

Lesson Twelve

## Calibration Part 2

### How many times do you need to get disappointing prints before you realise there is something wrong?

Colour management problems have been around since colour photography began and nothing has changed since digital, if anything its got worse.

#### Colour

How many times have you got a print back from the lab or out of your printer and it looks awful and your first thought is that there is something wrong with your printer or you start blaming the photo Lab. Well 9 times out of 10 if you don't have your monitor and printer fine tuned its going to be your fault, its hard to admit at times, but its true.

#### So what can you do about it?

Calibration is basically a controlled way to make sure that what you see on your screen is what the photo lab will see on their screen, as the lab will have to calibrate their systems as well to guarantee the image quality day after day.



Calibration of your monitor will make colour adjustment more accurate resulting in superior prints

For example the lab keeping their printing machines, their paper and chemistry calibrated is no different than you setting up your monitor and printer in harmony together, based on a consistent norm. Just

like a photo lab though, as you change to a different paper stock or a new ink set, the two will react differently and change the characteristics of the finished image, which could be disappointing.

#### ICC Profiles

International Colour Consortium is the key as these ICC profiles are a universal language and a standard that control the image and how it prints no matter where it is printed. To set up a ICC profile for your system you will need a colour analyser to measure the quality and depth of colours that your monitor outputs and if you calibrate your printer as well there will be consistency in the whole process and what you see on your screen will match what comes out of the printer.

#### Monitor

When editing images in post production it is essential when assessing colours on a monitor that some calibration has already been performed and set. This is to ensure that any colour or contrast adjustments that are being made to an image are accurately controlled in correction and not by fixing a false monitor colour cast or contrast problem.

Monitor calibration is achieved by using a device that is placed on your monitor screen to accurately analyse and measure the colours the monitor can output. Unlike the human eye that can falsely correct colour, a monitor will change its characteristics as it ages. The analyser brings the monitor's colours within a standard tolerance, by measuring precise blocks of colour, which when calculated will be saved as a working profile.

This process should usually be done once a month or if you are colour critical like I am, weekly.

#### Calibrating The Monitor

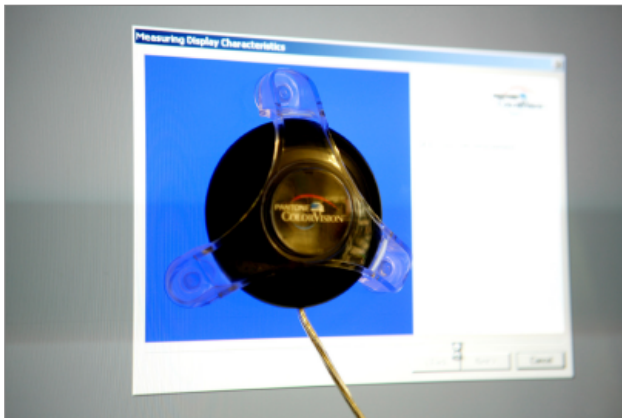
First make sure you have properly installed your analyser including all the software it will need.

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Top Tip

Always let your monitor warm up for about 30 minutes before running the calibration as some monitors take time to come to full brightness.

- 1 > Plug in analyser and launch its software.
- 2 > make sure that any stray colours are not spilling on to your screen, like sunlight or overhead lighting, as this will be also calibrated.
- 3 > Dangle you analyser in front of your monitor, please read the instructions before you do this and **DO NOT STICK AN ANALYSER TO A FLAT SCREEN WITH THE SUCTION PADS** or you will be buying a new monitor.
- 4 > Start the software and follow the on screen instructions.



The calibration software shows a series of colours to the analyser from which to measure and calculate.

- 5 > when finished save the ICC Monitor Profile, I usually give it the date as its name.
- 6 > **DO NOT ADJUST** any monitor buttons as this will change the new profile, if you do start the process again.
- 7 > put a date in you diary in 2 weeks time to create a new profile of the monitor.

Printer

If you are printing your own photographs it is best to invest in a calibrator that will analyse both a monitor and a printer.

To analyse the printer a test print has to be made first, this should be printed on the paper stock you are planning to use. The software will come with its own file to print and analyse.

The analyser to access the colours output on the paper surface then uses this test print.



An image may look correct on screen.



But may look very different when printed if you do not calibrate.

When finished an ICC Printer profile will need to be saved and used each time you print on that particular paper.

Repeat this procedure for every new paper stock as well as new inks used, as this will help you produces a print with superior results.

Top Tip

Be cautious when adding in too much saturation into an image in post production as this may look good on screen but can look like a nuclear glow on the finished print.

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