



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.

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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

How to Read this Manual

Symbols

In this manual, the following symbols are used:

 **WARNING:**

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

 **CAUTION:**

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

* The statements above are notes for your safety.

 **Important**

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

 **Preparation**

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

 **Note**

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

 **Limitation**

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

 **Reference**

This symbol indicates a reference.

[]

Keys that appear on the machine's panel display.

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

【 】

Keys built into the machine's operation panel.

Keys on the computer's keyboard.

TABLE OF CONTENTS

1. Using RICOH-SCRIPT2 with Windows

Using RICOH-SCRIPT2 with Windows 95/98	1
Printer Properties Tabs and Their Settings	1
Using RICOH-SCRIPT2 with Windows NT 4.0	7
Printer Properties Tabs and Their Settings	7
Default Document Properties Tabs and Their Settings	9
Windows Network Environment	14
Windows Headers	15
Sending Header Data.....	15

2. Using RICOH-SCRIPT2 with a Macintosh

Using RICOH-SCRIPT2 with a Macintosh	17
Option Setup Dialog	17
Setting up for Printing	18
Setting up for Print Options	18

3. Appendix

Staple Position	25
Simplex Printing	25
Duplex Printing.....	26
Printer Memory and VM Area	28
Precautions for RICOH-SCRIPT2	29
Differences between RICOH-SCRIPT2 and “PostScript Language Reference Manual, Second Edition”	29
Other Precautions	29
INDEX	30

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]**^{*1}, **[Vivid]**^{*2}, **[Super Vivid]**^{*3}, **[Fine]**^{*4}, **[Super Fine]**^{*5}.

^{*1} No modification to the color setting.

^{*2} Select this setting to perform CMYK conversion with enhanced saturation and brightness to print vivid colors.

^{*3} 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.

^{*4} 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.

^{*5} 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]**^{*1}, **[Presentation]**^{*2}, **[Solid Color]**^{*3}.

 **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 so on. 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 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]**^{*1}, **[Vivid]**^{*2}, **[Super Vivid]**^{*3}, **[Fine]**^{*4}, **[Super Fine]**^{*5}.
 - ^{*1} No modification to the color setting.
 - ^{*2} Select this setting to perform CMYK conversion with enhanced saturation and brightness to print vivid colors.
 - ^{*3} 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.
 - ^{*4} 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.
 - ^{*5} 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]**^{*1}, **[Presentation]**^{*2}, **[Solid Color]**^{*3}.

 **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]** ^{*1}, **[10-bin Sorter]** and **[20-bin Sorter]**.

^{*1} Among the optional sorter units, the 3-bin sorter does not support 5¹/₂" × 8¹/₂"  (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]**^{*1}, **[Vivid]**^{*2}, **[Super Vivid]**^{*3}, **[Fine]**^{*4}, **[Super Fine]**^{*5}.

^{*1} No modification to the color setting.

^{*2} Select this setting to perform CMYK conversion with enhanced saturation and brightness to print vivid colors.

^{*3} 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.

^{*4} 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.

^{*5} 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]** ^{*1}, **[Presentation]** ^{*2}, **[Solid Color]** ^{*3}.

 **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 **[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.

LaserWriter 8.4x or later

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]** ^{*1}, **[Vivid]** ^{*2}, **[Super Vivid]** ^{*3}, **[Fine]** ^{*4}, **[Super Fine]** ^{*5}.

^{*1} No modification to the color setting.

^{*2} Select this setting to perform CMYK conversion with enhanced saturation and brightness to print vivid colors.

^{*3} 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.

^{*4} 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.

^{*5} 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]** ^{*1}, **[Presentation]** ^{*2}, **[Solid Color]** ^{*3}.

 **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 so on. 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]** 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**

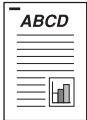

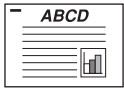

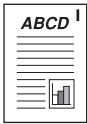

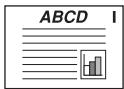

For more information, see the "Printer Reference" that is provided as a paper manual and the "Printer Reference" included as a PDF file in the CD-ROM.

3. Appendix

Staple Position

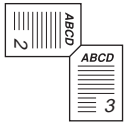

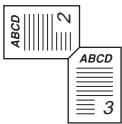
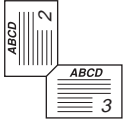

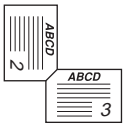
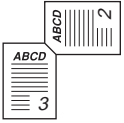

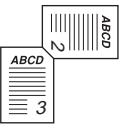
The following tables show the outputs of staple positions depending on each condition.

Simplex Printing

Output of Staple Position	OS ^{*1}	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	

^{*1} 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.

Precautions for RICOH-SCRIPT2

Differences between RICOH-SCRIPT2 and “PostScript Language Reference Manual, Second Edition”

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.

Other Precautions

- 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.

INDEX

A

About, 2
Advanced PostScript Options, 6
Advanced tab, 10
Auto Tray Switch, 3, 11
Available PostScript Memory, 7
Available printer memory, 3

C

Color Appearance, 10
Color Mode, 4, 11
Color Profile, 4, 11, 19, 22
Color Setting, 4, 11, 18, 22
Copies, 2
Copy Count, 9

D

Device Options tab, 3
Device Settings tab, 7
Dithering, 5, 12
Document Options, 10

E

EOF, 14

F

Fonts tab, 3
Font Substitution Table, 3, 8
Form to Tray Assignment, 8

G

Graphic, 10
Graphics tab, 2

H

Halftone Color Adjustment, 11
Halftone Setup, 8
header, 15

I

Installable options, 6

J

Job Timeout, 8

L

LaserWriter, 18, 20
LaserWriter 8.3x or earlier, 18
LaserWriter 8.4x or later, 20

M

Mirrored Output, 10
More Options, 2

N

Negative Output, 10

O

Option
 Sorter, 8
 Tray, 8
Option Setup Dialog, 17

P

Page Setup tab, 9
Page Size, 9
Paper size, 1
Paper Source, 9
Paper tab, 1
Paper Type, 12
PostScript tab, 6
Print as a mirror image, 3
Print as a negative image, 3
Printer Features, 11
Printer features, 3

R

Resolution, 2, 10

S

Send CTRL-D After Each Job, 11
Send CTRL-D Before Each Job, 11
Special, 2
Statistics Code
 User Code, User ID, 5, 13, 20, 24

T

Toner Saving, 5, 12
TrueType Font, 10

V

VM area, 28

W

Wait Timeout, 8
Windows 95/98
 Device Options tab, 3
 Fonts tab, 3
 Graphics tab, 2
 Paper tab, 1
 PostScript tab, 6
Windows NT 4.0
 Advanced tab, 10
 Device Settings tab, 7
 Page Setup tab, 9

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