

SmartLF Gx 40 Scanners

Outstanding performance CIS Scanner at an affordable price!

Sharp, fast large format technical document scans & copies
~ for professional and in-house users



NEW!
Universal
Repro Stand
Option



NEW! - PC & Flat Screen Mounting Option
NEW! - Paper Catch Basket Option

High-speed monochrome and colour, 40" wide format scanners

- 600dpi optical resolution ~ for extra sharp fine image detail and clean black & white scans
- 48-bit colour & 16-bit monochrome primary point data capture ~ excellent image reproduction
- Advanced 2+4 all-wheel-drive Active Paper Transport (APT) ~ scans your originals with care
- Instant, high quality scans from power-on, no warm-up and no waiting!
- Dynamic normalisation with automatic monitoring and adjustment of colour temperature
- Maintenance free contact image sensors (CIS) ~ no tubes, no stitch alignment, lower costs
- Supplied complete with SmartLF scan / copy / email software and internet upgrade server
- Windows Image Acquisition (WIA), standard file formats ~ TIFF, JPEG & PDF
- USB2 / Plug 'n' play / Upgradable ~ perfect for general office or mobile scanning projects

SmartLF Cx 40 Large Format Scanners

SmartLF Cx 40 is an innovative large format scanner design that uses the latest Contact Image Sensors (CIS) of 600dpi true optical resolution. All Cx scanner models provide exceptional monochrome performance with very sharp, clean black & white images; excellent greyscale reproduction and high scan speeds.

For colour applications there are two very affordable scanner models, offering a choice of fast or express scanning speeds. Both come with Colortrac's best in class CIS colour image quality ~ built in.

Cx 40 is designed to provide fast, high quality scans, copies or file distribution of large format maps, engineering drawings, blueprints, site plans, architectural renderings and many other technical documents. These 40" wide format scanners are ideal for AEC, CAD & GIS professionals and office users in any size of enterprise.

The SmartLF Cx scanner product range at a glance...

Scanner Model	Image Width 40"	Resolution		Scan Speeds	
		600dpi optical	100~3600dpi	Monochrome	Colour
Cx 40m (mono)	✓	✓	✓	10.1 inches/Sec	n/a
Cx 40c (colour)	✓	✓	✓	10.1 inches/Sec	0.84 inches/Sec
Cx 40e (colour express)	✓	✓	✓	10.1 inches/Sec	3.36 inches/Sec

SmartLF Cx 40 Scanning Advantages

Extra sharp fine image detail, optimised image sensor calibration

Due to the close proximity of the sensor to the original, CIS based scanners produce extremely sharp, finely resolved panchromatic monochrome & colour images that are especially suited for technical document scanning & copying. Accurate CIS calibration is achieved with Colortrac's Dynamic Normalisation Application (DNA) using 16-bit super-sampled data to analyse and set the appropriate dark & light levels. To maintain optimum factory calibration the scanner automatically monitors and adjusts the CIS colour temperature to guarantee the best possible image reproduction. Colour images are scanned using 48-bit 'primary point digital data capture' or 16-bits for monochrome, with the best 24 and 8-bits selected as image data respectively. This improves shadow and highlight detail, with better differentiation of the 256 tone levels possible.

Advanced 2+4 all-wheel-drive Active Paper Transport (APT)

Documents are fed side justified into the scanner from the front, over a gently curved feed tray and detected by reliable optical sensors for automatic loading. The original is transported between dual, precision ground drive rollers and dual, all-wheel-drive contour rollers with high grip rubber tyres, ensuring optimum support and accurate positioning as the document enters the scan window. There, it engages with dual, belt driven pressure rollers that actively promote a smooth passage through the scanner. APT applies constant minimum force necessary for preserving your delicate originals, while achieving the required traction & accuracy to ensure images are pin-sharp, colourful and shadow free. Access to the scan glass and pressure rollers for cleaning is quick and easy via the hinged APT.

Superior accuracy, reliability and stitch stability

One of the advantages of CIS devices is the very short image path (~13mm) between the LED light source, the original being scanned and the image pixel sensor. This arrangement provides high levels of mechanical stability for maintenance free stitch, superb accuracy & compactness. The image path in CCD scanners is normally much longer (~900mm) and the use of camera lenses introduces magnification errors, chromatic and optical distortions in the image that can need correction to achieve acceptable accuracy & colour output. (For more information about the differences between CIS and CCD, see <http://www.colortrac.com>)

On-site upgrade from monochrome to colour and colour to express colour

SmartLF is the ONLY large format monochrome scanner available that can be upgraded to full colour specification in-situ. If you require monochrome but are unsure of your need for colour, buy the scanner that fits the current requirement and budget with the reassurance that you can upgrade to full colour when the need arises.

Instant, high quality scans from power-on, no warm-up, no waiting!

The integral LED light source is ready to go within 35 seconds from power-on with no warm-up or stabilisation time required. In comparison, fluorescent light tubes used by CCD scanners can take up to an hour to stabilise and the scanner may need re-alignment and re-calibration before use. SmartLF scans excellent quality images right after power-on and when not in use the scanner can be switched off to conserve energy and is conveniently ready to go - at the flick of a switch. The SmartLF Cx is friendly to our environment, using just 27 VA during operation (approximately 10% of the power used by CCD scanners) and even less, 16 VA, when on standby.

Compact, space saving design requires low power

SmartLF is a compact, lightweight & portable desktop scanner that will fit easily in any workplace environment. If preferred, floor stand or universal repro stand options are available that minimise the installed footprint of the scanner and position the media feed tray at a comfortable & convenient height for most users.

New!
Active Paper Transport system and easy access for glass replacement



Low maintenance costs, plug & play USB2

Each of the 5 CIS sections are kinetically mounted in a rigid beam scanhead behind their own, chemically toughened, impact & scratch resistant scan glass. If it ever becomes necessary, any one of the 7/8" x 9" scan glass plates can be replaced in less than a minute. The LED light source has a virtually unlimited life span and the CIS should never need replacement. Colortrac included software provides users with all the maintenance applications that are required to keep the scanner in prime condition and up-to-date with the latest f/w and driver versions. A logon to Colortrac's internet upgrade server is required; this can be done locally from the scanner PC or remotely at an on-line internet access point.

SmartLF Cx is supplied with a comprehensive suite of scanner operating and maintenance software. For applications where more features are required, optional Colortrac and 3rd party software is available to enhance the capability and performance of the scanning system.

SmartLF Cx software options at a glance...

Scanner Model	SmartLF Software (Scan / Copy / Email)	ScanWorks (Scan to File Pro)	CopySmart (Scan to Print Pro)	ISIS (EDC / EDM driver)
Cx 40m (mono)	✓	Optional	Optional	n/a
Cx 40c (colour)	✓	Optional	Optional	Optional
Cx 40e (colour express)	✓	Optional	Optional	Optional

SmartLF 'ready-to-run' software. Simple, easy to use and EFFECTIVE

This Scan to file, scan to copy and scan to email software is designed for operation by non-specialist users. Simply select the inputs required using the intuitive user options, place the original in the scanner and off you go! The image is displayed on screen during scanning to provide real-time quality and image boundary checking. Windows Image Acquisition (WIA) / Still Image Interface (STI) drivers, TIFF, JPEG & PDF file formats and scanner utility software with internet upgrade server is included in the basic plug 'n' play SmartLF package.



Colortrac software options for advanced users

Archiving applications ~ Professional scan to file

ScanWorks ~ uses 'scan-it-once' technology. With other scanners you have to perform multiple pre-scans of selected image areas to make image filter adjustments, rewind and then re-scan to get the desired end result. ScanWorks performs all thresholding and image enhancements in the computer on the ONE AND ONLY scanned image. Scan-it-once technology gives ScanWorks a HUGE workflow advantage. The scanner operator can perform quality assurance and adjustments in-line, 'right-first-time', instead of needing to re-scan QC failures off-line after batch scanning is completed.

ISIS ~ (Image & Scanner Interface Specification) is a technology for connecting high-speed document scanners to electronic document management (EDM) systems and is THE leading, enterprise-level scanning interface. Colortrac ISIS drivers are tested to be ISIS compliant and provide flexibility of choice with the benefits of a familiar user interface.

Reproduction applications ~ Professional scan to copy, print from file

CopySmart ~ designed with simplicity and ease of use in mind, CopySmart adopts a 'big button' philosophy to make copies in as few, and simple steps as possible. Optional previews can be made for WYSIWYG editing before printing and image files can be saved and re-printed. Consistent colour fidelity and accurate reproduction of fine image detail is provided by IT8 closed loop calibration to match the scan colours to the printer, ink and media. CopySmart uses Colortrac developed printer drivers optimised to produce fast, high quality prints direct from the scanner or from saved image files.

3rd party software applications

Colortrac Ltd Approved Software Products (CLASP), <http://www.colortrac.com/clasp.htm>

Whatever the application, SmartLF Cx 40 is an easy to use, customer installable scanner that provides high performance, great images and exceptional value for money ~ straight out of the box.

Colortrac SmartLF Cx 40 Large Format Scanners

There are three SmartLF Cx 40 large format scanner models with performance levels and features optimised for different applications. If your requirements change, the m and c models can be upgraded at your premises quickly and easily using our simple scanner upgrade process.

SmartLF Cx 40 Wide Format Scanner Model:

			m	c	e
Maximum Image Width	40in (101.6cm)	Image Length: not limited by scanner	✓	✓	✓
Maximum Media Width	44in (111.8cm)	Maximum Thickness: 0.08in (0.2cm)	✓	✓	✓
Scan Speeds ¹ in/sec	24-bit RGB@200dpi (400dpi Turbo) 8-bit greyscale & monochrome @200dpi (400dpi Turbo)		N/A 10.10	0.84 10.10	3.36 10.10
Scan Accuracy ²	+/-0.1% +/-1 pixel		✓	✓	✓
Optical Resolution	Dots per inch (dpi)		600	600	600
Maximum Resolution	Dots per inch (dpi)		3600	3600	3600
Resolution Range	Variable from 100 to 3600dpi in 1 dpi steps		✓	✓	✓
Scan Modes	16.7 million colour RGB (24-bit) 256 & 16 colour RGB adaptive indexed colour palette (8-bit & 4-bit) 256 level greyscale (8-bit) Black & White (1-bit)		N/A N/A ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓
Digital Image Processing	2D Intelligent Adaptive Thresholding (IAT) (1-bit mode) Fixed Threshold Black & White (1-bit mode) Dynamic Normalisation Application (DNA) with 16-bit super sampled data Precise factory set colour calibration with automatic monitoring and automatic colour temperature adjustment		✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓
	(Colortrac software options provide a comprehensive range of 'post scan' image processing filters and tools)				
Colour Space	Normalised / Linearised Raw RGB data		N/A	✓	✓
Colour Image Processing	Gamma, brightness, black & white point adjustment		N/A	✓	✓
Advanced 2+4 wheel-drive Active Paper Transport (APT)	Dual, precision ground drive rollers Dual, all-wheel-drive contour rollers with high grip rubber tyres Dual, belt driven pressure rollers for active media control during scans Accurate, zero maintenance optical media sensors & automatic media size detection		✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓
All digital image sensor technology	5 x Contact Image Sensors (CIS) with extended depth illumination Rigid beam scanhead with maintenance free CIS alignment 25,500 pixels (RGB triplets) 48-bit primary point colour image capture 16-bit primary point greyscale image capture Panchromatic Black & White		✓ ✓ ✓ N/A ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓
Light Source (in CIS)	Extra long-life LED, extended depth illumination, instant-on scan ability		✓	✓	✓
Optics (in CIS)	Solid state fiber optic image guide lens (1 per pixel)		✓	✓	✓
User status & one touch operation	LCD panel (scanner status, mode & settings), stop, forward & rewind Scan Copy		✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓
Scanner maintenance and user replaceable parts	Customer installable, plug 'n' play scanner Precision media calibration with DNA 16-bit super sampled data SmartLF scanner diagnostic software with internet upgrade server 5 x chemically hardened, scratch resistant scan glass, each 22x228mm		✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓
SmartLF software (included)	Colortrac SmartLF ready-to-run software with: Scan_to_file with real-time image viewer Scan_to_copy with real-time image viewer Scan_to_email with real-time image viewer Scanner maintenance software with internet f/w, s/w upgrade server Drivers, TIFF, JPEG, PDF file formats		✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓
Interface (included)	USB2 / 2m USB2 Cable/ local power cable / rear media supports Window Image Acquisition (WIA) / Still Image Interface (STI)		✓ ✓	✓ ✓	✓ ✓
Dimensions & Weight	54.8in wide x 6.7in high x 13.0in deep (140 x 17 x 33cm) 60Lbs (26.5kg)		✓	✓	✓
Power Requirements	90~250 VAC autosensing, 47~63 Hz, 27 VA(scanning) 16 VA (standby)		✓	✓	✓
Scan Software (optional)	ScanWorks ~ professional scan_to_archive & post scan image processing		✓	✓	✓
Copy Software (optional)	CopySmart ~ professional scan_to_print with IT8 colour matching		✓	✓	✓
EDC Software (optional)	ISIS™ Driver ~ connect seamlessly to EDM systems & databases		✓	✓	✓
Scanner Accessories (Optional)	Floor stand 30.7in high x 21.7in deep (78 x 55cm) 21Lbs (9.3kg) Paper catch basket (requires floor stand) PC & Flat screen mounting kit (requires floor stand) Universal repro stand with PC & Flat Screen mounting kit (75in wide x 61in high (MAX incl. scanner) x 29in deep (189 x 155cm x 74cm) 113Lbs (51kg) max permissible printer height 49in (125cm)		✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓

¹The scan rate is proportional across the full range of resolutions supported by the scanner. Actual scan times will depend on the host system performance. Colour scan speeds quoted are for documents less than 24in width (60.96 cm); wider documents scan half speed. Quoted top speeds are not guaranteed for all media types. ²The quoted scan accuracy is valid for media up to 0.8mm thick and may vary depending on the operating environment and the type & thickness of media. SmartLF scanners are tested using a Mylar target at 20°C +/- 3°C, 60% +/- 10% RH. Colortrac recommends a Pentium4 2.8GHz processor with hyper threading, 512MB RAM, USB2, Windows™ XP or 2000. Some advanced features may not be available in Windows 2000. Contact your supplier for advice on the optimum system configuration for your application. Operating environment: 15 - 30°C, 15 - 85% RH, non-condensing. Colortrac SmartLF scanners comply with CB, CE, FCC, UL and RoHS (due May 2006) standards and regulations. Colortrac Ltd makes no warranty of any kind with respect to the information contained in this document and reserves the right to change specifications without notice. Colortrac and Smart LF are trademarks of Colortrac Ltd. All other trademarks are the property of their respective owners. Copyright © 2006 Colortrac Ltd. Colortrac SmartLF wide format scanners are designed and manufactured by Colortrac Ltd.