



# Colortrac Scanners **enhanced**

A Versatile range of High Performance Colour & Monochrome Solutions now with enhanced features and exceptional performance for copying and scanning.



- Firewire - Plug 'n' Play
- Glassless Scan Path
- Vivid Colours
- Shadowless Scans
- Thick Media Support
- 2 Year Warranty
- Hardware Accelerated Monochrome
- Scanning, Copying and ICC Profiling Software Included

## Colortrac enhanced Scanners - Technical Specifications

	5480e	4280e	4860e	3680e	4260e	3640e
Resolution (selectable in 1 dpi steps)						
- optical (dpi)	400	400	300	400	300	200
- maximum (dpi)	2400	2400	1800	2400	1800	1200
Active Scan Area (inches / cm)	54 / 137.2 x unlimited	42 / 106 x unlimited	48 / 121.9 x unlimited	36 / 91.4 x unlimited	42 / 106 x unlimited	36 / 91.4 x unlimited
Maximum Document Width (inches /cm)	55 / 139.7	43 / 109.2	55 / 139.7	43 / 109.2	43 / 109.2	43 / 109.2
Scan Rates* inches per second @200dpi						
- colour	1.5"/s	1.5"/s	2.66"/s	2.0"/s	2.66"/s	2.0"/s
- greyscale (R2GB)	1.5"/s	1.5"/s	2.66"/s	2.0"/s	2.66"/s	2.0"/s
- greyscale (Greenscale)	4.5"/s	4.5"/s	4.0"/s	6.0"/s	6.0"/s	6.0"/s
- black & white	4.5"/s	4.5"/s	4.0"/s	6.0"/s	6.0"/s	6.0"/s
Imaging Technology	3 cameras	3 cameras	2 cameras	2 cameras	2 cameras	1 camera
All models use tri-linear CCD cameras of 7,500 pixels width Open Aperture, glassless image path for streak free scanning 36-bit Primary Point Digital Data Capture Fully automatic digital camera stitching (Front/Back & Left/Right) Isolated chassis and 3-point optics mountings						
Scan Accuracy	+/- 0.1% plus a digitising rounding error of +/- 1 pixel					
Media Handling	Maximum media thickness 0.47", 12mm, adjustable in 1mm steps / Twin pinch rollers					
Document Type	Opaque or Translucent					
Illumination & Optics	Twin long life colour balanced Daylight Blue tubes, Apochromatic Lenses					
Colour & Image Processing	Gamma & Brightness, Automatic Light Level adjustment Black & White Point adjustment ICC colour device characterisation profile (sRGB) Downloadable Indexed Colour Paletting Image Sharpening Hardware					
Monochrome Thresholding	2D Intelligent Adaptive Thresholding Hardware (IAT)					
Output Modes	24-bit RGB Colour / 256 & 16 Colour Optimised Palette 256 Level Greyscale (R2GB & Greenscale) / Black & White / Dithered Black & White					
Interface	FireWire (400Mb/s), Ultra Wide SCSI (upto 40 MB/s)					
Equipment	<b>5480e / 4860e</b>					<b>4280e / 4260e / 3680e / 3640e</b>
- dimensions	39" H x 67" W x 20" D 99cm x 170cm x 51cm					39" H x 56" W x 20" D 99cm x 142cm x 51cm
- weight	143Lbs, 65Kgs					132Lbs, 60Kgs
- operating environment	59 ~ 86 F, 15 ~ 30 C, 15 ~ 85 % RH, non-condensing					
- power requirements	90 ~ 250 VAC autosensing, 47 ~ 63 Hz, 250 VA					

**Colortrac Scanners Include** ScanWorks, CopyWorks, CopyWorks Profiler, BatchWorks, TWAIN (PC & MAC), Firewire Cable, Localised Power Cable.

**Options**  
Preditor, CopyWorks Plus, ReproWorks, Unix Software, Media Support Tray

**Minimum System Requirements**  
Pentium 1GHz Processor / 128MB RAM / 10GB Disk Space / 24-bit Graphics Display Card  
SCSI Interface, 68 pin half pitch Dsub connector with thumbscrews or firewire interface  
Windows™ 2000 / ME / XP  
\*excluding CopyWorks  
\* The scan rate is proportional across the full range of resolutions supported by the scanner.  
However, the actual scan times will depend on the host system performance.  
Contact your local supplier for advice on the optimum system configuration for your application.

**Paradigm Imaging Group**  
1590 Metro Drive, Suite 116  
Costa Mesa, CA 92626  
888--221-SCAN (7226)  
[www.scantopia.com](http://www.scantopia.com)

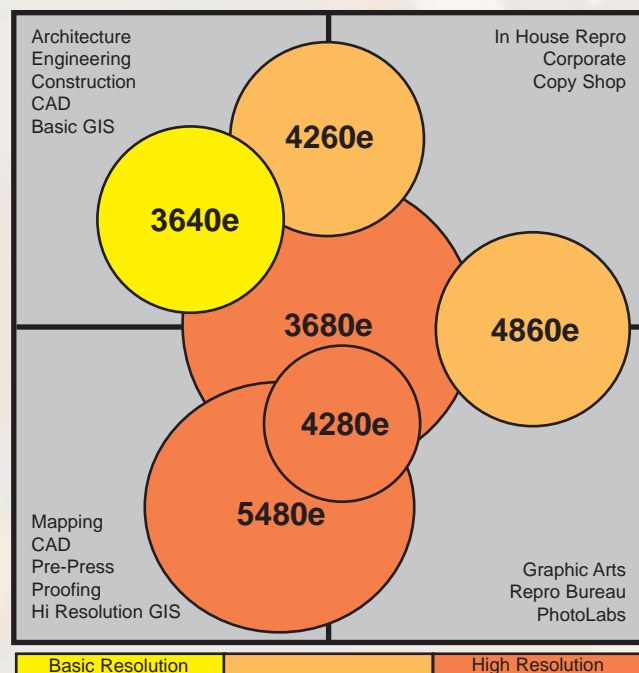
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# Colortrac Scanners **enhanced**

With over 50 years combined scanning experience ACTION Imaging Solutions bring together technology from 4 leading manufacturers (ANAtch, Colortrac, Tangent and Scangraphics). ACTION Imaging Solutions provide a complete system with all the scanning hardware and software you'll need for perfect scans and copies every time. Colortrac Scanners are designed to provide a flexible range of formats and quality options to meet your needs whatever the application. Whether it be maps, monochrome line drawings, detailed colour photographs or 12mm thick display boards you'll get accuracy and quality with maximum workflow.

**Formats and Resolutions.** The Colortrac scanners are available in a range of four carefully selected scan widths handling originals up to 12mm thick and three optical resolution options, providing the best performance and quality for any application. Use the market sector diagram as a guide to the optimum model for your application.



(see back page for detailed model specification)

**Open Scan Aperture.** Tired of streaks spoiling your scans and constant time consuming cleaning of scan glass? Acting directly on customer feedback, Colortrac developed a sophisticated glass-less media scan path to ensure high quality, 'streak' free, copies & scans that save end users time, money and reduce media waste. Any dust entering the open aperture, is outside the focus and not seen by the CCD cameras.

**Illumination.** Folded and creased originals could cause annoying shadowing effects on scans and copies but this is now eliminated by using a transparent material at the original path, maximizing the depth of illumination.

**Automatic Camera Alignment (AutoStitch).** Colortrac scanners have a fully automatic digital CCD alignment tool that enables users to perform camera to camera stitching as a simple software operation. There is no need to remove panels or to get your screwdriver out to align cameras. Once the alignment is set, ACTION Imaging's pivoted, three point mounted chassis and optics ensures that it stays SET, and stable, even when the scanner is moved or re-located within the premises.

**Colour Calibration.** All scanners use Dynamic Normalisation Application (DNA) with 12-bit super sampled data to analyze and automatically set 'dark' and 'light' levels. The colour data is sent to the application s/w in its raw form with no calibration scheme imposed that can limit the range of colours available from the scanner. Scan in industry standard sRGB colour space enabling colour management systems to process the data accurately and specifically for the rendering device selected, thus ensuring the best possible colour reproduction.



400Mb/s FIREWIRE and 40 MB/s Ultra Wide SCSI interfaces. Why limit yourself to one interface when you can have the use of either Firewire with the convenience of plug and play, long cable lengths still with data speed to spare or SCSI, the tried and tested professionals solution. Either method ensure that, given a fast enough PC and hard disk system, you can ACHIEVE the specified scanning speeds. Even if you don't need to with today's printer speed, your investment is protected with performance to spare for tomorrow's PC and printer developments.

- 36" width -1200 dpi:  
General A0/E graphics imaging and copying applications
- 36" width -2400 dpi:  
A0/E basic GIS & CAD scanning, archiving & graphics copying
- 42" width - 1800 dpi:  
B0 basic GIS & CAD scanning, archiving & graphics copying
- 42" width - 2400 dpi:  
B0 advanced GIS & CAD scanning, archiving & graphics copying
- 48" width - 1800 dpi:  
A0/E landscape format, general graphics imaging & copying
- 54" width - 2400 dpi:  
A0/E landscape, professional imaging services & LF copying



## Included Software

### ScanWorks - Scanning Software



- Intuitive viewing & editing
- Batch scanning with Presets
- Scan once, edit many, archive
- Works the way **you** like to work
- Automatic setup & consistent quality
- Maximum workflow efficiency

### Scanning

- 24-bit RGB, 256 & 16 colour optimised palette, 256 level greyscale, black & white
- Single Image or Batch file scanning with automatic original detection & scan
- Utilities for scanner calibration and fully automatic camera stitching
- ISO, American and Auto-size to original document

### User Interface & Document Viewing Tools

- Simple, intuitive user interface with Icon Buttons for most scan & imaging functions
- Real time 1:1 zoom view and pan while scanning
- Thumbnail view of entire image for zoom reference & navigation
- Loupe view with selectable 100, 200, 400% zoom

### Image Filtering Tools

- Sharpen / Blur filters
- Noise removal filters to reduce screen patterns etc.
- Tone Reproduction Curve editor for RGB or R.G.B
- Gamma, brightness, contrast and black & white point adjustment
- De-skew to any angle, Rotate 90° CW & CCW
- Crop to selected area, Mirror about Y axis
- Convert from current or saved imagetype to another
- Invert Greyscale or B&W images
- De-speckle with variable spot size
- Adaptive 2D and Fixed Thresholding for B&W
- Undo and Tool Reset buttons

### Archiving

- Auto indexing filenames
- Filename Browse / Create
- Presets - Create / Save / Open; proven scanner & filter setups
- Multiple industry standard raster file formats

### Batch Processing and Scheduling

- Batch process scanned archives with a choice of image filtering tools and file conversions.
- Use Batch Scheduler to run unattended batch processing when the workstation is available or for overnight runs.

### General Preferences

- Select units, language & temporary files location

## Software Options

### CopyWorks Plus

An enhanced version of copyworks with additional features.

- Text & Bitmap (logo) insertion via Pre-scan
- Simultaneous output to two local and/or networked LF printers
- Paneling with adjustable overlap margins
- CMYK sliders for fine adjustment of ink levels and colour reproduction
- Colour calibrated print from file

### ReproWorks

A high quality professional colour reproduction and printing application. Designed for the sophisticated user ReproWorks delivers the performance and quality that experienced colour users demand

### Preditor

A professional raster editor specifically designed for high speed viewing and editing of large colour, greyscale and monochrome images, optimised for easy to use raster editing, image clean up and drawing functions.

### ACTION Indexing Software

Making the capture of index data from scanned engineering drawings simple. Automatically displaying the title block so drawing information can be entered into the data window. Project information is stored in the common Microsoft Access 2000 format.

Contact your Action Imaging Solutions Dealer for pricing information.

### CopyWorks (standard) - Copying Software



- Single button operation
- ICC profile control
- Preview & crop
- Anyone can operate it
- Industry standard colours
- Increased user confidence

### Scanning

- Automatic selection of optimum scan resolution
- Colour photos, posters & prints, monochrome photos & greyscale, black & white drawings
- Image processing filters optimised for photographic, map or line art (text) originals
- ISO, American and Auto-size to original document

### Viewing

- Pre-scan
- Zoom & crop
- Black & white points and brightness adjustment

### Copying

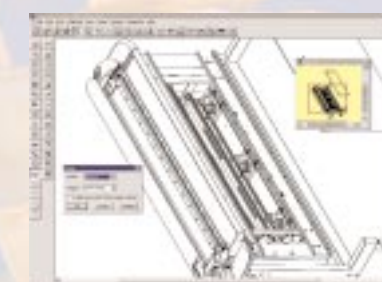
- HP, Epson, Encad, Canon and other printers
- Control for printer quality mode and resolution
- Simultaneous copy and archive of scanned image 'on-the-fly'
- Scaling 1 - 500% and 1 - 20 copies
- Step & Repeat with adjustable margin & mirror printing for back-lit or transfer media

### CopyWorks Profiler - ICC Profiling Software

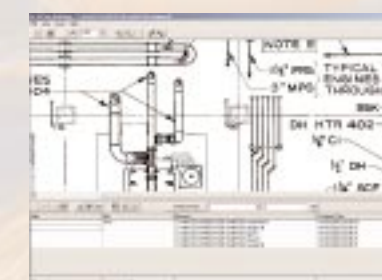
Create industry standard ICC profiles for your scanner and printer to ensure accurate colour reproductions of your originals, giving more versatility than a closed loop process and greater compatibility with enterprise wide colour management systems.

### TWAIN Interface

An industry standard TWAIN interface is provided for both PC and MAC\* platforms enabling data capture from your favourite TWAIN compliant software. (\*SCSI interface only)



Preditor Software



ACTION Indexing Software