



Mimaki UJV55-320

This document bridges the gap between the Fiery XF documentation and the Mimaki UJV55-320 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.

Installation

For a UJV55-320 printer, select the Fiery XF driver that matches the ink configuration in the printer:

Fiery XF model	Description
Mimaki UJV55-320 CMYK	Double CMYK set for higher speed and uninterrupted ink supply Ink type: UV Curable Ink (LUS-120)
Mimaki UJV55-320 CMYKcmW	CMYKcm, plus White Ink type: UV Curable Ink (LUS-120)

From the computer viewpoint, the Mimaki UJV55-320 is a special USB device with Ethernet support. The latest driver is downloadable from <http://www.mimaki.co.jp/>

Follow the instructions in the Mimaki USB Driver Install Guide before you connect the printer. Mimaki USB Driver version 4.0 or later is recommended. Furthermore, the Mimaki network driver is supported from version 1.2 onwards.

- 1 Install Fiery XF and the latest Fiery XF service pack that supports the Mimaki UJV55-320 printer. The minimum requirement is Fiery XF 7.1.
- 2 To configure the Fiery XF printer:
 - In System Manager, add the printer by clicking on the plus (+) icon and selecting “Mimaki” as the manufacturer and “Mimaki UJV55-320 CMYKcmW” as the printer type.
 - In the Connection panel, select the Connection type “Print via port” or “Print via IP network”.

Operation

Color Tools

In Color Tools, select the printer for which you want to create a calibration file. The calibration file forms the basis for creating a media profile.

- You can access the ink layers settings via the “Media type” setting.
- You can set the number of passes via the “Print mode” setting.
- You can select the Variable, Fixed Small/Large “Dot size” setting.
- You can select a resolution in the range of 600x300 dpi to 1200x900 dpi.

Note: Ink consumption may be higher in higher resolutions.

- If your printer has light inks, reduce the starting point of norm ink. Setting it to 1/2 of the default Color Tools setting (e.g. from 38% to 19%) is a good start.

Server Manager

- 1 In Server Manager, click on the Media panel for your printer and load the calibration file you created in Color Tools.
- 2 Click on Printer & Workflow Settings to open the Special Settings panel.

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

White printing

This section applies only to printer models with white ink.

Print speed and quality issues

For white printing, the print head is split into two bands - one band for process colors and one band for White ink. The print speed is much slower than for normal color printing.

White adds another 100% of ink. Although the print speed is slower, you can easily run into quality issues. Use as much of the media width as possible, and follow the hints given in the “Color Tools” section above. In particular, make sure to keep the printing width consistent.

Calibration and media profiles

There is no specific calibration available for White. White ink simply uses its own calibration curve. As far as profiles are concerned, the printer is still a CMYK device. Five-channel profiles that include a mix of CMYK and 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 one of the job's separations to WHITE_INK. You can then select the *.cxf file in the color settings of the job.

Printer settings

You can find the settings for White ink on the Special Printer Settings panel for the printer (Server Manager) or for the job (Job Editor).

Printer settings (White ink)

White ink printing

Print mode

Spot color WHITE_INK

White ink coverage:

100% (Normal)

Spread and choke

0.00 mm

Edge shape

Round

Print control bar 1 with white

Print control bar 2 with white

Printing order:

Color on White

White on color

White only

Color White Color

- 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 calibration 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.

- White ink coverage

White ink coverage is an option that configures the amount of white ink relative to black. The available settings are 10%, 13%, 16%, 20%, 25%, 32%, 40%, 50%, 60%, 83%, 100%.

- Printing order

Since White is opaque, the printing order is important.

Setting	Meaning
Color on white	Prints White as the foundation color, then prints the other colors on top. This setting is for printing on dark or metallic materials.
White on color	Prints White on top of other colors. This is for printing transparencies from the back.
White only	Prints White, but no other color channels.
Color White Color	Prints three layers with white in the middle.

Printer settings (heater)

Heater

Control heater temperature at RIP

Print Heater

Print Heater degrees C Heater off

Control heater temperature at printer control panel

The temperature can be set either through Fiery XF (20 – 60 °C) or at the printer control panel.

Printer settings (other)

Refresh

Refresh Level:

Media

Vacuum:

Media Types

Media Types:

White High Density

White High Density

- Refresh Level - For nozzle clogging prevention, set the amount of ink to be discharged from the nozzle.
- White-High density - This mode uses white ink twice as much comparing to printing with normal density.

Media type constraint table

- Mimaki UJV55-320 CMYKcmW

Serial no.	Printing order	Resolution	Media type
1	White mode Off	300 x 600 dpi 300 x 900 dpi 600 x 900 dpi	Tarpaulin/PVC
		900 x 1200 dpi 1200 x 1200 dpi	PVC/Soft media
		600 x 600 dpi 600 x 900 dpi	FF/Soft media
2	White Only White Color Color White Color White Color	300 x 600 dpi 300 x 900 dpi 600 x 600 dpi 600 x 900 dpi 900 x 1200 dpi 1200 x 1200 dpi	Film/Film (White High Density)

- Mimaki UJV55-320 CMYK

Serial no.	Resolution	Media type
1	300 x 600 dpi 300 x 900 dpi 600 x 900 dpi	Tarpaulin/PVC
2	900 x 1200 dpi	PVC
3	600 x 600 dpi 600 x 900 dpi	FF/Soft media