Mimaki UJV500-160

This document bridges the gap between the Fiery XF documentation and the Mimaki UJV500-160 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 UJV500-160 printer, select the Fiery XF driver that matches the ink configuration in the printer:

Fiery XF model	Description
Mimaki UJV500-160 CMYK Mimaki UJV500-160 CMYKWW	Double CMYK set for higher speed and uninterruptible ink supply CMYK, plus White Ink type: UV Curable Ink (LUS-120/LUS-150/LUS-200)
Mimaki UJV500-160 CMYKcmWW	CMYKcm, plus White Ink type: UV Curable Ink (LUS-120)

From the computer viewpoint, the Mimaki UJV500-160 is a special USB device. 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.

1   Install Fiery XF and the latest Fiery XF service pack that supports the Mimaki UJV500-160 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 UJV500-160 CMYKcmWW" as the printer type.

- In the Connection panel. select the Connection type "Print via port".

Santosh Kumar Patra

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 "Waveform" via the "Dot size" setting.

- You can select a resolution in the range of 600x300 dpi to 1200x1200 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.

Drying time and the overall ink consumption are extremely important, especially in fast print modes. When printing a narrow image, you get considerably less ink drying time between passes than when printing a wide image. If your print speed is very fast or you are printing white, you should make your printing width consistent:

- Consider setting a drying time for each scan.

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 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.

- 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)

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

Printer settings (other)

These settings are self-explanatory.