Nexscan F4000.

The next generation of scanning performance.

HEIDELBERG

High productivity with the Nexscan F4000.

Scanning the future – today.

The next generation of scanning performance is available right now, and your future has never looked more productive. With our new Nexscan® F4000 flatbeds, Heidelberg® brings you a family of scanners that have been built from the ground up to meet your imaging needs well into the new millennium.

We based the Nexscan F4000 on the quality heritage of Hell – the primary innovator of scanning technology for the past 20 years. Next we incorporated the best of TOPAZ®, the scanner that set the benchmark for flatbed performance in the 90s, with more than 5,000 working throughout the world. Then we raised the bar even higher with the development of our exclusive Direct Capture Technology with our new xyVariLens™ optical system and Vertical Camera Concept. The result is the Nexscan F4000 family – the flatbed scanners that bring you unprecedented levels of quality, productivity, reliability and cost-effectiveness. Just what you'd expect from Heidelberg.

Direct Capture Technology.

The Nexscan F4000 also raises scanning quality to new heights, because it's the first scanner to deploy Heidelberg's new Direct Capture Technology (DCT). As its name implies, the innovation provides a direct line of sight between the image being scanned and Nexscan's CCD array. In operation, Nexscan positions its trilinear CCD array directly below your original for an unobstructed capture. That eliminates the need for mirrors or other optics that could distort the light path. Thanks to DCT, Nexscan records full-light intensity and complete image information in its purest form. The result: brilliant color scans, in perfect quality, all of the time. That makes the Nexscan F4000 family the perfect platform when you want high-quality results.

The new xyVariLens optical system.

Another visionary advancement is Nexscan's xyVariLens optical system. This new technology begins with the original TOPAZ VariLens feature, which was designed to improve depth of focus and imaging quality, and takes it to the next level.

The new advanced optical system's xy ability can transport the VariLens to any point on the xy axes. That means your scans are performed at the maximum resolution at each point on the scanning bed. And you get optimum imaging quality every time you click on 'scan'.

Prepress quality begins with your choice of scanner.

Flexible scanning – through thick and thin.

Smart mounting saves you time.

The intelligent mounting system used by the Nexscan F4000 family features exchangeable trays for reflective and transparency originals. That ensures consistently high productivity for you. Scanning and mounting are performed separately, so your Nexscan never has to wait for the next job.

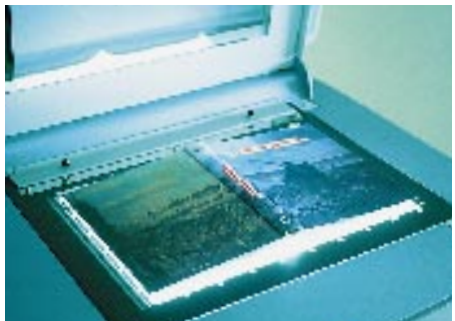
Also: film separations can be digitized with breathtaking ease and register accuracy. Your operators won't waste time inserting film into mounting foils, because Nexscan works with easy to use register strips. The innovation also enhances quality, since it puts the originals in direct contact with the scanning bed.

The Nexscan F4000 scans virtually any original that comes your way, whether it's color, black & white, line art, or a framed transparency – positive or negative. Size doesn't matter either. Nexscan's large scanning bed gives you the added capacity that makes all the difference. Thanks to its fixed, flat scanning surface, the Nexscan F4000 can also handle oversize reflective art and even four-up separations. With its transparency unit open, Nexscan can even scan three dimensional objects – all the way up to your ceiling. And printed originals can be descreened without having to put the optical system out of focus. With Nexscan in your corner, you will never have to turn down a job again.

Productivity at your clicks.

You control the Nexscan F4000 from your Power Macintosh™, with the assistance of the best scanning and image enhancement software in the business. LinoColor™ takes care of color management automatically, while providing intuitive tools that allow your scanning operators to maximize the image. Intelligent software assistants automate the scanning process and ensure first-rate scans every time. ColorAssistent™ takes care of the automatic image analysis. GeoAssistent™ automatically identifies originals. And JobAssistent™ automates batch and background scanning.

Nexscan F4000. A platform that has been fine-tuned to deliver maximum scanning speed. Direct Capture Technology and xyVariLens for the ultimate in scanning quality. Offline mounting to keep the scans flowing. These advantages all adds up to make our Nexscan your next scanner.



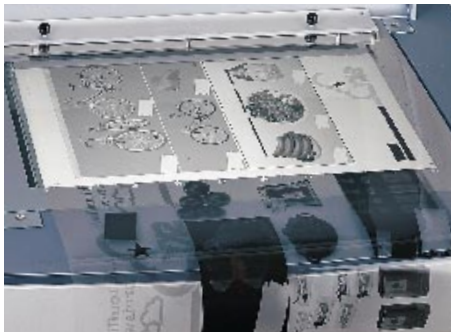
You can scan (virtually) everything with the transparency unit open.

The Nexscan F4000 can hold all transparency formats.

Nexscan F4100: Color scans are its strength.

Your marketplace is changing. You're seeing more short-run jobs, each with a larger number of color images, multimedia presentations and website developments. These are fields that allow the Nexscan F4100 to play to its strengths. Superb quality, high productivity, versatility, reliability and ease of operation – all are properties that you need to stay ahead of the game. That makes it ideal for printers of all sizes, trade shops, service bureaus, advertising agencies, graphic designers, publishing houses, newspapers, corporate communications departments and in-plants. Also photographers and stock photography companies will like the new versatility and flexibility of the new Nexscan F4100 scanner.

Mounting of separated films – fast and easy thanks to the register strip.



Even oversize scan originals are no problem for the Nexscan 4000.

Nexscan F4200: The multipurpose scanner.

If your scanner is part of your digital workflow, it needs to go beyond professional color scanning. The move to computer-to-plate technology calls for high-quality scanners capable of digitizing of film separations. That's why the Nexscan F4200 was developed. It combines professional color scanning with CopyDot and line art scanning. Dual CCD technology from Heidelberg makes the Nexscan F4200 the most powerful Copix scanner in its class. Plus, its additional black/white CCD array with 12,000 pixels enables the Nexscan F4200 to redigitize formats of up to 12.4 × 18 inch (315 × 457 mm) in a single scanning pass. We call this ›Real-One-Pass Scanning‹, which for you means maximum productivity. What's more, the Nexscan F4200 automates the most time-consuming aspects of the digitalization process. CopixAssistant™ in Nexscan's included LinoColor software automatically identifies the screen ruling, screen angle and basic film density. Meanwhile, RegisterAssistant performs semi-automatic registration of film separations. Both assistants enhance quality and simplify operation. Nexscan F4200 gives you more quality, flexibility and speed, while widening your profit margins.

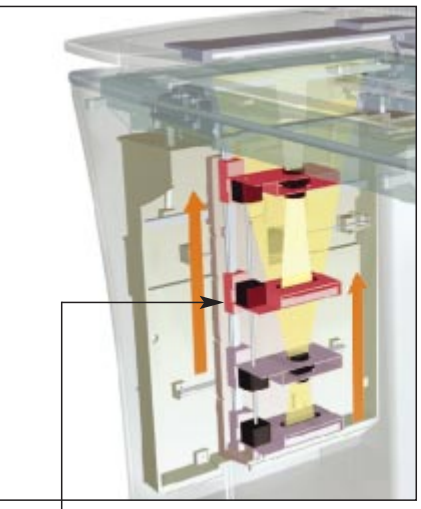
The features of the various models at a glance:

F4100

- Direct Capture Technology™
- Vertical Camera concept
- xyVariLens optical system
- Scanning format A3+
- Color/lineart 5080 dpi
- Dynamic range 3.7 D
- Max. density 4.0 D
- Color depth 16 bits linear

F4200

- Direct Capture Technology
- Vertical Camera concept
- xyVariLens optical system
- Dual-CCD Technology
- Scanning format A3+
- Color 5080 dpi
- Lineart 7040 dpi
- Dynamic range 3.7 D
- Max. density 4.0 D
- Color depth 16 bits linear
- CopixBooster™ board



The Nexscan F4000 Scanner family in Detail.

3-D originals.

Scanning of reflective originals at any height with lid open.

Integrated transparency unit

for optimum illumination. Fixed connection to the scanning unit ensures homogeneous light profile across the entire scan. The special design of the light units – 2 lamps with reflector – minimizes the effect of dust particles on the scan.

VariLens optical system.

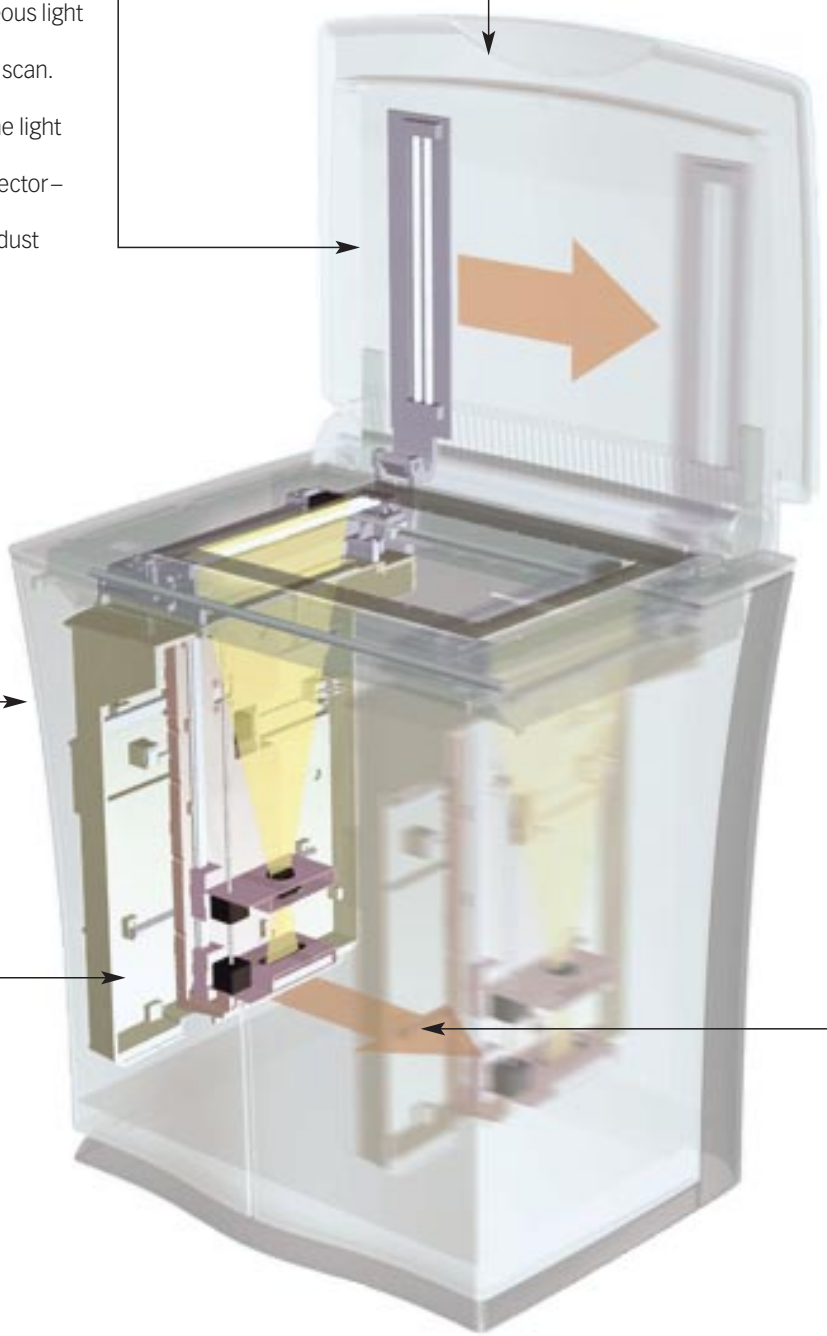
The VariLens optical system guarantees optimum sharpness and top reproduction quality for any imaging scale.

Elegant design.

Modern, ergonomic casing made of light and sturdy foam molding.

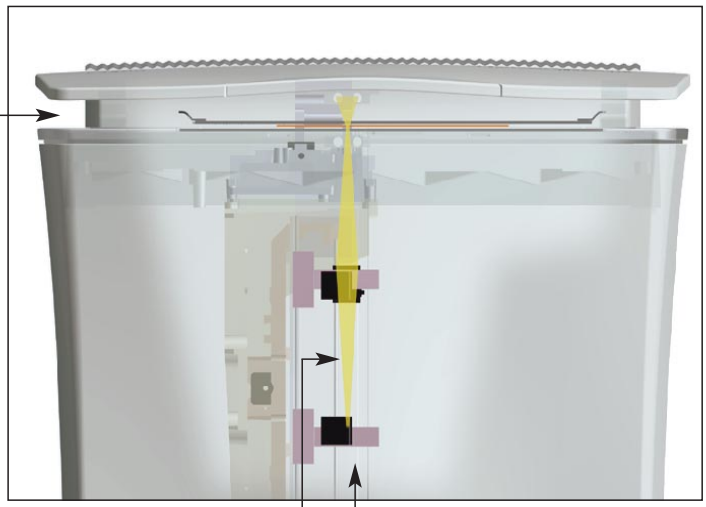
Design quality.

Sturdy cast aluminum chassis supports the optical system, preventing vibrations and increasing scanning precision and reliability.



Direct Capture Technology.

Brilliant color scans in superb quality thanks to the xyVariLens optical system and Vertical Camera Concept.



Outsize originals.

Flat mounting surface and fixed scanning tray for scanning outsize originals.

xyVariLens optic.

The xyVariLens optical system scans any point on the scanning area at maximum scanning resolution.

Vertical Camera Concept.

The light – and therefore the image information – reaches the camera directly without need for mirrors.

Dual-CCD Technology*.

The optimum CCD array for every application. Tri-linear color CCD array with 3 × 8000 pixels for color and contone scans. High-resolution mono-linear B/W CCD array with 1 × 12,000 pixels for line and CopyDot scans. (*Nexscan F4200).

Integrated light table.

Enables viewing of originals in the scanner.

Minimal footprint, small space required.

Ideal for office environments.

Nexscan F4000 Family: Technical Data

Nexscan F4200	
Scanner	Professional and multifunctional CCD color flatbed scanner for scanning work in color, lineart, descreening and CopyDot applications
Scanning principles	
Direct Capture Technology	Straightline signal path through VariLens optical system located directly below original
xyVariLens	New, enhanced VariLens optical system, can be positioned in x and y directions
Dual-CCD Technology	Trilinear color CCD array for color scans and high-resolution, monolinear CCD array for lineart and CopyDot scans
CCD	Heidelberg Dual-CCD Technology
Color/contone	Trilinear color CCD array with 3 × 8,000 pixels
Line/CopyDot	Monolinear black/white CCD array with 12,000 pixels
Image processing hardware	
CopixBooster	Hardware accelerator for CopyDot and line data in the scanner
AutoScaling	Special Hardware for infinitely adjustable scale calculations in the scanner
AutoSharpening	Special Hardware for optimum and high-speed USM calculations in the scanner
Max. scanning resolution	
Color/contone	Optical resolution 2000 l/cm (5080 dpi), interpolated resolution 4330 l/cm (11000 dpi)
Lineart	Optical resolution 2771 l/cm (7040 dpi), interpolated resolution 7038 l/cm (17600 dpi)
Mount for originals	
Universal tray	For all reflective/transparency originals, max. format 315 × 457 mm
Slide tray	Glassless mount for easy mounting of max. 35 framed 35-mm transparencies
Nexscan F4100	
Scanner	Professional and multifunctional CCD color flatbed scanner for scanning work primarily in color and descreening applications
Scanning principles	
Direct Capture Technology	Straightline signal path through VariLens optical system located directly below original
xyVariLens	New, enhanced VariLens optical system, can be positioned in x and y directions
CCD	
Color/contone/line/CopyDot	Trilinear color CCD array with 3 × 8,000 pixels
Image processing hardware	
AutoScaling	Special Hardware for infinitely adjustable scale calculations in the scanner
AutoSharpening	Special Hardware for optimum and high-speed USM calculations in the scanner
Max. scanning resolution	
Color/contone	Optical resolution 2000 l/cm (5080 dpi), interpolated resolution 4330 l/cm (11000 dpi)
Mount for originals	
Universal tray	For all reflective/transparency originals, max. format 315 × 457 mm
Nexscan F4100/Nexscan F4200:	**Technical data common to both scanners**
Software	
LinoColor	LinoColor scanning and repro software for Apple Power Macintosh computers
supported color spaces	CIELab, CMYK
supported file formats	TIFF™ Lab, TIFF RGB, TIFF G, TIFF B, TIFF CMYK, TIFF YCC, PS, EPS, DCS, PICT™
Max. scan format	315 × 457 mm
Max. format of originals	600 × 900 mm (4up film)
Types of originals	Transparency and reflective, color and black/white, contone and lineart, positive and negative, 3-D originals
Max. height of originals	Unlimited for reflectives, max. 20 mm for transparencies
Scaling range	
Color/contone/Lineart	20 – 2500 %
Scaling calculation	Infinite scaling with AutoScaling hardware in 0.1 % increments
Sharpness	AutoSharpening hardware in the scanner
Dynamic range	3.7 D, measured on the film output of a grayscale
Maximum density	4.0 D, measured on the film output of a grayscale
Signal resolution	16 bits per pixel and color (linear)
Interface	SCSI-2 for workstation connection
Power supply	85 – 132 VAC, 180 – 264 VAC, 47 – 63 Hz
Power consumption	Approx. 120 W
Ambient conditions	18 – 28 °C, 30 – 80 % relative humidity
Dimensions (W × H × D)	Approx. 855 × 990 × 710 mm
Weight	Approx. 90 kg
Approvals/Conformity	GS, UL, cUL, GOST/CE, FCC, ACN
Nexscan F4100/Nexscan F4200:	**Accessories common to both scanners**
Passe-partouts	
Universal passe-partout	Passe-partout for originals, max. format 315 × 457 mm
Passe-partout 35 mm	Passe-partout for max. 54 unframed 35 mm transparencies
Passe-partout 6 × 6 cm	Passe-partout for max. 20 transparencies of format 6 × 6 cm
Passe-partout 6 × 7 cm	Passe-partout for max. 15 transparencies of format 6 × 7 cm
Passe-partout 4 × 5 inch	Passe-partout for max. 6 transparencies of format 4 × 5 inches
Light table	Light table integrated into the scanner
Nexscan F4000 Copix option	
Scanners supported	Nexscan F4100 and Nexscan F4200
Nexscan F4000 Copix software	Software for redigitizing film color separations including following functions
Descreen	Descreening of film separations
CopyDot	Redigitization of screened film separations
MixedMode	Combination of Descreen and CopyDot
Merge	Automatic merging of up to 64 film separations
CopixAssistant	Automatic identification of screen definition, screen angle and basic film density in the original
RegisterAssistant	Automatic registration of film separations
Register systems	Bacher Plate System or register strips with Bacher perforation
Max. scan format	315 × 457 mm for reflective and transparency
Max. original format, Copix	600 × 900 mm for reflective and transparency (4up film)
Max. scanning resolution, Copix	
Nexscan F4200	Optical resolution 381 l/cm (968 dpi), max. output resolutions 1333 l/cm (3386 dpi)
Nexscan F4100	Optical resolution 254 l/cm (645 dpi), max. output resolutions 1000 l/cm (2540 dpi)

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xyVariLens	New, enhanced VariLens optical system, can be positioned in x and y directions
CCD	
Color/contone/line/CopyDot	Trilinear color CCD array with 3 × 8,000 pixels
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