

Basic Colour Management - Jim McCormick

1. The camera.

The colour settings for cameras can usually be found in the SET UP menu.

The menu will invite you to choose your preferred profile, either sRGB or Adobe RGB

This ensures that the pictures are tagged with your preferred profile

sRGB closely matches the colours we see on our monitor, the additional colours produced by the Adobe RGB (1998) profile won't be noticed on our monitor, or for that matter in the prints we produce at home.

I will assume, for the rest of this handout, that your choice of profile will be sRGB.

2. Capturing images from a scanner,

Look for the area in your scanner driver dialogue that contains the settings for attaching profiles.

In the Society's Nikon scanner, this can be found in PREFERENCES.

Activate the scanner's Colour Management features and select the sRGB profile.

Not all cameras or scanners have selectable profiles, therefore it's a safe bet that if your equipment doesn't offer the facility, it will be set to sRGB

3. Calibrating the monitor.

Switch on your monitor and let it warm up for 20 to 30 minutes

In Display Properties check that your monitor is displaying thousands (16 bit), or millions (32 bit) of colours

I would recommend that you remove colourful or patterned backgrounds from your screen.

Select a plain screen, preferably a neutral grey.

Strong colours on your monitor's desktop can upset your colour judgement.

Next open the Control Panel and select Adobe Gamma.

You can use either the Step by Step Wizard or the Control Panel versions to step through the options.

Using the wizard follow the instructions as they're presented.

Using the Control Panel mode you have more control over the results.

Start by pressing "Load" to open the folder containing the various ICC profiles.

Within the description box at the top of the screen, select the current sRGB profile.

Next adjust the Single Gamma slider until the central square merges with the stripped frame.

This is often found to be a difficult task to first time users; the tip is to view your monitor through half closed eyes.

Click on the drop-down menu next to "Desired" and select either "Windows" or "Mac" default gamma setting.

Select your White Point setting, (5,000K = is standard daylight temperature but tends to be a bit on the cool side) most people prefer 6,500K, as it gives a more pleasant screen image. You can if you wish select “Measure” to set your white point manually; this has to be carried out in a darkened room.

White point “Adjusted” box should read “Same as Hardware”.

If you uncheck the “View Single Gamma Only” box, you will see three colour targets.

Once again adjust the sliders so that the centre boxes merge into the striped frame.

Switch between these windows to fine trim your settings for greater accuracy.

Check the “Brightness and Contrast Bar”, and if your calibration is correct you should be able to make out alternating black and grey squares.

On completion you will be prompted to save your setting, select sRGB Colour Space Profile. This now becomes your current working profile.

4. Image Editing Software:

To ensure that our Image Editing Software is looking at the correct profile also.

Open “Photoshop”.

In the Edit menu select the Colour Settings option.

Click on the RGB downwards facing arrow in the “Working Spaces” box to open the folder containing the various ICC profiles.

Once again select the sRGB profile.

(Note that within the description box we’re told that sRGB reflects the characteristics of the average PC monitor.)

This is all that’s required as far as Image Editing is concerned.

5. The Printer:

For most photographers the printer is the final step in the process and it too has to be able to recognise the colour profile being used.

To ensure that it’s looking at the correct profile open up a picture in Photoshop.

From the “File” menu select the “Print with Preview” option.

Select the “Colour Management” option from the drop down menu.

Select sRGB as your Colour Management profile.

Your selection will be shown as your Print Space profile.

6. The Final Thoughts:

In order to test the results, make sure that the printer settings match the paper being used, as this is one of the most common causes of incorrect colour.

The printer needs to know exactly what kind of paper is being used in order to apply the

correct amount of ink.

Third-party inks can affect colour management.

They are not recommended for high quality photo output, which require precisely formulated inks, manufactured to very high standards.

And finally make a test print and compare it with the monitors image. It's important to use an image with a good range of colours and tones.

Preferably a full range test print. If you don't have a suitable photograph, you can download a test image from: www.digitaldog.net

Colour management is all about getting colours as close as possible.

But they're never going to be identical. Our aim therefore is to reduce discrepancies, and not expect perfection.