

SUPER COOLSCAN 9000 ED

multi-format film scanner

SUPER COOLSCAN 5000 ED

35mm film scanner

SCANNER SPECIFICATIONS



COOLSCAN
FILM SCANNERS

At the heart of the image™

Manage your scans.
Enhance your images.



185^{*}sec SUPER COOLSCAN 9000 ED can scan a piece of 6X9cm film in only 185 seconds!

20^{*}sec SUPER COOLSCAN 5000 ED can scan a piece of 35mm film in only 20 seconds!

Key Features

- 4000 dpi** true optical resolution for all film formats
- Exclusive SCANNER NIKKOR ED** high resolution optics
- 16-bit A/D converter** for superior image reproduction in detail with 4.8 optical density max
- High-speed scanning** (35mm slide film: 40 sec., 6x9: 185 sec. full resolution scan time)
- Low-noise 3 line mono-chrome CCD** increases the scanning speed
- Exclusive rod dispersion LED illumination** for accurate consistent color
- Multi-format** for 16mm, 35mm, 120/220mm up to 6x9 cm film, medical slide glass, and Electron microscope film
- Digital ICE[®] Advanced™ with Digital ICE Professional™** for image restoration / adjustment (compatible with KODACHROME film in most scenes)
- Improved Nikon Scan 4** software with all new Scan Image Enhancer for automatic color/contrast compensation
- Highly Accurate Color Management System Multi-Sample Scanning** (2,4,8,16X) for increased detail
- IEEE1394 computer interface** (interface card included for Mac® OS & Windows®)

Accessories

- FH-835M** 35mm Mounted Film Holder (supplied)
- FH-835S** 35mm Strip Film Holder (supplied)
- FH-869S** 120/220 Strip Film Holder (supplied)
- FH-869M** 120/220 Film Holder (optional)
- FH-869G** 120/220 Strip Film Holder with Glass (optional)
- FH-816** 16mm Film Holder (optional)
- FH-8G1** Medical Slide Holder (optional)
- FH-869GR** 120/220 Film Rotating Holder with Glass (optional)

Key Features

- 4000 dpi** optical resolution
- Exclusive SCANNER NIKKOR ED** high resolution optics
- 16-bit A/D converter** for superior image reproduction in detail with 4.8 optical density max
- Fast 20 second** full resolution scan time (including image transfer to display)
- New low-noise 2-line CCD** doubles the scanning speed
- Exclusive LED Technology** or accurate consistent color
- New Digital ICE[®] Advanced™** for image restoration/adjustment
- Improved Nikon Scan 4** software with all new Scan Image Enhancer for automatic color/contrast compensation
- Highly Accurate Color Management System**
- Multi-Sample Scanning** (2,4,8,16X) for increased detail
- High-speed USB 2.0** interface

*Scan times are based on scanning with no options selected

Accessories

- MA-21** Slide Mount Adapter (supplied)
- SA-21** Strip Film Adapter (supplied)
- FH-3** Strip Film Holder (optional)
- FH-G1** Medical Slide Holder (optional)
- IA-20(s)** IX240 Film Adapter (optional)
- SA-30** Roll Film Adapter (optional)
- SF-210** Slide Feeder (optional)

	SUPER COOLSCAN® 5000 ED	SUPER COOLSCAN® 9000 ED
Media <i>(Negatives and positives, in color and monochrome)</i>	35mm slides and film (IX240) film with optional adapter Medical slides with optional adapter	35mm slides and film Medium-format slides and film 16mm film with optional adapter Medical slides with optional adapter
Optical resolution	Up to 4,000 pixels per inch	Up to 4,000 pixels per inch
Image sensor	3,964-pixel, two-line linear CCD image sensor	10,000-pixel, three-line monochrome linear CCD image sensor
Light source	R, G, B and Infrared (IR) LEDs	R, G, B and Infrared (IR) LEDs light source with rod disperser and light output slot
AD conversion	16 bits per color	16 bits per color
Density range	4.8	4.8
Output	Full color or grayscale at 8 or 16 bits per channel	Full color or grayscale at 8 or 16 bits per channel
Interface	USB 2.0	IEEE 1394
Power requirements	AC 100 – 240V, 50/60Hz	AC 100 – 240V, 50/60Hz
Dimensions (WxHxD)	3.8 x 6.8 x 12.4 in.	9.8 x 19.6 x 8.0 in.
Weight (approx.)	6.6 lbs	19.8 lbs
Scanning time	Preview: 11 sec. Scan*: 20 sec.	Preview: 13 sec. (35mm) Scan*: 40 sec. (35mm) Preview: 38 sec. (120/220mm) Scan*: 185 sec. (120/220mm)

*Includes time required to display the scanned image

NIKON SCAN 4 SYSTEM REQUIREMENTS

	Windows	Macintosh
CPU	Pentium® 300MHz or faster	Power PC G3 or later (G4 or later recommended)
OS	Windows® 98SE, Windows® Me, Windows® 2000 Professional, Windows® XP Home Edition, Windows® XP Professional pre-installed model	Mac® OS 9 (9.1 or later), Mac® OS X (10.1.5 or later) RAM* Mac® OS 9: 64MB or more (256MB or more recommended) Mac® OS X: 128MB or more (512MB or more recommended)
RAM*	128MB or more (512MB or more recommended)	70MB required for installation (200MB recommended), with an additional 200MB (Mac® OS 9) or 550MB (Mac® OS X) of free disk space available while Nikon Scan is running
Hard disk**	40MB required for installation (200MB recommended), with an additional 200MB of free disk space available while Nikon Scan is running	800 x 600 with 16-bit color (full color recommended)
Display	800 x 600 with 16-bit color (full color recommended)	Interface USB***: Built-in USB 1.1 ports, USB 2.0 IEEE 1394: Only built-in IEEE 1394 ports supported
Interface	USB***: Built-in USB 1.1 ports, USB 2.0 IEEE 1394: OHCI-compliant IEEE 1394 interface required	Others CD-ROM drive required for installation
Others	CD-ROM drive required for installation	

*More memory may be required depending on film type, scan size, resolution, bit depth, the number of scans performed in each session, the film holder or adapter used, and whether Digital ROC™ or Digital GEM™ are used. A system with more than the minimum amount of memory is recommended.

**More free disk space may be required depending on the film type and number of frames. Nikon recommends having as much free disk space as possible when running Nikon Scan.

***Depending on the type of interface installed, USB will operate at high speed (USB 2.0 only; maximum transfer rate 480 Mbps) or full speed (USB 1.1/USB 2.0; maximum transfer rate 12 Mbps). Computers running Windows® XP and Windows® 2000 Professional with a USB 2.0 interface support high-speed USB. For more information, consult the manufacturer. Users of Windows® XP, Windows® 2000 Professional or Mac® OS X whose computer is not equipped with USB 2.0 can install a RATO PCI/USB 2.0 interface board (for more information, visit Rato Systems English-language web site at <http://www.ratosystems.com/english/index.html>).

Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. © 2008 Nikon Inc. CDP-SCANNER-01-10/08



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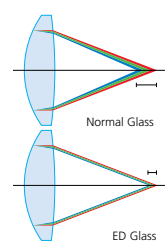
COOLSCAN

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Nikon COOLSCAN Core Technology

What differentiates Nikon COOLSCAN film scanners from other manufacturers' film scanners with similar specifications? Exclusive core technologies that Nikon has developed since the debut of our first scanner over a decade ago. **We call it the Nikon Difference.**



Scanner NIKKOR ED Lens greatly reduces chromatic aberration and image distortion, and delivers incredibly sharp images.



LED light source generates little heat, eliminating the risk of damage to film. It also requires no calibration or maintenance.



Nikon Color Management System provides consistently accurate reproduction of image data on monitors and in printouts. Each model is compatible with ICC version 4 standards.



Digital ICE⁴ Advanced™ comprises four cutting-edge image-correction components which help ensure superior image quality and operational efficiency.

Nikon's COOLSCAN film scanners offer 4,000 dpi true optical resolution and A/D conversion at up to 16 bits, for superior-quality digital images at an ultra-high resolution of **21 megapixels**.



Nikon's COOLSCAN lineup features a host of cutting edge image restoration functions. These progressive image correction tools give scanner users more freedom in image manipulation, and help ensure super high-fidelity reproduction and highly efficient operation. Take control with COOLSCAN film scanners from Nikon.

Scan Image Enhancer

Scan Image Enhancer provides one-touch image correction. Automatic brightness and color saturation adjustments with no complicated control settings, make it easy to produce images with optimal contrast.



Before

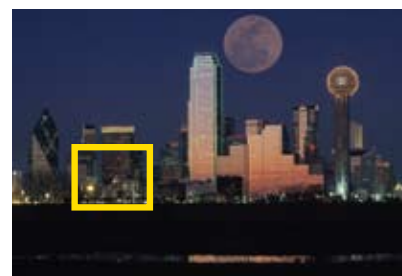


After



Multi-Sample Scanning

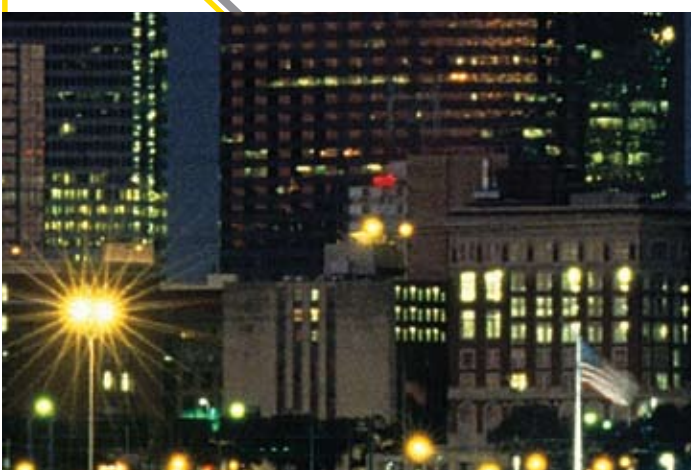
Multi-sample scanning helps produce rich, noise-free images. It removes virtually all the noise that can appear after only one scan. By making as many as 16 passes, it ensures faithful reproduction with smoother gradation.



Before



After



Digital ICE⁴ Advanced™ comprises four cutting-edge image correction components which help ensure superior image quality and operational efficiency.

Before



After



Digital ICE™
Image Correction & Enhancement.

Digital ICE™ removes defects or scratches on the surface of the film without losing any details or any other elements of the original image.*



Digital ROC™
Restoration Of Color.

Digital ROC™ brings faded color of old films or slides back to life. Enjoy vibrant, faithfully rendered images.



Digital GEM™
Grain Equalization & Management.

Digital GEM™ reduces the effects of film grain. The resulting images are sharp, clear and devoid of graininess.



Digital DEE™
Dynamic Exposure Extender.

Digital DEE™ helps reveal details hidden in shadows and highlights. It compensates for both underexposure and overexposure.

*Not compatible with non-chromogenic black & white film