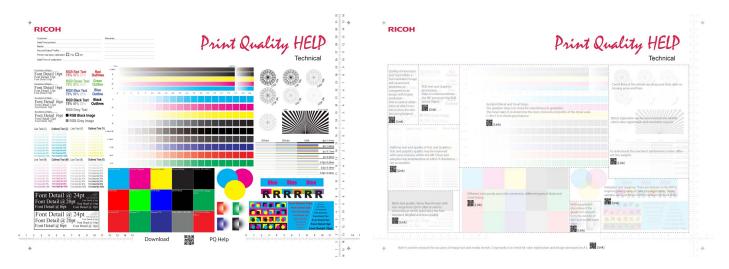


EFI Fiery controller

PQ Help tool.

As part of our colour controller customer training program we will be using our own colour diagnostic file "PQ Help". The Print Quality HELP (PQ HELP) file is developed as a troubleshooting tool to check that your Ricoh Production Printing solution (RIP and Engine) is printing to specification.



The first part of the PQ help tool helps Ricoh diagnose any possible issues regarding:-

Text (RGB/CMYK), Fusing, Linear and Radial gradients, Solid tints, Trapping and Overprint etc.

Self Help: We have also added QR codes and links to possible online solutions to help you quickly resolve or diagnose issues prior to having to place a Service Call.

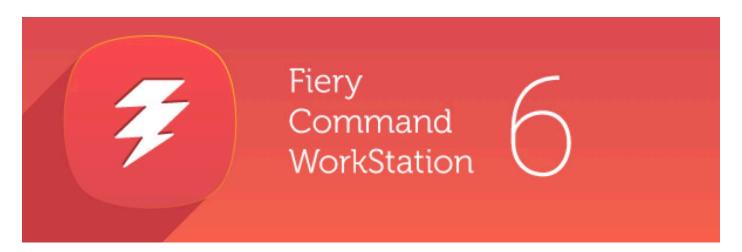


The second part of the PQ help tool helps Ricoh diagnose any possible issues regarding:Imaging (RGB/CMYK), resolution, greyscale, skin tones, shadows, highlights and midtones etc.
Self Help: We have also added QR codes and links to possible online solutions to help you quickly resolve or diagnose issues prior to having to place a Service Call.

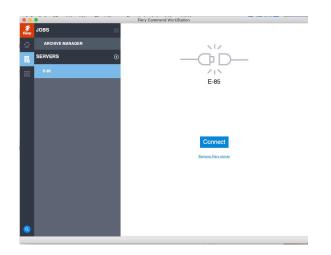
EFI Fiery controller

Fiery Command WorkStation

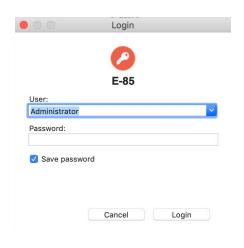
Centralise job management, connect to all Fiery servers on the network, and achieve optimal results in real time to increase productivity. The intuitive interface makes complex tasks simple, regardless of the operators' experience, while the flexible software adapts to any environment.



Logging in to Command WorkStation



Highlight the **Server**/Printer and click **Connect.**

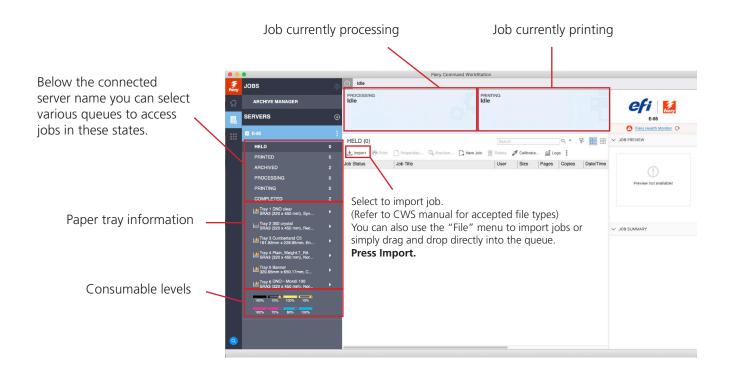


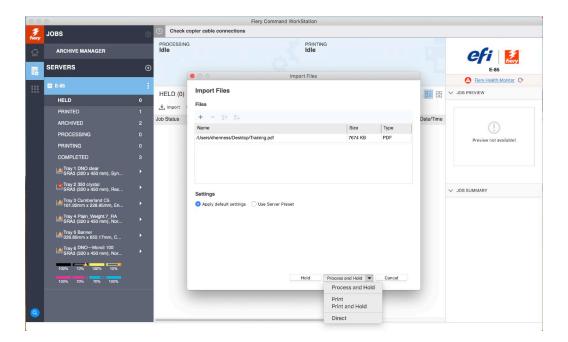
The default Username is **Administrator** and the default password is **Fiery.1**

Note: If you change the Administrator password, our technical team will need to be made aware to gain access for support purposes.

EFI Fiery controller

Home Screen

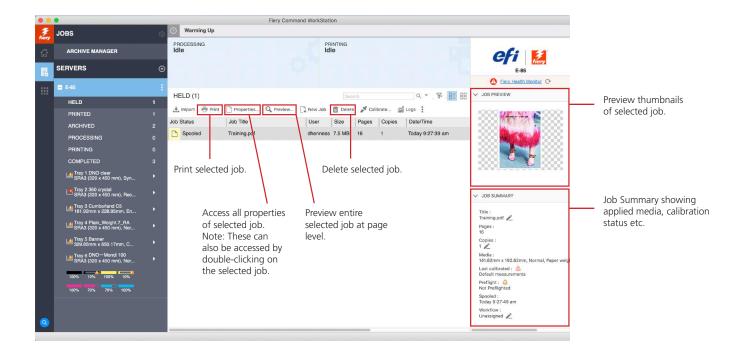




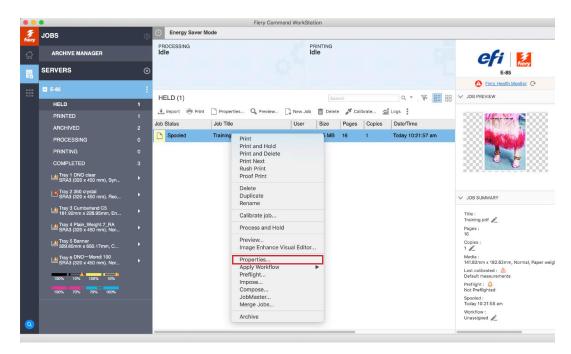
Once selected, browse to the location of the file/s you wish to import. As above, you can then select + to add more files from other locations. You also have the option to apply presets previously saved, and choose between various output options such as Print, Hold etc.

EFI Fiery controller

Once the file/job has been imported in to the "HELD" queue, you will notice more options that were previously greyed out, have now become available. For now, we will concentrate on the below highlighted.



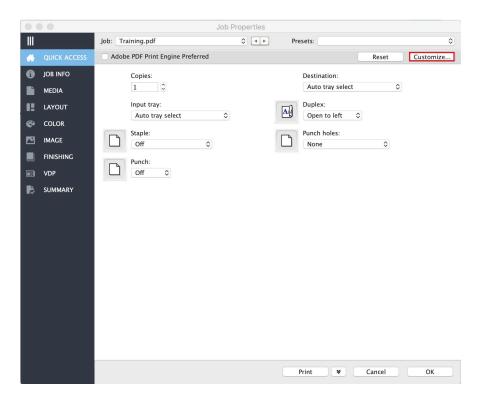
You can also right-click on the selected job to gain access to the above options and others as listed below. Please note: There may be optional software listed here that depending on your purchase, you may not have access to.



Select Properties.

EFI Fiery controller

Quick Access. This tab can be populated with any options from the other tabs you use frequently by selecting **Customize.**



At the top of each **Job Properties** tab are the below options.



APPE (Adobe PDF Print Engine) Preferred.

You can enable Adobe PDF Print Engine (APPE) to allow the Fiery Server to process and render PDF jobs without the need to convert them to PostScript. This can assist in resolving layering issues within print jobs where errors are exposed during the PostScript conversion.

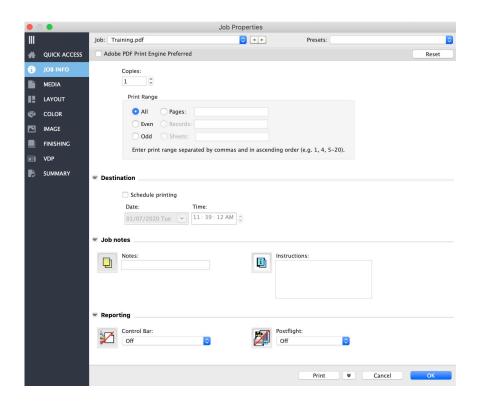
Presets.

Select Presets to access previously saved presets, or save a new preset including all selected job properties.

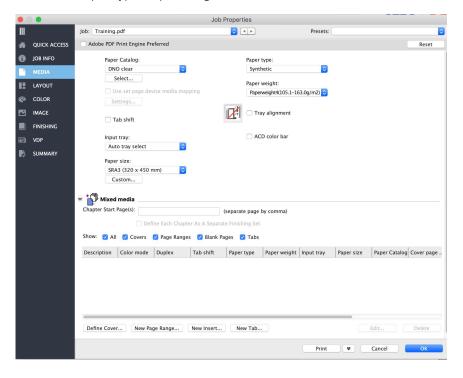
EFI Fiery controller

Job Info. Select the amount of copies, page ranges etc. You can also add notes and instructions that will appear in Job queues and Job Logs.

Control Bars and Postflight reports can be activated from here also.



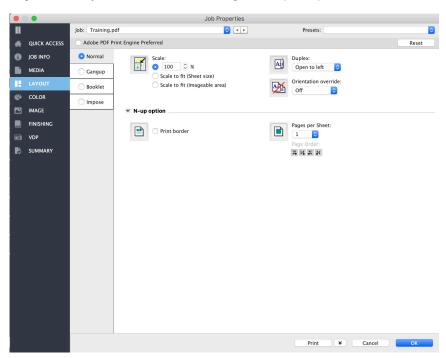
Media. Here you can choose the media/paper that this job will use. This can be done manually by selecting each setting such as **Paper Weight, Paper Size** etc. Alternatively you can choose from the **Paper Catalog** which will list any entries currently residing in the paper trays of the Ricoh engine. This will also automatically slelect the associated Paper Type, Paper Weight and Size.



Mixed Media settings can also be applied here. i.e Setting a page range to be printed on a separate paper stock to that of the rest of the job, as well as applying Full Colour Vs. Greyscale to certain page ranges.

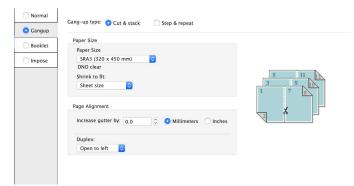
EFI Fiery controller

Layout. Here you have access to scaling and duplex options.

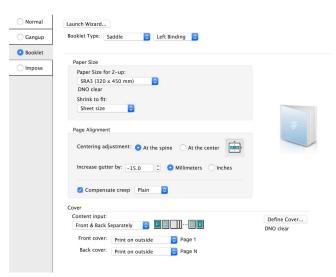


You will also have access to simple Imposition settings such as:-



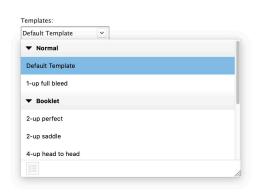


Booklet.



Fiery Impose* templates can also be applied here.





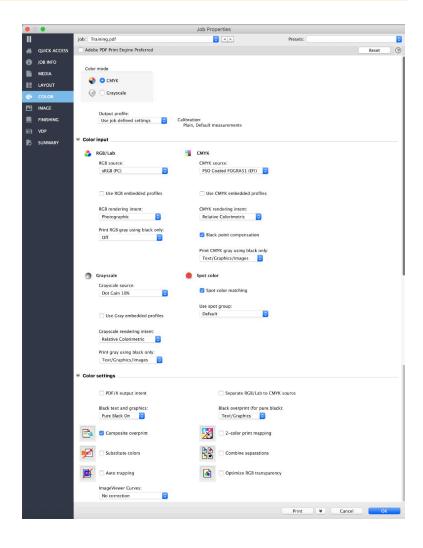
^{*}Fiery Impose is not a standard feature of some EFI controllers, and may need to be purchased seperately.

EFI Fiery controller

Color.

Here you will find extensive colour input settings including CMYK profile options and calibration settings, RGB conversion settings and rendering options as well as Black/ Greyscale handling options. Alternatively simply specifying whether this job will be Full Colour (CMYK) or Greyscale.

Please refer to the Command Workstation Operators manual for more detail on each colour setting component.



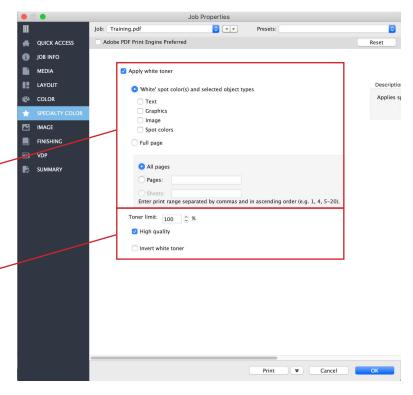
Specialty Color.

With the addition of a 5th colour station on the **Pro C7200x series**, the EFI Fiery controller has a specific Specialty Color tab within Job Properties to control this feature.

This screenshot shows we have White toner loaded, and gives you the option to first of all, apply white toner and to further specify what you would like the special toner applied to within the file, as well as what pages to apply the Special Toner to.

You can also choose to limit the amount of Special Toner being laid down. This can resolve certain imaging issues when laying a white underbase beneath certain CMYK mixes.

Also, an "Invert" option can assist with inaccurate file setups for this process.



EFI Fiery controller

Image.

The Image tab contains specific settings around mechanical imaging for the Ricoh Pro C7200 series.

Use Maximum Printer Density

The **Use Maximum Printer Density** feature allows the user to choose to output colors at the maximum density of the printer engine.

This allows for a user to utilize a larger available gamut resulting in punchier colors on printers that are performing beyond the average. This feature allows highly saturated colors to bypass calibration, so the color results may vary over time, depending upon the engine state. This feature applies to text, graphics and images.

Image Smoothing

This option will smooth low resolution images making them look less jagged/pixelated.

Toner Reduction

Select the Toner reduction check box to reduce all CMYK output values by a printer specified percentage.

This option is designed to protect the printer's fuser. It is typically used for thin paper (for example, 64-74 gsm) printed with heavy toner coverage, which may jam the printer fuser.

Edge Enhancement

Edge enhancement options will improve output of Halftoned and reversed text and graphics.

Image Enhance

Image Enhance is an option for automaticaly adjusting highlights/shadows, colour balance, sharpness and red-eye correction etc to images within a file.

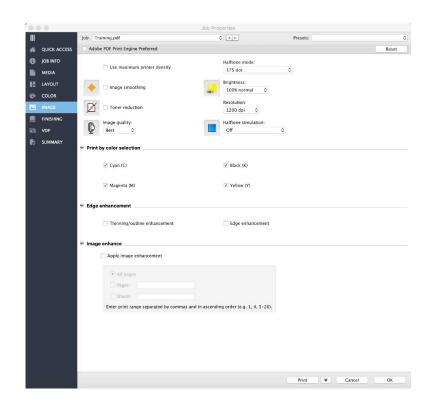


Image quality

The Image quality print option allows you to specify the type of image quality for the job. This option affects the fineness of images in the job; there is a trade-off with processing speed.

Choose one of the following for the print job:

- Normal to print quality images.
- **Best** to print the highest quality for text and images.

Halftone Simulaltion

The Halftone simulation print option allows you to specify a halftone screening method for your print job.

- Select Off when you do not want halftone simulation applied. This will use the printer's native halftone.
- Select Application defined to use the screening set by the application.
- Select Newsprint if you want a look similar to that of a newspaper.
- Select User defined screen 1-3 to use the screening set by the controller. The User defined screen 1-3 settings reflect the setting specified in controller Setup. This option is available as part of Fiery Graphic Arts Package, Premium Edition.

EFI Fiery controller

The Halftone mode print option is used to specify the halftone screening method for images.

Screening	Images (Raster)	Text (Vector)	Graphics (Vector)	Default	DPI
200 Dot	200lpi Dot	200lpi Dot	200lpi Dot		1200/600
200 Line + Fine Text	200lpi Line	270lpi Line	200lpi Line		1200/600
200 Dot + Fine Text	200lpi Dot	270lpi Line	200lpi Dot	•	1200/600
200 Dot + Fine Text & Graphics	200lpi Dot	270lpi Line	200lpi Line		1200/600
Hybrid	FM / AM	FM / AM	FM / AM		1200/600
175 Dot	175lpi Dot	175lpi Dot	175lpi Dot		1200/600
175 Line + Fine Text	175lpi Line	300lpi Line	175lpi Dot		1200/600
270 Line	270lpi Line	270lpi Line	270lpi Line		1200/600

For color consistency use the same screening in the Job Ticket, Calibration Set, and Output Profile

- 200 dot (approximately 200 lpi) prints all objects with a stable screen.
- 200 line + fine text (approximately 200 lpi) prints with smooth images/graphics and high-definition text. Graininess is improved over Dot screens in some cases.
- 200 dot + fine text (approximately 200 lpi) prints with smooth images/graphics and high-definition text.
- 200 dot + fine text & graphics (approximately 200 lpi) prints with smooth images and high-definition graphics/text.
- **Hybrid** uses a non-periodic screen to avoid interference with the source document. Also prints fine lines at arbitrary angles with faithful reproduction. This item is a combination of AM screening and FM screening.
- 175 dot (approximately 175 lpi) used in offset printing simulation. Reduces halo effect through a more stable screen than 200 dot.
- 175 line + fine text (approximately 175 lpi) prints with smooth images/graphics and high-definition text. Graininess is improved over Dot screens in some cases.
- **270 line** (approximately 270 lpi) prints text, fine lines, and vector graphics contained in images at high definition.

EFI Fiery controller

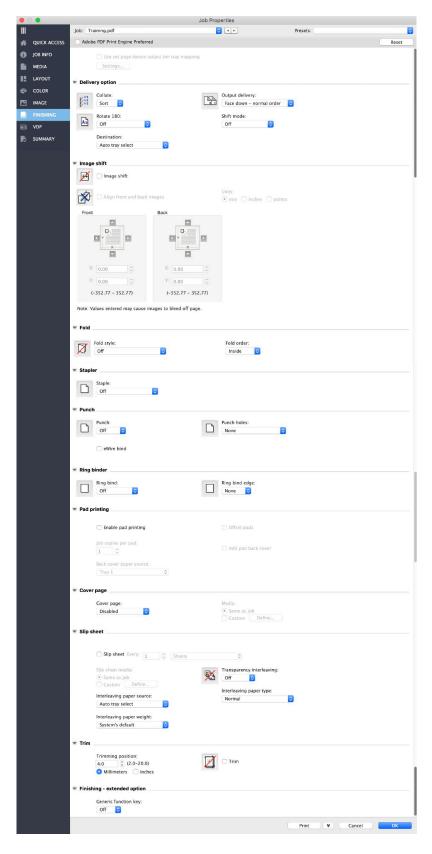
Finishing.

The Finishing tab contains the settings for the many finishing options available with the Ricoh Pro C7200 series, including output options, stapling, folding and punching options.

Image Shift

Shifting the image on the page is also available in the Finishing tab. Front and Back independently in 0.1mm increments.

This can also be achieved within the tray settings of the Pro C7200 series interface also. As well as being locked down within a Paper Catalogue entry.--



EFI Fiery controller

Spot Colours

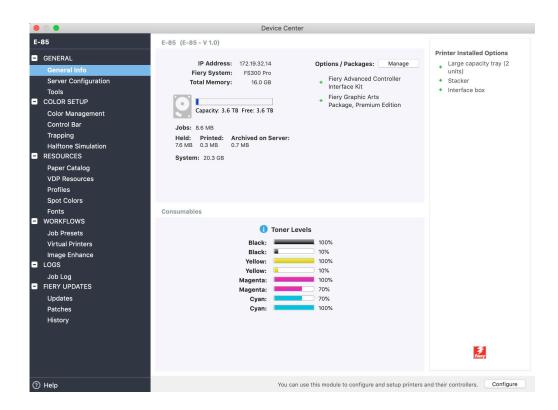
The EFI Fiery colour controller comes loaded with the entire Pantone® Colour libraries.

You also have the ability to add new colours, edit existing colours or replace colours in your file (Spot, CMYK or RGB) with "Substitute" colours.

Adding a new colour

Users may want to use this feature if there is a custom named spot colour within a document that needs to be edited independantly.

Under the Server menu, select **Device Center**.



Device Center is the nerve system of the Fiery controller, and is where Operators can set colour management defaults, Job Presets, Variable data resources and General Server configurations. It's also where the Spot Colour system is managed.

Select Spot Colors.



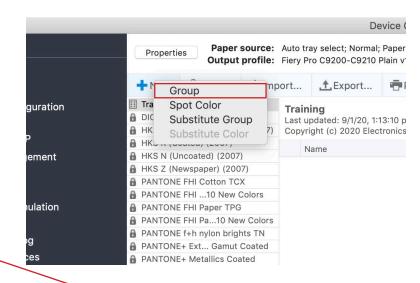
EFI Fiery controller

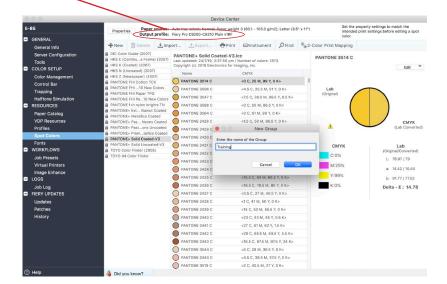
With Spots Colors highlighted, click on **New**. You can either create the new spot colour now, or create a "Group" that the new spot color will reside in.

In this instance we will create a new group. **Select Group**.

NOTE: You must have selected, the same output profile here as you are using when printing the job.

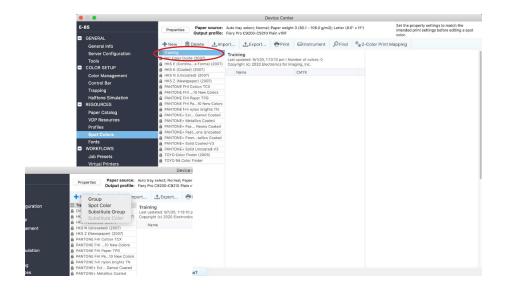
Give the new group a name. In this example it will be named **Training**.





With the new group created and highlighted, select **New** again.

Now select **Spot Color**.

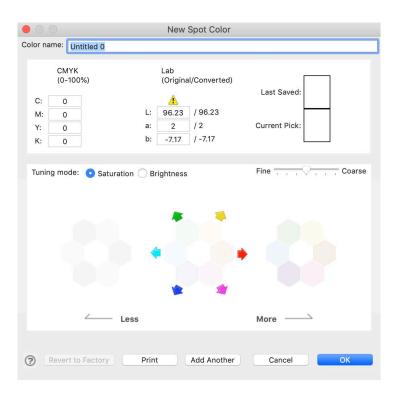


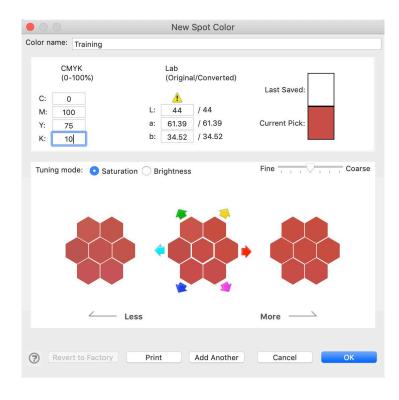
EFI Fiery controller

Name your new colour to match the name of the custom named colour within your file.

For this example we are going to name the colour "Training", as if there was a custom spot colour in our file named "Training".

You can now modify the properties of that colour independant of any other colour/s within that document/job.





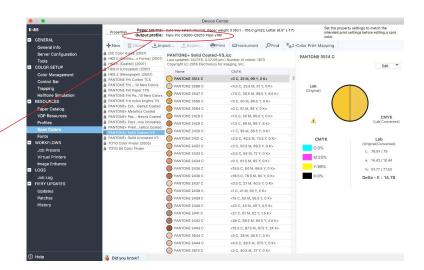
EFI Fiery controller

Editing an existing Pantone® Spot Colour

To edit an existing common Spot Colour, simply choose the Pantone® group the colour resides in. i.e Solid Coated and scroll to the colour you wish to edit.

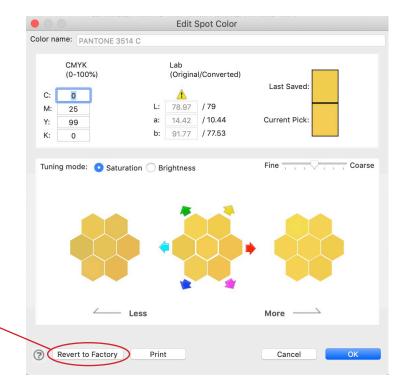
NOTE: You must have selected, the same output profile here as you are using when printing the job.

You can also use the "Find" tool when searching for the Spot Colour you wish to edit.



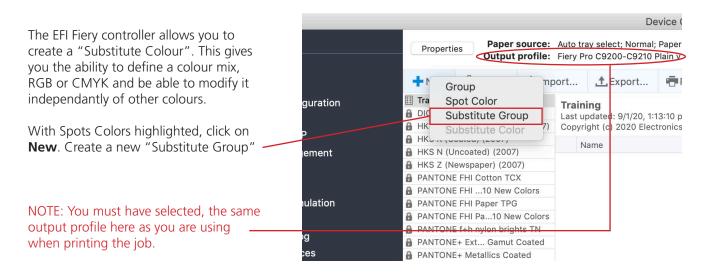
You can now modify the properties of that colour independant of any other colour/s within that document/job.

You can always restore the colour back to factory default.



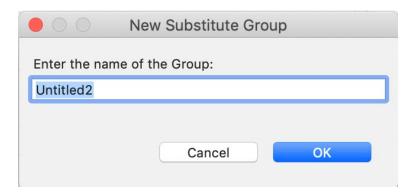
EFI Fiery controller

Creating and using Substitute Colours.



Name the new Substitute Group.

In this instance we will name the group "Training".



With our new Substitute Group selected, select **+New / Substitute Color**.



EFI Fiery controller

With the new substitute colour created, you can now define either the RGB device code i.e 0-255 or percentage, or alternatively the CMYK mix in your file that you want to substitute.

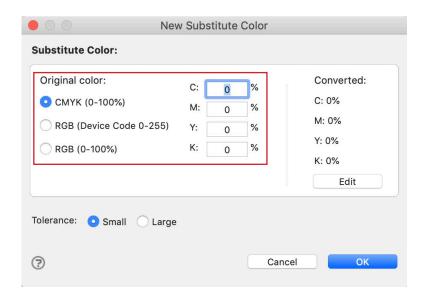
For this exercise, we will input a CMYK value of **C:0 M:100 Y:80 K:0**.

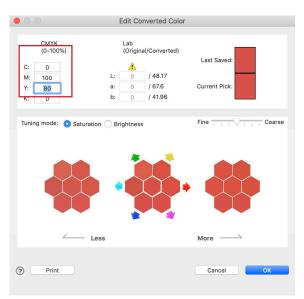
These are the values of the colour in the file that we want to modify independantly.

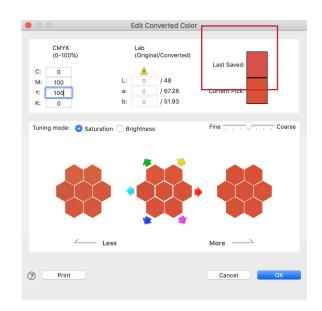
Note: To find the values of the colour you want to modify within a PDF file, you can use "Output Preview" within the Production Print menu, or an application like PitStop Pro Inspector.

We can now edit how we want this particular colour to look.

Here we have added 20% more yellow to the colour as you can see by the "Current Pick" swatch.

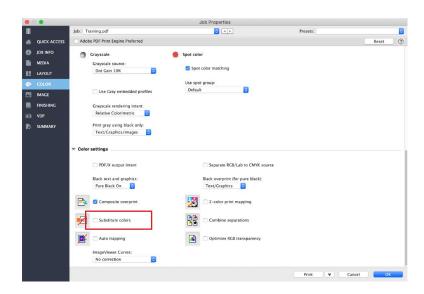






EFI Fiery controller

Finally, to activate the use of this Substitute Colour within a job, we need to tick the "Substitute Colors" option within the "Color" tab of Job Properties.



EFI Fiery controller

Calibration

Introduction

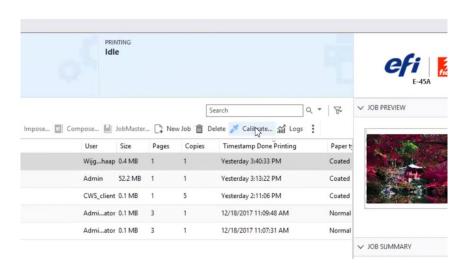
Fiery Calibration is a very important procedure to maintain colour reproduction. It will compensate for deviations in environmental conditions and should be carried out as often as is required depending upon your environmental controls, and will ensure that the colour that is produced this week is the same colour that is produced next week.

There are different ways to calibrate the Fiery controller depending upon your requirements and on the model of device you have.

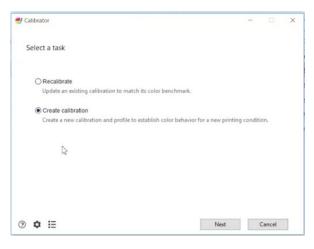
The following is a simple calibration procedure with the Automated Inline Sensor and 100gsm Mondi base stock to bring your device back in check. Then using the Automated Inline sensor to recalibrate.

The use of Auto in-line sensor is not avaiable with the Ricoh Pro C7200SL model.

Select Calibrate.

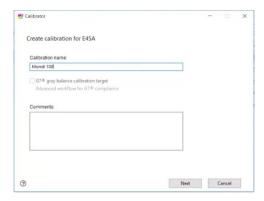


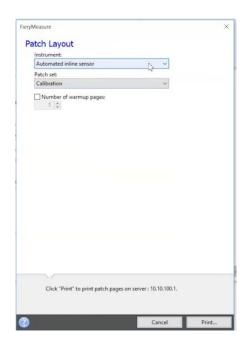
Choose Create calibration.



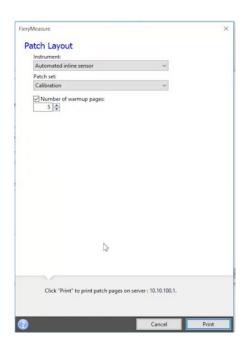
EFI Fiery controller

Name your calibration. Click **Next**.



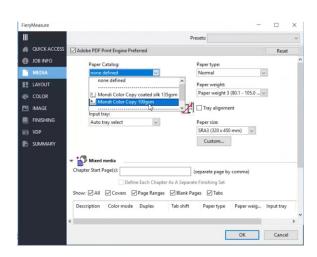


Select Automated inline sensor.



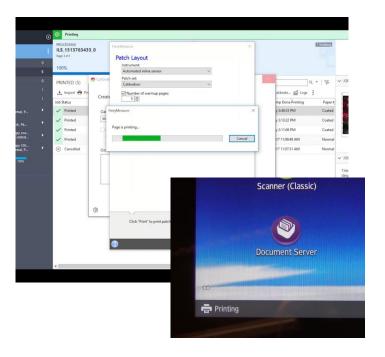
Tick the **Number of warmup pages** box and set **5** pages. Click **Print**.

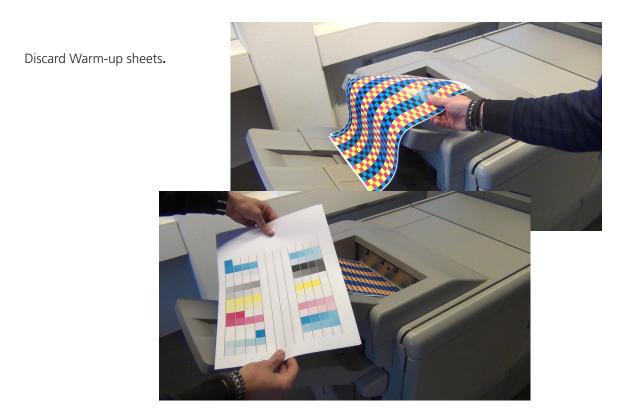
Choose the appropriate Paper Catalog selection. Click OK.



EFI Fiery controller

The Warm-up pages and calibration sheet will begin printing.

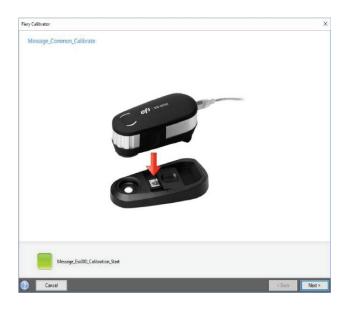


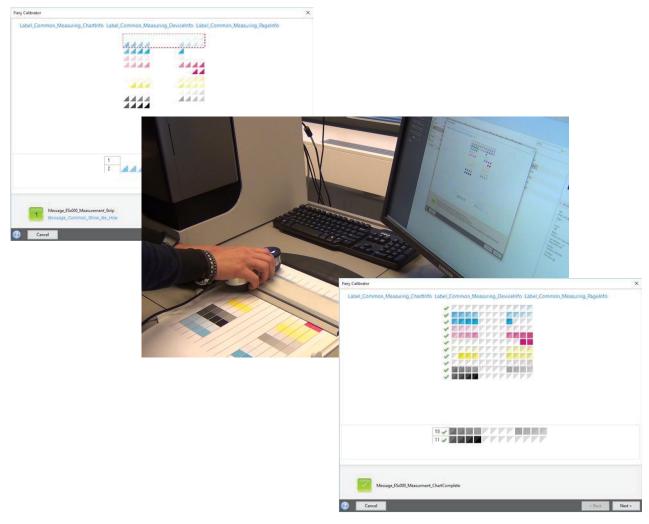


Check calibration sheets for an obvious abnormalities.

EFI Fiery controller

Follow the on screen prompts in preparation of the ES -2000 spectrophotometer and begin scanning process.



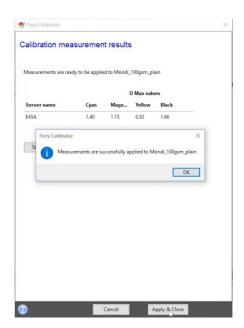


EFI Fiery controller

Click Apply & Close.



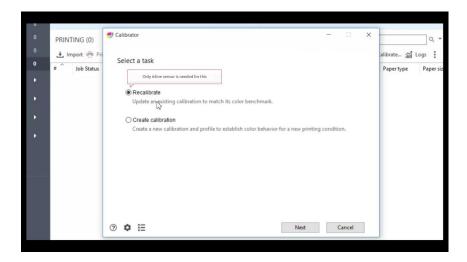
Calibration is complete.



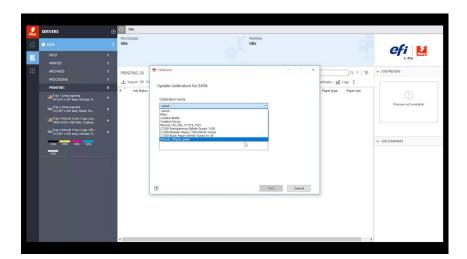
EFI Fiery controller

You can now make use of the Automated Inline Sensor by performing the following re-calibration process.

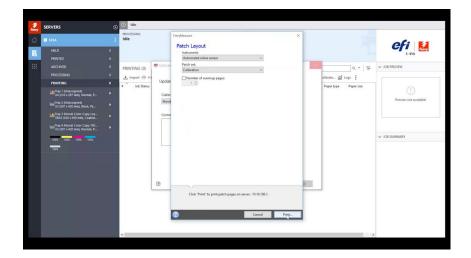
Click Recalibrate.



Choose the appropriate **Calibration name.**

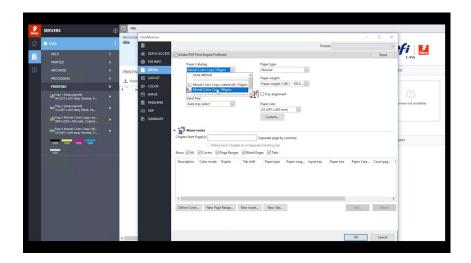


Choose Automated inline sensor.

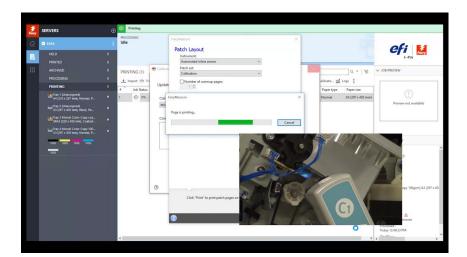


EFI Fiery controller

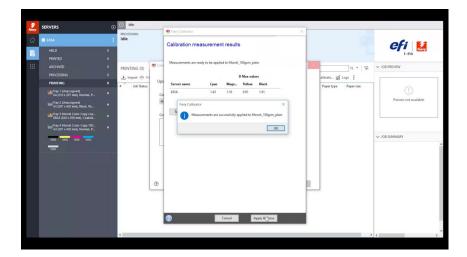
Choose the appropriate **Paper Catalog** selection.



The calibration sheets will pass through the automated inline sensor inside the engine for re-calibration.



Re-calibration is now complete.





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