

# All Together Now

John Bennett of Allied Images looks at the pros and cons of wide format printer, copier and scanner combinations

**T**he demand for digital copiers, especially digital plan and drawing copiers, has led to the integration of two technologies - large format (LF) scanners from suppliers such as Colortrac and wide format (WF) printers. Colortrac is a leader in their market with extensive product ranges. When scanner and printer are combined with a standard PC running copying software they provide a choice of digital copy solutions that suit a varied range of market requirements. These scanner/printer bundles allow solutions to be tailored to the user needs and budget more flexibly than the alternative solution, a fixed configuration multifunction Printer (MFP). An MFP is limited in capabilities, inflexible and narrowly targeted.

## SCANNERS

Scanners are a familiar sight in many offices - the small format A4 scanner is now ubiquitous. However, until recently large format scanners

capable of A0 or wider have been expensive and therefore much less common. This was due to the technology used to capture the image - fluorescent tube light sources, charge coupled device (CCD) cameras, mirrors and lenses. The long optical path requires a sturdy frame to maintain accuracy and the use of multiple CCD cameras requires the images to be combined together electronically (stitched).

The large number of components and the high mechanical accuracy meant that these scanners were expensive, from £8k to £20k, so few drawing offices could justify the cost. In late 2004, Colortrac, the UK's only LF scanner manufacturer, announced the SmartLF 4080 series. This scanner was based on the technology used in small format scanners - Contact Image Sensors (CIS). CIS arrays use LED light sources and have no lenses or mirrors, so there are fewer components and the mechanical design, is simpler and more rugged. The main benefit is that the scanner is much less costly to manufacture and is available from

£4,500 - a huge reduction over the CCD machines.

## COPY SOFTWARE

The glue joining scanner and printer into a digital copy solution is the software. There are several packages available including Colortrac CopySmart and SCP's Colorado product. CopySmart provides an entry level solution at an attractive price for users such as drawing offices with basic copy solution requirements. Colorado provides top-end users and copy shops with a full-featured solution with many professional features.

CopySmart is a simple copying application using ICC 'closed loop' colour calibration to connect the scanner to wide-format printer. The software uses a 'wizard' configuration assistant that guides users through the process. Similarly, a 'wizard' colour calibration assistant profiles the scanner, printer and media types ensuring accurate colour replication. The software will produce one copy at a time. An upgrade is available that allows multiple copies from a single scan, supports two printers and allows custom presets.

SCP develops software solutions for digital reprographics based on the specific requirements of their thousands of customers. The variety of tasks they have to carry out requires a fast, flexible and reliable system that is easy to use. The Colorado product line is the result of SCP's expertise.

Colorado has a concise layout with all the software's features displayed on a single user interface. So, Colorado is intuitive and easy to use, allowing users to work efficiently and be highly productive. The software is available in various levels to suit different needs and budgets. Users can start with an entry level and, if needed, expand the capabilities at a later date.



# wide format



Colorado XL Screen



CopyWorks Screen from CopySmart

Nearly all originals can be easily copied with Colorado's automatic modes. Just choose the original type, e.g. map or photo, and the software recognises the document size and determines the scanning parameters for every original.

When needed, you may manually adjust the automatic modes, scanning parameters and/or the original and output size. As soon as the scanner has captured the first lines of the document, the printer starts working and can take only between three and five minutes to generate an A0 copy depending on the print.

The copy must accurately reflect the original so the scanner/printer combination is calibrated with SCP's proven closed-loop calibration. You won't need extra tools or special knowledge as the calibration wizard in the software guides you through the process and is completed in only five minutes. Once the combination has been calibrated Colorado handles all colour management automatically.

During the scanning process Colorado converts the source colour space (RGB) into the target colour space of the printer (CMYK, etc.). Colorado supports printers from all major printer suppliers and will drive printers with 4, 6, 8 and 12-colour ink systems. Colours outside the printer's gamut (range) are taken into account. Before printing you may preview your output on the monitor and use the gamut warning function to identify and correct problems, saving you paper, ink and time.

In addition to easy handling, high-quality and speed, Colorado has much more to offer. The software keeps track of all individual tasks, registering paper and ink

use, the amount of scanned data and much more. This way it helps you with your supply planning, accounting and invoicing.

To protect the system from unauthorised access, individual user rights may be assigned through the integrated user management tool. In addition to this, system use may be registered for individual cost centres, projects, customers or employees. Also, Colorado supports multiple printers via subsystems so you can easily add extra capacity. Or, you could send all mono jobs to one printer and colour jobs to another for maximum flexibility. Colorado also supports unattended (overnight) printing.

## DIGITAL COPIERS - SCANNER/PRINTER BUNDLES

The use of a Universal Repro Stand (URS) like that supplied by Colortrac means that a LF scanner can be mounted above a WF printer, giving the same office footprint as an MFP. The bundle offers the same functionality as an MFP - digital copy - but has none of the limitations. However, the user interface can be more complex.

The strengths of the bundle option are many. Firstly, it offers the same copy functionality as an MFP. However, it is more flexible in operation and configuration. In operation, any user on the company network can access the scanner/printer resources while they are not being used for copying, thus increasing their utilisation and maximising return on investment. Thus, any user can scan a document and save it locally or more conveniently on the company's file

server, where they can be accessed by all.

The unit can also be configured more flexibly to suit your requirements. For example, you may only require black & white capability initially. SmartLF scanners can be upgraded in-situ via a simple software download to add colour capability. Also, you can select the width of machine that best suits your needs - from 36" to a super-wide 54". Similarly, the printer that best suits your needs can be integrated into the solution.

As Allied Images specialise in scanning and imaging technology solutions we are able, in partnership with the printer supplier, to offer specialist support on the solutions we supply.

## IN SUMMARY

MFPs are fine if all you want is a limited digital copying solution. However, this means that you won't get full value out of the components as you cannot make full use of the scanner and printer separately.

Scanner/printer bundles give you better overall copy performance at the expense of a slightly more complex user interface at a price comparable to that of an MFP. However, their separate nature means that you can use them as scanner or printer when not copying, increasing their usability and maximising your return on investment. Also, the scanner/printer bundle can be tailored to suit the user's exact requirements and budget giving a better overall solution to their digital copying needs.

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