NEXA-160UV

Clear Ink Print Guide

This manual describes the effects that can be expressed when clear ink is used in NEXA-160UV 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].
- RasterLink8 is referred to as RasterLink.

Symbols

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

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Applicable environment

Use a printer equipped with color inks and clear ink.

Printer	FW Ver.1.0 or later
Ink	ALS-150
Mimaki Driver	Ver.5.13.2 or later
RIP	RasterLink8 Ver.1.0.1 or later

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Setting the printer

Standard setting

When printing using this guide, set the printer as follows.

1. Turn on the printer's power.

- Wait until the Media Select mode.

Important! • If the power is already on, set to the Media Select mode.

2. Select the panel to press [MAPS] setting display, as follows:

(1) With [MENU] on the display, press the corresponding [FUNC] key.
(2) Use the ▲ ▼ key to select [Media Setting], then press the ENTER key.
(3) Use the ▲ ▼ key to select the media to be used, then press the ENTER key.
(4) Use the ▲ ▼ key to select [MAPS], then press the ENTER key.

3. Select "AUTO", as follows:

(1) Press the ENTER key.
(2) Use the ▲ ▼ key to select "AUTO", then press the ENTER key.

4. Return to <Local>, by pressing the END/POWER key several times.

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 1-4 of the following procedures, please do a test print.

1. Turn on the printer's power.

- Wait until the Media Select mode.

Important!
- If the power is already on, set to the Media Select mode.

2. Select the panel to press [MAPS] setting display, as follows:

(1) With [MENU] on the display, press the corresponding [FUNC] key.
(2) Use the ▲ ▼ key to select [Media Setting], then press the ENTER key.
(3) Use the ▲ ▼ key to select the media to be used, then press the ENTER key.
(4) Use the ▲ ▼ key to select [MAPS], then press the ENTER key.

3. Select "MANUAL", as follows:

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

4. 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.
Then press ENTER .
(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.

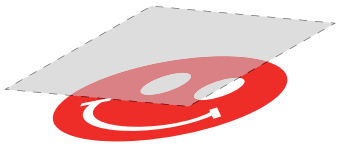
Recommended settings for printing a clear ink

To obtain a better effect of clear ink, print clear ink with the following conditions.

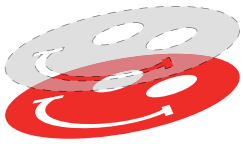
Recommended printing conditions				
Resolution	**Pass**	**Print direction**	**High speed print**	**Recommended density**
600 × 600 VD	4/6/8	Bi-direction	Yes	50%
600 × 1200 VD	8/12/16	Bi-direction	Yes	60%
600 × 1800 VD	16/24/32	Bi-direction	Yes	80%

Selection of clear ink printing method

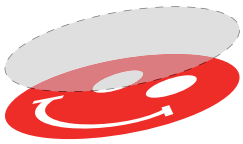
Select the method for printing clear ink.
In RasterLink, clear ink can be printed in the following way.



Printed over the whole of a color image



Printed onto valid pix-els of a color image



Printed on a back-ground other than the background of the color image



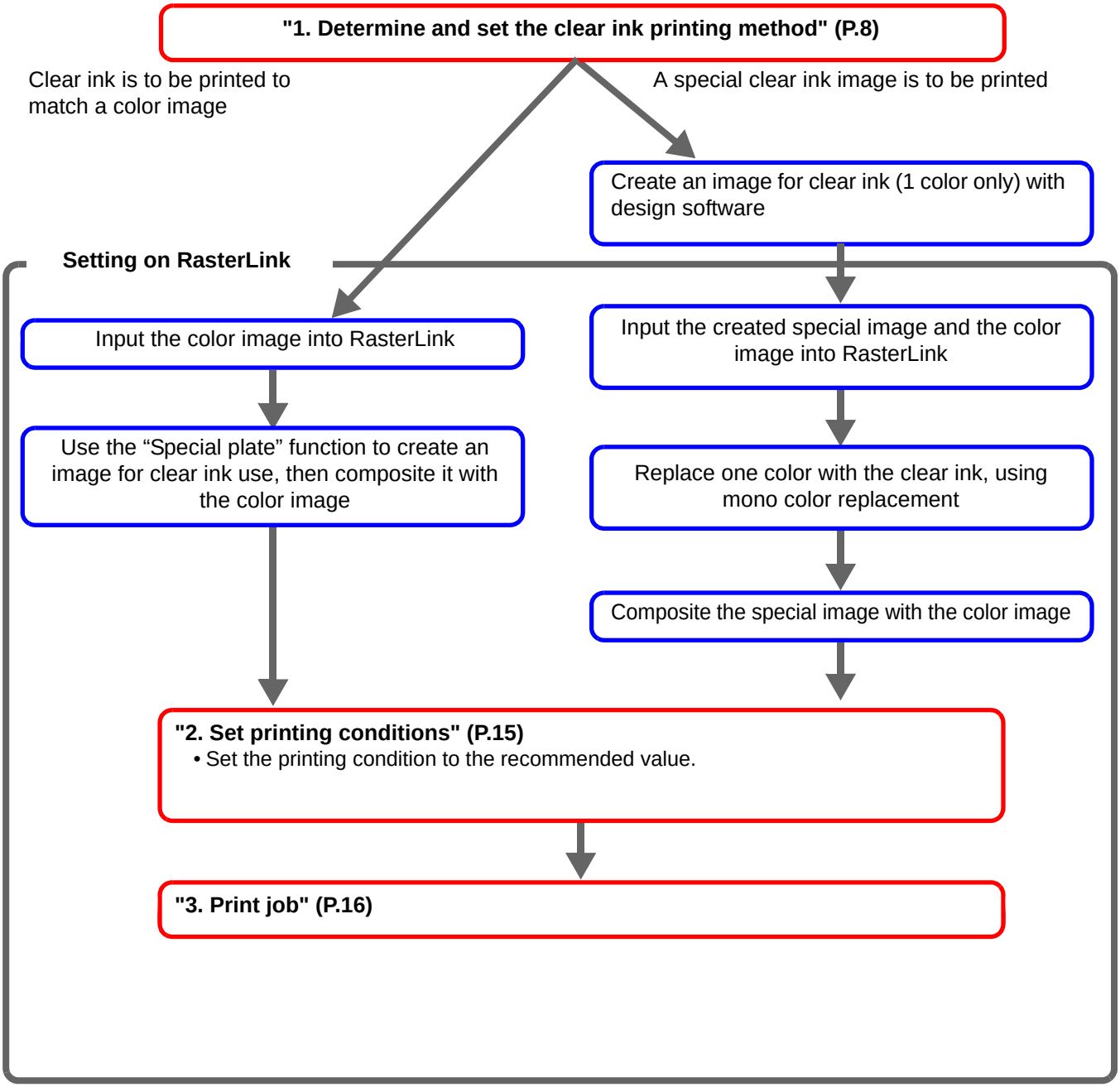
Printed as a special image for clear ink use

For "Printed over the whole of a color image" and "Printed onto valid pixels of a color image" and "Printed on a background other than the background of the color image", printed on a background other than the background of the color,imagecreate a clear ink job using the “Special plate” function of RasterLink.
For “Printed as a special image for 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.

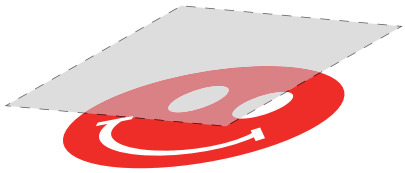


1. Determine and set the clear ink printing method

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

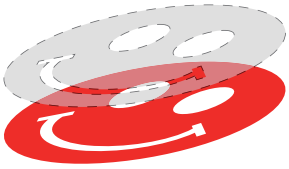


Print it over the whole of the color image



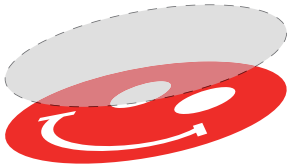
-> Go to A. Printing the clear ink over the whole of the color image

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 on a background other than the back-ground of the color image



-> Go to C. Printing the clear ink on top of a color image except on the background.

Print a special image for clear ink use



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

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

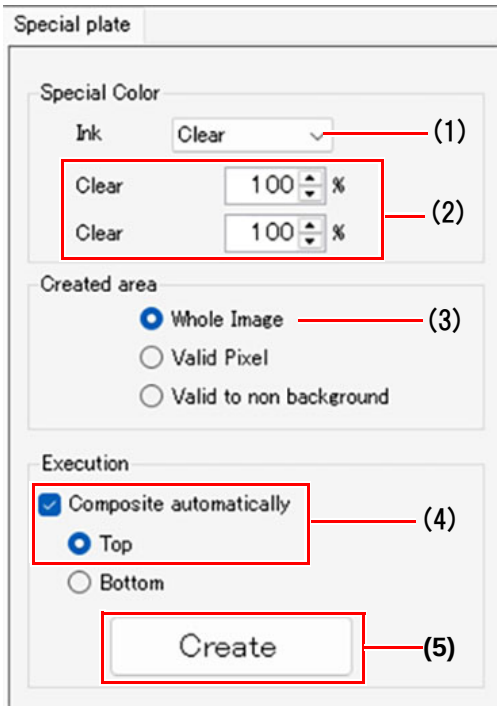
To print the clear ink over the entire color image, create a plate based on the color image on P. 8.

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

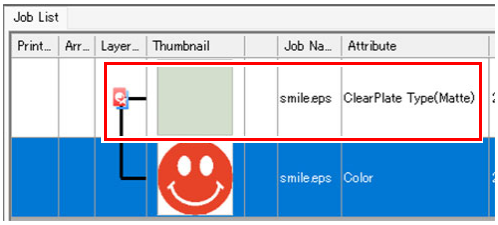
2. Click the [Special plate] icon from the function icon.

3. Set as follows and click [Create].

(1) [Ink]: Select [Clear]
(2) [Clear]: Set to the recommended concentration listed in the table for P.6 "Recommended settings for printing a clear ink" (2 places)
(3) [Created area]: Select [Whole image].
(4) [Composite automatically]: Check the box, and select [Top].
(5) Click the [Create] button.



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



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

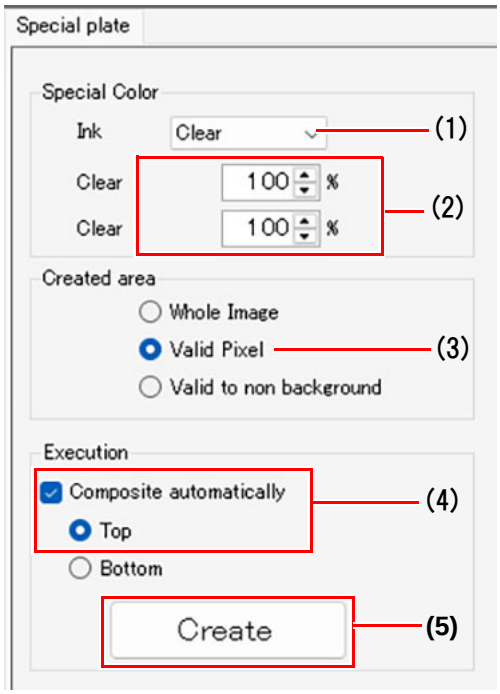
To print the clear ink on the effective pixel of the color, create the plate based on the color image of P. 8.

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

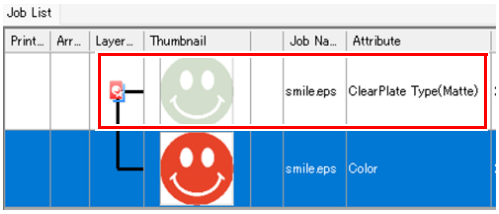
2. Click the [Special plate] icon from the function icon.

3. Set as follows and click [Create].

(1) [Ink]: Select [Clear]
(2) [Clear]: Set to the recommended concentration listed in the table for P.6 "Recommended settings for printing a clear ink" (2 places)
(3) [Created area]: Select [Valid Pixel].
(4) [Composite automatically]: Check the box, and select [Top].
(5) Click the [Create] button.



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



C. Printing the clear ink on top of a color image except on the background.

To print the clear ink on top of a color image except on the background, create a special plate on the basis of the image.

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

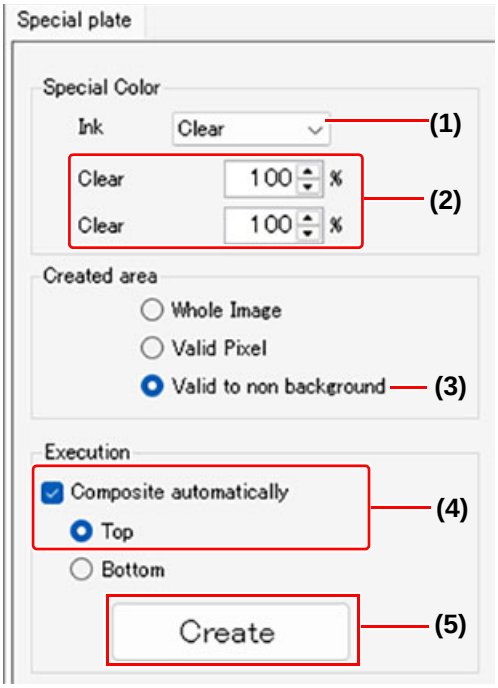
- Click the “Special plate”  function icon.

Important!

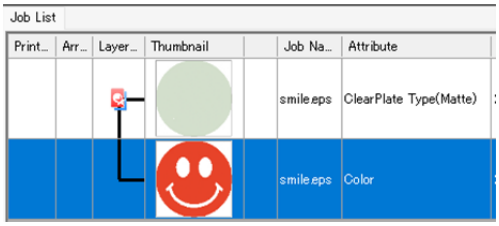
- Effective when the image data format is EPS, PS, or PDF and a color (including white) is specified in the data section.

2. Make the settings as follows.

(1) [Ink]: Select “Clear”
(2) [Clear]: Set to the recommended concentration listed in the table for P.6 "Recommended settings for printing a clear ink" (2 places)
(3) [Created area]: Select “Valid to non background”.
(4) [Composite automatically]: Check the box, and select “Top”.
(5) Click the [Create] button.



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



D. 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.

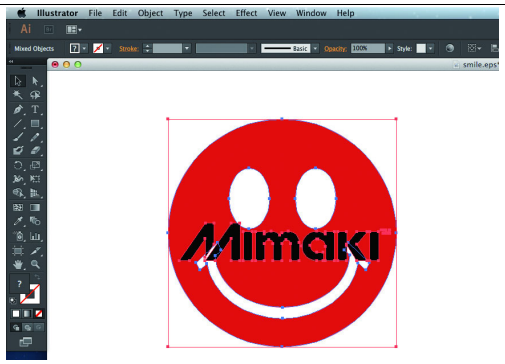
● Creating the clear ink image

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. Set 100% density for the color. For the other colors, set 0%.
  In this procedure, black 100% is used as an example.

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.

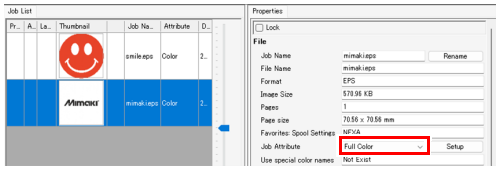
3. **Read the image saved in step 2 with RasterLink.**

● Setting mono color replacement

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

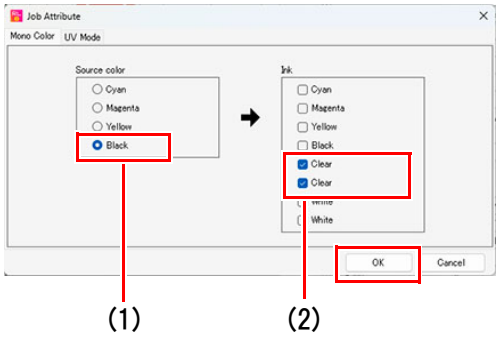
2. **Click the [Properties] icon from the function icon.**

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



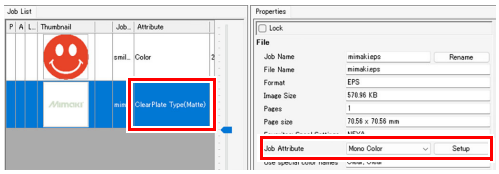
4. **Select the [Mono Color] tab and make the following settings.**

(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)].

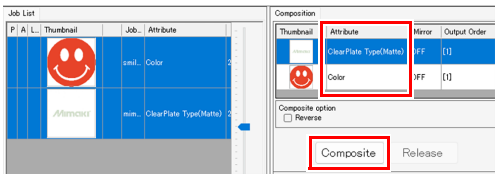


● Compositing the clear ink image with the color job

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

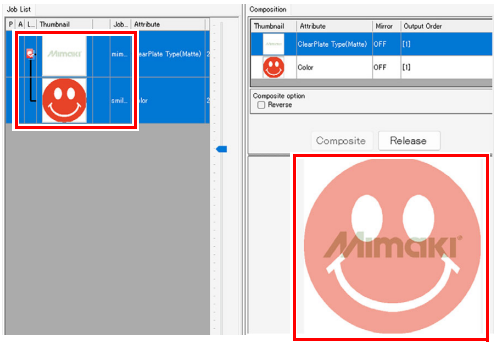
2. **Click the [Composition] icon from the function icon.**

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. Set printing conditions

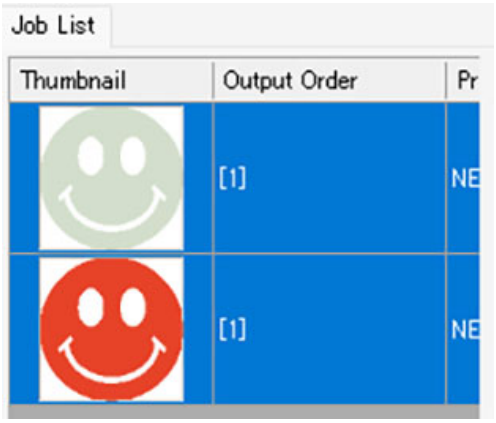
To obtain better effects from the clear ink, set according to image quality and output speed.
see below for recommended settings.
"Recommended settings for printing a clear ink" (P.6)

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

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

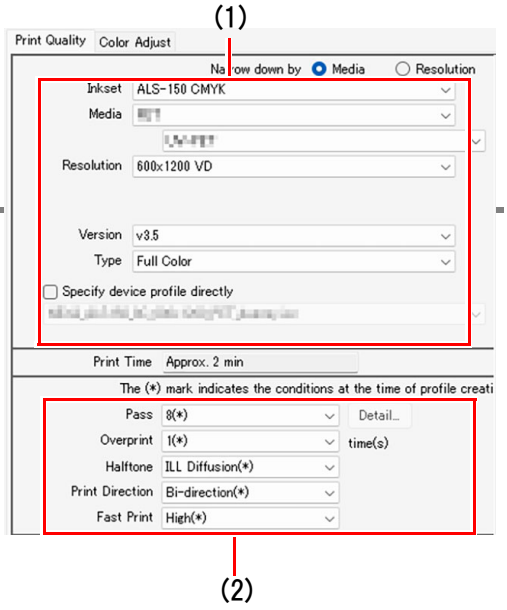
3. **Select both the color job and the clear ink job that are displayed in the [Job List].**

- 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. **"Recommended settings for printing a clear ink" (P.6) and set the output setting field (2).**

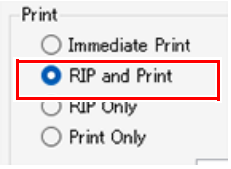


3. Print job

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 printing with clear ink and white ink together

Mechanism of printing using clear ink and white ink

As follows, three layers consisting of clear ink, color image, and white ink can be printed.



Print a color image on white ink. Furthermore, print clear ink on the color image.

Use the [Special plate] function to create [Clear (Matte)] and [White] jobs from color images.



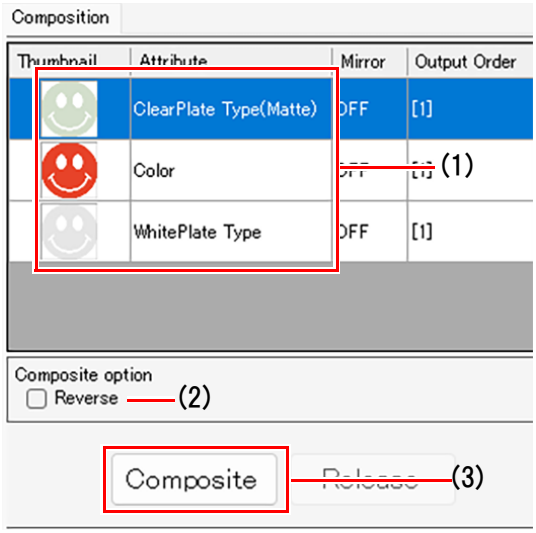
Print white ink, color image, and clear (matte) at once.

1. Select a job whose [Attribute] is [Clear (Matte)], [Color], or [White].

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

3. Set as follows and click [Composition].

- Arrange jobs in the order of [White], [Color], [Clear (Matte)] from the bottom



4. Click the [Quality] icon from the function icon.

- Set the print condition.

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

- The printing will be executed.



D204064-10-16112026
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