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Gamut

The Colour Management Newsletter

Accurate Digital Proofing

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Digital
Proofing
on a
Shoestring

The Epson 4000 inkjet printer solidifies the shift of accountability into the hands of the creator. Now the digital photographer can now optimize an image and within 3 minutes acquire a sellable piece of art. The commercial digital photographer can print proofs from his or her desktop that are compatible with digital proofers costing ten times more and the graphic designer can accurately produce CMYK proofs representative of the final press run – with an optional CMYK RIP.

Printer Overview:

The 4000 is a large desktop printer which incorporates four paper feed options: a high-capacity (150 sheet) paper tray capable of handling cut-sheet media up to 17"x 22", a 17" x 100' roll and two manual feed options. The ink system is an all-new 8-Channel Print Head Technology capable of handling eight separate ink channels. This allows for smart switching between the matte black and the photo black inks depending on the media selected. The best part about this printer is the ink cartridges – 220 ml's in size! These are big cartridges.

When it comes to evaluating an inkjet printer, there are six areas I consider: price, print speed, stability of colour over time, ease of use, media handling and colour gamut and stability. Output resolution not a serious issue with today's inkjet printers.

Price:

The 4000 will sell for around $2,400.00 Canadian and will hopefully go on sale before June of 2004. Epson sells their printers for a very reasonable price but with that purchase is a membership into the Lifetime of Purchasing Epson Inks Group or LPEIG for short. Seriously, Epson has done an admirable job of deterring 3rd party manufactures from being able to sell you cheaper inks that will compete with the quality of the UltraChrome ink-set.

Speed:

This printer is 1.9 times faster than the 7600 and 9600 Epson printers. I was a able to produce 8.5 x 11 proofs at 1440 dpi bi-directional in under 3 minutes and 13 x 19 inch proofs in 5 minutes.

Stability of colour and colour gamut:

Ink stability and colour gamut used to be a concern when considering the purchase of an inkjet printer. Previously, we had to utilize dye inks in order to ensure our prints had a large enough colour gamut and an adequate black density. Previous pigment inks (2000p, 7500 and 9500) were notorious for shifting colour when view under various lighting conditions. The UltraChrome Inks are pigment inks with a colour gamut that is large enough to be used for digital proofing and with the introduction of the light black ink, show very small amounts of matamerizism (colour shift).

As with all UltraChrome inks there is a small amount of bronzing on high-gloss papers when prints are view at extreme angles.

When choosing an inkjet paper for digital proofing it is important to compare the paper white to your press sheets the paper white of your inkjet media to insure you are not introducing a paper colour variable. Paper colour can be thought of as the 5th colour in printing.

Ease of Use:

The printer is very straight forward and well laid out. The only areas I found awkward were when I tried to load a single sheet into the manual feed slot from above. Two out of four attempts brought up a "media not straight" error. Maybe this is just an issue of learning the nuances the printer. Also, I found the on-board LCD display was not a straight foreword as previous models.

Overall this is an excellent printer that I would not hesitate to recommend it to anyone needing to print significant volumes of prints – 10 or more images per day. It is at this volume that the larger cartridges will begin to pay off. I still consider the 2200 a great buy for those printing less volume.

Time to RIP:

This printer is capable of producing great RGB prints via the supplied Epson driver, but if you need to proof CMYK files you need a RIP and BEST Color has rewritten their affordable Designer Edition RIP to be a serious candidate.

Best is a German company that has been creating RIPs for those serious about accurate colour for many years. But their RIPs have always been Windows based RIPs, so they created the Designer Edition RIP that runs on a Mac using OS X 10.2 or higher system.

The Designer Edition has some reduced functions when compared to the Windows version, Colorproof 5.0. Designer Edition can only have one queue, compared to 15 in Colorproof. Designer Edition has some basic Nesting options and Colorproof offers more sophisticated production tools (cropping, rotation, tiling and scaling). Colorproof also has more sophisticated printer linearization tools for setting up the device when compared to the Designer Edition version. Both share the same colour management engine.

With the right colour profiling tools and a Certified Best installer this RIP and printer combo can be setup to compete with digital proofer's costing considerably more. Designer Edition RIP for the Mac sells for $1,100.00 Cdn.

17" Wide