

Clear Ink Print Guide

This Guide explains how to obtain various kinds of printing effects by using clear ink with the JFX200-2513/JFX200-2531/JFX200-2513EX/JFX200-1213EX/JFX600-2513/JFX600-2531 printer.
Read this Guide carefully before using the ink.

Note

- It is strictly prohibited to write or copy a part or whole of this document without our approval.
- This document has been carefully prepared for your easy understanding, however, please do not hesitate to contact a distributor in your district or our office if you have any inquiry.
- Description contained in this document are subject to change without notice for improvement.
- Copying the Mimaki Engineering Co. Ltd. software described in this guide to other disks (except for backup purposes) or loading it to memory except for the purpose of running it, is strictly prohibited.
- Due to improvement or change of software, the description of this document could be partially different in specification, for which your understanding is requested.
- With the exception of what is provided for in the warranty provisions of MIMAKI ENGINEERING CO., LTD., we do not assume any liability against the damages (including but not limited to the loss of profit, indirect damage, special damage or other monetary damages) arisen out of the use or failure to use of this product. The same shall also apply to the case even if MIMAKI ENGINEERING CO., LTD. had been notified of the possibility of arising damages in advance. As an example, we shall not be liable for any loss of the media made using this product or indirect damages caused by the product made using this media.
- You can also download the latest operation manual from our website.

Notations used in this document

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

Screen image used in this document

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

Symbols



- This symbol indicates important information for using this product.



- This symbol indicates useful information.

RasterLink is the trademarks or registered trademarks of MIMAKI ENGINEERING CO., LTD. in Japan and in other countries.

Adobe, Illustrator are the trademarks or registered trademarks of Adobe Inc. in the United States and other countries.

CorelDRAW is a trademark or registered trademark of Corel Corporation in Canada, the United States and other countries, and its affiliates.

Microsoft and Windows are trademarks or registered trademarks of Microsoft Corporation of the United States and other countries.

Apple and Macintosh are trademarks or registered trademarks of Apple Inc. of the United States and other countries.

Other company and product names mentioned herein are the trademarks or registered trademarks of the respective companies in Japan and in other countries.

Applicable environment

JFX200-2513EX

| Ink | Ink set | Printer F.W.Ver | RIP | Mimaki Driver (RasterLink7 only) |
|---------|-----------|------------------------|---|-------------------------------------|
| LH-100 | 4C+CICIWW | F.W. Ver.1.10 or later | RasterLink6Plus Ver.2.1 or later RasterLink7 Ver3.0.0 or later | Ver5.7.0 or later |
| | 4C+CIPWW | | | |
| | 6C+WCI | F.W. Ver.1.30 or later | | |
| LUS-120 | 4C+CICIWW | F.W. Ver.1.10 or later | | |
| | 4C+CIPWW | | | |
| LUS-150 | 4C+CICIWW | | | |
| | 4C+CIPWW | | | |
| | 6C+WCI | | | |
| LUS-350 | 4C+CICIWW | F.W. Ver.1.50 or later | | |
| LUS-211 | 4C+CICIWW | F.W. Ver.2.70 or later | RasterLink7 Ver3.0.0 or later | Ver5.8.2 or later |
| ELH-100 | 4C+CICIWW | F.W. Ver.4.00 ~ | RasterLink7 Ver.3.3.3 ~ | Ver.5.9.17 ~ |
| | 4C+CIPWW | | | |
| | 6C+WCI | | | |

JFX200-1213EX

| Ink | Ink set | Printer F.W.Ver | RIP | Mimaki Driver (RasterLink7 only) |
|---------|-----------|------------------------|-------------------------------|-------------------------------------|
| LH-100 | 4C+CICIWW | F.W. Ver.3.00 or later | RasterLink7 Ver3.3.0 or later | Ver5.9.6 or later |
| | 4C+CIPWW | | | |
| | 6C+WCI | | | |
| LUS-120 | 4C+CICIWW | | | |
| | 4C+CIPWW | | | |
| LUS-150 | 4C+CICIWW | | | |
| | 4C+CIPWW | | | |
| | 6C+WCI | | | |
| LUS-350 | 4C+CICIWW | | | |
| LUS-211 | 4C+CICIWW | | | |
| ELH-100 | 4C+CICIWW | F.W. Ver.4.00 ~ | RasterLink7 Ver.3.3.3 ~ | Ver.5.9.17 ~ |
| | 4C+CIPWW | | | |
| | 6C+WCI | | | |

JFX200-2513

| Ink | Ink set | Printer F.W.Ver | RIP | Mimaki Driver (RasterLink7 only) |
|---------|-----------|------------------------|---|-------------------------------------|
| LH-100 | 4C+CICIWW | F.W. Ver.1.30 or later | RasterLink6Plus Ver.2.1 or later RasterLink7 Ver3.1.0 or later | Ver5.8.0 or later |
| | 4C+CIPWW | | | |
| LUS-120 | 4C+CICIWW | F.W. Ver.2.00 or later | | |
| | 4C+CIPWW | F.W. Ver.2.30 or later | | |
| LUS-150 | 4C+CICIWW | F.W. Ver.1.10 or later | | |
| | 4C+CIPWW | | | |
| LUS-350 | 4C+CICIWW | F.W. Ver.2.20 or later | | |

JFX200-2531

| Ink | Ink set | Printer F.W.Ver | RIP | Mimaki Driver (RasterLink7 only) |
|---------|-----------|-----------------------|----------------------------------|-------------------------------------|
| LH-100 | 4C+CICIWW | F.W. Ver.1.0 or later | RasterLink6Plus Ver.2.1 or later | - |
| | 4C+CIPWW | | | |
| LUS-120 | 4C+CICIWW | F.W. Ver.1.0 or later | | |
| | 4C+CIPWW | F.W. Ver.2.1 or later | | |
| LUS-150 | 4C+CICIWW | F.W. Ver.1.0 or later | | |
| | 4C+CIPWW | | | |
| LUS-350 | 4C+CICIWW | F.W. Ver.2.0 or later | | |

JFX600-2513

| Ink | Ink set | Printer F.W.Ver | RIP | Mimaki Driver (RasterLink7 only) |
|---------|-----------|---------------------------------|-------------------------------|-------------------------------------|
| LH-100 | 4C+CIPWW | System Pack Ver.2.05.0 or later | RasterLink7 Ver2.7.0 or later | Ver5.6.6 or later |
| LUS-120 | 4C+CICIWW | System Pack Ver.2.04.0 or later | RasterLink7 Ver2.5.0 or later | Ver5.6.4 or later |
| | 4C+CIPWW | System Pack Ver.3.05.1 or later | | |
| | 6C+WCI | System Pack Ver.4.01.0 or later | RasterLink7 Ver3.2.3 or later | Ver5.9.5 or later |
| LUS-150 | 4C+CICIWW | System Pack Ver.3.04.1 or later | RasterLink7 Ver2.2.0 or later | Ver5.6.2 or later |
| | 4C+CIPWW | System Pack Ver.1.02.0 or later | | |
| | 6C+WCI | System Pack Ver.4.01.0 or later | RasterLink7 Ver3.2.3 or later | Ver5.9.5 or later |
| LUS-211 | 4C+CICIWW | System Pack Ver.3.06.0 or later | RasterLink7 Ver3.2.1 or later | Ver5.9.2 or later |

JFX600-2531

| Ink | Ink set | Printer F.W.Ver | RIP | Mimaki Driver (RasterLink7 only) |
|---------|-----------|---------------------------------|-------------------------------|-------------------------------------|
| LH-100 | 4C+CIPWW | System Pack Ver.4.00.0 or later | RasterLink7 Ver3.2.1 or later | Ver5.9.3 or later |
| LUS-120 | 4C+CICIWW | | | |
| | 4C+CIPWW | | | |
| | 6C+WCI | System Pack Ver.4.01.0 or later | RasterLink7 Ver3.2.3 or later | Ver5.9.5 or later |
| LUS-150 | 4C+CICIWW | System Pack Ver.4.00.0 or later | RasterLink7 Ver3.2.1 or later | Ver5.9.3 or later |
| | 4C+CIPWW | | | |
| | 6C+WCI | System Pack Ver.4.01.0 or later | RasterLink7 Ver3.2.3 or later | Ver5.9.5 or later |
| LUS-211 | 4C+CICIWW | System Pack Ver.4.00.0 or later | RasterLink7 Ver3.2.1 or later | Ver5.9.3 or later |

Table of Contents

| | |
|--|-----------|
| Note | 1 |
| Applicable environment | 2 |
| Setting the printer(JFX200-2513/2531/2513EX/1213EX) | 5 |
| Setting the printer(JFX600-2513/2531) | 7 |
| Effects and printing with clear ink | 8 |
| Clear ink's effects | 8 |
| Ways clear ink can be printed | 11 |
| Printing methods | 12 |
| Data creation and printing procedures | 12 |
| 1. Decide the way the clear ink is to be printed | 13 |
| A. Printing the clear ink over the whole of the color image | 14 |
| B. Printing the clear ink onto the valid pixels of the color image | 15 |
| D. Printing a special clear ink image | 17 |
| 2. Select the clear ink's effect: set the UV mode | 20 |
| a. Setting Glossy Print | 21 |
| b. Setting Matte Print | 23 |
| c. Setting Emboss Print | 24 |
| 3. Set the recommended values for the printing conditions | 26 |
| 4. Execute printing | 27 |
| Setting glossy finish for Emboss Print | 28 |

Setting the printer(JFX200-2513/2531/2513EX/1213EX)

Before printing with this Guide, carry out setting of the printer as follows.

1. Turn on the printer's power.

- Wait until <Local> is displayed on the panel.



- If the power is already on, have the panel display <Local>.

2. Select [UV MODE] 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 [UV MODE], then press the **ENTER** key.
- (4) Use the **▲**, **▼** key to select [HOST].
- (5) Display the [LIGHT ADJUST]. Set "0%" and press the **ENTER** key
- (6) Press the **ENTER** key.
- (7) Return to [SETUP], by pressing the **END** key just once.

3. Select [MAPS2] on the panel, as follows:

- (1) Make sure that [SETUP] is selected.
- (2) Use the **▲**, **▼** key to select [MAPS], then press the **ENTER** key.
- (3) Use the **▲**, **▼** key to select [MAPS2].
- (4) Press the **END** key.

4. Select "AUTO" for [MAPS2], as follows:

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

MAPS2
: AUTO

5. Return to "Local", by pressing the **END** key several times.



- 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. If this happens, make the setting changes below and carry out test printing.










1. Turn on the printer's power.

- Wait until "Local" is displayed on the panel.

Important!

- If the power is already on, have "Local" displayed on the panel.

2. Select [MAPS2] on the panel, as follows:













- (1) With "Local" displayed, press the [FUNCTION] key.
- (2) Use the ,  key to select [SETUP], then press the  key.
- (3) Use the ,  key to select [MAPS], then press the  key.
- (4) Use the ,  key to select [MAPS2].
- (5) Press the  key.

3. Select "MANUAL" for [MAPS2], as follows:


- Use the ,  key to select "MANUAL".

MAPS2
: MANUAL

4. After setting to "MANUAL", make the settings for the ink colors, as follows.

- (1) Press the  key.
- (2) Make the setting for [COLOR], as follows.
Use the ,  key to set PATTARN to "AUTO".
Then press .
- (3) Make the setting for [SPOT], as follows.
Use the ,  key to set PATTARN to "AUTO".
Then press .
- (4) Make the setting for [CLEAR], as follows.
Use the ,  key to set PATTARN to "AUTO".
Then press .
- (5) Now make the detailed settings for [CLEAR], as follows.
Use the ,  key to change the TYPE/LV value.
Changing this value will change the clear ink image quality.

As a rough guide, use "Type1 60%" for Glossy Print, and "Type2 100%" for Matte Print.

After making the setting, press the  key.

- (6) Return to "Local", by pressing the  key several times.

COLOR
PATTERN: AUTO

< SPOT
PATTERN: AUTO >

< CLEAR
PATTERN: AUTO

< CLEAR
TYPE / LV.: TYPE1 / 100%

Setting the printer(JFX600-2513/2531)

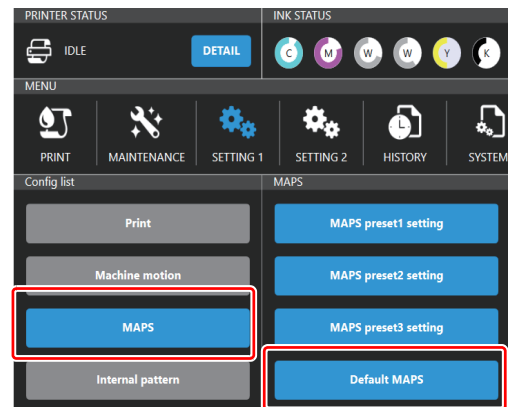
Before printing with this Guide, carry out setting of the printer as follows.

1. Turn on the printer's power.

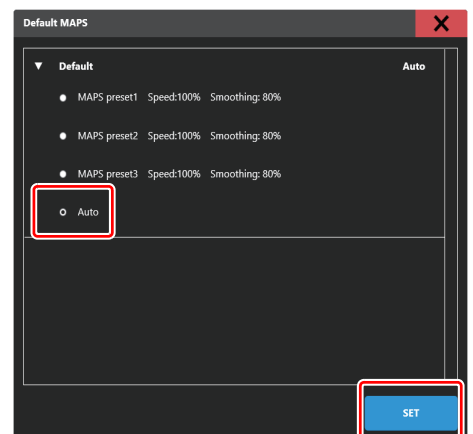
2. From [MENU] on the touch panel, tap [SETTING 1].

3. Tap [MAPS] > [Default MAPS]

- A dialog box appears.



4. Select "Auto", and then tap [SET].



Effects and printing with clear ink

Clear ink's effects

The effects below can be obtained by using clear ink.



Gloss feel effect - "Glossy Print"



Matte feel effect - "Matte Print"



3D feel effect - "Emboss Print"

These effects can be obtained via the "UV MODE" settings in RasterLink6Plus.

Recommended settings for printing a clear ink

To obtain a better effect of clear ink, please use the recommended setting below for the printing condition and clear ink concentration according to the image quality and printing speed.

■ JFX200-2513/JFX200-2531

| | | Output resolution | Passes | Print direction | High speed print |
|------------|--------------|-------------------|--------|-----------------|------------------|
| Print Mode | High Speed | 300x450HQ VD | 12 | Bi-direction | No |
| | Production | 600x600 VD | 16 | Bi-direction | Yes |
| | Standard | 600x900 VD | 24 | Bi-direction | Yes |
| | High quality | 1200x1200 VD | 32 | Uni-direction | Yes |

■ JFX200-2513EX/JFX200-1213EX

Except for LUS-211 ink

| | | Recommended Printing Conditions | | | | Recommended density of clear ink | |
|------------|--------------|---------------------------------|--------|-----------------|------------------|----------------------------------|--------------|
| | | Output resolution | Passes | Print direction | High speed print | Gloss effect | Matte effect |
| Print Mode | Draft | 300x300HQ VD | 8 | Bi-direction | No | 100% | 100% |
| | High Speed | 300x450HQ VD | 12 | Bi-direction | No | 100% | 100% |
| | Production | 600x600 VD | 16 | Bi-direction | Yes | 100% | 100% |
| | Standard | 600x900 VD | 24 | Bi-direction | Yes | 100% | 80% |
| | High Quality | 1200x1200 VD | 32 | Uni-direction | Yes | 70% | 40% |

LUS-211 ink

| | | Recommended Printing Conditions | | | | Recommended density of clear ink | |
|------------|--------------|---------------------------------|--------|-----------------|------------------|----------------------------------|--------------|
| | | Output resolution | Passes | Print direction | High speed print | Gloss effect | Matte effect |
| Print Mode | Draft | 300x300HQ VD | 8 | Bi-direction | No | Not recommended | 100% |
| | High Speed | 300x450HQ VD | 12 | Bi-direction | No | Not recommended | 100% |
| | Production | 600x600 VD | 16 | Bi-direction | Yes | Not recommended | 100% |
| | Standard | 600x900 VD | 24 | Bi-direction | Yes | 100% | 80% |
| | High Quality | 1200x1200 VD | 32 | Uni-direction | Yes | 70% | 40% |

**About Glossy Print with JFX200-2513EX/JFX200-1213EX**

At resolutions of 600x900VD or lower, some media may not get a glossy feel effect when gloss printing is executed. If the glossy feel effect does not appear, carry out the following settings.

- (1) Enable [Print bottom clear liquid] (See P. 21 for details).
- (2) Select a resolution of 600x900VD or higher.
- (3) [SETUP] > [UV MODE] > [HOST] > [LIGHT ADJUST] setting value is lowered.
- (4) Increase the MAPS level of [SETUP] > [MAPS] > [MAPS2] > [MANUAL] > [CLERA] > [AUTO] (see P. 6 for details)

**About Matte Print with JFX200-2513EX/JFX200-1213EX**

If the amount of clear ink is excessive, it may cause quality problems such as stripes or patterns at regular intervals. If stripes or patterns occur, reduce the amount of ink or set the clear ink resolution to be lower for printing.

- (1) Reduce the amount of ink
- (2) Select a lower resolution

■ JFX600-2513

LUS-120 ink

| Ink Set | Recommended Printing Conditions | | | | Recommended density of clear ink | |
|-----------|---------------------------------|--------|-----------------|------------------|----------------------------------|--------------|
| | Output resolution | Passes | Print direction | High speed print | Gloss effect | Matte effect |
| 4C+CIPWW | 600x1200 VD | 8 | Bi-direction | Yes | 100% | 100% |
| | 1200x1200 VD | 8 | Bi-direction | Yes | 75% | 100% |
| 4C+CICIWW | 600x1200 VD | 8 | Bi-direction | Yes | 70% | 70% |
| | 1200x1200 VD | 8 | Bi-direction | Yes | 70% | 50% |
| 6C+WCI | 600x1200 VD | 8 | Bi-direction | Yes | 70% | 70% |
| | 1200x1200 VD | 8 | Bi-direction | Yes | 70% | 70% |

LUS-150 ink

| Ink Set | Recommended Printing Conditions | | | | Recommended density of clear ink | |
|-----------|---------------------------------|--------|-----------------|------------------|----------------------------------|--------------|
| | Output resolution | Passes | Print direction | High speed print | Gloss effect | Matte effect |
| 4C+CIPWW | 600x1200 VD | 8 | Bi-direction | Yes | 100% | 100% |
| | 1200x1200 VD | 8 | Bi-direction | Yes | 85% | 80% |
| 4C+CICIWW | 600x1200 VD | 8 | Bi-direction | Yes | 70% | 70% |
| | 1200x1200 VD | 8 | Bi-direction | Yes | 70% | 50% |
| 6C+WCI | 600x1200 VD | 8 | Bi-direction | Yes | 70% | 70% |
| | 1200x1200 VD | 8 | Bi-direction | Yes | 70% | 50% |

LUS-211 ink

| Ink Set | Recommended Printing Conditions | | | | Recommended density of clear ink | |
|-----------|---------------------------------|--------|-----------------|------------------|----------------------------------|--------------|
| | Output resolution | Passes | Print direction | High speed print | Gloss effect | Matte effect |
| 4C+CICIWW | 600x1200 VD | 8 | Bi-direction | Yes | 90% | 70% |
| | 1200x1200 VD | 8 | Bi-direction | Yes | 70% | 50% |

LH-100 ink

| Ink Set | Recommended Printing Conditions | | | | Recommended density of clear ink | |
|----------|---------------------------------|--------|-----------------|------------------|----------------------------------|--------------|
| | Output resolution | Passes | Print direction | High speed print | Gloss effect | Matte effect |
| 4C+CIPWW | 600x1200 VD | 8 | Bi-direction | Yes | 100% | 100% |
| | 1200x1200 VD | 8 | Bi-direction | Yes | 85% | 100% |

■ JFX600-2531

LUS-120 ink

| Ink Set | Recommended Printing Conditions | | | | Recommended density of clear ink | |
|-----------|---------------------------------|--------|-----------------|------------------|----------------------------------|--------------|
| | Output resolution | Passes | Print direction | High speed print | Gloss effect | Matte effect |
| 4C+CIPWW | 600x1200 VD | 8 | Bi-direction | Yes | 100% | 100% |
| | 1200x1200 VD | 8 | Bi-direction | Yes | 75% | 100% |
| 4C+CICIWW | 600x1200 VD | 8 | Bi-direction | Yes | 70% | 70% |
| | 1200x1200 VD | 8 | Bi-direction | Yes | 70% | 50% |
| 6C+WCI | 600x1200 VD | 8 | Bi-direction | Yes | 70% | 70% |
| | 1200x1200 VD | 8 | Bi-direction | Yes | 70% | 70% |

LUS-150 ink

| Ink Set | Recommended Printing Conditions | | | | Recommended density of clear ink | |
|-----------|---------------------------------|--------|-----------------|------------------|----------------------------------|--------------|
| | Output resolution | Passes | Print direction | High speed print | Gloss effect | Matte effect |
| 4C+CIPWW | 600x1200 VD | 8 | Bi-direction | Yes | 100% | 100% |
| | 1200x1200 VD | 8 | Bi-direction | Yes | 85% | 80% |
| 4C+CICIWW | 600x1200 VD | 8 | Bi-direction | Yes | 70% | 70% |
| | 1200x1200 VD | 8 | Bi-direction | Yes | 70% | 50% |
| 6C+WCI | 600x1200 VD | 8 | Bi-direction | Yes | 70% | 70% |
| | 1200x1200 VD | 8 | Bi-direction | Yes | 70% | 50% |

LUS-211 ink

| Ink Set | Recommended Printing Conditions | | | | Recommended density of clear ink | |
|-----------|---------------------------------|--------|-----------------|------------------|----------------------------------|--------------|
| | Output resolution | Passes | Print direction | High speed print | Gloss effect | Matte effect |
| 4C+CICIWW | 600x1200 VD | 8 | Bi-direction | Yes | 90% | 70% |
| | 1200x1200 VD | 8 | Bi-direction | Yes | 70% | 50% |

LH-100 ink

| Ink Set | Recommended Printing Conditions | | | | Recommended density of clear ink | |
|----------|---------------------------------|--------|-----------------|------------------|----------------------------------|--------------|
| | Output resolution | Passes | Print direction | High speed print | Gloss effect | Matte effect |
| 4C+CIPWW | 600x1200 VD | 8 | Bi-direction | Yes | 100% | 100% |
| | 1200x1200 VD | 8 | Bi-direction | Yes | 85% | 100% |



- Even if the clear density is the recommended value, a high density may cause printed objects to bend, depending on the media material.
Test and check before use.

Important!**• About RasterLink7 [To print a Clear ink at the recommended density.] setting**

In the following conditions, setting [To print a Clear ink at the recommended density.] to ON at RasterLink7 [Quality] - [Print Quality] screen enables you to print with recommended density listed in this guide.

| Model | Ink Type | Ink Set |
|---------------|-----------------|---------|
| JFX200-2513EX | LUS-211 | All |
| JFX600-2513 | LUS-211 | All |
| | LUS-120,LUS-150 | 6C+WCI |
| JFX600-2531 | LUS-211 | All |
| | LUS-120,LUS-150 | 6C+WCI |

However, for the operation of printing using [To print a Clear ink at the recommended density.], set the following settings when creating the job.

- When creating a clear plate with [Special plate], set the clear ink density to 100%. (P. 14、 P. 15)
- When creating a clear plate with [Mono color replacement], set the color density of the original image to 100%. (P. 17)

Ways clear ink can be printed

Clear ink can be printed in the ways below with RasterLink6Plus.



Printed over the whole of a color image



Printed onto valid pixels of a color image



**Printed on a background other than the background of the color image
(RasterLink7 only)**



Printed as a special image for clear ink

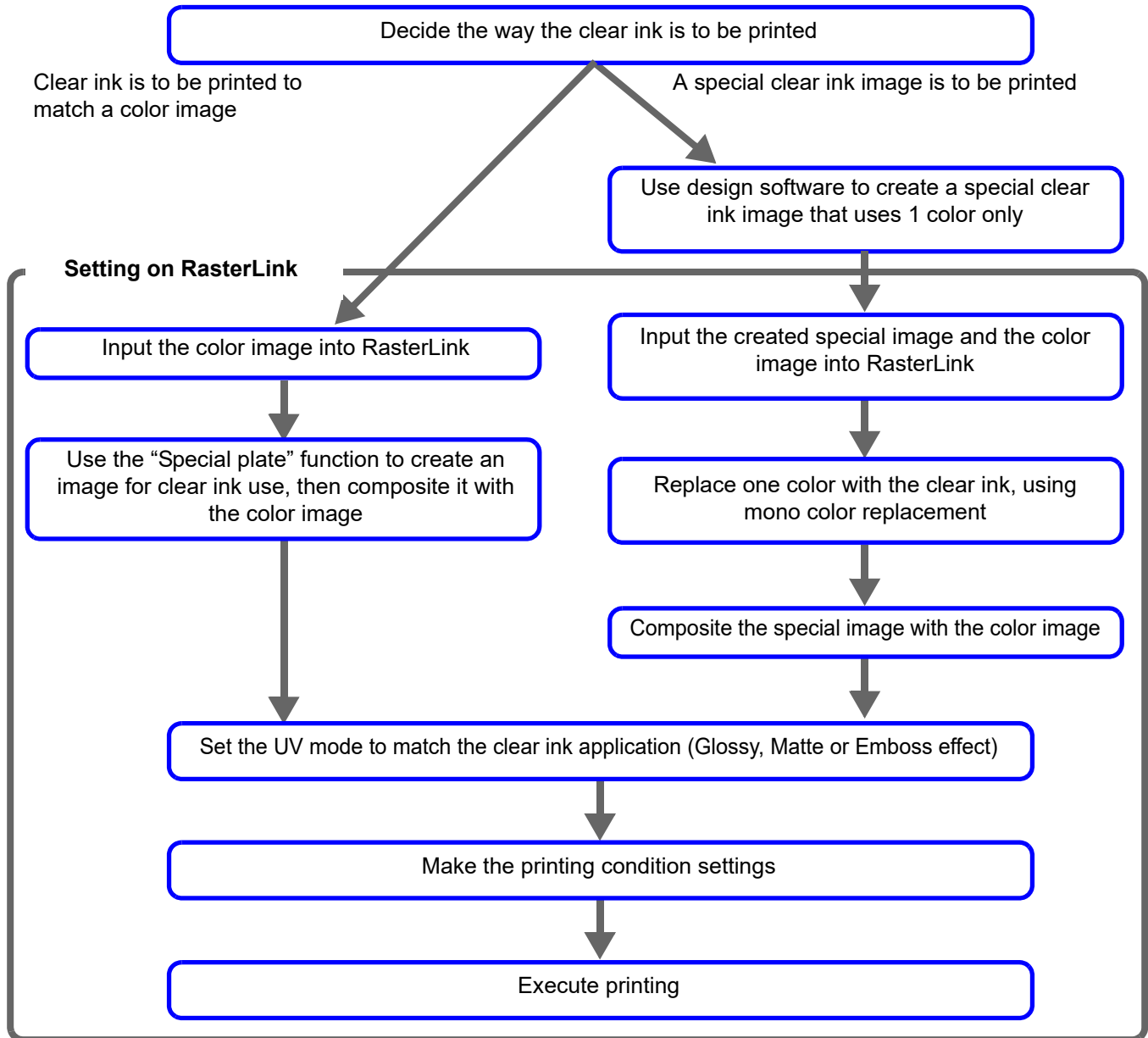
For printing the clear ink over the whole of a color image, and for printing it onto valid pixels of a color image, create a clear ink job using the "Special plate" function of RasterLink6Plus

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

In order to print, you must first create clear ink data and make the settings for it on RasterLink, using the procedure below.



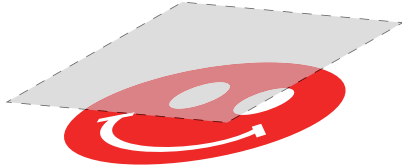
- On JFX200-2513/JFX200-2531/JFX200-2513EX/JFX200-1213EX, the settings of RasterLink, UV mode, etc. are different depending on the number of slots of printer and clear ink.

1. Decide the way the clear ink is to be printed

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

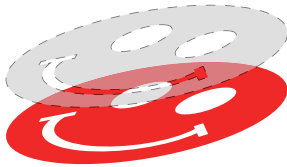


Print it over the whole of the color image



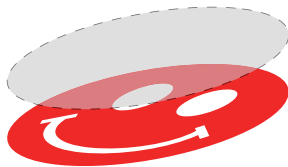
-> Go to [A. Printing the clear ink over the whole of the color image](#)

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 on a background other than the background of the color image (RasterLink7 only)



-> Go to [C. Printing the clear ink on top of a color image except on the background \(Raster-Link7 only\).](#)

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 whole of the color image, 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]  icon.

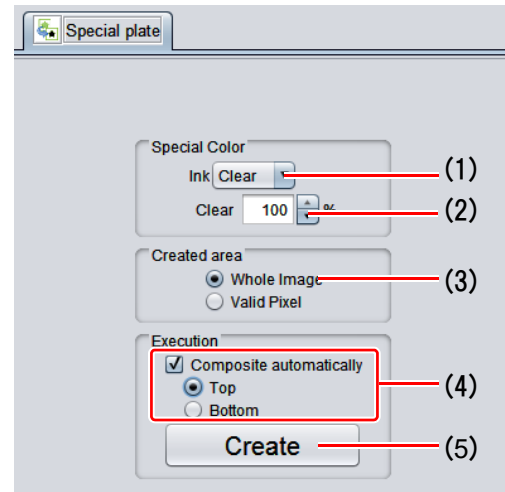
2. Make the settings as follows.

- (1) [Ink]: Select "Clear"
- (2) [Clear](ink volume):
 - Set the recommended ink density in P.8 "Recommended settings for printing a clear ink" (if not specified, set 100%).
 - When setting [To print a Clear ink at the recommended density.] to ON at [Quality], set 100%. (P. 11)

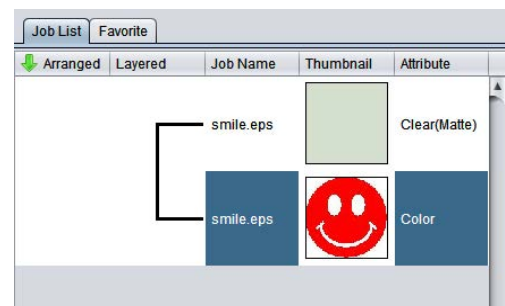
Important!

- When multiple [CLEAR] buttons are displayed, Set the above values for each of them.

- (3)
- (4) [Created area]: Select "Whole image".
- (5) [Composite automatically]: Check the box, and select "Top".
- (6) Click the [Create] button.



3. 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 onto the valid pixels of the color image, 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.

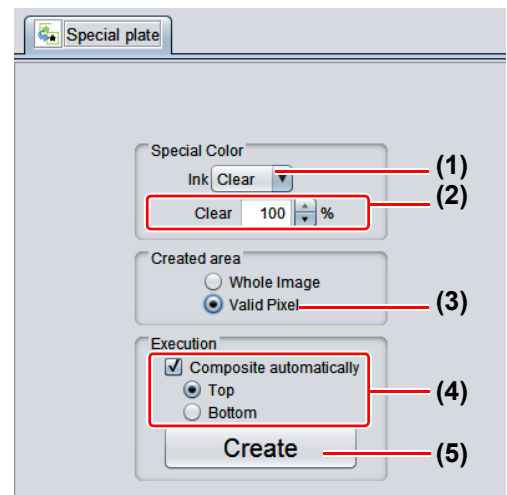
2. Make the settings as follows.

- (1) [Ink]: Select “Clear”
- (2) [Clear](ink volume):
 - Set the recommended ink density in P.8 "Recommended settings for printing a clear ink" (if not specified, set 100%).
 - When setting [To print a Clear ink at the recommended density.] to ON at [Quality], set 100%. (P. 11)

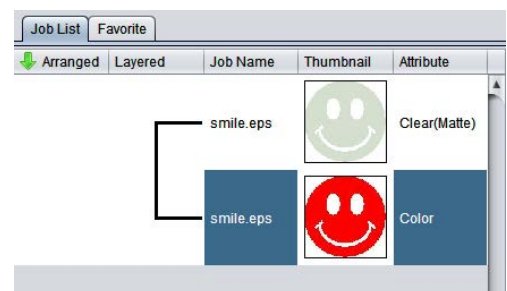
Important!

- When multiple [CLEAR] buttons are displayed, Set the above values for each of them.

- (3) [Created area]: Select “Valid Pixel”.
- (4) [Composite automatically]: Check the box, and select “Top”.
- (5) Click the [Create] button.




3. 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 (Raster-Link7 only).

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.

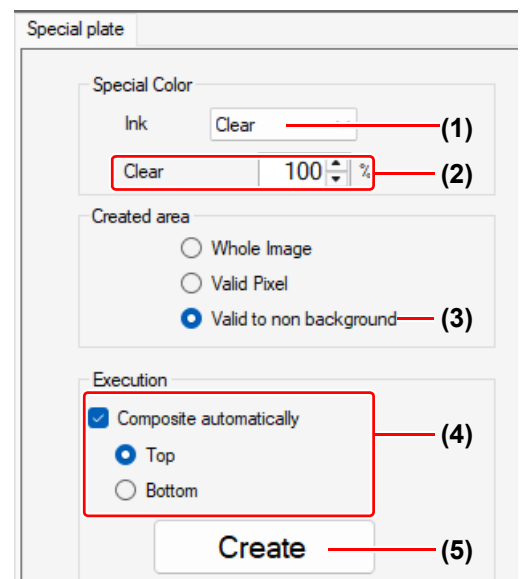
2. Make the settings as follows.

- [Ink]: Select “Clear”
- [Clear](ink volume):
 - Set the recommended ink density in P.8 “Recommended settings for printing a clear ink” (if not specified, set 100%).
 - When setting [To print a Clear ink at the recommended density.] to ON at [Quality], set 100%. (P. 11)

Important!

- When multiple [CLEAR] buttons are displayed, Set the above values for each of them.





- [Created area]: Select “Valid to non background”.
- [Composite automatically]: Check the box, and select “Top”.
- Click the [Create] button.



The 'Special plate' dialog box is shown with the following settings:

- Special Color:**
 - Ink:** Clear (1)
 - Clear:** 100% (2)
- Created area:**
 - ☐ Whole Image
 - ☐ Valid Pixel
 - ☒ Valid to non background (3)
- Execution:**
 - ☒ Composite automatically (4)
 - ☒ Top
 - ☐ Bottom
- Create** button (5)

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

| Job List | | | | |
|----------|---|---|-----------|------------------------|
| Arranged | Layered | Thumbnail | Job Name | Attribute |
| |  |  | smile.eps | ClearPlate Type(Matte) |
| |  |  | smile.eps | Color |

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:

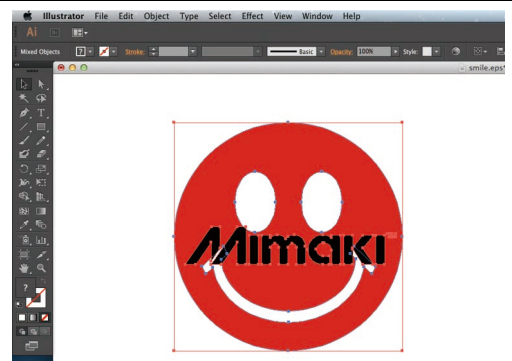
- Color mode: CMYK
Color mode: CMYK Color to be used: C, M, Y, or K. All other colors to be used are set to 0%. In this case, black is set as the only color used.
- Color Density
The color density set in the design software will be used as the output density of the special color ink.
 - Set the recommended ink density in P.8 "Recommended settings for printing a clear ink"
 - When setting [To print a Clear ink at the recommended density.] to ON at [Quality], set 100%. (P. 11)



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.

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.



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

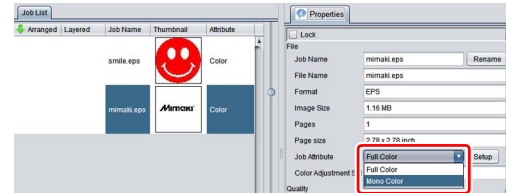
3. Import the image saved in procedure 2 into RasterLink.

Setting mono color replacement

1. In the job list, select the clear ink job.

- Click the “Properties”  icon.

2. Select “Mono color” in the [Job Attribute] dropdown list.



3. Select the [Mono color] tab.

- Make the settings as follows.

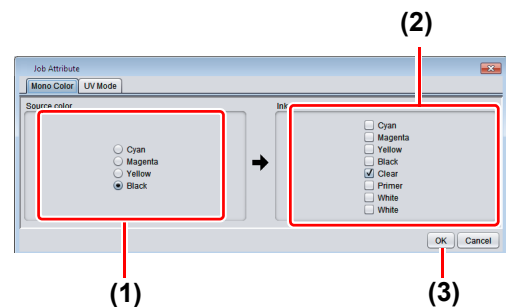
(1) [Source color]: “Black”

(2) [Ink]: “Clear”

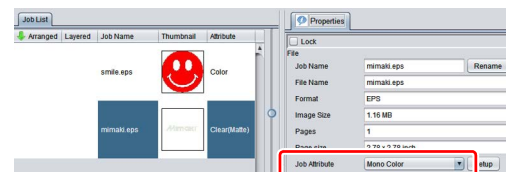
Important!

- If two “Clear” check boxes are displayed, check both.

(3) Click the [OK] button.




4. The job’s attribute is now “Mono color”. In the job list, the job will have a gray thumbnail color and “Clear(Matte)” will be displayed in its “Attribute” field.



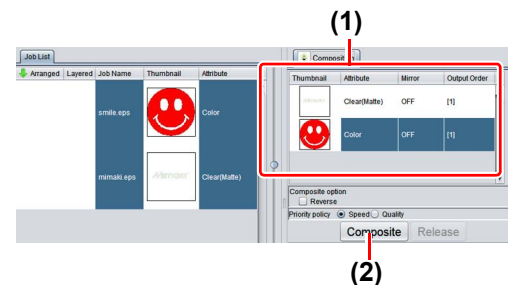
Compositing the clear ink image with the color job

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

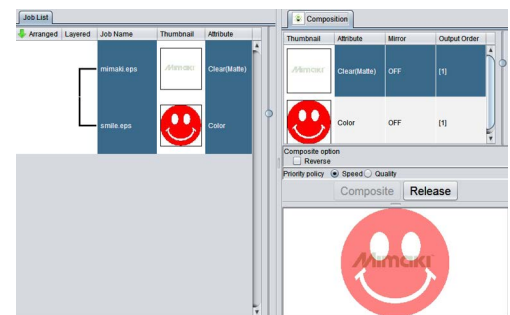
- Click the “Composition”  icon.

2. Carry out the following check.

- (1) Is the clear ink job above the color job in the job list.
 - If it is not, use drag and drop to change the positions around.
- (2) After the above check, click the [Composite] button.



3. The images will be composited.



- Printing will be carried out in either of the following ways, depending on the [Priority Policy] setting on the [Composition] screen.
 - “Speed”: The color image and clear ink image are printed simultaneously using special color overprinting. In this case, the UV mode set for the color image is ignored and the conditions set for the clear ink image are used.
 - “Quality”: The color image is printed first and the clear ink image is printed after. In this case, the UV modes set respectively for the color image and clear ink image are applied respectively to each image.
- In the case of gloss printing, please see [P.21 "a. Setting Glossy Print"](#)

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

The clear ink's effect is determined by the [UV mode setting] in RasterLink.

Gloss feel effect - "Glossy Print"



-> Go to [a. Setting Glossy Print](#)

Matte feel effect - "Matte Print"



-> Go to [b. Setting Matte Print](#)

3D feel effect - as "Emboss Print"

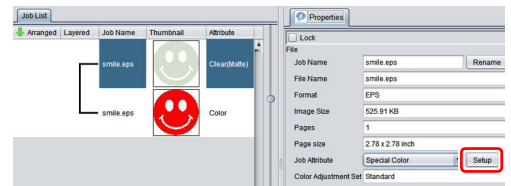


-> Go to [c. Setting Emboss Print](#)

a. Setting Glossy Print

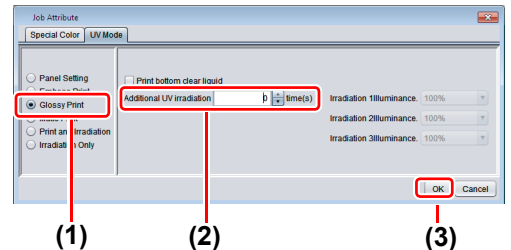
1. In the job list, select the clear ink job.

- Click the "Properties"  icon.
- Click the [Setup] button in the [Job Attribute] field.



2. Select the [UV Mode] tab.

- JFX200series :
 - (1) Select "Glossy Print" in the mode list on the left side.
 - (2) Set "0" for [Additional UV irradiation].
 - (3) Click the [OK] button.



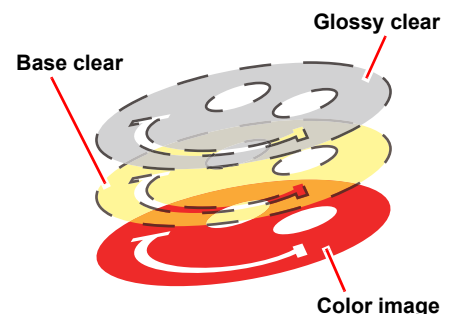
- JFX600series :
 - (1) Select "Glossy Print" in the mode list on the left side.
 - (2) Click the [OK] button.



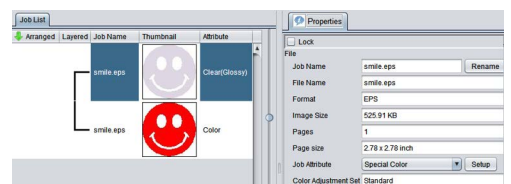
Important!

For JFX200 series, when "Print bottom clear liquid" is selected, the base clear is printed on top of the color image, and then print the glossy clear on it.

- In the case of clear × 1 slot
Glossy print cannot be obtained without printing a base clear on top of the color image, so "Print bottom clear liquid" cannot be disabled.
- In the case of clear × 2 slot
It will be glossy without printing a base clear on top of the color image.
If some media do not get glossy, please enable "Print bottom clear liquid".



3. Thumbnail of attribute becomes a "Clear (Glossy)".





- In glossy print, print the clear image as follows by the number of slots in the clear and by the setting of the UV mode to "Print bottom clear liquid".

| Clear Number of slots | Print bottom clear liquid | Synthesis conditions of synthetic screen | |
|-----------------------------|------------------------------|--|--|
| | | Speed priority ¹ | Quality priority ² |
| 2 | effective | - | After printing a color image, print the bottom clear, and finally print the clear image. |
| | Invalid | Print at the same time in the order of color image -> clear image. | After printing the color image, print the clear image. |
| 1 | (effective) | - | After printing a color image, print the bottom clear, and finally print the clear image. |

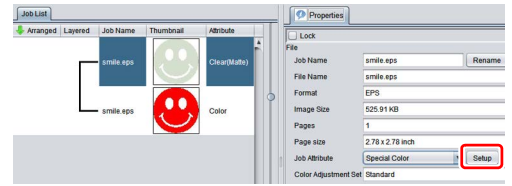
*1. If the speed priority, setting of the UV mode set to the color image is ignored, and print setting of the UV mode set clear image.

*2. Each color image and clear image will be printed as of setting of UV mode set for each. The setting of UV mode of the bottom clear liquid cannot be changed.

b. Setting Matte Print

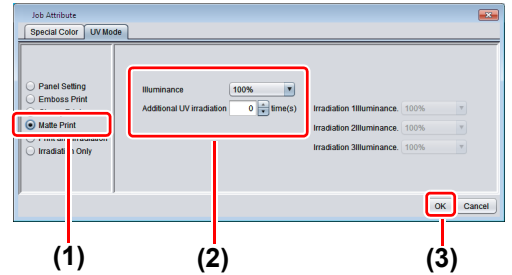
1. In the job list, select the clear ink job.

- Click the “Properties”  icon.
- Click the [Setup] button in the [Job attribute] field.

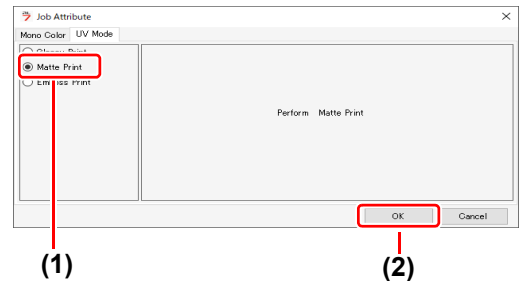


2. Select the [UV Mode] tab.

- JFX200series
 - (1) Select “Matte Print” in the mode list on the left side.
 - (2) Set “100%” for [Illumination].
Set “0” for [Additional UV irradiation].
 - (3) Click the [OK] button.



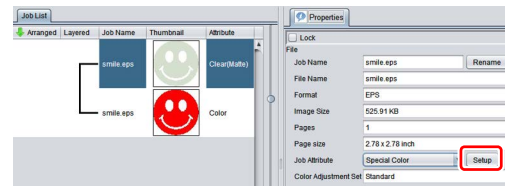
- JFX600series
 - (1) Select “Matte Print” in the mode list on the left side.
 - (2) Click the [OK] button.



c. Setting Emboss Print

1. In the job list, select the clear ink job.

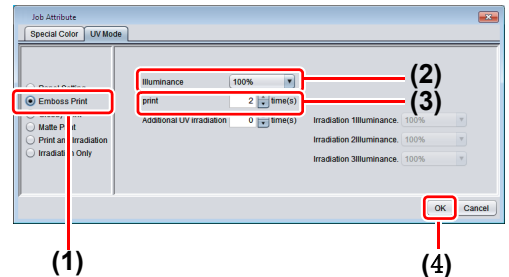
- Click the “Properties”  icon.
- Click the [Setup] button in the [Job Attribute] field.



2. Select the [UV Mode] tab.

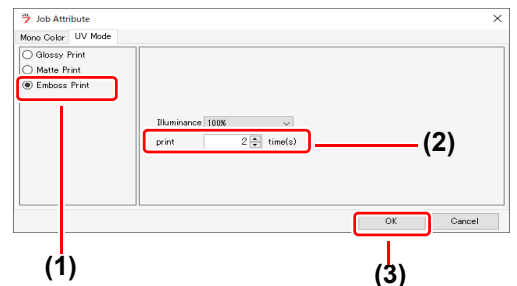
- JFX200series :

- (1) Select “Emboss Print” in the mode list on the left side.
- (2) [Illumination]: Set “100%”.
- (3) [Number of printings]: Set this according to the thickness of the embossing. (See “Hint!” below for rough calculation of the number of printings for the thickness).
- (4) Click the [OK] button.

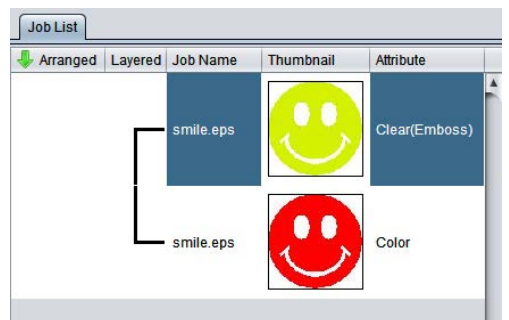


- JFX600series :

- (1) Select “Emboss Print” in the mode list on the left side.
- (2) [Number of printings]: Set this according to the thickness of the embossing. (See “Hint!” below for rough calculation of the number of printings for the thickness).
- (3) Click the [OK] button.



3. Thumbnail of attribute becomes a“Clear(Emboss)”.





- After you have set Emboss Print, the clear ink job will be printed the specified number of times after the color job is printed, regardless of the [Priority policy] settings on the [Composition] screen.
- The table below gives rough correspondences between the thickness of the embossing and the number of additional times (after the first printing) that the clear ink is printed over the color image.

These values are for when 600x900 dpi output resolution is set.

JFX200series : 600x900dpi,600x1200dpi, for clear 2 slots

| Number of times to add thickness | LH-100, ELH-100 clear ink | LUS-120 clear ink |
|----------------------------------|------------------------------|-----------------------------|
| | Embossing thickness [mm] | Embossing thickness [mm] |
| 2 | 0.07 | 0.05 |
| 4 | 0.13 | 0.12 |
| 6 | 0.19 | 0.21 |
| 8 | 0.25 | 0.26 |
| 10 | 0.31 | 0.33 |
| 15 | 0.46 | 0.50 |
| 20 | 0.61 | 0.66 |

JFX600series : 600x1200dpi

| Number of times to add thickness | Clear 1 slot | | |
|----------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | LH-100 clear ink | LUS-120 clear ink | LUS-211 clear ink |
| | Embossing thick- ness [mm] | Embossing thick- ness [mm] | Embossing thick- ness [mm] |
| 2 | 0.05 | 0.05 | 0.05 |
| 4 | 0.09 | 0.11 | 0.09 |
| 6 | 0.14 | 0.16 | 0.14 |
| 8 | 0.18 | 0.21 | 0.18 |
| 10 | 0.23 | 0.27 | 0.23 |
| 15 | 0.34 | 0.40 | 0.34 |
| 20 | 0.46 | 0.54 | 0.45 |


| Number of times to add thickness | Clear 2 slot | | |
|----------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | LH-100 clear ink | LUS-120 clear ink | LUS-211 clear ink |
| | Embossing thick- ness [mm] | Embossing thick- ness [mm] | Embossing thick- ness [mm] |
| 2 | 0.10 | 0.12 | 0.09 |
| 4 | 0.21 | 0.24 | 0.18 |
| 6 | 0.31 | 0.36 | 0.27 |
| 8 | 0.41 | 0.48 | 0.37 |
| 10 | 0.51 | 0.61 | 0.46 |
| 15 | 0.77 | 0.91 | 0.69 |
| 20 | 1.03 | 1.21 | 0.92 |

- When you specify Emboss Print, make sure that there is ample head clearance.
- If you set just Emboss Print, the finish will be matte. See [P. 28](#) for the settings to make in order to obtain a glossy print result.

3. Set the recommended values for the printing conditions

To obtain better effects from the clear ink, see P.8 "Recommended settings for printing a clear ink" for the settings that are appropriate for the image quality and output speed.

1. In the job list, select the applicable job.

- Click the "Quality"  icon.

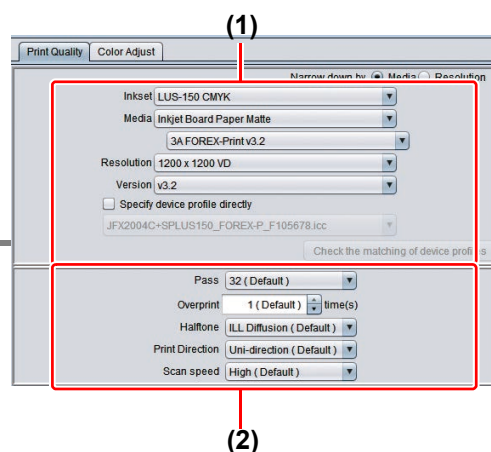
2. Select both the color job and the clear ink job that are displayed in the job list.

- You can select multiple items by holding down the CTRL key while clicking on them.
- By selecting both jobs, you can set the same conditions for both of them.




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

4. Refer to the table above to set the output setting field (2)



4. Execute printing

1. In the job list, select the applicable job.

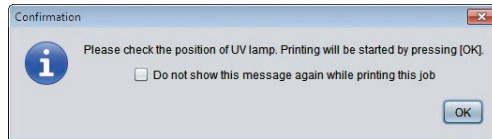
- Click the “Execution”  Icon.

2. Select “RIP and print”.

- Click the [Start] button.

Important!

- With RasterLink, the following message dialog box may be displayed when the [Start] button is clicked.



This message dialog is displayed on JFX200-2513/JFX200-2531/JFX200-2513EX/JFX200-1213EX.

- Move the UV lamp to the position refer to the “JFX200-2513 Operation Manual”, “JFX200-2531 Operation Manual” or “JFX200-2513EX/1213EX Operation Manual,” then click the [OK] button to start printing.

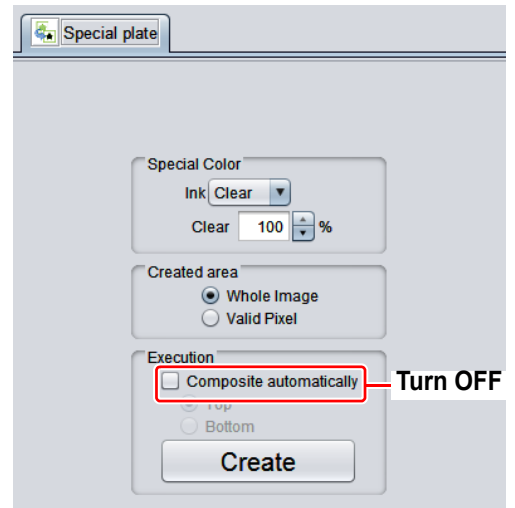
Setting glossy finish for Emboss Print


If you set just Emboss Print, the finish will be matte. To obtain a glossy finish, you must create a Glossy clear ink job, separate from the Emboss Print clear ink job.

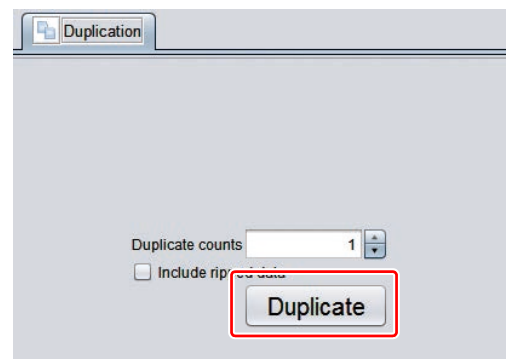
1. Referring to “1. Decide the way the clear ink is to be printed” (P. 13~) to , create 1 color job and 2 clear ink jobs.

Important!

- In the case of “A. Printing the clear ink over the whole of the color image” or “B. Printing the clear ink onto the valid pixels of the color image”:
Turn off “Composite automatically” in Special plate printing before creating the clear ink job. Otherwise it will not be possible to create multiple clear ink jobs, since a special plate cannot be made from a composited job. Carry out the above procedure 2 times to create the 2 clear ink jobs.

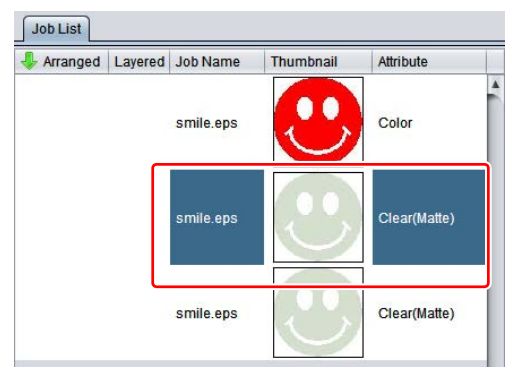


- In the case of “D. Printing a special clear ink image”:
Carry out the “Setting mono color replacement” procedure, then carry out the following procedure to duplicate the job.
 - Select the clear ink job.
 - Click the “Duplicate”  icon.
 - Set “1” for [Number of duplicates], and click the [Duplicate] button.
The clear ink job will be duplicated.



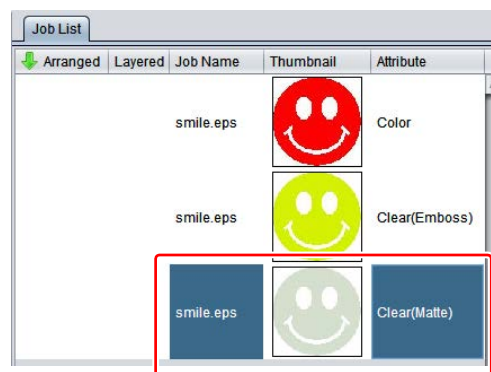
2. Choose one job of clear ink from the job list.

- Refer to “c. Setting Emboss Print” and set the thick print.



3. Choose the job of clear ink from the job list that is not selected in step 2.

- Refer to “a. Setting Glossy Print” and set the glossy print.

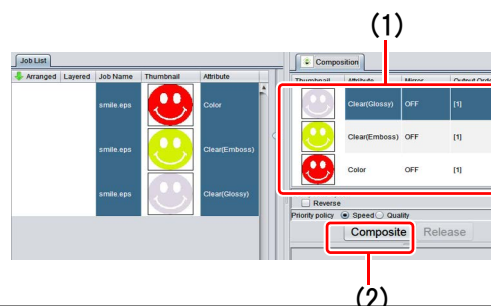


4. Choose the color job and clear ink of step2+3 from the job list,

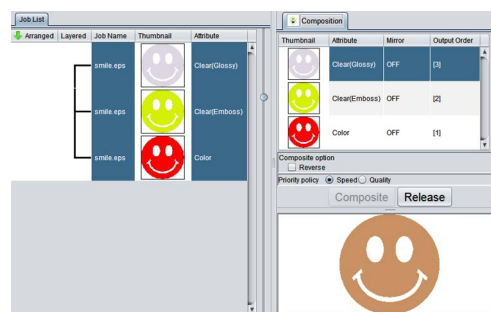
- Press [Composite]  from function icon.

5. Check the following.

- (1) From the top order of the list
Clear(Glossy) -> Clear(Emboss) -> Color
Check the order
- If the order is not as above, please replace the composition List by Drag & Drop.
- (2) Press [Composite] button.



6. Synthesized.



7. Execute printing.

Important!

- Depending on the job settings (clear ink texture, color image or not, etc), when a particular job is printed a dialog box for specifying changeover of the UV lamp position (P. 16) may be displayed.
If quality is emphasized, you are recommended to display this dialog box. However, once this box is displayed, printing will be halted until the box is manually closed. To print all jobs continuously, click ON for [Do not show this message again while printing this job] when the box is displayed at the time of print execution.

