

# Affordable Colour Management within Reach

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The rise of the digital darkroom has meant a new set of techniques and terminologies to be mastered. Just three years ago colour management tools that accurately measured and calibrated monitors were out of reach of ordinary photographers costing thousands of dollars. The introduction of the Pantone Colorvision Spyder and PhotoCal & OptiCal software has changed all that. Digital color control solutions and color accuracy for photography, design, desktop and pre-press applications have never been easier... or more affordable.

## The need for monitor calibration

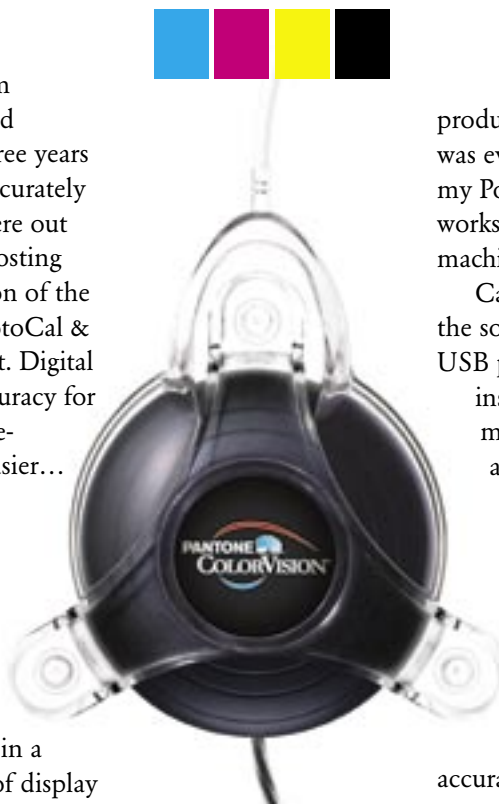
Whether you shoot film or digital, the digital darkroom is an important reality for many photographers. The images we create are likely to end up in a digital form, if only for the purpose of display and printing. Even if you never intend to enhance or manipulate your images digitally, you will want to be sure that the way your image is displayed on screen represents the original scene accurately. If you make adjustments to an image on an uncalibrated monitor and then print that image, it is likely that the final print will differ significantly from the image on screen. This is a frustrating situation that makes the process of image adjustment hit and miss.

## Monitor calibration

There are a number of common methods of calibration, each of which differs in technique, outcome and cost.

While there are simple software solutions, that allow you to adjust the monitor, they are not very accurate and are very subjective. Using the Pantone Colorvision Spyder is easy and now more affordable than ever. Colorvision recently announced price cuts across its range.

We recently tested the Colorvision Spyder Pro with OptiCal on a range of LCD and CRT monitors. The Spyder is one of the only



products that allows you to calibrate both. I was even able to quickly and easily calibrate my Powerbook LCD monitor. The software works on both Windows and Macintosh machines.

Calibration is a simple matter of loading the software and attaching the Spyder to the USB port and following the on-screen instructions. I then used the calibrated monitors (both the Powerbooks LCD and an external CRT monitor) to print images to an Epson 2100 printer and got very accurate and satisfy results immediately.

Attributes of a display monitor slowly change over time; recalibrating and profiling is not a one-time event. Calibrating and profiling at regular intervals becomes the best way to ensure that the necessary level of accuracy is maintained on your monitor.



**Consider** the example of the colourful nudibranch *Chromodoris kuniei* on the orange sponge. In the first photo the colour of the sponge is washed out, the saturation is poor, and the whole image is somewhat flat. This image was taken from a master file, and adjusted on an uncalibrated monitor.

## PrintFIX – Generating Custom Printer Profiles

Once we have a calibrated monitor, we turn to printing. The ICC profiles that come with the latest Epson or Canon printers are designed specifically for their own papers and out of the box are generally quite good. Our testing with the Epson 2100 and the new 4000 proved this to be the case. However, there are a huge number of third party papers available that may not come with a ready made profile for your printer.

PrintFIX from Pantone Colorvision allows you to build custom profiles for your printer, so that it outputs an accurate rendition of the colour data in the digital image file. The package includes software that works as a plugin for Adobe Photoshop (note for users of OSX, we had problems with the original software and had to get a patch from Colorvision for it to install correctly). At the moment PrintFIX supports certain Epson & Canon printers, but others are being added. The first step is to load the target in Photoshop and print it on your printer with the desired stock.



**The second** image was taken from the same master, and run through the same process on the same computer, using the same monitor. The only difference is that the monitor was calibrated before working on the image. Clearly the image has better contrast and is more vivid, a result of being able to see accurate colours on the screen.



Cathay Photo is running a special promo:  
Spyder Pro + Print Fix for S\$950;  
Spyder Pro for S\$540 or the Spyder for S\$369

Once printed the target is read by the PrintFIX scanner to create a profile, which can then be loaded into Photoshop.

In use the profiles I created for Epson papers showed marginal improvement over the supplied Epson profiles. Obviously you can create better profiles with solutions that use a dedicated spectrophotometer, but these solutions cost thousands of dollars. For users who wish to use third party papers, PrintFIX provides a cost effective option to generate accurate usable profiles.



*For more information see: [www.colorvision.com](http://www.colorvision.com)  
Singapore Agent:  
Cathay Photo: [www.cathayphoto.com.sg](http://www.cathayphoto.com.sg)*