UJV100 Clear Ink Print Guide

This manual describes the effects that can be expressed when clear ink is used in UJV 100, and how to set and print them.
Please read this manual carefully and use it correctly.

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Notations used in this document

- Items and buttons displayed in menus and on screens are marked with square brackets ([ ]) as in [File].
- RasterLink6Plus, RasterLink7 and RasterLink8 are referred to as RasterLink in together.

Screen image used in this document

- The explanation is based on the screen image of RasterLink6Plus as an example.

Symbols

Important!	• This symbol indicates important information for using this product.
	• This symbol indicates useful information.

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Applicable environment

Printer	UJV100 FW Ver.2.0 or later
Ink	Product specification ink
RIP	RasterLink6Plus Ver.2.8 or later RasterLink7 Ver.1.2.0 or later

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Effect of clear ink and selection of printing method

Clear ink's effects

The effects below can be obtained by using clear ink.

Gloss feel effect - "Glossy Print"

Matte feel effect - "Matte Print"

These effects can be obtained via the "UV MODE" settings in RasterLink.

Important!

Recommended settings for printing a clear ink
To obtain a better effect of clear ink, print clear ink with the following conditions.

If the media is PET, PVC or synthetic paper

- **Glossy print**

Recommended printing conditions					Recommended density		
Resolution	**Pass**	**Print direction**	**High speed print**	**Special Color Over Print**	**PET**	**PVC**	**Synthetic Paper**
1200 × 1200 VD	16/24/32	Bi-direction	[High]	Not do((Clear (Glossy) only)	160% (80%+80%)		Not recommended
				Do(Color ⇒ Clear (Glossy))	160% (80%+80%)		

- **Matte printing**

Recommended printing conditions				Recommended density		
Resolution	**Pass**	**Print direction**	**High speed print**	**PET**	**PVC**	**Synthetic Paper**
360 × 1200 VD	8/10/12/16	Bi-direction	[Normal]	120% (60%+60%)		
720 × 900 VD	12/16/24	Bi-direction	[High]			
1200 × 1200 VD	16/24/32	Bi-direction	[High]			

If the media is FF, Tarpaulin

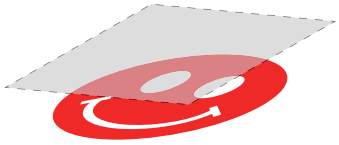
- **Glossy print**
  Can't print.

- **Matte printing**

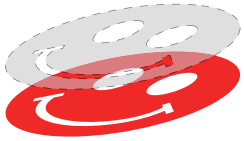
Recommended printing conditions				Recommended density	
Resolution	**Pass**	**Print direction**	**High speed print**	**FF**	**Tarpaulin**
360 × 900 VD	6/8/10/12	Bi-direction	[Normal]	120% (60%+60%)	
360 × 1200 VD	8/10/12/16	Bi-direction	[Normal]		
720 × 900 VD	12/16/24	Bi-direction	[High]		

Selection of clear ink printing method

Select the method for printing clear ink.
In RasterLink, clear ink can be printed in the following way.



Printed over the whole of a color image



Printed onto valid pixels of a color image

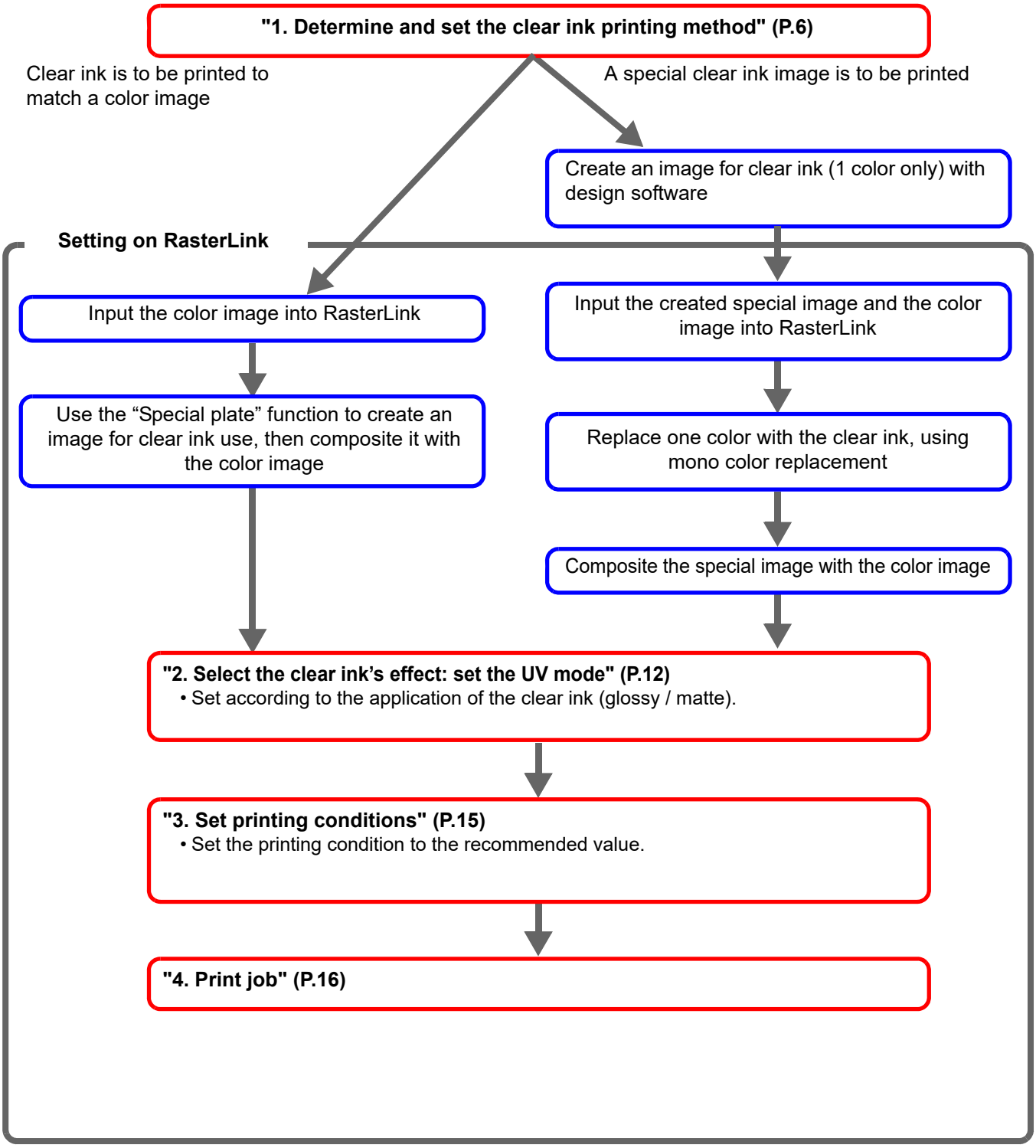
Printed as a special image for clear ink use

For printing the clear ink over the whole of a color image, and for printing it onto valid pixels of a color image, create a clear ink job using the “Special plate” function of RasterLink.
For printing the clear ink as a special clear ink image, you must create the special clear ink image by means of design software such as Illustrator.

Printing methods

Data creation and printing procedures

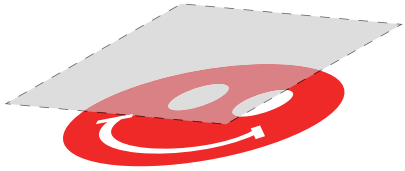
Data for clear ink is created in the following procedure and printed with RasterLink.



1. Determine and set the clear ink printing method

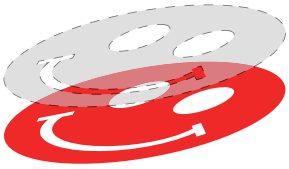
Suppose you have the following color image. You can print the clear ink in any of the three ways shown below.

Print it over the whole of the color image



-> Go to A. Printing the clear ink over the whole of the color image

Print it onto the valid pixels of the color image



-> Go to B. Printing the clear ink onto the valid pixels of the color image

Print a special image for clear ink use

-> Go to C. Printing a special clear ink image

A. Printing the clear ink over the whole of the color image

To print the clear ink over the entire color image, create a plate based on the color image on P. 6.

1. **In the [Job List], select the job that will be the basis for the plate.**

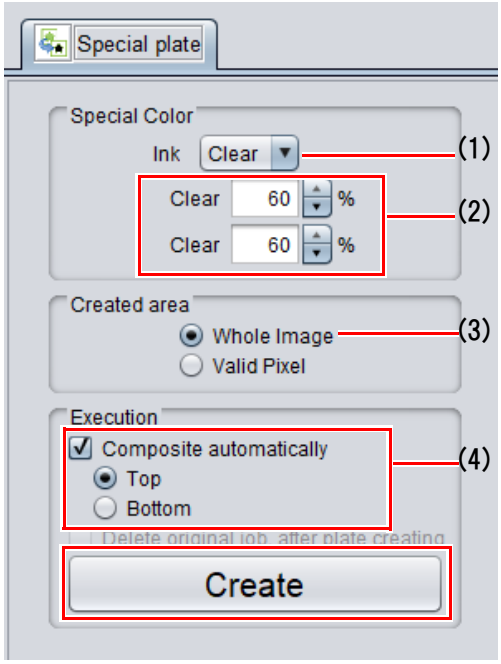
2. **Click the [Special plate] icon from the function icon.**

3. **Set as follows and click [Create].**

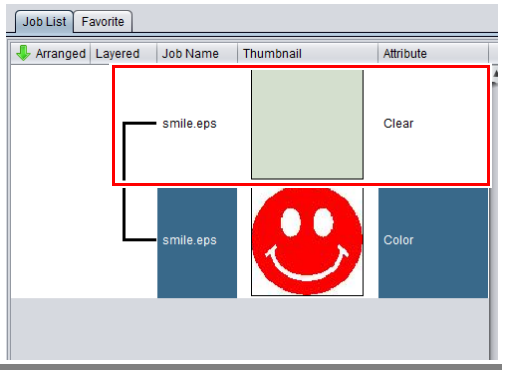
(1) [Ink]: Select [Clear]
(2) [Clear]: Set to 60% (2 places)

> Important! For more information on density, see "Recommended settings for printing a clear ink" (P.3)

(3) [Created area]: Select [Whole image].
(4) [Composite automatically]: Check the box, and select [Top].



- The clear ink job will be created, in a composited state.



B. Printing the clear ink onto the valid pixels of the color image

To print the clear ink on the effective pixel of the color, create the plate based on the color image of P. 6.

1. **In the [Job List], select the job that will be the basis for the plate.**

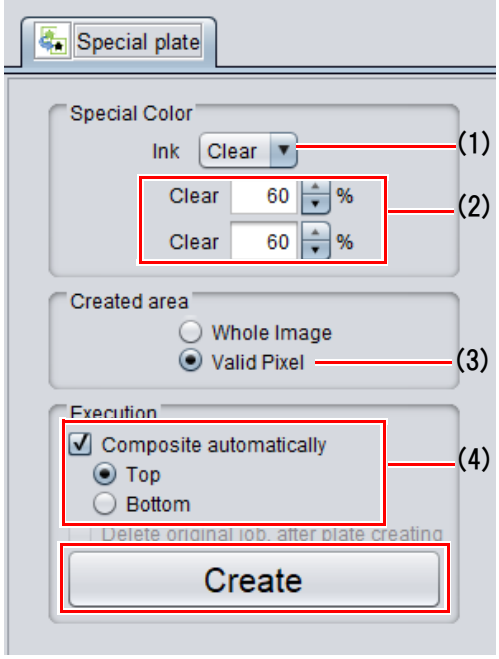
2. **Click the [Special plate] icon from the function icon.**

3. **Set as follows and click [Create].**

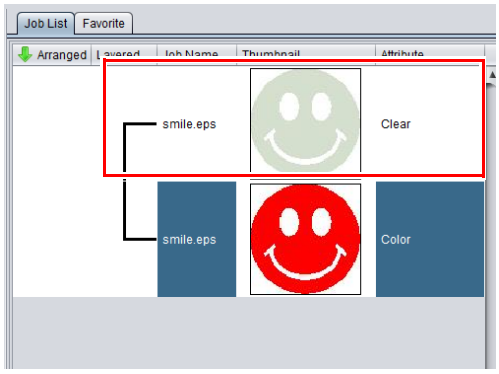
(1) [Ink]: Select [Clear]
(2) [Clear]: Set to 60% (2 places)

> Important! For more information on density, see "Recommended settings for printing a clear ink" (P.3)

(3) [Created area]: Select [Valid Pixel].
(4) [Composite automatically]: Check the box, and select [Top].



- The clear ink job will be created, in a composited state.



C. Printing a special clear ink image

To print an image designed for clear ink, create a special image, separate from the color image, and carry out mono color replacement with RasterLink. After that, composite the clear ink image with the color image.

● Creating the clear ink image

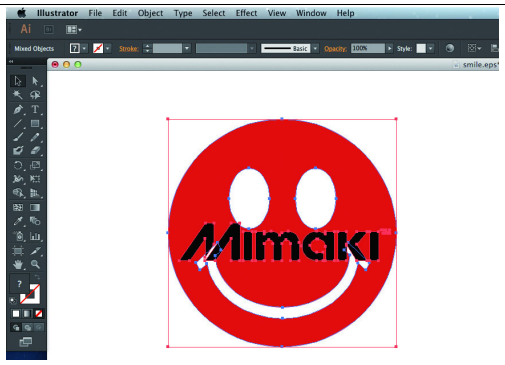
1. Using design software such as Illustrator or Photoshop, create a clear ink image with the following conditions:

- Color Mode: CMYK
  Colors used: One color only - cyan or magenta or yellow or black. **The concentration is the recommended density.For the other colors, set 0%.**
  In this procedure, black 60% is used as an example.

Important! For more information on recommended density, see "Recommended settings for printing a clear ink" (P.3)

Make the clear ink image's size match the color image's.

You can do this by creating a non-fill/non-line path around the periphery of both images, as shown on the right.



2. Save the created image as an EPS or TIFF image.

- You are recommended to save the color image and clear ink image separately from each other after you have done the layout for them with the design software.

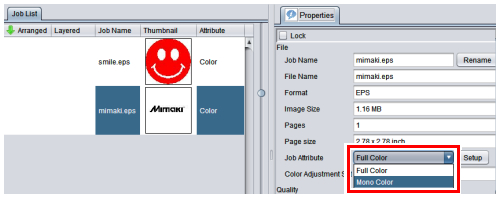
3. Read the image saved in step 2 with RasterLink.

● Setting mono color replacement

1. **In the [job list], select the clear ink job.**

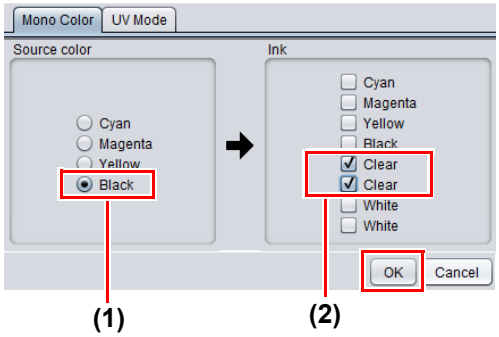
2. **Click the [Properties] icon from the function icon.**

3. **Select [Mono Color] in the [Job Attribute] pull-down menu.**



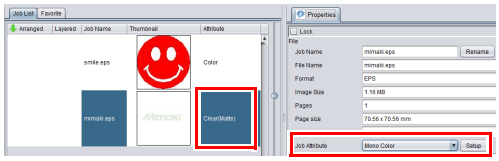
4. **Select the [Mono Color] tab and make the following settings.**

(1) [Source color]: [Black]
(2) [Ink]: [Clear] (2 places)



5. **Click the [OK].**

- Job attribute becomes [Mono Color] and [Attribute] of [Job List] becomes [Clear (Matte)].

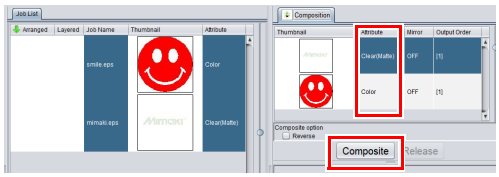


● Compositing the clear ink image with the color job

1. **In the [job list], select the color job and the clear ink job.**

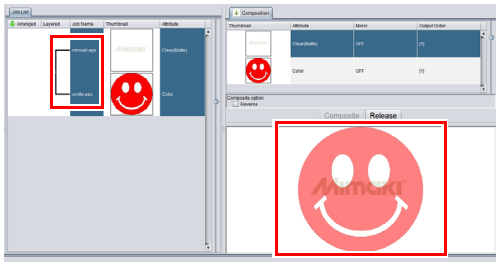
2. **Click the [Composition] icon from the function icon.**

3. **Confirm that the order of jobs on the [Composition] tab is "Clear → Color" from the top, and click [Composite].**



- If it is not, replace the job on the [Composition] tab with drag & drop.

- The job is composited.



2. Select the clear ink's effect: set the UV mode

Depending on the setting of [UV mode], the effect of clear ink can be changed.

Gloss feel effect - "Glossy Print"

-> Go to a. Setting Glossy Print

Matte feel effect - "Matte Print"

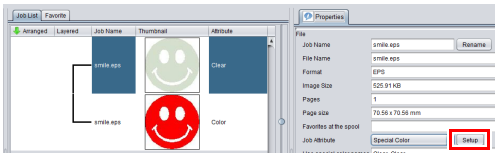
-> Go to b. Setting Matte Print

a. Setting Glossy Print

1. **In the [Job List], select the clear ink job.**

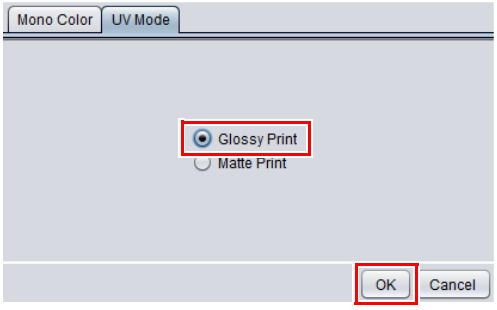
2. **Click the [Properties] icon from the function icon.**

3. **Click the [Setup] in the [Job Attribute].**

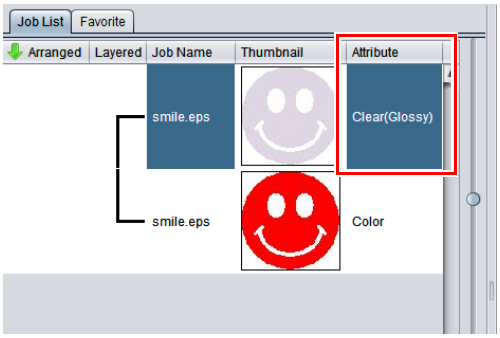


4. **Select the [UV Mode] tab and click [Glossy Print].**

5. **Click the [OK].**



- [Attribute] becomes [Clear(Glossy)].

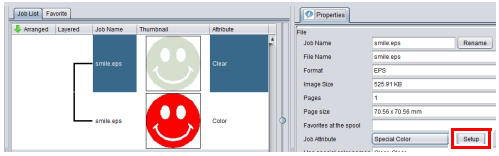


b. Setting Matte Print

1. **In the [Job List], select the clear ink job.**

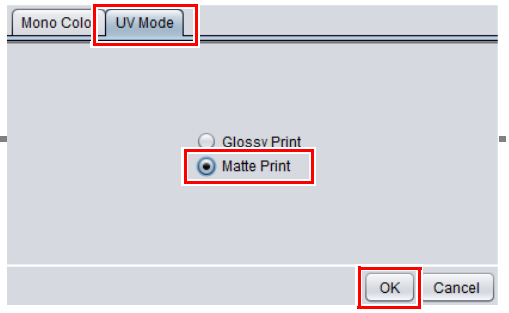
2. **Click the [Properties] icon from the function icon.**

3. **Click the [Setup] in the [Job attribute].**

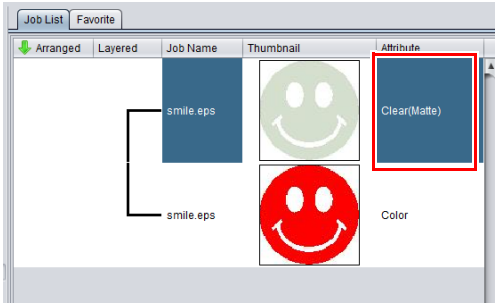


4. **Select the [UV Mode] tab and click [Matte Print].**

5. **Click the [OK].**



- [Attribute] becomes [Clear(Matte)].



3. Set printing conditions

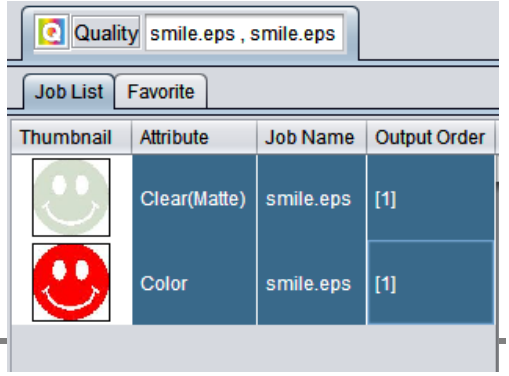
To obtain better effects from the clear ink, set according to image quality and output speed.
See below for recommended settings.
"Recommended settings for printing a clear ink" (P.3)

1. **In the [Job List], select the applicable job.**

2. **Click the [Quality] icon from the function icon.**

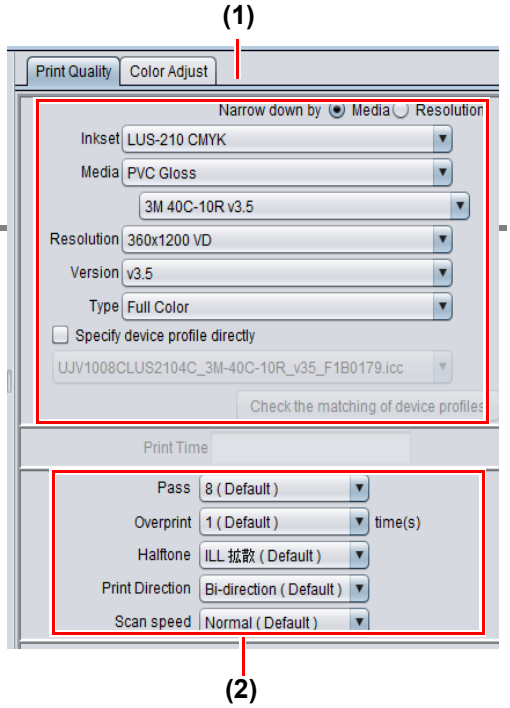
3. **Select both the color job and the clear ink job that are displayed in the [Job List].**

- Multiple jobs can be selected by holding down the CTRL key and clicking the job.
- If you select both, you can set the same conditions for these jobs.



4. **In the profile field (1), select a profile that matches the media to be printed on.**

5. **Refer to "Recommended settings for printing a clear ink" (P.5) and set the output setting field (2).**

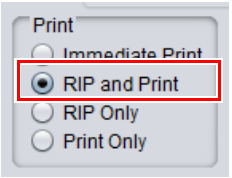


4. Print job

1. In the [Job List], select the applicable job.

2. Click the [Execution] icon from the function icon.

3. Select [RIP and Print].



4. Click the [Start].

At times like this

When the image quality is not good

If you use the clear ink according to the procedures in this Guide, the settings will be made so that good-quality images are obtained, with the specified quality feel. Sometimes however, the image quality may be poor due to the media material or other factor. In that case, change the setting of 1-3 of the following procedures, please do a test print.
The operation is done in local mode.

1. Select [MAPS4] on the panel, as follows:

(1) With <Local> displayed, press the [FUNCTION] key.
(2) Use the ▲ ▼ key to select [SETUP], then press the ENTER key.
(3) Use the ▲ ▼ key to select [SETUP 1] to [SETUP 4], then press the ENTER key.
(4) Use the ▲ ▼ key to select [MAPS4], then press the ENTER key.

2. Select “MANUAL” for ［MAPS4］, as follows:

(1) Press the ENTER key.
(2) Use the ▲ ▼ key to select “MANUAL”.

3. After setting to “MANUAL”, make the settings for the ink colors, as follows.

(1) Press the ENTER key.
(2) Make the setting for [COLOR], as follows.
Use the ▲ ▼ key to change level. (0 to 100%)
Changing this value will change the color image quality.
(3) Make the setting for [SPOT], as follows.
Use the ▲ ▼ key to change level.
Changing this value will change the spot color image quality.
Then press ENTER .
(4) Return to <Local>, by pressing the END/POWER key several times.

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