



Mimaki UJF-3042, UJF-3042HG and UJF-6042

This document bridges the gap between the Fiery XF documentation and the Mimaki UJF-3042, UJF-3042HG and UJF-6042 documentation.

Refer to the Installation section before you connect the printer to a computer.

The Operation section has information on profile generation and everyday use. Please refer also to the Operation Manual.

General settings

For a UJF printer, select the Fiery XF driver that matches the ink configuration in the printer:

Fiery XF Model	Description
Mimaki UJF-3042 White	CMYK + Double White (6 channels)
Mimaki UJF-3042HG White Mimaki UJF-6042 White	CMYK + Double White (6 channels) CMYKcm + Double White (8 channels)
Mimaki UJF-3042 Clear	CMYK + Double Varnish (6 channels)
Mimaki UJF-3042HG Clear Mimaki UJF-6042 Clear	CMYK + Double Varnish (6 channels) CMYKcm + Double Varnish (8 channels)
Mimaki UJF-3042 White+Clear	CMYK + White + Varnish (6 channels)
Mimaki UJF-3042HG White+Clear Mimaki UJF-6042 White+Clear	CMYK + Double White + Double Varnish (8 channels) CMYKcm + White + Varnish (8 channels)
Mimaki UJF-3042 White+Primer	CMYK + White + Primer (6 channels)
Mimaki UJF-3042 Clear+Primer	CMYK + Varnish + Primer (6 channels)
Mimaki UJF-3042HG Primer Mimaki UJF-6042 Primer	CMYK + Double Primer (6 channels) CMYKcm + Double Primer (8 channels)
Mimaki UJF-3042HG White+Primer Mimaki UJF-6042 White+Primer	CMYK + Double White + Double Primer (8 channels) CMYKcm + White + Primer (8 channels)
Mimaki UJF-3042HG Clear+Primer Mimaki UJF-6042 Clear+Primer	CMYK + Double Varnish + Double Primer (8 channels) CMYKcm + Varnish + Primer (8 channels)
Mimaki UJF-3042HG White+Clear+Primer Mimaki UJF-6042 White+Clear+Primer	CMYK + Double White + Varnish + Primer (8 channels)

Installation

The Mimaki UJF is a special USB device. The driver is downloadable from <http://eng.mimaki.co.jp/product/driver.html?id=5668>.

- 1 Follow the instructions in the Mimaki USB Driver Install Guide before you connect the printer. Mimaki USB driver version 4.1.2 or later is recommended.
- 2 Install Fiery XF and the latest Fiery XF service pack that supports the Mimaki UJF printer. The minimum requirement is Fiery XF 6.2.

The Fiery XF drivers for Mimaki printers are available only for Windows. Macintosh OS X is not supported.

- 3 To configure the Fiery XF output device:
 - On the Device tab, go to the Information pane and select the Device type, e.g. “Mimaki UJF-3042 White”
 - On the Device tab, go to the Connection pane. Under “Port”, select the Mimaki UJF printer.

Operation

Settings

You can access the ink layers settings in Color Tools via the “Media type” setting.

You can set the number of passes in Color Tools via the “Print mode” setting.

You can select a resolution in the range of 360x300 dpi to 1440x1200 dpi. (UJF-6042 also supports 1800x1800 dpi.)

Note that ink consumption may be higher in higher resolutions.

Creating profiles

Always check the control panel settings – they may override the RIP settings or otherwise affect print quality.

White ink printing

This section applies only to models that support White ink.

Print speed and quality issues

UJF-x042s have separate heads for printing color and for printing White/Clear/Primer.

Linearization, media profiles

There is no specific linearization available for White ink. White ink simply uses its own linearization curve. As far as profiles are concerned, the printer is still a CMYK device. Five-channel profiles for CMYK+White are not supported.

Printer-specific separations

Separated file formats, e.g. PS, PDF, EPS support spot colors. For Fiery XF, the spot color name WHITE_INK has a special meaning. It is a pre-defined printer-specific internal spot color. During job processing, it goes directly to the printer, by-passing color management. It is possible to specify it directly in the document. Alternatively, you can use Color Editor to set up an alias, by mapping any job separation to WHITE_INK. You can then select the *.cxf file in the color settings of the job.

Print settings for White ink

You can find the White ink settings on the Special Printer Settings pane for the output device (System Manager) or for the job (Job Explorer):

Print mode

There are six ways to print White:

Name	Meaning
Spot color WHITE_INK	The spot color of this name or alias from a separated document prints White. This is the default mode.
Inked image	Every pixel which does not have CMYK = 0,0,0,0 on the printer side adds White
Bounding box	Every pixel in the image rectangle adds White. This is the recommended mode during linearization and profile creation
White_INVERSE	Same as “Spot color WHITE_INK” but channel inversed
Ink chroma map	Reduces the amount of White for darker colors.
Off	White off, even when it comes from the separated document

The options “Inked image” and “Bounding box” work regardless of whether the file is separated or not.

Printing order

Since White is opaque, the printing order is important:

- “Color on White” uses White as the foundation color, then prints other colors on top. This setting is for printing on dark or metallic materials.
- “White on Color” prints White on top of color. This setting is for printing transparencies from the back.

White ink coverage

“White ink coverage” is a setting that configures the amount of White ink relative to black. The available settings are 10%, 13%, 16%, 20%, 25%, 32%, 40%, 50%, 63%, 80%, 100%.

Clear ink printing

This section applies only to models that support Clear ink.

Print speed and quality issues

UJF-x042 printers have separate heads for printing color and for printing White ink/ Clear ink/Primer.

Linearization, media profiles

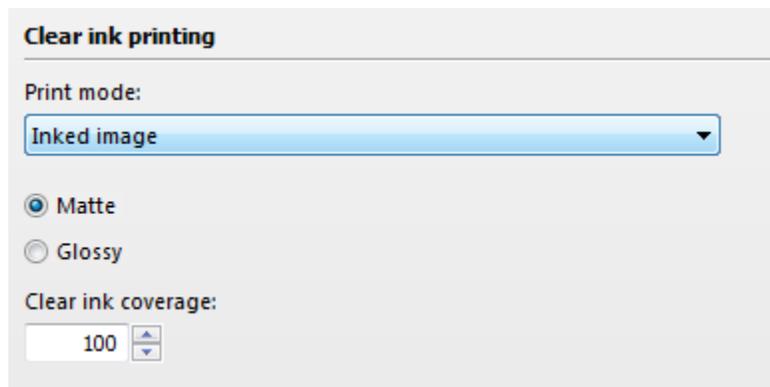
There is no specific linearization available for Clear ink. Clear ink simply uses its own linearization curve. As far as profiles are concerned, the printer is still a CMYK device. Five-channel profiles for CMYK+Clear are not supported.

Printer-specific separations

Separated file formats, e.g. PS, PDF, EPS support spot colors. For XF, the spot color name CLEAR_INK has a special meaning. It is a pre-defined printer-specific internal spot color. During job calculation, it goes directly to the printer, bypassing color management. It is possible to specify it directly in the document. Alternatively you can use Color Editor to set up an alias from any job's separation name to CLEAR_INK. Then you choose the .bct file in the color settings of the job.

Print settings for Clear ink

You can find the Clear ink settings on the Special Printer Settings pane for the output device (System Manager) or for the job (Job Explorer):



Print mode

There are five ways to print Clear ink:

Name	Meaning
Spot color CLEAR_INK	The spot color of this name or alias from a separated document prints Clear. This is the default mode.
Inked image	Every pixel which does not have CMYK = 0,0,0,0 on the printer side adds Clear
Inked image inverse	Same as “Inked image” but channel inversed
Bounding box	Every pixel in the image rectangle adds Clear. This is the recommended mode during linearization and profile creation.
Off	Clear off, even when it comes from the separated document

The settings “Inked image”, “Inked image inverse” and “Bounding box” work regardless of whether the file is separated or not.

Clear ink finishing

The following types of Clear ink finishing can be achieved:

- “Matte” prints Clear ink with matte finish
- “Glossy” prints Clear ink with glossy finish. Printing with glossy finish is slower in UJF compared to matte because the job has to go through an extra irradiation pass.

Clear ink coverage

Clear ink coverage is an option that configures the amount of Clear ink relative to black. The available settings range from 1% to 100%

Primer ink printing

This section applies only to models that support Primer ink.

Print speed and quality issues

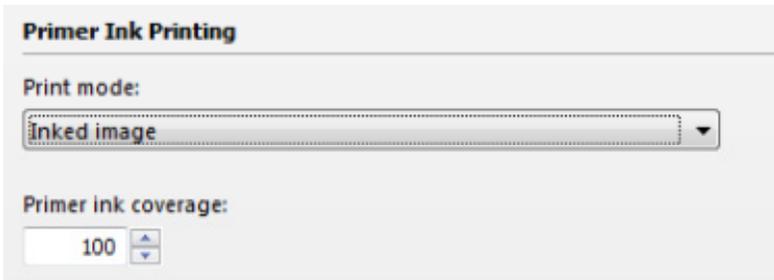
UJF-x042s have separate heads for printing color and for printing White/Clear ink/Primer.

Linearization, media profiles

There is no specific linearization available for Primer. Primer simply uses its own linearization curve. As far as profiles are concerned, the printer is still a CMYK device. Five-channel profiles for CMYK+Primer are not supported.

Print settings for Primer ink

You can find the Primer ink settings on the Special Printer Settings pane for the output device (System Manager) or for the job (Job Explorer):



Print mode

There are following options available to apply Primer:

Name	Meaning
Inked image	Primer will be applied for only colored pixels (pixels which do not have CMYK = 0,0,0,0)
Bounding box	Primer will be applied to every pixel in the image rectangle.
Off	Primer will not be applied

Primer coverage

Primer coverage is a setting that configures the amount of Primer to be applied. The available settings range from 1% to 100%

Printing order

If Primer is supported and job has Primer, it will always be printed first as the first layer.

The printing order of White and Clear ink depends on the White ink printing order and the print mode selected on the Special Printer Settings pane.

Printing order	Job has White ink	Job has Clear ink	Effective print order
Color on White	No	No	CMYK only
	Yes	No	Color on White
	No	Yes	Varnish on Color
	Yes	Yes	Varnish on Color on White

Printing order	Job has White ink	Job has Clear ink	Effective print order
White on Color	No	No	CMYK only
	Yes	No	White on Color
	No	Yes	Varnish on Color
	Yes	Yes	Error

The job has White if you set the print mode in the White group to any option except Off.

The job has Clear if you set the print mode in the Clear group to any option except Off.

If Primer is supported and the job has Primer, it will always be printed as the first layer. The job has Primer if you set the print mode in the Primer group to any option except Off.

Option support

Media length correction

In Fiery XF you enter a target length and an actual length. The MEDIA COMP value is then calculated as follows:
 $(\text{target length} / \text{actual length} - 1) * 10000$

This formula gives an exact MEDIA COMP value, although the corrected media length may be slightly inaccurate. For example, if you enter a target length of 100.60 cm and an actual length of 100.00 cm, the MEDIA COMP value will be +60.

Known issues

Note that the Fiery XF driver has not been tested for Mimaki USB driver versions earlier than 4.1.2.