RICOH

RICOH Software RIP

Reference Guide

Notice

- No part of this document or whole part of this document may be copied, duplicated, altered, extracted, or reprinted without permission.
- The contents of this document may be subject to change without notice.
- Due to improvement or change of this software, the description of this document could be partially different in specification, for which your understanding is requested.
- It is strictly prohibited to copy this software to other disk (excluding the case for making backup) or to load on the memory for the purpose other than executing it.
- With the exception of what is provided for in the warranty provisions of Ricoh Company,Ltd., we do not assume any liability against the damages (including but not limited to the loss of profit, indirect damage, special damage or other monetary damages) arisen out of the use or failure to use of this product. The same shall also apply to the case even if Ricoh Company,Ltd. had been notified of the possibility of arising damages in advance. As an example, we shall not be liable for any loss of the media (works) made using this product or indirect damages caused by the product made using this media.
- Make sure you make a copy or backup of the important documents and data. Some documents or data can be lost if you make operation mistakes or if this product malfunctions. Also, make sure to take precautions measures against computer viruses, worms, and any other harmful software at your own responsibility.
- Please note that we assume no responsibility whatsoever for any documents or data that are created by the users with this product.
- Please also note that we assume no responsibility whatsoever for any damages, failures resulting from losing documents or data, or any other damages resulting from the use of this product.
- We assume no responsibility whatsoever for any effects resulting from the use of this product or manual.
- Do not insert or remove removal disc and so on during operation.

About this manual

This manual explains the functions of "RICOH Software RIP".

Notations

Menu items are enclosed in quotation marks like [Full Color].
Buttons in dialog box are framed like ⬚ Update .

Symbols

(Important!)	Indicates a caution you must observe when operating the product.
💡	Describes a useful procedure.
☞	Shows the number of the page that has related contents.

About Terms

Job : A "Job" means a printing file that is handled by RICOH Software RIP. Once data in any format from application software such as Adobe Illustrator is spooled in RICOH Software RIP, it is registered in RICOH Software RIP and becomes a job.

Scan : "Scan" on the RICOH Software RIP means the head moving direction (Y direction) of the printer.

Feed : "Feed" on the RICOH Software RIP means the media moving direction (X direction) of the printer.

Table of Contents

At times like this

RICOH Software RIP Software Configuration

RICOH Software RIP consists of the following software.

RICOH Software RIP

Software that receives various image data, performs many different kinds of edits on them and sends drawing data to the printer

Profile Manager
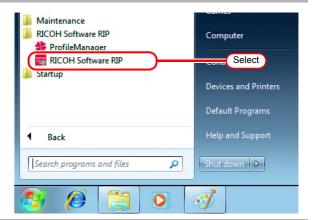
Software that manages the device profile and the input profile used in RICOH Software RIP

Basic Information of RICOH Software RIP

RICOH Software RIP start-up

For Windows Vista/ Windows 7

1 **Select [RICOH Software RIP];[Start] - [All Programs] - [RICOH Software RIP] menu.**

　• Or double-click the "RICOH Software RIP" icon on the desktop.

2 **User Account Control screen is displayed.**

3 **Click** ‹ Yes ›.

💡 **If the security center symbol (shield) is displayed**
• If the security center symbol (shield) is displayed, in order for a file to be executed, display the User Account Control screen and make sure that file execution is permitted.

---

4 **RICOH Software RIP starts.**

For Windows 8

1 **Right-click on the Start screen.**

• On the bottom-right side of the screen, the [All apps] icon is displayed. Click it.
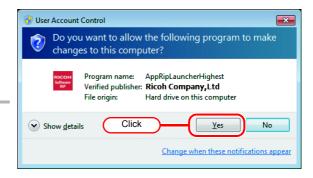
2 **The screen changes to the application screen.**

• Click [RICOH Software RIP].
• Or, double-click the [RICOH Software RIP] icon on the desktop.

3 **User Account Control screen is displayed.**

4 **Click** Yes **.**

If the security center symbol (shield) is displayed

• If the security center symbol (shield) is displayed, in order for a file to be executed, display the User Account Control screen and make sure that file execution is permitted.

---

5 **RICOH Software RIP starts.**

For Windows 8.1

1 **Click the arrow icon in the bottom left of the Start screen.**

2 **The screen changes to the application screen.**

   • Click [RICOH Software RIP].
   • Or, double-click the [RICOH Software RIP] icon on the desktop.

3 **User Account Control screen is displayed.**

4 **Click** Yes **.**

If the security center symbol (shield) is displayed
   • If the security center symbol (shield) is displayed, in order for a file to be executed, display the User Account Control screen and make sure that file execution is permitted.

---

5 **RICOH Software RIP starts.**
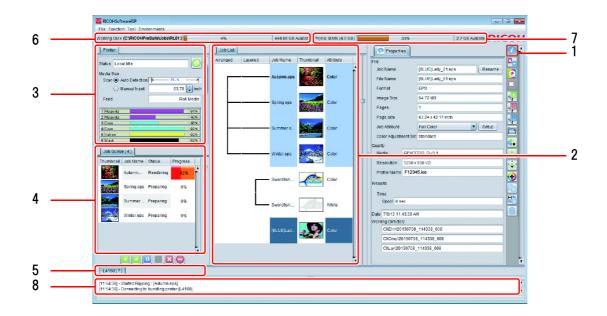
(Important!) **Depending on the authority of user who started RICOH Software RIP, the available function is limited.**

Authority of user	Unusable function
Other than administrative right	To create hot folder and printer driver. (☞P.101)
Administrative right	To read an image by drag & drop. (☞P.18)

Screen configuration

RICOH Software RIP performs various settings on the main screen display by selecting the function icon at the right on the screen and changing it.

Common item

1. Function icon

You can change the main screen by pressing these icons.
When the screen height is not big enough to display all icons, the scroll bar is displayed.
You can change the size of these icons or can hide unnecessary icons. (P.128)
Depending on the job condition selected in the job list, some function icons are displayed in gray and you cannot select them. For these, the condition is displayed in each function.

2. Job List
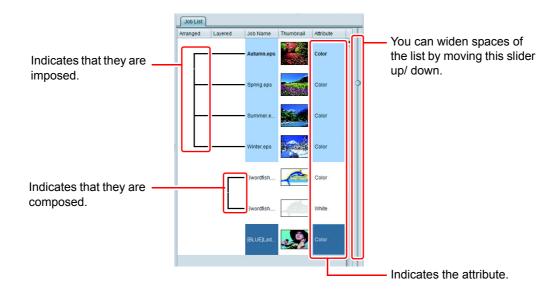
The job list is displayed.

> • This screen is displayed when you select the function icons below:
> Job property, imposition, composite, Special plate, Execution, copy, backup/ restore and deleting jobs

For each line

Arranged	Imposed (P.29) jobs are connected with a line and displayed.
Layered	Composed (P.67) jobs are connected with a line and displayed.
Job Name	The job name is displayed. You can change this in the job property (P.25).
Thumbnail	The thumbnail image is displayed.
Attribute	The job color attribute is displayed. Though the image is [Color], for the job on which you specified single color replacement (P.27) and the job created in the plate creation (P.59), the specified color is displayed.

Indicates that they are imposed.

Indicates that they are composed.

You can widen spaces of the list by moving this slider up/ down.

Indicates the attribute.

Job background color

Job background color has the meaning below:

Color		Status	RIPped data *1
White		Waiting	None
Green		Waiting	Exist
Cream color		Waiting	Some exist (when only some tiles are RIPped for tiling etc.)
Pink		Terminated	None
Magenta		Error	None
Blue		Running	—

*1. If there is ripped data, it is displayed by boldface.

Tool tip

[BLUE]Lady_01.eps   Color

Status : Ready, Ripped Data : None, Immediate Print : Possible

When you put the mouse onto the job, the status of that job is displayed in the tool tip.

• Displayed data
  Status/ with or without RIPped data/ whether RIP & print are available/ image editing type

Popup menu

Immediate Print	Ctrl+1
RIP and Print	Ctrl+2
RIP Only	Ctrl+3
Print Only	Ctrl+4
Top	Ctrl+T
Bottom	Ctrl+B
Duplicate	Ctrl+D
Delete Ripped Data	Ctrl+Backspace
Delete All Data	Ctrl+Delete

When you select a job and click the right button of the mouse, the popup menu is displayed.

Immediate Print/RIP and Print/RIP only/Print only
Executes the job respectively.
For details, refer to [Execution]
☞P.94.

Top   Moves to the top of the job list.

Bottom   Moves to the bottom of the job list.

Duplicate   Duplicates with the setting of the [Duplicate] screen ☞P.97.

Delete Ripped Data   If there is ripped data, deletes the ripped data.

Delete All Data   Deletes the selected job.

Double-click the job

Moves to the normal printing screen (☞ P.36).

3. Printer status

Information of the printer that has been connected is displayed.

> • This screen is displayed when you select the function icons below:
>   Job property, imposition, composite, print, copy, backup/ restore and deleting jobs
> • Depending on the printer, the displayed contents differ.

4. Job queue list (For details, ☞ P.96)

The status of the process, RIP and print at reading the image is displayed.
You can abort/ delete/ change printing order of the job that has been processed.

> • This screen is displayed when you select the function icons below:
>   Job property, imposition, composite, Special plate, Execution, copy, backup/ restore and deleting jobs

Print progress screen

Opening this screen while the printer is printing enables you to check how far the printing has proceeded at the current moment.
To display this screen, select [Enviroments]-[Option...]-[Display]-[Display print progress]. ☞ P.125
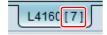
> • If the length of the print image exceeds 100 m, it will be displayed divided into sections of 100 m.

5. Printer tab

Switches the main screen by printer registered in the printer management (☞ P.126).
Total number of jobs read for that printer is displayed beside the printer name (number in red frame in the figure below).

> • You can create jobs up to 200 in total for all printers.

6. Working Disk

The used amount of the disk in which the folder (work folder) to manage job information of RICOH Software RIP is displayed.

7. Physic. Mem.

The current used amount of the memory of this computer is displayed.

8. Message display

The progress status of the process is displayed.

> • As the error is displayed in red, be sure to check it.

Flow up to print

When you print one image, it is performed in the following procedures.

(1) Read the image in RICOH Software RIP.
(2) Set the basic settings such as enlargement/ shrinkage.
(3) Output.

Read an image in RICOH Software RIP

There are four methods to read an image into RICOH Software RIP.

> (Important!)
> • You can read jobs up to 200 in total for all registered printers. If you try to read more, an error occurs.

[File] menu

1 **Select [Open] from the [File] menu.**

• The [Select file name to print] dialog is displayed.
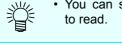
> • You can display it also by pressing `Ctrl` + `O` .

2 **Select an image to read.**
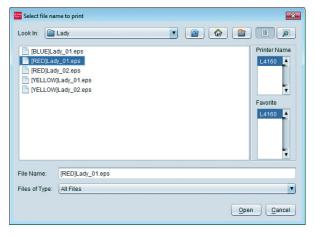
• When you registered multiple printers, select the dedicated printer from [Printer Name].
• Select the initial condition of the job after reading from [Favorite]. For "Favorite", refer to P.101.
• The selected "Favorite" will be selected by default from the next time.

> • You can select multiple images to read.

> (Important!)
> • You cannot read an image with selecting a shortcut file.

3 **After selecting all image files, press [Open].**
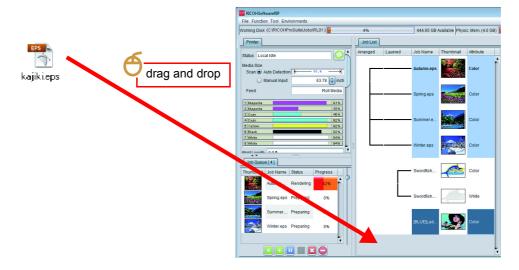
4 **The image is read into RICOH Software RIP and a job is created.**

Drag & drop into Job List

1 **Drag & drop an image to be read into [Job List].**

drag and drop

2 **The [Select file name to print] dialog is displayed.**
• The rest is the same as reading by using the [File] menu.

(Important!) • When you start RICOH Software RIP with administrator's right, even if you drag & drop the file into the job list, it is not read in.

Hot folder

Copy a file to the special folder (hot folder) to automatically load the image.
You can create this for each [Favorite](☞ P.101), and the condition set for "Favorites" is also set for the read job by default.
For the creating method, refer to P.101 and when you use via the network, refer to the Network Connection Guide.

1 **The hot folder is in the directory below:**
• [Install folder of RICOH Software RIP]\Hot\Favorite name

• As the hot folder is automatically set to be shared at creation, you can copy it via the network.

2 **Copy an image file in the hot folder.**
• A job is created.

Printer driver

By using the printer driver created in RICOH Software RIP, you can send an image directly to RICOH Software RIP from an application.
You can create this for each [Favorite], and the set condition for "Favorites" is also set for the read job by default.
For the creating method, refer to P.101 and when you use via the network or using method in specific software, refer to the Network Connection Guide.

1 Perform [Print] of each application.

> • As the printer driver is automatically set to be shared at creation, you can refer to via the network.

2 Select the same name printer as [Favorite] from printers and print.
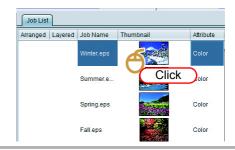
(Important!) **If an image is not displayed in the job list after you read it, it is possible that the following problems occur.**
- When you register multiple printers, the printer tab currently displayed may not be the printer selected for [Printer Name] in the [Select file name to print] dialog. Change the printer tab.
- Total number of jobs may exceed 200 in total for all printers. Check the message display.

Select a job
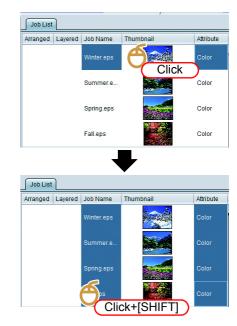
1   **You can select a job with a click of a mouse from the job list.**
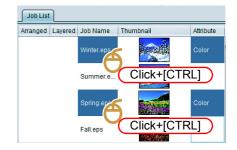
Select continuous and multiple jobs

After selecting the top job with a click of a mouse, click the last job while pressing [SHIFT].

Select multiple jobs intermittently

Select them with a click of a mouse while pressing [CTRL].

Perform the basic setting such as enlargement/ shrinkage

1 **Select a job to print from the job list.**

2 **Select** **(General Print) from the function icons.**
  • The main screen is changed to the general printing screen.

3 **On the general printing screen, you can perform the setting below:**

[Scale]	Enlarges/ shrinks the image.
[Rotation]	Rotates the image.
[Mirror]	Makes the image into the mirror image for right and left.
[Position]	Specifies the printing position of the image.
[Copy]	Makes the specified number of copies of the image.
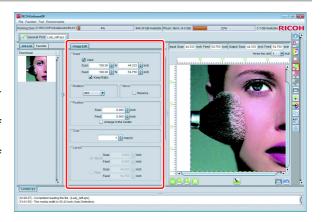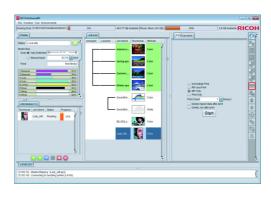
Output

1 **On the general printing screen, press the** **(Execution) button under the Preview screen.**
  • The screen changes to the [Execution] screen.

  • The printing method differs depending on the setting of the last performed method. For the performing method type, refer to P.95.

Terminating RICOH Software RIP

1 **Select [Exit] from the [File] menu.**

> **You can also terminate in the methods below:**
> • Press $\boxed{\text{Ctrl}}$ + $\boxed{\text{Q}}$.
> • Press "x" at the upper right of the main window.

> • After RICOH Software RIP has been terminated, the job read/ set by that time is automatically saved.
> • After restart, the job automatically saved is read automatically.

Function Explanation

About each function icon

Button	Function	Outline	Shortcut keys	Page
	Job Properties	Displays job/ printer information and changes job attribute.	Alt+I	P.25
	Arrangement	Sets imposition of multiple jobs.	Alt+A	P.29
	General Print	Sets the size/ the position/ the number of copies of the image and prints.	Alt+G	P.36
	Tiling	Prints the same image by splitting it.	Alt+T	P.43
	Step & Repeat	Prints the image by lying repeatedly without any spaces. With a flat-bed printer, this icon is not displayed in the initial settings (**).	Alt+S	P.53
	Crop	Cuts a part of the image.	Alt+C	P.57
	Special plate	Creates the job dedicated for special color from the selected job. This function is displayed only for the printer with special ink cartridge.	Alt+P	P.59
	Composition	Prints multiple jobs by overlapping them.	Alt+M	P.61
	Layer	Sets the layer print. This function is displayed only for the printer with special ink cartridge.	Alt+L	P.67
	Quality	Sets the printing condition.	Alt+Q	P.70
	Color Replacement	Sets the color replacement.	Alt+R	P.80
	Execution	Executes the selected job.	Alt+X	P.94
	Duplication	Duplicate the selected job.	Alt+U	P.97
	Backup / Restore	Saves and restores the job.	Alt+B	P.98
	Delete	Deletes the job.	Alt+D	——

(Important!)
- Depending on the ink set, some of the functions may not be displayed.
- Depending on the function settings, some items may be unselectable (grayed out). Pressing the shortcut keys for the functions in question will display the reasons why they cannot be selected, in the message area.
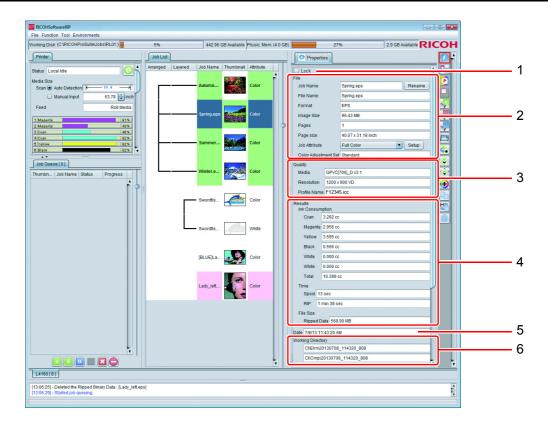
Displays job information- **Properties**

Function

On the [Properties] screen, you can perform the operation below:

● **Change the job name.**

● **Change the job attribute (full-color print/ special plate print/ Monochrome print.).**

● **Display job information.**

Screen configuration

1. Lock

Turning this on makes it impossible to change the settings for, or to delete, the selected job(s).

> **(Important!)**
> • When a job is locked, no functions can be executed for it except [Special plate][Backup] and [Execution].
> • Locking a single job in a group of jobs that have been composed or imposed will lock all the other jobs in that group.

2. File

Displays the job and the image information which created the job.

Job Name	Displays the job name. Though the default name is the file name of the original image, you can change it. (☞P.27)
File Name	Indicates the file name of the image.
Format	Displays the file format of the image.
Image Size	Displays the file size of the image.
Pages	Displays the number of pages of the image.
Page Size	Displays the size of one page.
Job Attribute	Displays or sets the attributes below depending on the printing method.

Full Color	Job to print with colors of the original image. This is the default of the image job.
Mono Color	Attribute that can be set only when the original image is CMYK color mode. Prints with assigning either of CMYK to the specified ink color. For details, refer to P.27.
Special Color	Job created in the [Special plate] function (☞P.59). You cannot change to other attribute. For details, refer to P.59.

3. Quality

Displays the following conditions set in the printing condition (☞P.70).
Media, resolution, profile name

4. Results

Displays various results after performing RIP and print.

Ink Consumption   Calculates the ink amount to be consumed by printing from ripped data and displays them by ink.

> • Depending on the combination of the machine type and ink, as data required for calculation is not available, the ink amount to be consumed cannot be displayed in some cases. In such a case, the message to inform you accordingly is displayed. Data will be added by update in sequence.
> • When the ink amount to be consumed is not calculated by the option setting (☞P.124), this column is not displayed.
> • For some machine types, the ink amount to be consumed cannot be calculated if you do not connect it with the printer.

Time   Displays the time for each processing.

5. Date

Displays the date and time when you registered the job.

6. Working Directory

Displays the working directory name where the job information is stored.
The actual working directory is right under the directory indicated in [Working Disk] of upper left of the screen.
e.g.)
        Working disk : C:\RICOHProSuite\Jobs\RL01
        Working directory : Cl\Elm\20121217_110309_252
        →The actual folder is
            C:\RICOHProSuite\Jobs\RL01\Cl\Elm\20121217_110309_252

Operation
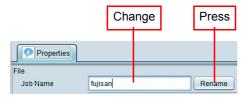
Change the job name

You can change the job name.
Use this when you read the same image file several times or when you copy the job to distinguish from each other.
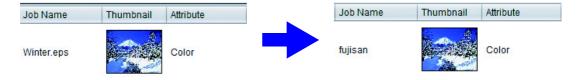
1 **Enter a new name into [Job Name] of [Properties] and press the [Rename] button.**

• The job name is changed.

Change   Press

• In addition, [Job Name] of [Job List] is also changed.

Perform setting to print a full-color image with one ink color -Mono color replacement

Use this when you print special color ink (white) with one color etc.
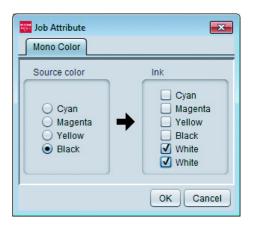
(Important!) • You can perform single color printing only for CMYK color mode image. (It is unavailable for RGB color mode.)
• You can perform single color replacement both for the illustrator (vector) and the image (raster).

1 **Select a job of which [Job Attribute] of [Properties] is "Full Color".**
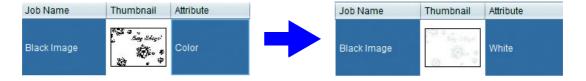
2 **Select "Mono Color".**

• The [Job Attribute] dialog is displayed.
• Select the color to be replaced in the original image from [Source color].
• Select the ink color to use from [Ink].
• When there is more than one same ink color, you can select that ink color more than one.

3 **Press the OK button and close the dialog.**

• [Job Attribute] of [Properties] is changed to "Mono color".
• Thumbnail and attribute in the job list are changed according to the set condition.
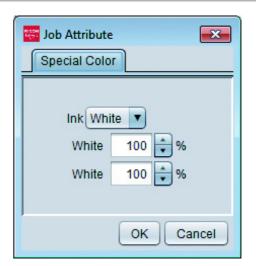
(Important!) • For the full-color image, color information other than specified ones as [Source color] are discarded and is not printed.
• The density of [Source color] is applied to the ink density to be printed.

Change the ink density etc. of the special color plate created in [Special plate] function

When the job attribute is "Special Color", you can change ink color and ink density of special color ink.

1 **Select a job of which [Job Attribute] of [Properties] is "Special Color".**

2 **Press the setting button of [Job Attribute] of [Properties].**

• The [Job Attribute] dialog is displayed.

3 **Change [Ink] and its ink density.**

4 **Press the OK button and close the dialog.**

• When you change ink, the attribute of the job list is changed.

![icon] Collect multiple images - Arrangement

Function
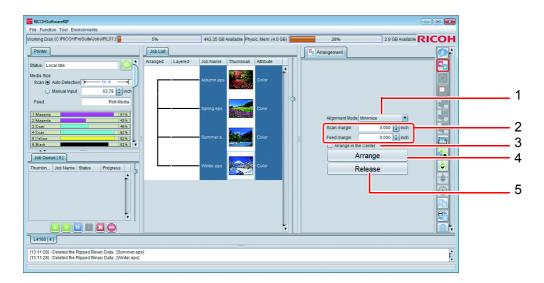
In [Arrangement], you can perform the operation below:

• Make collective print of multiple images.

> • In RICOH Software RIP, outputting multiple images at a time is called as "Imposition print".

Screen configuration

1. Alignment Mode

For setting the method of lining up a job group when the [Arrange] button is clicked.
To lay out the individual jobs in any desired positions, use [General Print] (☞ P.36) after arrangement.
For details, refer to next page.

Sequential	Arranges jobs in the media feeding direction.
Minimize	Arranges jobs so that you can use the media effectively.
No rotation	The jobs will be laid out by the same method as for minimum area, but will not be automatically rotated.

2. Scan margin / Feed margin

Set the spaces between images by the width and the feed. This value is will be applied when the [Arrange] button is clicked. Change [General Print] (☞ P.36) after arrangement. For details, refer to next page.

3. Arrange in the Center

When checked, the imposed job entire area is arranged at the center of the media. This value is will be applied when the [Arrange] button is clicked. Change [General Print] (☞ P.36) after arrangement.
For details, refer to P.32.

4. Arrange

Imposes multiple jobs selected in the job list. Depending on the job setting, imposition cannot be performed with some conditions. For details, refer to P.33.

5. Release

Cancel the imposition setting of the imposed job selected in the job list.
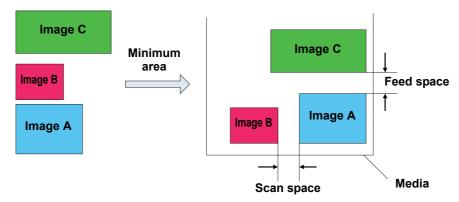
Arrangement setting of imposition

When you press the imposition button, the selected multiple images are arranged. You can specify the arrangement method at that time from two types.
You can also impose the copy image. The value of margins of imposition and copy is maintained separately.

Minimize
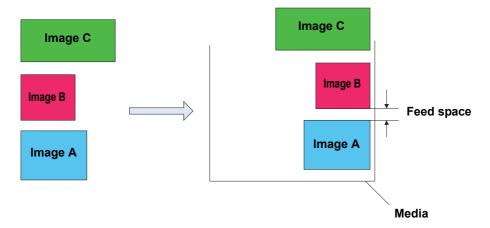
Arranges images so that the printing area may become minimum. At this time, the job is rotated automatically in some cases. You can specify the scan space and the feed space.

Sequential

Arranges images in the media feeding direction. To arrange so that the length becomes minimum, the job is rotated automatically in some cases. You can specify the feed space.
You can perform print images in sequence with the continuous print instruction simply, however, at this time, the printer puts a certain amount of space between images. You can instruct the space between images correctly in the imposition print in sequence.
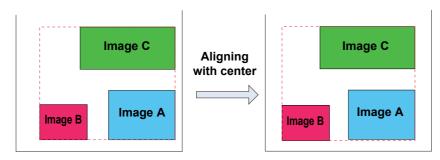
Arrange in the Center
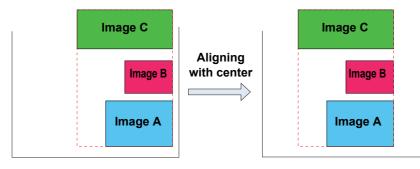
Arranges the imposed image with the center of the media width.

Minimize

Image C	**Aligning with center** →	Image C
Image B Image A		Image B Image A

The center of the entire imposed image is arranged with the center of the media width.

Sequential

Image C	**Aligning with center** →	Image C
Image B		Image B
Image A		Image A

Arranges the borderline rect-angle surrounding all images (dotted line part) at the center of the media width.

Conditions for imposition

Maximum arrangeable number of jobs

Up to 30 jobs can be arranged.

Editing conditions that you cannot perform imposition

For the job with the setting below, you cannot perform imposition:
• Tiling
• Step & repeat
In addition, you cannot impose other job with the already imposed jobs. In such a case, first release imposition once and then perform imposition.

When you impose composed job

You can impose multiple composed jobs, however, there are the conditions below:
• When you overprinted special color, the printing order of special color and color are the same for all jobs to be imposed.

About printing condition

⬤ **Conditions unavailable for imposition**
You cannot impose the jobs if the conditions below differ:
Output resolution

⬤ **If the conditions other than above differ**
If the printing conditions below differ, all become the same condition as the top job:
Pass, number of overprints, halftone, high-speed printing, printing direction
drying time by scanning, margins before and after printing, end margin feed, absorption fan, device adjustment.
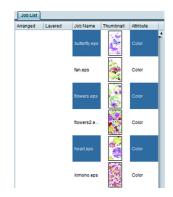
For the conditions other than above, you can impose even if the settings differ.

Procedures to impose

Perform imposition
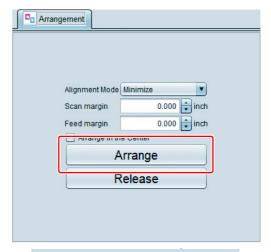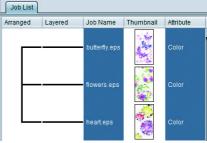
1 **Select multiple jobs to be imposed.**

• For the method to select multiple jobs, refer to P.20.

2 Select the [Arrangement] icon.

3 **Set the alignment mode, margins and with/ without "Arrange in the center". Then click [Arrange].**

• The selected jobs are displayed in a lump in the job list and lines are displayed for imposition.
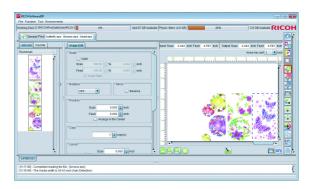
4 **When you select the [General Print] icon, they are imposed and displayed in the preview screen.**
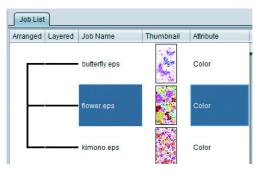
Release imposition

1 **Select a job to release its imposition.**

• Imposition of the selected job only is released. If you release all impositions, select all jobs.

2 **Select the** [Arrangement] **icon.**
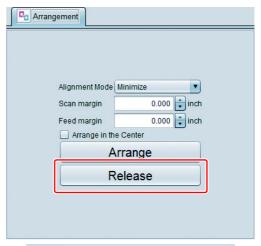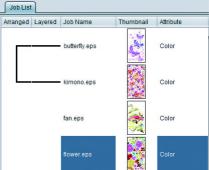
3 **Click [Release].**

• Imposition of the selected job is released, and the pagination lines disappear.

Perform basic image edit and print
- General Print

Function

You can perform the operations below in [General Print].

- Enlargement/ shrinkage, rotation and mirror of image
- Arrangement of image (moving and copy layout)
- Addition of printing information label
- Performing print

Screen configuration

Rough configuration

Job LIst/ Favorite screen

Image Edit screen

Preview screen
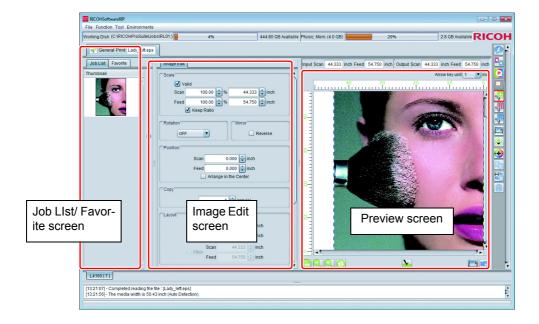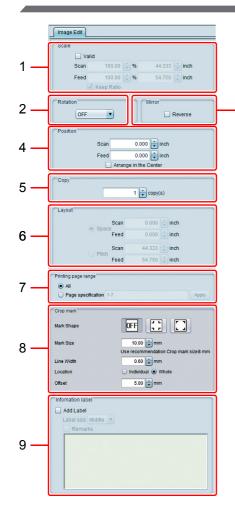
Image Edit screen

1. Scale

Specifies the printing size of the image. You can specify it by magnification (%) or the actual length size.
- When [Keep Ratio] is ON, you can enlarge/ shrink with the aspect ratio fixed.
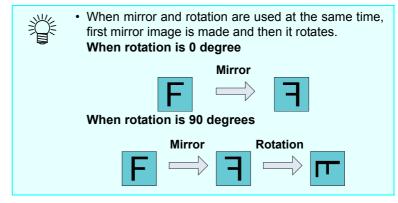
2. Rotation

Rotates the image. You can set the values below:

F	L F	ⅎ	⊤⊤
0°	90°	180°	270°

3. Mirror

Makes the mirror image.

> • When mirror and rotation are used at the same time, first mirror image is made and then it rotates.
> **When rotation is 0 degree**
>
> **Mirror**
> F ⟹ ⅎ
>
> **When rotation is 90 degrees**
>
> **Mirror**   **Rotation**
> F ⟹ ⅎ ⟹ ⊤⊤

4. Position

Sets the origin position of each job with the numerical value.
- When [Arrange in the Center] is ON, the image is arranged at the center of the media. When you copy or impose, as indicated in P.32, moves the entire area of multiple images to the center of the media.

5. Copy
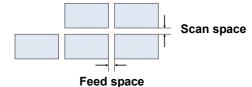
Makes the specified number of copies of the image and arranges.

6. Layout

When the job is imposed or set to be copied and it is arranged automatically (refer to P.41 [Optimization]), specify the arranging position. After specifying, by pressing the [Optimization] button, the setting is reflected on the preview.
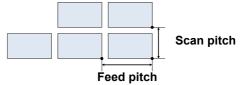
- **Space**
  Specifies the space between images by the numerical value. When the image is imposed, the space specification of the imposition screen is overwritten.

Scan space

Feed space

- **Pitch**
  Specifies the distance from the origin of the image to the origin of next image by the numerical value.
  In the following cases, pitch specification is not displayed:
  - Arrangement has been executed.
  - Multipage job (*)
  - Nesting in widthwise direction (only displayed with multipage jobs (*)) – the images in a multipage job are arranged in widthwise rows. When it is off, they are arranged in lengthwise rows.

  *Multipage job: A file that contains multiple images, such as a multipage PDF or TIFF, is called a multipage job.

7. Printing page range (only displayed when multipage job has been selected)

For specifying the pages to be printed in a multipage job.

- **All**
  Prints all the pages in the file.

- **Page specification**
  Prints specified pages.
  Examples of page specification:
  - To print pages 2 to 5, enter: [2-5]
  - To print just pages 2, 4 and 6, enter: [2,4,6]
  - To print pages 2 to 5 and pages 8 and 11, enter: [2-5,8,11]
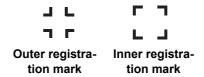
8. Crop mark

This is for applying a registration mark to images.
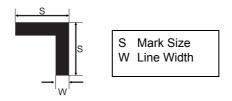
- **Mark Shape**
  You can select an outer or an inner registration mark. If no mark is to be printed, set "OFF".
  Match the "Shape" setting with the cutting plotter's settings.

  Outer registration mark   Inner registration mark

- **Mark Size / Line Width**
  For changing the size of the registration mark. The recommended values for sensing with a cutting plotter will be displayed as the [Recommend Mark Size]. Enter values equal to or higher than these. (The [Recommend Mark Size] will vary depending on the size of the images.)

  S   Mark Size
  W   Line Width

- **Location**
  You can select whether to apply a registration mark to individual images, or to the whole of a set of laid-out multiple images.

  Individual : Applies a registration mark to individual images. During cutting, each individual image will be sensed for the mark, and this will take time. But it will lessen the discrepancy between printing and cutting.
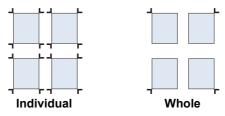
  > (Important!) **When "Individual" is selected for Location in Crop mark , note the following points:**
  > - When more than one is set for the number of copies and the number of images in the last line is smaller than the number of images in the first line, even after a number of cuts equal to the number of copies have been made completely, registration marks are still detected, which leads to a registration mark detection error.

  Whole : Applies a registration mark to the whole of a set of laid-out multiple images. During cutting, it will only be necessary to sense the registration mark for one set, and so the time taken will be short. But the discrepancy between printing and cutting will be large relative to "Individual".

  Individual   Whole

  > (Important!) **Pay attention to the following point if you select "Whole" for the registration mark layout.**
  > - The registration mark detection function cannot be used with this setting if cutting is performed with a cutting plotter following printing. In such a case, select "Individual".

- **Offset**
  Set the offset of a registration mark from an image.

> (Important!) • After registration mark printing has been set for a job, it will not be possible to make the following settings for that job:
> **With "Whole" set for [Location]:**
> Tiling, Step & Repeat, Crop, Special plate
> **With "Individual" set for [Location]:**
> Tiling, Step & Repeat
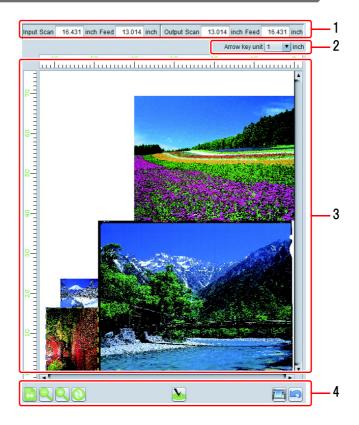
9. Information label

At printing, the printing condition is printed at the rear edge of the image. Information to be printed is as below:

Firmware version, RICOH Software RIP version, printing date, resolution, number of passes, printing direction, rapid printing on/off, scans-per-pass, halftone feed correction setting, heater setting (only with models with heater), job name, file format, file size, scale width, scale feed, rotation, mirror, ink set, media, device profile name, color matching settings, color adjustment settings Characters entered in [Notes] space

Preview screen

1. Input/ Output

The original size of the selected job is displayed in [Input] and output size in [Output].

2. Arrow key unit

You can move the selected job with the arrow key on the keyboard. Specify the moving amount of the job for one hit of the key at that time.

3. Layout preview

Arranged position when the image is printed is displayed.
The white part inside the image is the available drawing range (in the media) and the gray part is outside range.

You can perform the followings by selecting the image with a mouse. (You can select only one image.)
  • Make the selected image be the target to edit on the [Image Edit] screen.
  • Move the selected image with the arrow key on the keyboard.
  • Drag and move with a mouse.

4. Various button

	Display with media width	Displays the arranging preview width as the media width.
	Zoom out	Zooms out the arranging preview screen.
	Zoom in	Zooms in the arranging preview screen.
	Updating media width	Obtains the media width from the printer and updates the display of the available drawing range in the arranging preview.
	Optimization	When you impose multiple images or copy, arranges the image so that the media consumed amount becomes minimum. At execution, the margin setting specified in [Arrangement] setting is used.
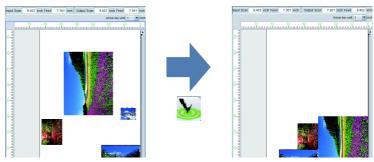
	Execution	Executes RIP/ print. The setting of mode to execute is the one you used the [Execution] function previous time. (☞ P.94)
	Restore	Restores the setting to the one when you opened the [General Print] screen.

Job List

The imposed job is displayed.
By selecting, it becomes the target to edit in [Image Edit].

Favorite

In the [General Print] screen, you can register/ use the conditions below as Favorites.
 • Scale
 • Rotation
 • Mirror
 • Arrange in the Center
For the setting method and the application method, refer to P.101.

🖼️Print a large image by splitting it - Tiling

Usage of split print

When you output an image larger than the printer width such as a sign, by using the split print function, you can print by splitting the image into the size to construct easier.

Function

You can perform the operations below in [Tiling].
- Enlargement/ shrinkage, rotation and mirror of image
- Setting split image
- Layout setting of split image
- Option setting to construct easier on sign etc.
- Performing print
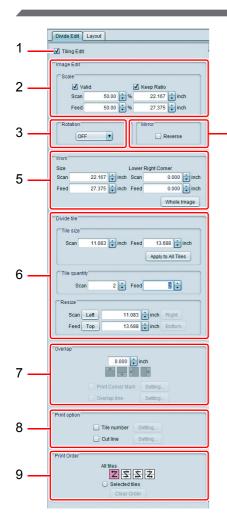
Screen configuration

Rough configuration

Divide Edit

1. **Tiling Edit**

   When this is ON, sprit print is specified and you can edit.

2. **Scale**

   Enlarges/ shrinks the image.

3. **Rotation**

   Rotates the image.

4. **Mirror**

   Makes the mirror image of the image.

5. **Work**

   Specifies the size and the position to clip the image.

   > • In RICOH Software RIP, the target to construct such as a sign is called [Work]. Usually, RICOH Software RIP enlarges the image into a little larger than the work and clips the required part in this [Work] function.

6. **Divide tile**

   Splits the image. You can split up to 100.

   > • In RICOH Software RIP, one split image is called [Tile].

   There are three types of the splitting.

   A. Tile size
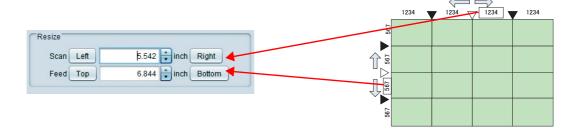
   Sets the size of one tile and applies it to all tiles.

   B. Tile quantity

   Sets the number of splits each for the scan and the feed and performs equal split.
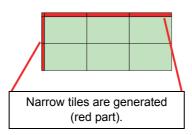
   C. Resize
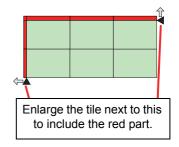
   Select the tile to specify the size by using [Left], [Right], [Top], [Bottom] button and specify the size. The size of the target tile to edit is displayed with rectangle on the Preview screen as below. When you click the mouse on the ▼ mark, it changes to the selected status (▽). In this status, you can perform fine adjustment with the cursor key.
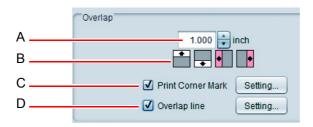
> **Important!**
> • Make the size of one tile be larger than 25.4mm square. If it is less than this, a warning message is displayed at printing or at changing screens and you cannot continue the process.
> • Especially, when the splitting method is [Tile size], a tile of 25.4mm and less may be created at the left edge or the upper edge of the image due to calculation difference. In such a case, enlarge the size of the tile next to this in [Resize].

Narrow tiles are generated (red part).

Enlarge the tile next to this to include the red part.

7. Overlap

When you construct on a sign, if you paste the split images as it is, gaps may be generated. To prevent this, you can put overlap space on neighboring parts of tiles.

A — 1.000 ▲▼ inch
B —
C — ☑ Print Corner Mark   Setting...
D — ☑ Overlap line   Setting...
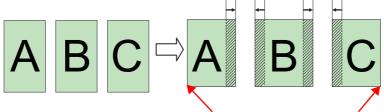
A. Size specification
Specify the size of overlap space.

B. Overlap space position
Specify the position to put overlap space. Overlap space will be put for the red section of the select buttons.
When you split the image into three vertically and set to put overlap space on the right and the left of the tile, the way to put overlap space is as below (the shaded area is overlap space):
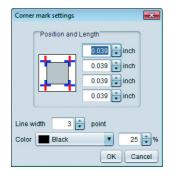
A B C ⇒ A B C

No overlap space is put on the edge of the image.
It is put when there is a tile next to this.

C. Print Corner Mark
When this is ON, the mark (+) used for reference to paste is printed. When you press the [Setting...] button, the dialog below is displayed.

Corner mark settings

Position and Length
0.039 inch
0.039 inch
0.039 inch
0.039 inch

Line width 3 point
Color Black 25 %
OK Cancel

Position and length
Specify the length of four sides of the mark. (Range: 0 to 100mm)
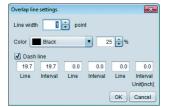
Line width Specify the mark line width. (Range: 0 to 30point)

Color Specify the color and the density of the mark.

When you press the [OK] button, the setting is applied.

D. Overlap line
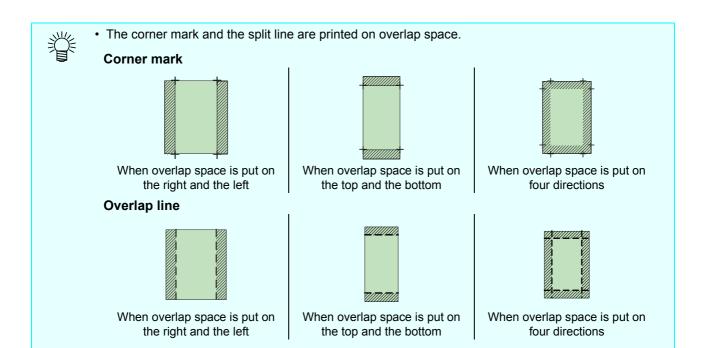
When this is ON, a line (split line) is printed on the borderline between the tile itself and overlap space. When you press the [Setting] button, the dialog below is displayed.

Line width	Specify the line width.
Color	Specify the line color.
Dash line	When you draw a dashed line, make this ON.
Dashed line shape	When you draw a dashed line, specify the line type and intervals.

- The corner mark and the split line are printed on overlap space.

Corner mark

When overlap space is put on the right and the left

When overlap space is put on the top and the bottom

When overlap space is put on four directions

Overlap line

When overlap space is put on the right and the left

When overlap space is put on the top and the bottom

When overlap space is put on four directions
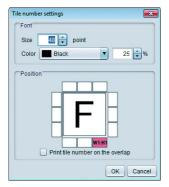
8. Option

Tile number

When this is ON, the tile number is printed so that you can see at which position of the original image the tile is [Setting]
When you press the button, the dialog below is displayed.

Font size   Set the font size of the tile number.

Color   Set the color of the tile number.

Position   Select at which position of the tile to print the tile number.
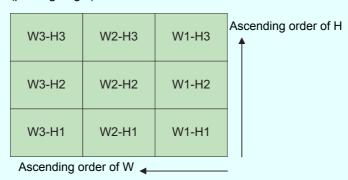
Pirnt tile number on the overlap
When you set to put overlap space and when this is ON, the tile number is printed on overlap space.
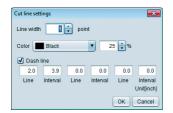
- The tile number is displayed as W for the scan direction and H for the feed direction, and (1, 1) for the lowest right tile (printing origin).

W3-H3	W2-H3	W1-H3
W3-H2	W2-H2	W1-H2
W3-H1	W2-H1	W1-H1

Ascending order of H

Ascending order of W

Cut line

When this is ON, a line is printed on the outer of the tile. If there are spaces in the tile etc., you can use this for reference to cut.
When you press the [Setting] button, the dialog below is displayed.

Line width   Specify the line width.

Color   Specify the line color.

Dash line   When you draw a dashed line, make this ON.

Dash line shape   When you draw a dashed line, specify the line type and intervals.
You cannot set [0] to all dash lines and interval.

- The cut line is printed on the outer of the tile including overlap space.

9. Print Order

Select the printing order and the tile to print.

When you print all tiles at a time
Click the icon to indicate the printing order.
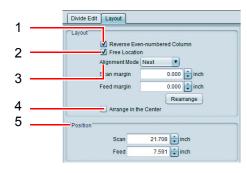
Icon	↗↙↗	↗→↘	↙←↗	↘→↗
Printing order	9 8 7 6 5 4 3 2 1	7 8 9 4 5 6 1 2 3	3 2 1 6 5 4 9 8 7	1 2 3 4 5 6 7 8 9

Output the specified tile only in any order
Select [Selected tiles]. For the tile order specification/ selecting method after that, refer to [To print the specified tile only.] (☞ P.51).

Layout

1
2
3
4
5
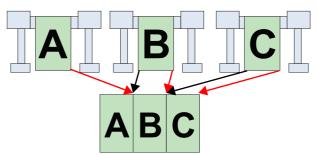
1. Reverse Even-numbered Column
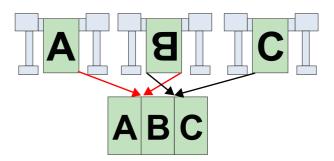
Rotates the even number sequence counted from the right of the tiles 180 degrees.
This is effective when there is color difference due to the heater temperature difference between the right and the left of the printer and when you paste tiles, the pasted part may stick out.

- **OFF** : Prints all tiles with the same direction.

- **ON** : Prints the even number sequence (here, Tile B) by rotating it 180 degrees.
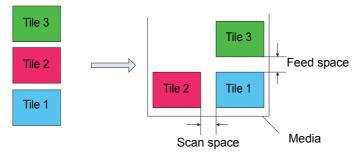
2. Free Location

When this is ON, you can move the tile to any position.
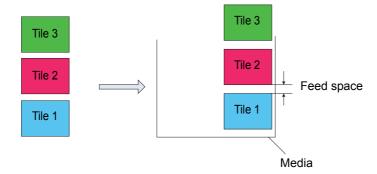
3. Alignment Mode

This can be operated when [Arrange in any position] is ON.
By putting space between tiles by the width specified in [Scan margin][Feed margin] and pressing the [Rearrange] button, arranges them as below.

• Nest
Arranges tiles in the media width direction side by side.

• Sequential
Arranges tiles in the media feed direction side by side.

4. Arrange in the Center

When it is ON, the entire range of multiple tiles is moved to the center of the media as indicated in P.32 .

5. Position

Moves the tile selected by clicking on the layout preview using the numerical value.

Favorite

You can register/ use the conditions below as Favorites in the [Tiling] screen.
• Scale
• Rotation
• Mirror
• Size and position of overlap space
• With/ without corner mark and its setting
• With/ without split line and its setting
• With/ without tile number and its setting
• With/ without cut line and its setting

At times like this
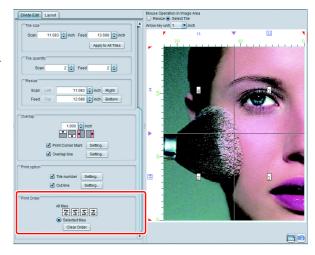
To print the specified tile only

When you reprint the specified tile because the work has failed etc., you can print it with the procedures below:

1 **Select the target job and open the split print screen.**

2 **Select [Selected tiles] in the [Selected tiles] column.**

- The number indicating the printing order is displayed on each tile on the split preview.
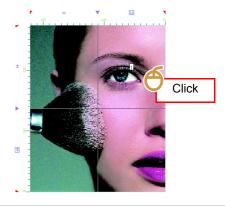
3 **Press the [Clear Order] button.**

- The number displayed on each tile on the split preview is cleared.

4 **Click the tile to print on the split preview.**

- The number indicating the printing order is displayed on the clicked tile.
- You can select multiple tiles. The printing order is displayed in the clicked order.
- If you want discard the currently configured settings and start from the beginning again, press the [Clear Order] button.
- Press the [Restore] button to clear all tile print settings.

Click

5 **Print it.**

Conditions of tiling

Conditions unavailable for tiling

You cannot perform tiling for the job with the setting below:
• Imposed
• Step & repeat
• Composed
• When you set the number of copies for normal printing etc.
• When you set the register mark for normal printing etc.
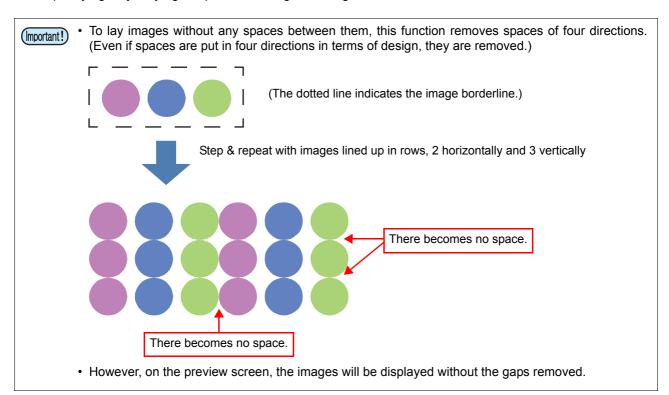
Print images side by side without any spaces between them - Step & Repeat

Function

You can perform the operations below in [Step & Repeat].
- Enlargement/ shrinkage, rotation and mirror of image
- Specifying way of lying/ output width/ length of image

[Important!]
- To lay images without any spaces between them, this function removes spaces of four directions. (Even if spaces are put in four directions in terms of design, they are removed.)

(The dotted line indicates the image borderline.)

Step & repeat with images lined up in rows, 2 horizontally and 3 vertically

There becomes no space.

There becomes no space.

- However, on the preview screen, the images will be displayed without the gaps removed.

Screen configuration

Favorite screen

Image Edit

Preview screen

Image Edit

1. Step & Repeat Edit

Performs Step & Repeat.

2. Scale

Enlarges/ shrinks the original image.

3. Rotation

Rotates the original image.

4. Mirror

Makes the mirror image of the original image.

5. Position

Moves the image arranged in Step & Repeat.
- When [Arrange in the Center] is ON, arranges entire Step & Repeat arranged image at the center of the media.

6. Type

Specifies the way of lying images.
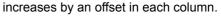
	Normal	: The images are lined up without staggering.
	vertical 1	: The images are lined up staggered in the vertical direction. The stagger amount increases by an offset in each column.
	vertical 2	: The images are lined up staggered in the vertical direction. The even columns only are staggered by an offset.
	horizontal 1:	The images are lined up staggered in the horizontal direction. The stagger amount increases by an offset in each row.
	horizontal 2 :	The images are lined up staggered in the horizontal direction. The even rows only are staggered by an offset.
	Sitcker Print :	The images can be lined up with any desired spacings (refer to next page for details)
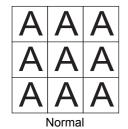
Example: The various types of placement with offset of 1/3

Normal	vertical 1	vertical 2	horizontal 1	horizontal 2
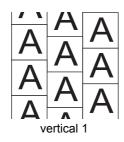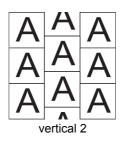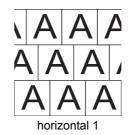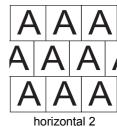
* refer to next page regarding Sitcker Print.

7. Offset

This is displayed when the images are to be lined up staggered. It is for specifying the stagger amount.

8. Size

Specifies the repeating size.

Length	: Specifies printing length/ width. Maximum length : 600m
Number of Poeces	: Specifies with the number of images assuming the original image is one. Maximum range: Length 600 m/image size multiplied by scaling

9. Sticker Print

This is displayed when " Sticker Print " is selected for [Type].

Sticker Print	**Total**	: For specifying the quantity of images.
	Scan Direction	: For specifying the quantity of images lined up in the widthwise direction and feeding direction.
Margin		: For specifying the inter-image spacings in the width direction and feed-direction.
Roller Margin		: For setting the value for the paper right-edge margin. If the paper is to be cut subsequently, see the Instruction Manual for the cutting plotter used regarding this margin value.
Reference Line		: For printing a line that will serve as origin when the printed sheet is cut with the cutting plotter.
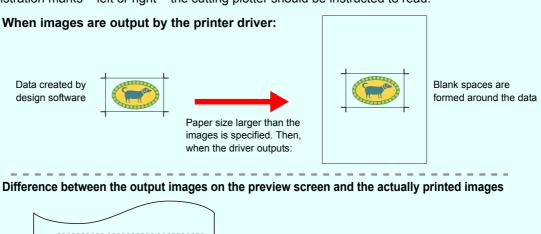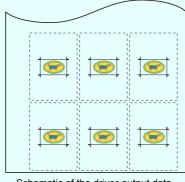
• Use this when you copy-print images that are to be cut.
Using the printer driver to read images into RICOH Software RIP may result in blank spaces being formed around the images. This is particularly likely to occur if print paper larger than the images is set in the printer driver settings. If spacings are set for the copying with the images in such a state, the pacings will be added to the blank portions around the images, and so the spacings will appear larger than specified in the printed copies.
This function avoids this problem by first removing the blank spaces at the outside of the images, so that copying is carried out with the specified spacings inserted between the images.
Also, when images are to be cut with a cutting plotter, you must specify whether the cutting plotter is to read the left or right registration marks initially. The registration mark guiding line indicates which registration marks – left or right – the cutting plotter should be instructed to read.
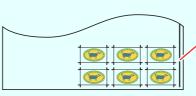
When images are output by the printer driver:

Data created by design software

Paper size larger than the images is specified. Then, when the driver outputs:

Blank spaces are formed around the data

Difference between the output images on the preview screen and the actually printed images

Schematic of the driver-output data when laid out

Actually printed images (with blank spaces around the data automatically removed)

A registration mark guiding line that indicates the origin can be printed.

Favorite

You can register/ use the conditions below as Favorites in the [Step & Reoeat] screen.
• Scale
• Rotation
• Mirror
• Arrange in the Center
• Type
• Offset value
• Reference Line

Conditions that do not allow step & repeat

Step & Repeat cannot be set for jobs for which the following settings have been made.
• Auto Special Color Composition job
(The job combining the Color layer job and Special Color layer job which is automatically created with [Composite automatically] in Composition function.
• Arrangement
• Tiling
• Number of copies 2 or higher with "General Print" or the like
• Mark specified with "General Print".
• Label printing with "General Print".
• Multipage jobs

🔲Clip some parts of the image - Crop

Function

You can perform the operation below in [Crop].
- Clip some parts of the image.

Screen configuration

Rough configuration

| Thumbnail | Image Edit | Preview screen |
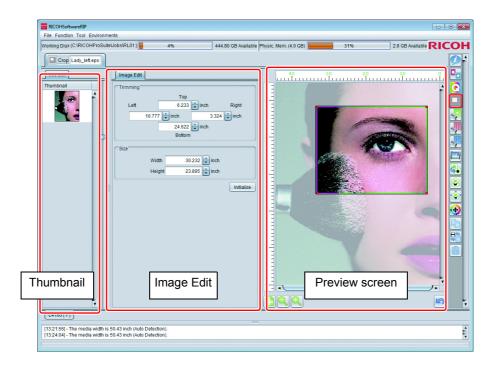
Image Edit

1. Triming

Specifies the rectangle area to be clipped by the distance from left, right, top and bottom of the image.

2. Size

Specifies the size of the rectangle to be clipped.

> (Important!) • Specify trimming and size based on the original size of the image. If you specify larger one in the general printing etc., the image after being clipped will be enlarged.

3. Initialize

Returns the setting to the one to print entire image.

Clip preview

By dragging & dropping the green line with the mouse on the preview, you can specify the area to clip.

Thumbnail

When you selected several images in the job list and moved to the [Clip] screen, the list of selected jobs is displayed in the thumbnail. After selecting the image you set to clip, perform setting. Perform setting for each job. (You cannot set collectively.)

Create an image for special color ink
- Special plate

Function
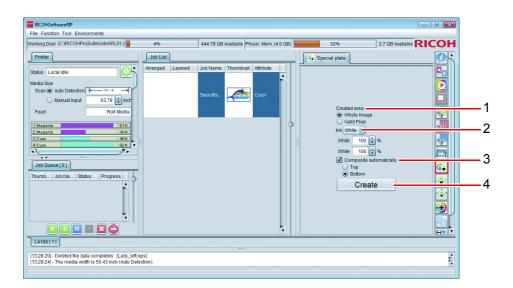
You can perform the operations below in [Special plate].
- Create the image to print with special color ink (white) from the color image.
- Specify the printing order (overprint order) of the created image.

> **(Important!)**
> - This function is available only when you set special color ink set.
> - The created job is called [Special color plate] job.
> - The special color plate created in creating plate does not have color density information of the original image. It is all one color and the ink density is the one specified at creation or in the job attribute of the job property (☞ P.28). When you want to change the density by using gradation in one image etc., create an image for special color and perform [Single color replacement] (☞ P.27) by yourself.

Screen configuration
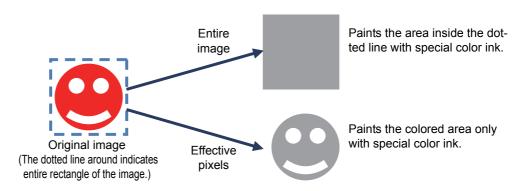
1. Create area

Set on which part you print special color of the original image.
- **Whole Image**
  Prints special color on entire rectangle of the original image.
- **Valid Pixel**
  Prints special color only on the printed part of the original image.

Entire image — Paints the area inside the dotted line with special color ink.

Effective pixels — Paints the colored area only with special color ink.

Original image
(The dotted line around indicates entire rectangle of the image.)

- When you want to paint inside the figure with special color as below,

Create data for special color with design software and perform single color replacement (☞ P.27).

2. Ink

Specify special color ink to use and its density.

> (Important!) • Only one type special color ink can be set for the created special color plate.

3. composite automatically

After creating the special color plate job, set whether you perform composite automatically (☞ P.65).
Specify whether you put the special color plate [On] or [Under] the original image.

4. Create

After setting 1 to 3 above, when you press this button, the job for special color plate is created and it is added to the job list.

Job whose plate cannot be created

If you select the job with the conditions below, you cannot create a plate.

- Imposed
- Composed
- Tiling or step & repeat is set.

When you want to create plate for the job above, once cancel the above setting and then create.

⬖ Make one image by overlapping images
- Composition

Function

You can perform the operation below in the [Composition] screen.
- Specify to print multiple jobs by overlapping them.
  There are several ways to overlap. They are explained in the next chapter.
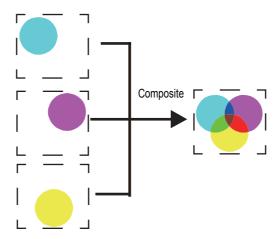
About way to overlap jobs at composite

The way to overlap jobs at composite differs depending on the printer type and the job attribute.

Composite of color jobs
Creates printing data by overlapping all image data and prints them at the same time.
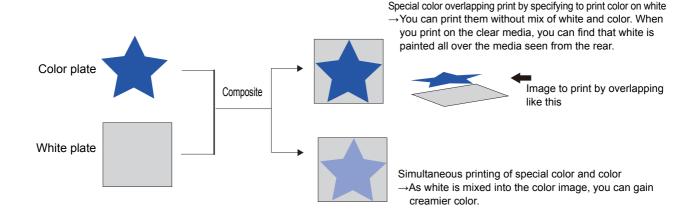
Composite

Composite of color job and special color plate job
When you compose color job and special color (white) job, you can print it in two methods below:
  A. You can print as below by using the "special color overprint" function (default)
     • Print color and special color at the same time by overlapping two layers.
     • Print color -> special color -> color in this order by overlapping three layers.
  B. Create image data by overlapping color and special color and print them at the same time.
Specify which printing method to be used in "Layer setting" (☞P.67).
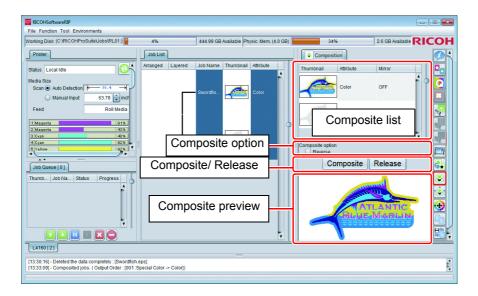
Color plate

White plate

Composite

Special color overlapping print by specifying to print color on white
→You can print them without mix of white and color. When you print on the clear media, you can find that white is painted all over the media seen from the rear.

Image to print by overlapping like this

Simultaneous printing of special color and color
→As white is mixed into the color image, you can gain creamier color.

Screen configuration

Rough configuration

Composite list

Jobs to be composed are displayed. The job selected in the job list is displayed as the target to compose.

If you change the order after composite, click [Composite] button again after changing the list order.

Composite option
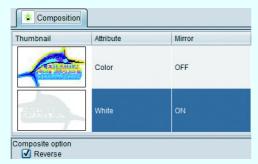
Reverse   When this is ON, you can make mirror image of the job selected in the list.

"Mirroring" relationship between the general print screen and the composed screen

"Mirroring" specified on the general print screen is carried out collectively on a job group after it has been composed.

"Mirroring" specified on the composed screen is carried out on specified jobs only. Use it when you want to mirror only a white plate, or for similar purposes.

When composition is carried out in the order in the list on the right, the results will be as shown below.

Thumbnail	Attribute	Mirror
	Color	OFF
	White	ON

Composite option
☑ Reverse

e.g. 1: If mirroring of the white job is turned on on the composed screen and turned off on the general print screen:
→ Mirroring will be applied to the white job.

e.g.2: If mirroring of the white job is turned on on the both composed screen and the general print screen:
→ The result will be a mirror image of Example 1 – in other words, mirroring will be applied to the color job.
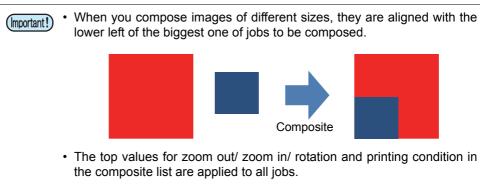
Composite/ Release

[Composite] button   Composes jobs in the composite list.
When they are composed, the composed jobs are connected with a line in the job list.

(Important!) • When you compose images of different sizes, they are aligned with the lower left of the biggest one of jobs to be composed.

Composite

• The top values for zoom out/ zoom in/ rotation and printing condition in the composite list are applied to all jobs.

[Release] button   Cancel job composite displayed in the composite list.

Composite preview
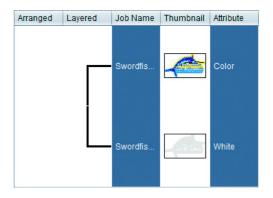
The preview of composed print is displayed. When you compose with special color plate, it is displayed with the preview color of the special color plate (☞ P.60).

Procedures to compose

Compose
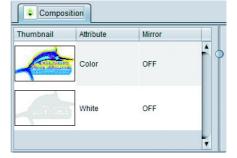
1 **Select multiple jobs to print by composition.**

2 **Select the composition icon.**

• The composition screen is displayed.
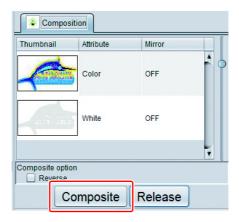
3 **Specify the overlapping order by drag & drop in the composition list.**

• Prints from the bottom of the list.
• For the listing order above, the image with white [Attribute] is printed under and the image with color [Attribute] is printed over.
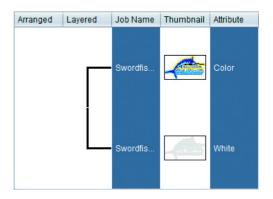
4 **Among jobs to compose, if there is one on which you perform mirror print, select that job and make "Mirror" ON.**

• When you see from opposite side from the printed surface such as for clear media, set "Mirror" after composition in "General Print" screen.

5 **Click [Composite].**
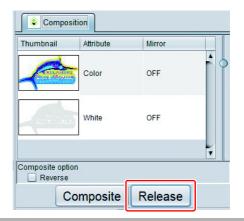
Release composition

1 **Select the composed job.**

2 **Select the composition icon.**

3 **Click [Release].**

4 **All composed jobs are released.**

Perform detailed setting of the composed image- Layer

Function

You can perform the operations below in [Layer].
- For the machine type supporting special color overlapping print, perform setting change of special color overlapping print.
- Correct the position and the size of special color.

| Important! | • This function is available only when you set special color ink set. |

Special color overlapping print

What is special color overlapping print?

Special color overlapping print is the method to print by overlapping special color (white) on the color image with a single print. Use this when you compose special color with color job, or, you perform color replacement of some part of color image by using special color. For printing at composition, refer to P.61 .

Position and size correction of special color
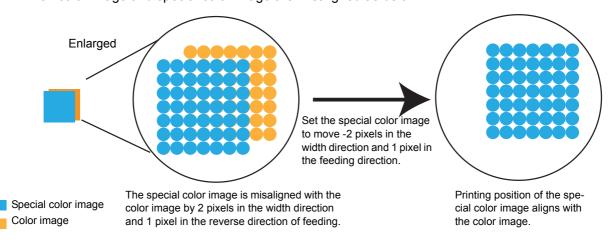
When you wish to solve the following problems, set the special color image correction function.
- When you print special color images (white) and color images by overlapping them, they may be misaligned in some cases, and when you wish to correct this
- When you want to print clear so that it may cover a little over the color image.
- When you wish to print the white ink image a little smaller because white ink printed on the base is printed outside the color image

Correction of position

Move the special color image position by the specified pixels of feed/scan direction.
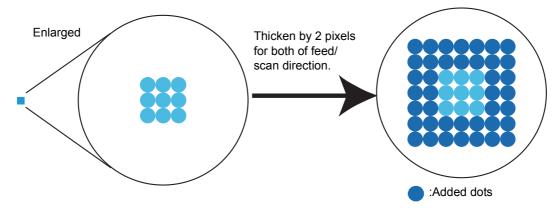
Ex.:When color image and special color image are misaligned as below:

Enlarged

Set the special color image to move -2 pixels in the width direction and 1 pixel in the feeding direction.

■ Special color image
■ Color image

The special color image is misaligned with the color image by 2 pixels in the width direction and 1 pixel in the reverse direction of feeding.

Printing position of the special color image aligns with the color image.

Correction of size
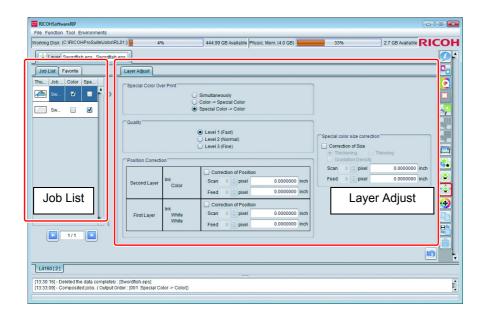
Correct the size of the special color image.

Ex.: When you set the special color image to thicken by 2 pixels for both of feed/scan direction

Enlarged

Thicken by 2 pixels
for both of feed/
scan direction.

● :Added dots

Screen configuration

Rough configuration
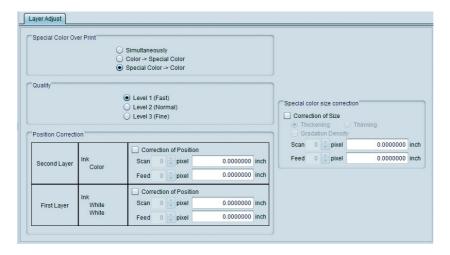
The layer setting screen differs depending on the machine type and special color ink.

Layer Adjust

Perform the settings below:
• Printing method of special color overprint (for printer supporting special color overprint)
• Correction of printing position and size of special color ink

The layer setting screen differs depending on the machine type/ special ink type/ with or without composition.

Special Color Over Print	Displayed only for printer supporting special color overprint. Specify whether you print color and special color by overlapping them and when you overlap them, specify the order to overlap.
Quality	Displayed only when you set to perform special color overprint and for printer with quality setting. Specify the printing quality when you perform special color overprint. The higher the level becomes, the better the image quality becomes. However, the printing speed is slower.
Position Correction	Moves the special color data position by pixel. For details, refer to P.67.
Special color size correction	Corrects the special color data size by pixel. For details, refer to P.68.

Set the print condition - Quality

Function
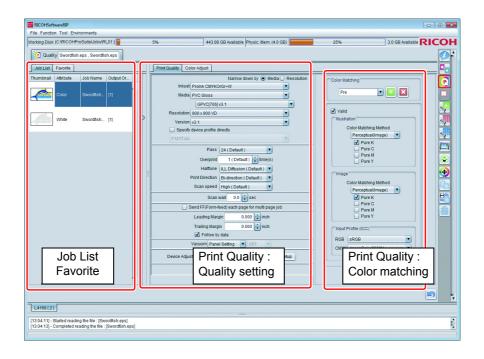
You can perform the operations below in [Quality].
- Selecting device profile
- Setting various output conditions
- Setting color matching method
- Setting color adjustment

Screen configuration

Rough configuration

Job List
Favorite

Print Quality :
Quality setting

Print Quality :
Color matching

Job List

The list of imposed and composed jobs is displayed.
Perform setting by job selected from the list. If you perform the same setting to all jobs, select all jobs here.

Important!
- If [Output Order] are same, those jobs are output at the same time. Therefore, it is necessary to make the settings below of [Print Quality] the same.
(In addition, depending on the machine type, other setting shall be the same.)

Print Quality: Quality setting

The setting contents of the quality setting column of drawing quality differ depending on the machine type.

● Selecting device profile

The "device profile" is the file that has the printing condition and data to adjust the ink amount to gain the best image quality.
The device profile exists for each printer, ink set, media and resolution. In the drawing quality screen, select the device profile by narrowing down these conditions.

Narrow down by Specify the order to narrow down.
- Media
  Narrow down in order of ink set -> media type -> media name -> resolution.
- Resolution
  Narrow down in order of ink set -> resolution -> media type -> media name.

Inkset Select the ink set that you use.

Media The combo box in the first line is [Media type] and the one in the second line is [Media name].

> - [Media type] is displayed/ categorized based on the information registered in the device profile. However, there is a device profile without this information. [Media type] of such a device profile is "Other".
> - When you select "All" to [Media type], all media are displayed in [Media name].

Resolution Specify the output resolution.
If the number of resolution is high, though the image quality is improved, the printing speed becomes slow. On the other hand, if the number is low, though the printing speed becomes fast, the image quality becomes degraded.
(For the image quality/ speed, the setting of [Selecting output setting] ☞P.74 has influence. Refer to it.)

Version Display the version of the device profile.

Type Display the type of the device profile.

Specify device profile directly
Specify the device profile from the file name.

● Check the matching of device profiles

You can print one image with imposition by using multiple profiles.
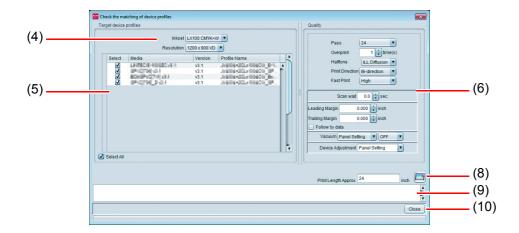
There is a case that you do not know which profile shall be applied against new media. If there is no profile dedicated to that media, use the profile for similar media.

However, if multiple profiles exist, or, if you do not know the proper media at all, you can choose the profile by using this function and printing with multiple profiles at a time.

> **(Important!)**
> • When the selected job has settings below, you cannot use this function.
>   Composite, imposition, tiling, step & repeat
> • Color adjustment is not applied with this function.

When you press [Check the matching of device profiles], the dialog below is displayed.
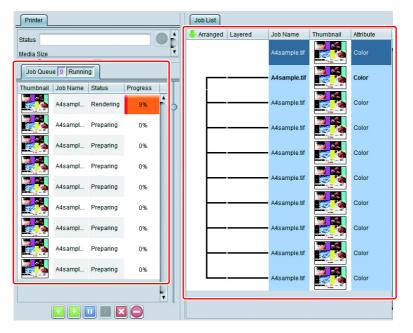
> The parenthesized numbers in the figure correspond to the numbered steps in the execution method below.

Actual procedures

(1) Select a job that you want to print with multiple profiles.
   • As print is performed with this job being nested and copied by the number of profiles automatically, set the image size etc. in [General Print] in advance.

(2) Open the [Quality] screen.

(3) Press the [Check the matching of device profiles] button.

(4) Select [Inkset][Resolution].
   • You cannot select the device profiles with different ink set and different resolution.

(5) The list of selected [Inkset][Resolution] profiles is displayed. Check the checkbox of the selection column of the profile to print.
   • When you use all profiles, check the [Select All] checkbox.

(6) Select the print condition.

(7) The media length required for the printing will be displayed for your reference.

(8) Press ▭ (Print) button.

(9) [Confirmation] dialog box will be displayed. Click the [OK] button. The [Check the matching of device profiles] dialog box will be closed.

(10) When you change the screen to [Properties] screen, you can check that the same number of jobs as the ones you selected in the [Check the matching of device profiles] dialog and they are processed/ output.

(11) Printing will be executed with the images arranged over the full width, without any margins.
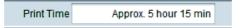
(12) As the profile name is printed above each image, apply it to the actual job.

● **Printing time estimate**

If you execute printing with the currently displayed conditions, an estimate of the time the printing will take will be displayed. It does not include RIP time.

Print Time	Approx. 5 hour 15 min

> (Important!) • An estimate of the time the printing will take when Logical seek is set to OFF will be displayed. If Logical seek is set to ON, an estimate of the time the printing will take might be significantly different from the actually expended time.

● **Selecting output setting**

The value set in the device profile is displayed by default. In addition, (Default) is added to that value.

Pass	24 (Default)
Overprint	1 (Default) time(s)
Halftone	ILL Diffusion (Default)
Print Direction	Bi-direction (Default)
Scan speed	High (Default)

Pass
Specify the number of splits of one band (max. feeding width printable in one scan). The more the number of splits is large, the more the image quality is improved and the slower the print speed becomes.

Overprint
Specify the number of scans at drawing one pass.
If you increase the number of scans, the density becomes high.

Halftone
Specify the gradation expression of print.
Currently, it is ILL diffusion only.

Print Direction
Uni -direction
When the head moves to the opposite side, it discharges ink and print. Compared to "Bidirectional", it has high resolution, however, print speed becomes slower.
Bi-direction
When the head moves forward and back, it discharges ink and performs printing. Quality is not as good as with "Uni-direction", but is faster.

Scan speed
Print at high speed. However, the quality becomes lower than general print. Depending on the combination between the machine type and the resolution, you cannot set this in some cases.

Print Quality: Color matching

Color matching means to match output color with input color.
Based on the ICC profile and the own data, match the color.

● Illustration and image

You can set color matching setting for illustration (vector data) and image (raster data) separately.

> • When you use "Effect" such as Gauss, Transparence for the vector object in Adobe Illustrator, some parts of this object is converted into the raster data. In this case, when you use different setting for the illustration from the image, colors change in the same object. If there is an object like this, be sure to use the same setting both for the illustration and the image.

Color Matching
> Keep the color matching setting as the template.
> By entering the name and pressing the [+] button, you can add the preset.

Valid   Select whether you perform color matching or not.
> When this is OFF, the operation other than ink limit process is not performed.

Color Matching Method

Perceptual (Image)
> This is suitable for the photo image. Color matching is performed so that brightness of entire image becomes closer to the input image.

Saturation (Graphics)
> This is suitable for illustration image. Color matching is performed so that the entire image becomes deep.

Relative
> Performs color matching for colors in the same color gamut of the input profile and the device profile so that they become closer as much as possible. However, if the color becomes outside the color gamut of the device profile even if the color can be expressed in the input profile, it is rounded to the color in the color gamut that can be expressed in the device profile. Therefore, high saturation part is collapsed.

Absolute
> The method to maintain the relative color gamut is the same as the color matching method. However, in the method to maintain the relative color gamut, even if white (media color) is different from the input profile, no correction is performed. In this mode, color correction is performed on the color including media color so that it may come closer to the color of input profile. As a result, color may be printed on white part of the original image in some cases.
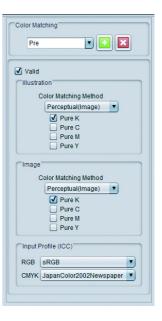
Gray Balance
> This is valid when the image data color is CMYK color mode. Only tone adjustment of CMY is performed and color matching calculation using the ICC profile is not performed. Specify this when you perform color matching process at application side.

Pure K, Pure C, Pure M, Pure Y

> This is valid when the image data color is CMYK color mode. If you perform color matching using the ICC profile, even if you specify the image color with either of C, M, Y and K, they become mixed color at print.
> When this is ON, if there is a single color of C, M, Y and K respectively. It makes the colors not be mixed.

Input Profile

Specify the profile of input side.
When there is a target profile, you can install with Profile Manager.
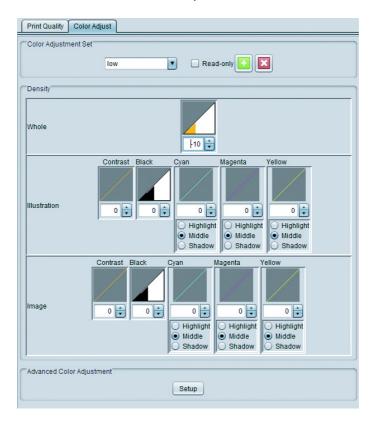
If a profile has been embedded in the images, a [Embedded Profile] check box will appear.
Putting a check mark in this box will prioritize use of the embedded profile as the input profile.

Color Adjust

Color adjustment adjusts the ink amount after color patching process.
You can adjust the ink amount of CMYK as well as special color ink such as white.

Color Adjustment set Add the set name in which you save the setting.

> • Color adjustment depends on the device profile. Even the color adjustment set registered once is not displayed if the device profile is different.
> In addition, even the same color adjustment set is handled as a different adjustment file if the device profile is different.
> • When you select [Standard], you cannot edit color adjustment.

Density   Adjust the density.
Set by illustration (vector object) and image (raster object) other than for [Entire].
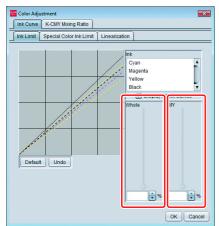
Whole	Change the ink limit value set in the device profile with the same ratio for all ink. It is effective when ink is dark or light entirely. The ink limit is changed to the value calculated by multiplying it by the value specified here. Ink increases with +1 to 50% setting, however, the final ink limit cannot exceed 100%. e.g.) when ink limit of cyan is set to 70% in device profile **[Whole] value / Ink limit of cyan:** -50% : 35% (70%×(100-50)% = 35%) -10% : 63% (70%×(100-10)% = 63%) +40% : 98% (70%×(100+40)% = 98%) +50% : 100% (However it becomes 70% x (100+50)% = 105%, it is rounded to 100%.)
Contrast	Change contrast between -50% to +50%. **-50%~-1%** Becomes the direction without change of colors. **+1%~+50%** Becomes the direction with big change of colors. You can make images sharper, however, tone at the high density part is collapsed.
Black	Change the ink amount of black and cyan/ magenta/ yellow between -50% to +50%. **-50%~-1%** Lowers the ink limit of black ink by ratio. **0%** K-CMY adjustment of detailed setting becomes valid. (When it is other than 0%, K-CMY adjustment setting becomes invalid.) **+1%~+50%** Increases the black ink amount and decreases ink amount of cyan/ magenta/ yellow. To perform more detailed setting, perform K-CMY adjustment.
Cyan, Magenta, Yellow	Change each ink amount of cyan/ magenta/ yellow between -50% to +50%. This is effective when you adjust the hue. The ink amount of middle part is changed, however, the ink limit is not changed. **Highlight** Changes the ink amount focusing around bright part. **Middle** Changes the ink amount focusing around 50% part. **Shadow** Changes the ink amount focusing around dark part.

● Detailed color adjustment

The screen of ink limit, linearization, special color ink limit and K-CM mixing ratio open when you press [Setup] button.
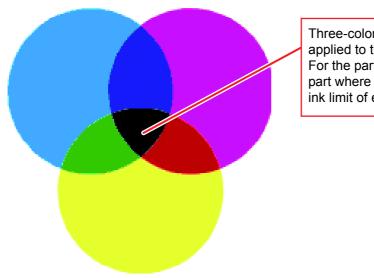
Ink Limit

Change each ink limit of process color ink (cyan, magenta, yellow and black, etc.) with the slider.

Entire is the setting of each color ink limit. Third-order color is the ink limit used when ink of more than three inks are mixed. The ink limit of Entire is the upper limit of Third-order color.

If ink blurs at the part where more than three inks are mixed, you can reduce ink with this setting.
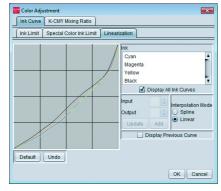
Three-color ink limit of each color is applied to the part where CMY are mixed. For the part of other single color and the part where two colors are mixed, entire ink limit of each color is applied.

C0,M0,Y0 The limit of entire cyan, entire magenta and entire yellow are used respectively.
C1,M1,Y1 The limit of cyan third-order, magenta third-order and yellow third-order are used respectively.

Linearization
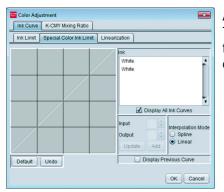
Perform curve edit on halftone density of process color ink (cyan, magenta, yellow and black, etc.).

Adjust tone so that each ink can be printed as smooth gradation.

You can change the maximum density (ink limit) here, however, as the ink limit adjustment becomes hard, do not change the maximum density.

Special color ink limit

Adjust special ink density of white etc.
Though the setting specified in input is used as it is by default, per-form curve adjustment in this screen when the density change of gra-dation is poor etc.

K-CMY Mixing Ratio
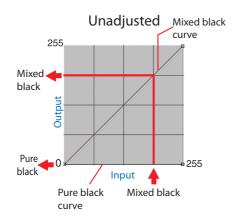
Perform curve edit on the using ratio of black and cyan/ magenta/ yellow.
Adjustment is possible for each illustration and image.
If input is a RGB image and ink spill out at the shadow part, you can reduce the ink amount without changing colors at the shadow part, by reducing cyan/ magenta/ yellow and increasing black.
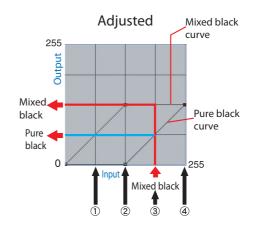
> (Important!) • When you set 0% to Black in [Density], you cannot perform setting.

Value of adjusted curve
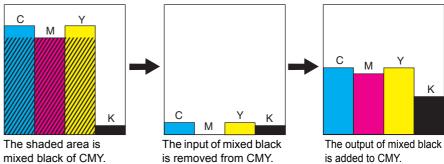
Input color				Mixed black		Single color black		Output color				Explanation
A			B	Input	Output	Input	Output	C	M	Y	K	
C	M	Y	K									
(1) 64	85	64	5	64	64	64	0	64	85	64	5	No change
(2) 128	150	160	5	128	128	128	0	128	150	160	5	No change
(3) 200	192	200	5	192	128	192	64	136	128	136	69	A part of CMY changes into K.
(4) 255	255	255	5	255	128	255	128	128	128	128	133	A part of CMY changes into K.

Calculation of (3)
C 200 - 192 + 128 = 136
M 192 - 192 + 128 = 128
Y 200 - 192 + 128 = 136
K 5 + 64 = 69

The shaded area is mixed black of CMY.

The input of mixed black is removed from CMY.

The output of mixed black is added to CMY.
The output of single color black is added to K.

⬦Replace a color of the image with another color - Color replacement

Function

You can perform the operations below in [Color replacement] screen.
- Select CMYK color or spot color in the image and replace it with another ink color or L*a*b value.
- Replace the gradation color of CMYK color.

About data

Data available for color replacement

You can perform color replacement on data satisfying all conditions below:

Color mode	CMYK
File format	ps, eps, pdf
Object	Vector object (illustration object) Raster object (image object) such as photos is impossible. However, even if you perform color replacement on the object whose conditions are as below, you cannot print correctly in some cases. • The one on which the filter effect such as Drop shadow, Transparence and Gauss of Adobe Illustrator was performed • Gradation object (*) when [Compatible gradation & gradation mesh] of Adobe Illustrator is checked

(*) When you perform color replacement on gradation, there are further conditions. (Refer to the next chapter "Gradation".)

Replaceable color

Spot color This is a special color with name (it is called spot color in Illustrator.).
(For the concrete specification method of spot color on Illustrator, refer to P.90.)
CMYK Replaces a process color (color consisting of cyan, magenta, yellow and black).
Gradation You can replace four kinds of gradation below.
(For the concrete specification method of gradation on Illustrator, refer to P.92.)

Type	Maximum density (%)				Minimum density (%)			
	C	M	Y	K	C	M	Y	K
Cyan	100	1	1	1	0	1	1	1
Magenta	1	100	1	1	1	0	1	1
Yellow	1	1	100	1	1	1	0	1
Black	1	1	1	100	1	1	1	0

Maximum density   Minimum density

Color that can be specified as color after replacement

You can specify the color below after replacement:
- Ink   : Specify ink color and its density of the printer with 0% to 100%. When you specify with ink color, the color differs depending on the machine type and ink.
- L*a*b* : L*a*b is the coordinate value of the color space that is independent on the machine.
   As it is independent on the machine (printer and ink), when you specify the same numerical value, even if it is other machine type and other ink, you can output with similar colors.
   Specify L (brightness), a* (red-green space coordinates) and b* (blue-yellow space coordinates).
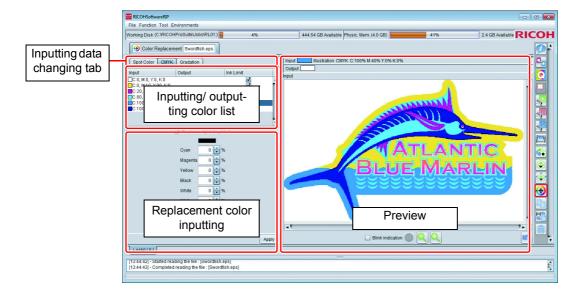
> • When you set color correction (☞P.115) to "Use" (☞P.116), if there is a condition to be matched at reading the image, color replacement is performed automatically.

Screen configuration

Rough configuration
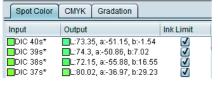
Input data switching tab

There is the [Inputting/ outputting color list] and [Replacement color Inputting] screen by color type available for replacement.

Inputting/ outputting color list

The list of colors for each inputting data inside the image.

Spot color

Input	Displays special color name and displayed color on the preview.
Output	Displays color after replacement and simulated print color.
Ink Limit	Displays whether ink limit in the device profile is applied or not at printing.
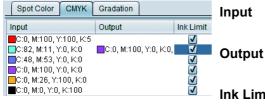
CMYK

Input	Displays the component value of CMYK and displayed color on the preview.
Output	Displays color after replacement and simulated printed color.
Ink Limit	Displays whether ink limit in the device profile is applied or not at printing.
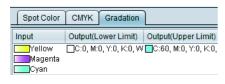
Gradation

Input	Displays gradation type (☞ P.80).
Output (Lower Limit)	Displays the lowest limit value of gradation after replacement.
Output (Upper Limit)	Displays the highest limit value of gradation after replacement.
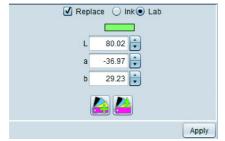
Replacement inputting screen

The replacement inputting screen differs depending on the inputting data and the color after replacement.

● When inputting data is spot color/ CMYK and color after replacement is Lab

Replace	Check this checkbox when you replace.
Input	Input the numerical value for the color after replacement.
Register into color collection	Register the color after color replacement into color collection. (☞ P.87)
Select from color collection	Select the color after color replacement from color collection. (☞ P.87)
Apply	When you press this, the setting is applied to the selected color.
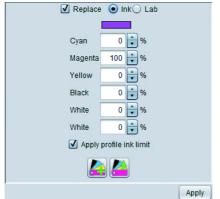
● When inputting data is spot color/ CMYK and color after replacement is CMYK

Replace	Check this checkbox when you replace.
Input	Input the numerical value for the color after replacement.
Apply profile Ink limit	When this is ON, the ink limit of the profile is used. (For details, refer to "Color process at color replacement".)

> **Important!** • When there is ink of special color ink set in three slots and more, "Apply profile ink limit" is always ON and you cannot change it.

Register into color collection	Register the color after color replacement into color collection. (☞ P.87)
Select from color collection	Select the color after color replacement from color collection. (☞ P.87)
Apply	When you press this, the setting is applied to the selected color.
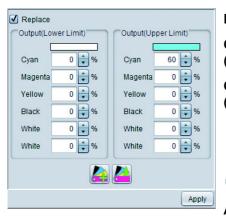
● When inputting data is gradation

Replace	Check this checkbox when you replace.
Output (Lower Limit)	Set the replacement color for the lowest density of gradation.
Output (Upper Limit)	Set the replacement color for the highest density of gradation.
Register into color collection	Register the color after color replacement into color collection. (☞ P.87)
Select from color collection	Select the color after color replacement from color collection. (☞ P.87)
Apply	When you press this, the setting is applied to the selected gradation.
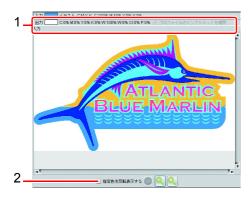
Preview

1 Displays color information of the position you click with the mouse in the preview image.

Input Displays object (illustration or image)/ color mode/ inputting color.

> • If there is any place on which color replacement cannot be performed, check whether it is data available for color replacement in this column (☞ P.80).

Output Displays color information after replacement.

2 Blink indication
When checked, the selected color part in the inputting/ outputting list is highlighted.

Note for color replacement

Note for data to be replaced

You cannot perform color replacement correctly for a color with the filter effect such as drop shadow/ transparence/ gradation of Adobe Illustrator.

When performing color replacement for spot colors

Following are cautions when using spot colors with changed density in animage.
• RICOH Software RIP sets ink density with respect to a spot color density of 100%.
The ink density is calculated automatically based on the spot color density.
Example:
If a special color called Spot (display color given by C=100, M=0, Y=0, K=0) is printed at 100% density in one area and at 50% in another in Illustrator, and the ink density for Spot is set to C=0, M=80, Y=20, K=0 in RICOH Software RIP, the ink density for Spot in the area printed at 100% becomes C=0, M=80, Y=20, K=0 and the ink density for Spot in the area printed at 50% becomes C=0, M=40, Y=10, K=0.
• The color for a spot color displayed in the Color Replacement information list may be different from the display color specified in Illustrator. This is because the input color of the spot color displayed in the Color Replacement information list displays the colors matched to the density of the spot color detected first on the image in RICOH Software RIP.
Example:
If a special color called Spot (display color given by C=100, M=0, Y=0, K=0) is printed at 100% in one area and at 50% in another in Illustrator, and RICOH Software RIP detects first the area where Spot is printed at 50%, the display color for Spot in the Color Replacement information list is set to C=50, M=0, Y=0, K=0.
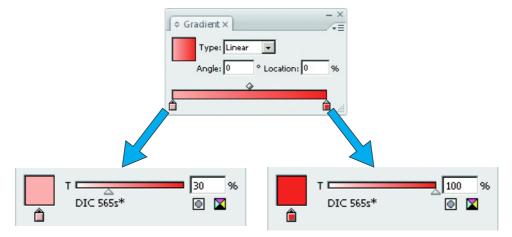
Changing the spot color used in gradation

If you want to specify a spot color as the color for gradation, it is only possible to change the color if the following two conditions are satisfied:
• The same spot color has been specified for all the gradation slides, and only the density differs.
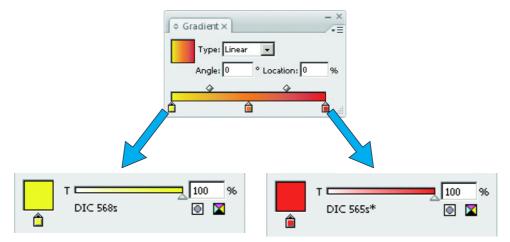
• A check mark has been placed against [Compatible Gradient and Gradient Mesh Printing.] in the llustration settings.

Specifying differing spot colors for gradation

If differing spot colors are specified as the colors for gradation, the colors cannot be changed. Also, when such differing colors have been specified, remove the check mark against [Compatible Gradient and Gradient Mesh Printing.] in the Illustration settings. If the check mark remains, the objects for which such gradation has been specified will not be printed, whether color changing has been set or not.

When performing color replacement for gradation

- If a midpoint is introduced between the maximum density and minimum density of a gradation by "Gradation slider" and the color is changed, color replacement cannot be performed.
- Color Replacement of gradations that include a lot of clipping paths may not be performed correctly.
- Color Replacement of gradations that use Illustrator filter effects such as Drop Shadows and Transparency may not be performed correctly.
- Illustrations with the same colors as those included in the gradation are also replaced.
  Example:
  Maximum density C = 100, M = 1, Y = 1, K = 1
  Minimum density C = 0, M = 1, Y = 1, K = 1
  If a C = 50, M = 1, Y = 1, K = 1 illustration is included in the data, it will be color replaced.
- Even if the setting of replacing gradations seems can be performed on the "Gradation" screen, the replacement will not be performed depending on the data. Check if the replacement will be performed or not, by reduced print in advance without fail.
- When the Illustrator setting "Compatible Gradient and Gradient Mesh Printing" is checked, gradation replacement cannot be set.
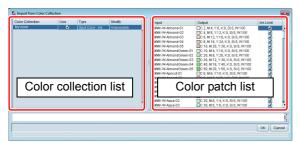
Linkage with color collection

The color collection is the library of color replacement information.
For details of the color library is explained in P.115. Here, the function of the color collection that you can use from each replacement color inputting column of the color replacement screen is explained.

Select from color collection

Select color replacement information from the color collection and apply it to the job.
When you press ![icon] (Select from color collection), the screen below is displayed.

Color collection list
Select the color collection.

Color patch list
The color list inside the selected color collection is displayed.
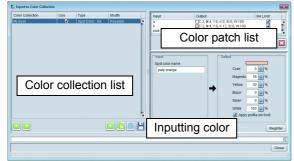
Application procedures
(1) Select the color collection to use from [Color collection list].
(2) Select the color used as the one after replacement from [Color patch list].
(3) Press the [OK] button. The value is set in [Replacement color inputting] and it is applied.

Register to color collection

Register the replacement color input in the [Replacement color inputting] column into the color collection.
When you press ![icon] (Register to color collection), the screen below is displayed.

Color collection list
Select the color collection to register.

Color patch list
The color list inside the selected color collection is displayed.

Inputting color
The color selected as the replacement source and the replacement information input in the [Replacement color inputting] column are displayed.

Application procedures
(1) Select the color collection whose color you register from [Color collection list].
(2) Check that the information input in the color replacement screen is in [Inputting color] and press the [Register] button.
(3) The data is registered in [Color patch list].

(Important!) • If you activate [Apply profile ink limit], printing will be carried out with the set value changed to a lower value in order to alleviate ink overflow. (Even if you specify 100%, printing will be carried out with a value lower than that.)
If you remove the check mark, printing will be carried out according to the specified color component values, but bleeding due to ink overflow and other printing faults will be liable to occur.
As far as possible, use color changing with this function activated.

When you perform color replacement using special color

When you perform color replacement using color ink and special color ink at the same time as the color after replacement, depending on the printer and the layer setting (☞P.67), it is printed as below.

Overlapping print of special color is not performed.
Prints special color and color at the same time. Therefore, special color and color ink are mixed.

Color -> special color
After printing the color after replacement only, special color is overlapped on it.

Special color -> color
After printing the special color after replacement only, color is overlapped on it.

Color replacement setting

There are other functions to change a color other than color replacement. They are single color replacement
(☞P.28) and plate creation (☞P.59). This chapter explains data creation for each main usage and setting
method of these functions.

For data creation method, Illustrator CS5 is explained as the example.

To print with one color ink such as white

Use the Mono color replacement function.

● Data creation method (Illustrator CS5)

It is recommended to create data with CMYK single color.

1 **Make the image color mode [CMYK].**

• Select [Document Color Mode]-[CMYK Color] from the [File] menu.

2 **Select all objects and select only one color of CMYK.**

• For an object with one color, change with [Color].
• When you do not change the density change for gradation object, change with [Gradient].
• When it is difficult to change color on Illustrator as it is created using other effect, write into the raster
format image and replace it with one color only with Photoshop etc.

3 **After you create data, save it and read it into RICOH Software RIP.**

• RICOH Software RIP does not support the AI file format created by Adobe Illustrator. The software
supports EPS, PS, TIFF, JPEG, BMP, and PDF (PDF1.5 or lower).

● Color replacement method (RICOH Software RIP)

Refer to "Perform setting to print a full-color image with one ink color -Mono color replacement"
(☞P.27).

To print special color such as white on clear media as the base and print color on it

Use the "Special plate" function.
For details, refer to P.59.

Replace spot colors in a color image

The spot color is special color with name. By adding usage etc. to the spot color name, it becomes reference for color replacement. Use the color replacing function to replace.

(Important!) • Fully read note of color replacement and set.

● **Data creation method (Illustrator CS5)**

1 **Make the image color mode [CMYK].**

• Select [Document Color Mode]-[CMYK Color] from the [File] menu.
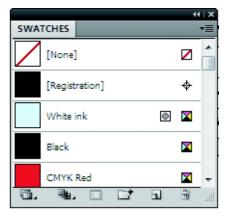
2 **Register a spot color. (If you use the spot color already registered, proceed to the Step 3.)**

(1) Select [Swatches] from the [Window] menu.
      The [Swatches] window opens.
(2) Press the ▼ button at upper right and select [New Swatch...] from the displayed menu.
      The [New Swatch...] window opens.
(3) Set as below and click OK.
      • Swatch Name : Enter the color name.
      • Color Type   : Select "Special color".
      • Color Mode   : Select "CMYK".
      • Color   : Specify the displaying color. If color replacement is not performed, data is printed based on this color.

(4) It is registered in the list on the [Swatches] window.

3 **Apply the spot color to the object.**

(1) Select the object.
(2) Select either of "Stroke" or "Fill" by which you apply the spot color on the [Color] window.
(3) Select the created spot color from the [Swatches] window.
      The color is applied to the object.

4 **After you create data, save it and read it into RICOH Software RIP.**

• RICOH Software RIP does not support the AI file format created by Adobe Illustrator. The software supports EPS, PS, TIFF, JPEG, BMP, and PDF (PDF1.5 or lower).

● **Color replacement method (RICOH Software RIP)**

1 **Select a job and switch to the color replacing screen.**

2 **Open the [Spot Color] tab.**
• All spot colors used in the image are displayed in the list.

3 **Select a spot color to which you perform color replacement from the list.**

4 **Specify the replacement color.**

Replace CMYK color in the color image

Replace CMYK color.

(Important!) • Fully read note of color replacement and set.

● **Data creation method (Illustrator CS5)**

1 **Make the image color mode [CMYK].**
• Select [Document Color Mode]-[CMYK Color] from the [File] menu.

2 **Specify the color in the [Color] window.**

3 **After you create data, save it and read it into RICOH Software RIP.**
• RICOH Software RIP does not support the AI file format created by Adobe Illustrator. The software supports EPS, PS, TIFF, JPEG, BMP, and PDF (PDF1.5 or lower).

● **Color replacement method (RICOH Software RIP)**

1 **Select a job and switch to the color replacing screen.**

2 **Open the [CMYK] tab.**
• All CMYK colors used in the image are displayed in the list.

3 **Select a color to which you perform color replacement from the list.**

4 **Specify the replacement color.**

Change gradation in the color image to the color mixed with multiple ink
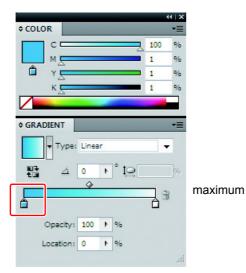
When you change gradation to the color mixed with multiple ink, perform gradation replacement.
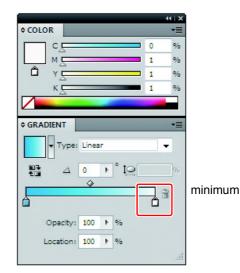
(Important!) • Fully read note of color replacement and set.

● **Data creation method (Illustrator CS5)**

1 **Make the image color mode [CMYK].**
• Select [Document Color Mode]-[CMYK Color] from the [File] menu.

2 **Create an object and select it.**

3 **Select [Gradation] from the [Window] menu.**
• The [Gradation] window is displayed.

4 **Specify the maximum/ minimum density settable in P.80 gradation.**

maximum   minimum

5 **After you create data, save it and read it into RICOH Software RIP.**
• RICOH Software RIP does not support the AI file format created by Adobe Illustrator. The software supports EPS, PS, TIFF, JPEG, BMP, and PDF (PDF1.5 or lower).

● **Color replacement method (RICOH Software RIP)**

1 **Select a job and switch to the color replacing screen.**

2 **Open the [Gradation] tab.**
   • All gradation types used in the image are displayed in the list.

3 **Select a gradation to which you perform color replacement from the list.**

4 **Specify the maximum/ minimum density after the replacement.**

Output into the printer - Execution

Function
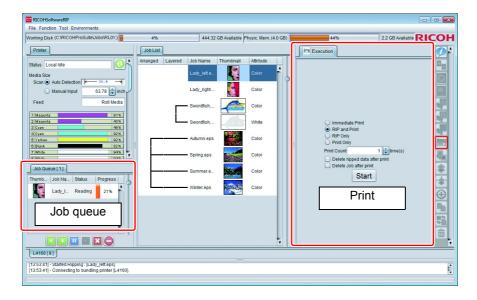
You can perform the operations below in the [Execution] screen.
- Specifying and performing RIP and the outputting method of the selected job
- Specifying the number of outputs
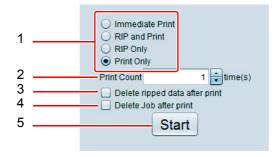
> • This chapter explains the job queue screen closely related to as well as the [Perform] screen.

Screen configuration

Performing screen

● Image job

1. Performing method

There are the performing method below:

|	
Immediate Print	RIP and print are performed at the same time. Depending on the job condition, even if you specify [RIP & Print]. It changes into [Print after RIP] and performs in some cases. (☞P.96 "Condition on which you cannot perform RIP & Print") If the original image is complicated, RIP process cannot be performed in time and the printing operation stops temporarily. In this case, use [Print after RIP]. When you perform RIP & print, the ripped data is not created.
RIP and Print	Prints after RIP has been completed. Ripped data is created.
RIP Only	Only RIP is performed and the ripped data is created. Print is not performed.
Print Only	Performs print only. If RIPped data has not been created (whether it is created or not, refer to [Job list status check]), prints after RIP.

2. Print Count

When you perform RIP & Print: It is the number of repetitions of RIP & Print.
Print after RIP print, Print: It is the number of repetitions of Prints. (For Print after RIP, RIP process is only once.)

3. Delete ripped data after print

When it is ON and the executing method is print after RIP or print only, deletes ripped data after printing.
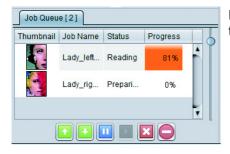
4. Delete Job after print

When it is ON and the executing method is RIP & print, print after RIP or print only, deletes job data including the read image.

5. Start

Performs the process specified in the Step 1.

Job queue

Displays the progress status. In addition, you can perform the operations below against the job selected in this list.

Changes the processing order. First, terminates the job that is currently being processed and then performs this.

Aborts the job process.

Restarts the job process terminated once.

Aborts the process of the selected job.
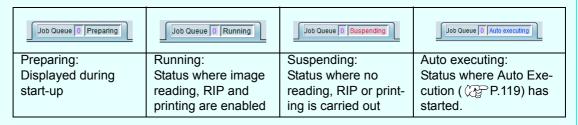
Aborts the process of all jobs.
After executing, the job process suspends automatically. If you read the image and perform RIP/ print after executing, click ▶ to restart.

• The current job cue and auto execution status (☞ P.119) are shown in the job queue tab.

Job Queue 0 Preparing	Job Queue 0 Running	Job Queue 0 Suspending	Job Queue 0 Auto executing
Preparing: Displayed during start-up	Running: Status where image reading, RIP and printing are enabled	Suspending: Status where no reading, RIP or printing is carried out	Auto executing: Status where Auto Execution (☞ P.119) has started.

Condition on which you cannot perform RIP & Print

On the conditions below, even if you specify RIP & Print, printing is performed after RIP automatically.

- Performed copy specification in general print.
- Imposed jobs
- Composed jobs
- Arbitrarily-positioned specification in tiling is ON.
- Step & repeat

▤ Duplicate the job **- Duplication**

Function
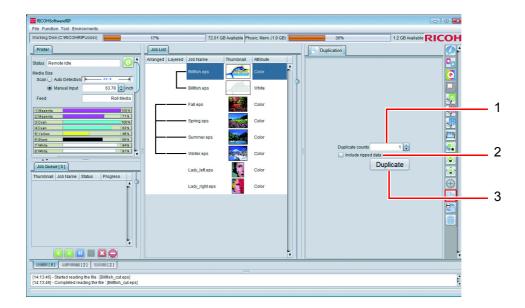
You can perform the operation in the [Duplication] screen.
- Duplicate the selected job.
  By using this function, if there is a base job, you do not have to read the same image again.
  In addition, the setting of the base job is also duplicated, you can create a job by changing some settings only without changing the original job.

Screen configuration

1. Duplicate counts

Specify the number of duplications of the job.

2. Include ripped data

When this is ON, ripped data is also duplicated.

3. Duplicate

Duplicates the job.

> ☀ • When you duplicate the job, the job name becomes the same as the original job. It is recommended to change the job name in the [Job property] screen to recognize them. (For the setting method, refer to P.27.)

Save the job in the file - Backup
Read the saved job - Restore

Function

You can perform the operations below in the [Backup/ Restore] screen.
- Save the job in the file (backup file).
- Read the saved backup file and restore the job.

Screen configuration

1. Backup

Save the selected job in the specified backup file.
When you select multiple jobs, these are saved in on backup file.

> • The data below is saved in the backup file.
>   Image, job setting information, device profile, inputting profile and various setting file
> • The ripped data is not included in the backup file. Therefore, it is necessary to perform RIP again after restoring.

2. Delete Job after Backup

When this is ON, the job is deleted after backup.

3. Restore

Restore the job from the backup file.

> • If the machine type in which backed up job is registered and the special color ink set that is set to that machine type are not registered in RICOH Software RIP, an error is displayed in the message area and you cannot restore it.
> • If the device profile/ the input profile specified in the backup file are not installed, an error is displayed in the message area and you cannot restore it. In this case, the device profile/ the input profile in the backup file are saved in the folder below. (The detailed saving destination is displayed in the message area.) Terminate RICOH Software RIP once, start the profile manager and install the profile.
> Installation folder\Tmp
> After installation, restart RICOH Software RIP and restore it again.
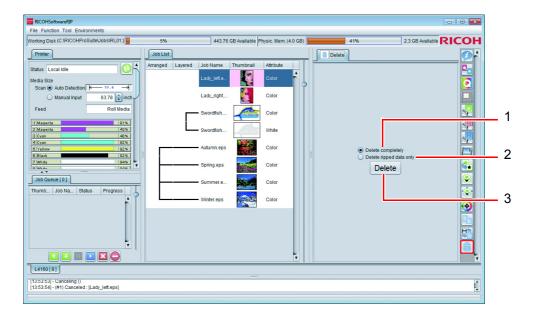
![trash icon] Deleting Jobs and ripped Data - **Delete**

Function

The following operations are carried out on the [Delete] screen:
- Deletion of selected jobs
- Deletion of RIP-ed data of selected jobs

Screen configuration

1. **Delete completely**

Delete all the data of jobs selected in the job list.

> **(Important!)** **Deletion is not possible in the following cases:**
> - One part only of a composed or arranged job group has been selected.
>   In such a case, first cancel the composed or arrangement, then select the jobs you want to delete and delete them.
>   If you want to delete an entire composed or arranged job group, select all the jobs in it.

2. **Delete ripped data only**
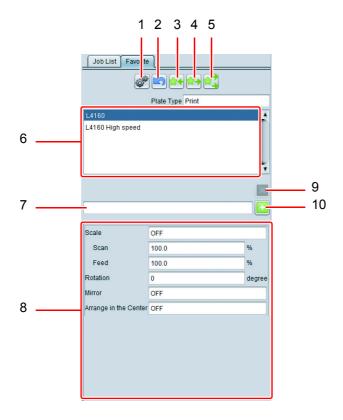
Delete ripped data that are present in the jobs you have selected in the job list.

3. **Delete**

Execute deletion with the conditions specified above.

⭐ Use by naming various setting - Favorite

You can register various setting values into [Favorite] in RICOH Software RIP. By calling registered Favorites, you can set the condition that you frequently use easily.

1. Hot folder setting ⚙

Creates or deletes the hot folder and the printer driver of the selected [Favorite setting].
When you spool data to the created hot folder or the printer driver, the setting value of [Favorite setting] is applied to the spooled job.
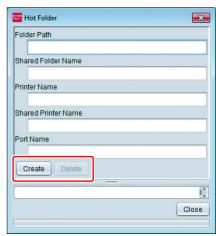
When you click the [Hot folder setting] icon, the [Hot Folder] screen on the right is displayed.
When you click the [Create] button, the hot folder and the printer driver are created.
If they have already been created, you can delete them with the [Delete] button.

| Important! | • When you create the hot folder and the printer driver, start RICOH Software RIP with the administrator right. |

2. Cancel save

Cancel the latest save.

3. Save

Saves the setting value of the screen that you are editing in [Favorite].

4. Application

Applies the setting value in the selected [Favorite] to the setting items of the screen that you are editing.

5. Applying all

Applies the setting value in the selected [Favorite] to the jobs on the screens that you are editing, as well as to the setting items of other screens.

6. Favorites setting list

The list of [Favorite] is displayed.
By default, the favorites with the same name as the registered printer is set. This setting can be edited.

7. Additional name

Input the name of [Favorite] to add.

8. Setting value

The setting items and values saved in the selected [Favorite] is displayed.

9. Delete

Delete the selected [Favorite].
When the hot folder and the printer driver are created, they are deleted at the same time.
You cannot delete the preset [Favorite] (same name as printer).

10. Add

Newly add [Favorite] with the setting value of job that being edited.

How to create the favorite job

1 **Select the function icon which is having the Favorite tab in the screen.**

2 **Enter the registration name on "Additional name" field and press ⊞ [Add] button.**
  • After that, this name added to "Favorites setting list".

How to save the favorite job

1 **Select the function icon which you want to register as Favorite setting.**

2 **Set the register value in the edit tab.**

3 **Create the Favorite newly or select the Favorite from "Favorites setting list" in the favorite screen.**

4 **Press ⭐ [Save] button.**
  • Displayed the saving values in "Saving value" field.

How to set the Favorite setting to Job

1 **Select the function icon which you want to set the value from the Favorite.**

2 **Select the Favorite from "Favorites setting list".**

3 **Press ⭐ [Apply] button.**
  • The value that displayed on "Setting value" field is set to edit tab.

  • If you want to set all conditions in the Favorite to a job, uses ⭐ [Applying all] button.

Print the color chart

What is the color chart?

With the color chart function, you can create color example by changing color component in a certain value focusing around the specified color (Base color).
For example, if the printed color is a little different from the target color you can search the target color by creating the color chart focusing around that color.

Color chart that can be created

Color chart type

You can create three charts depending on the color component to change.

● **CMYK color chart**
Create the chart image (PDF format) and job of CMYK color mode.

[Usage]

Based on CMYK color chart, change the image color of CMYK color mode before spooling with design software and output the target color.

● **RGB color chart**
Create the chart image and job of RGB color mode.

[Usage]

Based on RGB color chart, change the image color of RGB color mode before spooling with design software and output the target color.

● **Special color chart**
Create the job of the chart by specifying output ink density.

[Usage]
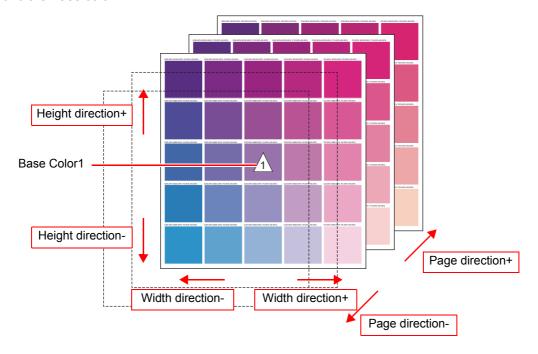
Based on the chart, specify the ink density as the color after replacement in color replacement
(☞ P.80). You can use this especially to check colors when you perform color replacement using special colors such as white.

Color chart pattern

Depending on the number of basic points, you can create three pattern charts.
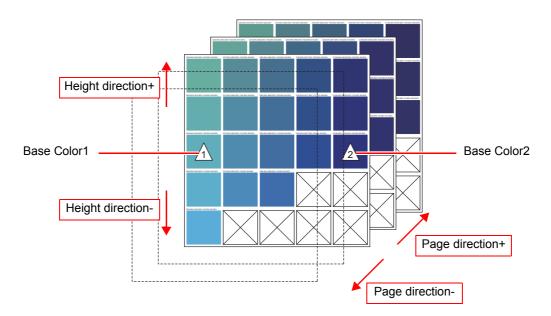
● For one Base color

Specify color change of three directions of height direction/ width direction/ page direction focusing around the Base color.
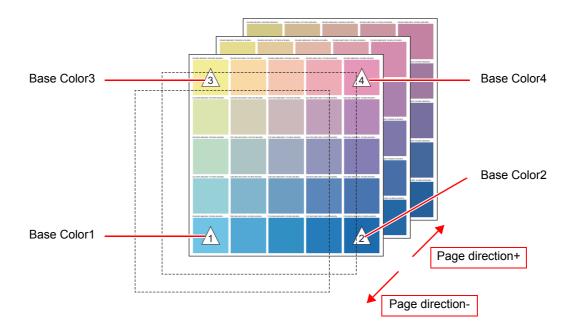
● For two Base colors

Specify color change of two directions of width direction/ page direction by making color change between two Base colors be height direction.

● **For four Base colors**

For four Base colors specify color change of page direction by making color change among four Base colors be width direction/ height direction.

Base Color3

Base Color4

Base Color1

Base Color2

Page direction+

Page direction-

RGB/CMYK color chart

The setting method for CMYK and RGB color chart is same.
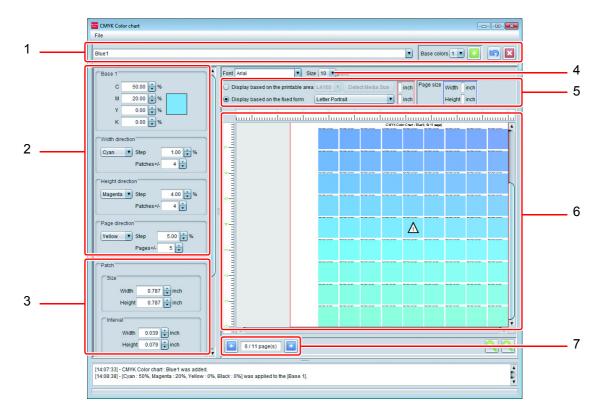
Displaying method of setting screen

● **For CMYK color chart**

Select [CMYK color chart] from the [Tool] menu.

● **For RGB color chart**

Select [RGB color chart] from the [Tool] menu.

Screen

● Rough screen configuration

1. Screen for adding/ selecting/ deleting chart

Inputting/ selecting chart name combo box	Select the existing chart setting file, or, enter the chart name to create new chart setting file.
Number of Base colors	Set the number of Base colors. For the number of Base colors, refer to P.105.
Adding chart ➕	Create the Base color chart setting file of the number of Base colors combo box with the entering chart name/ selecting combo box. If there is the same name chart setting file exists, check whether it is overwritten. If it is overwritten, each value becomes the default.
Restore ↩	Restore the setting of the currently selected chart setting file to the value at selection.
Deleting chart ✖	Delete the currently selected chart setting file.

2. Setting screen: color setting

The setting screen differs depending on the number of Base colors.

For one Base color

Base 1
C   50.00 ⊕ %
M   20.00 ⊕ %
Y   0.00 ⊕ %
K   0.00 ⊕ %

Width direction
Cyan ▼ Step   1.00 ⊕ %
        Patches+/-   4 ⊕

Height direction
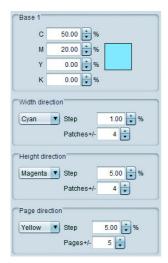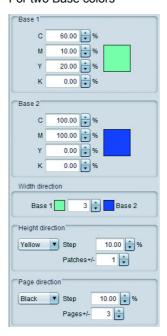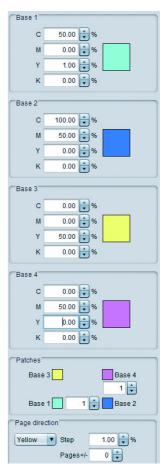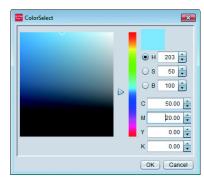Magenta ▼ Step   5.00 ⊕ %
           Patches+/-   4 ⊕

Page direction
Yellow ▼ Step   5.00 ⊕ %
          Pages+/-   5 ⊕

For two Base colors

Base 1
C   60.00 ⊕ %
M   10.00 ⊕ %
Y   20.00 ⊕ %
K   0.00 ⊕ %

Base 2
C   100.00 ⊕ %
M   100.00 ⊕ %
Y   0.00 ⊕ %
K   0.00 ⊕ %

Width direction
Base 1 ▢ 3 ⊕ ▢ Base 2

Height direction
Yellow ▼ Step   10.00 ⊕ %
          Patches+/-   1 ⊕

Page direction
Black ▼ Step   10.00 ⊕ %
         Pages+/-   3 ⊕

For four Base colors

Base 1
C   50.00 ⊕ %
M   0.00 ⊕ %
Y   1.00 ⊕ %
K   0.00 ⊕ %

Base 2
C   100.00 ⊕ %
M   50.00 ⊕ %
Y   0.00 ⊕ %
K   0.00 ⊕ %

Base 3
C   0.00 ⊕ %
M   0.00 ⊕ %
Y   50.00 ⊕ %
K   0.00 ⊕ %

Base 4
C   0.00 ⊕ %
M   50.00 ⊕ %
Y   0.00 ⊕ %
K   0.00 ⊕ %

Patches
Base 3 ▢   ▢ Base 4
               1 ⊕
Base 1 ▢ 1 ⊕ ▢ Base 2

Page direction
Yellow ▼ Step   1.00 ⊕ %
          Pages+/-   0 ⊕

Base color	Set the Base color. When you click the color rectangle, the color selection dialog is displayed.

Base 1
C   50.00 ⊕ %
M   20.00 ⊕ %
Y   0.00 ⊕ %
K   0.00 ⊕ %   Click   ➡

ColorSelect
○ H   203 ⊕
○ S   50 ⊕
○ B   100 ⊕
C   50.00 ⊕
M   20.00 ⊕
Y   0.00 ⊕
K   0.00 ⊕
OK   Cancel

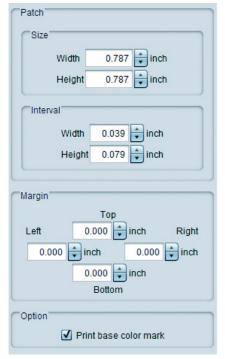|	
Width direction **Height direction**	Focusing around the Base color, specify one color component to change in each direction, the density increment by patch and the number of patches of that direction.
Page direction	Focusing around the Base color, specify one color component to change in the page direction, the density increment by page and the number of pages before/after of it.

3. Setting screen layout

Patch	Specify one color patch size and space size between patches.
Margin	Specify the spaces from top/ bottom/ right/ left of the page.
Print base color mark	Specify whether you put △ mark on the Base color at print. (On preview, whether this is ON or OFF, the Base color mark is displayed.)

4. Font

Specify the font of the character to use in the color chart and the title size of each page.

5. Preview display area setting

Set the area displayed on the preview screen.

Display based on the printable area	Gain the media size of the selected printer and display that area as the valid area.
Display based on the fixed form	Display the selected fixed size and the direction as the valid area.

> (Important!) • The area specified here is display area on the preview, and it differs from the actual page size. The actual page size is [Page size] surrounded with blue.

6. Chart preview

When you click the patch, that patch is selected and each density of color component is displayed in the message area.
In addition, when you right-click it, the pop-up menu is displayed and you can set the selected color as the Base color.
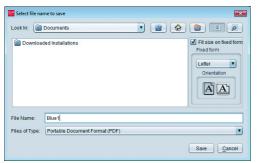
7. Changing pages

When you specify the increment of colors in the page direction, you can change pages.

Creating PDF format file

You can save the color chart of the PDF format file based on the setting.

(1) Select [Create PDF…] from the [File] menu of the color chart.
(2) The "Select file name to save" dialog is displayed.
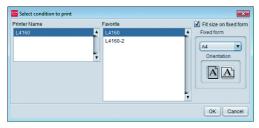

(3) If you fit the page with the fixed-size paper, check the checkbox and specify the fixed-form size paper.
(4) Enter the file name and press [Save].
(5) It is saved as a PDF format file.

Creating a job

Create the color chart as the PDF format image based on the setting and create a job by reading it automatically.

(1) Select [Create Job] from the [File] menu of the color chart.
(2) The "Select condition to print" dialog is displayed.

• Select the printer to output and the favorites setting matching the printing conditions etc.
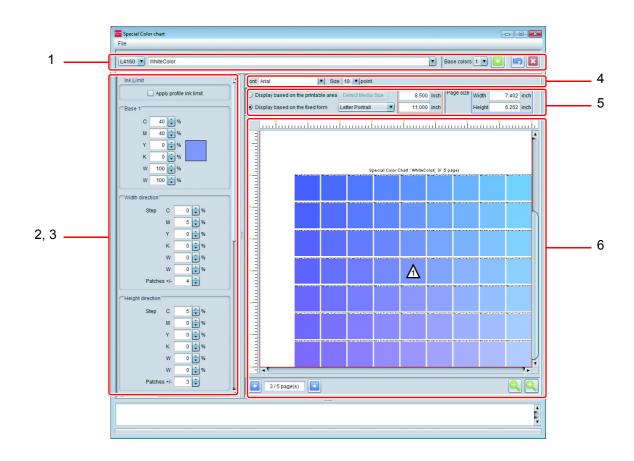If you fit the page with the fixed-size paper, check the checkbox and specify the fixed-form size paper.

(3) Press the [OK] button.
(4) When you display the main screen, the job of chart file name is created in the selected printer's job list.

• The handling way is the same as the normal multiple pages job.

Special color chart

Setting screen displaying method

Select [Special color chart] from the [Tool] menu.

Screen

1. Screen to add/ select delete chart

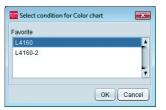|	
Printer selecting combo box	As the special color chart depends on the printer ink set, select the target printer.
Chart name inputting/ selecting combo box	Input the chart name to select the existing chart setting file or to create new chart setting file.
Based colors	Set the number of Base colors. For the number of Base colors, refer to P.105.

Adding chart ➕	Create the chart setting file of the Base color of the Base color number combo box with the chart name inputting/ selecting combo box. If Create the Base color chart setting file of the number of Base colors combo box with the entering chart name/ selecting combo box. If there is the same name chart setting file exists, check whether it is overwritten. If it is overwritten, each value becomes the default. When you press this, [Select condition for Color chart] dialog is displayed.

To determine the ink set to use, select the Favorites setting.
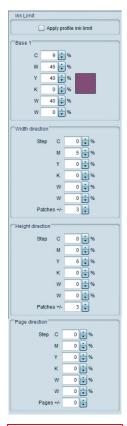
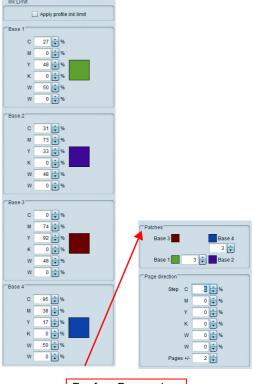|	
Restore ↩	Restore the setting of the currently selected chart setting file to the value at selection.
Deleting chart ✖	Delete the currently selected chart setting file.

2. Setting screen

The setting screen differs depending on the number of Base colors.

For one Base color

For two Base colors

For four Base colors

Apply profile ink limit When this is ON, the ink limit of the profile is used. It can reduce ink spilling out.

> **Important !** • When there are three slots or more of ink of the special ink set, "Apply profile ink limit" becomes always ON and you cannot operate.

Base color Set the ink density that acts as the Base color.
When you click the color rectangle, the "Color Collection" dialog is displayed.
Select the ink color density that acts as the Base color.

Width direction
Height direction Focusing around the Base color, specify one color component to change in each direction, the density increment by patch and the number of patches of that direction.

Page direction Focusing around the Base color, specify one color component to change in the page direction, the density increment by page and the number of pages before/ after of it.

3. Setting screen layout

Patch Specify one color patch size and space size between patches.

Margin Specify the spaces from top/ bottom/ right/ left of the page.

Print base color mark Specify whether you put △ mark on the Base color at print.
(On preview, whether this is ON or OFF, the Base color mark is displayed.)

4. Font

Specify the font of the character to use in the color chart and the title size of each page.

5. Preview display area setting

Set the area displayed on the preview screen.

Display based on the printable area   Gain the media size of the selected printer and display that area as the valid area.

Display based on the fixed form   Display the selected fixed size and the direction as the valid area.

> **(Important!)** • The area specified here is display area on the preview, and it differs from the actual page size. The actual page size is [Page size] surrounded with blue.

6. Chart preview

When you click the patch, that patch is selected and each density of color component is displayed in the message area.
In addition, when you right-click it, the pop-up menu is displayed.
Apply color to base   : You can set the selected color for the Base color.
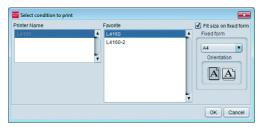Register to Color Collection : Register the selected color in the color collection.

Creating a job

Create the color chart as the PDF format image based on the setting and create a job by reading it automatically.

   (1) Select [Create Job] from the [File] menu of the color chart.
   (2) The "Select condition to print" dialog is displayed.
      • The output printer is fixed to the one specified in the special color chart.
      • Select the favorites setting whose printing condition etc. matches.
        When you fit the page to the fixed paper size, specify the fixed paper size by checking this.

   (3) Press the [OK] button.
   (4) When you display the main screen, the job of chart file name is created in the selected printer's job list.
      • The handling way is the same as the normal multiple pages job.
      • Ink density setting is performed on the color replacement screen.

Color collection

What is the color collection?

The color collection is the outline of replacement information of color replacement (☞ P.80).
You can create the collection file each for the usage/ original color information before replacement and after replacement.

Color collection type

You can create the color collection file of the conditions below by combining original color information before replacement and after replacement.

● Spot color : ink

Replace spot color with ink color.

● Spot color : Lab

Replace spot color with Lab value.

● CMYK : ink

Replace the color in the CMYK color mode image with ink color.

● CMYK : Lab

Replace the color in the CMYK color mode image with Lab value.

● Gradation

Save replacement information of gradation color replacement.
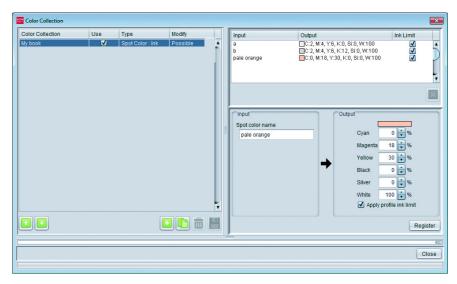
Creating color collection file and registering color

Displaying color collection screen
Open [Color Collection…] from the [Tool] menu.
Or, press from the color replacement screen.

Screen

● **Color collection list**

Display the color collection list currently available for the printer displayed in the main window.

About each row

Color Collection	Displays the color collection file name.
Use	When this is ION, if there is the color information in the read image as in the color collection, performs color replacement with its output data automatically.
Type	Displays color collection type (☞ P.115).
Modify	Displays whether you can add/ delete/ change of color.

Color collection operation screen

 (Changing applying order of color collection)	When the color collection [Use] is ON and if multiple collections have the color with same condition, collection information at the top of the list is applied. With the [↑][↓] button, you can change the collection order.
	Adds new color collection. When pressed, the [Add] dialog is added. Enter the color collection type and name.
	Copy the collection currently selected in the color collection list. When pressed, the [Duplicate] dialog is displayed. Enter new collection name.
	Deletes the collection currently selected in the color collection list. You cannot delete the one whose [Modify] is "Impossible".
	Creates the swatch file for Adobe Illustrator/ CorelDRAW for the collection currently selected in the color collection list. You cannot create in the condition below: • The one whose [Modify] is "Impossible" • The one whose type is "Gradation"

Color list
Displays the list of colors inside the collection selected in the color collection list.
When you delete the selected color, press [x].

Inputting color value
Adds and edits the color information inside the collection selected in the color collection list.
For the settable value, refer to the color replacement screen (P.80).

Perform color replacement using the color collection

There are two methods for color replacement using the color collection.

Always apply the color collection

When you always want to perform color replacement with the setting of the specific color collection file for the read image, set as below.

> (1) Open the color collection screen.
> (2) Select the color collection file that you always want to use and check the checkbox of [Use].
> (3) Close the color collection screen.

This is applied when you read an image newly.

Perform color replacement individually on the color replacement screen

On the color replacement screen, you can refer to the color collection. For details, refer to the color replacement function (P.80).

Auto Execution

What is Auto Execution?

Auto Execution is a function that automatically starts RIP and executes outputting when images that comply with the conditions have been read in.
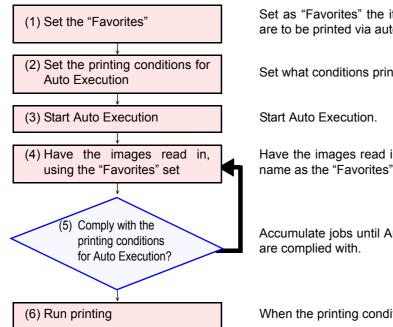It is convenient when settings that are to be regularly used have been decided on.

> (Important!) • The following cannot be carried out with auto printing:
> Composition, Tiling, Step & Repeat, Mono color replacement

Flow of Auto Execution

Auto Execution is carried out according to the flow below.

(1) Set the "Favorites"	Set as "Favorites" the items you want to use for the images that are to be printed via auto execution.
(2) Set the printing conditions for Auto Execution	Set what conditions printing is to start with.
(3) Start Auto Execution	Start Auto Execution.
(4) Have the images read in, using the "Favorites" set	Have the images read in to the hot folder or driver with the same name as the "Favorites" set in (1).
(5) Comply with the printing conditions for Auto Execution?	Accumulate jobs until Auto Execution printing conditions set in (2) are complied with.
(6) Run printing	When the printing conditions are complied with, run printing.

(1) Setting the "Favorites"

Set the "Favorites". The conditions that are set for the various jobs in Auto Execution depend on the hot folder and driver associated with the "Favorites" that are used when having images read in, and on the "Favorite settings" in the file selection dialog box.
For details of the "Favorites", refer to ☞P.101.

> (Important!) **The Favorite settings that are applied to jobs are the following:**
> •General Print
> In the case of color jobs : Scale, Mirror
> •Quality
> All the parameters set for Favorites
> **The settings for the color collection (☞P.115) will be applied for the color changing settings.**
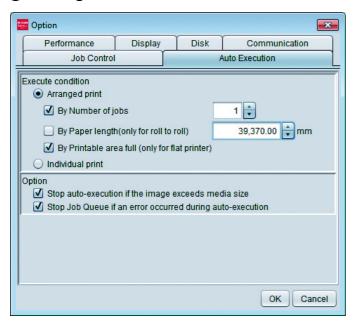
(2)Setting the conditions for Auto Execution

Set the conditions for start of printing during Auto Execution.

● **Displaying the setting screen**

Select [Environments]-[Option]-[Auto Execution] from the menu. The Auto Execution tab will be displayed.

● **Setting contents**

1. Execute condition

Arranged print	Jobs will be accumulated until any one of the conditions below is complied with, then the jobs will be arranged and printed with minimum area (☞ P.31).
By Number of jobs	If this is activated, printing will be executed at the moment when the specified number of jobs has been read in.
By Paper length	Printing will be started when the jobs read in have been arranged with minimum area and reach a specified length. For the specific conditions, refer to P.122.
Individual print	RIP and printing are carried out as soon as the images are read in.

(Important!)
- If [Arranged print] is activated, RIP will be started immediately after the images are read in.
- If [Arranged print] is activated and [By Paper length] and [By Number of jobs] are both deactivated, only IP will be carried out – printing will not be carried out. Stop Auto Execution and print via manual operation, using the execution screen.
- The values for [Scan margin], [Feed margin] and [Arrange in the Center] that are currently set on the arrangement screen (☞ P.29) will be applied.
- Some of the images will be rotated automatically, depending on the individual image sizes.
- Where multiple Favorites are present on the same printer, ahead of output, arrangement will be carried out on each favorite that was used when the images were read in.
- Editing and similar operations cannot be carried out on jobs with "Awaiting printing" status (jobs with sky-blue background color). To edit such jobs, stop Auto Execution.

2. Option

Stop auto-execution if the image exceeds media size
>   If the images read in exceed the printable range, Auto Execution is stopped.

Stop Job Queue if an error occurred during auto-execution
>   If an error occurs, the job queue is stopped. Accordingly, the subsequent image read-in, RIP and print processing are also stopped. Check out the error, then click the restart button on the job queue screen (☞ P.96.

(3) Restarting Auto Execution

Select [Enviroments]-[Auto Execution]-[Start] from the menu.

- During Auto Execution, [Auto executing] will be displayed in the job queue (☞ P.96) tab.
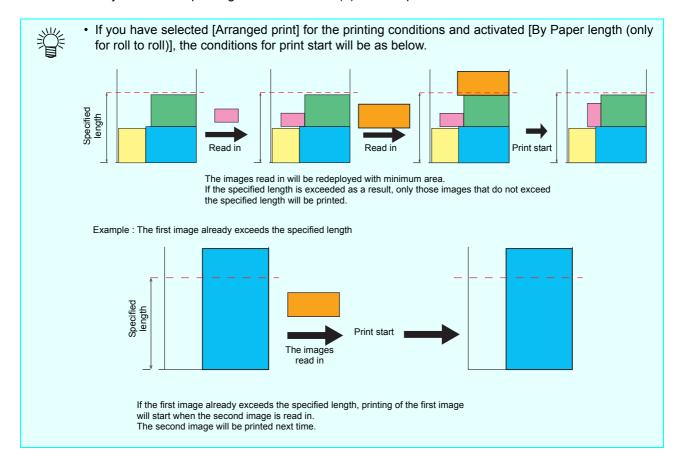
Job Queue | 0 | Auto executing

- To stop Auto Execution, proceed as follows:
  Select [Enviroments]-[Auto Execution]-[Stop from the menu.

(4) Having images read in using the Favorites you have set

Have images read in using the Favorites you set in (1). For the method of specifying favorites for image read-in, refer to "Read an image in RICOH Software RIP" on ☞ P.17.

(5)Are the printing conditions for Auto Execution complied with?

Accumulate jobs until the printing conditions set in (2) are complied with.

• If you have selected [Arranged print] for the printing conditions and activated [By Paper length (only for roll to roll)], the conditions for print start will be as below.

Specified length

Read in → Read in → Print start

The images read in will be redeployed with minimum area.
If the specified length is exceeded as a result, only those images that do not exceed the specified length will be printed.

Example : The first image already exceeds the specified length

Specified length

The images read in → Print start →

If the first image already exceeds the specified length, printing of the first image will start when the second image is read in.
The second image will be printed next time.

(6) Printing

Execute printing.

(Important!)
• [Delete ripped data after print] and [Delete Job after print] on the Execution screen (☞ P.94) will be applied as the post-printing conditions.
• To cancel the RIP and printing, execute stopping of the job queue (☞ P.96).
  Stopping Auto Execution will not stop the RIP and printing.

Menu bar

[File]

[Open]

Selects the image to print and reads it. For details, refer to P.17.

[Restore]

Selects the backup job file and reads it. For details, refer to P.98.

[Exit]

Terminates RICOH Software RIP.

[Function]

The [Function] menu is the one that displays the function icons (P.24) as the menu.
- You can make the [Function] menu hidden with the [Function icon setting] (P.128).
- In the [Function] menu, the function hidden in the [Function icon setting] is also displayed.

[Tool]

[RGB Color Chart]

Starts the RGB color chart creating function. For details, refer to P.104.

[CMYK Color Chart]

Starts the CMYK color chart creating function. For details, refer to P.104.

[Special Color Chart]

Starts the special color chart creating function. For details, refer to P.104.

[Color Collection]

Starts color collection. For details, refer to P.115.

[Environments]

[Auto Execution]

Auto Execution is a function whereby RIP is started and printing executed automatically when images are read in, provided that they comply with the conditions.
For details, refer to P.119.

● [Auto Execution]-[Start]
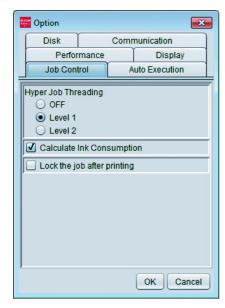Start Auto Execution.

● [Auto Execution]-[Stop]
Stop Auto Execution.

[Option...]

Opens the option screen and performs various settings.
The one whose setting is changed becomes valid after restarting RICOH Software RIP.

● [Job Control]

Hyper Job Threading
Specifies the method performed in parallel when you perform multiple jobs in parallel for one printer.
The changed setting becomes valid from the job that is executed after change.

|	
OFF	Does not perform jobs in parallel. The spooling process, the RIP process and printing process are performed in sequence.
Level 1	Performs the RIP process and printing process in parallel. Maximum of two jobs are performed in parallel.
Level 2	The spooling process, the RIP process and printing process are performed in parallel. Maximum of three jobs are performed in parallel.
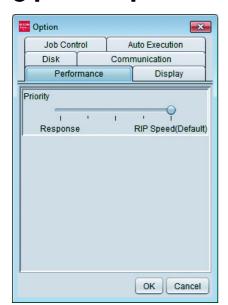
Calculate Ink Comsumption
When this is ON, calculates rough ink consumption and displays it on the job property screen (☞ P.25.

Lock the job after printing
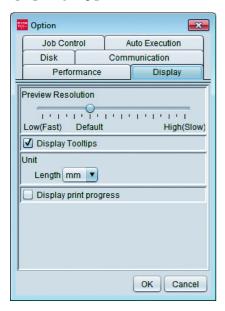When this is ON, lock will take automatically after printing. (☞ P.25)

● [Perfomance]

Priority
If the operation response lowers much during RIP, it will be improved by making the setting to [Response]. However, as the RIP speed becomes slower, use it with the default setting if there is no problem.

● [Display]

Preview Resolution
Specifies the resolution of the preview image created at spooling.

Display Tooltips
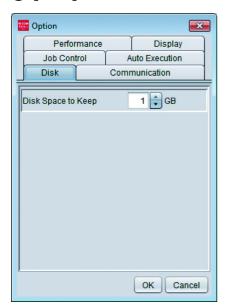When this is ON, simple explanation is displayed for the item with mouse pointer.

Unit
Sets the unit of length (mm, inch).

Display print progress
With printers that have print status display capability, a [Print progress] screen (☞ P.15) will be displayed during printing when this has been activated.

● **[Disk]**
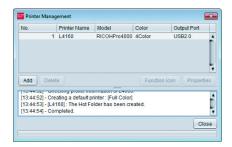
Disk Space to Keep
Sets the minimum amount of space of hard disk including the work folder.
If the space becomes less than the setting value during executing the job, the executing operation stops.

[Printer Management...]

Opens the printer management screen and adds/ deletes/ changes the setting of the printer.

Printer List
Displays the registered printers in the list.

Add
Displays the [Printer setting] screen to add a printer.

Delete
Deletes all settings/ jobs of the printer selected in the printer list.

Function icon
Displays the [Function icon setting] screen to change the function icon indication displayed on the right of the main window of the printer selected in the printer list.
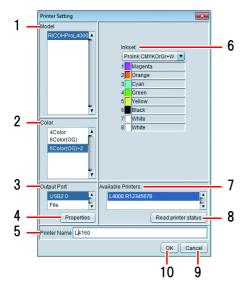
Properties
Displays the [Printer setting] screen to check/ change the setting of the printer selected in the printer list.

● **Printer setting screen**

This is displayed when you click the [ADD] and the [Properties] button on the printer management screen.

1. **Model**

   Select the model name of the printer to register.

2. **Color**

   Select the color of the printer to register.

3. **Output Port**

   Select the output port type.

4. **Properties of Output Port**

   Set the information to the output port.

5. **Printer Name**

   Enter the name to distinguish it from other printer.

6. **Inkset**

   Select the ink type set on the printer.

7. **Available Printers**

   The connectable printer is displayed.

8. **Read printer status**

   Make the connectable printer list information the latest.

9. **Cancel**
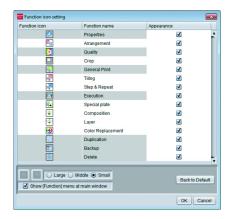
   Cancel the printer registration.

10. **OK**

    Register the printer.

● **Function icon**

This is displayed when the [Function Icon] button is pressed on the printer management screen.

Function icon list

Displays the function list supported by the printer selected on the printer management screen.

You can hide/ display that icon in the [Appearance] column.

If the background of function name is gray, you cannot hide that icon.

Changes the displaying order of the function selected in the function icon list.

Size

Changes the function icon size.

Show [Function] menu at main window

When this is ON, the [Function] menu is displayed on the menu bar of the main window.

Back to Default

When you click it, the function icon setting is returned to the default.

At times like this

About security setting of installed PC

CD menu screen does not appear when installation CD is inserted into the PC

If an automatic execution function (Autorun) of the CD or the USB memory is disabled, the CD menu does not start when the CD is inserted. In this case, display the CD drive as follows, and then directly select "CDMenu.exe" to execute it.

      (1) Select the CD drive in the explorer.
      (2) Select "CDMenu.exe", and then select [Open] from the pop-up menu.

(Important!)	• Be sure to use CDMenu.exe to install RICOH Software RIP. If it is installed directly from the RICOH Software RIP installer without using the CDMenu.exe, some files are not installed and errors may be caused.

Images cannot be read into RICOH Software RIP

When reading images into RICOH Software RIP, sometimes an error message window as shown on the right appears and the images cannot be read.
The possible causes are that the security software blocks the start of the tools necessary for RICOH Software RIP to read images, or faultily detects the image as a virus and deletes it. Check the followings.

      (1) Referring to the manual of the security software, check the "PS3.exe" file is on the software list that limits the start, and if it is on the list, admit the start.
          RICOH Software RIP installation folder \Bin\PS3.exe
      (2) Check the "PS3.exe" file is in the PC. If not, reinstall RICOH Software RIP. Then, refer to the manual of the security software to set the "PS3.exe" file on the white list (The file list that is not virus).

If an error occurred in the RICOH Software RIP screen display

In rare PC environment, an error below may occur in the RICOH Software RIP screen display.

- When you switch tabs, a part of the previous tab remains.
- The preview image jumbles.
- When you use RICOH Software RIP for a long time, the screen display becomes look funny and the PC may freeze at worst.

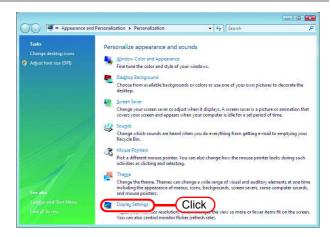If these errors occur, it is possible to solve them with the following methods:

Method to solve 1

Upgrade the driver of the graphic board to the latest version.
For the method to upgrade the driver of the graphic board, refer to the manual of your PC or the graphic board.
If the latest driver is not provided, perform the next [Method to solve 2].

Method to solve 2

● For Windows Vista
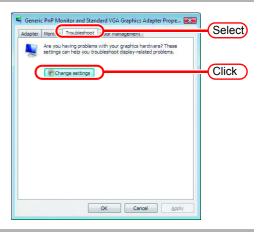
1 **Right-click the desk top and select [Personalization] from the displayed pop-up menu.**

2 **As the "Personalization" window is displayed, click [Display Settings].**

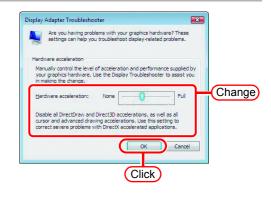**3** As the "Display Settings" window is displayed, click Advanced Settings... .

Click

4 From the displayed window, select [Troubleshoot].

Select

Click

5 Click Change settings .

6 Change "Hardware acceleration" to the second from the left end.

• The following message is displayed:
 "Disable all DirectDraw and Direct3D accelerations, as well as all cursor and advanced drawing accelerations. Use this setting to correct severe problems with DirectX accelerated applications."

Change

Click

7 Click OK .

8 Terminate [Display Setings] with OK .

Note on application

About Adobe Photoshop 5.x and earlier

Files of Adobe Photoshop 5.X or older versions may be printed dark.
And when EPS file of Adobe Photoshop 5.X or older versions is placed on Adobe Illustrator, it may also be printed dark.
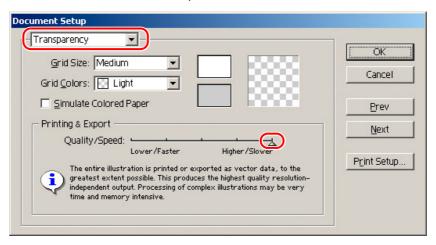In case an image is printed dark, execute one of the following procedures.
Uncheck "Post Script Color Management" of Print Dialogue of Adobe Photoshop. Or, save it with Adobe Photoshop 6 and later.
When "Post Script Color Management" is checked, color matching of RICOH Software RIP does not work and the image is printed dark.

About Adobe Illustrator

● Drop shadow and Transparency

Data that is created with Adobe Illustrator 9 or later versions adopting transparency effect may have prominent jags (stair-like oblique line), when it is enlarged and printed with RICOH Software RIP.
To avoid this, set items of "Document Setup" menu of Adobe Illustrator as follows.
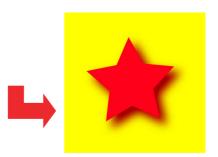
When using drop shadow command, the color around the object becomes different from the ground color.
To avoid this, set color matching method of both illustration and image of RICOH Software RIP equal.
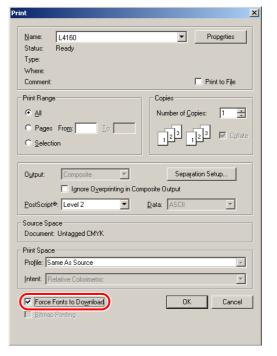

● **Letters cannot be plotted**

● **Letters become italic**

● **A part of the object around the letters cannot be plotted**

Change the font into Outline.
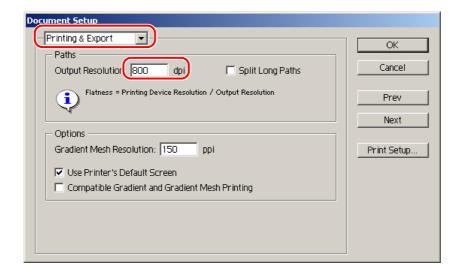When printing with the printer driver, set the driver so as to download the font.

● Circles or letters become polygonal

Output resolution of Paths of Illustrator is too low or scale ratio at RICOH Software RIP is too high (for example some are set at 1000%).
Default value of Output resolution of paths of Illustrator is 800 dpi.
Increase the Output resolution of Illustrator or lower the scale ratio of enlargement at RICOH Software RIP.

For increasing the output resolution of Illustrator paths, calculate the resolution with the following formula. Specifying a higher value than that obtained with the formula has no effect.

● With Illustrator 8, 9, or 10

Output resolution = Resolution in the scan direction of the selected device profile x scale value (%) specified for image editing / 100
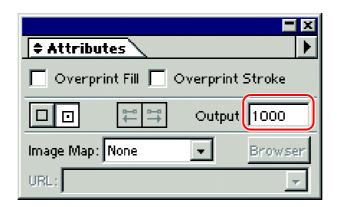
Example:
  Selected device profile resolution: 720 x 1440 dpi
  Set the scale value for image editing at 1000%

  720 (scan direction resolution) x 1000 (scale value) / 100 = 7200
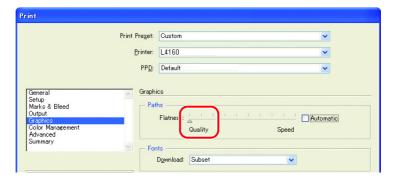 Set the Illustrator path output resolution to 7200.

As for Illustrator 8 and Illustrator 9, changing the Output Resolution of "Printing & Export" in "Document Setup..." does not affect on the created object.
To change the created object, select the object and change the object size at "Attributes" pallet.
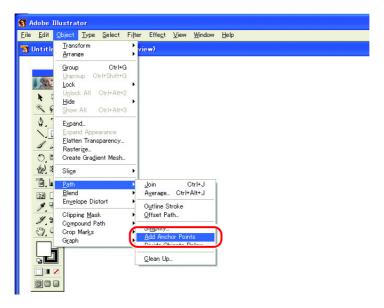To access "Attributes" pallet, select "Window" menu and then "Show Attributes".

● With Illustrator CS, CS2 or CS3

When saving to an EPS file, there is no setting item for path output resolution. Use the printer driver from Illustrator to set "Flatness" of "Graphics" to "Quality" before printing.
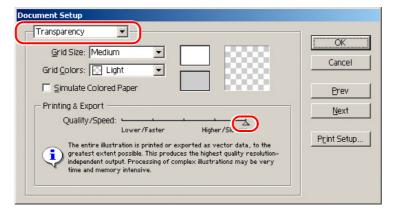

If you do not increase the scale value in RICOH Software RIP, or you increase the output resolution of Illustrator paths, circles and text objects may be printed as polygons. In this case, select the relevant object in Illustrator, apply [Add Anchor Points] 1 to 3 times, and make the individual curves shorter.

● A jaggy contour occurs in characters to which a transparent effect is applied

When you enlarge an image on the RICOH Software RIP side, there may be a case where a jaggy contour occurs in characters to which a transparent effect is applied.
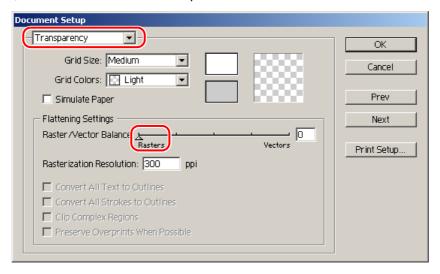To avoid such a trouble, set the items of "Document Setup" of Adobe Illustrator as follows.

136

● **Some objects that are applied transparency effect have unnecessary lines or some parts of the object do not appear**
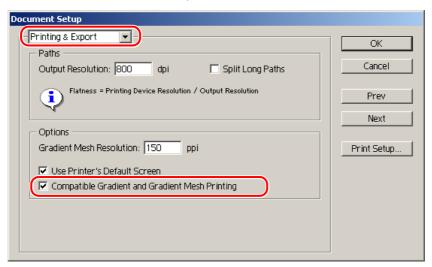
Some complicated objects and photos that are applied transparency effect may have unnecessary lines or some parts of the objects.
To avoid this, set items of "Document Setup" menu of Adobe Illustrator as follows.
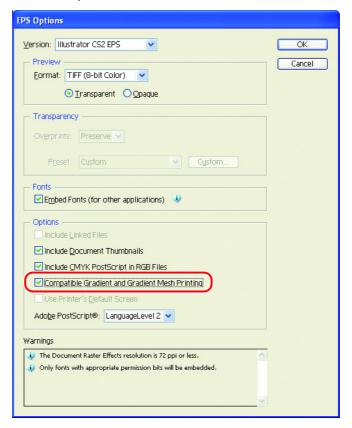
● **Gradation Tone Jump is prominent**

To avoid this, set items of "Document Setup" menu of Adobe Illustrator as follows.
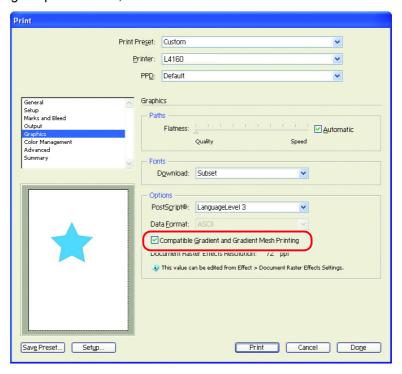
● Illustrator CS, CS2, CS3 (When saving EPS)

When saving EPS, set "EPS Options" as follows.

● Illustrator CS, CS2, CS3 (When printing)

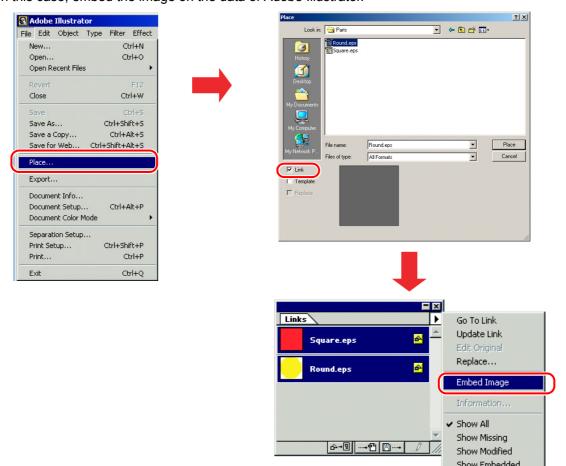When outputting the printer driver, set "Print" as follows.

(Important!) • When setting the data to replace gradation, do not check "Compatible Gradient and Gradient Mesh Printing". It disables color replacement.

● **Linked data isn't printed**

Linked images placed on the data of Adobe Illustrator may not be printed or the colors are not printed properly.
In this case, embed the image on the data of Adobe Illustrator.

● **The surrounding image of EPS file saved by Illustrator 10 is cut off**

When arranging rectangular object with thin line on surrounding part, the line may become thinner or may be printed nothing.
It occurs because the whole image size is rounded by integer Point and is clipped.

In Illustrator 10, arrange dummy object around the image and save as EPS, or set a little larger Post-Script custom page size in printing with printer driver.

● The image size differs between on application and on RICOH Software RIP

The image size created by application does not correspond completely to the image size displayed on the job editor of RICOH Software RIP. It occurs by following causes.

(1) **Limitation of the image size set by PostScript language**
Application usually sets the size by mm or inch, but PostScript language sets the number by Point (1/72 inch).
Although image object size is measured by Point of real number, the whole size in saving EPS file or PostScript custom page size in printing with printer driver is eventually changed to the Point of integer.
It causes conversion error up to 1 Point (0.353 mm).

(2) **Effect of line width**
The object size displayed on [Information] window of Illustrator does not include the line width.
Actual object size includes the line width.

(3) **Effect of the calculation of size by specific application**
As Illustrator 10 described above, specific size calculation by application effects on the size.

By the reasons above, it causes about 1 Point error even when printing with original size. Therefore, when scaling by RICOH Software RIP, the error widens (In case of 1 Point error, widening 1000% causes 3.5 mm error).
If considering the accuracy of output size, note the followings to reduce the error.

• Print by original size as possible
• If scaling, set by % (do not set by mm or inch)

Caution about Mac OS X

Spooling from Mac OS X, it is enacted the following restrictions.

Print PDF documents

When printing PDF documents from Acrobat Reader ver. 5, [File Name] on the "Job List" turns into garbage. This problem is modified after ver. 6, print PDF documents using Adobe Reader ver. 6 or later.

Caution about using hot folder with Macintosh

● **In case canceling the file copying to the hot folder, the error occurs.**

Most of all files canceled copying are ignored or moved to the error queue, however RICOH Software RIP may abend since spooling the file copied incompletely.
Do not cancel copying the file as far as possible.
With Mac OS X, abnormal phenomena may occur simply by clicking the open hot folder in the Finder.
When copying files, do not perform any unnecessary operations in the Finder.

● **When deleting the file from the hot folder by compulsion during copying, error occurs.**

You can force to delete the file copying from the hot folder at Mac OS X. However, when doing these operation, the other files may be deleted or RICOH Software RIP may abend.
Do not delete the file copying to the hot folder.

● **About extension display on OSX**

For OSX, the extension is not displayed if the checkbox of "Show all filename extensions" is not checked from [Finder Preferences]-[Advanced].

Improvement of the spooling speed when printing from the application software with Macintosh

Changing the output folder to hot folder, the spooling speed may be faster depending on the application software. Try the following steps.

In case of Mac OS X

The file can be spooled from application to the hot folder by following steps, however, error may occur depending on the application software. When the error occurs, clear the check box for "Save as File" of [Output Options] menu in the "Print" window.

Application software caused error

● **Illustrator 10**

It is unstable to output the file.

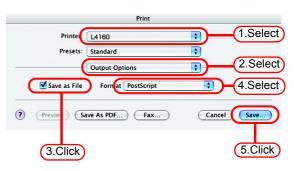● **Illustrator CS**

Some files cannot be spooled.
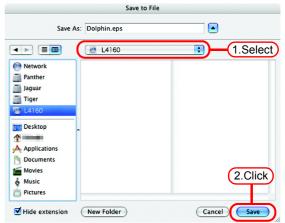
● **Photoshop 7**

Some files cannot be spooled when does not change the file name to save.

1 **Open the "Print" window in the [File] menu with the application software.**

2 **Select the printer for RICOH Software RIP at "Printer;" menu.**
  • Select "Output Options".
  • Check the box for "Save as File".
  • Select "PostScript" at "Format".

3 **Click Save .**

4 **Specify the hot folder of RICOH Software RIP to output.**

5 **Click Save .**

RIP speed improvement method for images containing gradated objects

Where objects with complex gradation meshes, or very large numbers of gradated objects, are present inside an image, RIP processing will take time. In such cases, the RIP speed can be improved by changing the Illustrator settings.

It is usually recommended to remove a check mark against [Compatible Gradient and Gradient Mesh Printing]. If you want to specify a spot color as the color for gradation, put the check mark.

Try the following settings if the RIP speed does not improve.

⬤ **In cases where gradation meshes are heavily used or where objects with large gradation meshes are present:**

Put a check mark against [Compatible Gradient and Gradient Mesh Printing.] in the Illustrator settings.

⬤ **In cases where gradations are heavily used for color filling or lines or where objects with large gradation are present:**

Remove a check mark against [Compatible Gradient and Gradient Mesh Printing.] in the Illustrator settings.

> • As you can infer from the above instructions, activation of the [Compatible Gradient and Gradient Mesh Printing.] setting has validity with regard to either gradated objects only or gradation mesh objects only.
>
> Change the setting according to which of the two the Illustrator's [Document information] window indicates is more heavily used.