

Troubleshooting Guide

**This guide is split into two sections. The first deals with ink and profile installation.
The second deals with colour reproduction issues.**

Ink / Profile Installation

● **Problem**

“I’ve installed my Lyson cartridges but all my prints show banding. I have performed a nozzle check and there are missing nozzles. I’ve cleaned the heads many times without success.”

Cause

Occasionally the cartridge installation procedure can introduce small pockets of air into the ink system. This can prevent some ink nozzles from firing correctly. Repeated head cleans will only cause this air block to grow larger and will waste a lot of ink in the process.

What to do

Leaving the printer to settle for a few hours will usually solve this problem allowing the air to dissipate naturally. The nozzles will then fire properly.

● **Problem**

“The profile I received was named correctly on my hard disk but Photoshop sees the profile as a different name.”

Cause

The profile has a hidden “tag” that is read by Photoshop and other ICC aware applications. This tag may be worded differently to the file name of the profile you downloaded.

What to do

Simply use the profile which refers to your ink/printer/media combination.

● **Problem**

“I cannot find the “No Colour Adjustment” setting in my print driver.”

What to do

Epson printers: This option either appears as a separate option under the sRGB and ICM options or can be found as an option in the Colour Adjustment pop-up menu along with “Photo-Realistic” and “Vivid”. Consult your printer manual for further details. Ensure you have the most up-to-date version of your driver.

Canon Printers: On the new Photo printers for the PC drivers this option is available when the “Manual” colour adjustment is selected, and the Print Type option set to “none”. Consult the PDF instruction document included with the printer profile for more specific information.



● Problem

“Photoshop cannot see the ICC profile I have installed.”

Possible Cause 1

The profile has not been decoded before installing.

What to do

Use Winzip for PCs or StuffIt! Expander for the Mac to decode the downloaded document before installation.

Mac System Cause 2

The profile is installed in the wrong folder. There may be more than one ColorSync folder on your computer and Photoshop may be looking in the wrong one.

What to do

Write down the profiles that Photoshop does see in the “Print Space” down list in under FILE-PRINT. Look on your hard disk for the ColorSync folder that contains these profiles and copy your new profiles to this folder.

PC System Cause 3

The ICC Profile requires a .icc or .icm suffix on the MS-DOS file name. For example, if you have received a profile for an Epson 1290 with Fotonic ink on Fine Art paper your profile name should be “Epson1290 FotonicFineArt.icm” (right-click on the profile, come down to properties, select, and look at MS-DOS name). If your profile does not have the .icm your computer will not recognise it as a profile and neither will Photoshop. The profile icon in this case would not look like the other icons in the color folder.

What to do

Rename your profile, adding the .icm suffix. The file icon should change to a profile-type triangle icon.

PC System Cause 4

The profile has been installed in the wrong folder.

What to do

Follow the correct path to the “color” folder that stores all the active colour profiles. Alternatively right-click on the profile and select “Install Profile” from the drop-down menu.

Colour Reproduction Issues

● Problem

“My prints looked OK with Epson ink but look wrong with my new ink. I have verified that Photoshop and my print driver are setup correctly.”

This is the most common complaint and the problem for which there are the most number of possible reasons...

Cause 1

The colour management has not been activated in Photoshop 6/7/CS. Due to changes in the way the colour management systems work between versions 5 and 6 it became possible to import images into Photoshop that had no embedded profile, without being warned about the missing profile. The file looks correct on the screen but when the file was printed with the output profile selected correctly and the driver settings selected correctly the print still had a distinctive colour cast. This was not seen when using Epson inks because the Photoshop colour management was not being used and all the colour corrections were being handled by the print driver.

What to do

Turn on the colour management options in Photoshop as described in “Using Profiles in Photoshop”. Re-open your image file. Assign the current working RGB space to the image when the “Missing Profile” message appears, or convert the image to Photoshop’s current working space. The image may appear different with a similar cast to the original prints. Correct for the cast and reprint the file. The print should mirror the corrected image on your monitor.

Cause 2

This can be down to the information in the image file. Because of the large margin of error when using Epson™ inks together with an Epson print driver, many users would be achieving reasonable results even when their image files were not correctly colour balanced. The ICC profiles are designed to accurately reproduce the information in your image file. This is why it is important to have a well calibrated monitor.

What to do

Check the calibration of your system by printing a test pattern that contains neutral RGB grey scales. You can follow this link (<http://www.colourmanagement.net/downloadables>) to download an RGB test image designed for this purpose. If this prints well then the problem will be down to the information contained in your own image file. Also if the neutral tones in this test print do not look neutral on your monitor then your monitor calibration will need adjustment. See the pdf document "Monitor Profiling Explained".

Cause / Solution 3

The "No Colour Adjustment" option has not been properly selected. Remember this is always given as a specific option in your print driver. Simply leaving the Cyan, Magenta and Yellow sliders in their centre position is not the same as selecting this option. Ensure this driver option is selected before printing.

Cause / Solution 4

The media selection in the print driver is wrong. Each profile has been written for a specific media setting. For example, Lyson Professional Gloss paper on an Epson 1200 requires the "Photo Quality Gloss Film" setting otherwise the colour balance of the print will be incorrect. Check the PDF instruction document included with the printer profile for the correct media settings.

Mac System Cause / Solution 5

The ICC printer profile has been selected in Colorsync and also in the "Print Space" dialogue box. This is applying the colour correction twice resulting in an incorrect colour balance. Always ensure that you only select the printer profile once, in the print space option when in FILE-PRINT. Do not select the profile in the ColorSync section of the print driver as well as in FILE-PRINT. In OSX10.3 this is the same as leaving all the Colorsync options at their default selection. (Color conversion: Standard, Quartz Filter: None)

Cause / Solution 6

The generic profiles available free from Lyson and our dealers are not going to provide absolute colour accuracy for everyone's printer. Each printer has its own colour characteristics that cannot always be compensated for with a generic profile. These differences are within the margins of error when using OEM ink and the OEM print driver. However because of the higher intensity of our inks a small imbalance in colour may be visible. This is usually in the form of a magenta cast to the print out.

For this reason there are now a number of consultants able to offer "custom" profiling, i.e., profiling your own printer and preferred media. In the UK our largest distributor, Marrutt Ltd, has a website with links to these consultants. Visit www.marrutt.com for details. The price varies depending on whether the service offered is "remote" (the customer is emailed a target file to print which is then sent away, the profile emailed by return) or "On-Site" (the consultant performs all the work at the customer's premises, usually more expensive).

● Problem

"My printer has developed an imbalance in the colour output over time."

Cause 1

The latest generation of high resolution printers can operate with nozzles mis-firing and the print out will not show the usual banding (thin white lines in the print). Instead the colour balance is affected as there will not be the correct amount of colour going down.

What to do

Perform a nozzle check (through the “Utilities” menu of your print driver). Carry out a head clean if necessary.

Cause 2

“Device Drift” is the term that describes how colour devices such as monitors and printers can change in their colour balance over time. In general the older the device the more quickly it will drift. Printer device drift will be less pronounced than CRT monitor drift. However in colour-critical environments it may nevertheless cause a problem.

What to do

Using a Rip to drive the printer is an advantage here as this software often allows for a technique called “re-linearisation”. This allows a printer to be easily calibrated, every day if necessary. In general only A3+ printers or larger will be compatible with Rips such as “ColorProof” by EFI™ or “Shiraz” by AIT™. The printer manufacturer’s website will feature details of which Rips are compatible with which printer model.

Problem

The printer lays down dots across the entire page, even over areas of white where I know from the info palette that there is no information.

Cause

The printer can sometimes lay a faint “wash” of colour, usually cyan, over the entire page because of a variety of reasons. For example, some of the profiles on the Lyson website have been edited to achieve the best possible colour accuracy. The software that writes the profiles occasionally loses the white point after a number of edits. If you are experiencing this problem you can check whether the profile is adding colour into the whites by creating a new RGB document and filling it with white (RGB: 255, 255, 255). Then go to **IMAGE-MODE-PROFILE TO PROFILE** in PS5 or **IMAGE-MODE-CONVERT TO PROFILE** in PS6/7/CS. Select as the destination profile the printer profile you are using and click **OK**. With the Info Palette open you can see any change to the absolute white being made by the profile, usually a drop to a value of 254 in one or more of the RGB channels. Ignore the CMYK values.

What to do

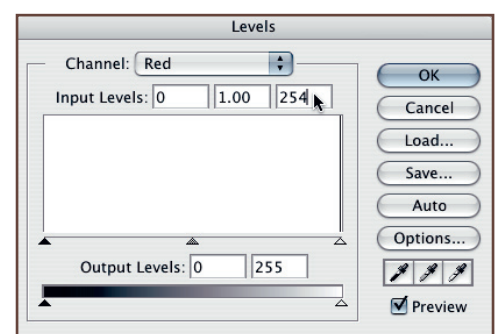
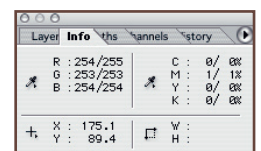
Photoshop 6/7/CS users can go to **EDIT-COLOUR SETTINGS**. If you have a choice of conversion engine options other than ADOBE (ACE) try changing the engine to “Kodak”. This engine often makes an absolute white point when other engines do not. However this engine is usually only found on Macintosh installations.

For reliable results in these cases you can apply the profile in Photoshop before printing. Once you are happy with your image on the monitor, save your file under a new file name, then go to **IMAGE-MODE-PROFILE TO PROFILE** for PS5, **IMAGE-MODE-CONVERT TO PROFILE** for PS6/7.

Select the printer profile you were using as your destination profile. Click **OK**. The profile adjustment is then made to the image directly, rather than at the printing stage.

Once the profile is applied you can then correct the white point of your image. Check the RGB values

in the info palette after the profile conversion for the lowest value when your pointer is over a white point in the image (it should not go any lower than 253, absolute white is 255). Then go to **IMAGE-ADJUST-LEVELS**. Select a colour channel that is not achieving an absolute white. At the top of the dialogue box there are three boxes for the input levels, 0, 1, 255. Double click on the **255 value** and change it to the lowest value in the info palette, e.g., **254**. This makes a new white point for your image by forcing that RGB value to absolute white 255. See the screenshot (right).



Repeat for any other RGB channel you need to correct. After this correction is applied there should be an absolute white point of **255,255,255** in your info palette.

Print this file with **"No colour Adjustment"** and the correct Media Type setting selected in the printer driver and no ICC profiles selected anywhere else in your workflow. In **FILE-PRINT** for PS5 this means selecting **"RGB COLOR"** in the space option, in PS 6/7 this is selecting **"Same As Source"**. Your image will then print as it looked on the screen before you applied the profile, with no coverage in the white areas.

You can save your images with the profile applied and the white point corrected but be sure not to over-write your original.

Problem

The overall colour balance of my print is fine apart from isolated parts of the image where the colours are very different to how they appear on the screen.

Cause

This can be caused by some of the colours in the image being "out of gamut", i.e., not reproducible using a CMYK inkset from a conventional desktop printer. Many monitors are able to reproduce a wider range of colours than a printer because they are RGB devices and RGB generally has a wider colour gamut than CMYK. Although the problem colours on the monitor may not appear to be that intense they may be a combination of Red, Green and Blue that cannot be easily reproduced. This problem most commonly occurs when dealing with RGB scans as many scanners can capture an extremely wide range of colours. You can check this easily by using the info palette. If the CMYK values on the right of the palette have an exclamation mark after them when you run your pointer over the problem areas then the colours may not reproduce correctly.

What to do

Firstly try applying the profile with the **"Relative Colorimetric"** rendering intent. This ensures that the software does not try to simulate those out of gamut colours with the colours available, a process that can cause intense unexpected colorations.

Also, Photoshop enables you to quickly highlight any areas that may cause problems. Go to **VIEW-GAMUT WARNING**. Any out-of-gamut areas will be highlighted in grey. Using Photoshop's colour adjustment tools such as **HUE-SATURATION** reduce the intensity or change the composition of the colours until the grey areas disappear. The file should then reproduce without a problem.

