VUTEk X3r / X5r [FAST DRIVE]

This document describes the specifics of the VUTEk X3r/X5r printer driver. The driver supports the following printer models:

- VUTEk X3r [FAST-DRIVE]
- VUTEk X5r [FAST-DRIVE]

Each printer model supports four colors using CMYK and additionally white and/or clear.

Installation

Install Fiery XF 8.0.4 or later. The Fiery XF drivers are available only for the Windows server.

Configuration

The VUTEk X3r/X5r printer driver is a file output device. The output files are created in the configured Export folder. The Export folder may be a local folder on the machine or a network shared folder on a remote machine.

∨ INFORMATION

Name

VUTEk X3r [FAST-DRIVE]

Description

Manufacturer

EFI VUTEk

Printer Type

VUTEk X3r [FAST-DRIVE]

Unique ID ⓘ

c7900d30-3269-4c3f-911f-d7bea779ea14

∨ CONNECTION

Connection type

File output   ∨

Export path

C:/ProgramData/EFI/EFI XF/Server/Export   Choose...

Username

Password

                                               Test

Naming

%order_%job_%jobid_%t_%p_%date   ∨ ⓘ

Example: 001_FileName_3_T1_P1_20241022052705

Database server

Host name or IP address:

127.0.0.1   Test

Connecting to a shared folder on the network

To connect to a remote shared folder using the UNC (Universal Naming Convention) you must enter your user credentials (username and password). You also require write permissions to the remote folder. If necessary, you can add a domain to the username, using the format <domain>\<username>. The password may be optional for user accounts that do not require it on the remote machine. You can verify the connection to the remote folder by clicking the Test button.

The VUTEk X3r/X5r FE (Front End) machine may have a shared network folder that you can specify in Fiery XF for direct output.

Database server

A SQL database is used for connection to EFI MIS systems. This is not required for most printer installations.

Connecting to a local folder

Specifying a local folder can be done manually through an LFS (Local File System) path or by browsing to the location using the Choose button. You do not need to enter your user credentials to connect to a local folder.

Output

The VUTEk X3r/X5r printer driver generates separated one-bit TIFF files. Each printed job creates its own subfolder based on the chosen naming format: <job-name>.**mjob**. The following output files are created:

File type	Name template
1bpp ("Fixed") or 2bpp ("Grayscale) TIFF separations	< job-name >▲**C**.tif (XF Name: Cyan) < job-name >▲**M**.tif ((XF Name: Magenta) < job-name >▲**Y**.tif ((XF Name: Yellow) < job-name >▲**K**.tif ((XF Name: Black) < job-name >▲**W**.tif ((XF Name: WHITE_INK) < job-name >▲**V**.tif ((XF Name: CLEAR_INK) Other colors/inks : No translation for additional colors/inks to a specific VUTEk X3r/X5r. The internal XF naming would be used instead. Additional files for split print modes: < job-name >▲**LC**.tif < job-name >▲**LM**.tif < job-name >▲**LY**.tif < job-name >▲**LK**.tif < job-name >▲**LW**.tif < job-name >▲**LV**.tif
Preview image	< job-name >▲**PRV**.bmp
Job ticket	< job-name >.xml

▲ = Space character

The job ticket xml contains job-specific information for the VUTEk X3r/X5r printer, including the printer mode to be used and layout options.
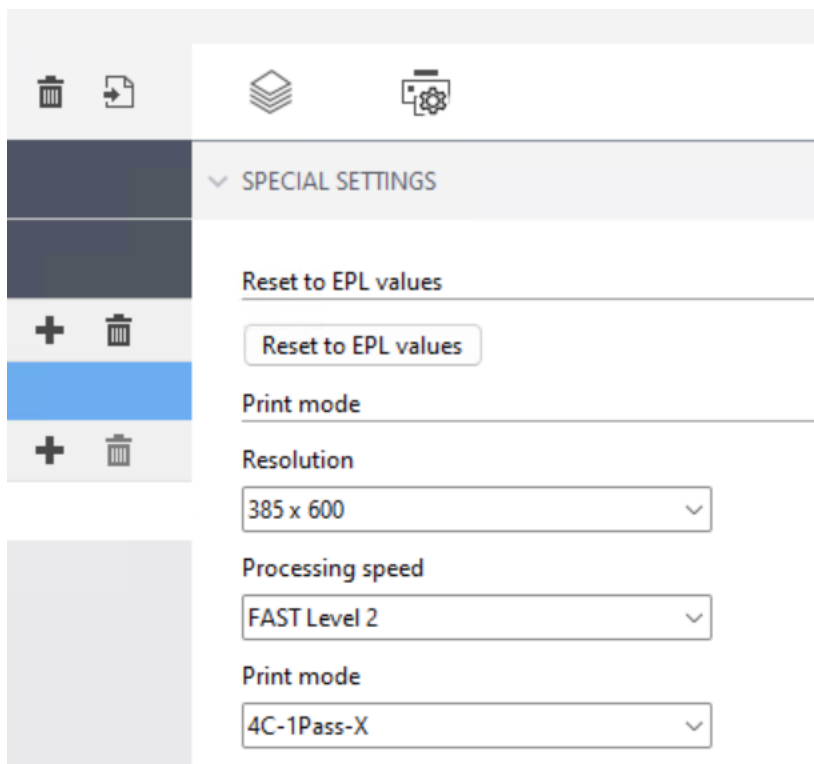
Split print modes:

Some of the print modes are switched to create a secondary TIFF file, as described in the table "available print modes".

Special printer settings

Print modes

You can override the resolution, print mode and smoothing level saved to the selected media profile by using the print mode options on the Special Printer Settings pane:

Only resolutions and print modes which are compatible with the color mode of the media profile are available for selection. For example, if the media profile was created for CMYK, only the resolutions and print modes applicable for this color mode are displayed. The Halftone mode should always be set to "Use halftoning from EPL".

Clicking "Reset to EPL values" button will reset the resolution, print mode and smoothing level to the values saved in the media profile.

Processing speed can be selected when a valid nVidia GPU with license is available, otherwise it is not available. For close distance view print application Processing Speed "FAST Level 1-2" is recommended. For far distance view print application "FAST Level 3-4" is recommended.

White Ink

All X3r/X5r printer models support White ink. However, be aware that the White ink is optional, depending on the configuration of the physical device.

You can generate White ink either by mapping a spot color (if one exists in the input job) or by using one of the available options: Bounding Box (Flood), Inked Image or Inked Image Inverse. Details of creating white calibration is available in the Advanced Calibration Guide.

Important: Not all print modes create White ink TIFF separations, even if the White ink option is set up in Fiery XF to generate it either from a spot color or another option. This is because only the White print modes accept these separations on the X3r/X5r FE side.

For example: If you use the **4C-2Pass-X** print mode, no white separation will be created, because it is a non-white print mode. However, if you switch to the **4C-WO-X** print mode, a white separated TIFF will be produced in the job folder.

The following options are available under Print Mode for white ink

Option	Description
Spot color WHITE_INK	**The spot color of this name or alias from a separated document prints white ink**
Bounding Box	**Every pixel in the image rectangle adds white ink. This is recommended more during linearization and profile creation.**
Fixed ink amount on printed areas	**Every pixel which does not have CMYK = 0,0,0,0 on the printer side adds white ink.**
Fixed ink amount on printed areas (inverted)	**Similar to the above but inverted**
Dynamic ink amount on printed areas	**Additional white ink is applied to light areas. White ink is reduced in darker areas to save white ink.**
Dynamic ink amount on printed areas (inverted)	**Similar to the above but inverted**
Off	**Blank separation will be generated**

White Ink Coverage options only apply to Fixed ink amount on printed areas, Fixed ink amount on printed areas (inverted) and White_BOUNDING BOX print modes. These options change the overall coverage of white for these modes.

Spread: Expands the size of the White_Ink area. Can be used to have a white frame printed around and image. Is obtained by entering a positive value.

Choke: Decreases the size of the White_Ink area. Mostly used to avoid white ink bleeding from under the CMYK part of file, to compensate for eventual hardware misalignment.

Clear\Varnish\Coat Ink

All VUTEk X3r/X5r printer models support Clear ink. However, be aware that Clear ink is optional, depending on the configuration of the physical device.

You can generate Clear ink either by mapping a spot color (if one exists in the input job) or by using one of the available options: Bounding Box (Flood), Inked Image or Inked Image Inverse.

Important: Not all print modes create Clear ink TIFF separations, even if the Clear ink option is set up in Fiery XF to generate it either from a spot color or another option. This is because only the Clear print modes accept these separations on the VUTEk X3r/X5r FE side.

For example: If you use the **4C-2Pass-X** print mode, no clear separation will be created, because it is a non-clear print mode. However, if you switch to the **4C-Coat-Matte-X** print mode, a clear separated TIFF will be produced in the job folder.

The following options are available under Print Mode for clear ink.

Option	Description
Spot color CLEAR_INK	**The spot color of this name or alias from a separated document prints clear ink**
Bounding Box	**Every pixel in the image rectangle adds clear ink. This is recommended more during linearization and profile creation.**
Fixed ink amount on printed areas	**Every pixel which does not have CMYK = 0,0,0,0 on the printer side adds clear ink.**
Fixed ink amount on printed areas (inverted)	**Similar to the above but inverted**
Dynamic ink amount on printed areas	**Additional clear ink is applied to light areas. Clear ink is reduced in darker areas to save ink.**
Dynamic ink amount on printed areas (inverted)	**Similar to the above but inverted**
Off	**Blank separation will be generated**

Clear Ink Coverage options only apply to Fixed ink amount on printed areas, Fixed ink amount on printed areas (inverted) and BOUNDING BOX print modes. These options change the overall coverage of clear for these modes.

Layout options

The following layout options are available in Fiery XF:

Setting	Description
Alignment	Aligns the job horizontally on the media
Mirror	Mirrors the job horizontally
Rotate 180°	Rotates the job by 180 degrees
Compression	This is enabled by default and supports compression of data send to printer

These options are set inside the job ticket xml of the job and are reflected on the X3r/X5r FE user interface. If you change the setting on the VUTEk X3r/X5r FE user interface, it overrides the equivalent setting from the job ticket xml.

Note: The layout options provided on the Special Printer Settings pane are different from the generic ones available on the Layout pane of the Fiery XF client, and their behavior is different. While the generic layout options are performed by the RIP, the settings on the Special Printer Settings pane are applied by the X3r/X5r printer at the time of printing.

Available Print Modes

The following print modes are available in Fiery XF. Additional custom print modes may be available. Contact inkjet support to inquire about additional print modes.   For details on the different print modes and how to process and print using them see the printer operations manual.

Print mode	X-Res	Y-Res	Split Mode	Bits per Pixel	drop size (pL)
4C-1Pass-X	385	600	on	1Bit	14
4C-2Pass-GS-X	450	600	on	2Bit	6.2 , 11.6 , 16.5
4C-3Pass-X	770	600	on	1Bit	6,2
4C-4Pass-GS-X	450	600	on	2Bit	6.2 , 11.6 , 16.5
4C-5Pass-GS-X	450	600	on	2Bit	6.2 , 11.6 , 16.5
4C-6Pass-GS-X	450	600	on	2Bit	6.2 , 11.6 , 16.5
4C-9Pass-GS-X	450	600	on	2Bit	6.2 , 11.6 , 16.6
4C-Backlit-X	770	1200	off	1Bit	6,2
White-Over-X	770	1200	off	1Bit	6,2
4C-CWC-X	770	1200	off	1Bit	6,2
4C-CWC-B-X	770	1200	off	1Bit	6,2
White-Only-X	770	1200	off	1Bit	6,2
White-Under-X	770	1200	off	1Bit	6,2
4C-CWC-C1-X	770	1200	off	1Bit	6,2
4C-CWC-C2-X	770	1200	off	1Bit	6,2
4C-CWC-B-C2-X	770	1200	off	1Bit	6,2
4C-CWC-B-C1-X	770	1200	off	1Bit	6,2
4C-CWBWC-C1-X	770	1200	off	1Bit	6,2
4C-CWBWC-C2-X	770	1200	off	1Bit	6,2
4C-Coat-Matte-X	770	1200	off	1Bit	6,2
4C-Coat-Gloss-X	770	1200	off	1Bit	6,2
White-Under-Coat-Gloss-X	770	1200	off	1Bit	6,2
White-Under-Coat-Matte-X	770	1200	off	1Bit	6,2
4C-CWWC-B-C1-X	770	1200	off	1Bit	6,2
4C-CWWC-B-C2-X	770	1200	off	1Bit	6,2
4C-CCWWCC-B-C2-X	770	1200	off	1Bit	6,2
4C-CCWWCC-B-C1-X	770	1200	off	1Bit	6,2
4C-CCWCC-B-C2-X	770	1200	off	1Bit	6,2
4C-CCWCC-B-C1-X	770	1200	off	1Bit	6,2
4C-CWBWC-Coat-Gloss-C1-X	770	1200	off	1Bit	6,2
4C-CWBWC-Coat-Gloss-C2-X	770	1200	off	1Bit	6,2

Version	Date	Description	Updated by	Affected XF Versions
v1.0	22-Oct-24	First version	Friedrich Nowak	Fiery XF 8.0.4