JFX plus Series

UJF-3042

Clear Liquid Printing Guide

(RasterLinkPro5 v2.22)

This document explains the procedures to print special effects using UV ink clear liquid from RasterLinkPro5. For others, refer to “Operation Manual” of each printer, “Installation Guide” and “Reference Guide” of the RasterLinkPro5.

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MIMAKI ENGINEERING CO., LTD.

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Chapter 1 Before Using

1-1. Related Manual

The explanation described in this manual is based on the assumption that set-up of the printer and RasterLinkPro5 have been completed. Before reading this manual, read the related manual below and perform the required set-up etc. The latest version of the manual can be also downloaded from our web page.

1) “Operation Manual” of each printer
Explains the printer operation and handling about the maintenance etc.

2) “Maintenance” of each printer
Explains daily maintenance to use the printer in the better status.

3) “Installation Guide” of RasterLinkPro5
Explains the installation/the set-up procedures of RasterLinkPro5.

4) “Reference Guide” of RasterLinkPro5
Divided into Common features for every printer and the Required set-up items for using RasterLinkPro5, such as the function and the operation procedures for each printer.

1-2. Installation of Device Profile

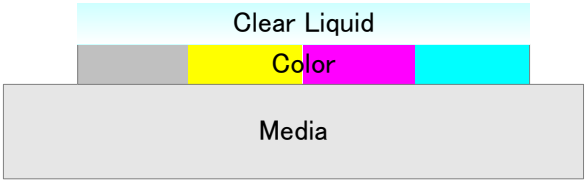
Right after RasterLinkPro5 installation has been completed, only required minimum of device profile has been installed. Obtain other device profile from the profile CD attached with the product, MIMAKI’s web page for download (http://www.mimaki.co.jp/english/download/uc_index.php) or RasterLinkPro5 [ProfileUpdate] and install it.

Chapter 2 Type of Special Print Using Clear Liquid

There are some types for special print using clear liquid as below.

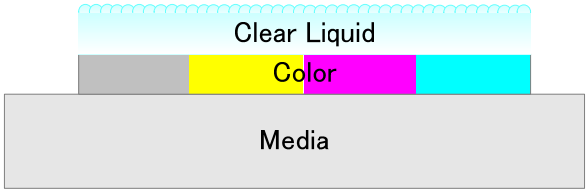
2-1. Glossy Print

First, print color data. Next, print clear liquid without UV irradiation. By performing UV irradiation later, the printing surface becomes smooth and you can gain shiny Glossy Print.



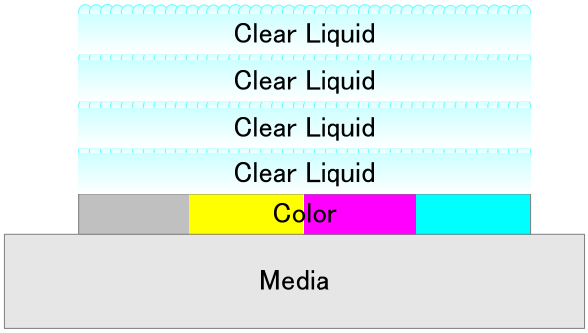
2-2. Matte Print

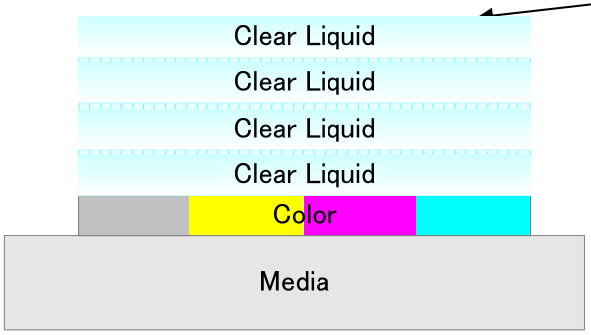
First, print color data. Next, print clear liquid while performing UV irradiation at the same time. By doing this, concavity and convexity remain on the printing surface inversely with Glossy Print. You can gain Matte Print.



2-3. Emboss Print

First, print color data. Next, print clear liquid with Matte Print several times repeatedly. By overlapping clear liquid layers to increase the thickness of the printing part, you can gain Emboss Print. You can print so that the last clear liquid printing may be Glossy Print.





You can print so that the last clear liquid printing may be Glossy Print.

Chapter 3 Job Creation Method Using Clear Liquid in RasterLinkPro5 IP

3-1. Job Type

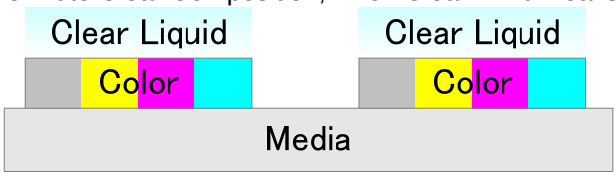
To create a job using clear liquid, there are three types of “Auto Clear Composition”, “Manual Composition of Color Image and Clear Image” (Grouping Multiple Jobs) and “Clear Image Single Job”. Each has the feature below:

Printing Method	Data to be Prepared	Printing Position of Clear Liquid	Print Density of Clear Liquid	Settable Correction Method of Special Color
Auto Clear Composition	Color image	Whole image of color image Valid pixel of color image	0% to 100% Fixed density	Size correction
Manual Composition of Color Image and Clear Image	Color image Image for single color replacement	Whole image of color image Valid pixel of color image Any position of color image	0% to 100% Depending on the tone of original image	Size correction Position correction
Clear Image Single Job	Image for single color replacement	Any position	0% to 100% Depending on the tone of original image	None

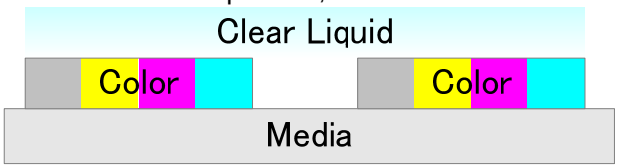
3-1-1. Auto Clear Composition

Print “color image” and “single color image of clear liquid (clear image) automatically created based on color image” so that they may be overlapped.

1) For Auto Clear Composition, when Clear Print Area is set to Valid Pixel

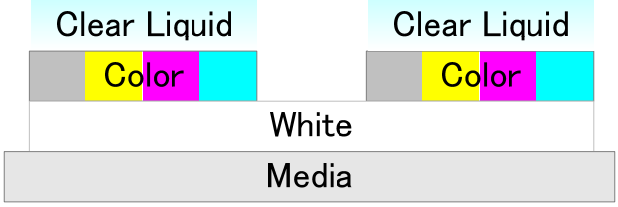


2) For Auto Clear Composition, when Clear Print Area is set to Whole Image

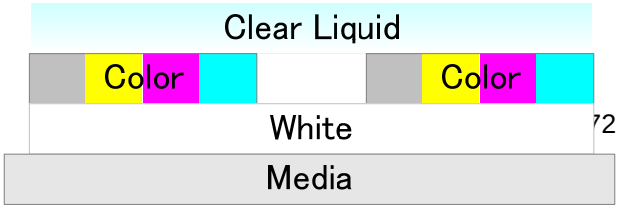


- You can combine with Auto Special Color Composition.

Ex.: For Auto Clear Composition, when Clear Print Area is set to Valid Pixel and for Auto Special Color Composition, Special Color Print Area is Whole Image



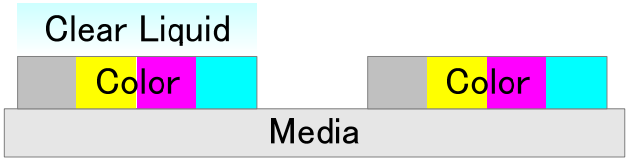
Ex.: For Auto Clear Composition, when Clear Print Area is set to Whole Image and for Auto Special Color Composition, Special Color Print Area is Whole Image



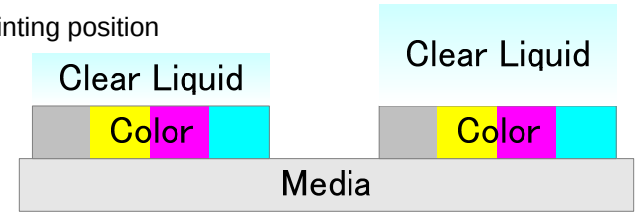
3-1-2. Manual Composition of Color Image and Clear Image (Grouping Multiple Jobs)

Group “color image” and “single image (clear image) replaced with clear liquid” and print so that they may be overlapped.

1) When combining color image and clear image manually and printing clear liquid on any position

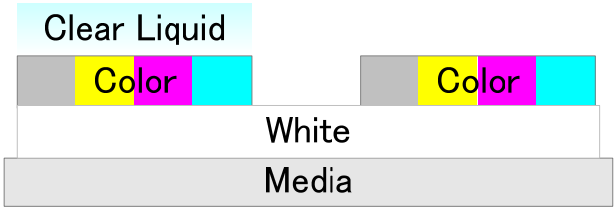


2) When combining color image and clear image manually and changing density of clear liquid depending on printing position

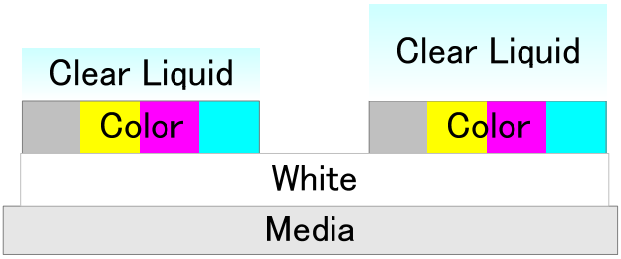


- Depending on the way to create single color image (clear image), you can print clear liquid on “Whole Image” or “Valid Pixel” of the color image same as Auto Clear Composition.
- You can combine manually including special color (white).

Ex.: When combining special color (white), color image and clear image manually and printing clear liquid on any position



Ex.: When combining special color (white), color image and clear image manually and changing density of clear liquid depending on printing position



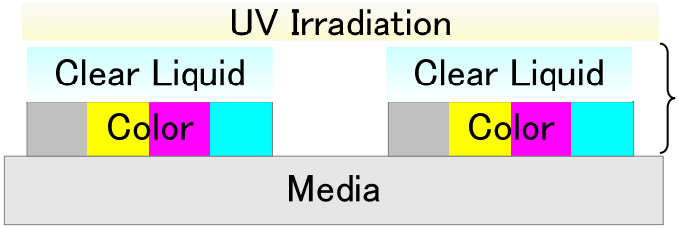
3-1-3. Clear Image Single Job

Print “single color image (clear image) replaced with clear liquid”.

Use this when you output clear image only later against the material that has already been printed.

1) When you printed color image and clear image in advance, however, curing is not enough

-> When performing irradiation only later



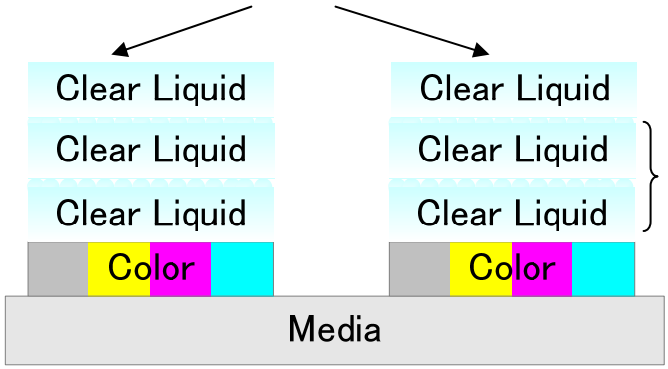
Status of color image and clear image having been printed

(Curing of clear image is not enough.)

2) When Emboss Print (printing twice) of color image and clear image has already been performed

-> When performing Glossy Print of surface clear image later (when performing Emboss Print with the machine type other than UJF-3042)

Perform Glossy Print of surface clear image.

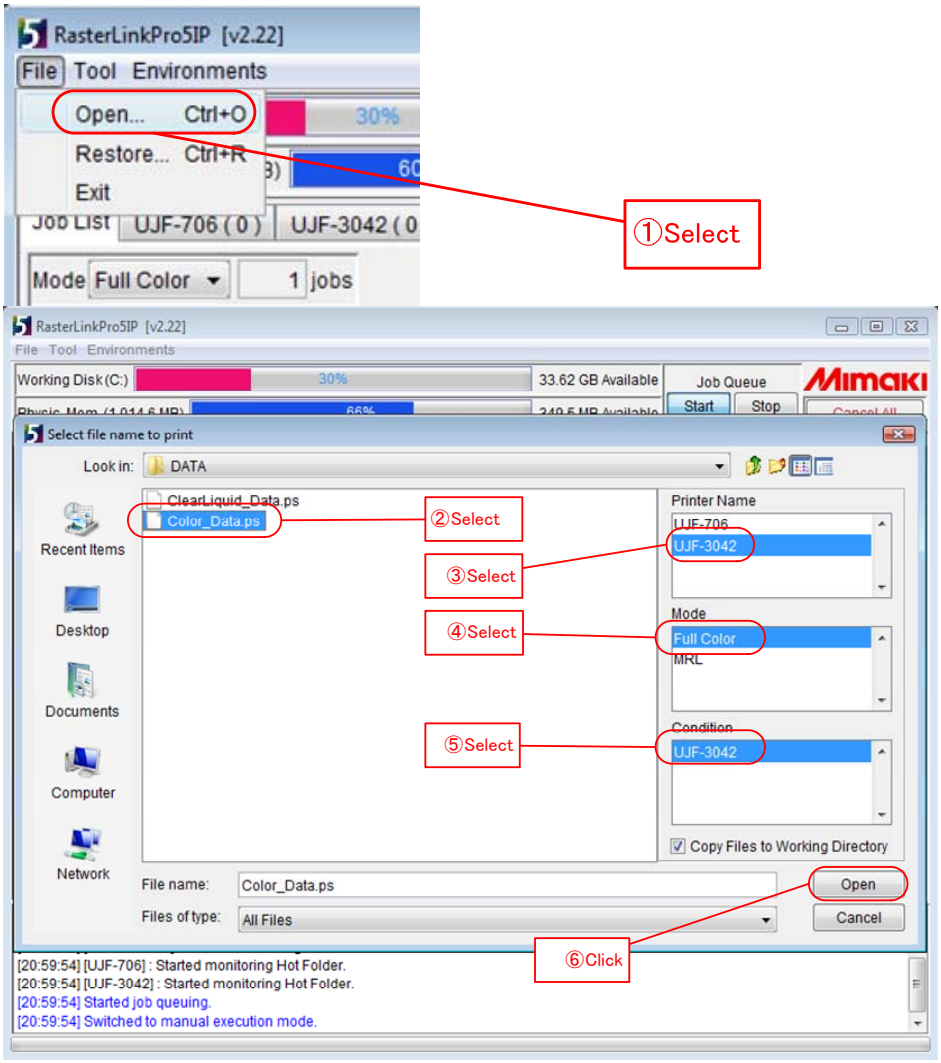


When Emboss Print (printing twice) of color image and clear image has already been performed

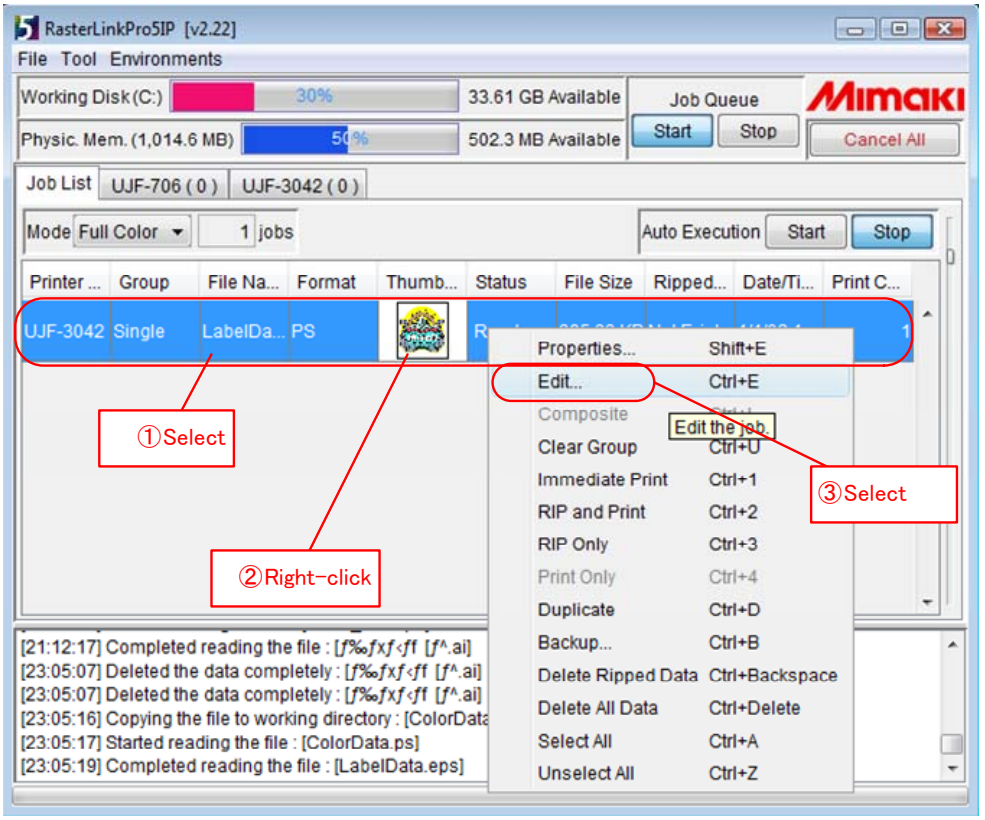
Each job creation method is explained by following the procedures from here.

3-2. Create Auto Clear Composition job.

Select [Open] of the [Job List] and enter “Color Image”.



Select entered “Color Image”, and right-click. Then, select [Edit] to display [Image edit screen].



Select Device Profile in [Print Condition], and select “Special Colorset” of clear in [Print Mode].

Clear Liquid is indicated as “Cl”.

The displayed contents differ depending on your printer and the device profile, therefore, select the Special Colorset suitable for your environment.

“Cl”: Clear liquid one color

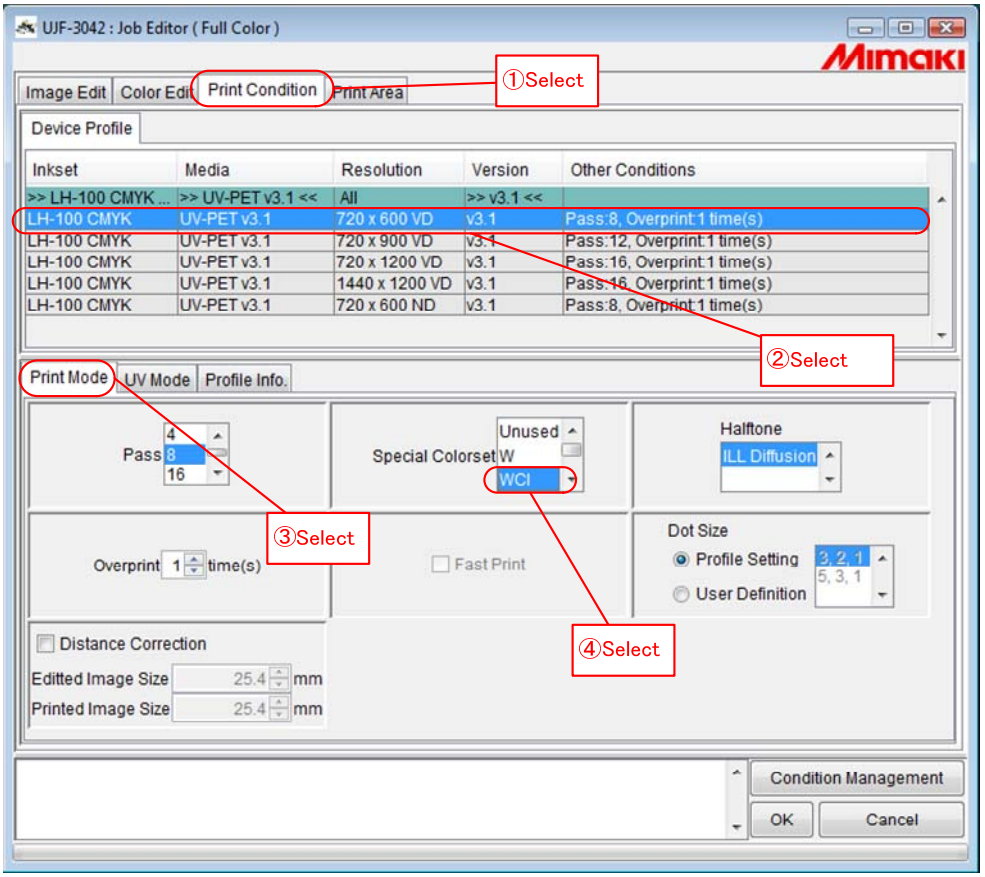
“ClCl”: Clear liquid two colors

“WC1”: White one color

: Clear liquid one color

“WWClCl”: White two colors

: Clear liquid two colors

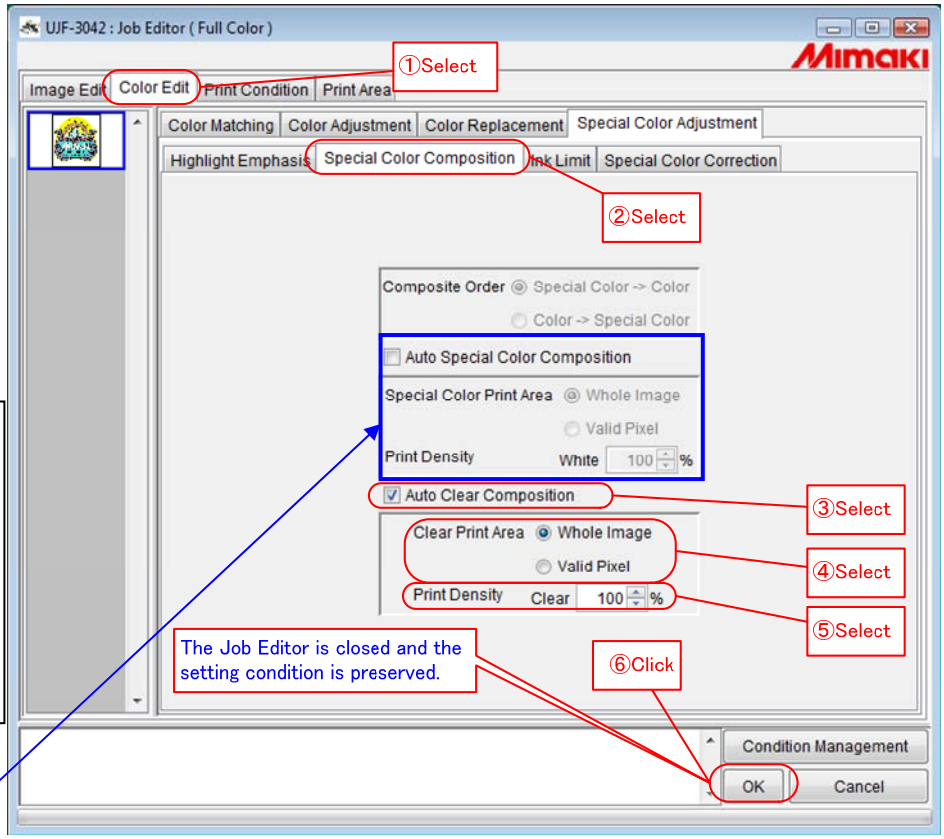


Select [Color Edit] - [Special Color Adjustment] - [Special Color Composition].

Select “Auto Clear Composition”.

Select “Clear Print Area”.

Set “Print Density”.



Hint

When performing Glossy Print in the printing method dedicated to UJF-3042, Print Density affects the image quality. For details, refer to “4-4 Note on Glossy Print of UJF-3042”.

If the special color ink of your printer has white ink, you can print combining with Auto Special Color Composition.

Click the “OK” button.

Up to now, the basic setting of the job using clear liquid with Auto Clear Composition has been completed.

From here, set details of clear liquid special print. Depending on the type of special print, refer to the chapters below:

Glossy Print -------- 3-2-1 “Perform Glossy Print.” (Printing Method Common to All Machine Types)

Glossy Print -------- 3-2-2 “Perform Glossy Print.” (Printing Method Dedicated to UJF-3042)

Matte Print -------- 3-2-3 “Perform Matte Print.”

Emboss Print -------- 3-2-4 “Perform Emboss Print”.

3-2-1. Perform Glossy Print. (Printing Method Common to All Machine Types)

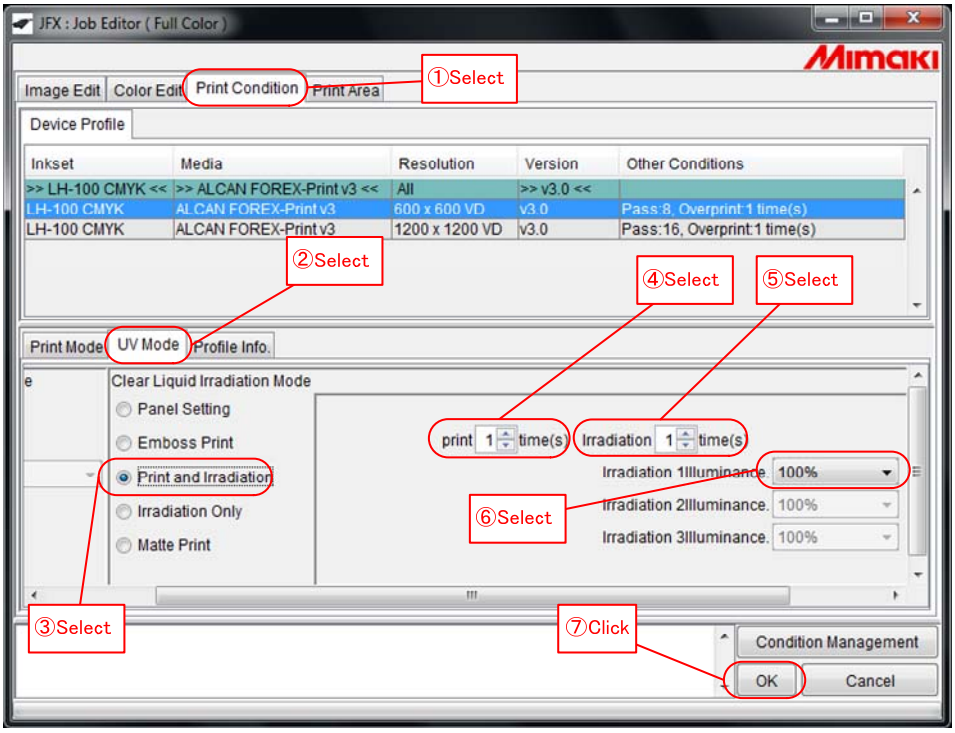
The method to perform Glossy Print of clear liquid is explained. (Here, it is based on the premise that the basic setting explained in 3-2 “Create Auto Clear Composition job.” has been completed.)

Select [Print Condition] - [UV Mode].

Select “Print and Irradiation” of “Clear Liquid Irradiation Mode”.

Set “Print” to “1 time”.

Set the number of “Irradiation” and “Illuminance” at your will.

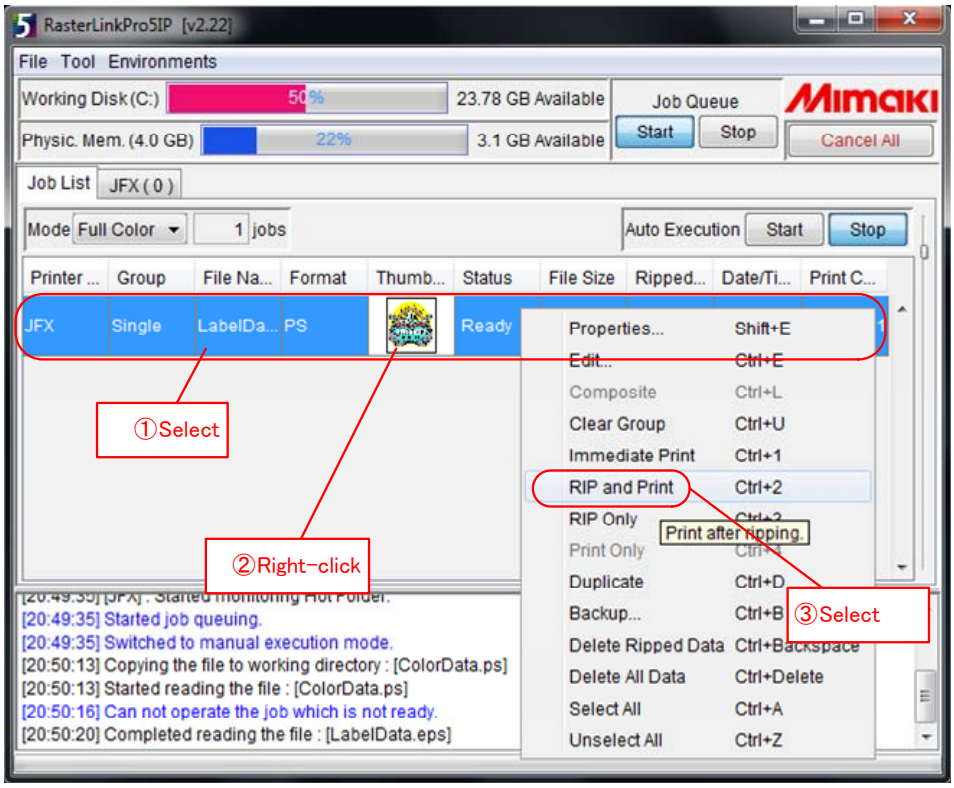


Hint

When “Print and Irradiation” is selected, data (printing data) to discharge clear liquid without UV irradiation is output to the printer. Then, data (irradiation data) to perform UV irradiation without printing clear liquid is output to the printer. “Printing data” and “irradiation data” are output by the number of times set on the screen.

Press the [OK] button to terminate the image edit screen.

Select a job in the [Job List] and right-click. Then, select [RIP and Print] to perform printing.



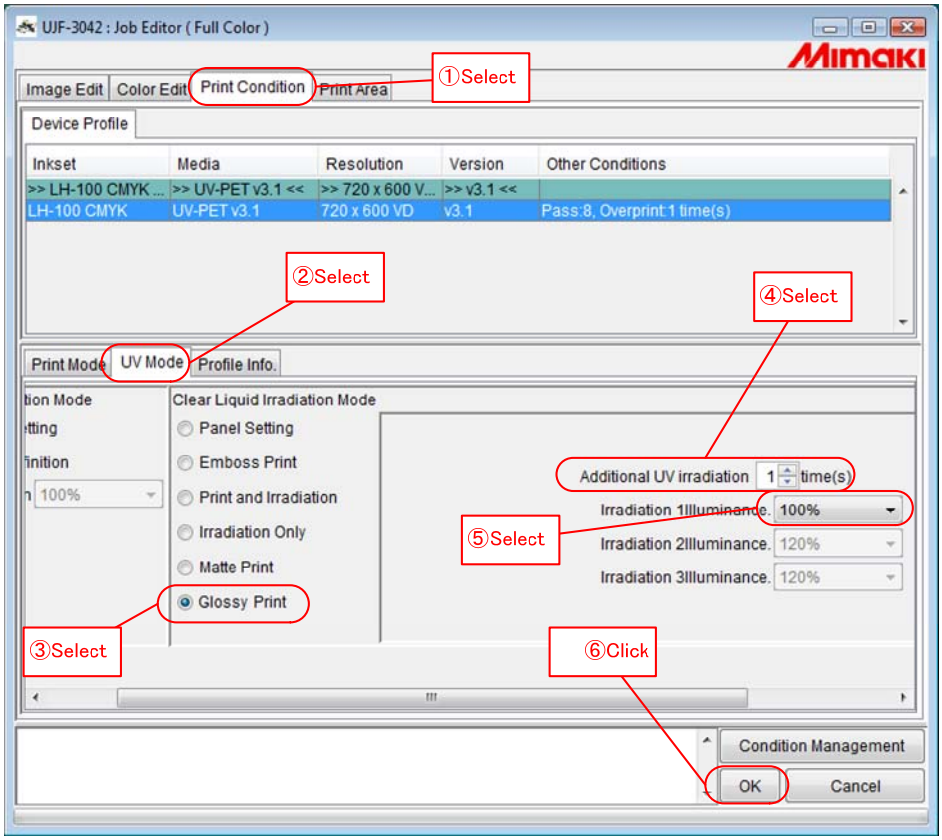
3-2-2. Perform Glossy Print (Printing Method Dedicated to UJF-3042)

The method to perform Glossy Print of clear liquid is explained. (Here, it is based on the premise that the basic setting explained in 3-2 “Create Auto Clear Composition job.” has been completed.)

Select [Print Condition] - [UV Mode].

Select “Glossy Print” of “Clear Liquid Irradiation Mode”.

Set the number of “Additional UV Irradiation” and “Illuminance” at your will.

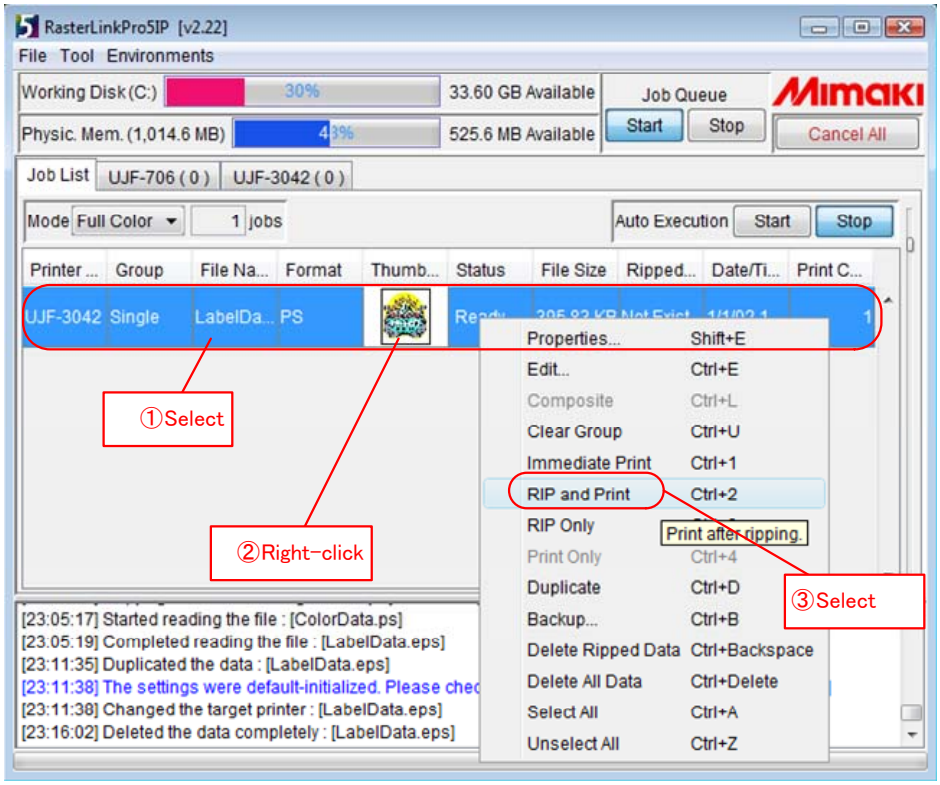


Hint

As Glossy Print controls so that the UV lamp may be turned off partly, clear liquid curing may not be enough. You can specify the number of Additional UV Irradiation to one to three and perform curing later.

Click the [OK] button to terminate the image edit screen.

Select a job in the [Job List] and right-click. Then, select [RIP and Print] to perform printing.



3-2-3. Perform Matte Print.

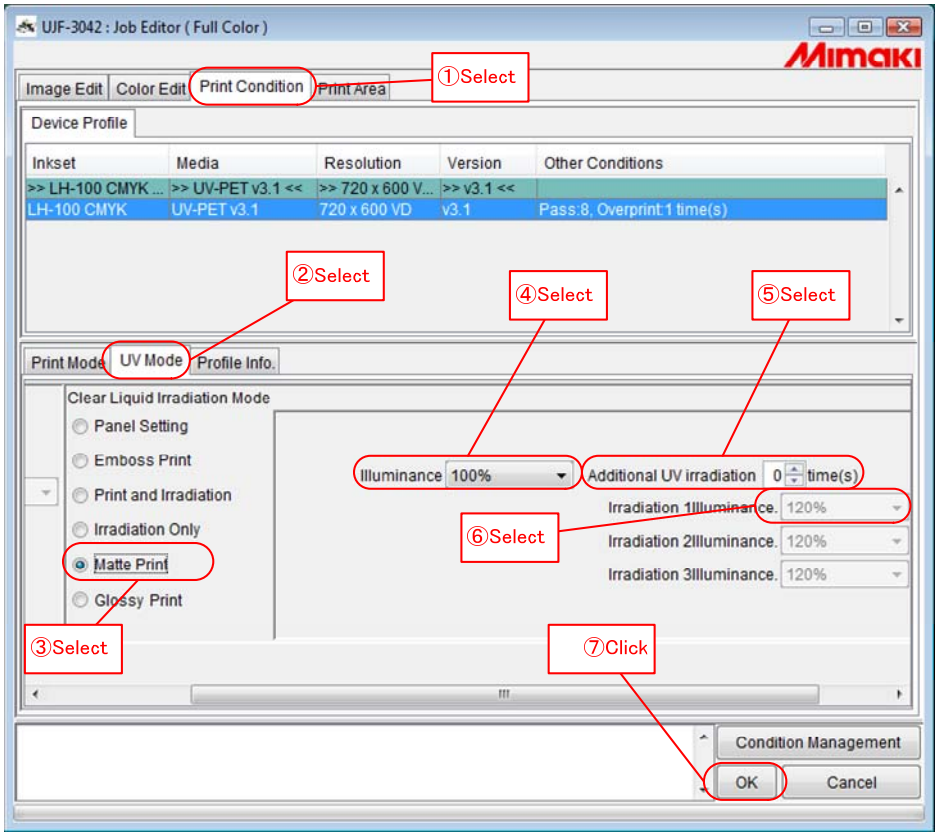
The method to perform Matte Print is explained. (Here, it is based on the premise that the basic setting explained in 3-2 “Create Auto Clear Composition job.” has been completed.)

Select [Print Condition] - [UV Mode].

Select “Matte Print” of “Clear Liquid Irradiation Mode”.

Set “Illuminance” at your will.

Set the number of “Additional UV Irradiation” and “Illuminance” at your will.

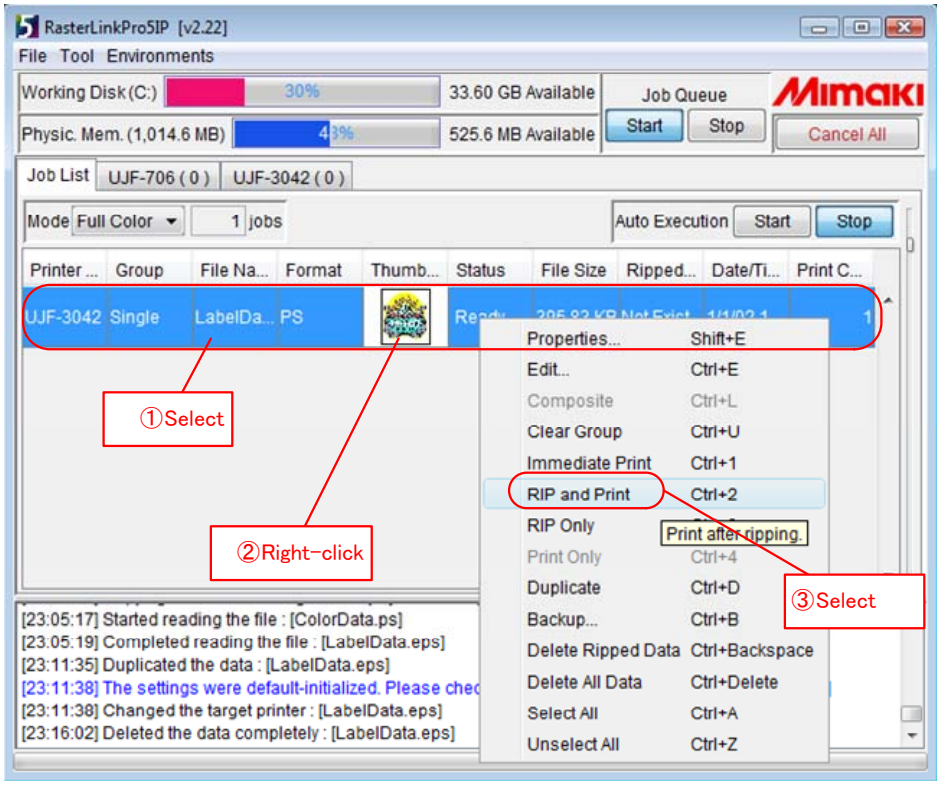


Hint

Depending on the density of clear liquid, curing may not be enough. In such a case, set the Illuminance higher. Or, you can specify the number of Additional UV Irradiation to one to three and perform curing later.

Click the [OK] button to terminate the image edit screen.

Select a job in the [Job List] and right-click. Then, select [RIP and Print] to perform printing.



3-2-4. Perform Emboss Print.

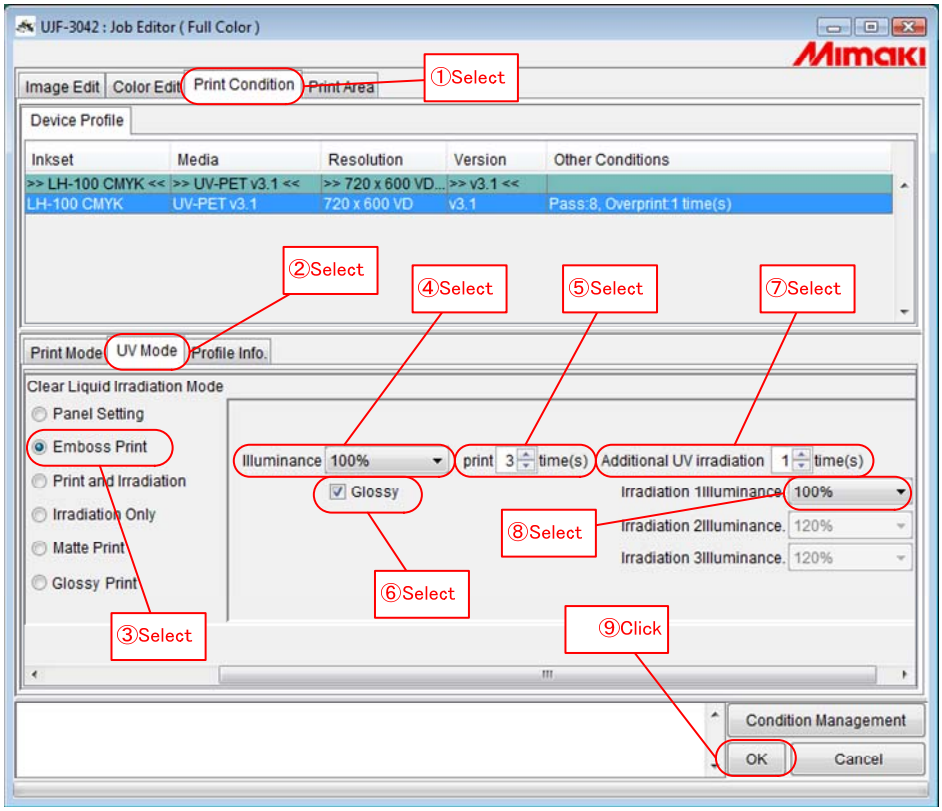
The method to perform Emboss Print is explained. (Here, it is based on the premise that the basic setting explained in 3-2 “Create Auto Clear Composition job.” has been completed.)

Select [Print Condition] - [UV Mode].

Select “Emboss Print” of “Clear Liquid Irradiation Mode”.

Set “Illuminance” at your will.

Set the “Print time(s)” to one to nine at your will.



Hint

The more the number of printings becomes, the more three dimensional the printing result looks.

Hint

When your printer is UJF-3042, by selecting “Glossy Print”, you can set the printing method of the last clear liquid.

Select: Glossy Print

Not select: Matte Print

When you select “Glossy Print“, Print Density and the number of printings affect the image quality. For details, refer to “4-4 Note on Glossy Print of UJF-3042”.

When you use the printer other than UJF-3042, the same print can be performed by combining multiple jobs. For details, refer to 4-3-4.2.

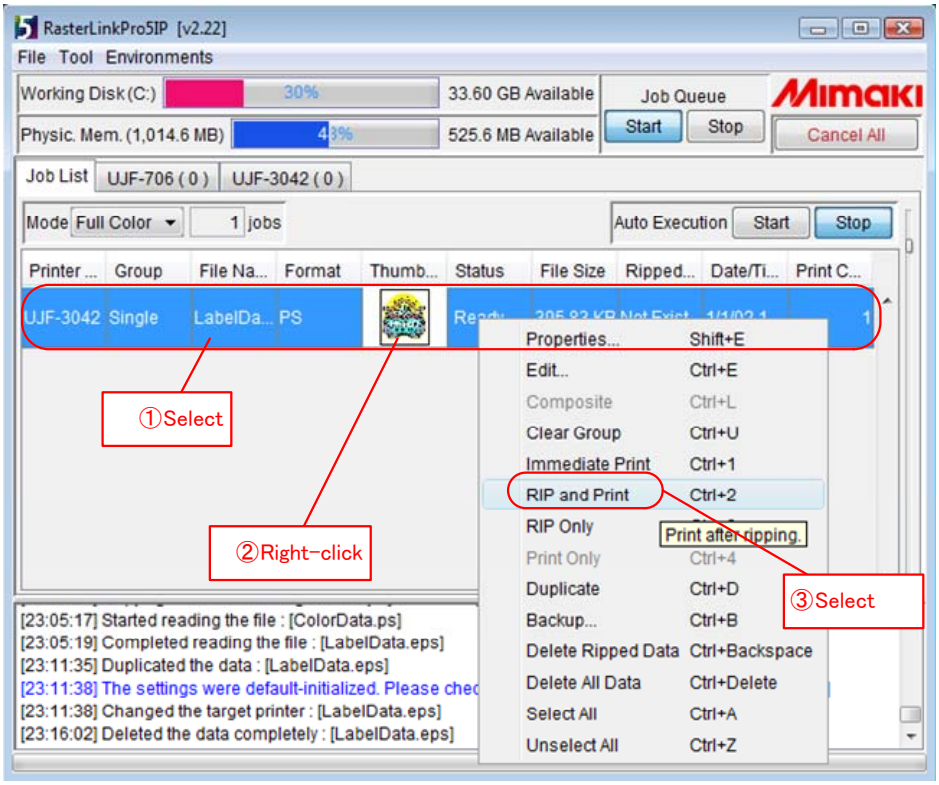
Specify the number of “Additional UV Irradiation” and “Illuminance” at your will.

Hint

When you print several times to realize Emboss Print with clear liquid, curing may not be enough. In such a case, set the illuminance higher. Or, you can specify the number of Additional UV Irradiation to one to three and perform curing later.

Click the [OK] button to terminate the image edit screen.

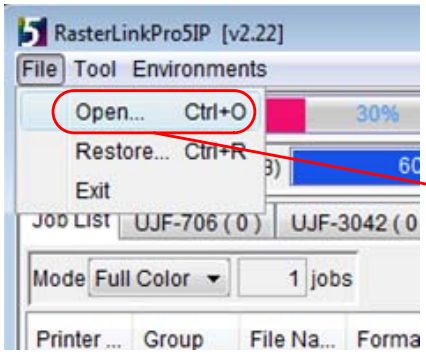
Select a job in the [Job List] and right-click. Then, select [RIP and Print] to perform printing.

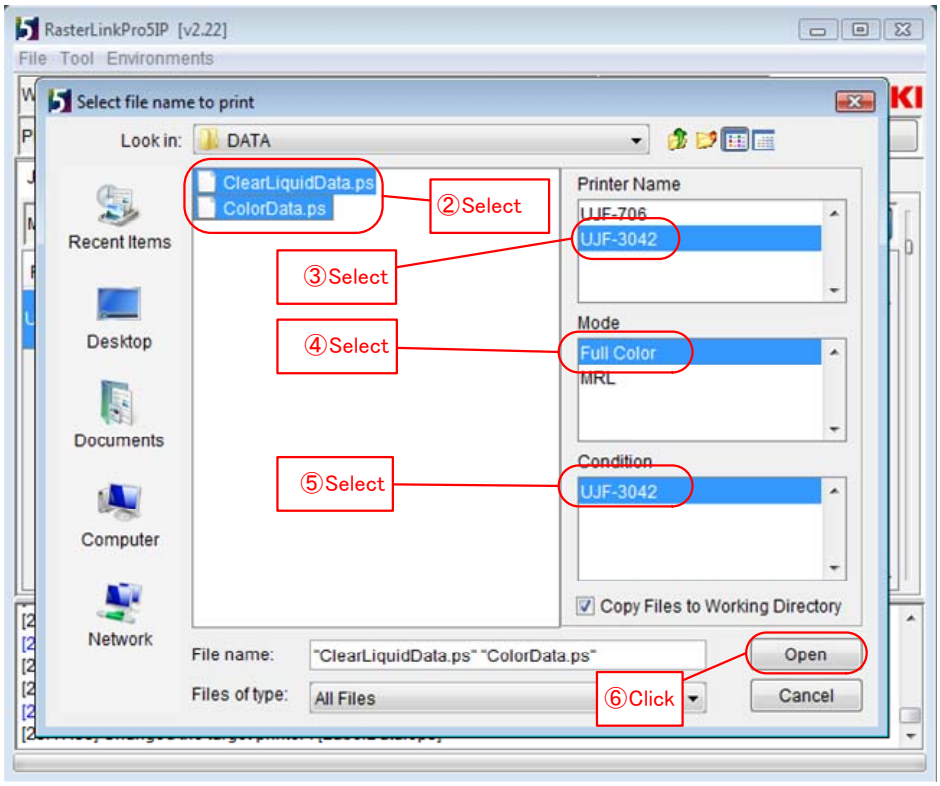


3-3. Create the job for manual composition. (Group multiple jobs.)

Select [Open] of the [Job List] and enter “Color Image”.

Select [Open] of the [Job List] and enter “Image to be replaced with clear liquid” (clear image).

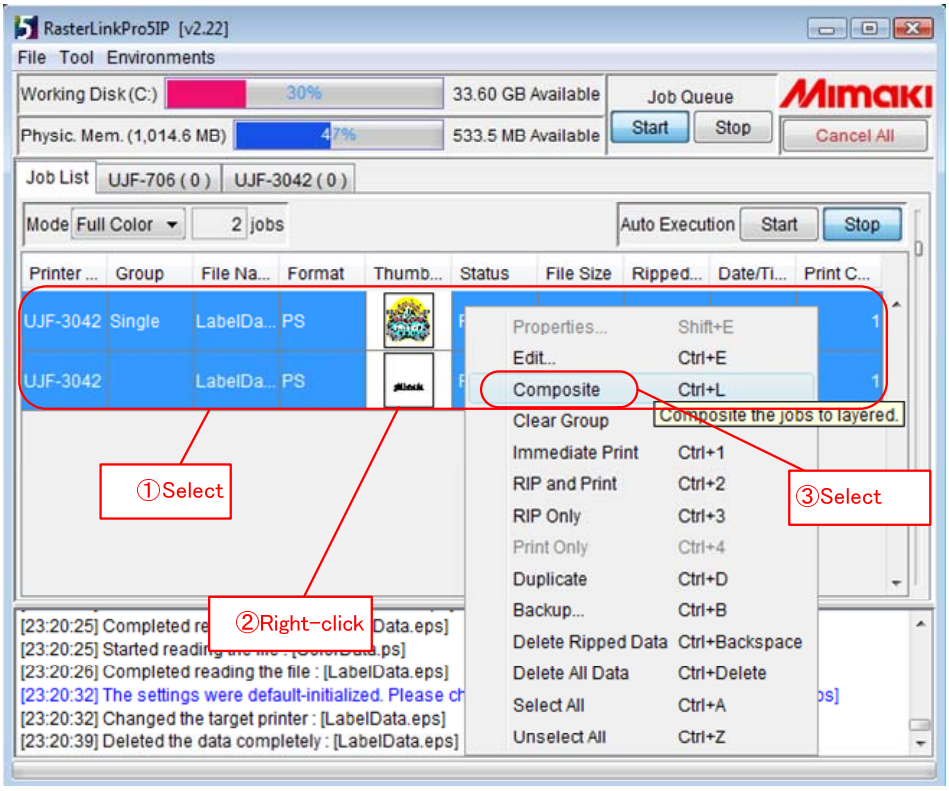




Select “Color Image” and “Image to be replaced with clear liquid” and right-click. Select [Composite] to display [Image edit screen].

Hint

You can also enter the special color image and combine the special image, the color image and the clear image in this order.



Select the device profile in [Print Condition] and select “Special Colorset” of clear in [Print Mode].

Clear Liquid is indicated as “Cl”.

The displayed contents differ depending on your printer and the device profile, therefore, select the Special Colorset suitable for your environment.

“Cl”: Clear liquid one color

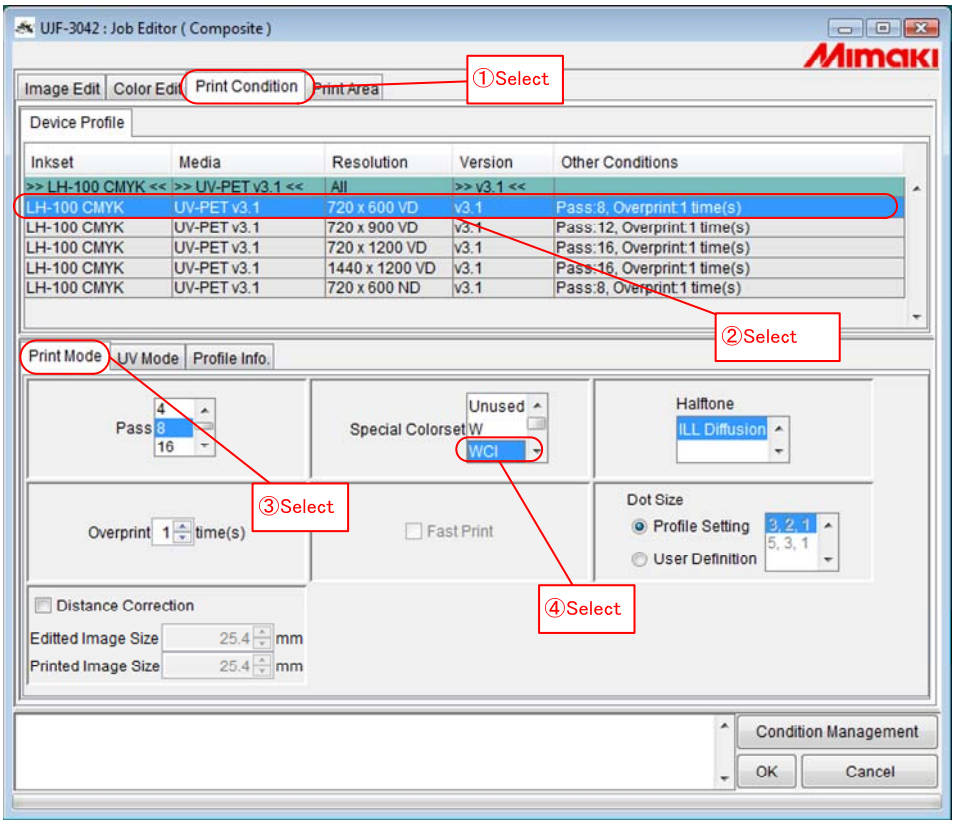
“ClCl”: Clear liquid two colors

“WC1”: White one color

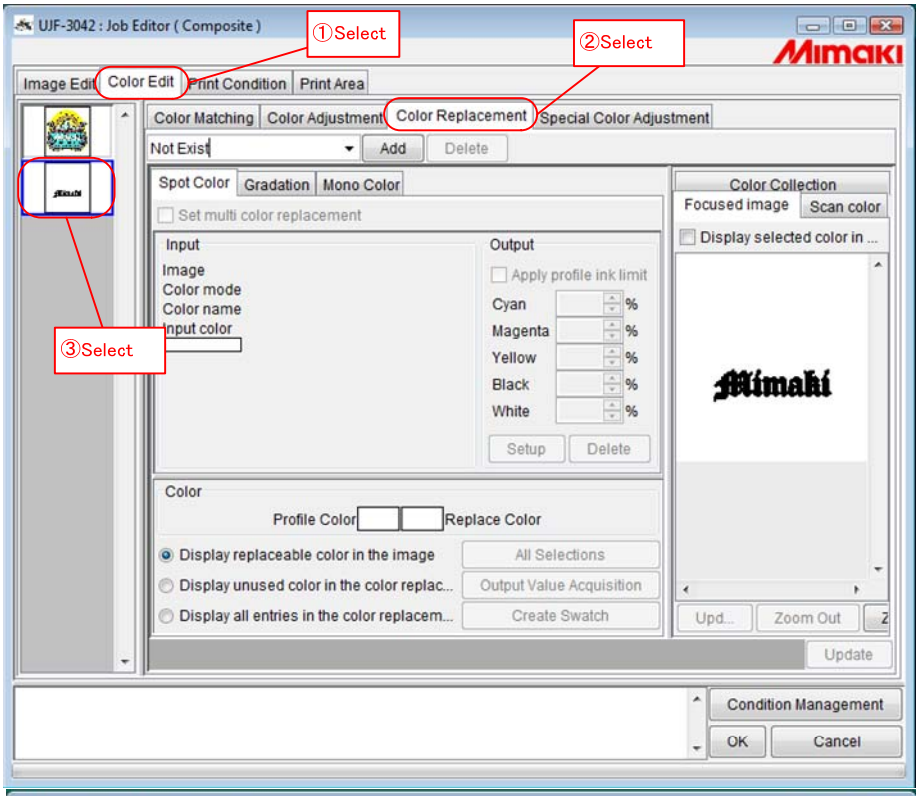
: Clear liquid one color

“WWClCl”: White two colors

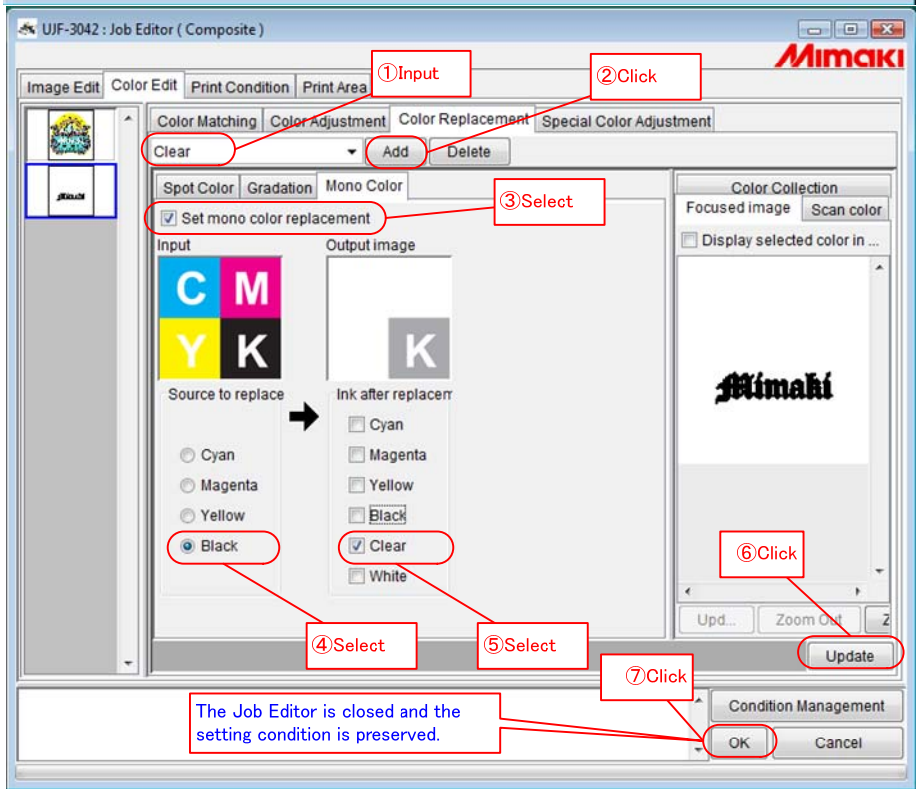
: Clear liquid two colors



Select [Color Edit] - [Color Replacement] and select “Image to be replaced with clear liquid” from the thumbnail list.



Add the color replacement definition file and select “Set mono color replacement”. Replace “Black” with “Clear” and press [Update] button.



Hint

When performing Glossy Print in the printing method dedicated to UJF-3042, Print Density of “Image to be replaced with clear liquid” affects the image quality of Glossy Print. For details, refer to “4-4 Note on Glossy Print of UJF-3042”.

Click the “OK” button.

Up to now, the basic setting of the job using clear liquid with manual composition (grouping multiple jobs) has been completed. From here, set details of clear liquid special print. Depending on the type of special print, refer to the chapters below:

Glossy Print -------- 3-3-1 “Perform Glossy Print.” (Printing Method Common to All Machine Types)

Glossy Print -------- 3-3-2 “Perform Glossy Print.” (Printing Method Dedicated to UJF-3042)

Matte Print -------- 3-3-3 “Perform Matte Print.”

Emboss Print -------- 3-3-4 “Perform Emboss Print”.

3-3-1 Perform Glossy Print. (Printing Method Common to All Machine Types)

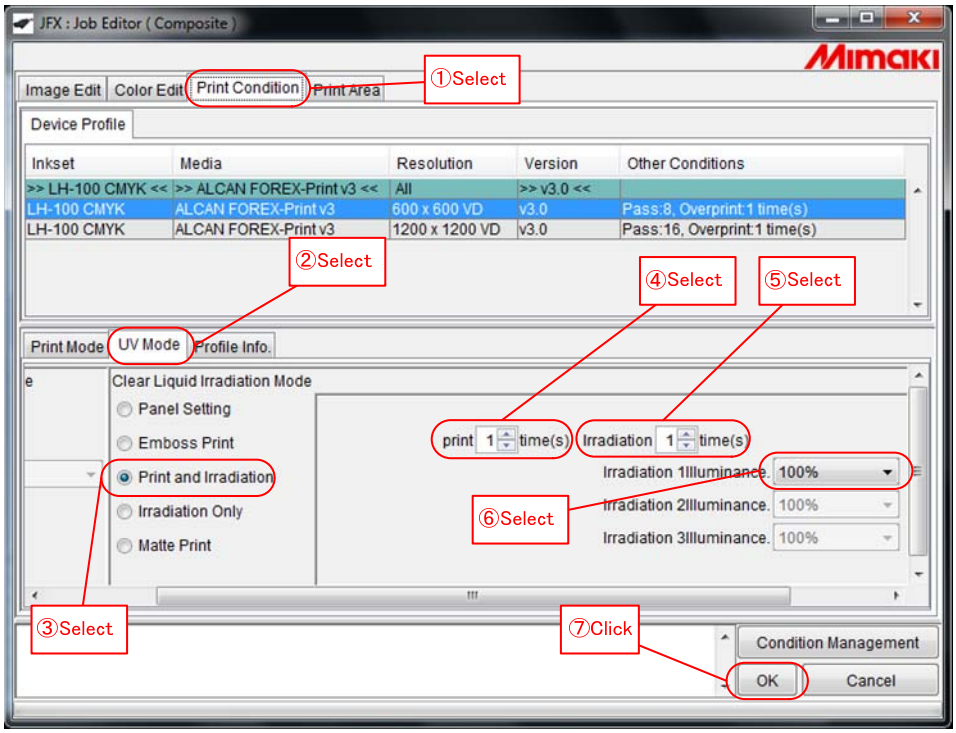
The method to perform Glossy Print of clear liquid is explained. (Here, it is based on the premise that the basic setting explained in 3-3 “Create the job for manual composition. (Group multiple jobs.)” has been completed.)

Select [Print Condition] - [UV Mode].

Select “Print and Irradiation” of “Clear Liquid Irradiation Mode”.

Set “Print” to “1 time”.

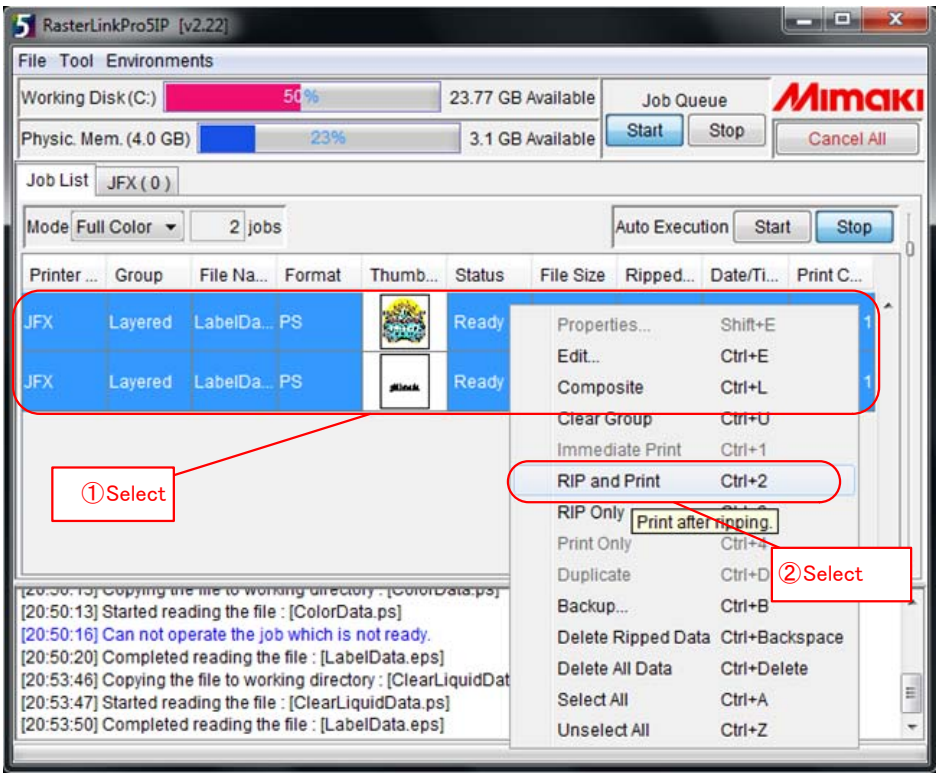
Set the number of “Irradiation” and “Illuminance” at your will.



Hint

When “Print and Irradiation” is selected, data (printing data) to discharge clear liquid without UV irradiation is output to the printer. Then, data (irradiation data) to perform UV irradiation without printing clear liquid is output to the printer. “Printing data” and “irradiation data” are output by the number of times set on the screen.

Click the [OK] button to terminate the image edit screen.



Select the job in the [Job List] and right-click. Then, select [RIP and Print] to perform printing.

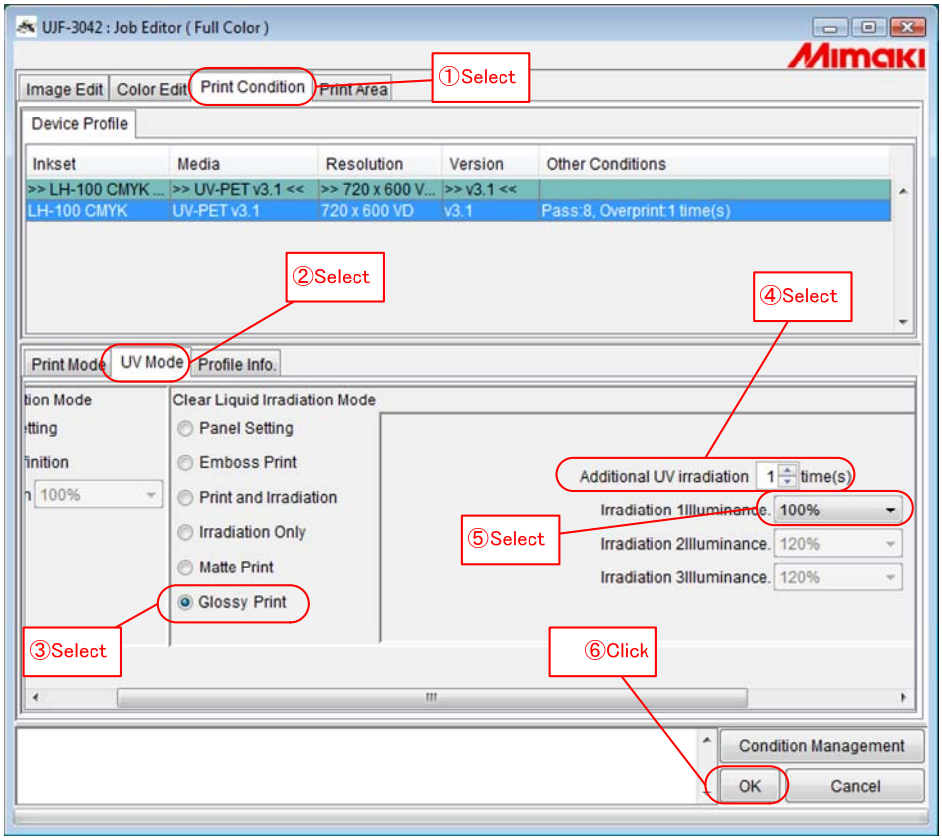
3-3-2 Perform Glossy Print. (Printing Method Dedicated to UJF-3042)

The method to perform Glossy Print of clear liquid is explained. (Here, it is based on the premise that the basic setting explained in 3-3 “Create the job for manual composition. (Group multiple jobs.)” has been completed.)

Select [Print Condition] - [UV Mode].

Select “Glossy Print” of “Clear Liquid Irradiation Mode”.

Set the number of “Additional UV Irradiation” and “Illuminance” at your will.

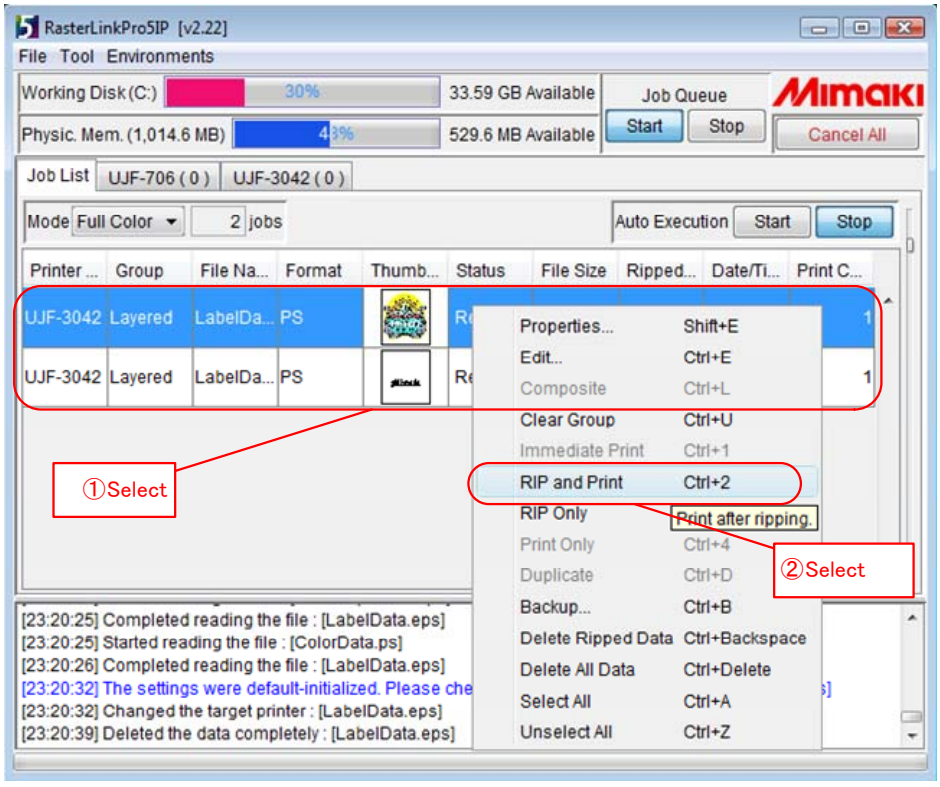


Hint

As Glossy Print controls so that the UV lamp may be turned off partly, clear liquid curing may not be enough. You can specify the number of Additional UV Irradiation to one to three and perform curing later.

Click the [OK] button to terminate the image edit screen.

Select the job in the [Job List] and right-click. Then, select [RIP and Print] to perform printing.



3-3-3 Perform Matte Print.

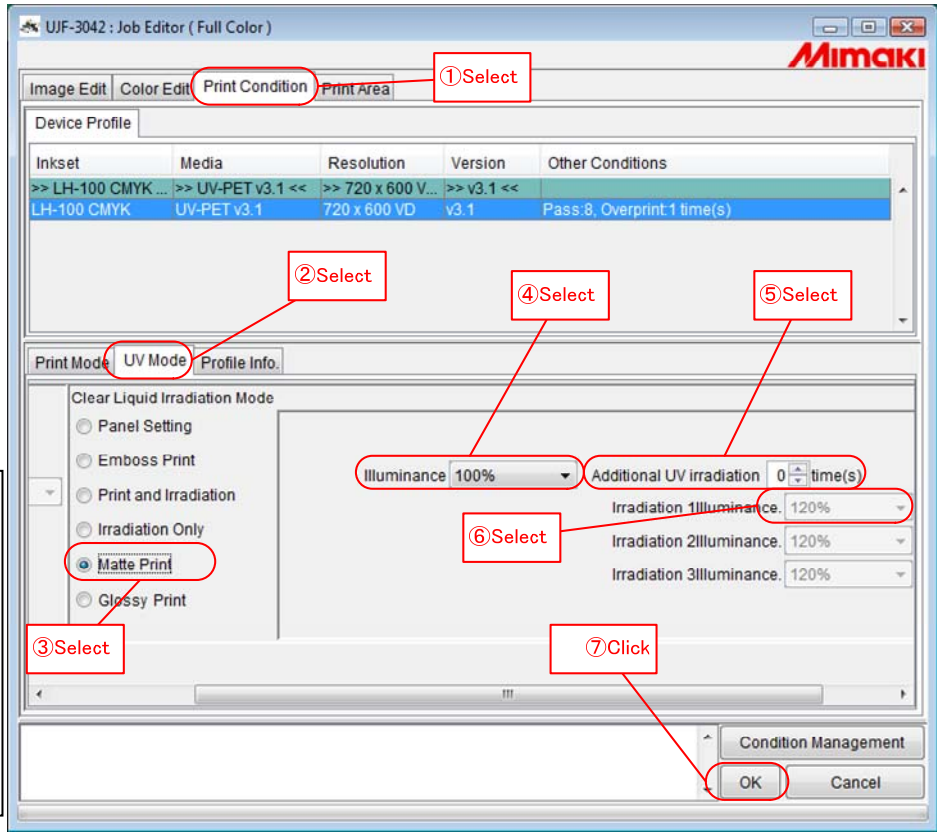
The method to perform Matte Print of clear liquid is explained. (Here, it is based on the premise that the basic setting explained in 3-3 “Create the job for manual composition. (Group multiple jobs.)” has been completed.)

Select [Print Condition] - [UV Mode].

Select “Matte Print” of “Clear Liquid Irradiation Mode”.

Set “Illuminance” at your will.

Set the number of “Additional UV Irradiation” and “Illuminance” at your will.

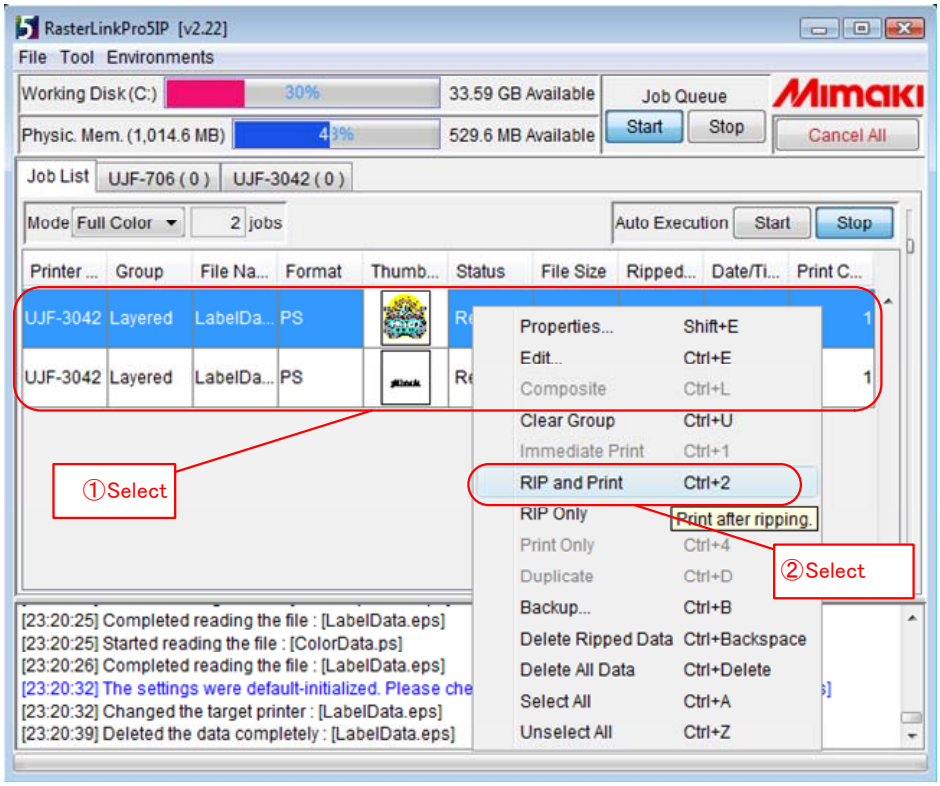


Hint

Depending on the density of clear liquid, curing may not be enough. In such a case, set the Illuminance higher. Or, you can specify the number of Additional UV Irradiation to one to three and perform curing later.

Click the [OK] button to terminate the image edit screen.

Select the job in the [Job List] and right-click. Then, select [RIP and Print] to perform printing.



3-3-4 Perform Emboss Print.

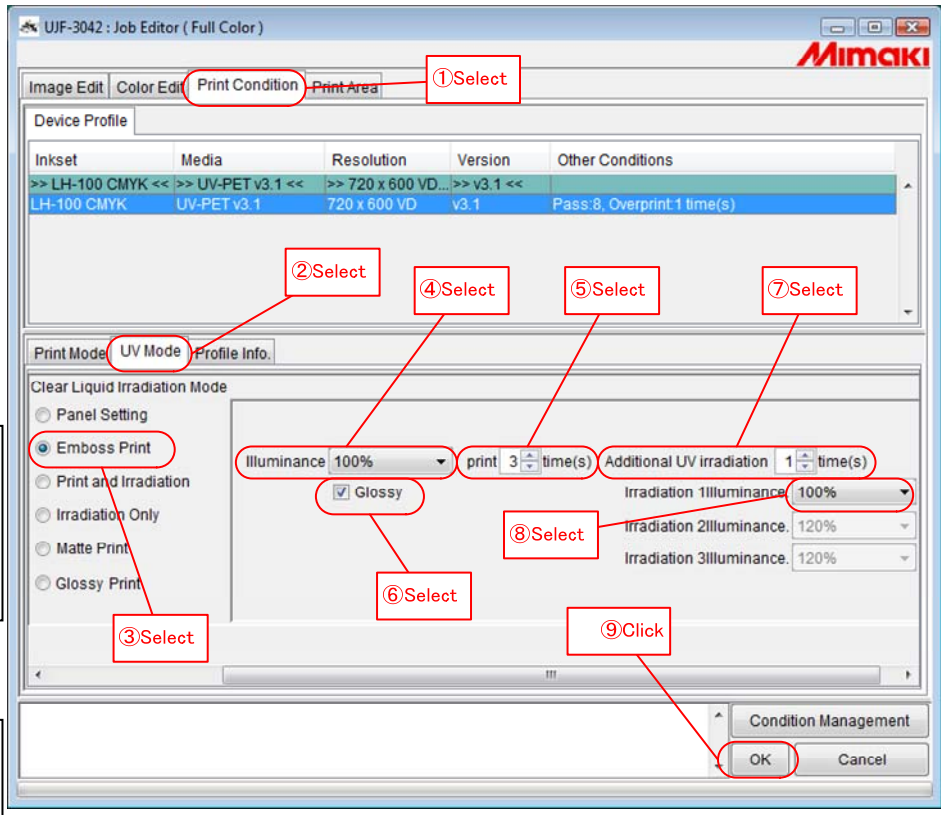
The method to perform Emboss Print of clear liquid is explained. (Here, it is based on the premise that the basic setting explained in 3-3 “Create the job for manual composition. (Group multiple jobs.)” has been completed.)

Select [Print Condition] - [UV Mode].

Select “Emboss Print” of “Clear Liquid Irradiation Mode”.

Set “Illuminance” at your will.

Set the “Print time(s)” to one to nine at your will.



Hint

The more the number of printings becomes, the more three dimensional the printing result looks.

Hint

When your printer is UJF-3042, by selecting “Glossy Print”, you can set the printing method of the last clear liquid.

Select: Glossy Print

Not select: Matte Print

When you select “Glossy Print“, Print Density and the number of printings affect the image quality. For details, refer to “4-4 Note on Glossy Print of UJF-3042”.

When you use the printer other than UJF-3042, the same print can be performed by combining multiple jobs. For details, refer to 4-3-4.2.

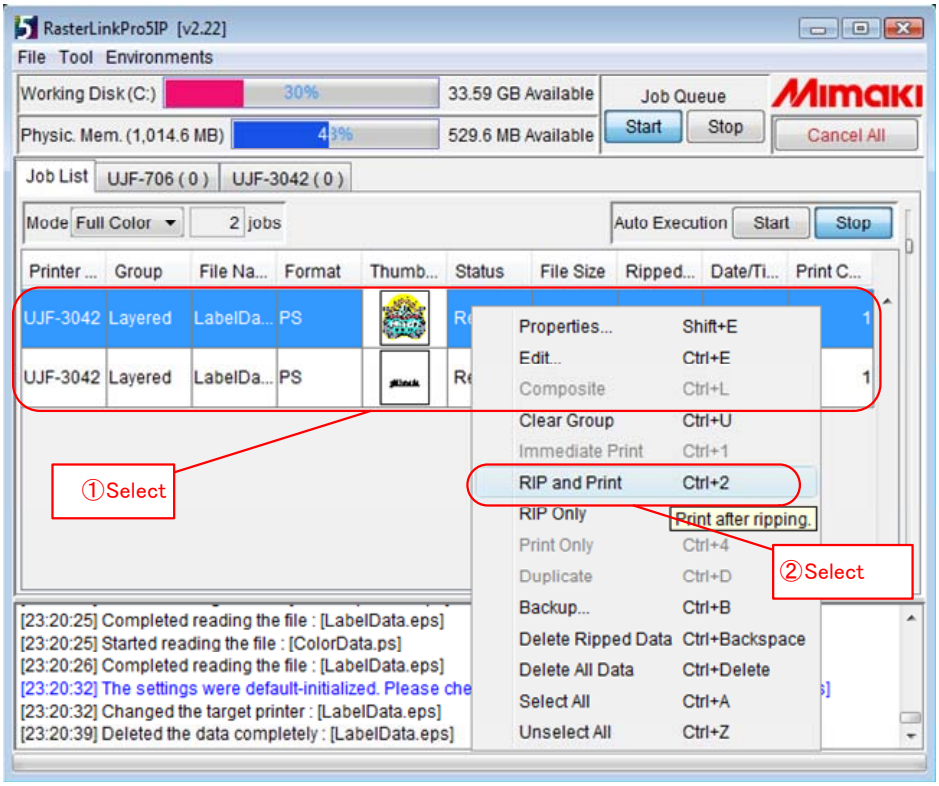
Set the number of “Additional UV Irradiation” and “Illuminance” at your will.

Hint

When you print several times to realize Emboss Print with clear liquid, curing may not be enough. In such a case, set the illuminance higher. Or, you can specify the number of Additional UV Irradiation to one to three and perform curing later.

Click the [OK] button to terminate the image edit screen.

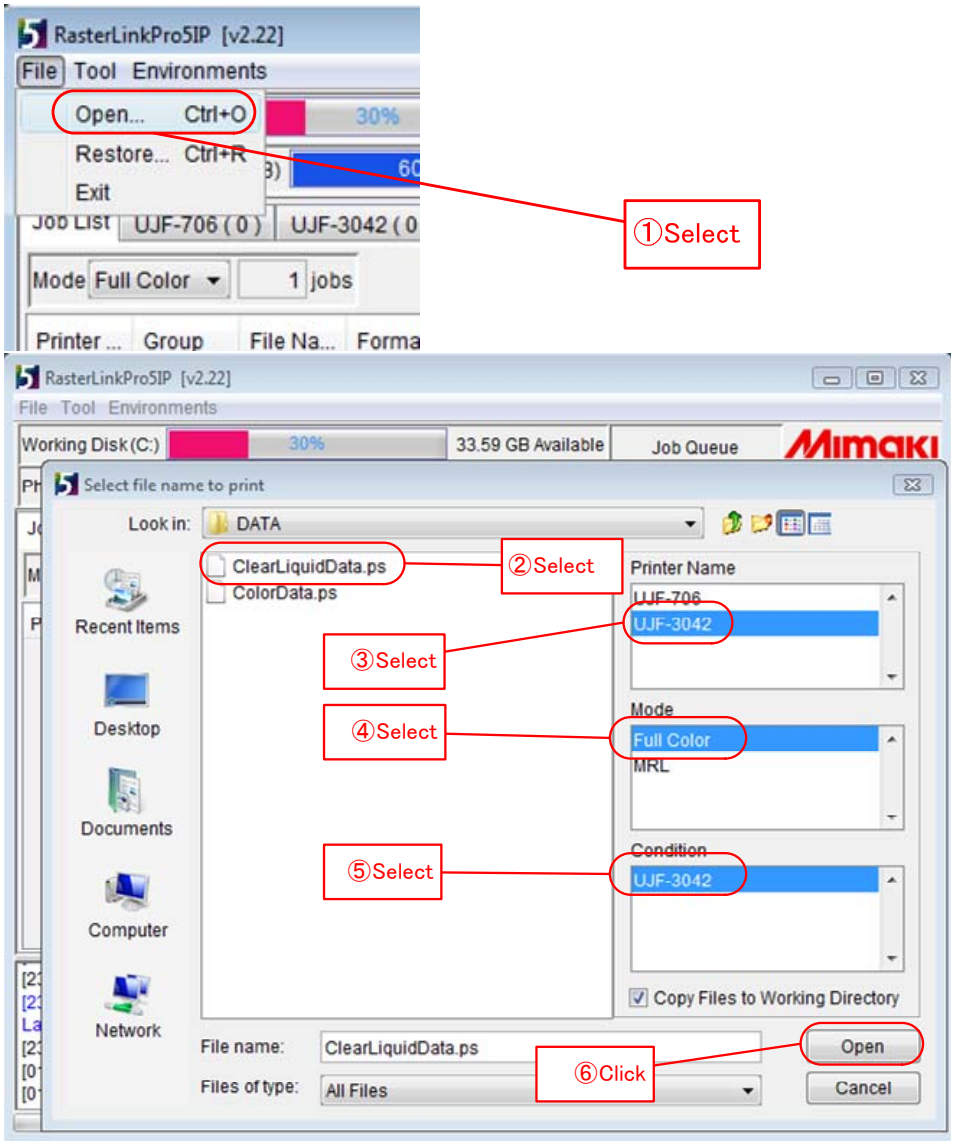
Select the job in the [Job List] and right-click. Then, select [RIP and Print] to perform printing.



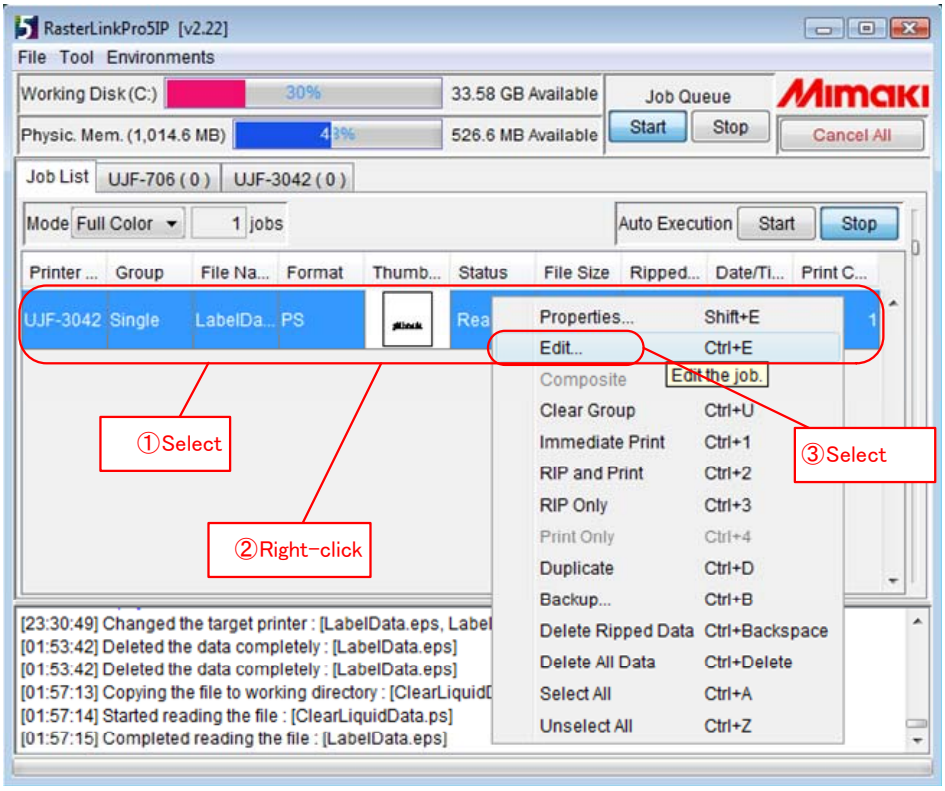
3-4. Create the single job of clear image.

Select [Open] of [Job List] and enter “Color Image”.

Select [Open] of [Job List] and enter “Image to be replaced with clear liquid” (clear image).



Select “Image to be replaced with clear liquid”. Right-click and select [Edit] to display [Image Edit Screen].



Select Device Profile in [Print Condition], and select “Special Colorset” of clear in [Print Mode].

Clear Liquid is indicated as “Cl”.

The displayed contents differ depending on your printer and the device profile, therefore, select the Special Colorset suitable for your environment.

“Cl”: Clear liquid one color

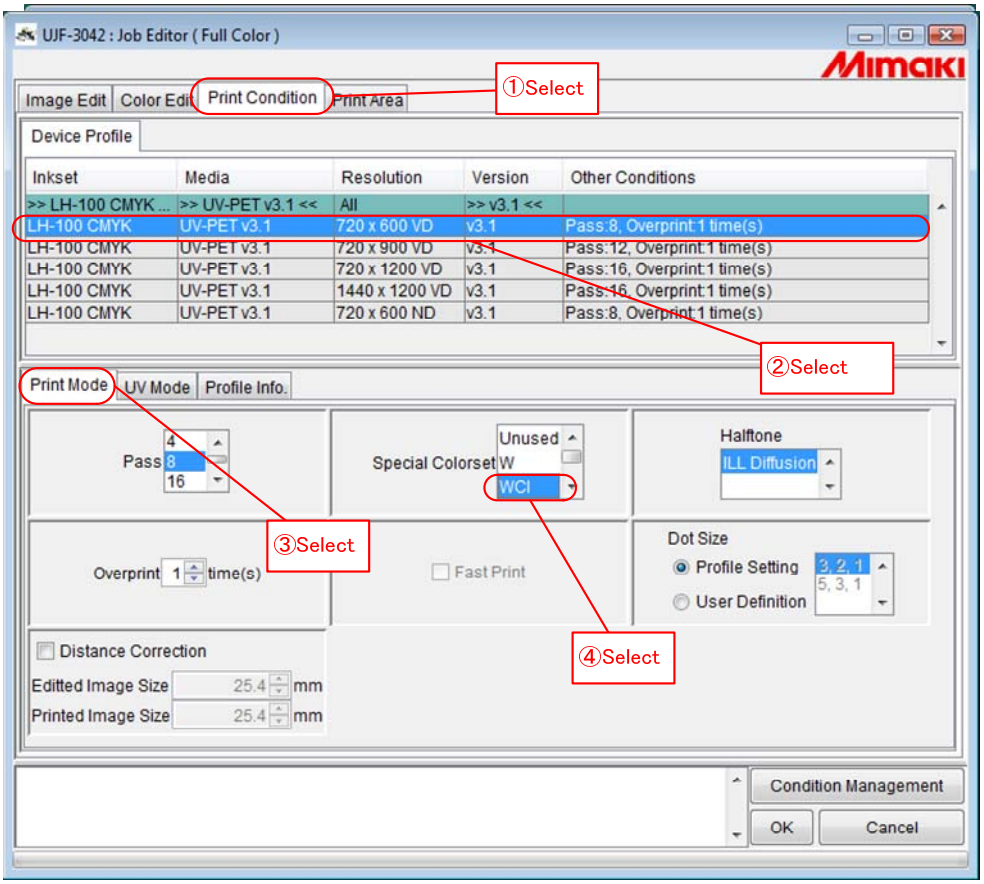
“ClCl”: Clear liquid two colors

“WC1”: White one color

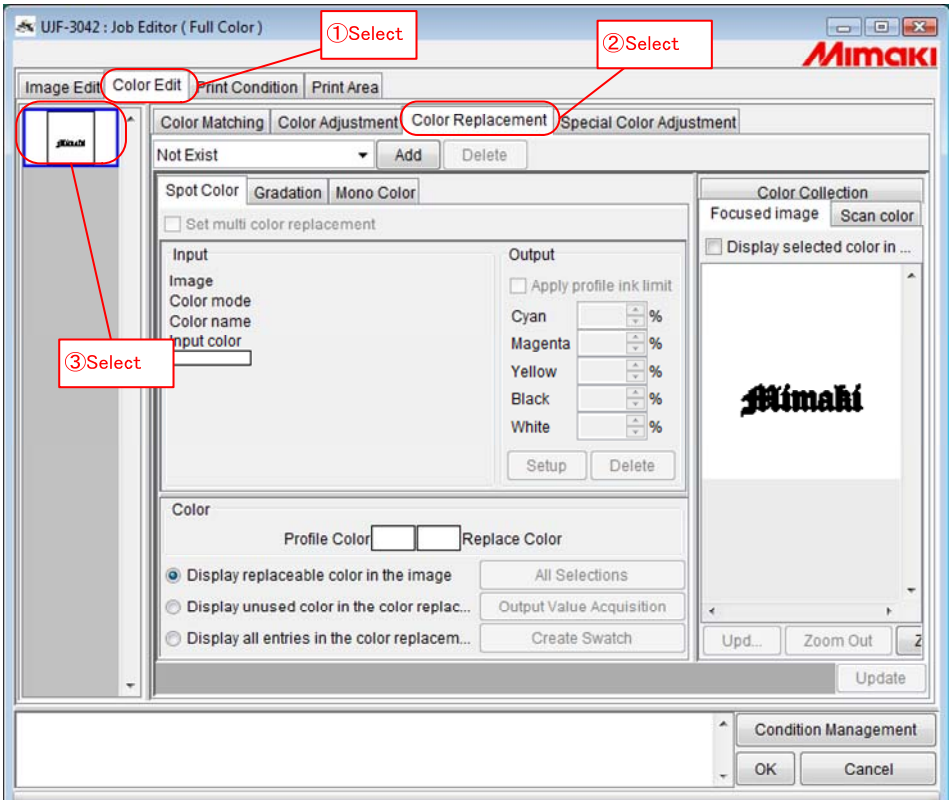
: Clear liquid one color

“WWClCl”: White two colors

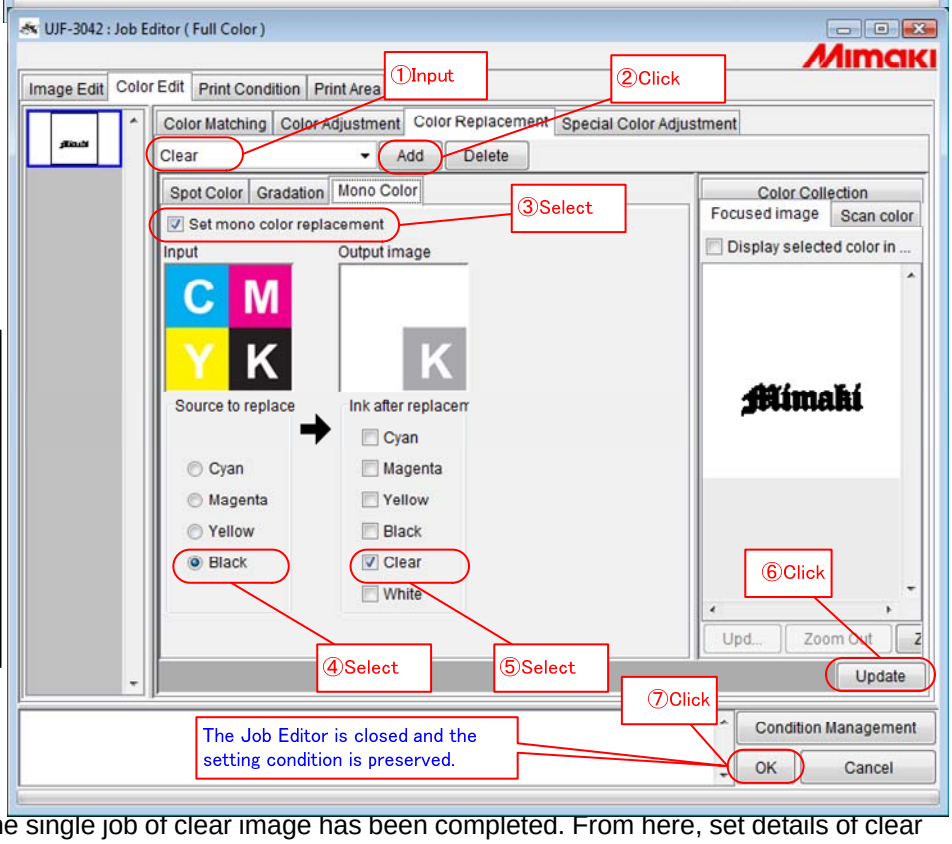
: Clear liquid two colors



Select [Color Edit] - [Color Replacement] and select “Image to be replaced with clear liquid” from the thumbnail list.



Add the color replacement definition file and select “Set mono color replacement”. Replace “Black” with “Clear” and press [Update] button.



Hint

When performing Glossy Print in the printing method dedicated to UJF-3042, Print Density of “Image to be replaced with clear liquid” affects the image quality of Glossy Print. For details, refer to “4-4 Note on Glossy Print of UJF-3042”.

Click the [OK] button.

Up to now, the basic setting of the single job of clear image has been completed. From here, set details of clear liquid special print. Depending on the type of special print, refer to the chapters below:

Glossy Print -------- 3-3-1 “Perform Glossy Print.” (Printing Method Common to All Machine Types)

Glossy Print -------- 3-3-2 “Perform Glossy Print.” (Printing Method Dedicated to UJF-3042)

Matte Print -------- 3-4-2 “Perform Matte Print.”

Emboss Print -------- 3-4-3 “Perform Emboss Print”.

3-4-1 Perform Glossy Print. (Printing Method Common to All Machine Types)

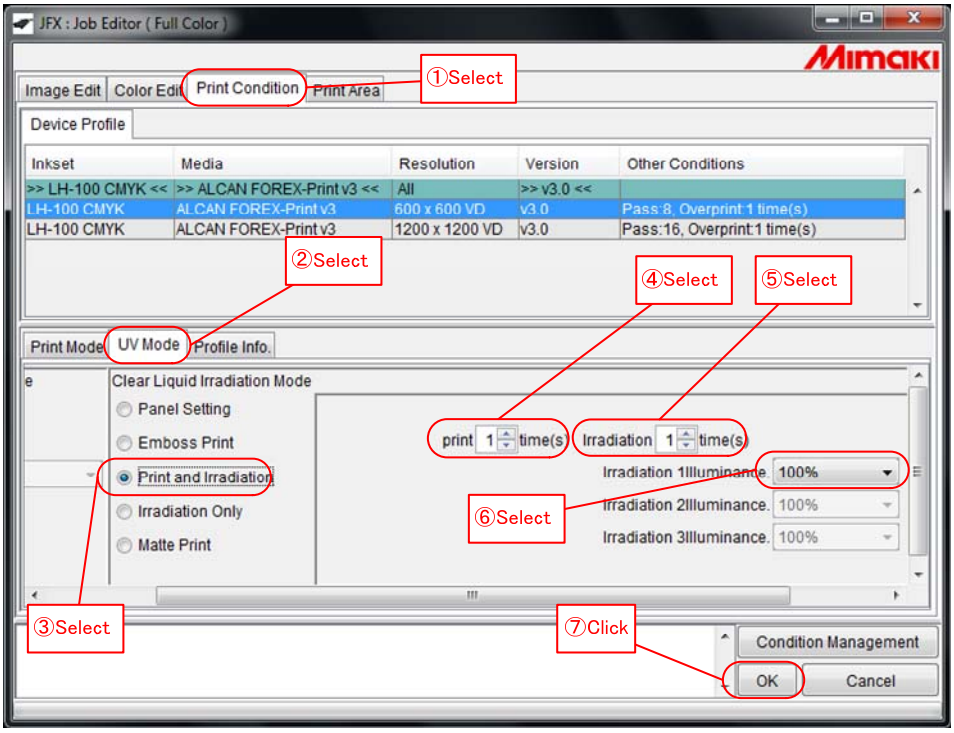
The method to perform Glossy Print of clear liquid is explained. (Here, it is based on the premise that the basic setting explained in 3-4 “Create the single job of clear image.” has been completed.)

Select [Print Condition] - [UV Mode].

Select “Print and Irradiation” of “Clear Liquid Irradiation Mode”.

Set “Print” to “1 time”.

Set the number of “Irradiation” and “Illuminance” at your will.

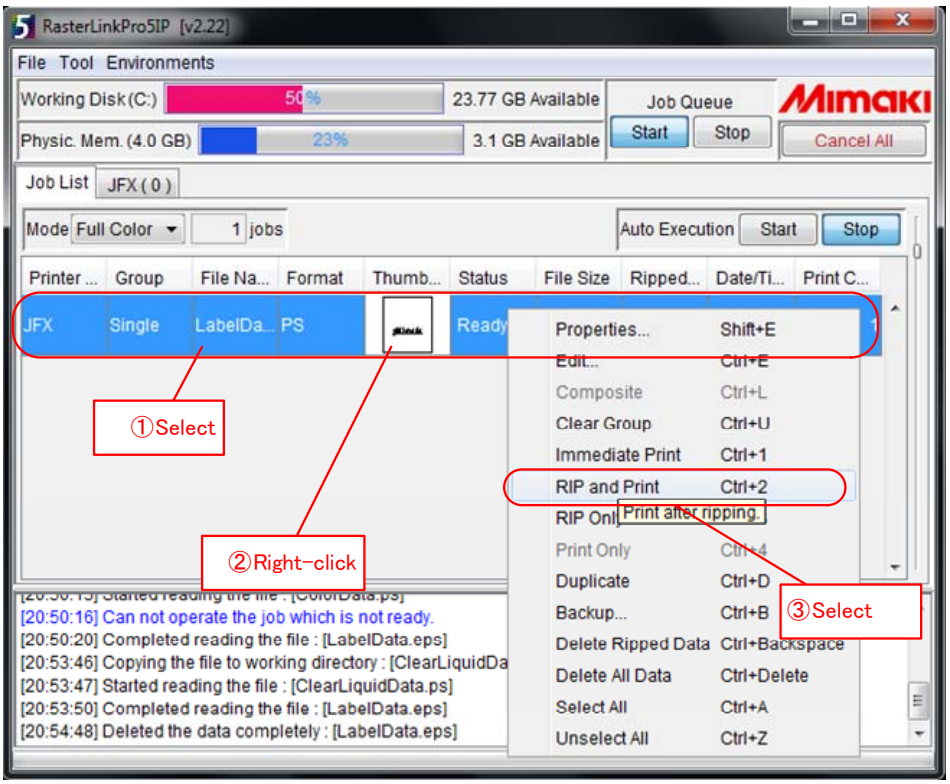


Hint

When “Print and Irradiation” is selected, data (printing data) to discharge clear liquid without UV irradiation is output to the printer. Then, data (irradiation data) to perform UV irradiation without printing clear liquid is output to the printer. “Printing data” and “irradiation data” are output by the number of times set on the screen.

Click the [OK] button to terminate the image edit screen.

Select the job in the [Job List] and right-click. Then, select [RIP and Print] to perform printing.



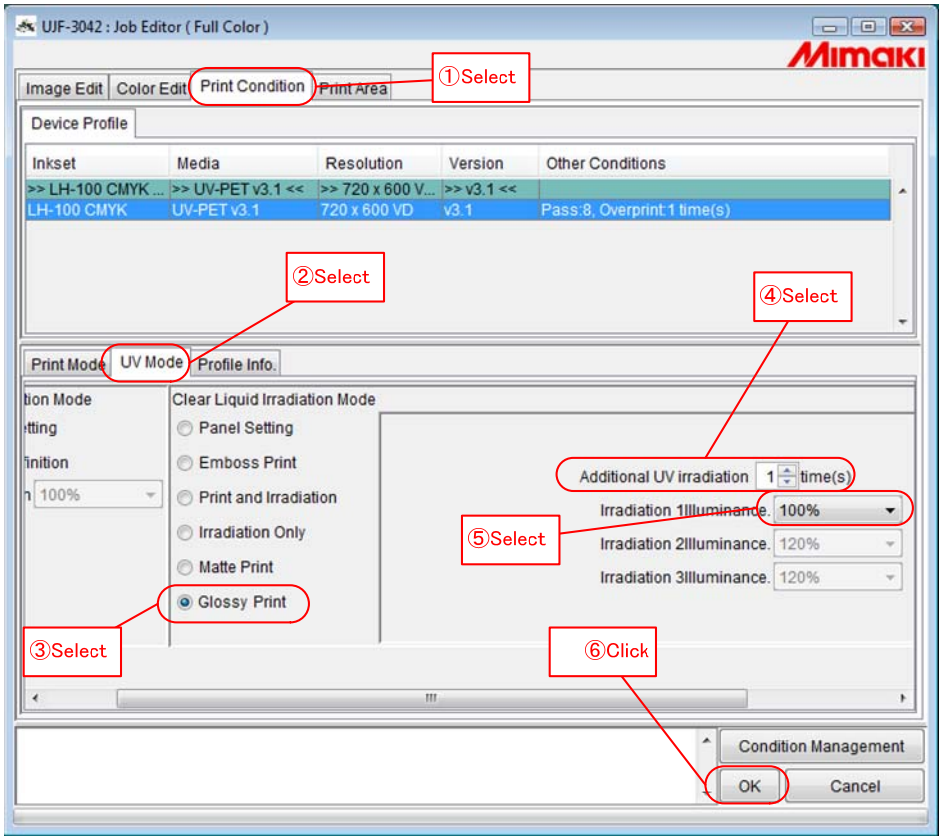
3-4-2 Perform Glossy Print. (Printing Method Dedicated to UJF-3042)

The method to perform Glossy Print of clear liquid is explained. (Here, it is based on the premise that the basic setting explained in 3-4 “Create the single job of clear image.” has been completed.)

Select [Print Condition] - [UV Mode].

Select “Glossy Print and Irradiation” of “Clear Liquid Irradiation Mode”.

Set the number of “Additional UV Irradiation” and “Illuminance” at your will.

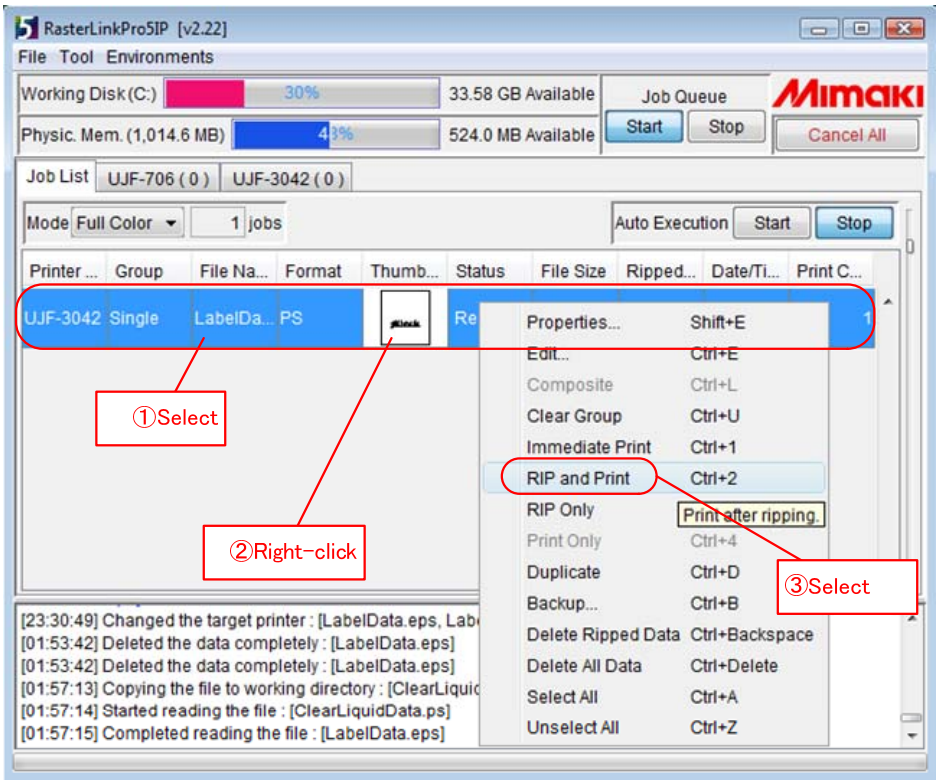


Hint

As Glossy Print controls so that the UV lamp may be turned off partly, clear liquid curing may not be enough. You can specify the number of Additional UV Irradiation to one to three and perform curing later.

Click the [OK] button to terminate the image edit screen.

Select the job in the [Job List] and right-click. Then, select [RIP and Print] to perform printing.



3-4-3 Perform Matte Print.

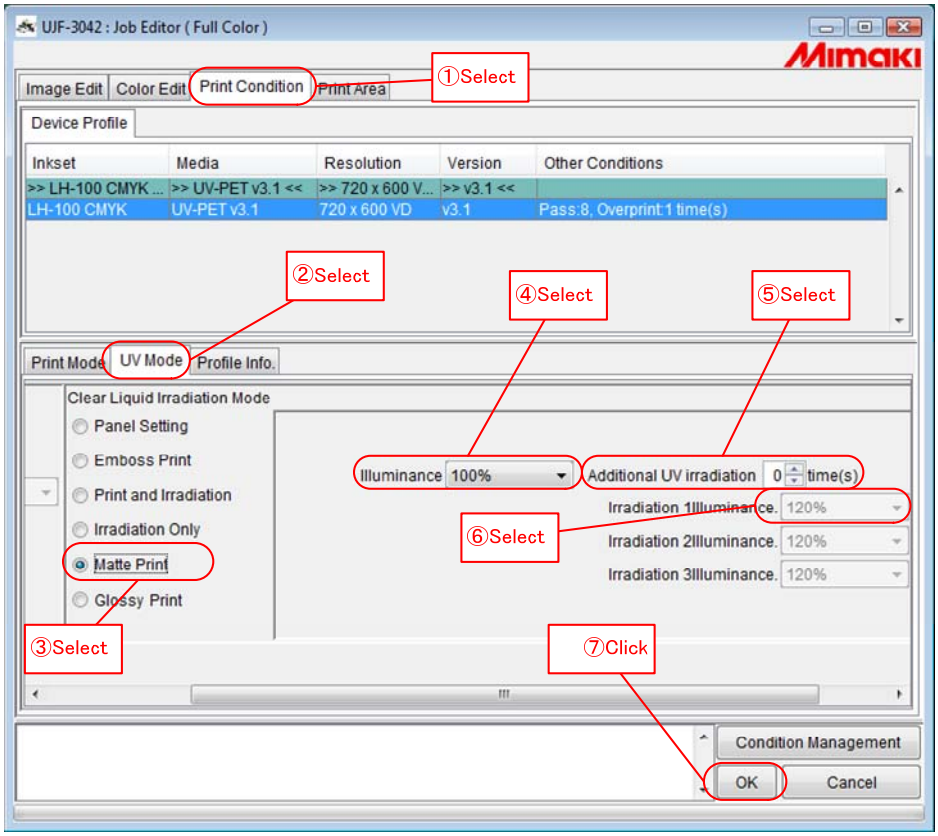
The method to perform Matte Print of clear liquid is explained. (Here, it is based on the premise that the basic setting explained in 3-4 “Create the single job of clear image.” has been completed.)

Select [Print Condition] - [UV Mode].

Select “Matte Print and Irradiation” of “Clear Liquid Irradiation Mode”.

Set “Illuminance” at your will.

Set the number of “Additional UV Irradiation” and “Illuminance” at your will.

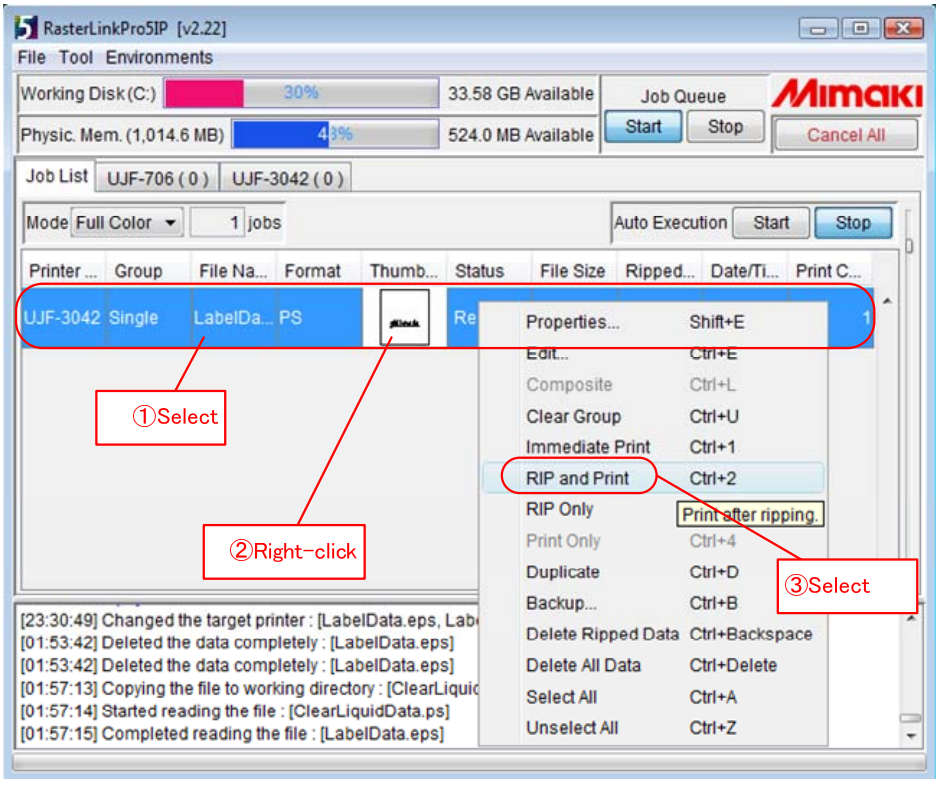


Hint

Depending on the density of clear liquid, curing may not be enough. In such a case, set the Illuminance higher. Or, you can specify the number of Additional UV Irradiation to one to three and perform curing later.

Click the [OK] button to terminate the image edit screen.

Select the job in the [Job List] and right-click. Then, select [RIP and Print] to perform printing.



3-4-4 Perform Emboss Print.

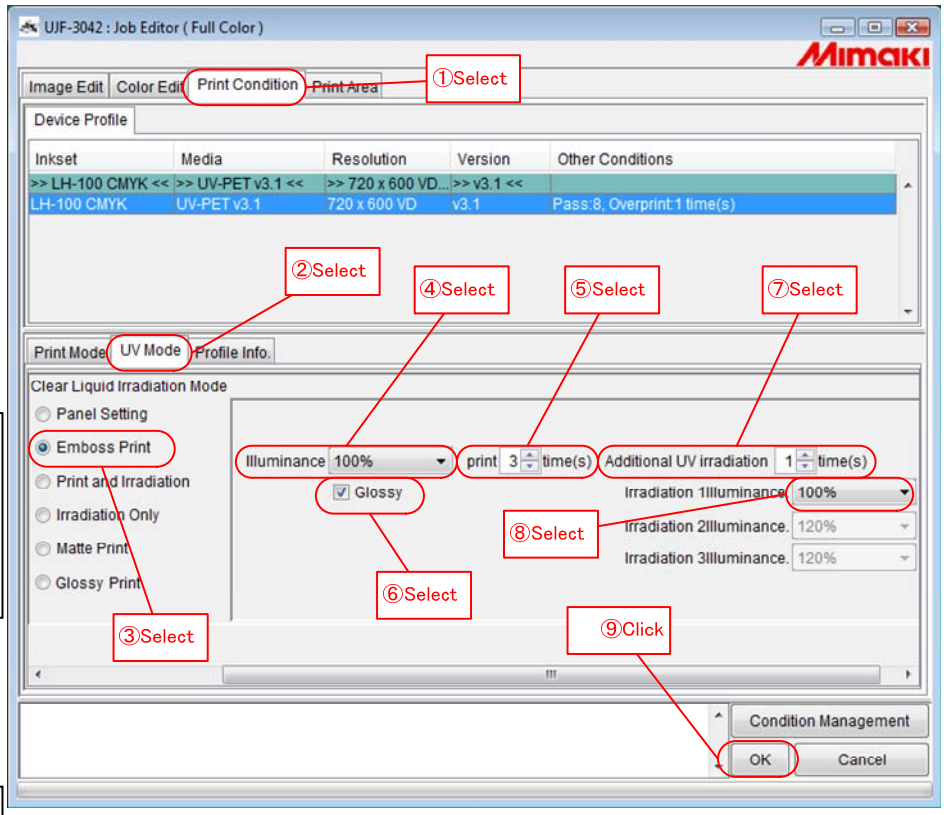
The method to perform Emboss Print of clear liquid is explained. (Here, it is based on the premise that the basic setting explained in 3-4 “Create the single job of clear image.” has been completed.)

Select [Print Condition] - [UV Mode].

Select “Emboss Print” of “Clear Liquid Irradiation Mode”.

Set “Illuminance” at your will.

Set the “Print time(s)” to one to nine at your will.



Hint

The more the number of printings becomes, the more three dimensional the printing result looks.

Hint

When your printer is UJF-3042, by selecting “Glossy Print”, you can set the printing method of the last clear liquid.

Select: Glossy Print

Not select: Matte Print

When you select “Glossy Print“, Print Density and the number of printings affect the image quality. For details, refer to “4-4 Note on Glossy Print of UJF-3042”.

When you use the printer other than UJF-3042, the same print can be performed by combining multiple jobs. For details, refer to 4-3-4.2.

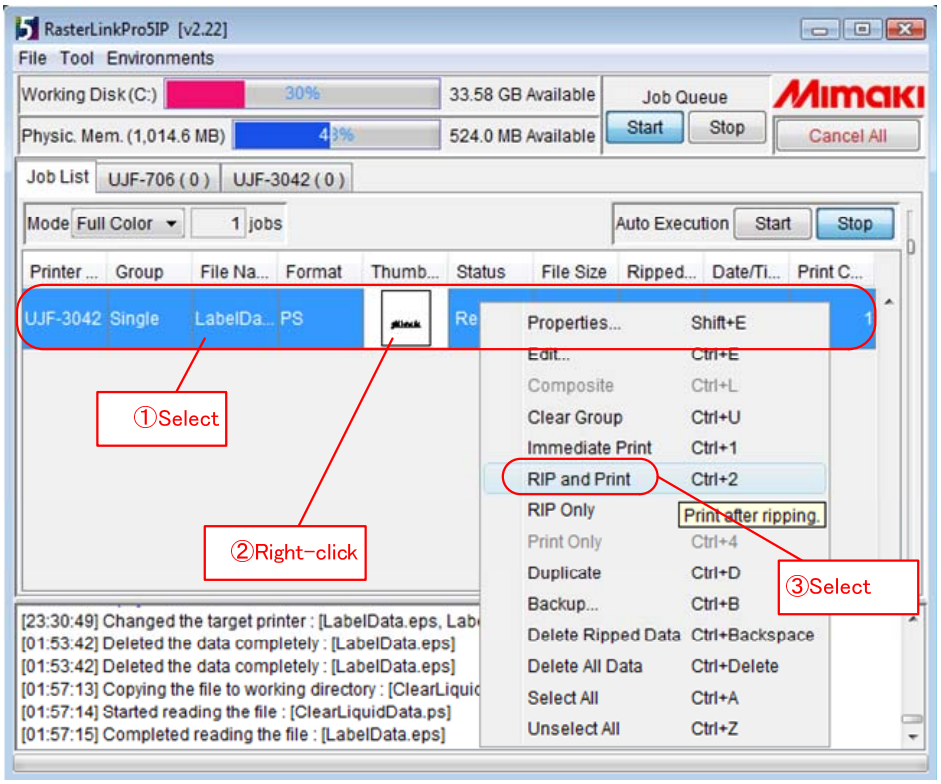
Specify the number of “Additional UV Irradiation” and “Illuminance” at your will.

Hint

When you print several times to realize Emboss Print with clear liquid, curing may not be enough. In such a case, set the illuminance higher. Or, you can specify the number of Additional UV Irradiation to one to three and perform curing later.

Click the [OK] button to terminate the image edit screen.

Select the job in the [Job List] and right-click. Then, select [RIP and Print] to perform printing.



Chapter 4 Supplementary Explanation

4-1. Setting of Other Clear Liquid

There are some settings of the clear liquid UV irradiation mode other than explained up to now. Supplementary explanation of each setting is provided here.

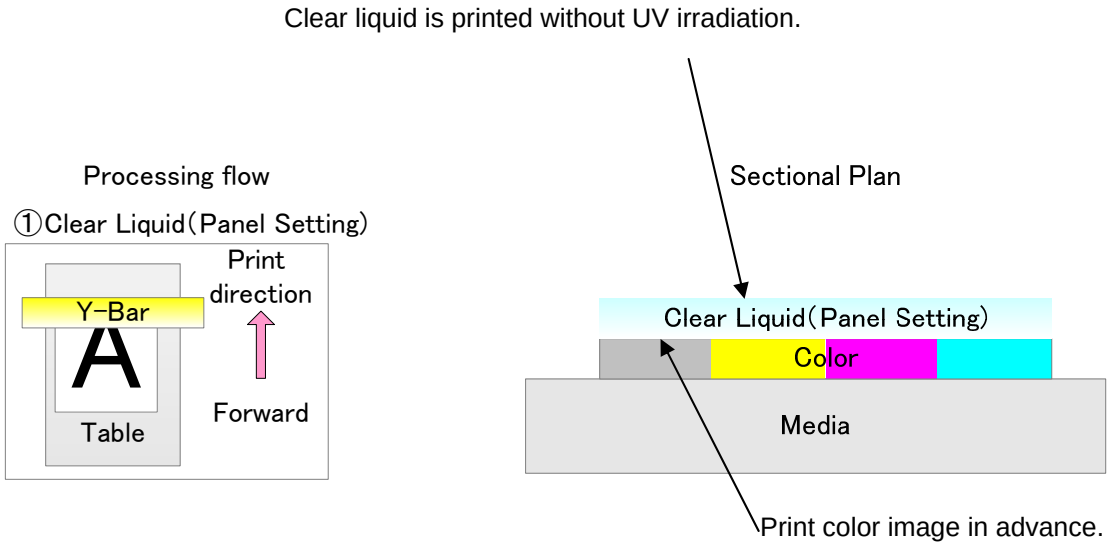
1) Panel Setting
2) Irradiation Only

4-1-1. Operation Panel Setting Value

When you select “Panel Setting”, the machine operates according to the mode of “LED UV unit” of the printer main body.

Use this when using the media being weak against heat, or, when you do not wish to light LED UV for test drawing during cleaning etc.

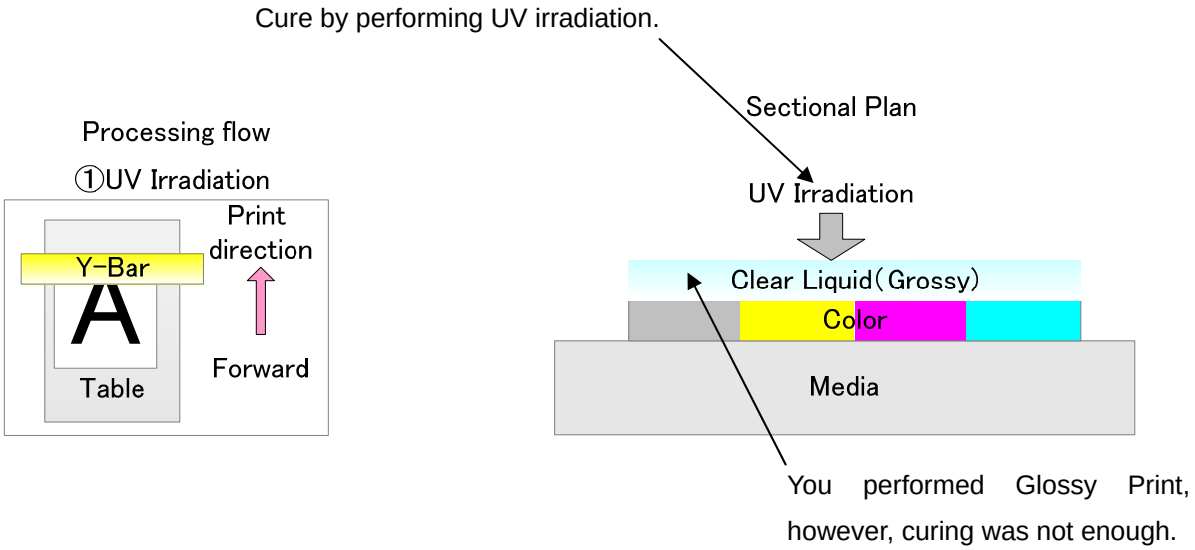
Ex.: When color image was printed in advance and you set the mode of “LED UV unit” of the printer main body to “OFF”



4-1-2. Irradiation Only

When you select “Irradiation only”, data with UV irradiation only is output. It is convenient to use this when you perform Glossy Print with Additional UV Irradiation 1 time, however, curing was not enough etc.

Ex.: When it is irradiation only



4-2. Creating Method of Image for Single Color Replacement to be Replaced with Clear Liquid (Clear Image)

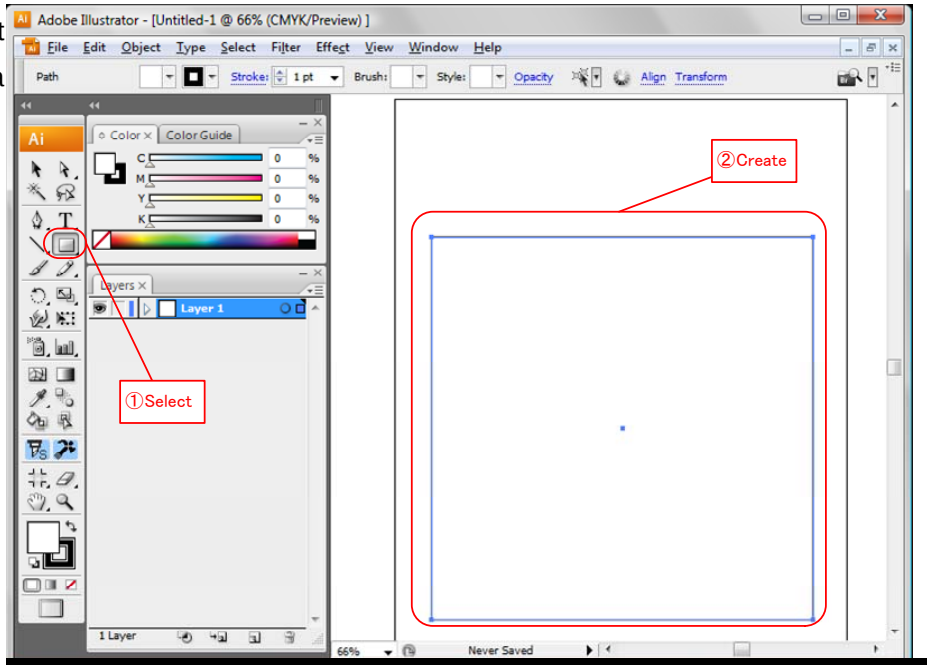
The creating method of data to be replaced with clear liquid is explained.

4-2-1. Create the image for single color replacement (clear image) from swatch pattern in Illustrator.

The creating method of data to print clear liquid by the texture pattern on the whole or some parts of the color image (hereinafter, referred to as clear image) is explained.

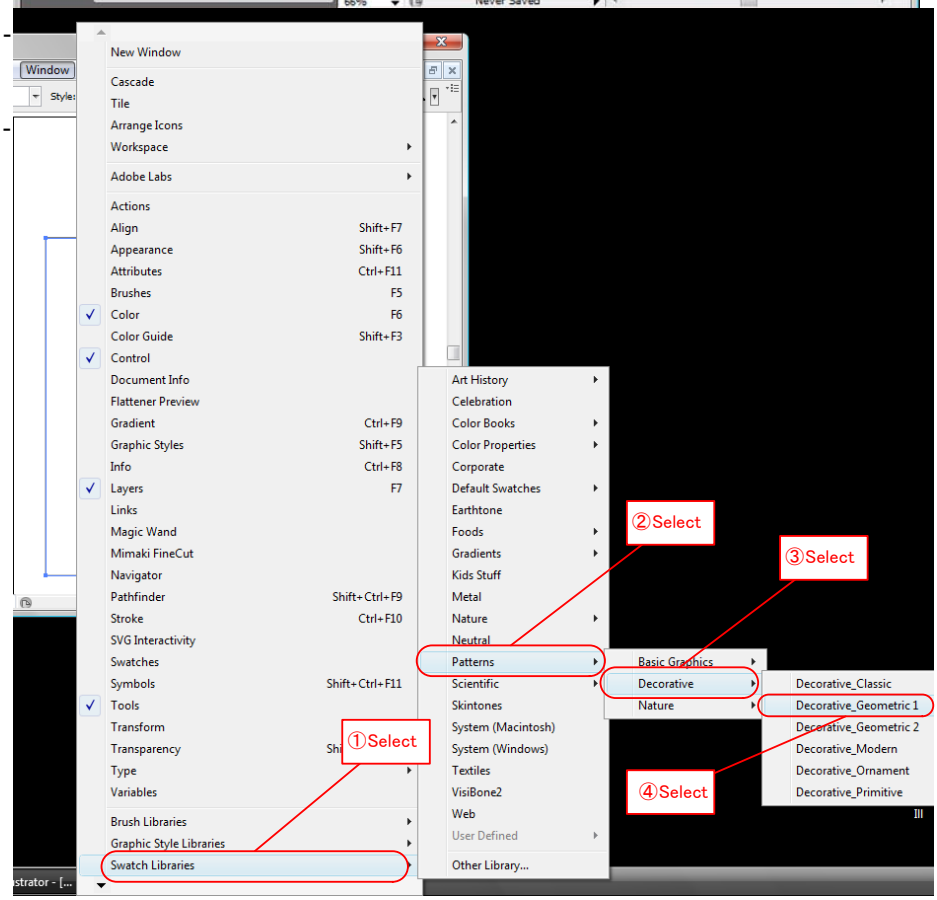
In the explanation below, create the clear image to print the texture pattern on the simple rectangle.

From New Document, select "Rectangle Tool" and create a rectangle.



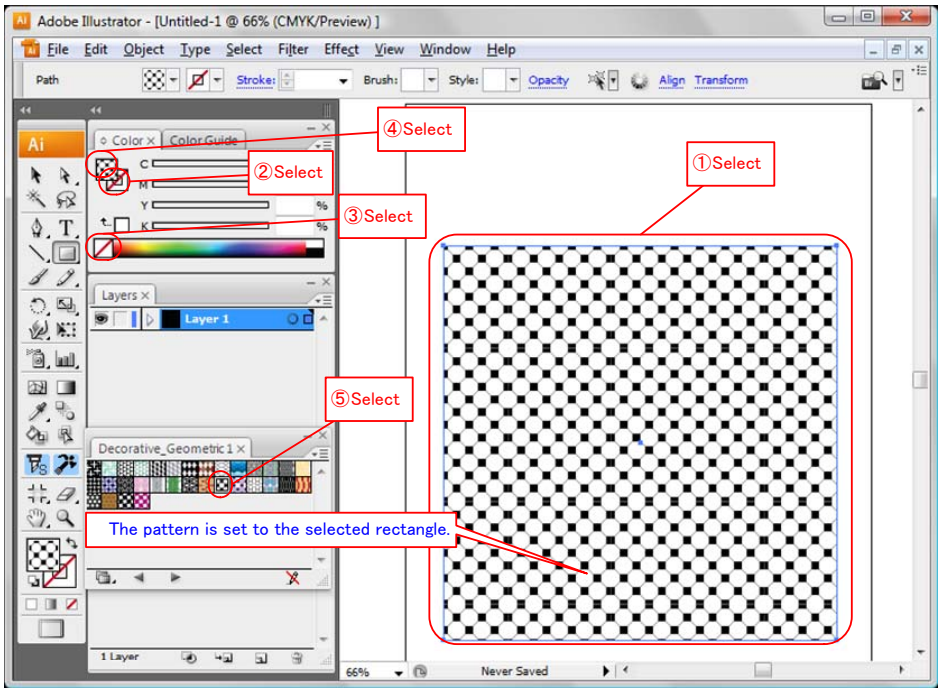
Select a pattern from [Window] - [Swatch Libraries] - [Patterns].

Here, select [Decorative] - [Decorative_Geometric1].



Select a rectangle object and set “None” to “Stroke” and any monochrome pattern to “Fill”.

Here, select “Hexagon Tile”.



Select [File] - [Save As…] to save it as a file.

The creation of clear image using a pattern is completed with the procedures above. Use the created clear image with the procedures explained in “3-3 “Create the job for manual composition. (Group multiple jobs.)” or “3-4 Create the single job of clear image”.

Hint

When printing with a pattern, if you perform Emboss Print with the number of prints “two”, the pattern looks three dimensional and can be printed effectively.

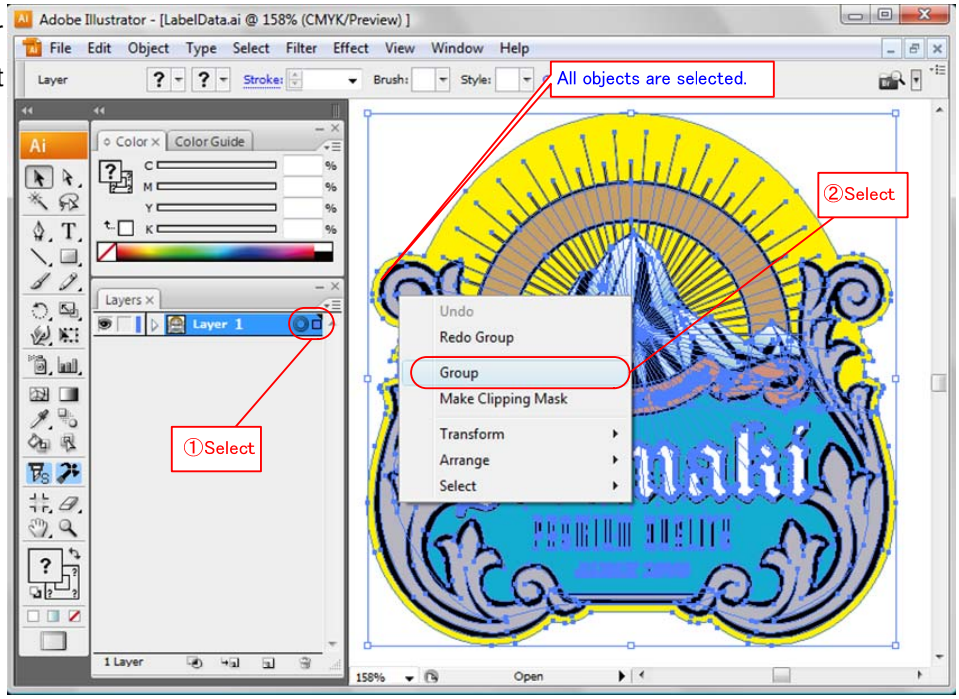
4-2-2. Create the image for single color replacement (clear image) from color image in Illustrator.

4-2-2.1 Creating Clear Data

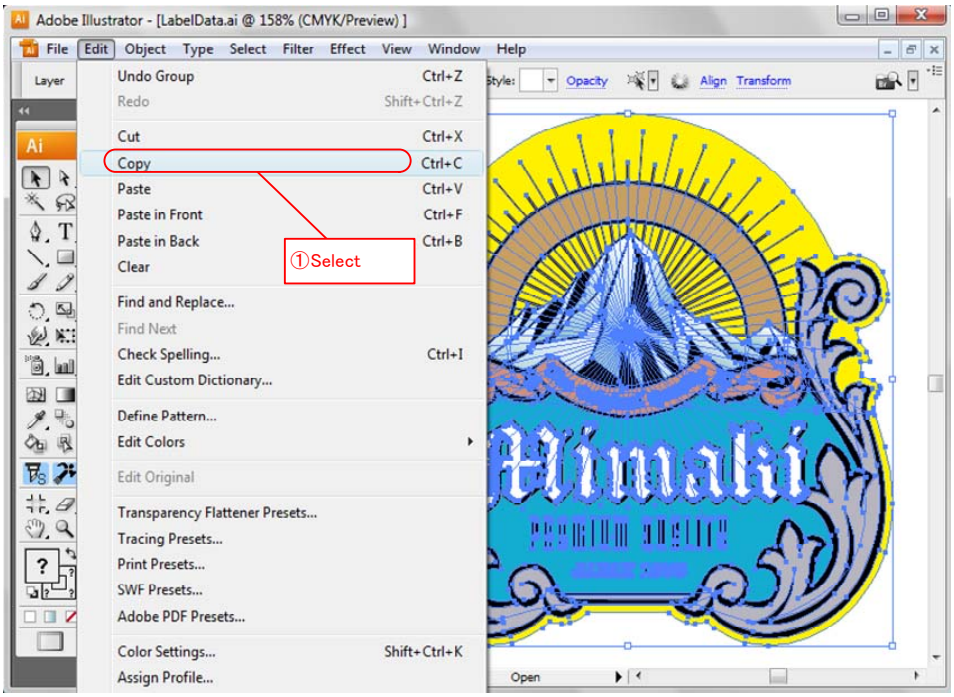
The creating method of the image to be replaced with clear liquid based on the color image (hereinafter, referred to as clear image) when you wish to print clear liquid on some parts of the color image is explained.

In the explanation below, create the clear image to print clear liquid on the characters in the center of the color image (“Mimaki”) only.

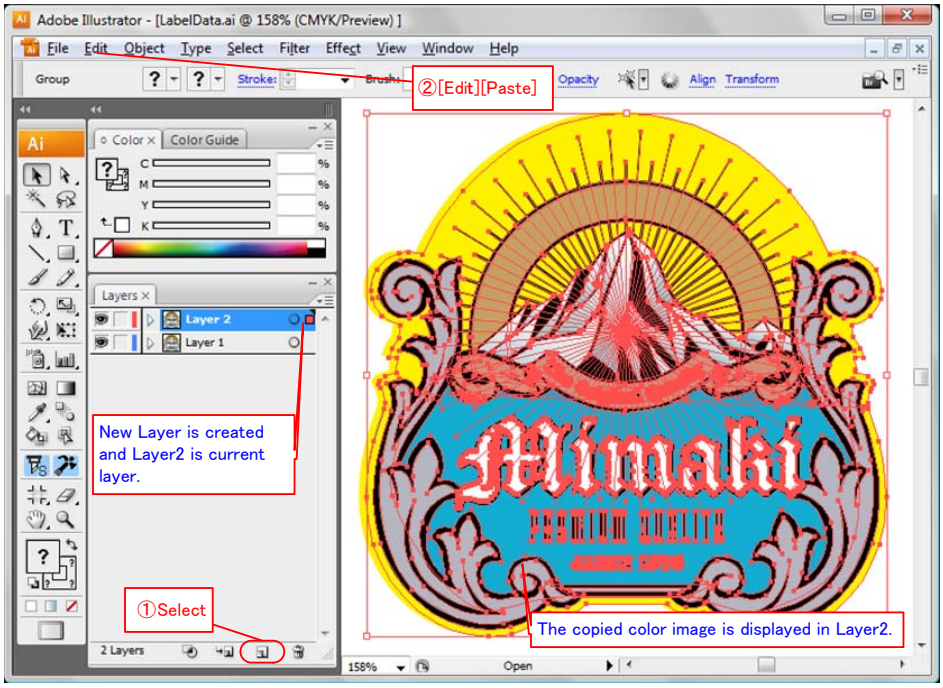
Select all objects of the color image and right-click. Then, select [Group].



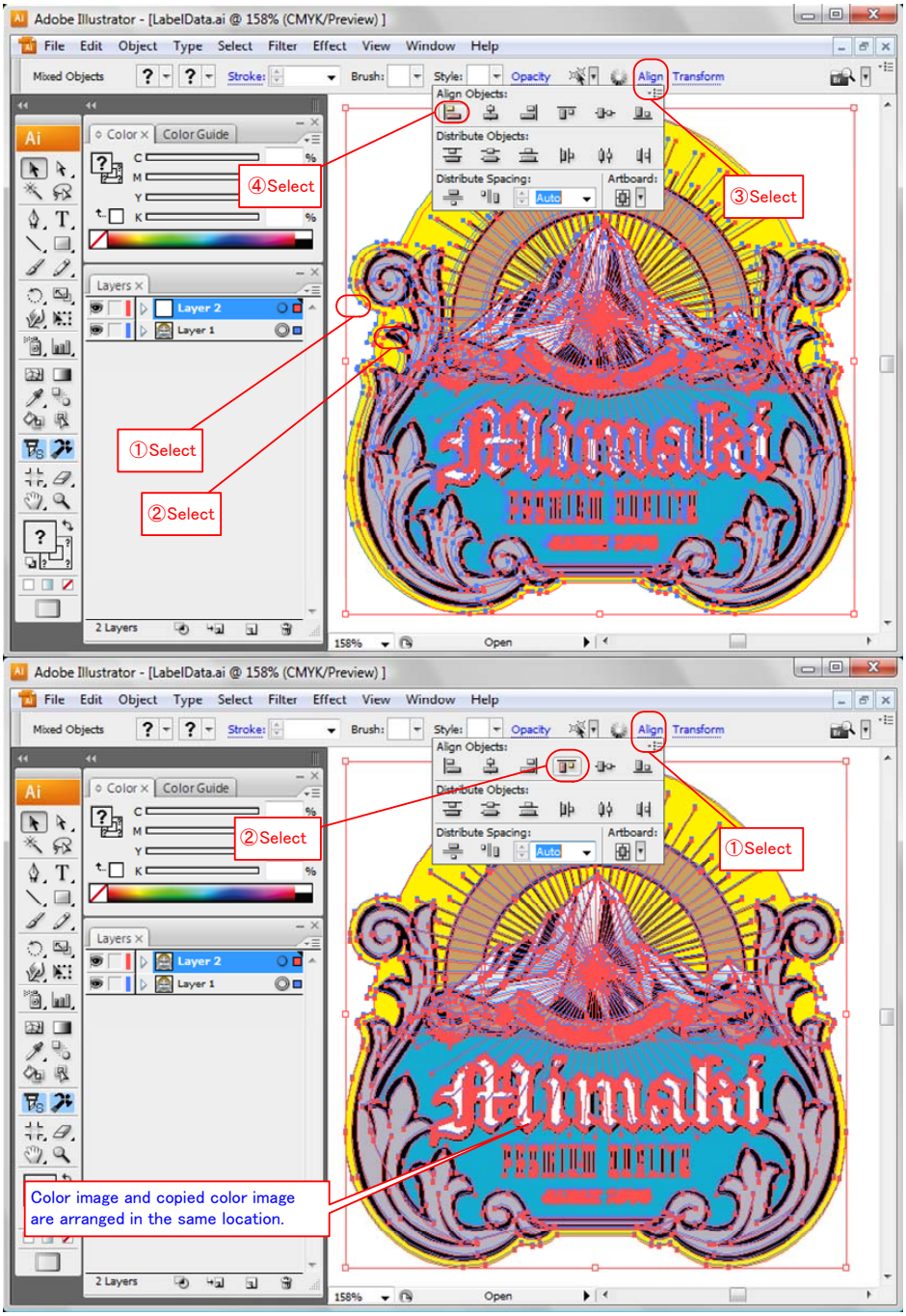
Copy the color image using [Edit] - [Copy].



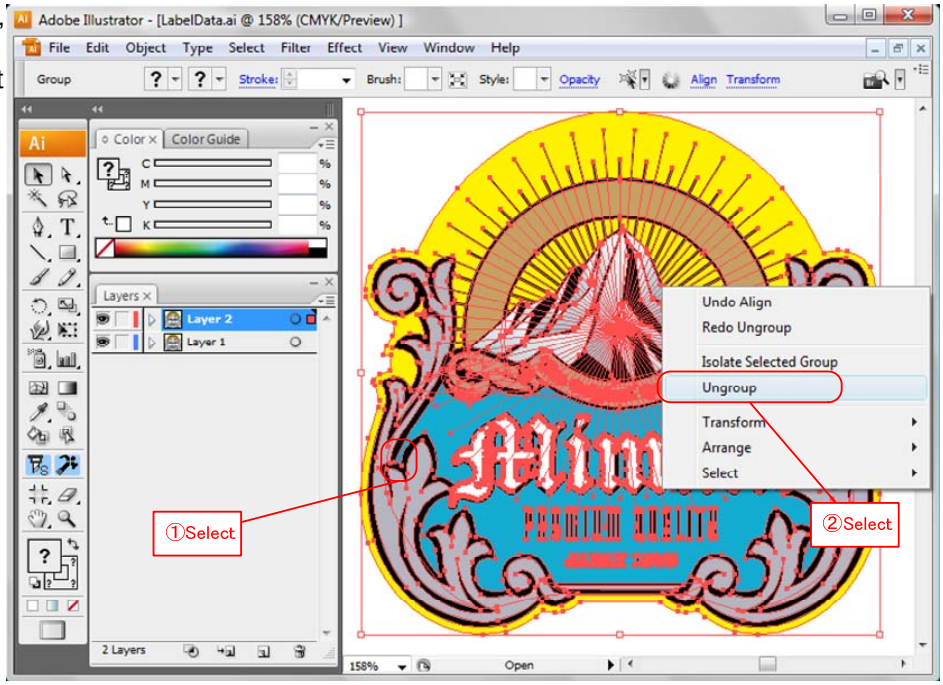
Select “Layers” - “Create New Layer” and paste the copied color image on the new layer with [Edit] - [Paste].



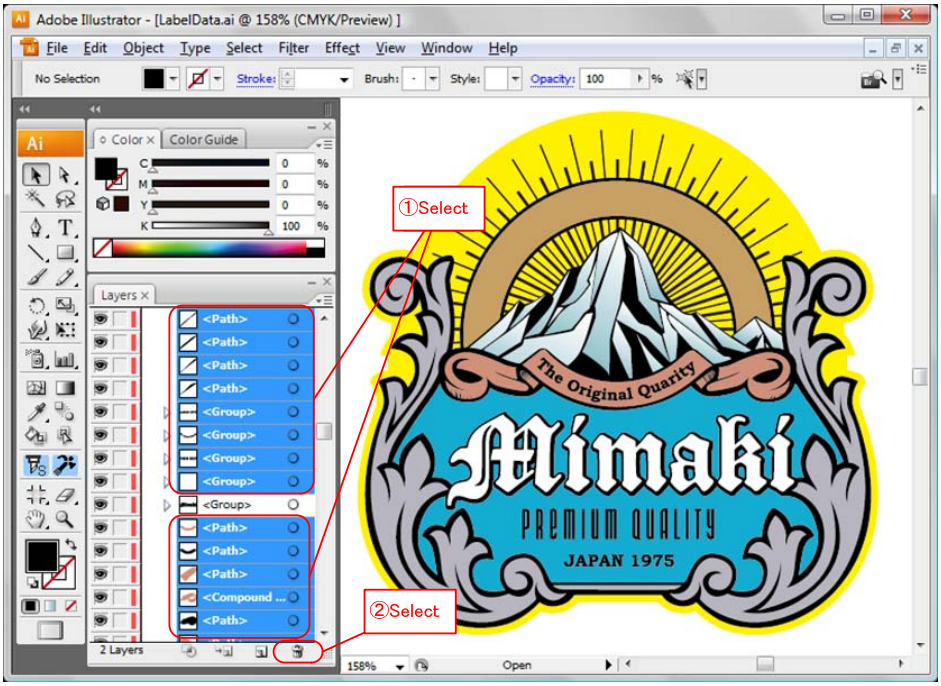
Select both of the “color image” and the “copied color image” and align them horizontally and vertically.



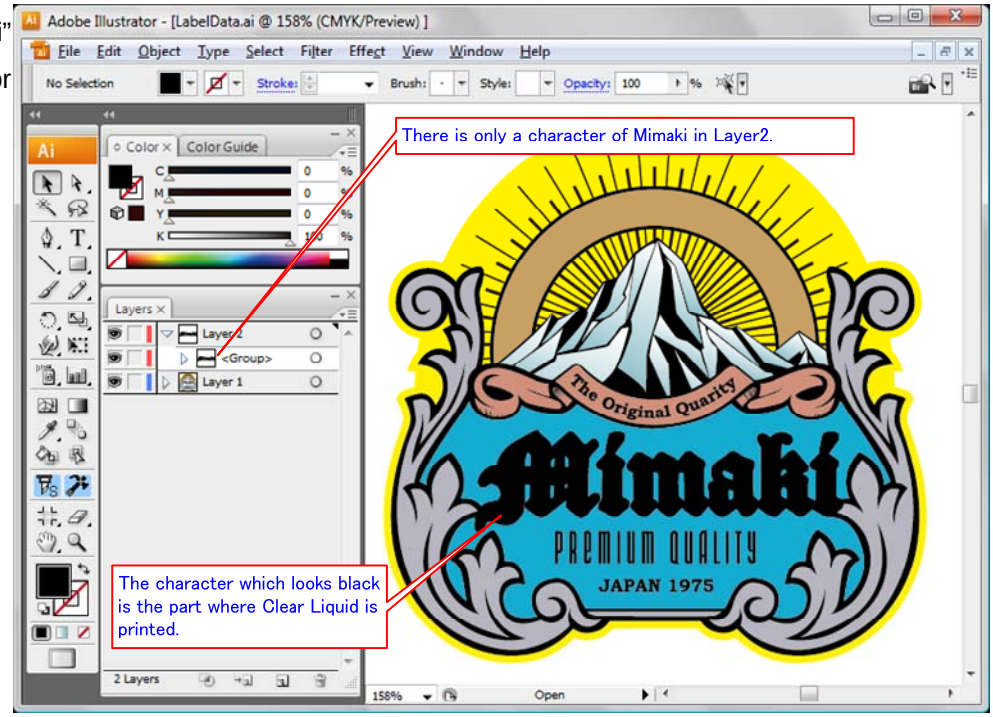
Select the “copied color image” and right-click. Then, select [Ungroup].



Select the objects other than “Mimaki” in the “Layer2” and click the “Delete Selection” button to delete them.



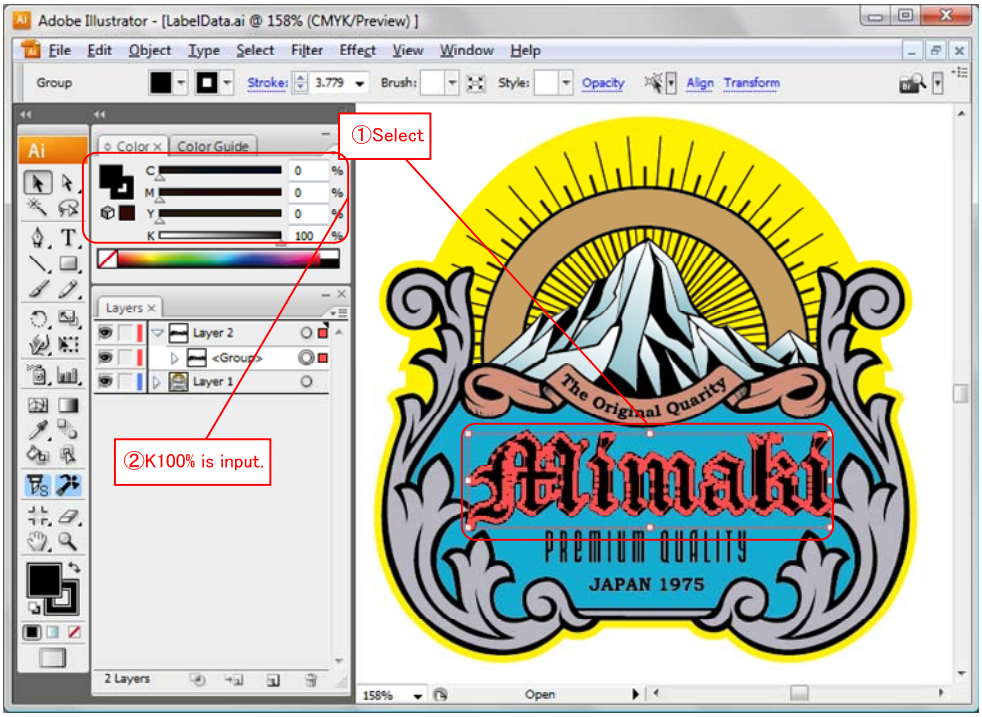
Check that only “Mimaki” remains in the “copied color image”.



Enter K100% in “Stroke” and “Fill” of “Mimaki” characters. (As clear liquid is printed with the density entered here, specify any density.)

Hint

When you perform “Glossy Print“, Print Density affects the image quality. For details related to the density, refer to “4-4 Note on Glossy Print of UJF-3042”.



To replace K image with clear liquid in the RasterLink single color replacement, set K100% to the part to be printed with clear liquid.

Select [File] - [Save as…] to save it as the AI file.

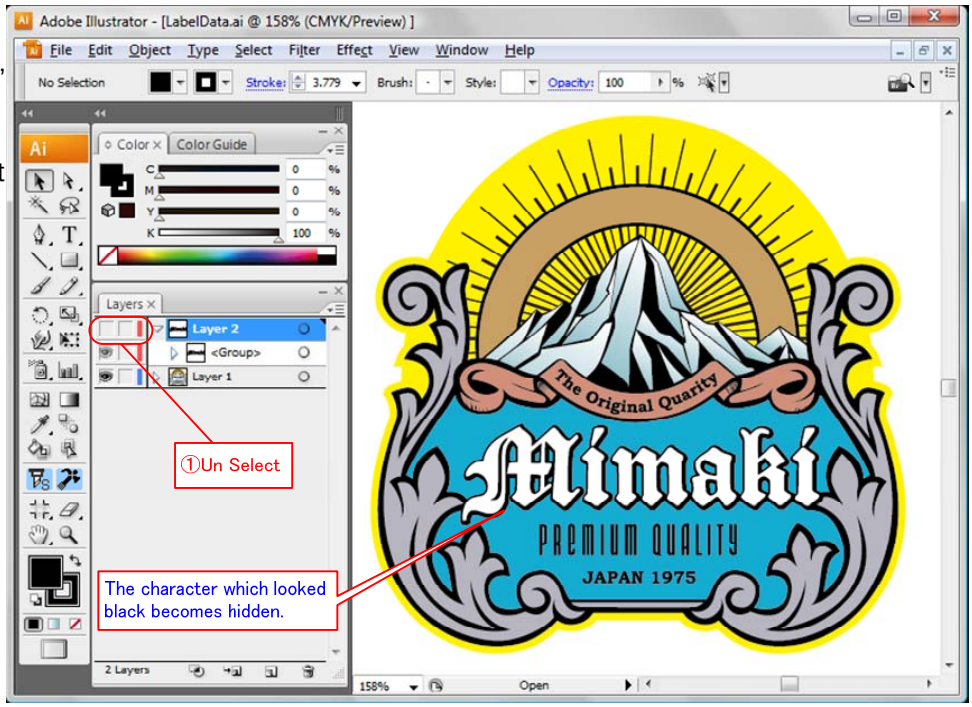
4-2-2.2 Output the color image and clear image to RasterLink.

The method to output the created data to RasterLink is explained below. Print the color image and the clear image in the same size so that colors may overlap clear liquid correctly.

Print the color image.

Click the “Toggles Visibility” button in the [Layer2].

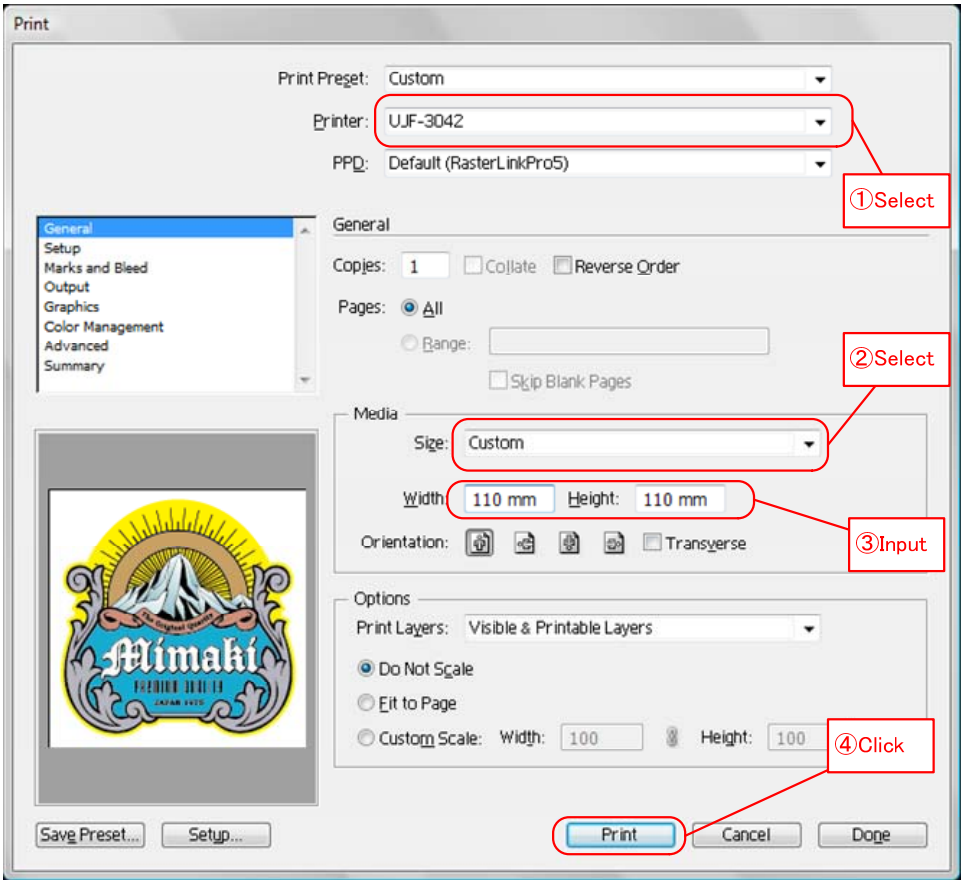
The clear image becomes not displayed.



Select [File] - [Print] and the Printer of RasterLink on the Print screen.

Select “Custom” from “Media” - “Size” and enter any size.

Click the “Print” button.



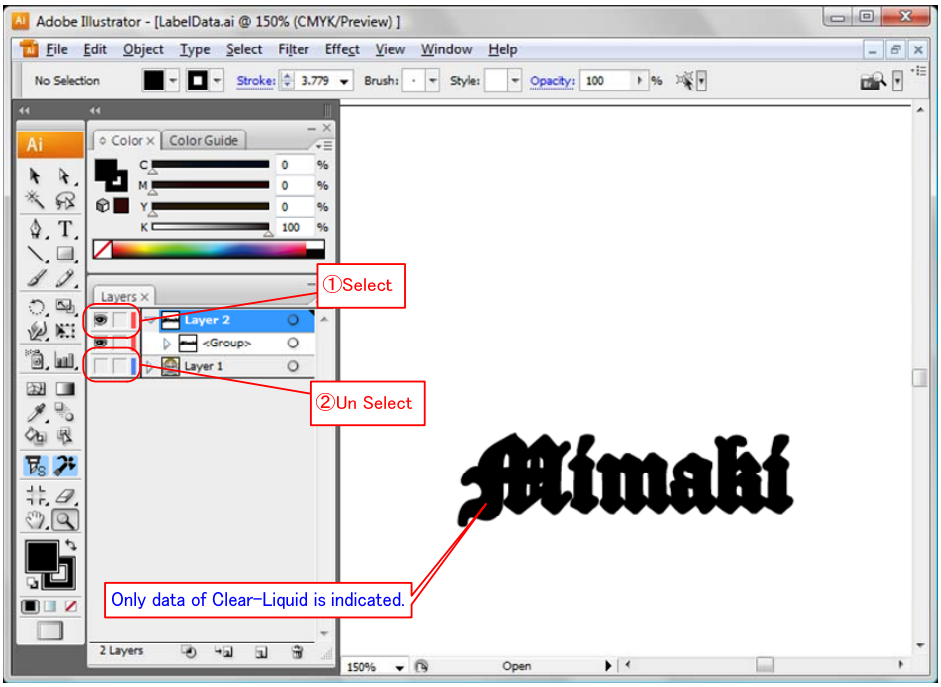
Print the clear image.

Click the “Toggles Visibility” button in the [Layer2].

The clear image is displayed.

Click the “Toggles Visibility” button in the [Layer1].

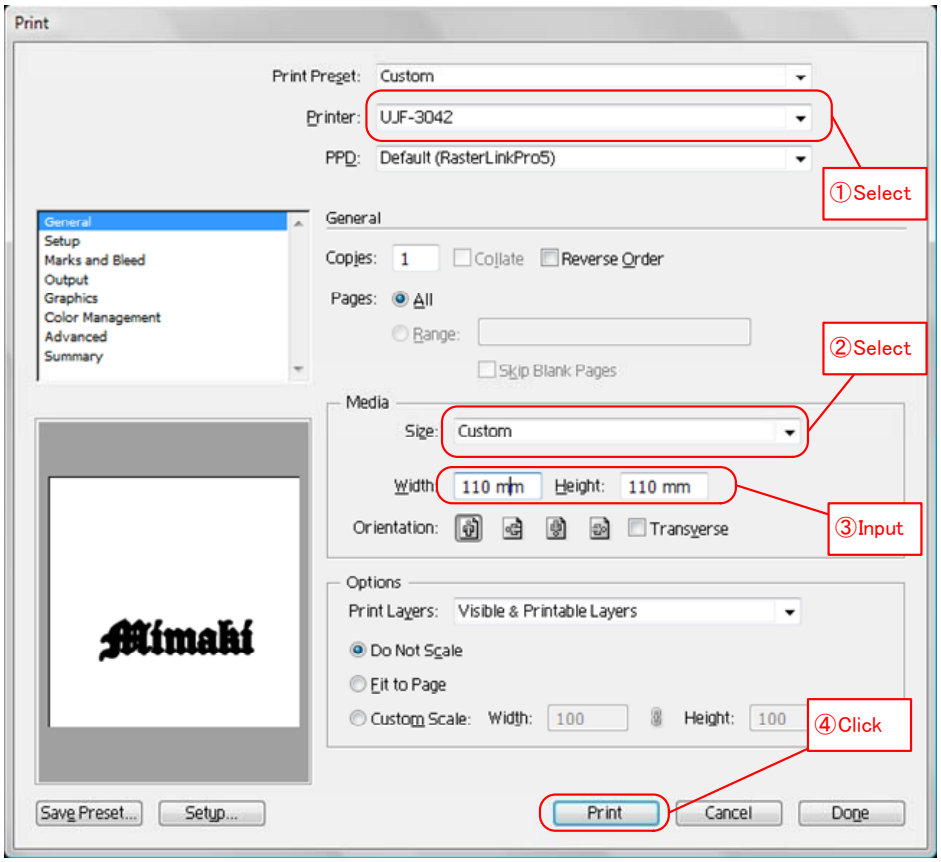
The clear image becomes not displayed.



Select [File] - [Print] and the Printer of RasterLink on the Print screen.

Select “Custom” from “Media” - “Size” and enter any size.

Click the “Print” button.

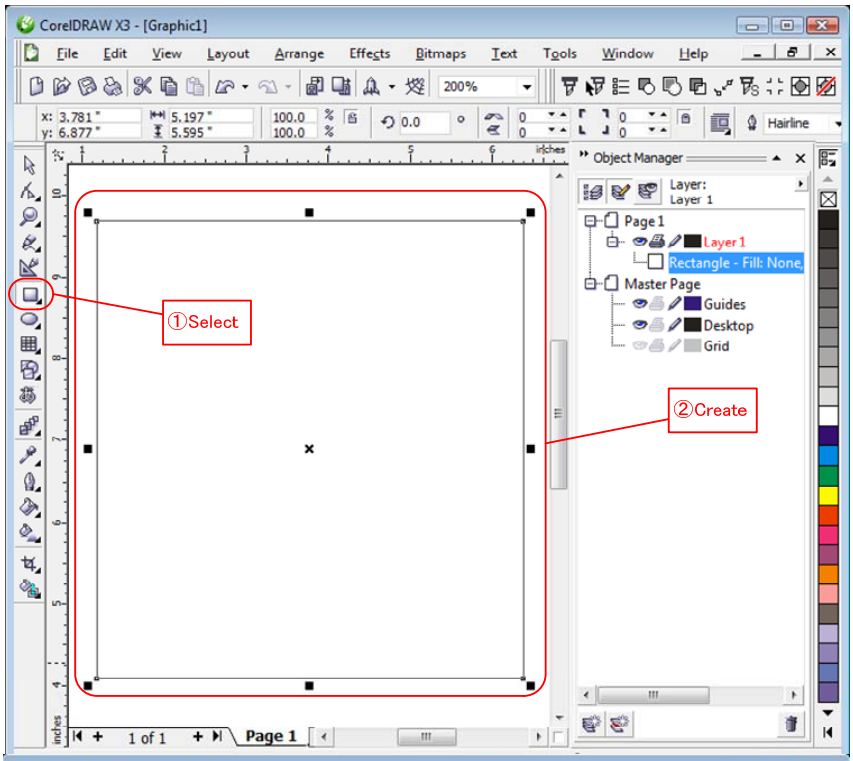


4-2-3. Create the image for single color replacement (clear image) from pattern in CorelDraw.

The creating method of data to print clear liquid by the texture pattern on the whole or some parts of the color image (hereinafter, referred to as clear image) is explained.

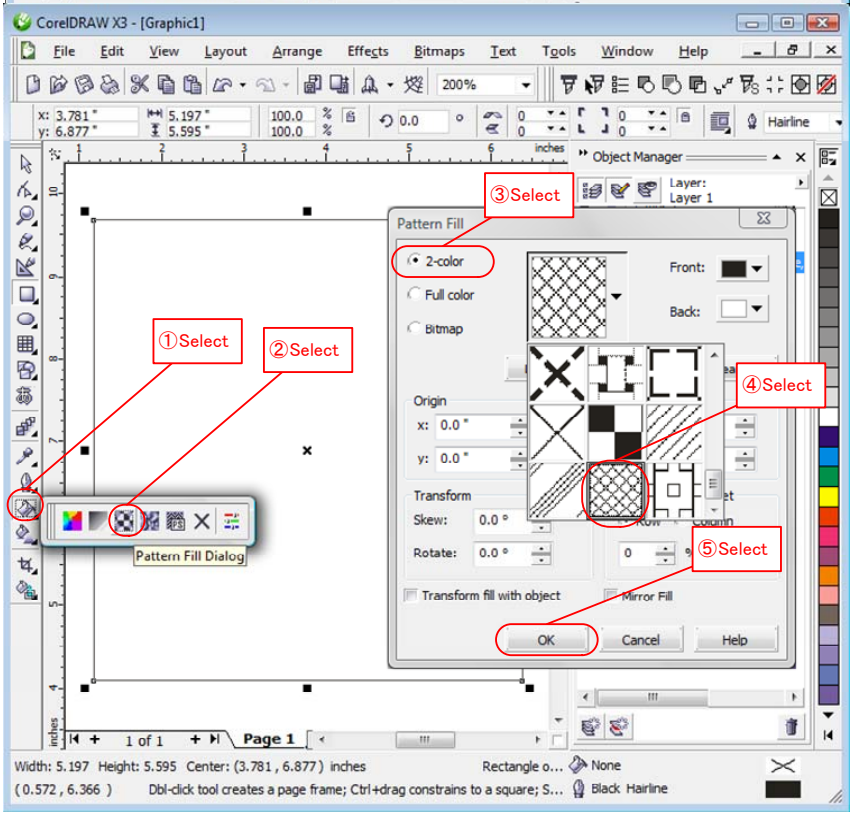
In the explanation below, create the clear image to print the texture pattern on the simple rectangle.

From New Graphic, select “Rectangle Tool” and create a rectangle.

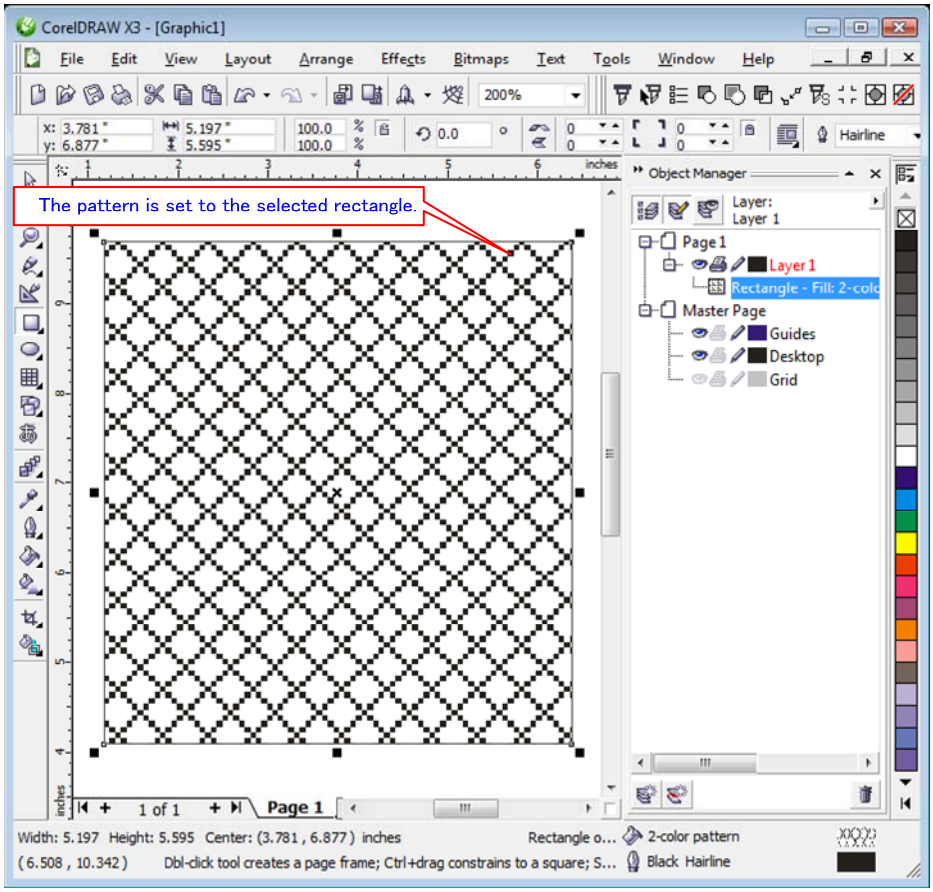


Select [Fill Tool] - [Pattern Fill Dialog] and [2-color] pattern.

Here, select the check pattern and click the OK button.



The pattern is set to the rectangle object.



Select [File] - [Save As…] to save it as a file.

The creation of clear image using a pattern is completed with the procedures above. Use the created clear image with the procedures explained in “3-3 “Create the job of manual composition. (Group multiple jobs.)” or “3-4 Create the single job of clear image”.

Hint

When printing with a pattern, if you perform Emboss Print with the number of prints “two”, the pattern looks three dimensional and can be printed effectively.

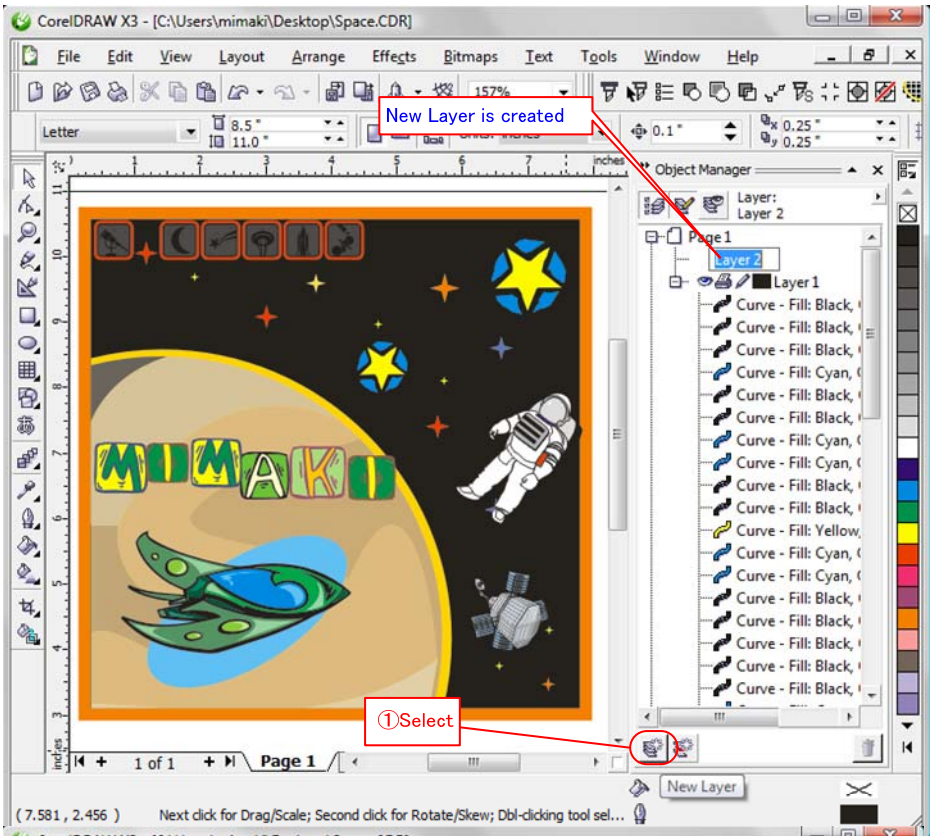
4-2-4. Create the image for single color replacement (clear image) from color image in CorelDraw.

4-2-4.1 Creating Clear Image Data

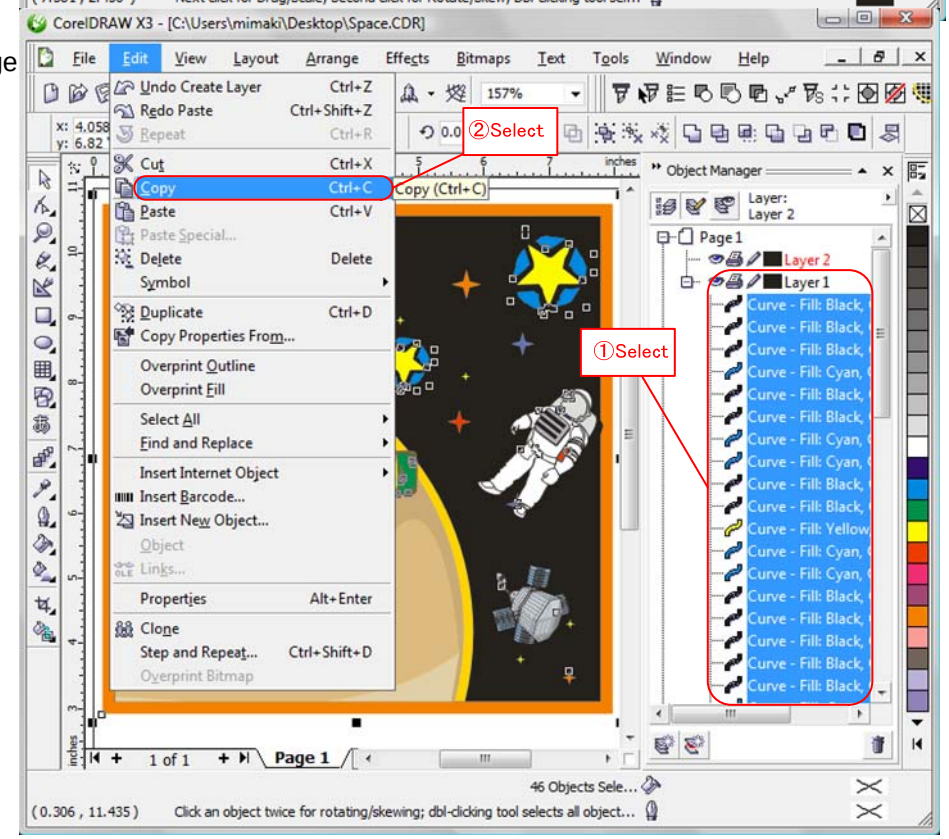
The creating method of the image to be replaced with clear liquid based on the color image (hereinafter, referred to as clear image) when you wish to print clear liquid on some parts of the color image is explained.

In the explanation below, create the clear image to print clear liquid on the characters in the center of the color image (“Mimaki”) only.

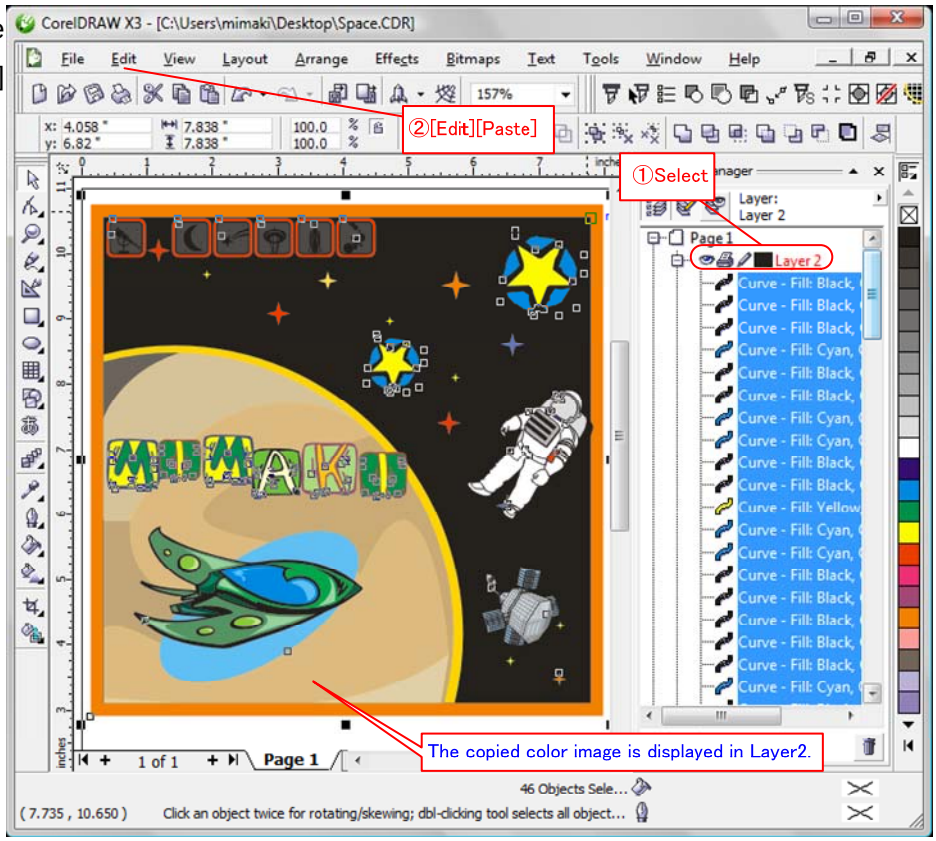
Click the [New Layer] button.



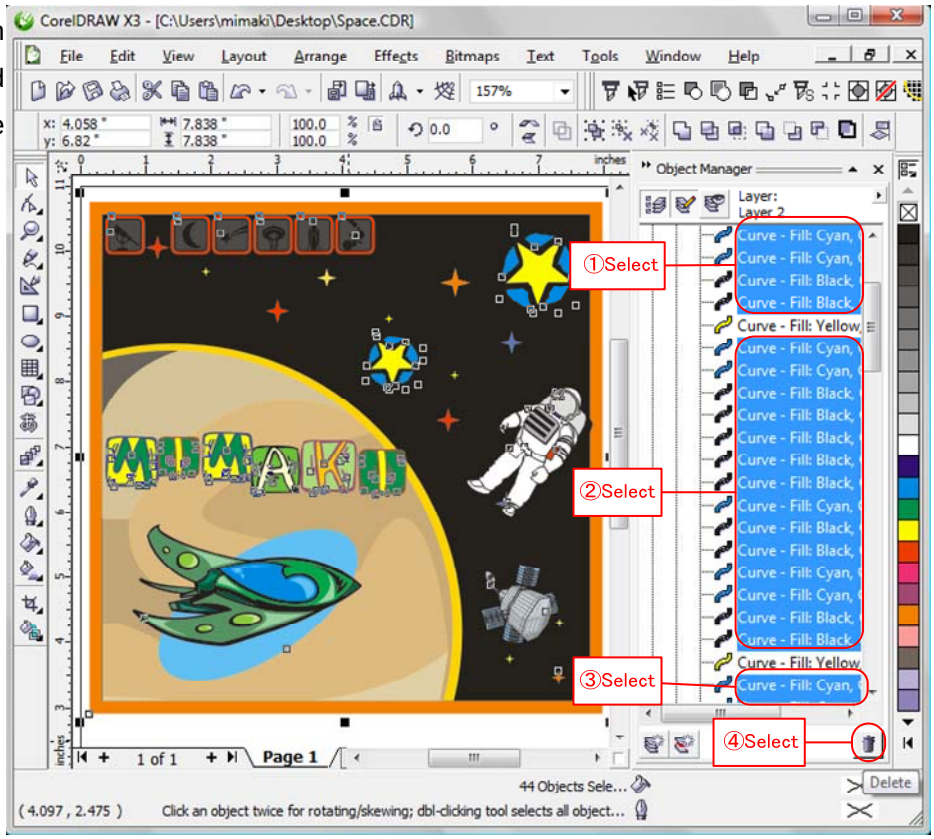
Select whole of the color image and copy it using [Edit] - [Copy].



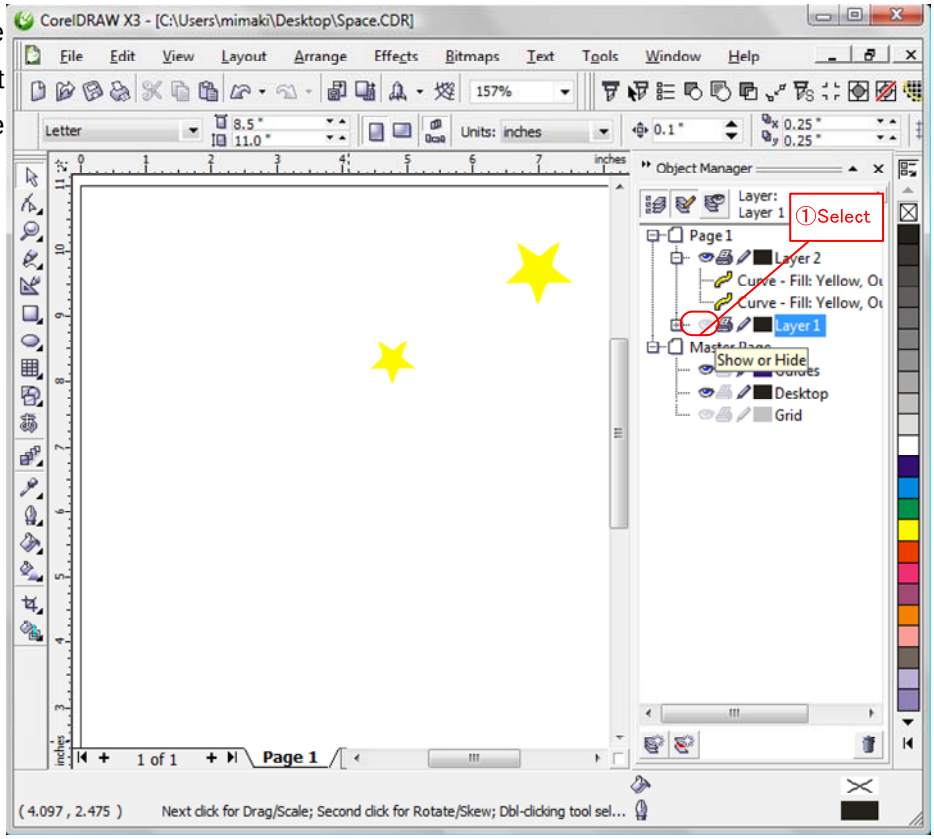
Select the “Layer2” and paste the copied color image using [Edit] - [Paste].



Select all objects other than yellow stars in the “Layer2” and click the “Delete” button to delete them.



Set “Show or Hide” of the “Layer1” to Hide and check that only yellow stars remain in the “Layer2”.



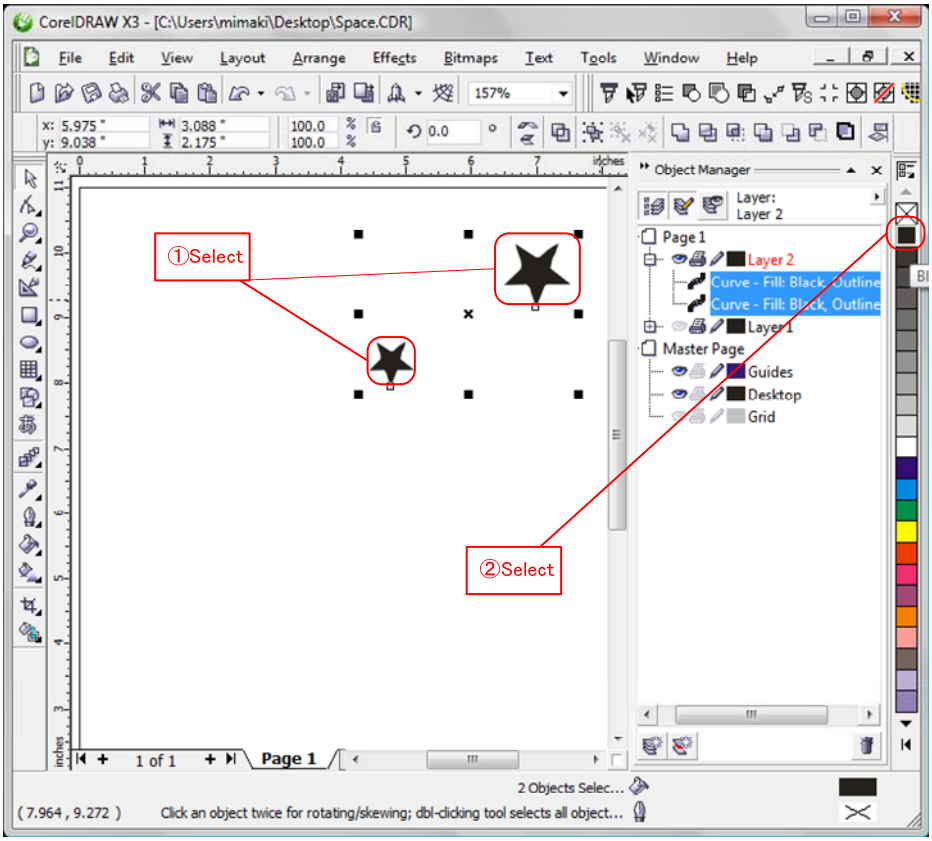
Enter K100% in “Fill” of the yellow star. (As clear liquid is printed with the density entered here, specify any density.)

Hint

When you perform “Glossy Print“, Print Density affects the image quality. For details related to the density, refer to “4-4 Note on Glossy Print of UJF-3042”.

To replace K with clear liquid in the RasterLink single color replacement, set K100% to the part to be printed with clear liquid.

Select [File] - [Save as…] to save it as a file.



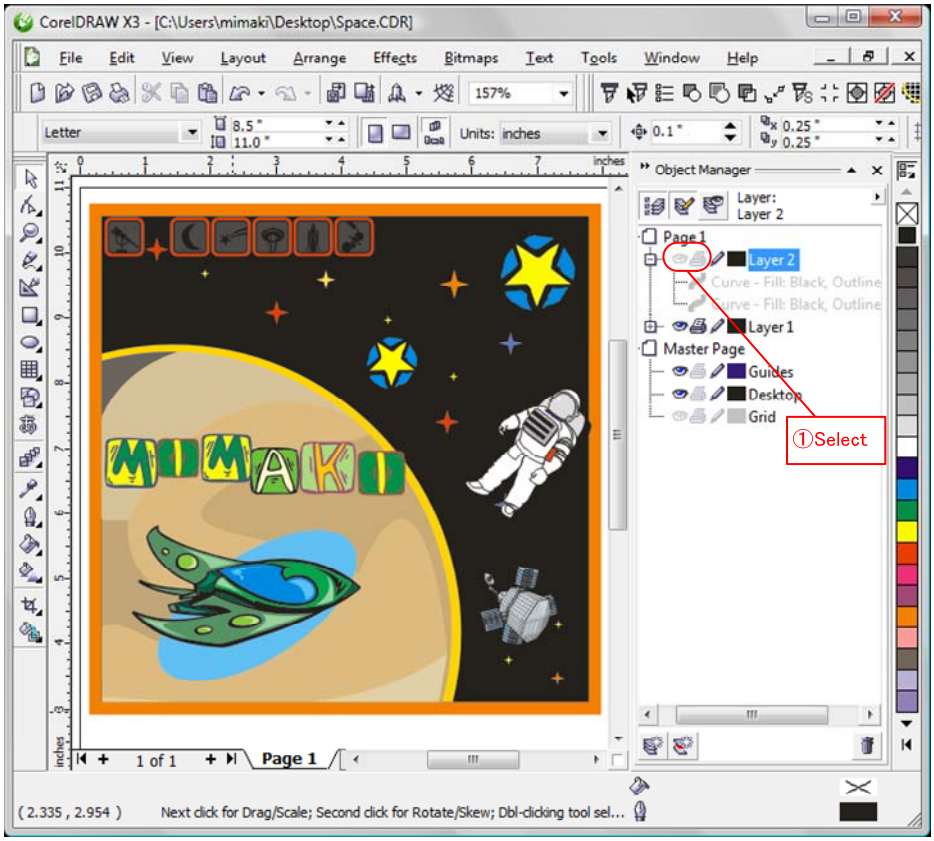
4-2-4.2 Output the color image and the clear image to RasterLink.

The method to output the created data to RasterLink is explained below. Print the color image and the clear image in the same size so that colors may overlap clear liquid correctly.

Print the color image.

Set Hide to “Show or Hide” of the [Layer2] and Disable to “Enable or Disable Printing and Exporting”.

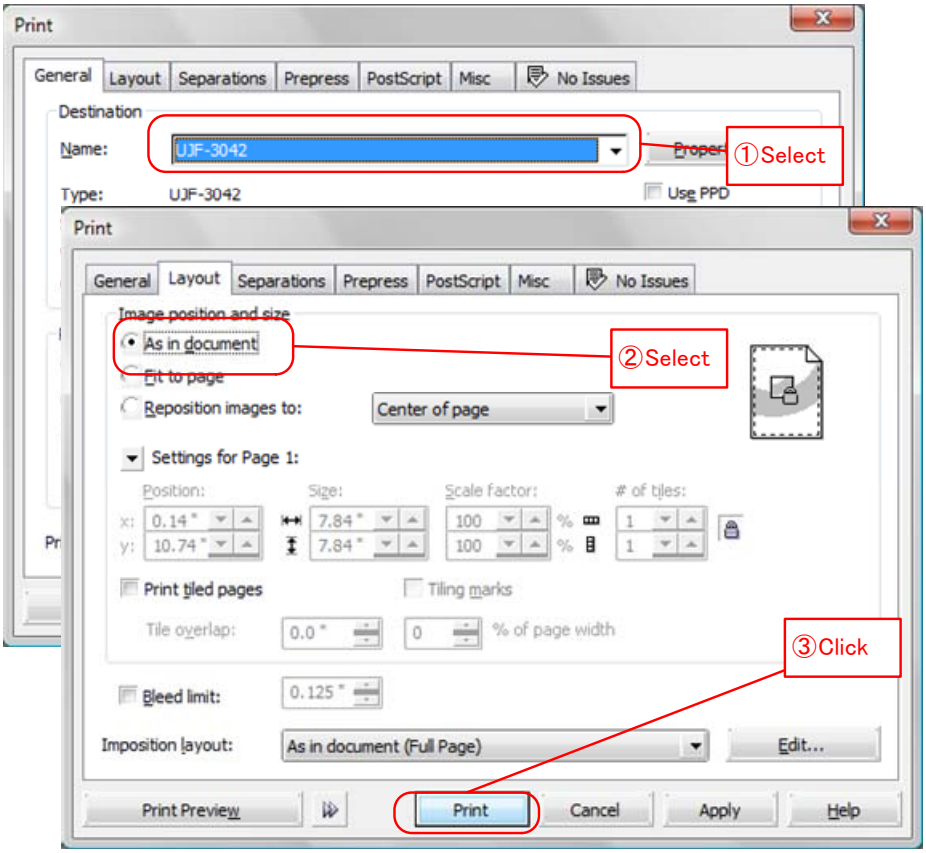
The clear image becomes not displayed.



Select [File] - [Print] and RasterLink Printer in the “General” tab on the Print screen.

Select “As in document” in the “Layout” tab.

Click the “Print” button.



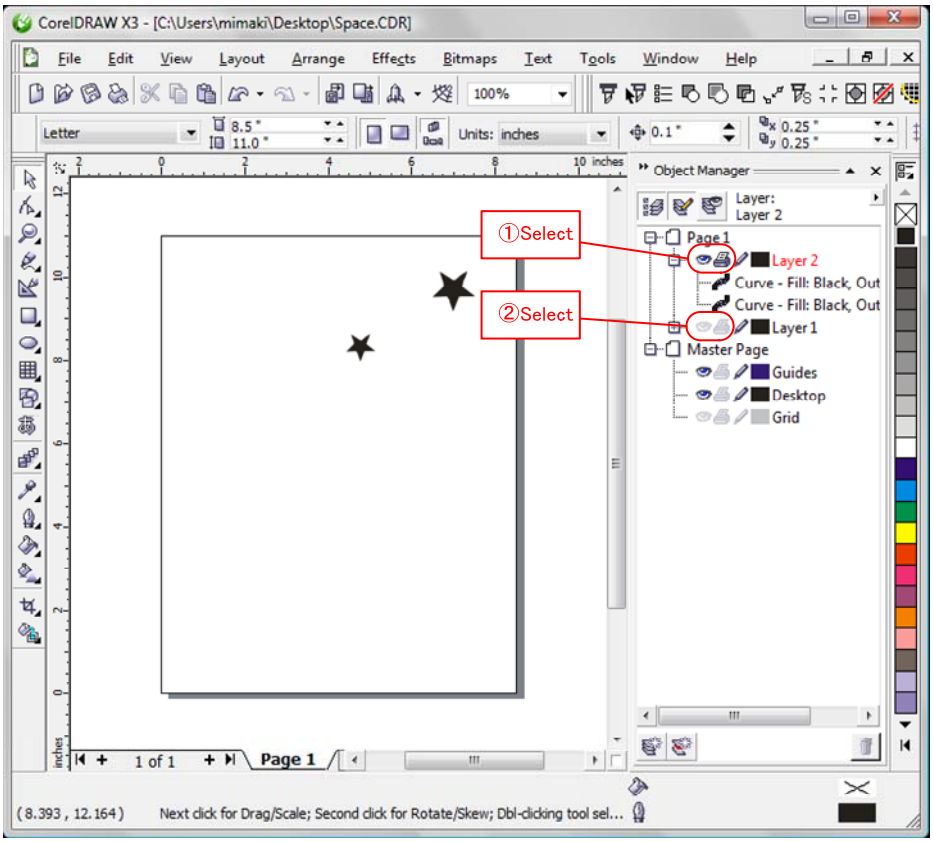
Print the clear image.

Set Show to “Show or Hide” in the [Layer2] and Enable to “Enable or Disable Printing and Exporting“.

The clear image is displayed.

Set Hide to “Show or Hide” in the [Layer1] and Disable to “Enable or Disable Printing and Exporting”.

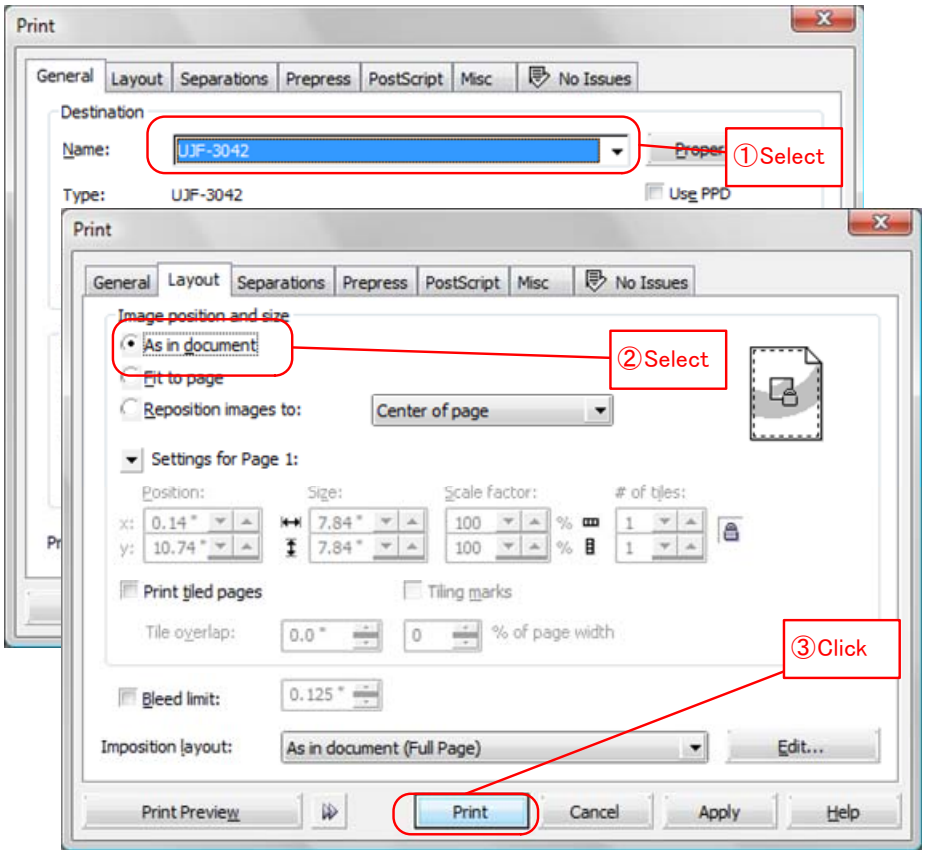
The color image becomes not displayed.



Select [File] - [Print] and RasterLink Printer in the “General” tab on the Print screen.

Select “As in document” in the “Layout” tab.

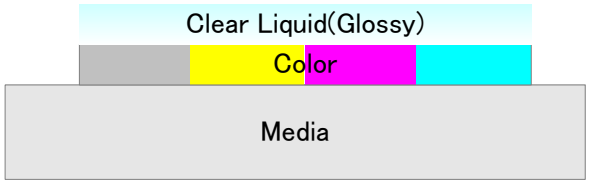
Click the “Print” button.



4-3. Setting Example of Special Print and Process Flow

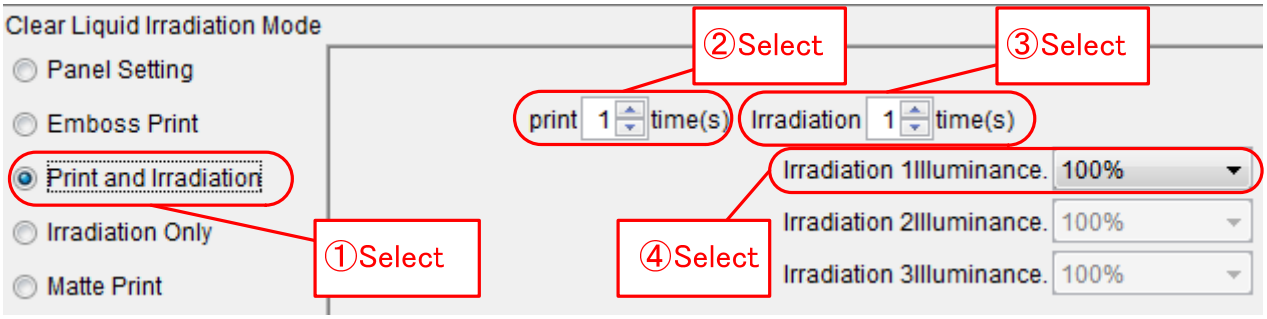
4-3-1. In Case of Color and Clear Liquid (Glossy Print)

Cross section diagram of printing result

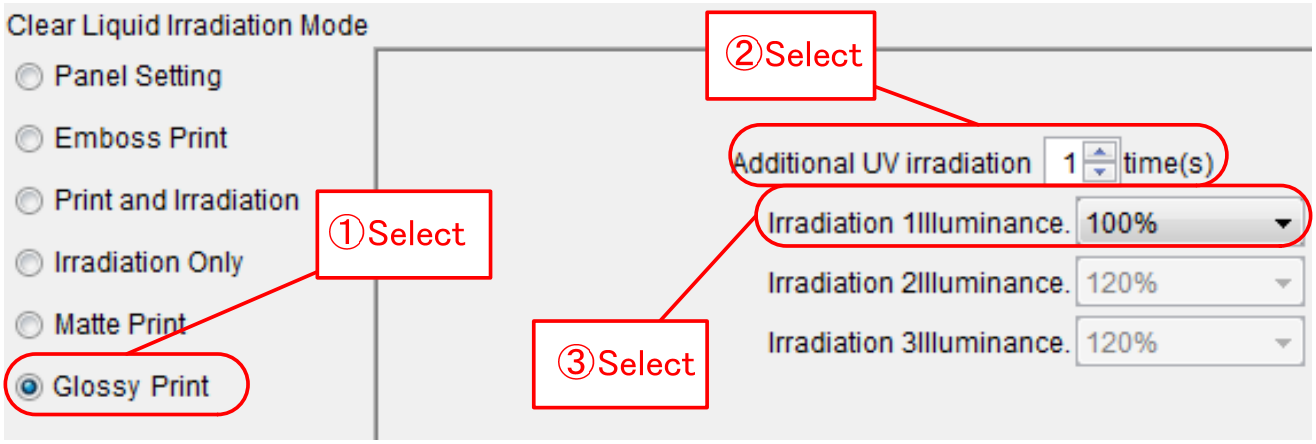


Clear liquid setting

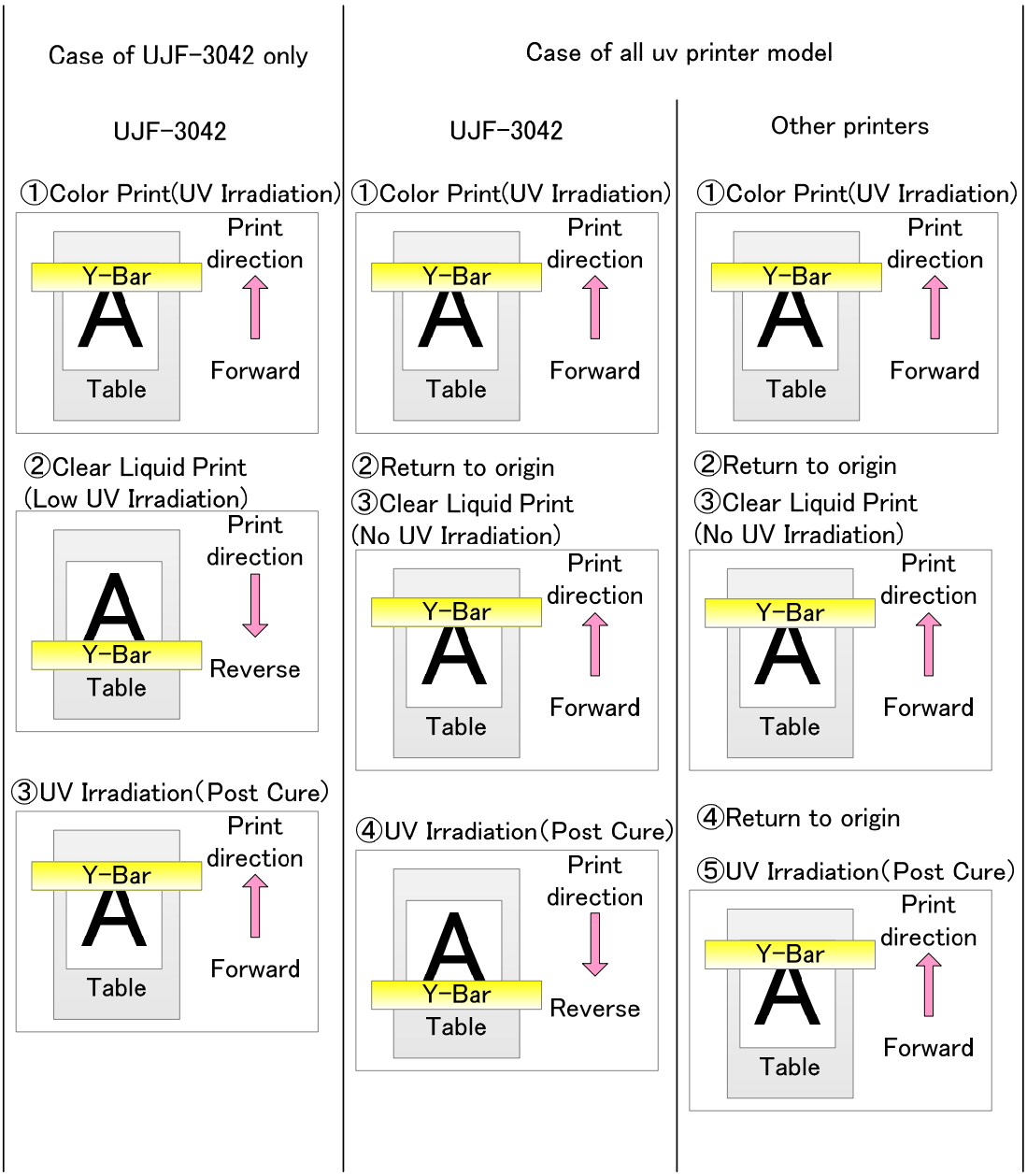
Setting of Glossy Print (printing method common to all machine types)



Setting of Glossy Print (printing method dedicated to UJF-3042)



Process flow

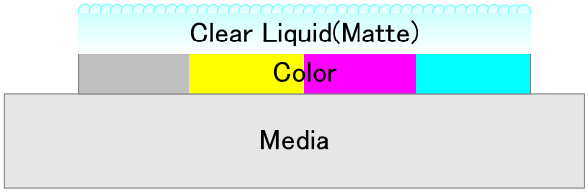


Supplementation

- Clear liquid (Glossy Print) is fixed to Reverse print direction.
- Clear liquid (without irradiation) is fixed to Forward print direction.

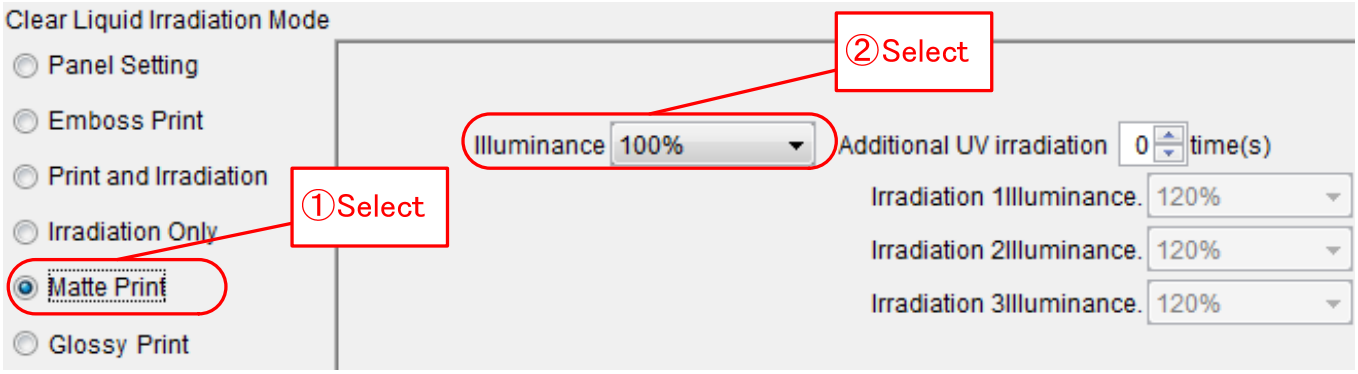
4-3-2. In Case of Color and Clear Liquid (Matte Print)

Cross section diagram of printing result

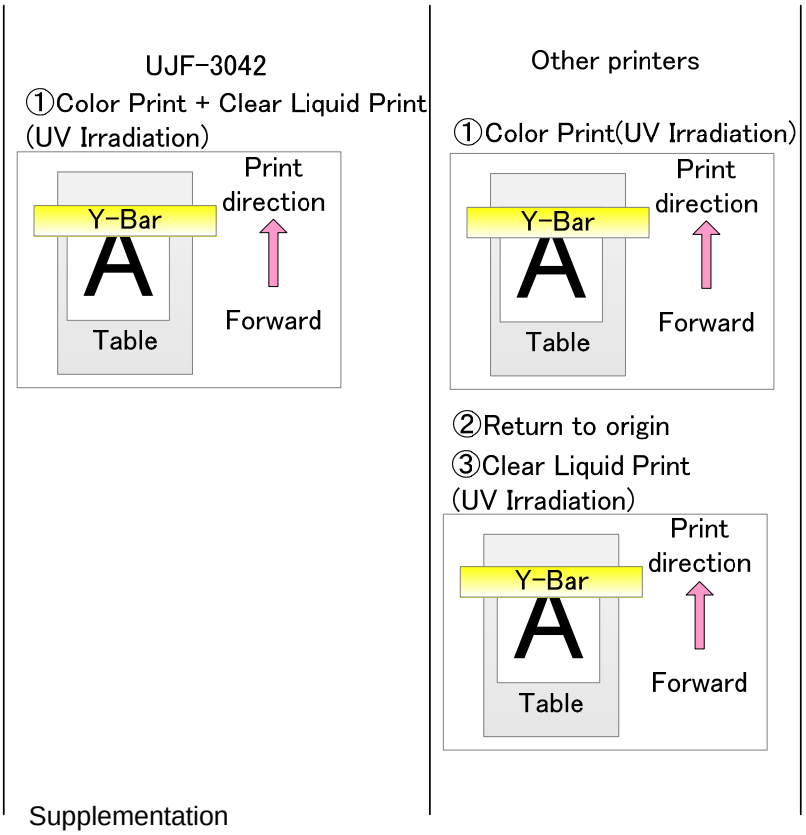


Clear liquid setting

Matte Print setting



Process flow

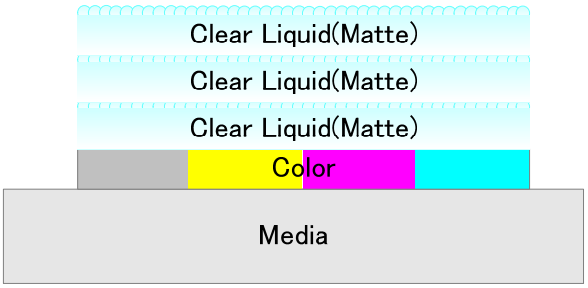


Supplementation

- Color + clear liquid (Matte Print) is fixed to Forward print direction.

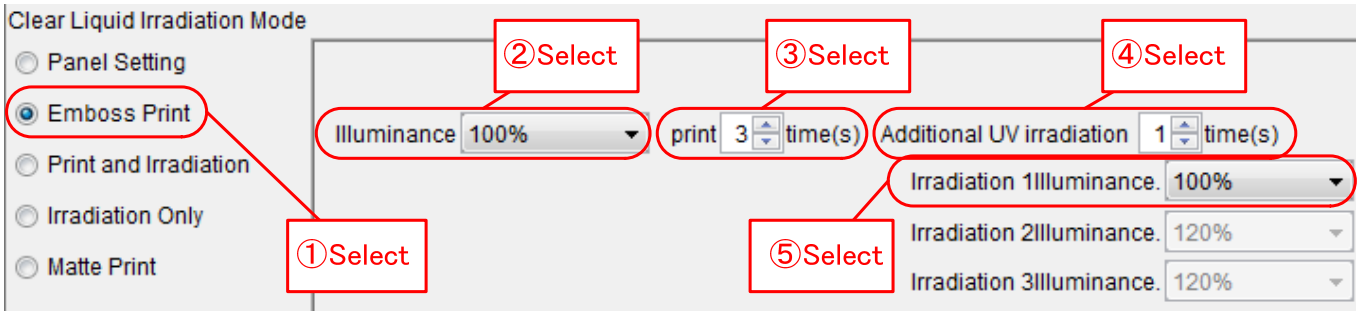
4-3-3. In Case of Color and Clear Liquid (Emboss Print, Surface Clear Liquid is Matte)

Cross section diagram of printing result

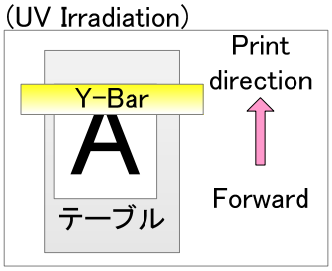
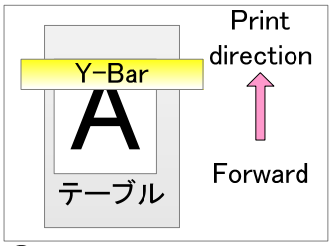
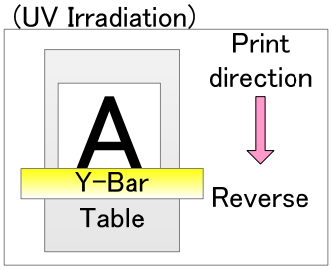
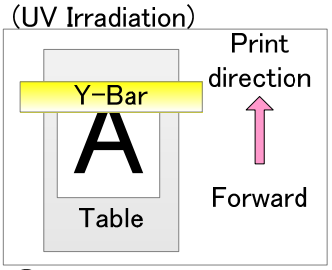
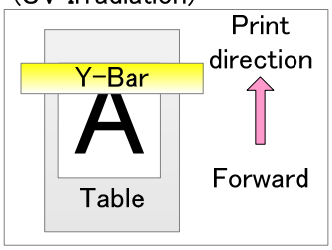
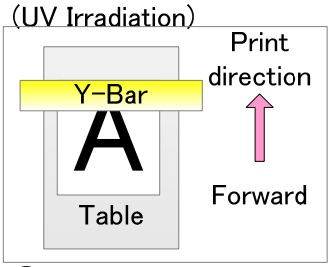
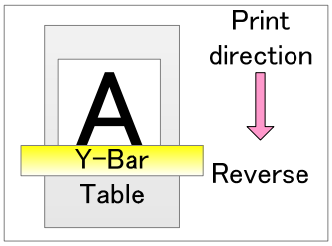
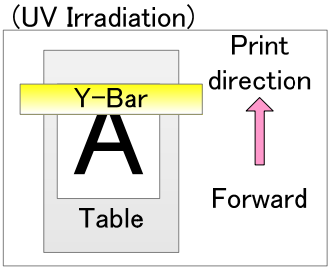
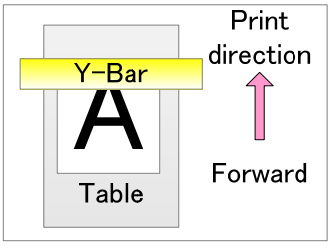


Clear liquid setting

Emboss Print (surface clear liquid is matte) setting



Process flow

UJF-3042	Other printers
①Color Print + Clear Liquid Print (UV Irradiation) 	①Color Print(UV Irradiation) 
②Clear Liquid Print (UV Irradiation) 	②Return to origin ③Clear Liquid Print (UV Irradiation) 
③Clear Liquid Print (UV Irradiation) 	④Return to origin ⑤Clear Liquid Print (UV Irradiation) 
④UV Irradiation(Additional) 	⑥Return to origin ⑦Clear Liquid Print (UV Irradiation) 
	⑧Return to origin ⑨UV Irradiation(Additional) 

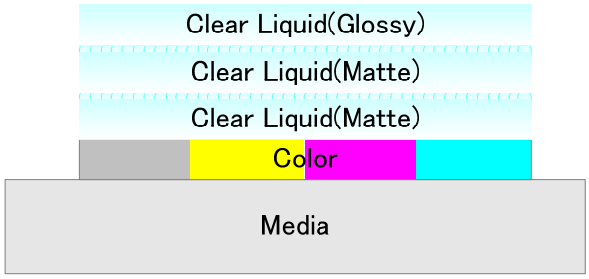
Supplementation

- Color + clear liquid (Matte Print) is fixed to Forward print direction.

4-3-4. In case of Color and Clear Liquid (Emboss Print, Surface Clear Liquid is Glossy)

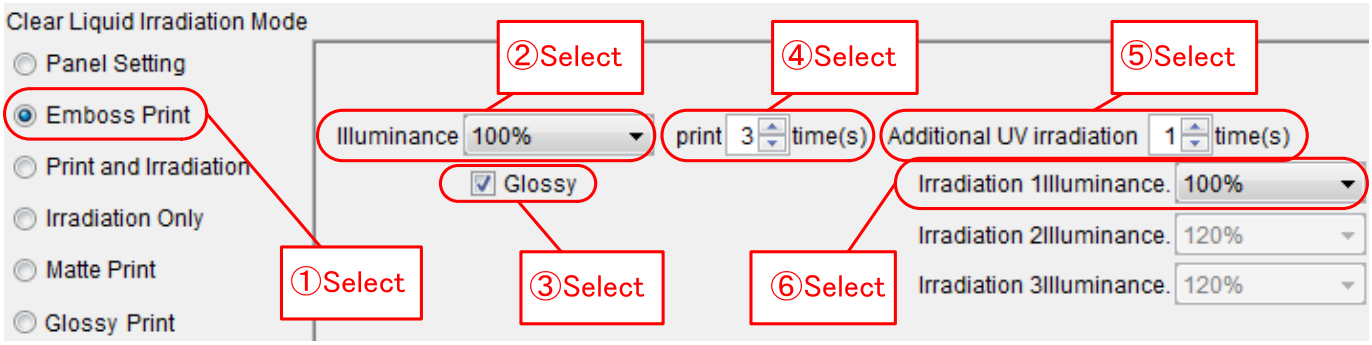
4-3-4.1 For Printing Method Dedicated to UJF-3042

Cross section diagram of printing result



Clear liquid setting

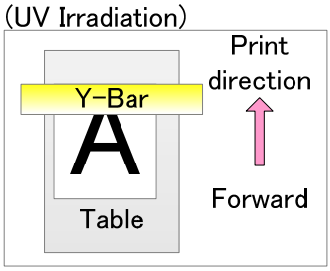
Emboss Print (surface clear liquid is glossy) setting



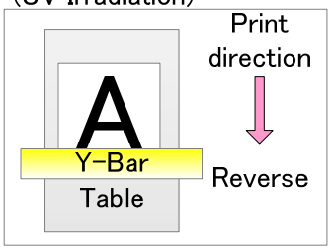
Process flow

UJF-3042

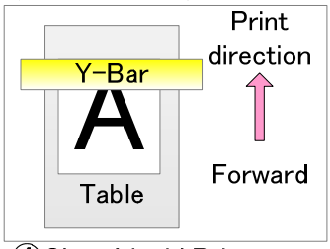
①Color Print + Clear Liquid Print
(UV Irradiation)



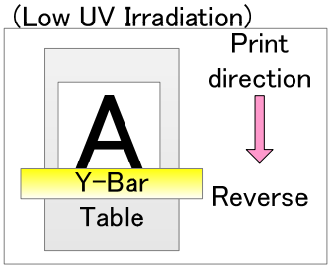
②Clear Liquid Print
(UV Irradiation)



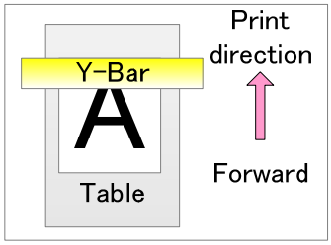
③Clear Liquid Print
(UV Irradiation)



④Clear Liquid Print
(Low UV Irradiation)



⑤UV Irradiation（Post Cure）



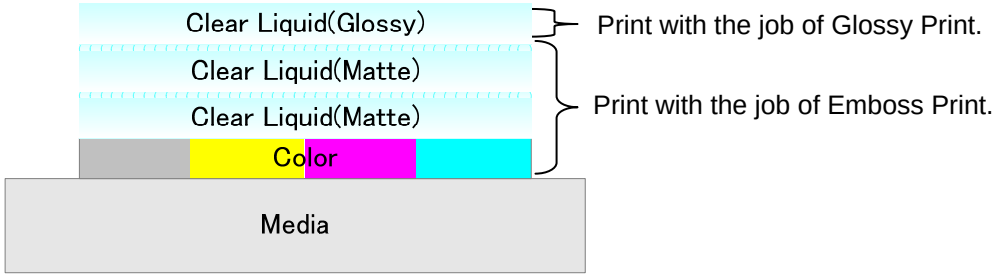
Supplementation

- Color + clear liquid (Matte Print) is fixed to Forward print direction.
- Clear liquid (Glossy Print) is fixed to Reverse print direction.

4-3-4.2 For Printing Method Common to All Machine Types

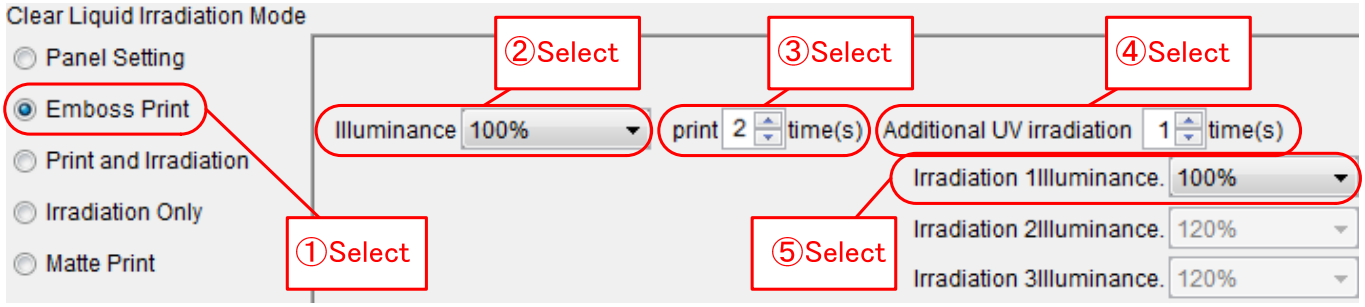
By creating two jobs of Emboss Print and Glossy Print and combining them, make surface clear liquid glossy.

Cross section diagram of printing result

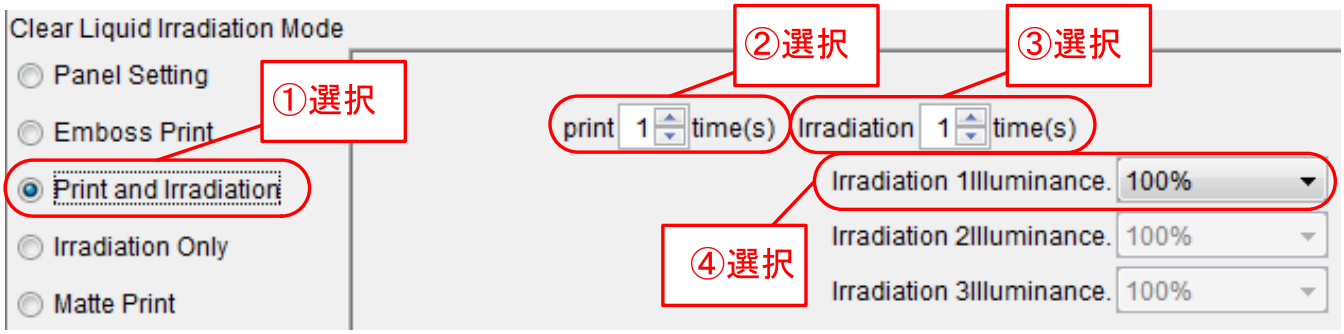


Clear liquid setting

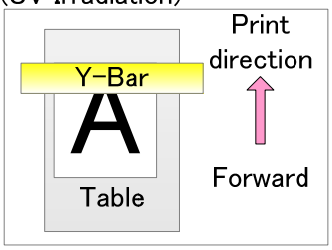
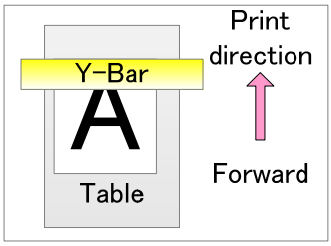
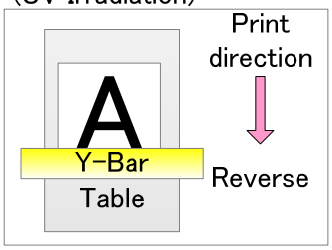
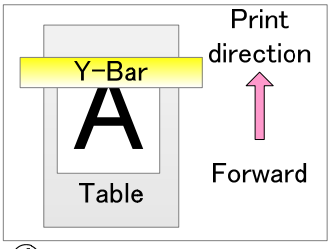
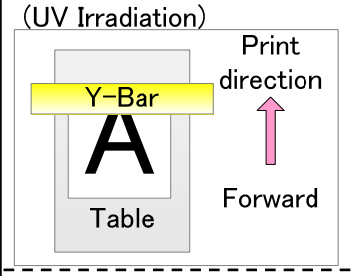
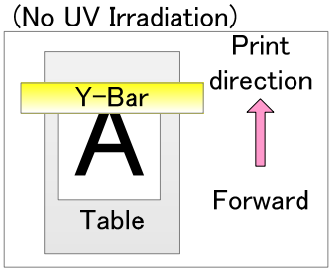
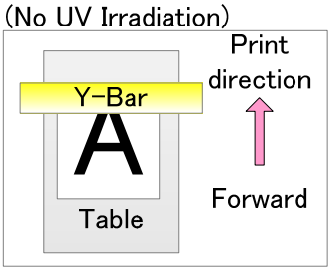
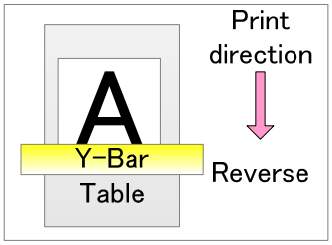
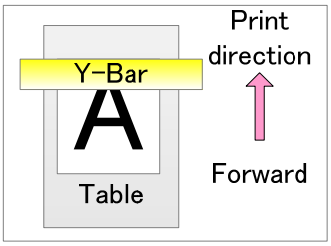
Emboss Print (surface clear liquid is matte) setting



Glossy Print (common to all machine types) setting



Process flow

UJF-3042	Other printers	
①Color Print + Clear Liquid Print (UV Irradiation) 	①Color Print(UV Irradiation) 	
②Clear Liquid Print (UV Irradiation) 	②Return to origin ③Clear Liquid Print (UV Irradiation) 	
	④Return to origin ⑤Clear Liquid Print (UV Irradiation) 	
③Clear Liquid Print (No UV Irradiation) 	⑥Clear Liquid Print (No UV Irradiation) 	From here, it is the second job.
④UV Irradiation(Post Cure) 	⑦Return to origin ⑧UV Irradiation(Post Cure) 	

Supplementation

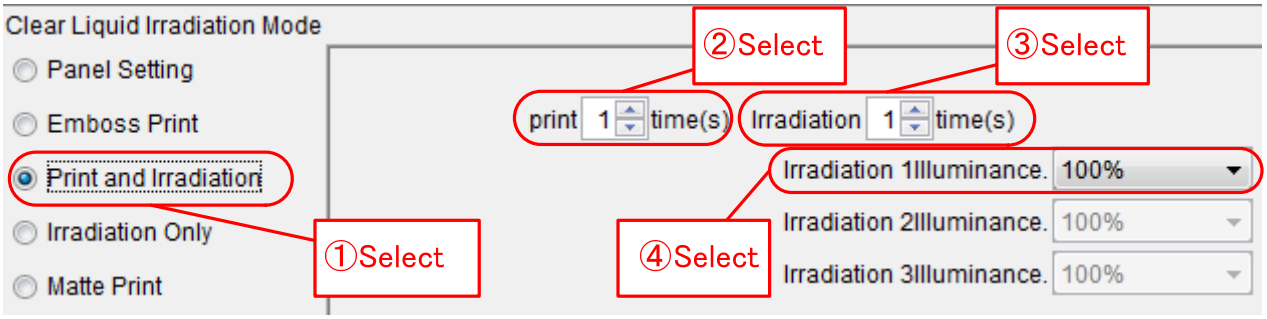
- Color + clear liquid (Matte Print) is fixed to Forward print direction.
- Clear liquid (Glossy Print) is fixed to Reverse print direction.

4-3-5. In Case of Special Color (White), Color and Clear Liquid (Glossy Print)

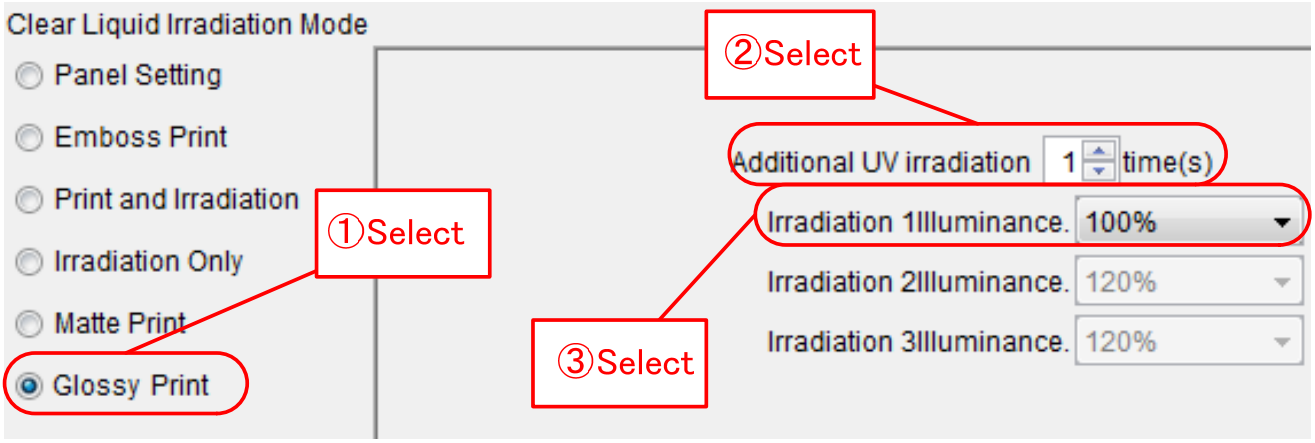
Cross section diagram of printing result

Clear liquid setting

Glossy Print (printing method common to all machine types) setting



Glossy Print (printing method dedicated to UJF-3042)

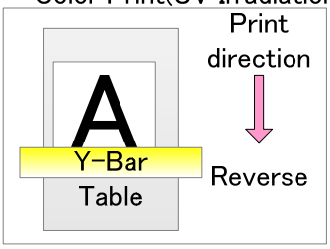


Process flow

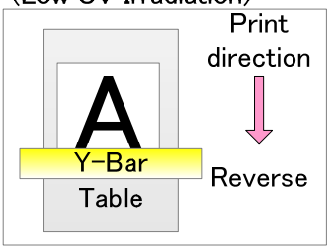
Case of UJF-3042 only

UJF-3042

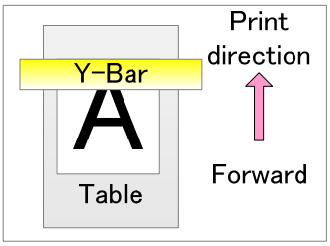
①Special(White) Print
+ Color Print(UV Irradiation)



②Move to origin of reverse
③Clear Liquid Print
(Low UV Irradiation)



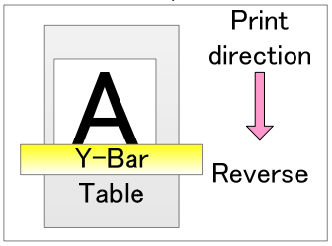
④UV Irradiation(Post Cure)



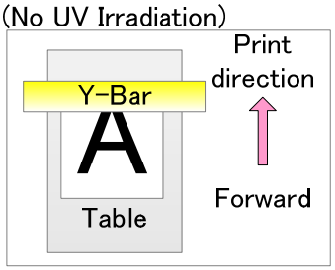
Case of all uv printer model

UJF-3042

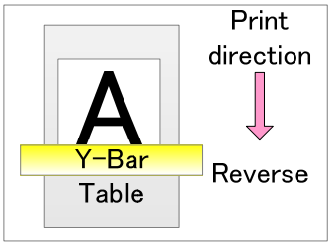
①Special(White) Print
+ Color Print(UV Irradiation)



②Clear Liquid Print
(No UV Irradiation)

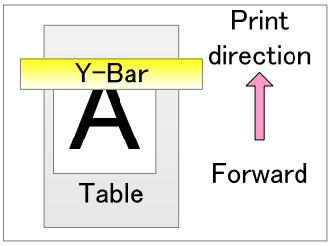


③UV Irradiation(Post Cure)

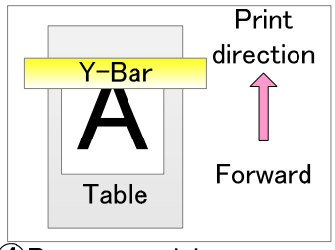


Other printers

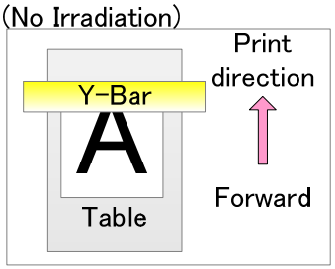
①Special(White) Print
(UV Irradiation)



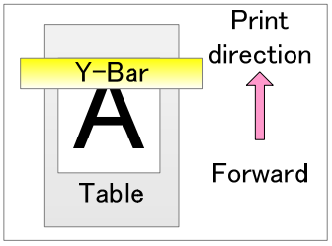
②Return to origin
③Color Print(UV Irradiation)



④Return to origin
⑤Clear Liquid Print
(No Irradiation)



⑥Return to origin
⑦UV Irradiation(Post Cure)

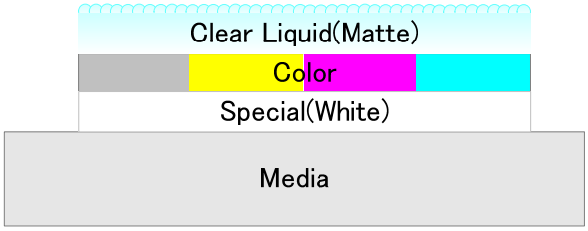


Supplementation

- Special color (white) + color is fixed to Reverse print direction.
- Clear liquid (Glossy Print) is fixed to Reverse print direction.
- Clear liquid (without irradiation) is fixed to Forward print direction.

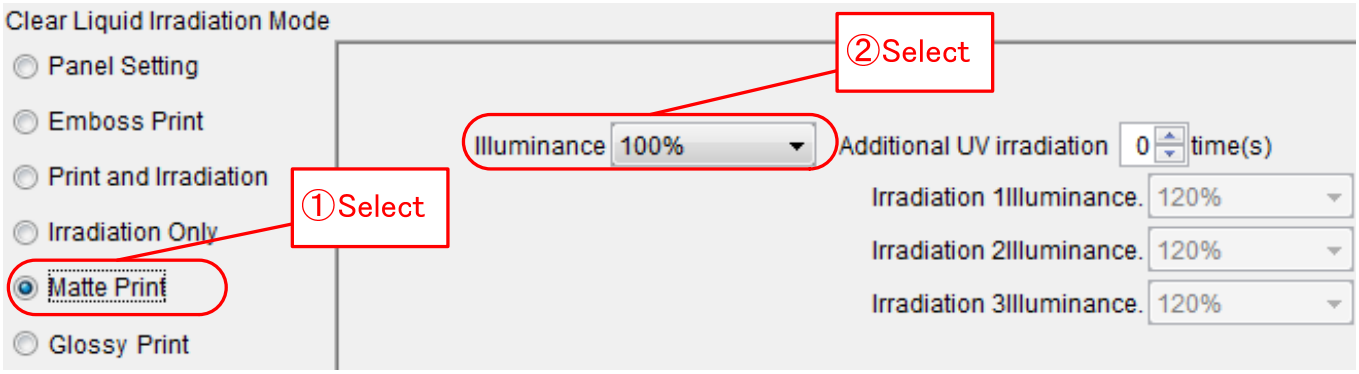
4-3-6. In Case of Special Color (White), Color and Clear Liquid (Matte Print)

Cross section diagram of printing result



Clear liquid setting

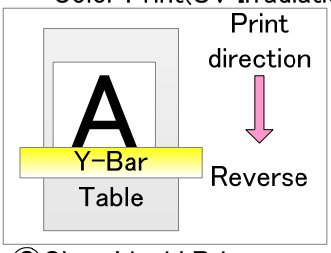
Matte Print setting



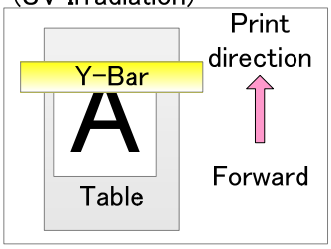
Process flow

UJF-3042

①Special(White) Print
+ Color Print(UV Irradiation)

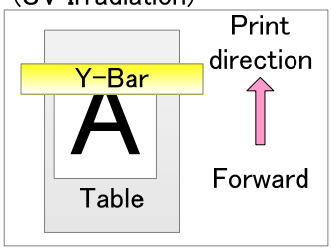


②Clear Liquid Print
(UV Irradiation)

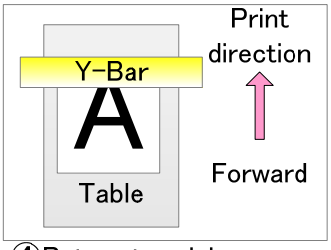


Other printers

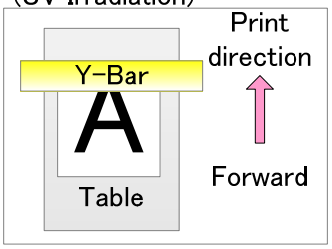
①Special(White) Print
(UV Irradiation)



②Return to origin
③Color Print(UV Irradiation)



④Return to origin
⑤Clear Liquid Print
(UV Irradiation)

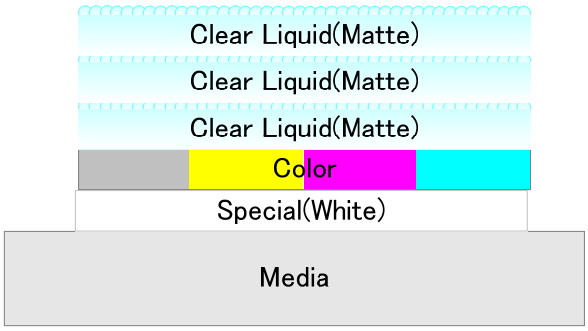


Supplementation

- Special color (white) + color is fixed to Reverse print direction.

4-3-7. In Case of Special Color (White), Color and Clear Liquid (Three-dimensional + Surface Clear Liquid is Matte)

Cross section diagram of printing result



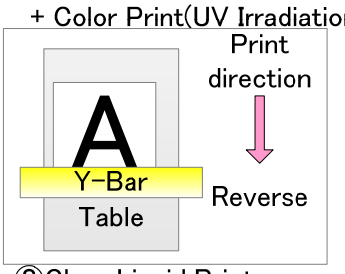
Clear liquid setting

Emboss Print (surface clear liquid is matte) setting

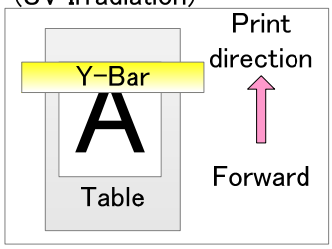
Process flow

UJF-3042

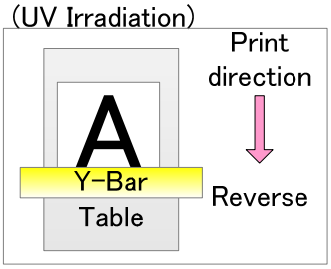
①Special(White) Print
+ Color Print(UV Irradiation)



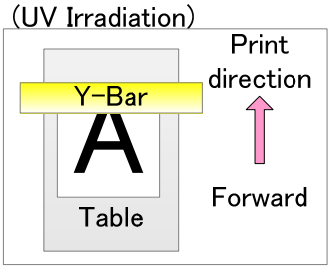
②Clear Liquid Print
(UV Irradiation)



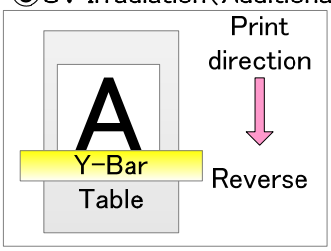
③Clear Liquid Print
(UV Irradiation)



④Clear Liquid Print
(UV Irradiation)

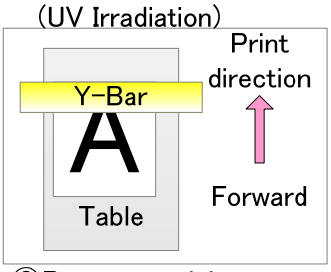


⑤UV Irradiation(Additional)

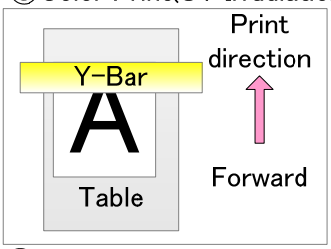


Other printers

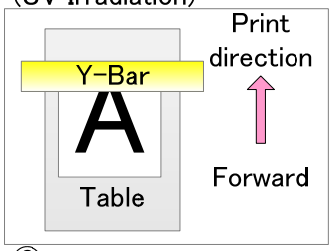
①Special(White) Print
(UV Irradiation)



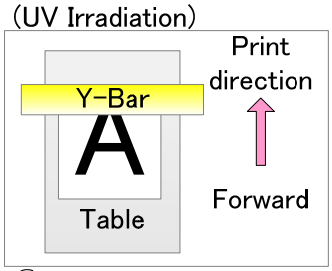
②Return to origin
③Color Print(UV Irradiation)



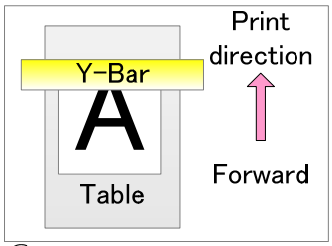
④Return to origin
⑤Clear Liquid Print
(UV Irradiation)



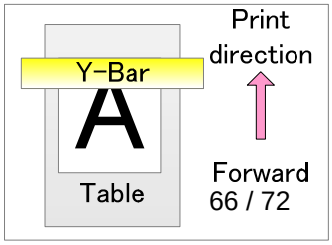
⑥Return to origin
⑦Clear Liquid Print
(UV Irradiation)



⑧Return to origin
⑨Clear Liquid Print
(UV Irradiation)



⑩Return to origin
⑪UV Irradiation(Additional)



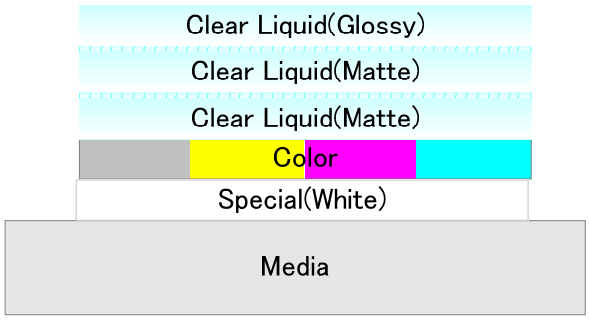
Supplementation

- Special color (white) + color is fixed to Reverse print direction.

4-3-8. In Case of Special Color (White), Color and Clear Liquid (Three-dimensional + Surface Clear Liquid is Glossy)

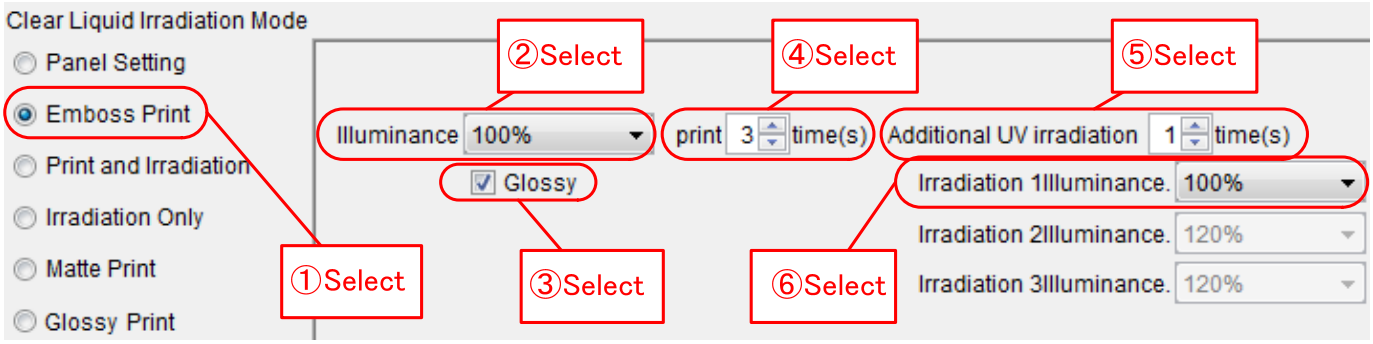
4-3-8.1 For Printing Method Dedicated to UJF-3042

Cross section diagram of printing result



Clear liquid setting

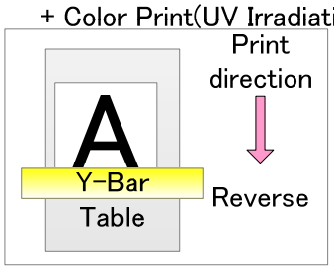
Emboss Print (surface clear liquid is glossy) setting



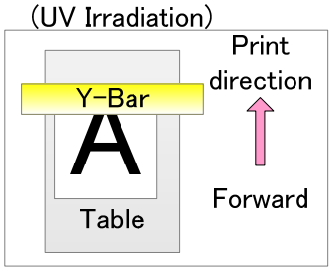
Process flow

UJF-3042

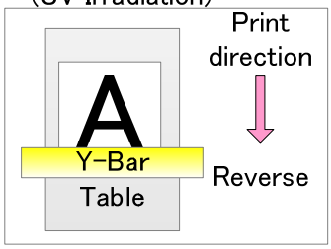
①Special(White) Print
+ Color Print(UV Irradiation)



②Clear Liquid Print
(UV Irradiation)

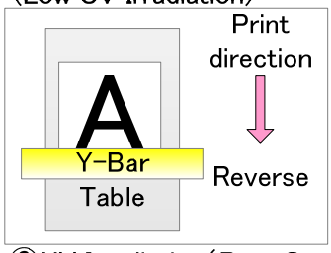


③Clear Liquid Print
(UV Irradiation)

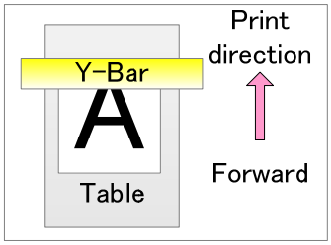


④Move to origin of reverse

⑤Clear Liquid Print
(Low UV Irradiation)



⑥UV Irradiation(Post Cure)



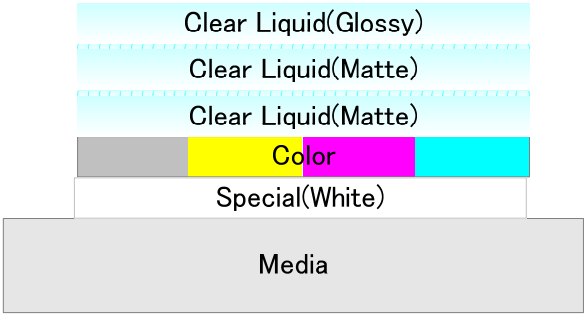
Supplementation

- Special color (white) + color is fixed to Reverse print direction.
- Clear liquid (Glossy Print) is fixed to Reverse print direction.

4-3-8.2 For Printing Method Common to All Machine Types

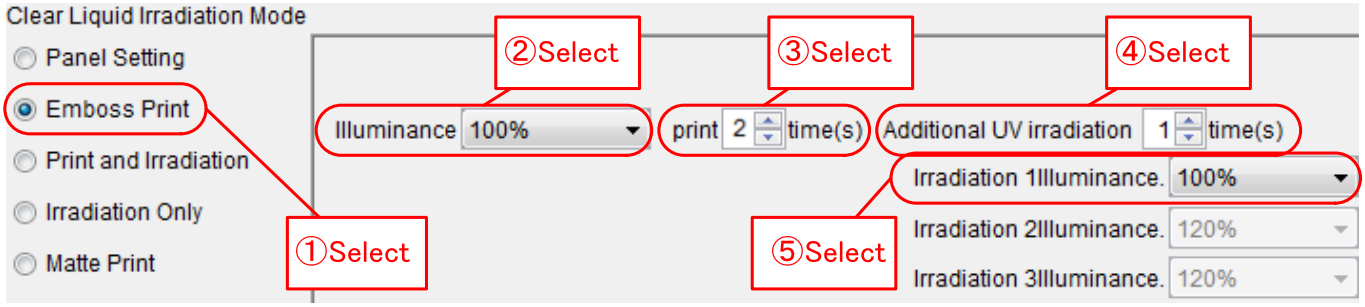
By creating two jobs of Emboss Print and Glossy Print and combining them, make surface clear liquid glossy.

Cross section diagram of printing result

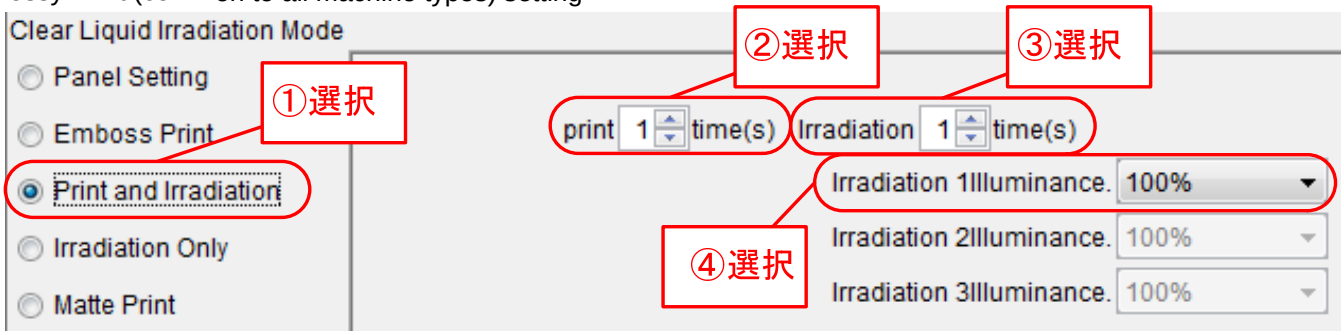


Clear liquid setting

Emboss Print (surface clear liquid is matte) setting



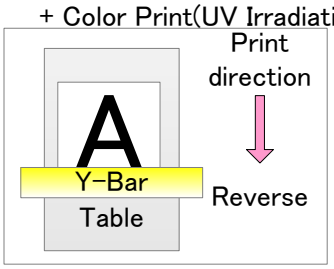
Glossy Print (common to all machine types) setting



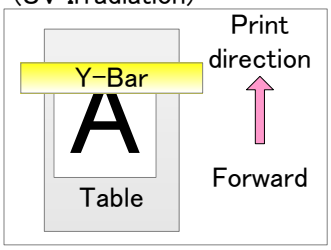
Process flow

UJF-3042

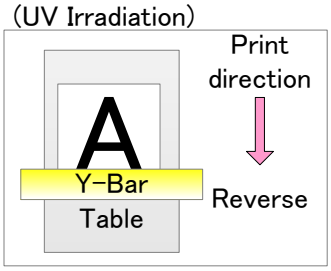
①Special(White) Print
+ Color Print(UV Irradiation)



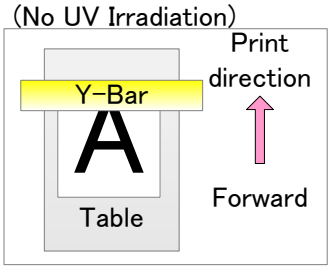
②Clear Liquid Print
(UV Irradiation)



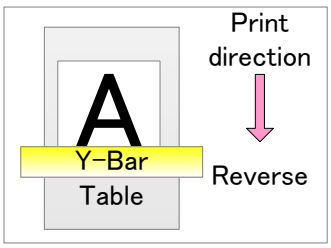
③Clear Liquid Print
(UV Irradiation)



④Clear Liquid Print
(No UV Irradiation)

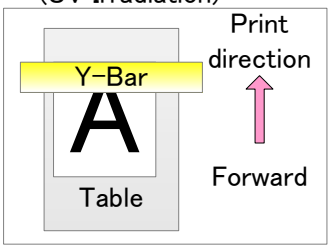


⑤UV Irradiation(Post Cure)

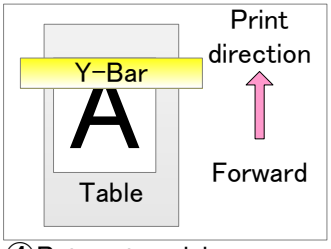


Other printers

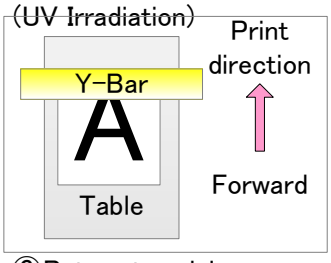
①Special(White) Print
(UV Irradiation)



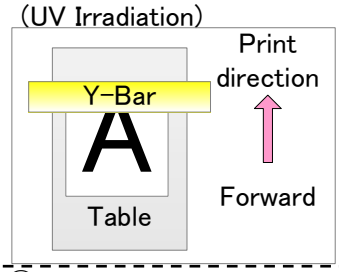
②Return to origin
③Color Print(UV Irradiation)



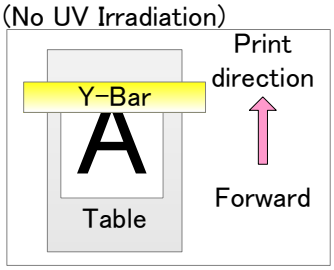
④Return to origin
⑤Clear Liquid Print
(UV Irradiation)



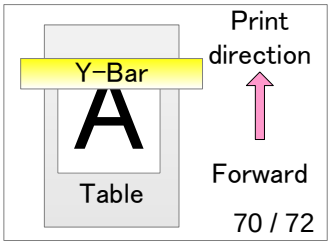
⑥Return to origin
⑦Clear Liquid Print
(UV Irradiation)



⑧Clear Liquid Print
(No UV Irradiation)



⑨Return to origin
⑩UV Irradiation(Post Cure)



From here, it is the second job.

Supplementation

- Special color (white) + color is fixed to Reverse print direction.
- Clear liquid (Glossy Print) is fixed to Reverse print direction.

4-4. Note on Glossy Print of UJF-3042

About Media

You might not be able to print smooth gloss by the media you use. Please confirm Glossy Print by the media you use beforehand.

About pass

To perform Glossy Print of clear liquid, it is necessary to print with the most suitable number of passes according the resolution of feeding direction.

When performing Glossy Print on the surface with Glossy Print/Emboss Print in RasterLinkPro5, the number of passes selected in the print mode is used for the color image, the special color image (white), the clear image (Matte Print) during Emboss Print and UV irradiation, however, when performing Glossy Print, the pass below is used (RasterLinkPro5 changes the pass automatically.)

No	Printing Resolution of Feeding Direction	Pass
1	600 Dpi	4
2	900 Dpi	6
3	1200 Dpi	8

About density

When perform Glossy Print of clear liquid, the density and the media affect the image quality. In addition, when making the surface glossy in the Emboss Print, the number of printings also affects. The recommended setting values under the checked conditions are as below:

Profile media name: Lumirror WhiteBackv3.1

Ink: LH-100 ink

Others: Clear liquid was discharged on the part printed with color ink of LH-100 ink.

No	Printing Resolution	Pass	Dot size (L, M, S)	Glossy Print		Emboss Print (Glossy Print on surface)					
						When density is lower			When density is 100%		
				Pass	Density	Pass	Density	No. of printings	Pass	Density	No. of printings
1	720 x 600VD	16	3,2,1	4	95%	4	95%	2,4,6,8,10	4	100%	2,4,6,8,10
2	720 x 900VD	24	3,2,1	6	70%	6	70%	2,4,6	6	100%	NG
3	720 x 1200VD	32	3,2,1	8	70%	8	70%	NG	8	100%	NG
4	1440 x 1200VD	32	3,2,1	8	85%	8	85%	NG	8	100%	NG

Profile media name: UV-PETv3.1

Ink: LH-100 ink

Others: Clear liquid was discharged on the part printed with color ink of LH-100 ink.

No	Printing Resolution	Pass	Dot size (L, M, S)	Glossy Print		Emboss Print (Glossy Print on surface)					
						When density is lower			When density is 100%		
				Pass	Density	Pass	Density	No. of printings	Pass	Density	No. of printings
1	720 x 600VD	8	3,2,1	4	95%	4	95%	NG	4	100%	2,4,6
2	720 x 900VD	12	3,2,1	6	80%	6	80%	4,6,8,10	6	100%	NG
3	720 x 1200VD	16	3,2,1	8	80%	8	80%	2,4	8	100%	NG
4	1440 x 1200VD	16	3,2,1	8	100%				8	100%	NG

Even if you select the pass in blue, RasterLinkPro5 changes it to the one in red automatically for Glossy Print. (Refer to “About pass” above.)

4-5. Information on Emboss Print of UJF-3042

The thickness of ink when a clear liquid is printed 100 times is as follows.

Media Name: Lumirror

Ink Consumption	Print Condition	Thickness
Maximum Ink Consumption	Profile: UJF30426CLH100_Lumirror_F103025.icc Resolution:720x900VD Pass:24 Emboss Print Count: 10 times Print Count of Job:10 times	1.6173mm
Minimum Ink Consumption	Profile: UJF30426CLH100_Lumirror_F103117.icc Resolution:720x1200VD Pass:32 Emboss Print Count: 10 times Print Count of Job:10 times	1.3998mm

Media Name: UV-PET

Ink Consumption	Print Condition	Thickness
Maximum Ink Consumption	Profile: UJF30426CLH100_PET_F103024.icc Resolution:720x900VD Pass:12 Emboss Print Count: 10 times Print Count of Job:10 times	1.6145mm
Minimum Ink Consumption	Profile: UJF30426CLH100_PET_F103144.icc Resolution:720x600VD Pass:8 Emboss Print Count: 10 times Print Count of Job:10 times	1.1038mm

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