



VUTEk Q3h series

This document provides the procedure on how-to setup Fiery XF connecting to a VUTEK Q3h series printer and bridges Fiery XF to the EFI Q3h connector documentation.

System Requirement.

Fiery XF Server 9.0.1

Fiery CommandWorkStation 7.2.0.516 and higher

EFI Q3h Connector v1.2 and higher

Supported printers.

1. VUTEk Q3h X: CMYK + White or CMYKck + White
2. VUTEk Q3h XP: CMYK + opt. White and Clear or CMYKck + opt. White and Clear

Supported color mode.

CMYK

Note: Fiery XF writes only CMYK tiffs or PDFs and optional CMYK plus White and Clear as spot channels. See “Linearization of a Q3h series printer using Fiery XF” for additional information.

Connect Fiery XF to EFI VUTEk Q3h series printer.

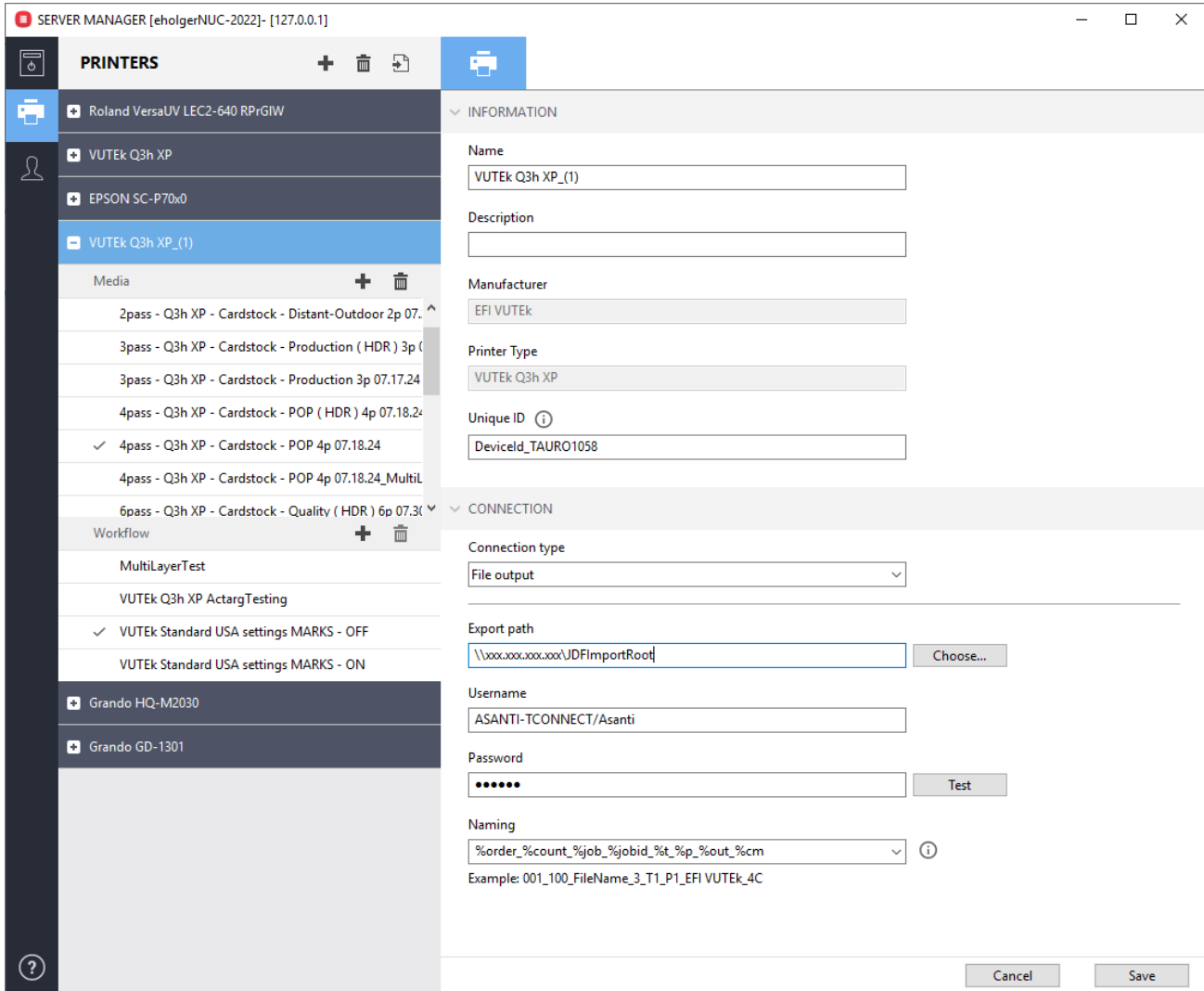
The connection to the Q3h series device is hotfolder based. The hotfolder resides on the PC, which is running the EFI Q3h connector. Therefore, enter at creation time of the printer, the hotfolder path as UNC path with user name and credentials. Please refer to the EFI Q3h Connector documentation regarding user name and credentials.

The screenshot shows a 'NEW PRINTER' dialog box with the following fields and options:

- Connection type:** A dropdown menu set to 'File output'.
- Export path:** A text input field containing 'C:\ProgramData\EFI\FIERY XF\Server\Export' and a 'Choose...' button to the right.
- Username:** An empty text input field.
- Password:** An empty text input field.
- Naming:** A dropdown menu set to '%order_%count_%jobid_%t_%sp_%out_%cm' with a help icon to the right. Below it, an example path is shown: 'Example: 001_100_FileName_1_T1_P1_4C'.

At the bottom of the dialog are three buttons: '< Back', 'Finish', and 'Cancel'.

Once the device is created, a test can be done, if the user name and password used for connecting to the hotfolder is correct or not. Please refer to the screenshots below for a typical connection setting:



Note: Make sure, that there is also a folder named XMLImport at the location where you setup Fiery XF to write the exported files. If this folder is missing, additional XML cannot be written.

Note: In case that you setup Fiery XF to export to a local folder (e.g. for testing purposes), there is no need to create an additional XMLImport folder in the export path.

Setup EFI VUTEK Q3h printer with Fiery XF.

Printer UUID

Whenever a new instance of a printer is created in Fiery XF, a Unique ID for this device is generated, too. In case of setting up a connection to an EFI Q3h printer, this UUID must be manually changed to the DeviceID of the Q3h printer. Check out the EFI Q3h connector documentation on how to get the Device ID of your printer.

A typical example for such a DeviceID is **DeviceID_MORW9109**. Put in the complete string into the Unique ID field as it is shown below.

Manufacturer

Printer Type

Unique ID

Print Modes

Processing and printing a job successfully using Fiery XF and the EFI Q3h connector, is only possible, if Fiery XF uses the correct and available PrintModes of the EFI Q3h.

To add these available PrintModes into Fiery XF, a file called MediaList.xml must be created using the EFI Q3h Connector. Check out the Q3h Connector documentation on how to create such a MediaList.xml using the MediaHub in the Q3h Connector.

After creating the MediaList.xml file, same must be placed into a specific folder in the Fiery XF server installation. Therefore, navigate into the temp folder of your Fiery XF server installation.

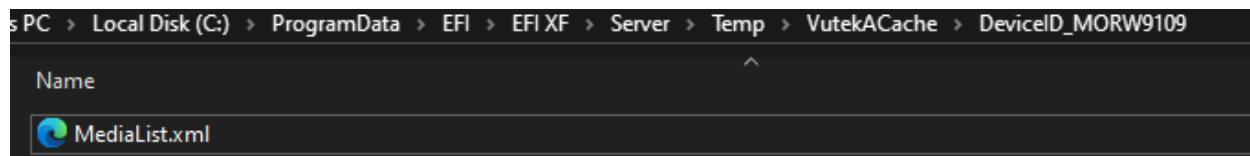
This is, in case of a Fiery XF proServer, located on the D drive. On a non-proServer installation checkout the ProgramData folder on the C drive.

Note: Check-out for the location of the Temp folder of the Fiery XF Server by using Fiery XF ServerManager and looking into the “Server File Paths” pane

Usually, you can find in the Temp folder already a subfolder called VutekACache. If not, create a subfolder in the temp folder with this name and navigate into it. Now create in the VutekACache folder another subfolder with the same name as the Device ID. Picture below shows this scenario for a non-proServer installation.



Finally copy the MediaList.xml into this subfolder and restart Fiery XF server using Fiery XF Server Control.



Note: The table below shows the print modes in case of a correctly detected MediaList.xml

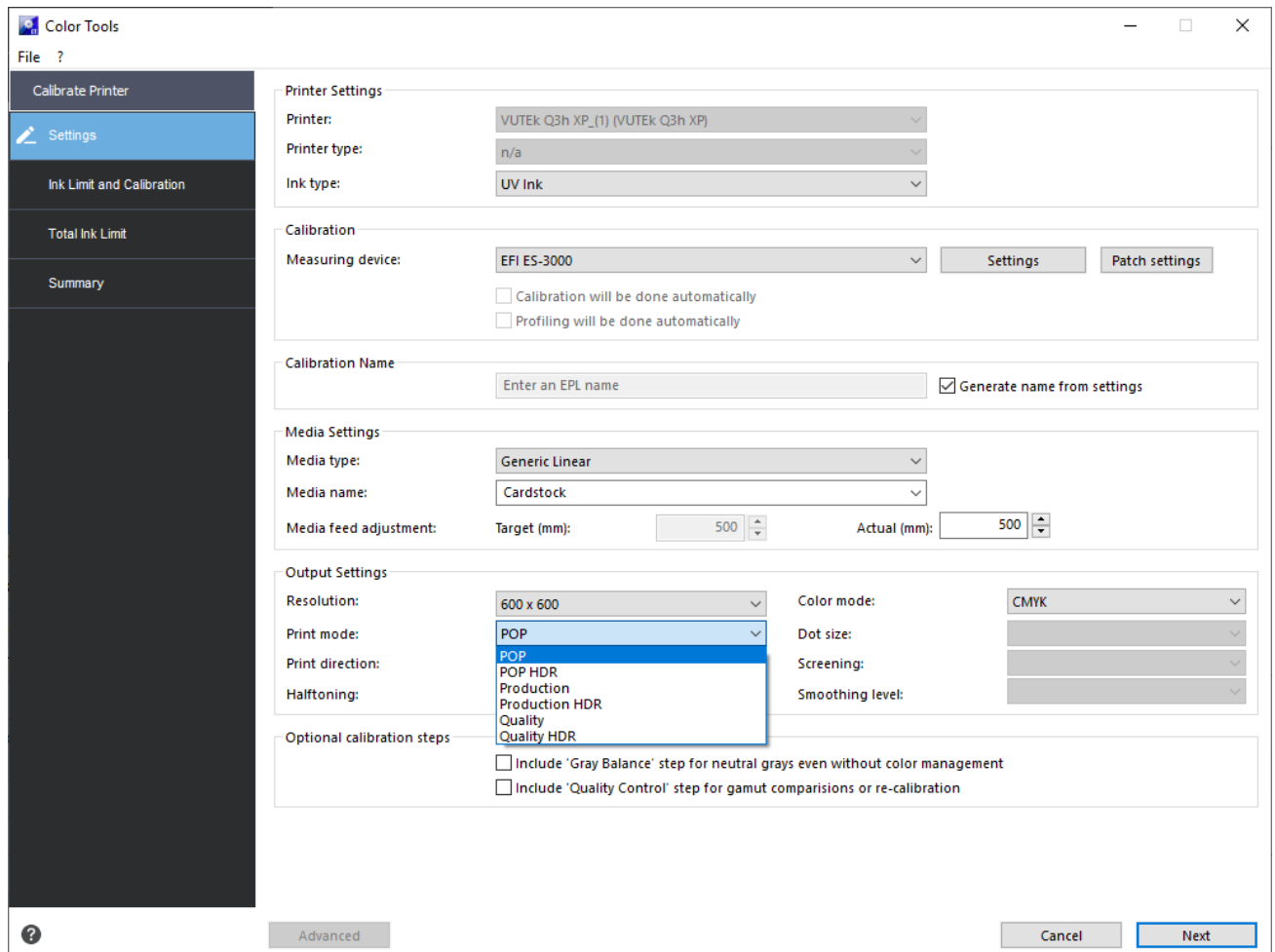
PrintMode shown in Fiery XF
Draft
Outdoor
POP
POP HDR
Production
Production HDR
Quality
Quality HDR

Linearization of a Q3h series printer using Fiery XF

Fiery XF uses the Advanced Linearization method to create a linearization for the VUTEK Q3h. Although the printer supports light inks, Fiery XF only allows to set up CMYK as color mode.

Before you even start any linearization process using ColorTools, check out the Printer Special Settings for the Media Set defined as default. Make sure that you use right Ink set of the printer (CMYKck in case that your printer has also light inks or CMYK in case that your printer has only CMYK inks), set up a recommended media thickness for the media you want to profile as well as the which light-norm ink split curve shall be used.

In Fiery XF linearization process the user can only specify the media he is using by name and specify to which print mode/quality setting this media shall be assigned to. The assignment itself of the media to the related print mode is done in the EFI Q3h Connector. Please refer to the EFI Q3h connector documentation how to verify this assignment and how to create a new print mode.



Note: Please refer to the EFI Q3h connector documentation, in case you want to linearize with White Under or White Over and if the selected Calibrated Printing Mode (CPM) on the Q3h connector can handle White printing or not. Otherwise, a different print mode is automatically selected in the Q3h Connector or jobs are erroring out.

When measuring the first chart to determine the light/norm split curves, typically the curves look like these:

The screenshots show the 'Step 3: Light/Norm setup' dialog box for the Cyan channel. Each screenshot displays a different light/norm split curve, with associated gamut and ink consumption data.

Step 3: Light/Norm setup (Screenshot 1)

- Norm ink: 100%
- Dot gain at 50%: 0%
- Maximum gamut Chroma: 58.9, L*a*b*: 52.7 -26.7 -52.5
- Current gamut Chroma: 58.9, L*a*b*: 52.7 -26.7 -52.5
- Ink consumption: 93%

Step 3: Light/Norm setup (Screenshot 2)

- Norm ink: 100%
- Dot gain at 50%: 0%
- Maximum gamut Chroma: 73.5, L*a*b*: 52.1 73.1 -8.3
- Current gamut Chroma: 72.8, L*a*b*: 52.0 72.5 -6.7
- Ink consumption: 63%

Step 3: Light/Norm setup (Screenshot 3)

- Norm ink: 100%
- Dot gain at 50%: 0%
- Maximum gamut Chroma: 84.8, L*a*b*: 85.9 -3.8 84.7
- Current gamut Chroma: 84.8, L*a*b*: 85.9 -3.8 84.7
- Ink consumption: 62%

Step 3: Light/Norm setup (Screenshot 4)

- Norm ink: 100%
- Dot gain at 50%: 0%
- Maximum gamut L*: 24.3, L*a*b*: 24.3 -0.9 -0.9
- Current gamut L*: 24.3, L*a*b*: 24.3 -0.9 -0.9
- Ink consumption: 118%

This is because Fiery XF sends pre-defined light/norm, curves for Black/Light Black and Cyan/Light Cyan into the EFI Q3h Connector when printing the first chart. Which Light/Norm split curve is used depends on the Ink split setting you have set up in the printer special settings.

Compared to all previous versions of the EFI Q3h connector, version 1.2 can consume external link/norm split curves together with a job to process and uses these curves while printing. The EFI Q3h connector default curves are only used, in case the Fiery XF job does not send these additional curves.

The Total Ink Limit for the Q3h is recommended to be set to 400% with these curves. To achieve this, please deactivate Auto check box for the Norm ink and enter 100% for all colors.

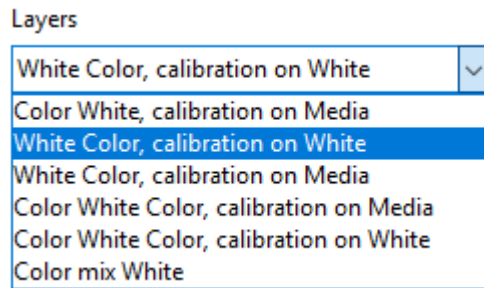
Printer Special Settings.

Media Thickness.

The Q3h printer does not detect automatically the thickness of the media used for printing. Use the Media Thickness entry in the printer special setting to setup per media the according thickness. The values are given in micrometers. Please refer to the EFI Q3h Connector documentation which thickness to use for each media. By default, the value is set to 800 micrometers.

White ink settings.

All print modes support white and clear ink. In case of White ink printing, Fiery XF allows also to do layered printing using the following modes:



These layer settings are related to similar settings in the EFI Q3h connector and have the following effects:

Color White, calibration on Media –

creates postWhite on the printer. Color is printed first, after that a White layer is been printed.

White Color, calibration on White –

Creates preWhite on the printer. White is printed first, after that the color is printed. Designed for transparent media.

White Color, calibration on Media -

Creates preWhite on the printer. White is printed first, after that the color is printed. Designed for non-transparent media.

Color White Color, calibration on Media –

Creates sandwich white printing. Designed for non-transparent media.

Color White Color, calibration on White –

Creates sandwich white printing. Designed for transparent media.

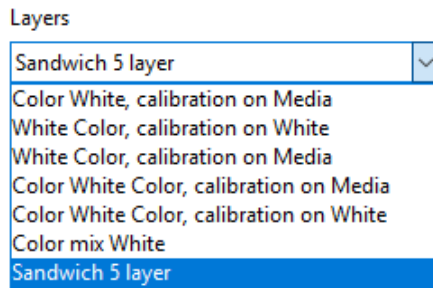
Color mix White –

White is printed at the same time as the process colors.

Note: Please refer to the EFI Q3h connector documentation when to use the option ‘calibration on White’ or ‘Calibration on Media’. If the Calibrated Printing Mode (CPM) in the Q3h Connector does not support the used setting, jobs will error out in the Q3h Connector.

MultiLayer support.

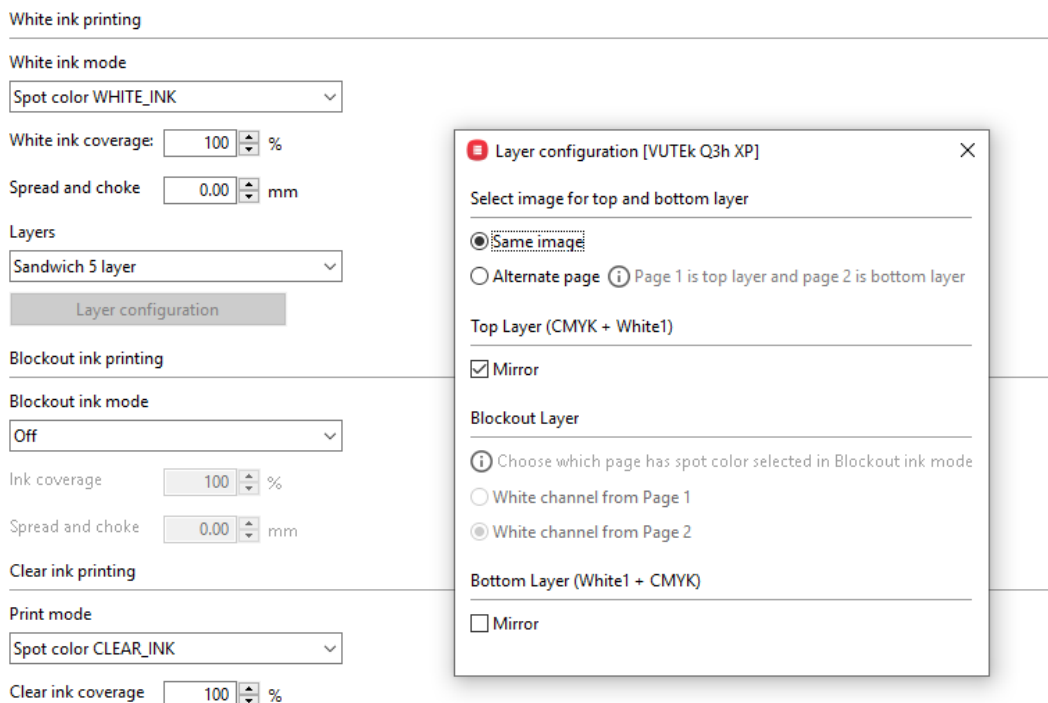
Fiery XF driver for EFI VUTEK Q3h also supports 5 Layer sandwich printing, which means CWBWC printing. To enable it, user must select following settings in the layering options:



Fiery XF will then create 3 separate jobs in the following way/order/naming convention:

- Job 1 named <JobName>#C1W(1);.tif, which is Color + White with Spot White under
- Job 2 named <JobName>#C2(2);.tif, which is a Black Blockout
- Job 3 named <JobName>#WC3(3);.tif, which is White + Color with spot White under

Fiery XF offers the option to use the same image on front and back and to use a 2-page job for front and back side printing. It allows to mirror the front and/or the back site and to set up a different white layer for creating the block out.



Layered files from Fiery XF are consumed in the EFI Q3h Connector as separate jobs, but they can be selected in the job list of the Printer and combined to a multi-layer job without any further user interaction. Please refer to the EFI Q3h Connector documentation for details.

Clear ink printing.

In case of the EFI VUTEk Q3h XP, user can select also clear ink printing. It is processed as an additional Spot Channel in the resulting Tiff/PDF file Fiery XF writes.

Job settings.

The job settings dialogue combines various job-related parameters to be set up.

The image shows a software interface with two panels. The left panel contains various settings for ink and job parameters, while the right panel shows a detailed 'Edit...' dialog box for a specific job.

Left Panel Settings:

- Cyan:** High
- Black:** High
- White ink printing:**
 - White ink mode: Spot color WHITE_INK
 - White ink coverage: 100 %
 - Spread and choke: 0.00 mm
- Layers:** Color White, calibration on Media
- Blockout ink printing:**
 - Blockout ink mode: Bounding box
 - Ink coverage: 100 %
 - Spread and choke: 0.00 mm
- Clear ink printing:**
 - Print mode: Off
 - Clear ink coverage: 100 %
- Job settings:** Edit...

Right Panel (Edit... [VUTEk Q3h XP]):

- Second surface Printing:**
 - Mirror complete job
- Customer:** Customer
- Order Name:** Fiery XF Job
- Customer Name:** admin
- Company Name:** Fiery
- File Output Settings:**
 - Type: TIFF
 - Compression
 - 16 bit
 - Max split count: 4
- Layout Options:**
 - Format: Media width
- Job status and accounting:** Enable

Second surface printing.

Fiery XF driver for the EFI VUTEk Q3h series allows to mirror the complete job. Check Mirror complete job to create a mirrored output used for backlit printing for example.

Customer settings.

Fiery XF driver for the EFI VUTEk Q3h series allows to specify customer data per media. This help to identify the jobs on the printer and to order them accordingly in the printer list. Fiery XF allows to setup an order name, the customer name and the company name.

File Output settings.

Fiery XF allows to write Tiff or PDF files and to enable or disable compression of the output data. The compress method is LZW. Further you set up Fiery XF creating several splits of the Tiff/PDF.

Default are 4 chunked tiff files or 4 chunked PDFs.

If the uncompressed raster data size in one single split is more than 10GB, then the split count will be increased by the max split count value, i.e. if max split count is set to 4, the actual split count will then become 8. Even then if the data inside individual split file is more than 10GB, the split count will be increased by 4 again, so it became 12. The reason is that EFI Q3h connector is not able to process a single tiff file that has more than 10GB raster data.

Note: To disable the Tiff splitting set the max. number of split counts to 1.

File Format settings.

This is the size of media requested in the connector for a job. It can be set to media width or job width.

Job status accounting.

Allows to disable or enable job status tracking and retrieving accounting information from the printer.

Mirror complete Job.

Allows to mirror the complete job.

JMF communication settings.

JMF Job submission: Job can be submitted to connector via hot folder or via jmf. Delete job when deleted in EFI Q3h connector: When a job is deleted in Q3h connector, it will be deleted from Fiery XF as well.

Ink Set settings.

The EFI Q3h X/XP is available with the following ink sets: CMYKc and CMYK (plus optional White and Clear/Varnish). There is no communication to the printer which ink set is in use. The Ink Set settings allows to use CMYK only or CMYK with light inks.

Note: Do not set the Ink Set to CMYK depending on the print modes! The driver is automatically disabling sending light inks in case of 1-pass (Draft) or 2-pass mode (Outdoor).

Ink Split Settings.

Allows to setup different light/norm split curves for Cyan/Light Cyan and Black/Light Black. High/Med/Low describe three different levels of maximum amount of light inks. Those settings can be used to reduce the visibility of steps in bigger gradients or increase the level of ink saving.