

Serious about printing your own competition prints- a suggested colour workflow.

Did I say it was easy?

Some of you may be aware that I took the opportunity to visit Canon UK this week for a workshop entitled 'Beyond the Image'. This was a joint presentation from Canon & Hahnemühle under the 'Print with Confidence' banner. I did this because I am trying to get serious about the quality of printing required to gain that elusive extra point.

Following my RAF Career as a Photographic Engineer I had always vowed that I wouldn't contemplate printing at home because of the cost and the difficulties of managing the required workflow to get consistent results, well that was 20 years ago and things have moved on – I hope.

So I have taken the decision to purchase a Canon Imageprograf Pro 300 A3+ desktop printer. I know that at least 3 other club members have (or are getting) Pro Printers from Canon. Hence this missive

One of the speakers was Clive Booth a professional Photographer and Film Maker with an impressive portfolio and a Canon Ambassador (see link if interested)

<https://www.canon.co.uk/pro/ambassadors/clive-booth/>

The information provided on the day.

Work area – should be kept with minimal lighting and preferably have neutral colour walls as these can reflect in the monitor and affect the colour. The lighting should be either D55 or at most D65, both are classed as daylight although D65 is a somewhat cooler light, Clive suggested that he only has one light in his post processing room and that is placed over the printer output tray and is balanced in his case to D55. Its important to note that the light used by KLDCC to illuminate prints for judging is D55. So if you what to check your prints it makes sense to view them under the same lighting conditions.

Monitor – If printing, it is of paramount importance that the monitor is calibrated, Clive's view was that if you don't calibrate it is pointless attempting to print. Unless you have a very expensive monitor such as the EIZO ColorEdge CG2420 24 Inch at just over £1000 you will need some sort of screen calibrator, either Calibrate Display or Datacolour Spyder Pro X costing between £100 and £200. In order to ensure that you monitor is displaying the correct colours.

Colour space - KLDCC has advocated providing files in the sRGB colour space. This remains correct for PDI submissions but Pro printers have a colour gamut closer to that of Adobe RGB which will complicate matters slightly. If pictures are taken in RAW it doesn't matter what colour space your camera is set to The colour profile is only added when the camera produces the JPEG image.

If you are planning on printing an image the preferences in your post processing software should be set to Adobe RGB and the file saved as a 16 bit TIFF. This is preferable to JPEG

because JPEG images are only 8 bit and can therefore only display 16.7 million colours rather than the billions contained in a TIFF image. It is straight forward to convert your print resolution Adobe RGB TIFF image to a 1920 x 1200 pixel JPEG sRGB image for use as a PDI as has been explained at the various club presentations. So to recap:

An image for print needs to be sized at 300 pixels(dots) per inch and saved as an Adobe RGB TIFF files

An image for the PDI needs to be resized to 1920 x 1200 pixels and converted to sRGB and saved as a JPEG.

Profiles – a profile tells your printer how to print an image on to a specific paper with specific inks and a specific Printer. Most of the major fine art paper manufacturers provide what they call ‘Generic Profiles’ and in all cases they will provide an individual profile for each of their papers based on a specific printer using the manufactures OEM inks. However, if you find that these generic profiles do not quite provide the quality you are seeking most of the high end paper providers will produce custom profiles which will be based on your personal printer. Should you wish to stray onto 3rd party unknown papers and inks you will be faced with an uphill battle but you can ask some paper providers to produce you a colour profile for your paper, ink and printer combination, these usually cost in the region of £25 per profile.

Printing your image – this can be done directly from your preferred imaging software be it Photoshop, Lightroom or Affinity (or anything else for that matter that allows colour management). It is important to make sure that it is the application that manages colour not the printer. To do this make sure that the printer dialogue box is set to Photoshop Manages colour and select the profile for the specific paper so that the printer knows how to apply the colour. Finally set the paper type ie Glossy, Matt, Lustre as detailed by the paper provider. I theory this should provide you with a print that matches what you have on screen. However, it is important to bear in mind what you are looking at on screen is using transmitted light whereas when viewing a print you are looking at reflected light. It follows therefore that a gloss print will always look closer to the image you see on screen. Some matt papers and canvas materials can look decidedly flat in comparison. To gain an idea of what you print might look like in print you can ‘soft proof’ in your post processing software where you can view what the image looks like with the profile added. Additionally, you can simulate the ink and paper combination and make additional adjustments before printing.

To go one step further Canon provide a free piece of software that will work with their pro printers called Canon Profession Print and set up. From what I witnessed on Tuesday this software is superb making printing a little more straight forward. I have not tried it yet so time will tell, it does however, seem to have some really useful features. Perhaps more later.

Did I say it was easy – well perhaps not but once I have my head around this quagmire of a subject I will be happy to try and assist those that may have unwittingly gone down this path.