

Welcome to our third Newsletter of 2002, covering the latest developments at Lyson, the largest independent inkset manufacturer in the world, and their main UK distributor, Marrutt Digital.

If you want truly professional long-life inkjet prints, read on...

Having just returned from *photokina* in Cologne, it is becoming clear that our industry is approaching its 'tipping point' where darkroom techniques give way to digital in almost every sphere of imaging activity. Among the exciting new product releases, huge budget presentations and a rather reassuring sense of optimism about the future of our industry, I saw that many of the highest quality colour and monochrome prints on display were still either produced in the darkroom, or using hybrid digital/photo printers such as Durst Lamda etc. Lyson GmbH showed some really exceptional fine art photographic inkjet prints from some of the finest photographers world-wide, but this was very much an exception to the rule.

Very average display prints

Many inkjet prints shown around the halls were very average. Perhaps I am just being super-critical, but to my eyes there was a lot of consumer standard digital imaging being promoted as professional. Hardly any CRT monitors were in evidence, almost all were plasma or LCD displays, and with very few

exceptions they had poor monitor calibration with respect to prints produced. **The inkjet print quality rarely did justice to the original input.**

A number of live demos of professional digital camera to inkjet print output, even from major consumer inkjet companies, showed extremely poor colour accuracy and image fidelity. Subtle flesh tones on a model wearing a beautifully detailed ivory wedding dress (captured in this case quite accurately on a well-calibrated monitor) was printed out (using the very latest pigment inksets on the most recently released desktop inkjet printer) as a far harsher, exaggerated coloured version of the exquisite softly lit studio set-up. **It would seem that consumer standards of imaging are often being passed off as professional standard.**

Don't accept lower standards

Don't let the convenience of digital imaging tempt you into accepting lower standards than you would insist on with conventional professional photography. As in the darkroom, final image print quality depends upon the sum of each stage in the imaging process:

→ If we use a poor scan of low dynamic range, the final print will suffer.

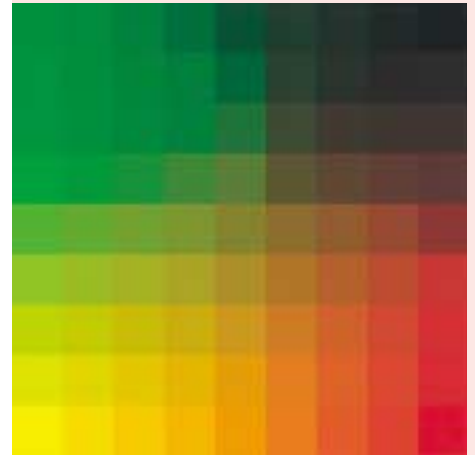
→ If we over-adjust our image in Adobe Photoshop due to poor monitor performance, calibration or technique, the final print will suffer.

→ Our experience tells us that we need generic, or preferably custom ICC printer profiles to turn a consumer standard printer into a device capable of doing justice to a high quality image file.

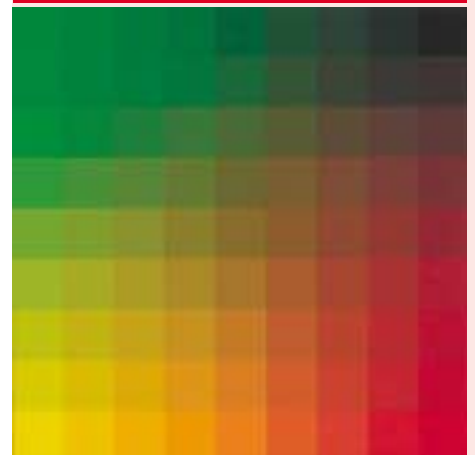
→ If we use an inappropriate consumer or economy inkset on a professional imaging job, we may well be disappointed with the end result, even though everything that went before was of the highest standard.

Continued on page 2.

Unretouched printout* using a popular brand consumer inkset



Unretouched printout* using correct profile and Lyson colour inkset



**Using the same printer*

Illustrated above are unretouched comparisons between a popular brand consumer inkset and a correctly profiled Lyson colour inkset produced on the same printer. See how the darker colours in the Lyson print smoothly graduate into the very dark colours. Lyson Fotonic Colour and Monochrome inks are profiled to deliver the maximum possible smooth graduation into your shadows.

See full text on page 2.

Marilyn Shenton

AMPA ARPS LBIPP

Master Photographer of the Year 2001

"I use Epson 1160 inkjet printers with Lyson Small Gamut toneable inks and Lyson Fine Art Media. I will shortly be extending my use to Lyson Quad-Black. I have found Lyson products really brilliant and easy to use. They have enabled me to speed up my workflow, as it is possible to look at images

immediately without using the traditional darkroom. I have been really impressed with the quality of Lyson inks and paper."



There is a danger that your customers (consumers) have easier access to reasonable print quality in-house than ever before. If you, as a professional, settle for consumer standards of digital imaging, why should your customers buy from you? We can help you to select the correct equipment and techniques, but if you settle for consumer inksets and media in your standard issue consumer printer, your end result is likely to be little better than your customer can achieve themselves.

John Read, MD Marrutt Digital

Three categories of Inksets

Inksets fall into one of three clearly defined sectors: Economy, Consumer, and Professional. Let us explain the features of each category, and help you to identify the best choice for your needs:

Economy 'budget' Inksets

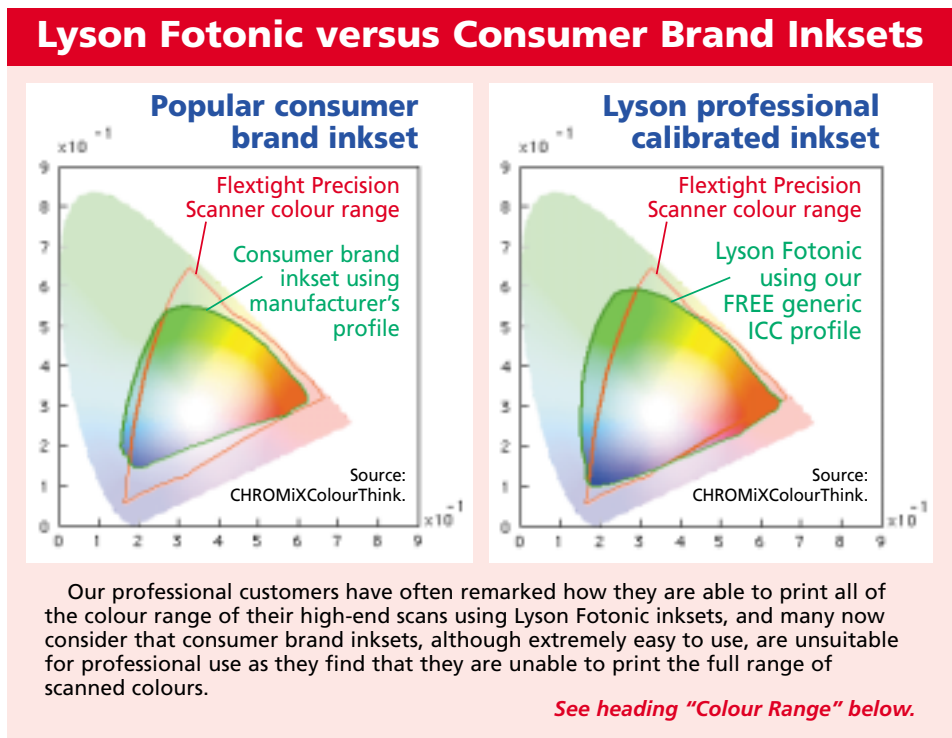
There are many low priced inksets on the market that the user may find in the short-term enables them to produce non-calibrated colours for a fraction of the ink cost of branded consumer inksets. The downside to this is that quite apart from producing non-stable prints of varying image quality, many 'budget' inks are simply not manufactured to the required high standards as the large manufacturers' own excellent branded inks. In some cases unbranded budget 'particle' inks may damage the ultra-fine inkjet printer head and ink reservoirs.

Our advice is to stay clear of these non-branded 'budget' inks. If you are looking for savings in ink costs, consider a **bulk feed system**, or **upgrading to a larger format printer** with separate large ink cartridges for each colour channel.

Two things to bear in mind: **1.** For the average inkjet print, the ink costs usually represent less than half of the total cost of the print. Good quality inkjet paper usually accounts for the larger portion of the cost per print. Lyson professional archival media is available across the range in bulk packs for lower cost per print. **2.** An unprofiled printer often uses far more ink per page than a correctly ICC profiled device. We find that we can easily achieve over 80 5" x 7" colour or mono prints per set of Lyson cartridges from our desktop inkjet printers, as the ICC profiles usually allow you to set the printer in-flows (media type) to a lower level than usual (photo quality glossy film on Lyson coated media).

Consumer Inksets

Almost without exception, branded consumer inksets (those inksets produced by the printer manufacturers themselves) are excellent for the use for which they were originally intended: Simple, easy to use, trouble-free colour printing to an average consumer standard. Longevity, colour accuracy and image fidelity are not such important issues as the ease of use by absolute beginners and, as such, the prime goal is to make the inkset as 'idiot-proof' as possible. Your customers use these inksets quite successfully, and are able to produce extremely pleasing 'snaps'. **Thoroughly recommended for consumer standard colour imaging and home use.**



Professional Inksets

A common misconception in inkjet printing is that every desktop or large format printer is produced with absolutely identical ink characteristics, in that every inkjet printer from a particular manufacturer of a model type lays down ink in exactly the same way as another printer of the same model.

If you talk to high-end colour calibration specialists, whose job is to achieve the highest possible levels of colour accuracy and image fidelity, they would tell you that these printers can vary quite noticeably, not only in colour rendering, but also in printer linearity (curve) and overall ink flows. This may be acceptable for producing consumer standard 'snaps' for home use, but may give too wide a variation for professional imaging.

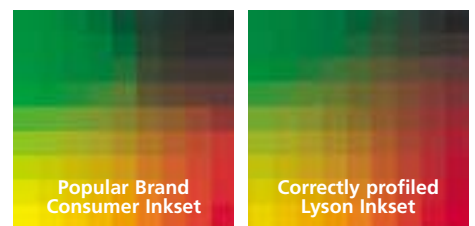
The answer is to use a stable calibrated professional inkset, which is provided with free generic ICC printer profiles for good standard accuracy, and then to commission a number of custom made ICC profiles for your particular printer for absolute accuracy and image fidelity. Consult your colour management consultant for in-depth ICC profiling advice (see our list of experts in our Contacts List on page 5). In this way, you are changing your printer designed for home and consumer use into a calibrated professional output device that you can rely on.

Lyson is the only company that produces colour and monochrome calibrated archival inksets specifically for professional use in association with ICC printer profiles to specifically enhance the following factors...

...Shadow Detail

We illustrate (above right) an unretouched comparison between a popular brand consumer inkset and a correctly profiled Lyson colour inkset on the same printer. See how the darker colours in the Lyson print smoothly graduate into the very dark colours. This shows that the shadow detail that you were careful to retain in your scan, and carried through into Photoshop without

'blocking in' may otherwise be thrown away if you use a standard consumer brand inkset (see how the darker colours suddenly get much darker in the consumer print). Lyson Foteric Colour and Monochrome inks are profiled to deliver the maximum possible smooth graduation into your shadows.



(See full size images on front cover)

This means that when you use a Lyson professional inkset, you do not throw away your shadow detail!

...Colour Range

One of the many advantages of an archival inkset is that the cyan, magenta and yellow values tend to be higher than for a normal consumer inkset, so where a normal consumer inkset may struggle to print even two-thirds of your scanned colours (see diagram top left). Some consumer pigment inksets may struggle to print half of your scanned colours!

Lyson Foteric inks are almost identical to the colour range of a high-end scanner (see diagram top right). **This means that when you use a Lyson professional Foteric inkset, you do not throw away over a third of your scanned colours!**

...Colour Accuracy

As mentioned above, consumer desktop and large format printers can vary noticeably. Only a correctly ICC calibrated professional inkset can deliver the colour accuracy you may need. See the testimonials which appear later in this Newsletter, which confirm the many advantages of using an accurately colour calibrated printer. **This means that when you use a Lyson professional Foteric inkset with correct ICC calibration, you do not throw away the colour accuracy of your original!**

...Posterisation in colour/mono graduations

One of the most telling differences between a consumer standard colour/mono print and its high-end professional counterpart is in the smooth subtle colour or monochrome graduations that occur in real life. Consumer inksets are notoriously bad at reproducing incredibly subtle smooth tonal graduations without 'breaking up' into fairly course changes of colour or monochrome density (posterisation).

TIP: At the input stage, scan or capture in RGB 16 bit (or high bit) mode if available, affect tonality enhancement in Photoshop through <levels> while still in 16 bit mode, then revert to 8 bit for subsequent image editing. Keep it subtle, don't 'overcook' your <contrast> control by judging your image via monitor appearance alone in 8 bit mode. In our experience, only a correctly ICC profiled professional inkset is usually able to do justice to a truly smooth subtle digital image. **This means that when you use a Lyson professional Fotonic colour or monochrome inkset with correct ICC calibration, you do not throw away the smooth subtle graduations of your original!**

...Longevity

Suffice to say that Lyson are still the only certified archival inksets in the Industry out-performing the average popular consumer inkset five-fold in independent

longevity testing. This means that when you use Lyson certified archival colour or monochrome inksets, you do not throw away your credibility by producing prints which can fade and colour shift in a short space of time!

A special word about monochrome

In addition to the above, Lyson professional monochrome inksets are formulated to produce:

- Smoothest tonal graduation.
- Absence of posterisation between density levels, with smooth graduation without banding or fringing.
- Correct greyscale density with respect to digital values in the scan.
- Midtone, quartertone, highlight and shadow detail reproduced faithfully where they should be according to the digital values in the image file.
- Exceptional rendering of blacks.
- No 'milky' blacks or 'washed out' monochromes. Full 100% punchy blacks to your images.

CONCLUSION

If you want the cheapest possible prints and are not concerned about the image quality or risk to your printer, use economy 'budget' inks. If you want the easiest possible method of producing a consumer standard print of average 'home use' quality, use a consumer brand inkset. If, on the other hand, you are like us, obsessed with quality (shadow detail, colour range, colour accuracy, posterisation, longevity) in other words, a professional, use Lyson inksets, media and technical back up from us.

Just think - if you are selling the same consumer standard prints that your customers can easily produce for themselves, why should they use you?

Use our resources and technical back-up to get you to the professional standard that you seek. If there is any aspect of your digital imaging that you are not happy with, and you think we can help you, give our FREE TECHNICAL HELPLINE a call on 01825 764 057.

→ → NEW PRODUCTS → → NEW PRODUCTS → → NEW PRODUCTS → →

Lyson Bulk Feed System



Equal to approximately 10 traditional ink cartridges!

For those who want better ink economy and professional inkset quality, Lyson now provide a well-proven and reliable CIS (continuous ink system) at a sensible price, with the assurance of the backing of

Lyson, the largest independent ink manufacturer world-wide. Available at present for the Epson 1160, 1270/1290 and 2000P, bulk

inks are available in Lyson Fotonic, Quad Black Neutral and Small Gamut in 125ml bottles.

Starter pack comprises Black bulk feed cartridge, Colour bulk feed cartridge, Feeder Tubes and bottle rack.

- 1160 continuous ink system starter pack excl. inks **£125**
- 1270/1290 continuous ink system starter pack excl. inks **£205**
- 2000P continuous ink system starter pack excl. inks **£205**

(Call us regarding other printers.)

125ml Bottles for the Lyson Bulk Feed System

- Lyson Fotonic archival colour ink in 125ml bottles **£15 per colour channel**
- Lyson Quad-Black neutral archival monochrome ink in 125ml bottle **£16 per mono channel**
- Lyson Small Gamut toneable archival monochrome ink in 125ml bottles **£18 per toned mono channel**

Lyson User Guide Interactive CD

Completely new and up to date content, with very little carried over from the old Lyson User Guide Video, this interactive dual-platform CD provides a basic tutorial on Lyson archival colour and black & white inksets for use with Epson and Canon desktop inkjet printers. Selectable in five languages (English, German, French, Spanish and Italian), this CD provides the essential information needed to achieve a truly professional result from your desktop inkjet printer.

Priced at £4.95 or free with any order to Marrutt.



Screen grab of the Index from the Lyson User Guide CD.

Online ordering now accounts for over 50% of our daily business!

For all online orders we receive up to 4pm we **guarantee same day despatch.**

Delivery is by Securicor (or 1st class post for small items, such as individual ink cartridges) and is **guaranteed carriage free** on every item ordered.

We have had many of our Australian, New Zealand and South African customers query whether this applies to them too – *of course it does!* **We are happy to pay the airfreight for all our global online customers.**

We update our website weekly and the system really is easy to use.

Our online ordering is totally secure.

Try it for yourself on
www.marrutt.com

Duncan Lawson

"Having used Lyson's Quad-Black inks on an Epson 1160 with extremely satisfying results, I see the Quad-Blacks as being the only way to achieve the depth of blacks, tonal range and, more importantly, the neutrality in a digital black and white print using an inkjet printer – something that cannot be achieved by using a colour inkset."

TESTIMONIAL

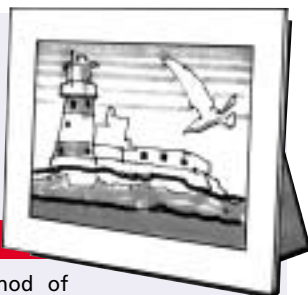


→ → NEW PRODUCTS → → NEW PRODUCTS → → NEW PRODUCTS → →

PhotoMount Pro Self Adhesive Professional Foamboard

EASY TO USE • NO MESS • NO FUSS

A totally new and economic method of presenting your images, whether photographic or digital. Mounting your prints using PhotoMount Pro board gives you the opportunity to display and sell you images to clients "ready to display" – **without having to frame your print at extra expense.** It allows you to display your work on the wall, using velcro, Blu tack or PhotoMount hooks, or to display it on a desk or shelf, using PhotoMount locking rudderstruts, which are large self-adhesive heavy card folding supports. They present your A4 or A3 print at the correct angle in portrait or landscape orientation.



This unique 5mm white dense foam board can be cleanly trimmed with a sharp blade. It has a tensioned 80 micron film backing, which has a dual purpose – it holds the board under tension to keep it flat and also creates a moisture barrier. The face is coated with a high-technology adhesive which creates a permanent bond.

- No mounting press required - No heat.
- Ready cut to oversize A4, A3, A3+ and A2. Plus larger custom sizes are available.
- High-Tech adhesive for permanent bond.

Pack of 20 oversized A4 PhotoMount Pro	£39.95
Pack of 10 oversized A3 PhotoMount Pro	£39.95
Pack of 10 oversized A3+ PhotoMount Pro	£49.95
Pack of 10 oversized A2 PhotoMount Pro	£79.95
Pack of 10 PhotoMount Locking Rudderstruts	£9.95
Pack of 10 PhotoMount Wall Hooks	£4.95

Prices exclude VAT.

NEW Portfolio Albums for inkjet printers



Stone Editions has joined forces with Lyson, to create a unique album system for the production of portfolios, wedding albums and creative photography books.

Stone™ Photo Velvet Plus is a 100% cotton rag paper that is inkjet coated both sides, making it ideal for the production of album pages. The coating employed has been developed by Lyson to provide the best in print quality and colour rendition without compromise in image permanence and archivability. This unique archival coating has a printing performance second to none – bright, vibrant colours and deep velvety blacks that bring your images to life – and has been prepared primarily to be used with the Lyson range of archival inks.

Using the patent pending Stonehinge binding system, Stone™ Photo Velvet Plus paper is **converted into digital album pages that feed through most popular photo realistic inkjet printers to make ready-to-bind printed images.** For double sided printing, simply reverse the page and feed through the printer again. Stonehinge translucent interleaves are available that prevent images from rubbing together.

The Portfolio Album comprises 25 digital album pages, 25 translucent interleaves and a set of album covers, plus a metal edged presentation box (seen below).

Album Size	Page Size	Price
9½" x 8½"	8" x 8"	£115
13½" x 12½"	12" x 12"	£175
12½" x 16½"	12" x 15"	£195

Prices exclude VAT.



Contact
us for
full details.

Useful contacts for professional Lyson users and what customers say about their services:

Neil Barstow

Pixl Colour Management Consult ApS (UK)
Website: www.neilbarstow.co.uk
Tel: 01273 774704

Thomas Holm

Pixl Colour Management Consult ApS (Denmark)
Website: www.pixl.dk
Tel: +32 969014

"Anyone working seriously with digital images will be aware that colour accuracy and consistency are all-important. ICC calibration and profiling has become the universal standard in 'breaking the closed loop' and is an area of expertise in which Thomas Holm at Pixl ApS in Denmark and Neil Barstow Consulting clearly excel.

They have generated many custom profiles for me, from my Flextight PII through to my three Epson 1160s, encompassing different ink and paper combinations. My working life has become so efficient (in both time and materials) and sure with the knowledge that the image I see on screen will be beautifully and accurately reproduced in print. The occasion is rare that I have to produce more than two prints to achieve my creative and technical goals."

Jack Lowe – www.jacklowe.com

"Custom profiling is an essential part of any professional workflow. Without accurate standards to work to, all the time and effort in producing a "perfect" image on your monitor will go out the window when a file is sent to a printer straight out of the box! And many are! Neil Barstow's tuition was an important part of my learning process and, with his guidance, my equipment was set up to get the best possible results, from scanning right through to the final print. Understanding the use of profiles was brought in right at the beginning, but at £150 each, their use had to be justified. After a trial run with a 'canned' Marrutt/Lyson ICC profile, which produced good results, I was persuaded that a custom profile was worth it.

My 1160 printer was set up with Lyson inks, and a Pixl/Neil Barstow Consulting profile was made for use with Lyson Fine Art, which produced excellent results. Having used my printer for months with no profile, I realised what all the fuss was about on the ProDig internet newsgroup forum. I now make reference prints, which are sent out with discs for a stock library, and as 90% of images will print first time, I no longer have hours of frustration and wasted paper.

As a result, I am about to have a profile made for the new Lyson Smooth Fine Art stock, giving a second digital option for display prints. No serious digital user should work without custom profiles."

Paul DeBois – www.pauldebois.com

"Pixl/Neil Barstow Consulting profiles have really put my limited edition prints on the map. It is a profound leap for my understanding of colour management and image integrity. Neil has helped me to produce a really professional range of limited edition Giclee prints from my Epson 7500, using Lyson Fotonic ink and Fine Art papers. My paintings have very bright saturated colours, which are almost out of gamut, making them difficult to print, so Neil's training in digital imaging and his help with setting up the equipment, and making of colour profiles has been invaluable for different types of papers."

Gillian Burrows – www.artistgb.com

"After receiving the (custom Pixl) ICC profiles (for my Epson 1160 printer with Lyson Fotonic Inks), I made test print-outs and left them for 36 hours for the colours to stabilise. The results have been shown to various friends who include a painter, fine artist, a scientist, who specialises in visual colour perception, and an inventor/3D specialist, who has an encyclopedic knowledge of repro. They all say the same thing, that it is the best colour reproduction they have ever seen.

I can only agree with their enthusiasm, and the results on 310gsm Fine Art media are simply beautiful. Now that I am properly profiled and colour managed from start to finish, the idea of using a lab – any lab – is an absurd waste of time and money. Once the math is finally in place, then everything else becomes just smoke and mirrors."

Will Curwen – www.william.ws

Udo Machiels

Atmos Design Colour Management (UK)
Tel: 01342 300 839
E-Mail: atmos.design@lineone.net

"Thanks for all your help. After months, in fact years, of frustration (and wasting paper and ink) Udo's custom profiles are consistently producing not only perfect colours, but are giving a tonal range that is quite outstanding."

Adrian Arbib – www.arbib.org

"Dear John, many thanks for introducing us to Udo of Atmos Design. Since he calibrated our monitor to our printers, our prints per day and profitability have increased. Now when we have the image we want on the screen, we print directly to A3, our (our standard size). We now never do a test print, saving time and paper. We think the help Marrutt give their customers is outstanding, and in our case very much appreciated."

Guy Griffiths Photography

"John, if you remember, I came down to your offices with my Epson 1290 printer, because my printer had a horrible pink bias. Quite by chance Udo Machiels from Atmos Design was there as well. I quizzed him for a good long time and realised, much to my dismay, that I would have to spend more money on having custom profiles made!

I had three made for three different papers by Udo, who was incredibly efficient and the profiles are FANTASTIC. From being despondent and regretting getting into the whole digital morass, I could suddenly see great results, which were accurate and very close to my originals. I just wanted to pass on this news, recommend Udo from first hand experience and thank you for all your help."

Craig Lynn

"Hi Udo, what can I say! You are a genius. I only had a little time to try the profiles that you have done for us, but the results are superb. When compared to prints before, there is a huge improvement, so much so that for the first time in months I actually managed to colour adjust a scan on screen, softproof it through your profile and get a very accurate match on the printer. Thank you once again for your excellent service and all your help. You have resolved in the last few days a problem that nearly forced me to give up on this method of printing, and last night I actually felt like a weight had been lifted from me and that I can now be confident in my own colour skills once more."

Jason Hicking

"Dear Udo, further to our recent meeting and the sequence of telephone conversations, I would like to thank you for all the invaluable help and guidance you have provided regarding printer, media and ink profiles. Although I have only been using the profiles you created for me for a short time, the resulting difference in print neutrality is astonishing.

Friends and colleagues who have seen prints are equally impressed and many of them will in due course be contacting you directly to oversee their profiling. Together with the Lyson Small Gamut inksets from John Read at Marrutt I feel that the system of creating custom profiles for print management provides an invaluable tool for those who are serious about their monochrome digital printing."

Clive Tanner FRPS

Other useful contacts for professional Lyson Users

Jake Morrison

Colour Management
Midlands and Northern Region (UK)
E-Mail: jacobmorrison@yahoo.com

New to the northwest is an on-site colour management service being offered by Lyson's own technical support manager Jacob Morrison. Using the most up-to-date software and hardware, Jacob can write and optimise printer profiles for your own printer with your own computer. The ability to edit a profile to ensure the highest degree of accuracy places this service apart. A pre-press standard instrumented monitor profile can also be written for your own monitor that can dramatically improve the accuracy of your display. Desktop and wide format printers can all be profiled, dye-sub as well as inkjet.

Chris & Dave Newton

Enhanced Images, Flextight Scans and Oversized Lyson prints
Tel: 01342 327574
E-Mail: enhanced.images@btinternet.com

Dave and Chris Newton, of Enhanced Images, offer to scan your negs or trans from 35mm up to 5" x 4" size using their Imacon Flextight, with a dynamic range exceeding 4.0 from £10 per scan. They also print oversized using Lyson Monochrome and Colour Fotonic inks with custom ICC accuracy up to 44" wide.

Ian Richards

Independent Epson/Canon printer service and repairs
Tel: 07866 693243

You can expect a first class service from Ian Richards, an Ex-Epson senior service technician, who is able to give your Epson or Canon printer a thorough recondition service and clean from £30 plus carriage. He also does repairs, including head replacement, from around £50 plus carriage.

"I have every confidence in the services offered by these consultants and specialists. I know from first hand experience that they can provide extremely valuable support and advice to help professionals with their digital output requirements."

John Read, MD Marrutt Digital

