NT 4.0	Long edge	Bottom Left	
	Mac OS 7.6 ~ 8.6		Top Right	
	Windows 95/ 98 Windows NT 4.0	Short Edge	Bottom Left	
	Mac OS 7.6 ~ 8.6		Top Right	
		Long edge	Top Right	
		Short edge		

Output of Staple Position	OS *1	Binding	Staple Setting	Paper Feed
	Windows 95/98 Windows NT 4.0	Long edge	Top Left	
	Mac OS 7.6 ~ 8.6		Bottom Right	
	Windows 95/98 Windows NT 4.0	Short edge	Top Left	
	Mac OS 7.6 ~ 8.6		Bottom Right	

\*1 The position of the staple will be different depending on the rotation of the driver and application.



## Printer Memory and VM Area

The following table shows the relationship between the printer memory capacity and the VM (virtual memory) capacity.

Printer Memory	VM (virtual memory) Capacity
96MB	Approximately 9.9MB

### Note

- The “VM” of the PostScript printer is the memory area outside of the page memory and program area. If the data sent from the computer is very complex, printing may not be possible because of insufficient printer memory. This is called a “VM error”.
- In some cases, printing is impossible even though a VM error has not occurred.

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# Precautions for RICOH-SCRIPT2

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## Differences between RICOH-SCRIPT2 and “PostScript Language Reference Manual, Second Edition”

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The differences between RICOH-SCRIPT2 and PostScript Level 2 as defined in the “PostScript Language Reference Manual, Second Edition” by Adobe Systems Incorporated are described below.

- RICOH-SCRIPT2 does not support the “user path cache” function, therefore the print processing speed may be reduced when this function is called by any PostScript program. This function originated in Display PostScript, and it is not used by most printer drivers.
- RICOH-SCRIPT2 does not support “automatic garbage collection”. Instead, a similar routine is implemented by the printer drivers with the “save/restore” operators. Not having this function does not create any problems.

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## Other Precautions

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- Because of the differences in image, graphics, and clipping rules, the printing results produced by any single draw operator might be out of place by one dot.
- The memory area used for downloading fonts will not be free. A VM error might occur when downloading fonts with insufficient VM memory. In this case, the print job may be canceled. However, this printer will restart RICOH-SCRIPT2 automatically.
- Lasertalk version 1.3 is not supported.
- Built-in font metric data may be different from the PostScript fonts.
- Type 1 fonts conform to the Adobe Type 1 font format (1.1) standard. However, some Type 1 fonts with outline transposition (self-interference) may not print correctly.
- When printing text without using “font hint data” downloaded from the application, enlarged or reduced fonts may print incorrectly.
- When using the PostScript printer driver with Windows applications, the printed result might not match the preview on the computer screen.

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## Note to users in the United States of America

### Notice:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one more of the following measures:

**Reorient or relocate the receiving antenna.**

**Increase the separation between the equipment and receiver.**

**Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.**

**Consult the dealer or an experienced radio/TV technician for help.**

### Warning

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### Caution (in case of 100BASE-TX environment):

Properly shielded and grounded cables (STP) and connectors must be used for connections to host computer (and/or peripheral) in order to meet FCC emission limits.

STP with ferrite core must be used for RF interference suppression.

### Declaration of Conformity

Product Name: Printer Controller

Model Number: Color Controller RC-200

Responsible party: Ricoh Corporation

Address: 5 Dedrick Place, West Caldwell, NJ 07006

Telephone number: 973-882-2000

This device complies with part 15 of FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

### Note to users in Canada

### Note:

This Class B digital apparatus complies with Canadian ICES-003.

### Remarque concernant les utilisateurs au Canada

### Avertissement:

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.



### Declaration of Conformity

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

### Caution (in case of 100BaseTX environment):

Properly shielded and grounded cables (STP) and connectors must be used for connections to host computer (and/or peripheral) in order to meet EMC Directive 89/336/EEC emission limits.

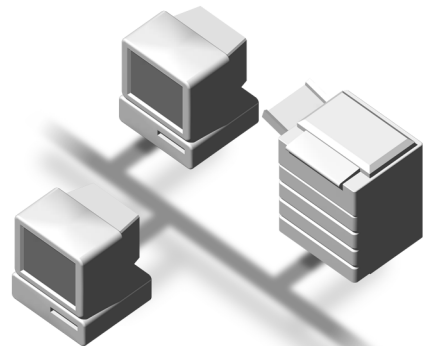


**RICOH-SCRIPT12 Type305 (Option) OPERATING INSTRUCTIONS**



# Network Interface Board

## OPERATING INSTRUCTIONS



Read this manual carefully before you use this product and keep it handy for future reference.

For safety, please follow the instructions in this manual.



## 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 "Printer Reference" 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.

## Note

The names of the applications do not appear in the following pages. Confirm which applications you will be using before reading this manual.

Descriptions in this manual	Application
PRINTER MANAGER FOR ADMINISTRATOR	Aficio Manager for Admin
	Net Vision for Admin
	infotec NetPrint Manager for Admin
	Lanier Net Manager for Admin
PRINTER MANAGER FOR CLIENT	Aficio Manager for Client
	Net Vision for Client
	infotec NetPrint Manager for Client
	Lanier Net Manager for Client

## Software Versions Conventions Used in this Manual

- NetWare 3.x means NetWare 3.11, 3.12 and 3.2.
- NetWare 4.x means NetWare 4.1, 4.11 and IntranetWare.

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Novell, NetWare, Client32 and NDS are registered trademarks of Novell, Inc.

PostScript is a registered trademark of Adobe Systems, Incorporated.

Sun is a registered trademark of Sun Microsystems, Inc.

SunOS is a registered trademark of Sun Microsystems, Inc.

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

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights in those marks.

## Note

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

- Microsoft Windows 95 operating system
- Microsoft Windows 98 operating system
- Microsoft Windows for Workgroups operating system Version 3.11
- Microsoft Windows NT Server operating system Version 4.0
- Microsoft Windows NT Workstation operating system Version 4.0

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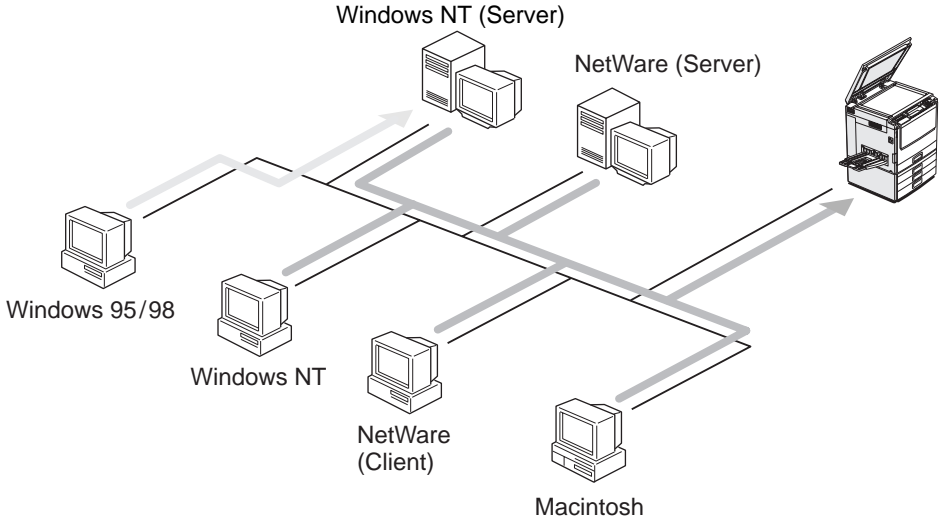
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# Introduction

This manual contains detailed instructions on configuring the printer to use it as a network printer. The actual procedures may differ depending on your network environment. Use the procedure appropriate for your network environment.



## Important

❑ The procedures in this manual assume that you are a network administrator. If you are not, be sure to consult your network administrator before configuration.

## Reference

For more information on physically installing the Network Interface Board and cabling, see the "Printer Reference" that is provided as a paper manual.

For more information on configuring the Network Interface Board with the operation panel, see the "Printer Reference" that is provided as a paper manual.

## Features

- Support for 100BASE-TX and 10BASE-T
- The Network Interface Board is compatible with NetWare (IPX/SPX), Windows NT (TCP/IP, NetBEUI), Windows 95/98 (TCP/IP, NetBEUI), and Macintosh (AppleTalk) protocols. This allows you to use the printer in a network that uses different protocols and operating systems.
- A computer used as a dedicated print server is not required because the Network Interface Board can be configured as a NetWare print server.
- The Network Interface Board can connect the printer to the network without requiring its own power supply because the Network Interface Board is installed inside the printer.

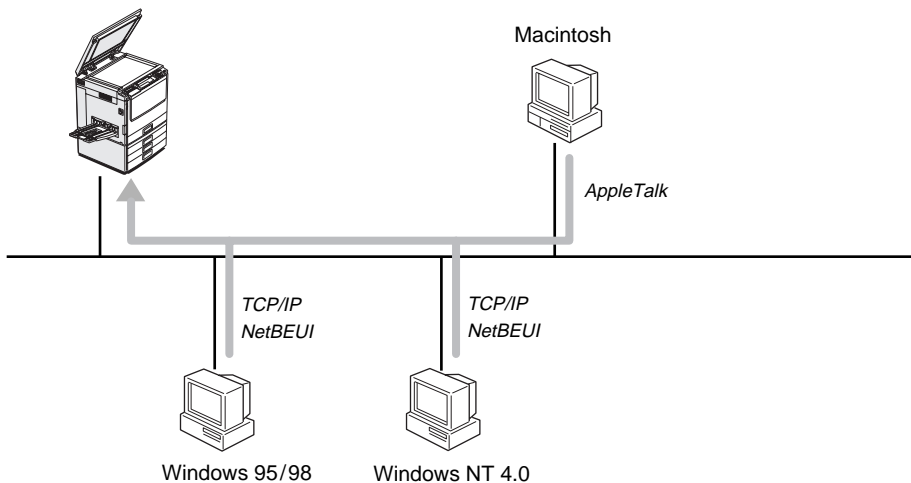
# Setting up the Printer in a Network

---

## Printing without Using a Print Server

---

You do not need to use a print server. The actual procedure may differ depending on your operating system.



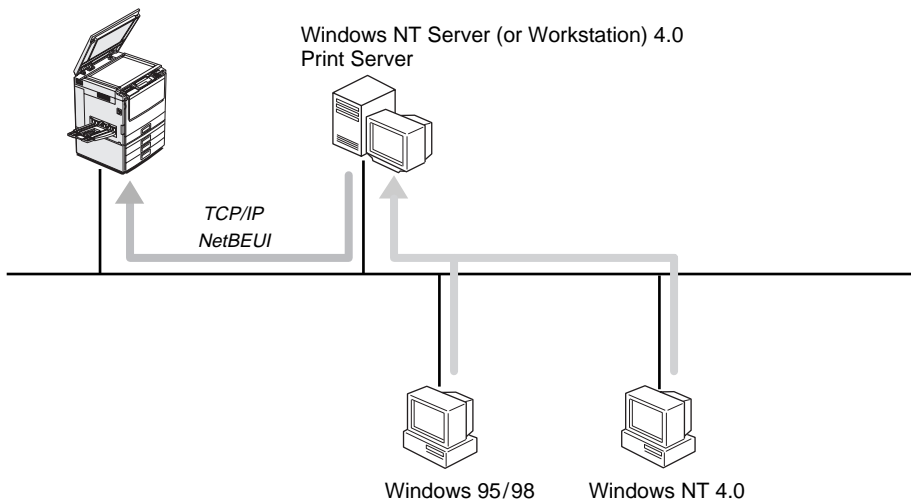
- Windows 95/98 ⇒ P.5
- Windows NT 4.0 ⇒ P.14
- Macintosh ⇒ P.47

---

## Printing with a Windows NT Print Server

---

When Windows NT Server or Workstation is the operating system used on the print server, TCP/IP or NetBEUI protocols are used.



 **Note**

- For more information on setting up TCP/IP or NetBEUI in a Windows NT environment, see P.14 *“Preparing for a Network Connection”*.
- Client setup instructions are different for each type of Windows OS.
  - Windows 95/98 ⇒ P.21
  - Windows NT 4.0 ⇒ P.22

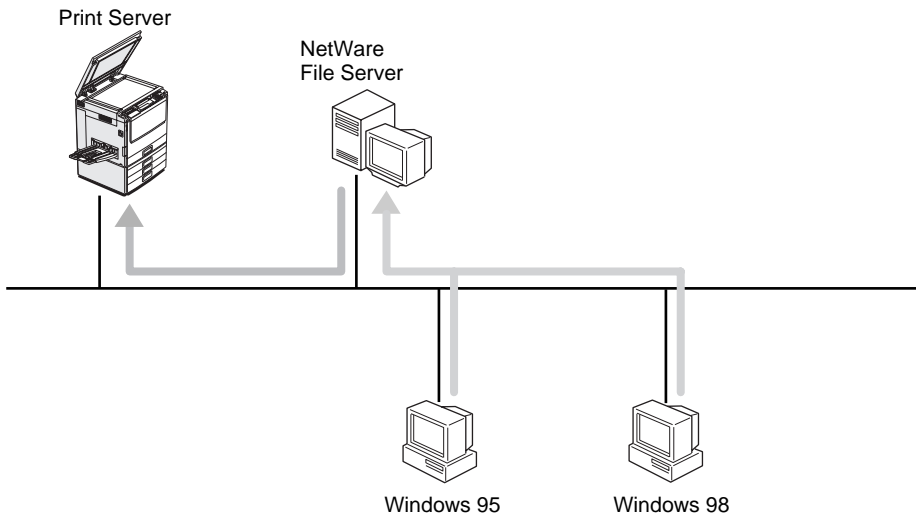
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## Printing as a NetWare Print Server

---

The Network Interface Board allows you to set up the printer in a NetWare environment as either a print server or a remote printer. A dedicated NetWare print server is not required. If a dedicated print server is being used, the printer should be configured as a remote printer.

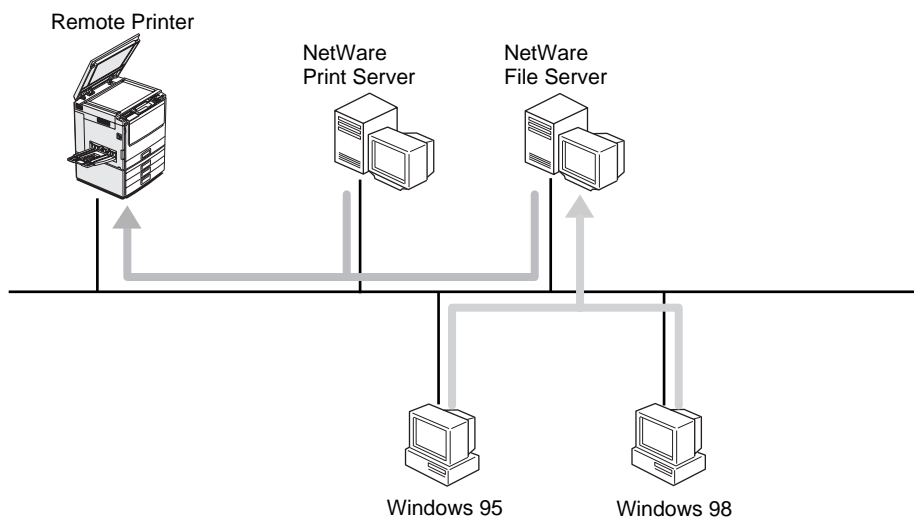
❖ **Configure as Print Server**



 **Note**

- The actual procedures for configuring the printer may differ depending on the version of NetWare.
  - NetWare 3.x ⇒ P.31 *“NetWare 3.x - Advanced Settings”*
  - NetWare 4.x, 5 ⇒ P.37 *“NetWare 4.x, 5 - Advanced Settings”*
- The actual procedures for configuring your client computer may differ depending on the operating system.
  - Windows 95/98 ⇒ P.44 *“Windows 95/98”*

## ❖ Configure as Remote Printer



### Note

- ❑ The actual procedures for configuring the printer may differ depending on the version of NetWare.
  - NetWare 3.x ⇒ P.34 *“Setting up as Remote Printer”*
  - NetWare 4.x, 5 ⇒ P.40
- ❑ The actual procedures for configuring your client computer may differ depending on the operating system.
  - Windows 95/98 ⇒ P.44 *“Windows 95/98”*

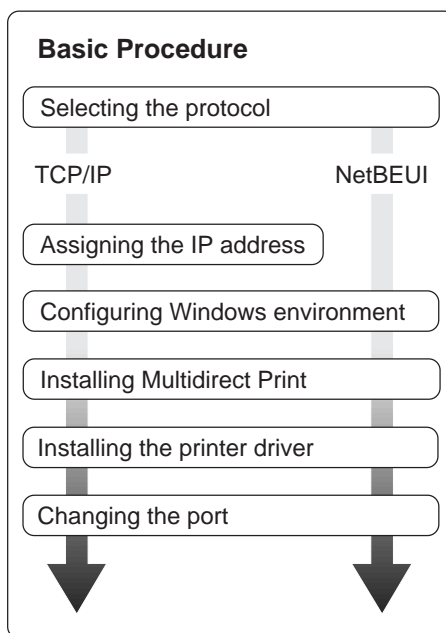
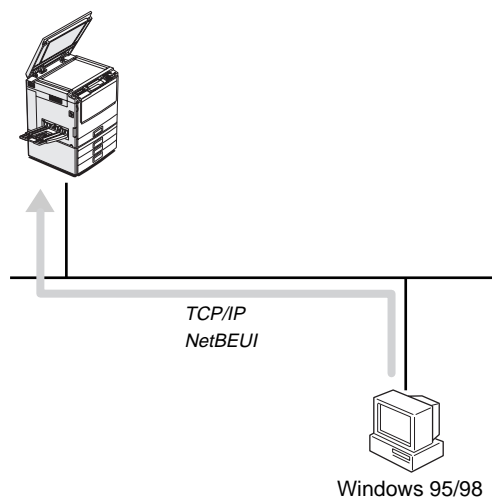
# 1. Windows 95/98 Configuration

You can use the printer as a network printer with Windows 95/98 using Multi-direct Print, and the TCP/IP or NetBEUI protocols. This chapter explains how to configure your printer and Windows.



# Configuring Windows 95/98

1



## Preparation

Multidirect Print supports the TCP/IP protocol and the NetBEUI protocol. Consult the network administrator before selecting the protocol.

## Limitation

- When you use the NetBEUI protocol, you cannot print to a printer which is located on the other side of a router.

## Note

- You can use both TCP/IP and NetBEUI protocols in a computer. To use both protocols, you must first install them.

## Preparing to Use the TCP/IP Protocol for Printing

To use the TCP/IP protocol to print, the network must be configured as described below.

### Configuring the printer

Configure your printer to use the TCP/IP protocol.

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

## Reference

For more information on how to make the above settings, see the "Printer Reference" that is provided as a paper manual.

If DHCP is used to assign IP addresses, see P.79 "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]**, and then click **[MS-DOS 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 95/98 computer

---

Follow these steps to configure a Windows 95/98 computer to use the TCP/IP protocol.

- 1** Double-click the **[Network]** icon of **[Control Panel]**, and confirm that "TCP/IP" is in the **[The following network components are installed]** box of the **[Configuration]** tab.

### Note

- If the TCP/IP protocol is not installed, click **[Add]** in the **[Configuration]** tab, and install it. For more information on installing the TCP/IP protocol, see the Windows 95/98 online help.

- 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.

---

## Preparing to Use the NetBEUI Protocol for Printing

---

To use the NetBEUI protocol to print, the network must be configured as described below.

---

### Configuring the printer

---

Configure your printer to use the NetBEUI protocol.

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

### Reference

For more information on how to make the above settings, see the "Printer Reference" that is provided as a paper manual.

---

## Configuring a Windows 95/98 computer

---

Install the NetBEUI protocol into a Windows 95/98 computer, and configure NetBEUI as the default protocol.

**1** Double-click the **[Network]** icon in **[Control Panel]**, and confirm that "NetBEUI" is in the **[The following network components are installed:]** box in the **[Configuration]** tab.

### Note

- If the NetBEUI protocol is not installed, click **[Add]** in the **[Configuration]** tab, and install it. For more information on installing the NetBEUI protocol, see the Windows 95/98 online help.
- If there is "NetBEUI ->Dial-Up Adaptor" in the **[The following network components are installed:]** box, select it and click **[Remove]** to remove the binding.

**2** Configure the NetBEUI protocol as the default protocol. Click the **[Configuration]** tab, select "NetBEUI" in the **[The following network components are installed:]** box, and click **[Properties]**.

**3** Click the **[Advanced]** tab, select **[Set this protocol to be the default protocol]**, and click **[OK]**.

**4** Click **[OK]** to close the **[Network]** dialog box.

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

---

## Installing Multidirect Print

---

Follow these instructions to install Multidirect Print.

### Preparation

You must restart the computer after installing Multidirect Print. Be sure to close all applications before beginning the installation process.

### Note

- You must install Multidirect Print and the appropriate printer driver in order to print. If you print, using the TCP/IP protocol, to be able to browse the printer via the network, PRINTER MANAGER FOR CLIENT (⇒see the inside of the front cover of this manual) needs to be installed. If the installer starts automatically with the Auto Run program, you can install both of these programs. For more information on how to install these programs, see the "Printer Reference" that comes with the printer.

**1** Close all the applications that are currently running.

**2** Insert the CD-ROM in the CD-ROM drive.

 **Note**

- If the installer starts automatically, you can use it to install Multidirect Print, and set up the printer driver, and then go to step **6**.

**3** Open [Control Panel], and double click the [Add/Remove Programs] icon.

**4** In the [Install/Uninstall] tab, click [Install].

**5** Click [Next >].

**6** Type the name of the CD-ROM drive in the [Command line for installation program] box, followed by “\NETWORK\MDP\DISK1\SETUP” (do not include the quotation marks), and then click [Finish].

 **Note**

- An example would be “D:\NETWORK\MDP\DISK1\SETUP” when the drive letter is “D”.

**7** From the [Choose Setup Language] list, select the language you use.

**8** After the [Welcome] dialog box appears, click [Next >].

**9** After the [Setup Complete] dialog box appears, click [Yes, I want to restart my computer now.], and click [Finish].

The computer restarts, and Multidirect Print can now be used. If you select “No”, be sure to restart the computer manually before launching Multidirect Print for the first time.

Go to P.9 “Setting up the Printer Driver” after the computer restarts.

---

## Setting up the Printer Driver

---

Using Multidirect Print to print is not possible until the printer driver is installed and the correct port selected.

 **Preparation**

The target printer must be turned on before starting the installation process.

**1** Install the printer drivers.

If the printer drivers have already been installed, you can go to the next step.

 **Reference**

For more information on installing the printer drivers, see the “Printer Reference” that is provided as a paper manual.

 **Note**

- Any port can be selected during the installation, however, LPT1 is recommended.

1

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

**3** Click the [Details] tab, and then click [Add Port].

**4** In the [Add Port] box, click [Other], and click [Multi Direct Print], and then click [OK].

The [Select Printer] dialog box appears, and the names of the printers which can print with TCP/IP appear.

 **Limitation**

- If PRINTER MANAGER FOR CLIENT is not installed in your computer, printers which can print with TCP/IP do not appear.

 **Note**

- The printers which have replied to a broadcast from the computer are listed here. To print to a printer that is not on this list, or to directly type the port name, click [New Printer], and click [Next >], and then type the port name in step **7**.

**5** To print using the NetBEUI protocol, click [NetBEUI].

**6** Click the printer you want to use, and click [Next >].

 **Reference**

For more information on a particular item in the dialog box, see P.51 “*Multidirect Print*”.

 **Note**

- You can identify the “Printer Name” and “Address” on the configuration page printed by the printer.
- You cannot add the partly same address that was already used. For example, when “192.168.0.2” was already used, “192.168.0.2xx” cannot be used. Similarly, when “192.168.0.20” was already used, “192.168.0.2” cannot be used.

**7** Confirm that the port name of the printer is correct, and click [Next >].

If you did not select a printer in step **6**, you must type the port name.

### Typing the port name for use with the TCP/IP protocol

**1** Type the IP address of the Network Interface Board into the [IP address] box.

You can type the host name or a domain name instead of an IP address into the [Host Name] box.

### Limitation

- You cannot use a host name that begins with “%%”.
- You cannot use the port name that is already in use.

### Note

- When you use DHCP to assign IP addresses to Network Interface Boards, you can use a printer name (Current Hostname on the network configuration page) as the host name.

---

## Typing the port name for use with the NetBEUI protocol

---

- 1** Print a configuration page, and confirm the Network path name.

### Reference

For more information on printing a configuration page, see the "Printer Reference" included as a PDF file in the CD-ROM.

- 2** Type the printer's network path name in the form of “%%Computer name \Share name”. Do not type “\” as head characters but “%%”.

- 8** Confirm the port name in the [Port Name] box, and click [Finish].

- 9** Confirm that the port name is displayed in the [Print to the following port] box, and click [OK].

Configuration is complete.

When you print, the printing procedure is no different. When you select the printer configured here, the computer automatically uses Multidirect Print.

---

## Uninstalling Multidirect Print

---

- 1** Open [Control Panel], and double-click the [Add/Remove Programs] icon.

- 2** With the [Install/Uninstall] tab, click [Multi Direct Print], and click [Add/Remove].

- 3** After a confirmation message appears, click [Yes].

UninstallShield removes all of the components of Multidirect Print.

- 4** When the uninstallation is complete, restart the computer.

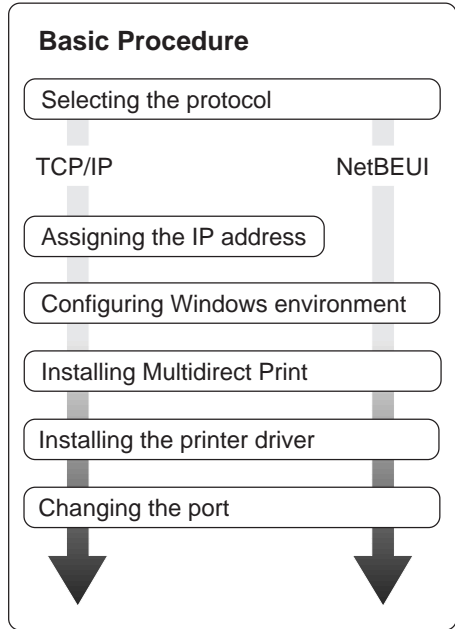
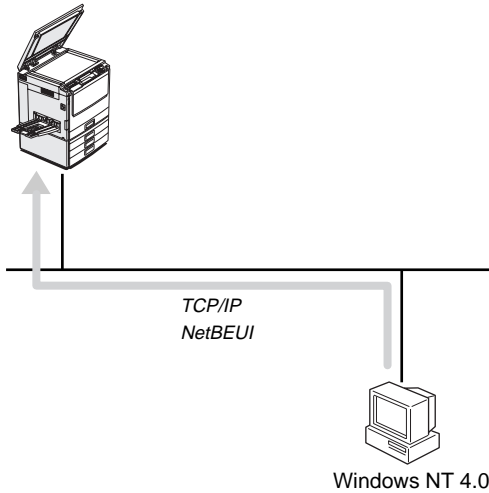


## 2. Windows NT 4.0 Configuration

You can use the printer as a network printer with Windows NT 4.0 using Multi-direct Print, and the TCP/IP or NetBEUI protocols. This chapter explains how to configure the printer and Windows NT.



# Preparing for a Network Connection



## Preparation

Multidirect Print supports the TCP/IP protocol and the NetBEUI protocol. Consult the network administrator before selecting the protocol.

## Limitation

- When you use the NetBEUI protocol, you cannot print to a printer which is located on the other side of a router.

## Note

- You can use both TCP/IP and NetBEUI protocols, in a computer. To use both protocols, you must first install them.

---

## Preparing to Use the TCP/IP Protocol for Printing

---

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

---

### Configuring the printer

---

Configure your printer to use the TCP/IP protocol.

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

## Reference

For more information on how to make the above settings, see the "Printer Reference" that is provided as a paper manual.

If DHCP is used to assign IP addresses, see P.79 "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]**, 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 Windows NT to use the TCP/IP protocol.

- 1** Double-click the **[Network]** icon of **[Control Panel]**, and confirm that "TCP/IP Protocol" is in the **[Network protocols]** box in the **[Protocols]** tab.

### Note

- ❑ If the TCP/IP protocol is not installed, click **[Add]** in the **[Protocols]** tab, and install it. For more information on installing the TCP/IP protocol, see the Windows NT online help.

- 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 the "Microsoft TCP/IP Printing" is installed.

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

---

## Preparing to Use the NetBEUI Protocol for Printing

---

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

---

## Configuring the printer

---

Configure your printer to use the NetBEUI protocol.

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

### Reference

For more information on how to make the settings above, see the "Printer Reference" that is provided as a paper manual.

---

## Configuring a Windows NT computer

---

Install the NetBEUI protocol into a Windows NT computer, and type the LAN adapter number (Lana Number).

**1** Double-click the **[Network]** icon of **[Control Panel]**, and confirm that "NetBEUI Protocol" is in the **[Network protocols]** box in the **[Protocols]** tab.

### Note

- If the NetBEUI protocol is not installed, click **[Add]** in the **[Protocols]** tab, and install it. For more information on installing the NetBEUI protocol, see the Windows NT online help.

**2** Change the Lana Number. Click the **[Services]** tab, select the **[NetBIOS interface]** in the **[Network Services]** box, and click **[Properties]**.

**3** Select the Lana Number corresponding **[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 with a number other than "0".

**5** Click **[OK]**.

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

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

### Note

- When you change the Lana Number, you must restart.

---

## Installing Multidirect Print

---

Follow these instructions to install Multidirect Print.

### Preparation

You must restart the computer after installing Multidirect Print. Be sure to close all applications before beginning the installation process.

### Note

- You must install Multidirect Print and the appropriate printer driver in order to print. If you print, using the TCP/IP protocol, to be able to browse the printer via the network, PRINTER MANAGER FOR CLIENT (⇒see the inside of the front cover of this manual) needs to be installed. If the installer starts automatically with the Auto Run program, you can install both of these programs. For more information on how to install these programs, see the "Printer Reference" that comes with the printer.
- To install this software, you must be logged on as a member of the Administrators group.

**1** Close all applications that are currently running.

**2** Insert the CD-ROM in the CD-ROM drive.

### Note

- If the installer starts automatically, you can use it to install Multidirect Print, and set up the printer driver, and then go to step **3**.

**3** Open [Control Panel], and double-click the [Add/Remove Programs] icon.

**4** In the [Install/Uninstall] tab, click [Install].

**5** Click [Next >].

**6** Type the name of the CD-ROM drive in the [Command line for installation program] box, followed by “:\NETWORK\MDP\DISK1\SETUP” (do not include the quotation marks), and then click [Finish].

### Note

- An example would be “D:\NETWORK\MDP\DISK1\SETUP” when the drive letter is “D”.

**7** From the [Choose Setup Language] list, select the language you use.

**8** After the [Welcome] dialog box appears, click [Next >].

- 9** After the [Setup Complete] dialog box appears, click [Yes, I want to restart my computer now.], and click [Finish].

The computer restarts, and Multidirect Print can now be used. If you select "No", be sure to restart the computer manually before launching Multidirect Print for the first time.

Go to P.18 "Setting up the Printer Driver" after the computer restarts.

## 2

---

## Setting up the Printer Driver

---

Using Multidirect Print to print is not possible until the printer driver is installed and the correct port is selected.

### Preparation

The target printer must be turned on before starting the installation process.

### **1** Install the printer drivers.

If the printer drivers have already been installed, you can go to the next step.

### Reference

For more information on installing the printer driver, see the "Printer Reference" that is provided as a paper manual.

### Note

- Any port can be selected during the installation, however, LPT1 is recommended.

### **2** In the [Printers] window, click the icon of the printer you want to use. On the [File] menu, click [Properties].

### **3** Click the [Ports] tab, and click [Add Port].

### **4** In the [Available Printer Ports] box, click [Multi Direct Print], and then click [New Port].

The [Select Printer] dialog box appears, and the names of the printers which can print with TCP/IP appear.

### Limitation

- If PRINTER MANAGER FOR CLIENT is not installed in your computer, printers which can print with TCP/IP do not appear.
- You cannot add to type the port name that was already used.

### Note

- The printers which have replied to a broadcast from the computer are listed here. To print to a printer that is not on this list, or to directly type the port name, click [New Printer], and click [Next >], and then type the port name in step **7**.

**5** To print using the NetBEUI protocol, click **[NetBEUI]**.

**6** Click the printer you want to use, and click **[Next >]**.

 **Reference**

For more information on a particular item in the dialog box, see P.51 *"Multidirect Print"*.

 **Note**

- You can identify the "Printer Name" and "Address" on the configuration page printed by the printer.

**7** Confirm that the port name of the printer is correct, and click **[Next >]**.

If you did not select a printer in step **6**, you must type the port name.

---

### Typing the port name for use with the TCP/IP protocol

---

**1** Type the IP address of the Network Interface Board into the **[IP address]** box.

You can type the host name or a domain name instead of an IP address into the **[Host Name]** box.

 **Limitation**

- You cannot use a host name that begins with "%%".
- You cannot use a port name that is already in use.

 **Note**

- When you use DHCP to assign IP addresses to Network Interface Boards, you can use a printer name (Current Hostname on the network configuration page) as the host name.

---

### Typing the port name for use with the NetBEUI protocol

---

**1** Print a configuration page, and confirm the Network path name.

 **Reference**

For more information on printing a configuration page, see the "Printer Reference" included as a PDF file in the CD-ROM.

**2** Type the printer's network path name in the form of "%%Computer name \Share name". Do not type "\\\" as head characters but "%%".

**8** Confirm the port name in the **[Port Name]** box, and click **[Finish]**.

**9** In the **[Printer Ports]** dialog box, click **[Close]**.

- 10** Confirm that the port name appears in the [Print to the following port(s)] box and that it is selected. And then click [OK].

Configuration is complete.

When you print, the printing procedure is no different. When you select the printer configured here, the computer automatically uses Multidirect Print.

---

## 2

---

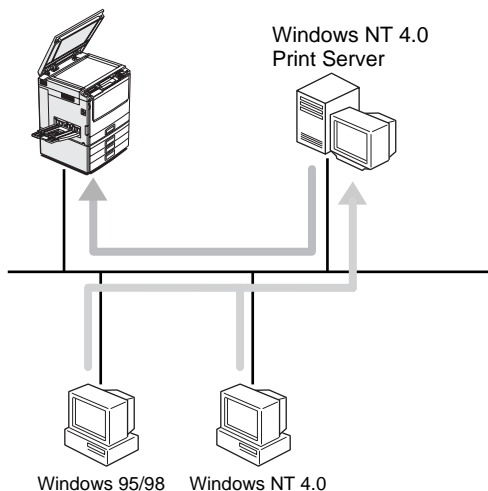
### Uninstalling Multidirect Print

---

- 1** Open [Control Panel], and double-click the [Add/Remove Programs] icon.
- 2** In the [Install/Uninstall] tab, click [Multi Direct Print], and click [Add/Remove].
- 3** After a confirmation message appears, click [Yes].  
UninstallShield removes all of the components of Multidirect Print.
- 4** When the uninstallation is complete, restart the computer.

# Setting up a Client Computer

This section describes the procedures for setting up a client in a network that uses Windows NT Server or Windows NT Workstation as a print server.



2

## Note

- ❑ All of the procedures in this section assume that the client has already been configured to communicate with a Windows NT print server. Do not proceed with the following instructions until the client has been set up and configured correctly.

## Windows 95/98

To print from Windows 95/98, you must install the printer driver and change the printer port to the print server.

### 1 Install the printer driver as a local printer.

#### Reference

For more information on installing the printer driver, see the "Printer Reference" that is provided as a paper manual.

#### Note

- ❑ Any port can be selected during the installation, however, LPT1 is recommended.

### 2 Click [Start], point to [Settings], and then click [Printers].

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

### 4 Click the [Details] tab, and click [Add Port].




- 5** Click **[Network]**, and click **[Browse]**.
- 6** On the network tree, double-click the name of the computer used as the print server.  
The names of the printers attached to the network appear.
- 7** Click the name of the printer you want to use, and click **[OK]**.
- 8** Click **[OK]**.
- 9** Confirm that the port name appears in the **[Print to the following port]** box, and click **[OK]**.

---

## Windows NT 4.0

---

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

- 1** Click **[Start]**, point to **[Settings]**, and then click **[Printers]**.
- 2** Double-click the **[Add Printer]** icon.  
This launches the Add Printer Wizard.
- 3** Click **[Network printer server]**, and click **[Next >]**.
- 4** In the **[Shared Printers]** box, double-click the name of the computer used as a print server.  
The names of the printers attached to the network appear.
- 5** Click the name of the printer you want to use, and click **[OK]**.  
 **Note**
  - If the printer driver is not installed in the print server, a message appears. If a driver has been installed on the client, click **[OK]**, and follow the instructions on the screen.
  - There is a Windows NT printer driver in the CD-ROM that comes with the machine.
- 6** Select whether you use this printer as the default printer, and click **[Next >]**.
- 7** After installation is complete, click **[Finish]**.  
The icon of the newly installed printer appears in the **[Printers]** window.

# Configuring LPR Port Printing

This section explains the procedure for printing to a LPR port from Windows NT.

## Preparation

The TCP/IP protocols must be installed and configured correctly. ⇒ P.14  
*“Preparing to Use the TCP/IP Protocol for Printing”*

## Note

- The following instructions assume that the printer drivers have already been installed. This is a procedure to change the printer port to LPR.

- 1** Click **[Start]**, point to **[Settings]**, and then click **[Printers]**.
- 2** Click the icon of the printer you want to use. On the **[File]** menu, click **[Properties]**.
- 3** Click the **[Ports]** tab, and then click **[Add Port]**.
- 4** In the **[Available Printer Ports]** box, click **[LPR Port]**, and then click **[New Port]**.

## Note

- If “LPR Port” does not appear, “Microsoft TCP/IP Printing” has not been installed.

- 5** Type the IP address of the Network Interface Board into the **[Name or address of server providing lpd]** box.
- 6** Type “lp” into the **[Name of printer or print queue on that server]** box, and click **[OK]**.
- 7** Click **[Close]**.
- 8** Confirm that the port name is displayed in the **[print to the following port(s)]** box and the check mark is inside the check box. Then click **[OK]**.



# 3. NetWare Configuration

This chapter describes how to configure the printer to use it 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 on how to set it, see the "Printer Reference" included as a PDF file in the CD-ROM.

## Installing NIB Setup Tool

A utility called NIB Setup Tool is provided to configure your printer to work in a NetWare environment. Installing the PRINTER MANAGER FOR ADMINISTRATOR (⇒see the inside of the front cover of this manual) installs NIB Setup Tool on the computer. This section describes how to install the PRINTER MANAGER FOR ADMINISTRATOR, and how to run NIB Setup Tool.

### Limitation

- NetWare 3.x, 4.x or 5 must be functional to run NIB Setup Tool.
- NIB Setup Tool is supported to work with the following operating systems.
  - Microsoft Windows 95/98
  - Microsoft Windows NT 4.0

---

## Installing the PRINTER MANAGER FOR ADMINISTRATOR

---

Follow these steps to install the PRINTER MANAGER FOR ADMINISTRATOR.

### Preparation

You should install the PRINTER MANAGER FOR ADMINISTRATOR on your computer. If you install the PRINTER MANAGER FOR ADMINISTRATOR from a file server or run it via the network, the PRINTER MANAGER FOR ADMINISTRATOR might not work correctly.

Be sure to close all applications before starting the installation procedure.

**1** Close all the applications that are currently running.

**2** Insert the CD-ROM in the CD-ROM drive.

If the setup menu starts automatically, follow the instructions on the screen.

Otherwise, go to step **3**.

**3** Open [Control Panel] and double-click the [Add/Remove Programs] icon.

**4** In the [Install/Uninstall] tab, click [Install].

**5** Click [Next >].

**6** In the [command line for installation program] box, type the name of the CD-ROM drive followed by “:\NETWORK\PRINTMAN\XXXADMIN\DISK1\SETUP” (do not include the quotation marks) and then click [Finish].

### Note

- An example would be “D:\\NETWORK\\PRINTMAN\\XXXADMIN\\DISK1\\SETUP” when the CD-ROM drive name is “D”.

**7** From the [Choose Setup Language] list, select the language you use.

**8** In the **[Welcome]** dialog box, click **[Next >]**.

**9** The **Software License Agreement** appears.

After reading through all of the contents by clicking **[PageDown]**, click **[Yes]** to agree with the License Agreement.

**10** Select a folder to install it in, and then click **[Next >]**.

To change the displayed folder, click **[Browse]** to select another one.

The installation program starts.

After the confirmation dialog box appears, the installation is complete.

3

---

## Running NIB Setup Tool

---

**1** Click **[Start]**, point to **[Programs]**, and then click **[NIB Setup Tool]** in the **[PRINTER MANAGER FOR ADMINISTRATOR]** program folder.

# Quick Setup Using the NIB Setup Tool Wizard

Using NIB Setup Tool, you can easily set up a NetWare printing environment.

## Reference

For more information on setting up NIB Setup Tool, see P.26 “*Installing NIB Setup Tool*”.

You can select **[Wizard]** or **[Property Sheet]** as an installation method.

When you configure the Network Interface Board for the first time, use the Wizard method.

If you want to use the Property Sheet method, see P.31 “*NetWare 3.x - Advanced Settings*” and P.37 “*NetWare 4.x, 5 - Advanced Settings*”.

## Note

- This section assumes that NetWare is functional and that the necessary environment for the NetWare Print Services is available.
- If you configure the Network Interface Board in a NetWare environment using NIB Setup Tool, you should install the client software released from Novell in the following cases.
  - Windows 95/98 in NDS mode
  - Windows NT 4.0 in NDS mode
  - Windows NT 4.0 in Bindery mode

**1** Log in to the Netware file server or the NDS tree as an Admin or Admin equivalent.

**2** Run NIB Setup Tool.

## Reference

⇒ P.27 “*Running NIB Setup Tool*”

**3** Click **[Wizard]** and click **[OK]**.

The **[Network board list]** dialog box of the Network Interface Board appears.

**4** Click **[IPX protocol]**.

**5** Click the IPX address of the Network Interface Board you are configuring, and click **[Next >]**.

## Note

- If you do not know which Network Interface Board you are configuring, see a network configuration page to confirm the MAC address (Network address).

**6** Confirm that the MAC address and IPX address are correct, and click **[Finish]**.

**7** Type the print server name into the **[Device Name]** box, and click **[Next >]**.

The factory default is RDP\_ followed by the 6 digit serial number. We recommend that you change it to something that is easier to remember or something based on the structure of your network.

**8** In the dialog box for selecting a network environment, click to select **[NetWare]** and clear **[TCP/IP]**.

**9** Click **[Next >]**.

A dialog box for configuring the NetWare environment appears.

**10** Select **[Bindery]** when printing under the Bindery mode, or select **[NDS]** when printing under the NDS mode.

When you are using NetWare version 4.x, you should select **[NDS]**.

 **Note**

- When configuring the NDS mode, if **[NDS]** cannot be selected, you need to check the version of the client software released from Novell. It is recommended that you install the latest version of the client software released from Novell.

**11** If you selected **[Bindery]**, type into the **[File Server Name:]** box 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.

**12** If you selected **[NDS]**, type into the **[Tree:]** box the name of the NDS tree in which the print server is created, and type the context into the **[Context:]** box.

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

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".



**13** Click **[Next >]**.



- 14** Type the name of the printer into the **[Printer Name]** box, and the name of the print queue into the **[Print Queue Name]** box.

The default for the Printer Name is “Print Server Name” followed by “\_1” and that the default for the Print Queue Name is “Print Server Name” followed by “\_Q” (quotation marks are not included). You can change them, if necessary.

- 15** If you have selected the NDS mode, type the volume of the print queue into the **[Queue Volume]** box.

Clicking **[Browse]**, you can select one of those shown in the **[Browse]** dialog box.

- 16** Click **[Next >]**.

A dialog box to confirm the printing environment appears.

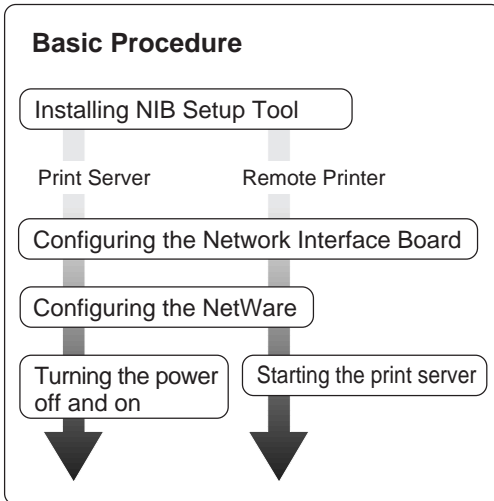
- 17** After confirming the environment, click **[Next >]**.

If you want to change the settings, click **[< Back]** and make the settings again. Clicking **[Next >]**, NIB Setup Tool automatically creates the Print Server, the Printer and the Print Queue in the NetWare network.

- 18** After a confirmation dialog box appears, select **[Quit]** and click **[Finish]** to exit NIB Setup Tool.

# NetWare 3.x - Advanced Settings

The actual procedures for configuring the printer may 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.



3

## Preparation

The following procedures use the Property Sheet method in configuring the Network Interface Board. When you configure the Network Interface Board as a NetWare print server for the first time, we recommend that you use the Wizard method. ⇒ P.28 *“Quick Setup Using the NIB Setup Tool Wizard”*

## Note

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

---

## Setting up as Print Server

---

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

**2** Run NIB Setup Tool.

### Reference

⇒ P.27 *“Running NIB Setup Tool”*

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

The [Browse] dialog box of the Network Interface Board appears.

**4** Click [IPX protocol].

- 5 Click the IPX address of the Network Interface Board which is to be configured, and then click **[Next >]**.

 **Note**

- If you do not know which Network Interface Board you are configuring, see a network configuration page to confirm the MAC address (Network Address).

- 6 Confirm that the MAC address and the IPX address are correct, and click **[Finish]**.

The **[NIB Setup Tool]** window appears.

- 7 Click **[Configure]**.

The property sheet appears.

- 8 Click the **[General]** tab, and type the name of the print server into the **[Device Name]** box.

- 9 Click the **[NetWare]** tab, and make the following settings.

- 1 Select **[Bindery]**.

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

Click **[Browse]** to select a file server among those listed in the **[Browse]** dialog box.

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

- 4 After a confirmation dialog box appears, click **[OK]**.

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

- 11 Type "PCONSOLE" from the command prompt.

```
F:> PCONSOLE
```

- 12 Create a print queue as follows.

 **Note**

- If you use the currently defined print queue, go to step 13.

- 1 From the **[Available Options]** menu, select **[Print Queue Information]** and press the **[ENTER]** key.

- 2 Press the **[INSERT]** key and type a print queue name.

- 3 Press the **[ESC]** key to return to the **[Available Options]** menu.

- 13 Create a printer as follows.

- 1 From the **[Available Options]** menu, select **[Print Server Information]** and press the **[ENTER]** key.

- ② To create a new print server, press the **[INSERT]** key and type a print server name.

If you use the 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 NIB Setup Tool. ( Step ③)

- 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".

- 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 Other/Unkown]**.

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

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

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

- 14 Assign print queues to the created printer as follows.

- ① From the **[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 previous steps, confirm that the queues are assigned.

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

- 16 Turn the printer power off and on.

### Note

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

**F:> USERLIST**

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

---

## Setting up as Remote Printer

---

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

**2** Run NIB Setup Tool.

 **Reference**

⇒ P.27 “Running NIB Setup Tool”

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

The [Browse] dialog box of the Network Interface Board appears.

**4** Click [IPX protocol].

**5** Click the IPX address of the Network Interface Board which is to be configured, and click [Next >].

 **Note**

If you do not know which Network Interface Board you are configuring, see a network configuration page to confirm the MAC address (Network Address).

**6** Confirm that the MAC address and IPX address are correct, and click [Finish].

The [NIB Setup Tool] window appears.

**7** Click [Configure].

The property sheet appears.

**8** Click the [General] tab, and type the name of the print server into the [Device Name] box.

**9** 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].

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

**11** Type "PCONSOLE" from the command prompt.

F:> PCONSOLE

**12** Create a print queue as follows.

 **Note**

If you use the currently defined print queue, go to step **12**.

**1** From the [Available Options] menu, select [Print Queue Information] and press the [ENTER] key.

**2** Press the [INSERT] key and type a print queue name.

**3** Press the [ESC] key to return to the [Available Options] menu.

**13** Create a printer as follows.

**1** From the [Available Options] menu, select [Print Server Information] and press the [ENTER] key.

**2** To create a new print server, press the [INSERT] key 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 NIB Setup Tool. (Step **3**)

**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 was used as the Remote Printer No. using NIB Setup Tool. (Step **3-4**)

**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].

**14** 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 **12**.

- 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 previous steps, confirm that the queues are assigned.

- 15 Press the **[ESC]** key until “Exit?” appears, and select **[Yes]** to exit PCONSOLE.

- 16 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**

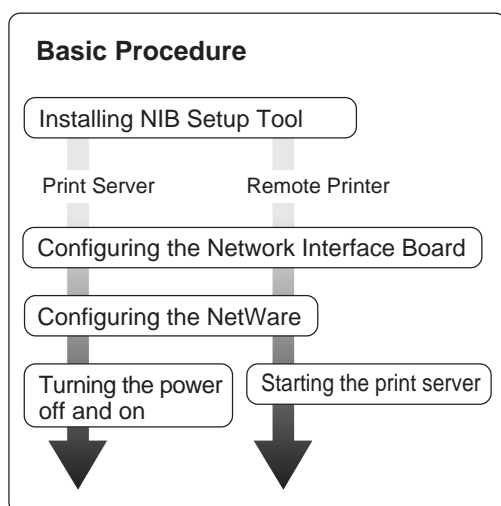
- If the printer works as configured, “Waiting for job” appears.

# NetWare 4.x, 5 - Advanced Settings

The actual procedures for configuring the printer may 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 and 5 environment.

## ❖ To use NetWare 5

- Load the IPX protocol into the file server in advance.
- You cannot use the NDPS (Novell Distributed Print Services) mode.



## 📄 Preparation

The following procedures use the Property Sheet method in configuring the Network Interface Board. When you configure the Network Interface Board as a NetWare print server for the first time, we recommend that you use the Wizard method. ⇒ P.28 "Quick Setup Using the NIB Setup Tool Wizard"

## 📌 Note

- ❑ This section assumes that NetWare is functional and that the necessary environment for the NetWare Print Service is available.
- ❑ You should install the client software released from Novell on Windows before running NIB Setup Tool for configuring in NDS mode or using Windows NT 4.0.



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## Setting up as Print Server

---

### Important

- You can set up the print server using the NDS or Bindery mode in NetWare 4.x, 5. The following procedure is for setting up the print server using the NDS mode in NetWare 4.1. When you set up the print server using the Bindery mode, use the NIB Setup Tool Wizard. ⇒ P.28 “Quick Setup Using the NIB Setup Tool Wizard”.

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

**2** Run NIB Setup Tool.

#### Reference

⇒ P.27 “Running NIB Setup Tool”

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

The [Browse] dialog box of the Network Interface Board appears.

**4** Click [IPX protocol].

**5** Select the IPX address of the Network Interface Board which is to be configured by clicking it, and click [Next >].

#### Note

- If you do not know which Network Interface Board you are configuring, see a network configuration page to confirm the MAC address (Network Address).

**6** Confirm that the MAC address and the IPX address are correct, and click [Finish].

The [NIB Setup Tool] window appears.

**7** Click [Configure].

The property sheet appears.

**8** Click the [General] tab and type the name of the print server into the [Device Name] box.

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

- 1** Select [NDS].

- 2 Type into the **[Tree:]** box the name of the NDS tree in which the print server is created, and type the context into the **[Context:]** box.

Clicking **[Browse]**, you can select a NDS tree and 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".



- 3 Click **[OK]** to close the property sheet.
  - 4 After a confirmation dialog box appears, click **[OK]**.
- 10 On the **[NIB]** menu, click **[Exit]** to exit NIB Setup Tool.
  - 11 From Windows, run NWAdmin.

#### Reference

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

- 12 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 the **[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]**.
- 13 Create a printer as follows.
  - 1 Select the container object the printer is located in, and click **[Create]** on 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 to select **[Define additional properties]** to check a box, and click **[Create]**.
- 14 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 12, 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].

### 15 Create a print server as follows.

- ① Select the context specified using NIB Setup Tool (step 9-1) 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 Server (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 NIB Setup Tool. (Step 3)

- ④ Click to select [Define additional properties], and click [Create].

### 16 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 to select the printer created in step 15, and click [OK].
- ③ After confirming the settings, click [OK].

### 17 Turn the printer power off and on.

#### Note

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

---

## Setting up as Remote Printer

---

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

- 2 Run NIB Setup Tool.

#### Reference

⇒ P.27 "Running NIB Setup Tool"

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

The [Browse] dialog box of the Network Interface Board appears.

- 4 Click [IPX protocol].

- 5** Select the IPX address of the Network Interface Board which is to be configured by clicking it, and click **[Next >]**.

 **Note**

- If you do not know which Network Interface Board you are configuring, see a network configuration page to confirm the MAC address (Network Address).

- 6** Confirm that the MAC address and the IPX address are correct, and click **[Finish]**.

The **[NIB Setup Tool]** window appears.

- 7** Click **[Configure]**.

The property sheet appears.

- 8** Click the **[General]** tab, and type the name of the print server into the **[Device Name]** box.

- 9** 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 a 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** After the confirmation dialog box appears, click **[OK]**.

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

**11** From Windows, run NW Admin.

### Reference

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

**12** 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 to select "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 the Browse button.
- 5** In the [Available objects] box, click to select the volume in which the print queue is created, and click [OK].
- 6** After confirming the settings, click [Create].

**13** 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 to select "Printer", and click [OK]. When you are using the 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].

**14** 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 **12**, 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].

**15** Create a print server as follows.

- 1** Select the context specified using NIB Setup Tool (Step **8**), 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 the NetWare 5, click "Print Server (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 NIB Setup Tool. (Step 3)

4 Click to select **[Define additional properties]**, and click **[Create]**.

16 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 step 12, 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 NIB Setup Tool. (Step 3-5)

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

17 Start the print server by typing as follows 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
```

## Setting up a Client Computer

This section describes how to set up a client computer when you use a NetWare print server.

### Note

- This section assumes that the client has NetWare client applications installed and is correctly configured to communicate with a NetWare print server. If not, install necessary applications before starting the set up procedure.

## 3

---

### Windows 95/98

---

Follow these steps to set up a Windows 95/98 client.

#### Preparation

Log in to the NetWare file server before starting the following procedure.

- 1** Install the printer driver of the printer you want to use as "Local printer".

#### Reference

For more information on installing the printer driver, see the "Printer Reference" that comes with the printer.

#### Note

- Any port can be selected during the installation, however, LPT1 is recommended.

- 2** Click [Start], point to [Settings], and then click [Printers].
- 3** In the [Printers] window, click the icon of the printer you want to use.
- 4** On the [File] menu, click [Properties].
- 5** Click the [Details] tab, and click [Add Port].
- 6** Click [Network] and click [Browse].
- 7** On the network tree, double-click the name of the file server.  
The queues appear.
- 8** Click the queue you want to print, and click [OK].
- 9** Click [OK].  
In the [Print to the following port] box, a network path to the printer appears.
- 10** Click [OK] to close the printer property, and again, open it.
- 11** Click the [Printer Settings] tab.

- 12** Clear the **[Form feed]** and the **[Enable banner]** check boxes.

 **Note**

- You should not select these check boxes because they should be specified using the printer driver. If they are checked, the printer might not print correctly.

---

### When using the PostScript printer driver

---

Follow these steps to set up for the PostScript printer driver.

- 1** Click the **[PostScript]** tab.
- 2** Click **[Advanced]**.
- 3** Remove the check marks from the **[Send CTRL+D before job]** and the **[Send CTRL+D after job]** check boxes.

- 13** Click **[OK]** to close the property.

---

## Windows NT 4.0

---

Follow these steps to set up a Windows NT 4.0 client.

 **Preparation**

Login to the NetWare file server before starting the following procedure.

- 1** Double-click the **[Network Neighborhood]** icon on the desktop and navigate to the queue you want to use, and then double-click it.

The **[Printers]** dialog box appears.

- 2** Click **[No]**.
- 3** Close all the applications that are currently running.
- 4** Insert the CD-ROM in the CD-ROM drive.

If the setup menu starts automatically, you can proceed to the next step. If not, see the "Printer Reference" that is provided as a paper manual.

- 5** The **[Printer Installation]** dialog box appears.
- 6** From the **[Port]** list, select the queue you selected in step **1**, and click **[Next >]**.
- 7** Follow the instructions on the screen to finish the installation of the printer driver.

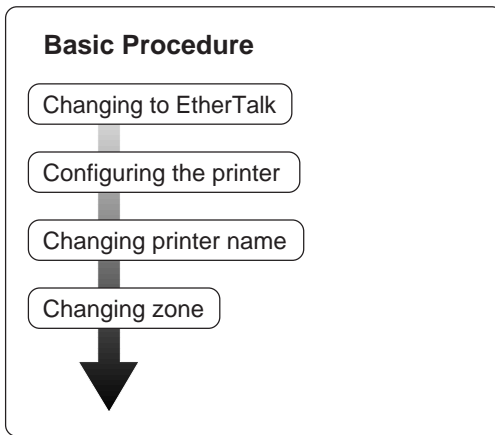




# 4. Macintosh Configuration

## Configuring a Macintosh

This chapter explains how to configure a network printer in a Macintosh EtherTalk environment. The actual procedures to configure a network printer may differ depending on the version of the Mac OS. This chapter describes how to configure your printer for Mac OS 8. If you use a different version, see the manual that comes with your version of the Mac OS for more information.



### ! Limitation

- To print from a Macintosh, you must use RICOH-SCRIPT2.

---

## Changing to EtherTalk

---

Follow these steps to configure a Macintosh computer to use EtherTalk.

### 🔍 Reference

For more information on installing the software required for EtherTalk, see the Macintosh manuals.

- 1** Open [Control Panels], and double-click the [AppleTalk] icon.
- 2** From the [Connect via:] menu, select "Ethernet".
- 3** If you change zones, select a name from the [zone] menu.
- 4** Close the [AppleTalk] control panels.
- 5** Restart the Macintosh.

---

## Configuring the Printer

---

Use the operation panel to activate the EtherTalk protocol (The default setting is active).

### Reference

For more information on configuration, see the "Printer Reference" that is provided as a paper manual.

---

## Changing Printer Name

---

If the network has several same model printers, the names will be the same. Printers that have the same name will have their names changed slightly in the Chooser. For example, three printers named "printer" will appear in the chooser as "printer0", "printer1" and "printer2".

Use an application such as **Apple Printer Utility** or **LaserWriter Utility** to change printer names in the Macintosh EtherTalk environment. These utilities are distributed by Apple Computer, Inc.

---

## Changing Zone

---

It may be necessary to change the zone configuration.

Use an application such as **Apple Printer Utility** or **LaserWriter Utility** to change the zone configuration in the Macintosh EtherTalk environment. These utilities are distributed by Apple Computer, Inc.

### Note

- If your Macintosh is configured to use TCP/IP, you can change the zone configuration with a Web browser. ⇒ P.54 "Configuring the Network Interface Board with a Web Browser"

Follow these steps to use the Apple Printer Utility.

- ① Insert the CD-ROM in the CD-ROM drive.
- ② Copy the "Zone Name.ps" file in the "Zone Name" folder to the hard disk.
- ③ Open the copied "Zone Name.ps" file using a text editor, and change "New-Zone", which is in the second line from the bottom, to the name of the new zone.
 

```

%!PS-Adobe2.0 %%
Title: Changing Zone (EtherNet only)
%%CreationDate: Tue Dec 16 1997
%%EndComments
true 0 startjob not {ERROR}if
(%EtherTalk%) << /EtherTalkZone (NewZone) >> setdevparams
%%EOF
```
- ④ Save "Zone Name.ps".

- ⑤ Run the Apple Printer Utility, and select the printer for which the new zone name is to be used.
- ⑥ Select **[Send PostScript File]** in the **[Utilities]** menu, and send “Zone Name.ps” to the printer.



## Multidirect Print

Multidirect Print is a Windows program that allows you to print on a Peer-to-Peer network. This program allows you to print directly to a network printer, even if there is no print server.

OS	Protocol Stack
Microsoft Windows 95/98	The Microsoft version of TCP/IP that comes with Windows.
Microsoft Windows NT 4.0	The Microsoft version of NetBEUI that comes with Windows.

### Note

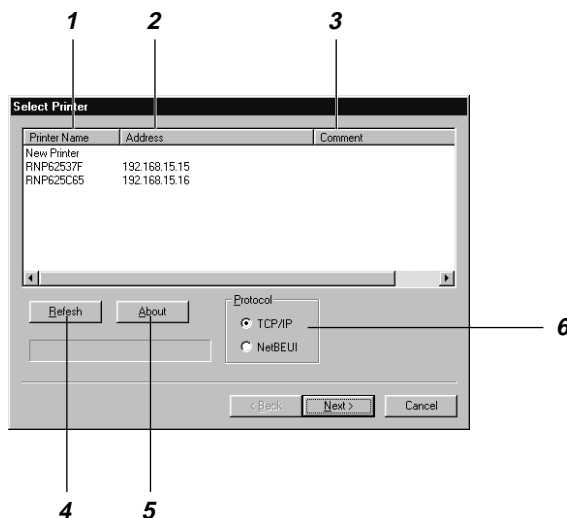
- If the printer is in the middle of warming up or printing, an error message might appear for a short time after you request a print job. You can change how long the printer should wait to display the message by clicking **[Port Settings]** in the **[Details]** tab on Windows 95/98, and **[Configure Port]** in the **[Ports]** tab on Windows NT 4.0.

---

## [Select Printer]

---

A list of available printers appears on this screen. This example is for the English version.



### 1. Printer Name

The contents of this list are different for the TCP/IP and NetBEUI protocols.

If you select **[TCP/IP]**, the printer name of the Network Interface Board appears. If you select **[NetBEUI]**, the computer name of the Network Interface Board appears.

**Note**

- ❑ The printer name can be found on the printer configuration page.
- ❑ The printer name is set to “RNP” and the last 6 digits of the MAC address of the Network Interface Board. For example, a board with a MAC address of 00:00:74:62:5C:65, would be named RNP625C65. You can change this name to something more convenient.

**2. Address**

The contents of this list are different for the TCP/IP and NetBEUI protocols.

If you select **[TCP/IP]**, the printer name of the Network Interface Board appears. If you select **[NetBEUI]**, the computer name of the Network Interface Board appears.

**Note**

- ❑ The form of the Network path name is “%% computer name \ name of printer type”.

**3. Comment**

Comments that are registered on the Network Interface Board.

**4. [Refresh]**

Click to refresh the contents of the display. When refreshing, the name of this button changes to **[Stop]**. Click it to stop the refresh.

**5. [About]**

Version and copyright information.

**6. Protocol**

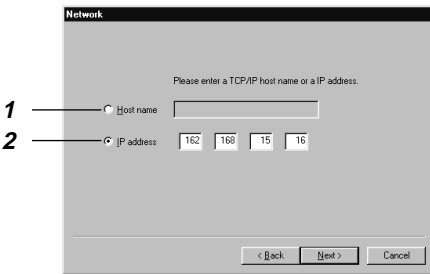
Select to display the printers which can print using the selected protocol.

5

**[Network]**

When you select a printer with the **[Select Printer]** dialog box, the port name is entered automatically. These examples are for the English version.

❖ **TCP/IP**



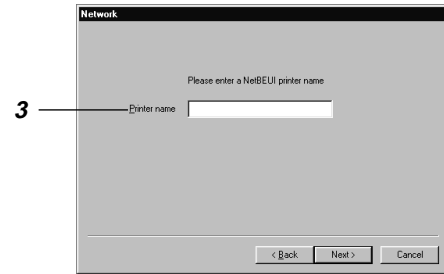
**1. Host name**

If you print using the TCP/IP protocol, to select a printer using a host name or a domain name, type the name here. Type the IP address into the **[IP address]** box when selecting a printer by an IP address.

**Limitation**

- ❑ You cannot use a host name that begins with “%%”.

❖ **NetBEUI**



**Note**

- ❑ When you use DHCP to assign IP addresses to Network Interface Boards, you can use a printer name (Current Hostname on the network configuration page) as the host name.

**2. IP address**

If you print using the TCP/IP protocol, type the IP address of the printer.

### 3. Printer name

Type the printer's Network path name in form of "%Computer name \Share name". Do not type "\\\" as head characters but "%".



# 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 facility 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 on configuring the printer to use the TCP/IP protocol, see the "Printer Reference" that is provided as a paper manual.

## ❖ Operating System Browser Requirements

OS	Browser
Microsoft Windows 95/98	Microsoft Internet Explorer 3.02/4.0 Netscape Navigator 3.0/4.0
Microsoft Windows NT 3.51/4.0	
Mac OS 7.6 ~ 8.6	
Solaris 2.5 ~ 2.6	

### ⚠ Limitation

- Using Windows NT 3.51 with Internet Explorer 3.02 may cause problems.
- 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 set to be 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

---

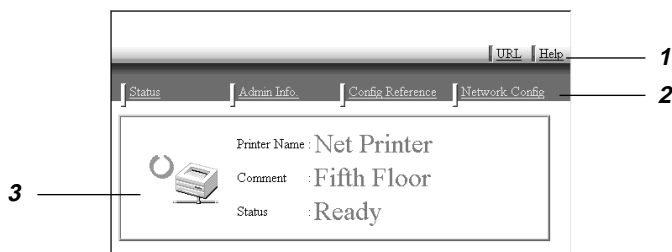
After launching your Web browser, type the IP address of the printer. See the example below. This example is for the English version.

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

**1. Header Button**

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

**Important**

- ❑ There may be a fee in using the browser to access a website on the internet.

**Note**

- ❑ The help file is stored in the CD-ROM in the HTML format.

**2. Menu Button**

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 in the remote maintenance (mshell) and that used in NIB Setup Tool. If you change a password on the Web browser, the other passwords are also changed.

**3. Representation Area**

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

**Linking the Address (URL) to the [Help] Button**

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

- ① Copy the help file 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 file in the **[Help URL]** box.  
If you copied the help file to "C:\HELP\EN", then type "file://C:/HELP/".  
For example, if you copied the file to a web server, the address (URL) that will be linked to the help files 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 configuring.



# Assigning IP Address with ARP+PING

Using TCP/IP, you can assign the IP address using ARP and PING. The following example is for a BSD UNIX workstation (SunOS 4.x).

## Preparation

ARP+PING should be set to active in the network boot configuration before assigning the IP address using ARP+PING. For more information on setting it to active, see the "Printer Reference" that is provided as a paper manual.

**1** Log in to the workstation as root.

**2** Use the `arp` command to assign the IP address to the MAC address of the Network Interface Board.

```
# arp -s 192.168.15.16 00:00:74:62:5C:65
```

### Note

192.168.15.16 is the IP address, and 00:00:74:62:5C:65 is the MAC address.

**3** Assign the IP address using the PING command.

```
# ping 192.168.15.16
```

**4** Use the PING command again to confirm the address.

```
# ping 192.168.15.16
```

If the address has been configured correctly, the following message appears.

```
192.168.15.16 is alive
```

If the address has been configured incorrectly, the following message appears.

```
no answer from 192.168.15.16
```

## How to Confirm the MAC Address

The MAC address (Ethernet address) of the Network Interface Board is required in order to use ARP and PING to assign the IP address.

The MAC address can be seen on the printer configuration page.

## Reference

For more information on printing a configuration page, see the "Printer Reference" included as a PDF file in the CD-ROM.

## Remote Maintenance by Telnet (mshell)

You can view the printer status and configure the network interface board using telnet.

### Note

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

---

## Operation Flow

---

The following is a sample procedure using telnet.

### Limitation

- Only one person at a time can log 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 on telnet commands, see P.59 “*Command List*”.

### **4** Finish telnet.

```
msh> logout
```

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

### **5** Type “yes” to save the changes and press the **[ENTER]** key.

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

### 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 cancelled.

---

## Command 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 on the syntax of that command.  
`msh> help command_name`

---

## TCP/IP address

---

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

### ❖ Reference

```
msh> ifconfig
```

### ❖ Configuration

```
msh> ifconfig le0 parameter address
```

Parameter	Configuration Item
(no parameter)	IP address
netmask	subnet mask
gateway	default gateway address

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

```
msh> ifconfig le0 192.168.15.16
```

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

```
msh> ifconfig le0 netmask 255.255.255.0
```

### Note

- This affects the configuration of the Network Board of the IP address that is used.
- To type an address using hexadecimal, add “0x” to the first command.

 **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 addresses above, contact your network administrator.

5

---

**Access control**

---

Use the access command to view and configure access control.

❖ **Reference**

`msh> access`

❖ **Configuration**

`msh> access parameter address`

Parameter	Configuration Method
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 of the computer attempting to print, print jobs from that IP address can be accepted by the Network Interface Board.
- ❑ For example, if you assign 192.168.15.16 as the Access Control Address to the Network Interface Board, the combination of the Access Control Mask and the IP addresses that can be printed are as follows. The XXX is a variable that means any number from 1 to 255 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 a network boot.

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

“On” means active and “Off” means inactive.

Parameter	Configuration Method
ping	ARP+PING
tftp	RARP+TFTP
bootp	BOOTP
dhcp	DHCP

### Note

- When you use RARP+TFTP, BOOTP or 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. "Down" means inactive.
tcpip	
netware	
netbeui	
lpr	
ftp	
rsh	
diprint	
web	

 **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, and web.

---

**Status of printer**

---

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 job.
info	Information about the paper tray, output tray, emulation and program of printer.
prnlog [ID]	Lists the last 10 print jobs.
netstat	Information on the Network Interface Board.

 **Note**

- More information on the print job appears when the ID number is added after the prnlog command.

 **Reference**

For more information on the meaning of the data returned with these commands, see P.69 "Configuring the Network Interface Board".

---

## Information about the Network Interface Board configuration settings

---

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 on one screen at a time.

### Reference

For more information on the meaning of the data returned with this command, see P.69 “Configuring the Network Interface Board”.

---

## System log information

---

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

```
msh> syslog
```

### Reference

For more information on the displayed information, see P.72 “System Log Information”.

---

## SNMP

---

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

### Note

- You can configure from No. 1 to 10 SNMP settings.
- The default settings for No. 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 displays one by one.
- If the registered number is not added, you can view the status of all the registered numbers.

**❖ 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 access is permitted.
write	Read and write access is permitted.
trap	User is notified of trap messages.
no	All access is denied.

5

**❖ Protocol configuration**

You should use the following command to set the protocols to active or inactive. If you set a protocol to inactive, you cannot use all the registered numbers for it.

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

- “On” means active and “Off” means inactive

If you want to change the protocol settings for each registered number, use the following command. Confirm that the protocol set to inactive using the above command, are not set to active using this command.

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

**❖ Access configuration**

You can configure the 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.

The following example shows how to set the protocol for an address.

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

 **Note**

- When using the TCP/IP protocol, type `ip` followed by a space and then the IP address.
- When using the IPX/SPX protocol, type `ipx` followed by a space, 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
```

---

## 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 NIB Setup Tool. If you change a password on the mshell, the other passwords are also changed.

**4** Type the new password again.

Retype new password:

# 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 on the printer.

The factory default community names are “public” and “admin”. You can get MIB information using these community names.

## Reference

For more information on configuring the community name, see P.63 “SNMP” in “Remote Maintenance by Telnet (mshell)”.

## Limitation

The supported MIBs may differ depending on your printer.

## 5

### ❖ Supported MIBs

- MIB-II
- PrinterMIB
- HostResourceMIB
- RicohPrivateMIB

# Understanding the Displayed Information

This section describes how to read the displayed information on the status of the Network Interface Board.

---

## Print Job Information

---

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

- mshell : Use the status command. ⇒ P.62 “*Status of printer*”

Item Name	Meaning
ID	Number of the print request.
Source	The name of the host requesting the print job.
Process	The type of print command.
Status	Status of print job. <ul style="list-style-type: none"> <li>• Active Printing or preparing to print.</li> <li>• Waiting Waiting to be transferred to the printer.</li> </ul>
Time	The time when the print request was received.

5

---

## Print Log Information

---

This is a record of jobs that have been printed up to now. The most recent ten records appear.

This record appears with the following commands.

- mshell : Use the prnlog command. ⇒ P.62 “*Status of printer*”

Item Name	Meaning
ID	Printing request number.
Source	The user name, workstation name or address of the host that sent the print job.
Process	The type of print command used.
Bytes	The size of the file in bytes.

Item Name	Meaning
Result	Communication result. <ul style="list-style-type: none"> <li>• OK Indicates that the print job was completed correctly.</li> <li>• NG Indicates that the print job was not completed normally.</li> <li>• Canceled rcp, rsh or lpr print commands were stopped. A problem occurred with the printing application. This message does not appear when ftp or RPRINTER is used.</li> </ul>
Time	The time when the print request was received.
User Code	The user name, workstation name or address of the host that sent the print job.
Address	IP address.
Process	The type of print command used.
Print Start Time	The time the print process was started.
Print End Time	The time the print process was completed.
Open Count	The number of print processes that the application made.
Eof Count	The reception number of file unit.
Data Size	The number of bytes of received data.

## Network Statistical Information

This section is about the information provided about the Network Interface Board.

Detailed information on the words used to describe the status of the Network Interface Board are described below.

- mshell : Use info command. ⇒ P.62 “*Status of printer*”

Item Name	Meaning
System elapsed time	The time that has passed since the network interface board started.
Total printing time	The total time spent in processing the print data.
Total open count	The total number of open (printing process) count that the application requires.
Current connection count	The number of jobs currently connected with the Network Interface Board.
Total connection count	The total number of print jobs sent to the Network Interface Board.

Item Name	Meaning
Print error count	The number of times the printing process sent an error message.
Access error count	The number of times the connection was refused because of the value of the access control.
Print request full count	The number of times a connection was refused because the number of print requests exceeded the number of allowed sessions.

## Configuring the Network Interface Board

Network Interface Board settings can be displayed and confirmed using the commands below.

- mshell : Use the show command. ⇒ P.63 “*Information about the Network Interface Board configuration settings*”

Item Name	Meaning
Common Mode Protocol Up/Down AppleTalk TCP/IP NetWare NetBEUI NVRAM version Device name Comment Location Contact Soft switch	Up means active. Down means inactive.  Internal version number.
AppleTalk Mode Net Object Type Zone	AppleTalk protocol in selection. Network number. Macintosh printer name. The type of printer. Name of the zone that the printer belongs to.



Item Name	Meaning
TCP/IP	
Mode	Up means active. Down means inactive.
ftp	
lpr	
rsh	
diprint	
web	
telnet	
download	
EncapType	Frame type.
Network boot	Network boot.
Filter	Internal parameter.
Max DSTs	
Address	IP address.
Netmask	Subnet mask.
Broadcast	Broadcast address.
Gateway	Default gateway address.
AccessCtrl	Access control address.
AccessMask	Access control mask.
Time server	
Home page URL	URL of homepage.
Home page link name	URL name of homepage.
Help page URL	URL of help page.
SNMP protocol	Protocol used with SNMP.

Item Name	Meaning
NetWare Mode EncapType RPRINTER number RPRINTER name Print server name Fileservername Context name Switch Mode NDS/Bindery Packet negotiation Print job timeout	(This value is fixed) Frame type. Remote printer number. Remote printer name. 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 Mode Switch Mode Direct print Notification Workgroup name Computer name Comment Share name[1]	(This value is fixed) (This value is fixed) (This value is fixed) Notices of finishing to print. Name of the workgroup. Name of the computer. Comment. Share name. (name of the printer type)
Shell mode	Mode of the remote maintenance tool.

## Message List

This is a list of messages recorded 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.

- mshell : Use the syslog command. ⇒ P.63 "System log information"

### Message when the Network Interface Board starts or restarts

RICOH Network Interface Board Ver.x.x.x	The version number of the Network Interface Board.
PRINTER SYSTEM "system name" Ver.x.x.x	The system name and version of the printer.
Attach FileServer="file server name"	The printer is attached to "file server name" as the nearest server.
Current Interface Speed:xxxMbps	The speed of the network (10 Mbps or 100 Mbps).
Current IPX address	The current IPX address.
Frametype="frame type name"	The "frame type name" is configured to be used on NetWare.
NetBEUI Computer Name="computer name"	The NetBEUI Computer Name is defined as "computer name".
Start httpd	The Web server has been started.
Start npmpd for IPX	The npmpd for the IPX protocol has been started.
Start npmpd for TCP/IP	The npmpd for the TCP/IP protocol has been started.
Start smbd direct print mode(NetBEUI)	You can print from a client on the Windows network via the print server.
Start snmpd Ver.2.0	The SNMP agent of the displayed version has been started.
Vendor= , Country= , Lang=	The vendor, the country code and the language.

---

**NetWare (When the Network Interface Board is started)**


---

**❖ When working as a print server**

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.	Cannot log in to the file server. Confirm that the print server is registered on the file server. If a password has been configured for the print server, delete it.
Attach to print queue "print queue name"	Attached to the print queue.
File server is empty	The file server is not registered. Register your file server using the utility.
Log in to the file server "file server name" ("NDS   BINDERY")	Logged in to the file server with NDS or BINDERY mode.
Open log file "file name"	The selected log file has been opened.
Printer "printer name" has no queue	The print queue is not assigned to the printer. Using NWAdmin, assign the print queue to the printer, and then restart it.
Print queue "print queue name" cannot be serviced by printer 0, "print server name"	Print services are not available for the print queue. Confirm that the volume of the print queue exists on the selected file server.
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 has been set. Register the print server without setting a password.

**❖ When working as a remote printer**

Cannot create service connection	Cannot establish a connection with the file server. Your request may exceed the maximum number of connections that the file server can deal with at a time.
Cannot find the printer ("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.
Establish a connection with the print server, "print server name"	A connection with the print server has been established.

No local target for "print server name"	Cannot get routing information on the file server. If a different frame type is configured from that used on the network, you should select "Auto Select" as a frame type.
Required file server ("file server name") not found	Cannot find the required file server.
Required print server ("print server name") not found	Cannot find the print server. Confirm the name of the print server.
Unable to attach to print server ("print server name")	Cannot connect to the print server. The print server refuses a connection for some reason. Confirm the configuration of the print server.

### NetBEUI (When the Network Interface Board is started)

5

Back to default name (<Computer name>)	The same Computer name is detected on the network. As unable to add computer name to the suffix, the computer name changed to the default name. Configure a new computer name that is unique.
Print session full	Cannot accept the print session.
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.

### TCP/IP

#### ❖ When the address is configured

Invalid gateway address	The Gateway address is not correct for the selected IP address.
-------------------------	---

#### ❖ When using lpr

filter data error	Some data cannot be handled by the filter option. Confirm the file code and the settings of the filter option.
lost connection	The connection was cut by a counterpart. Check the printer to which you requested to print.

print requests full	Cannot accept the print request (max. 5 requests). Confirm the status of the printer with mshell, and print it again after the number of print requests becomes less than 5.
printer permission denied	Cannot get a permission to use the printer. Confirm the access rights with the access control address and the access control mask.
printer refuse	Something is wrong with the printer. Confirm the status of the printer.

At the beginning of the message, the IP address of the client is displayed with in parentheses.

#### ❖ When using SNMP

Exit snmpd	The agent is complete. Reset the printer or turn the printer off and on.
recvfrom:packet discarded,length(Reception packet length)> (Packet size),from addr <Address of partner point>	The received packet was ignored since the length of the packet exceeds the limit. Confirm whether the administration station sent a packet whose length was longer than 1025 bytes.
session <Community name appointed> not defined	The community name of the received packet is not defined. Confirm that the community name of the administration station is the same as that of the printer.
snmpin:Bad use of session <community Name> from <Address>	The community name of the received packet is not the same as that of the administration station. Confirm the community name of the printer.
snmpin:error in snmpdecipher,code (<Error No.>)	An error occurred on the received packet. Check if the number of the objects sent from the administration station is more than 31 and if there are wrong MIB requests.
snmpin:error in snmpsendsend,code (<Error No.>)	Cannot send a response packet. Normally, this message is followed by the messages below *1 *2.
snmpin:pkt too large,code (<Error number>)*1	The response packet to the request is too big to send. Reduce the number of the objects per request.

snmpin:error in sending too large request back,code (<Error number>),giving up*2	The packet notifying the error is too big to send. Reduce the number of the objects per request.
snmpin:received bad version	The version of the received packet is invalid. Confirm that the version of the administration station is version-1(0).

Error numbers in the messages are codes for internal use.

---

# Precautions

Please pay attention to the following when using a 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 on printing a configuration page, see the "Printer Reference" that comes with the printer.
- For more information on 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 on selecting a frame type, see the "Printer Reference" that is provided as a paper manual.

---

### Configuring the printer without NetWare

---

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

 **Reference**

For more information on selecting a protocol, see the "Printer Reference" that is provided as a paper manual.



---

## When Printing PostScript from Windows

---

When printing PostScript from Windows, see the “Printer Reference” that comes with your machine, and configure it to use the Network Interface Board with the printer driver.

---

## When Printing it with NetWare

---

---

### Configuring the form feed

---

You should not configure the form feed on NetWare. You do not need to configure on NetWare in order to control a new page with the printer driver of Windows. If this setting is configured, the printer might not print properly. If you do not want to use the form feed, configure it according to the OS you are using as follows.

5

- With Windows 95/98, clear the **[Form feed]** check box with the **[Printer Settings]** tab in the printer properties dialog box.

---

### Configuring the banner page

---

Do not configure a banner page on NetWare.

If you do not want to add a banner page, configure it according to the OS you are using as follows.

- With Windows 95/98, clear the **[Form feed]** check box with the **[Printer Settings]** tab in the printer properties dialog box.
- With Windows NT 4.0, click **[Start]**, point to **[Setting]**, point to **[Control Panel]** and click it. Select **[Network]** and select **[Novell Client Configuration for Windows NT]** in the **[Service]** tab and click **[Properties]**. The **[Novell Client Configuration]** box appears. Clear the **[Enable banner]** check box in the **[Default Capture]** tab in **[Novell Client Configuration]**.

---

### 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).

---

### Supported systems

---

Windows NT Server 4.0 can be configured as a DHCP server.

---

### Configuring 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.

Follow these steps to configure the printer with a reserved IP address.

- 1** Start the DHCP manager.
- 2** Select the scope that will be used, and on the [Scope] menu, click [Reservation].
- 3** Type the IP address into [IP Address].
- 4** Type the MAC address of the Network Interface Board into [Unique Identifier].

 **Note**

- Do not use hyphens to separate the numbers.
- If you do not know the MAC address, it can be found on the configuration page printed by the printer.

- 5** Type a name and comment into the [Client Name] box and the [Client Comment] box.

 **Note**

- For more information on client names, see P.80 “Additional information”.

- 6** Click [Add].

An IP address is reserved.

- 7** Click [Close] to close the dialog box.

---

## Additional information

---

- When you click **[Active Lease]** on the **[Scope]** menu of DHCP manager, a list of client leases appears. When the reserved IP address is not active, the name of the reservation is the name entered in the Client Name field of the Add Reserved Clients dialog box. When the reserved IP address becomes active, the client name changes to the printer name configured by the Network Interface Board. Only the first 13 letters of the printer name appear here. When you use the printer with Multidirect Print, use the host name of the printer as the **[Client Properties]** Client Properties dialog box.
- 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.

5

---

## When Using NIB Setup Tool

---

If the Network Interface Board cannot browse using the TCP/IP protocol, confirm that the TCP/IP environment is correctly configured in your computer.

# Specifications

LAN interface	100BASE-TX, 10BASE-T
Frame type	EthernetII, IEEE802.2, IEEE802.3, SNAP
Protocol	<ul style="list-style-type: none"><li>• TCP/IP Windows 95 Windows 98 Windows NT 4.0</li><li>• IPX/SPX NetWare 3.11, 3.12, 3.2, 4.1, 4.11, 5, IntranetWare</li><li>• NetBEUI Windows 95 Windows 98 Windows NT 4.0</li><li>• AppleTalk Mac OS 7.6 ~ 8.6</li></ul>
SNMP	MIB-II, PrinterMIB, HostResourceMIB, RicohPrivateMIB

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## Note to users in the United States of America

### Notice:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one more of the following measures:

**Reorient or relocate the receiving antenna.**

**Increase the separation between the equipment and receiver.**

**Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.**

**Consult the dealer or an experienced radio/TV technician for help.**

### Warning

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### Caution (in case of 100BASE-TX environment):

Properly shielded and grounded cables (STP) and connectors must be used for connections to host computer (and/or peripheral) in order to meet FCC emission limits.

STP with ferrite core must be used for RF interference suppression.

### Declaration of Conformity

Product Name: Printer Controller

Model Number: Color Controller RC-200

Responsible party: Ricoh Corporation

Address: 5 Dedrick Place, West Caldwell, NJ 07006

Telephone number: 973-882-2000

This device complies with part 15 of FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

### Note to users in Canada

#### Note:

This Class B digital apparatus complies with Canadian ICES-003.

#### Remarque concernant les utilisateurs au Canada

#### Avertissement:

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.



#### Declaration of Conformity

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

#### Warning

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.





**Network Interface Board 185  
OPERATING INSTRUCTIONS**

