



# Océ Colorado 1650 Printer Supplement

This document bridges the gap between the Fiery XF documentation and the Océ Colorado 1650 documentation.

Refer to the Installation section before you connect the printer to XF. Also, refer the documentation shipped with your printer.

## Printer configuration

The printer driver supports the following printers.

Printer model	Description
Océ Colorado 1650	<ul style="list-style-type: none"><li>• Color mode: CMYK</li><li>• Ink: UVgel ink</li><li>• 4 channels printer, using 8 bits per channel</li></ul>

## System requirements

- The driver is available only for Windows.
- Products based on Fiery XF technology: EFI Fiery XF 7.2
- Required license: XF Output Option XXL
- The following outgoing TCP ports must not be blocked by a firewall: 80, 8085, 8086, 8090, 9100. Windows blocks most ports if it considers a network as 'public'.

## Configure the printer

- 1 Make sure the printer is on.
- 2 In Fiery command WorkStation > Server Manager, next to Printers, click the **Add** button and add Océ Colorado 1650.
- 3 Configure the IP address and click **Finish**.

## Operation

The operator settings for this printer is available only through the RIP. You can create new media type, delete, edit or update an existing media type. Also, it is possible to set all media specific as well as printer specific settings from the

rip. These settings are provided as part of the special printer settings for this printer in XF. Please go through the special printer settings section to understand how to create, modify, delete or update a media type in the printer.

## Media Type

Media types are created by the user for each printer. All media types along with the corresponding settings are saved in the RIP for future use.

## Print mode and resolutions

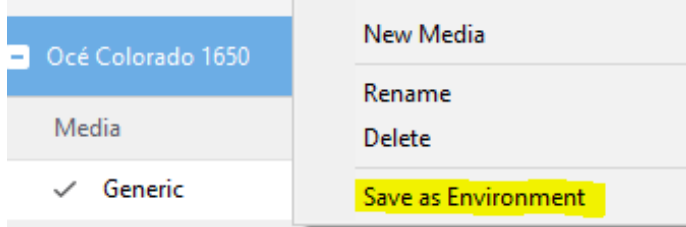
Following print mode and resolution combinations are supported for any media:

Display Name	X-resolution	Y-resolution	Number of passes
Max Speed	300	300	1
High Speed	450	300	1
Production	450	600	2
High Quality	600	600	4
Matte Production	450	600	5
Matte Speed	450	600	4
Superior	450	600	6
Matte Quality	450	600	6
Specialty	600	600	8
Matte Specialty	450	600	8
Backlit	450	600	8
Backlit Density	450	600	14

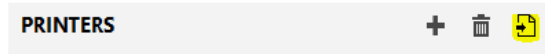
## Distribution of printer environment

You can share media profiles by first saving the printer environment in one machine and then loading the same in another machine.

### Saving the environment



### Loading the environment



## Distribution of one media profile

Profile for one media can be created as an epl using Color Tools. Every epl for Colorado 1650 created since XF 7.2 will have embedded information regarding media category, media type, and media settings used to create the epl. When an epl is available in Fiery XF, the epl name will also be listed in the media types list in special settings.

#### Media management settings

##### Media categories:

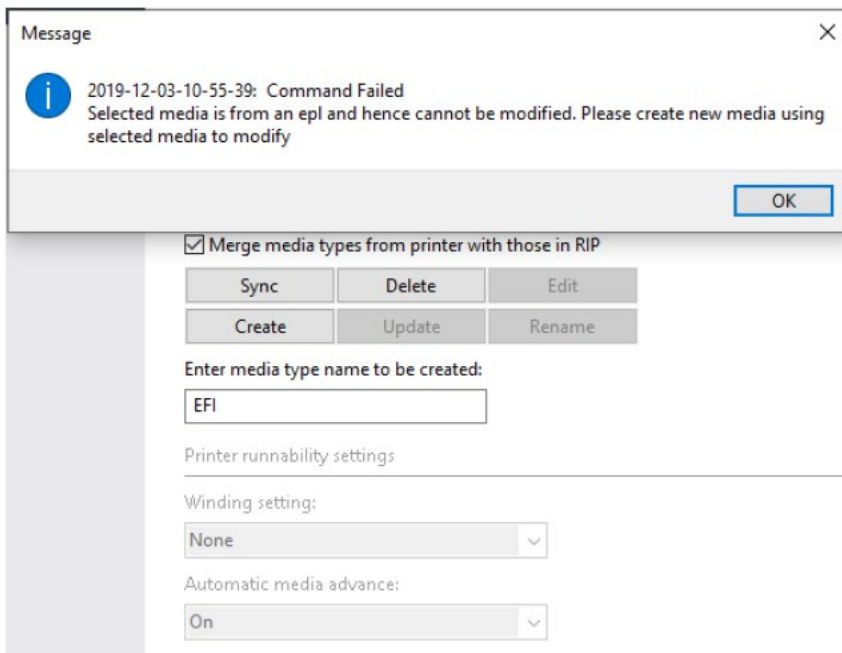
##### Media types of selected category:

The following epl name is listed in media types list:

##### Resulting Calibration(s)

Listing the profile name in media types list helps a user to see what media settings were used to create the epl and modify them. The media settings for selected epl will be updated in the media settings when Edit button is clicked. However, it is not possible to change values for these settings in place for selected epl.

When an epl name is selected in media types list, jobs will be printed using the media type and settings that are used to create the epl. User cannot modify media settings of an epl. If a user tries to modify media settings of an epl, following message will displayed:



The Update and Rename buttons will be disabled along with all media settings. The media settings will be the same as were used to create the selected epl. User can only see these settings. If user wants to modify these settings and print, then they need to select the epl name they want to modify in media types list and create a new media type using the Create button and a new name. This will create a new media type with exact same media settings as the epl selected in media types list. User can then click edit on this new media type to modify media settings and print.

## Printing job

For Colorado 1650, job is printed in the media type selected in media management settings in the Special settings tab. This selected media type in special settings should be same as that loaded onto the printer. If not, job will show as printed in Command WorkStation but the printer will not print.

- Linearization job: Are printed from Color Tools. The media type selected in Color Tools should be same as that selected in Special settings tab. If not, the job will not print.
- EPL calibration profile based job: Are printed by importing user provided documents and processing them using the ICC profile and settings from epl. For printing a job using an epl, the epl should be selected in the Media tab, and same epl name should be selected in Media types list in media management settings in the Special settings tab. If user wants to modify media settings from epl, then they can create a new media type by selecting the existing epl name in media types list and edit the settings and print a job. However, the type of loaded media should then be changed in printer also.

## Special settings

The Special Settings panel provides the following settings:

Setting	Description
EPL specific settings	<p>These settings override the settings in epl to allow printing job with updated settings.</p> <ul style="list-style-type: none"> <li>• Reset to EPL values This button will change all epl specific settings to their default values from the epl selected in media tab. If there is no epl available, this button will be disabled.</li> <li>• Resolution User can change resolution for selected media to any value in the list. Default value will be displayed. If there is no epl available, this button will be disabled.</li> <li>• Print mode User can change print mode for selected media to any value in the list. Default value will be displayed. If there is no epl available, this button will be disabled.</li> </ul>
Driver status	<p>This area shows information about current and recent activities in driver. The time stamp shows the time at which last activity happened. This is useful to see when profiles have been downloaded, if media information changed, if given commands were successful, and other status messages.</p>

<p>Media management settings</p>	<p>XF contains the master media catalog. Media and dedicated parameters are created/updated in the RIP and then transmitted to the printer. There is no backdoor on the printer allowing the media creation, edition or management. Media must be defined (or imported) from the RIP. Before using any of the command button, please make sure to save your changes, or else the changes will not be used.</p> <ul style="list-style-type: none"> <li>• Media categories <p>This list holds the media categories and can be downloaded from printer on clicking the Sync button. The list of media categories is fixed, and each category has default media characteristics. It is not possible to change the media category settings.</p> </li> <li>• Media types of selected category <p>This list holds all the media types of selected media category that were created using the Create button or exist in the printer. The suffix (Printer) will be added to those media types that are coming from the printer and were not created by user in this rip.</p> </li> <li>• Merge media types from printer with those in rip <p>Enabling this setting will show list of all media types that exist in the printer along with those that exist in the rip when sync is done.</p> </li> <li>• Sync <p>This button will download all media categories and media types from printer and updates the media list in the printer by either merging the media lists in printer with those in rip or only uploads the media list from rip to printer depending on above setting.</p> </li> <li>• Delete <p>This button will delete the selected media type from printer and rip.</p> </li> <li>• Edit <p>This button will enable the settings below. Since create, update and rename are media editable settings, those will be enabled only when the Edit button is clicked. However, epl name listed in media types list will not be editable after clicking edit, only updated values from epl will be shown.</p> <ul style="list-style-type: none"> <li>• Create <p>This button will create a new media type and add it to the list of media types for selected media category. After adding, this media will be selected by default.</p> </li> <li>• Update <p>This button will update media settings values as modified after clicking the Edit button. Note that the media name will not be updated using this command. Rename button should be used for changing media name.</p> </li> <li>• Rename <p>This button will rename an existing media type. Also, updates in the list of media types for selected media category.</p> </li> </ul> </li> <li>• Enter media type name to be created <p>Entering a name here and clicking the Create button will add a new media type of given name. Also, entering a new name for a selected media type and clicking the Rename button will rename it.</p> </li> </ul>
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Printer runnability settings

Update of media settings that influence printer runnability will be considered when the same media is loaded in the system.

- **Tight winding setting**  
Colorado 1650 allows to start printing on material before it needs to be taped on the output winder. However, for some media this cannot be achieved because of the nature of the material. For those medias, attach to the winder and apply tension before the actual printing starts. This setting should then be used to specify that it is required and how the tension bar should be used (locked or unlocked). For stiff media the locked positioning is preferred. For weak media the unlocked positioning is preferred.
- **Automatic media advance**  
When automatic media advance is enabled, media between the pinch wheels in the drawer and the transport pinch is spooled forward after the media has been idle on the platen for 120 seconds. This prevents dents on media made by pinch wheels.
- **Suitable for printer cutter**  
Colorado 1650 comes with an embedded knife to ease up printer operation and perform straight cut automatically for the operator. This knife can cut through most supported media but not all such as canvas, textile, and heavy banners. In case of any cut issue on a specific material, use this setting to disable the usage. The printer will then request operator to perform the cutting operation.
- **Moist protection**  
Moist protection is used to define the sensitivity of media for deterioration by humidity. The range of these setting vary from 0 (not sensitive) to 5 (very sensitive). If the media is left on the printer platen for at least the timer specified, the printer will not print on it and spool forward before printing. This should be used to optimize print quality depending on the material type and humidity levels in the printer room. The values are as follows:

Moist protection	Timeout after
0	Never. The media is insensitive.
1	1800 sec
2	250 sec
3	120 sec
4	120 sec
5	120 sec

- **Outer diameter of roll core**  
Colorado 1650 provides the ability to predict the remaining length on a loaded roll. This technology uses the fact that the media is loaded and transported to give a measurement of the remaining length. This measurement is based on the outer core diameter of the cardboard core, operator should fill this value has measured on the roll to get the most accurate measurement from the printer.
- **Media thickness**  
Colorado 1650 can use specified media thickness for print head (carriage) calibration and media calibration and calculating the remaining media length (together with the outer core diameter).  
**Warning:** To avoid media touches and to reach optimal print quality, enter the most accurate thickness value provided by the media supplier.
- **Manual loading**  
The printer will not automatically start a new job when this setting is on. The operator needs to feed the medium using the printer UI. (“Media” menu, “Feed” option). Width detection will be postponed just before the printing to allow the operator to ensure that the media is loaded correctly on the print surface, before the print carriage travel over it. When the media is loaded and a job is printed without cutting the media, the printer should start automatically if the next job for that media arrives.

<p>Print quality settings</p>	<p>Update of media settings that influence print quality will be considered when a print is started on the same media.</p> <ul style="list-style-type: none"> <li> <p><b>Automatic advance correction</b></p> <p>When automatic advance correction is activated on a medium, the printer will print yellow or black ink markers that it will use as guidance to correct for media step inaccuracy. Using the markers will influence the total printable width. For the max speed, high speed and production print modes, the markers have no effect towards advance correction. The printer will print the (yellow or black) markers next to the image. The printed image will be clipped if the margin &amp; image size are too small.</p> <table border="1" data-bbox="475 541 1372 898"> <thead> <tr> <th>Printing Surface</th> <th>Max Roll Media Width [mm]</th> <th>Non Printable Margin [mm]</th> <th>Max Image Width [mm]</th> <th>Max Image Height [mm]</th> </tr> </thead> <tbody> <tr> <td>Roll-to-roll Colorado 1650, AutomaticAdvanceCorrecti on set to None</td> <td>1625.6 mm</td> <td>5.3 mm</td> <td>1615 mm</td> <td>100,000 mm</td> </tr> <tr> <td>Roll-to-roll Colorado 1650, AutomaticAdvanceCorrecti on set to Normal</td> <td>1625.6 mm</td> <td>9 mm</td> <td>1607 mm</td> <td>100,000 mm</td> </tr> <tr> <td>Roll-to-roll Colorado 1650, AutomaticAdvanceCorrecti on set to Enhanced</td> <td>1625.6 mm</td> <td>17.5 mm</td> <td>1590 mm</td> <td>100,000 mm</td> </tr> </tbody> </table> </li> <li> <p><b>Carriage elevation</b></p> <p>The settings carriage elevation controls the height of the carriage. When automatic is selected, the optimal carriage height is automatically determined based on the Media thickness set in the media profile. High position should be only used when experimenting with new media to protect from touches. Best print quality is always achieved using the automatic carriage elevation.</p> </li> <li> <p><b>Vacuum strength</b></p> <p>Colorado 1650 has 5 vacuum zones as part of the printer platen that enable the printer to adjust for friction while transporting media. In case of media buckle and depending on the location, power can be adjusted.</p> </li> </ul>	Printing Surface	Max Roll Media Width [mm]	Non Printable Margin [mm]	Max Image Width [mm]	Max Image Height [mm]	Roll-to-roll Colorado 1650, AutomaticAdvanceCorrecti on set to None	1625.6 mm	5.3 mm	1615 mm	100,000 mm	Roll-to-roll Colorado 1650, AutomaticAdvanceCorrecti on set to Normal	1625.6 mm	9 mm	1607 mm	100,000 mm	Roll-to-roll Colorado 1650, AutomaticAdvanceCorrecti on set to Enhanced	1625.6 mm	17.5 mm	1590 mm	100,000 mm
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<p>Print quality per print mode settings</p>	<p>Update of media settings that influence print quality will be considered when a print is started on the same media. These media settings are specified per print mode.</p> <ul style="list-style-type: none"> <li>• <b>Print strategy setting</b> Adapted print strategy tables. The chosen print strategy influences the way layering is done and improves the print quality at high printer platen temperatures.</li> <li>• <b>Printer platen temperature</b> The setting printer platen temperature controls the temperature of the printer platen that sits under the printhead carriage and the UV LED carriage. It influences how the ink will behave with regards to pinning and adhesion on the substrate. Increasing the temperature will improve adhesion.</li> <li>• <b>Precure power</b> Precure power settings of the curing LED units are automatically adjusted for every printing mode. The precure power settings control the curing intensity of the LED for the first part of the curing zone. The default settings are expected to be optimal in most cases, however via the precure power settings, the possibility for adjustment is offered to the user to tune for specific media. Warning: Setting the power very low might introduce not fully cured prints. Handle the prints with care when changing the power value and check curing quality. Also, the risk of pollution of the printer increases. When experimenting with this setting, wear gloves when removing the medium.</li> <li>• <b>Postcure power</b> The post cure power settings control the curing intensity of the LED for the subsequent part of the curing zone. In cases where smudge or an insufficient curing level is observed on specific media, it might be beneficial to increase the post cure power. Warning: setting the power very low might introduce not fully cured prints. Handle the prints with care when changing the power value and check curing quality. Also, the risk of pollution of the printer increases. When experimenting with this setting, wear gloves when removing the medium.</li> <li>• <b>Pincure power</b> The pincure power settings control the curing intensity of the LED for the pin curing. This LED is used for matte print modes. In cases where smudge or an insufficient curing level is observed on specific media, it might be beneficial to increase the pincure power. Warning: setting the power very low might introduce not fully cured prints. Handle the prints with care when changing the power value and check curing quality. Also, the risk of pollution of the printer increases. When experimenting with this setting, wear gloves when removing the medium.</li> <li>• <b>Media advance correction</b> Manual setting to correct the average step size for a given media and print mode. This should only be used when the media calibration and automatic advance correction do not reach the expected print quality on a given media. In case of light line artifact, enter negative values (smaller step) and in case of dark lines, enter positive values (bigger step).</li> </ul>
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## FAQs

- How to download media types from printer?  
Enable the **Merge media types from printer with those in RIP** setting under media management settings in Special settings tab and click the **Sync** button.
- How to keep media types created only in current XF server?

Disable the **Merge media types from printer with those in RIP** setting and click the **Sync** button.

- Are media settings embedded in epl?  
Yes. For epls created before XF 7.2, jobs will print, but those epl names will not be listed in media types list for viewing and editing. Older epls can be updated to have embedded media settings by doing a re-linearization using earlier it8 files and saving the new epl. Keep in mind to have the correct media type and settings in the Special settings tab before doing the re-linearization.
- Is it possible to print jobs with different media type than that used to create epl?  
Yes, it is possible to select a media type in media management settings that is not the epl name and jobs will print fine. However, a warning will be displayed in Job editor if media type or any media settings are different from the epl media type and media settings.
- Is it possible to print a job with different media category than that used to create the epl?  
No. Selecting a different media category and printing a job will error out the job. For a correct print, media category should be same as used to create epl and only media type can be different.
- When will epl name be shown in media types list?  
Epl name will be shown in media types list when a new epl is available to select in the Media tab. If epl name is not shown in media types list automatically, click the Sync button. If epl name is still not shown, then it is possible the epl doesn't have embedded media settings information (probably created before XF 7.2).

## Troubleshooting

- If any discrepancy is seen in media types or media settings, click the Sync button.
- If the buttons in media management settings are not working, restart XF server.