

Nikon Scan 4 System Requirements

Windows	Macintosh
CPU Pentium® 300MHz or faster	CPU Power PC G3 or G5 (G4 or G5 recommended)
OS Windows® 98SE, Windows® Me, Windows® 2000 Professional, Windows® XP Home Edition, Windows® XP Professional pre-installed model	OS Mac® OS 9 (9.1 or later), Mac® OS X (10.1.5 or later)
RAM* 128MB or more (512MB or more recommended)	RAM* Mac® OS 9: 64MB or more (256MB or more recommended) Mac® OS X: 128MB or more (512MB or more recommended)
Hard disk** 40MB required for installation (200MB recommended), with an additional 200MB of free disk space available while Nikon Scan is running	Hard disk** 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
Display 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: OHCI-compliant IEEE 1394 interface required	Interface USB***: Built-in USB 1.1 ports, USB 2.0 Firewire: Only built-in Firewire ports supported
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 RATOC PCI-U3U USB 2.0 interface board (for more information, visit Ratoc Systems English-language web site at <http://www.ratocsystems.com/english/index.html>).

Note:
Scanning times and other performance-related statistics are based on Nikon internal testing results.

Digital ICE® Advanced™ is Digital ICE™, Digital ROC™, Digital GEM™ and Digital DEE™.
Digital ICE® Advanced™ are technologies developed by Applied Science Fiction.
Digital ICE Professional™ is technology developed by Applied Science Fiction.
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Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. March 2008

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WARNING

TO ENSURE CORRECT USAGE, READ MANUALS CAREFULLY BEFORE USING YOUR EQUIPMENT. SOME DOCUMENTATION IS SUPPLIED ON CD-ROM ONLY.



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Code No. 6CE41400 (0803/H)K



At the heart of the image

35mm/IX240 & MULTI-FORMAT FILM SCANNERS

SUPER COOLSCAN 9000 ED

SUPER COOLSCAN 5000 ED



SUPER COOLSCAN 5000 ED



SUPER COOLSCAN 9000 ED



SUPER COOLSCAN 9000 ED



SUPER COOLSCAN 5000 ED

Latest achievements from the leader in desktop film scanning

Dynamic, sophisticated core technologies. A history of excellence in digital imaging. World-renowned optics. These are the attributes that have made Nikon the dominant force in the desktop film scanning market.

Nikon's SUPER COOLSCAN scanners are available in two models, each offering superior optical components, color reproduction and image correction functions, along with incomparable operability. Both models, also possess defining capabilities that, when integrated with Nikon's advanced core technologies, make them the best in their class.

Whether for home use or for application in small- to large-scale business operations, Nikon SUPER COOLSCAN desktop film scanners get the job done — better and faster than any in the field.

SUPER COOLSCAN 5000 ED

The speed and performance of a leader

- High-quality, high-speed scanning of 35mm (135) format film
- Ultra-fast 20-second scanning
- 4,000 dpi optical resolution and 16-bit A/D converter
- Plug-and-play USB 2.0 interface for rapid transfer of image data
- Digital ICE⁴ Advanced™

SUPER COOLSCAN 9000 ED

Multi-format scanning at its finest

- High-quality scanning of multiple film formats (120/220, 35mm, etc.)
- 4,000 dpi optical resolution and 16-bit A/D converter
- High-speed IEEE 1394 interface
- High-speed scanning (35mm slides: 40 seconds; 6 x 9: 185 seconds)
- Digital ICE⁴ Advanced™ with Digital ICE Professional™



The Nikon Difference — exclusive core technologies for unrivaled performance

In the two decades since Nikon unveiled the first film scanner, we have accumulated considerable expertise and applied it to the development of exclusive, cutting-edge technologies. They serve as the foundation for the unparalleled performance offered by both SUPER COOLSCAN models.

Scanner Nikkor ED lens



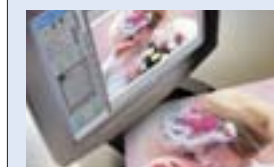
The single most important element in the production of high-quality scans is the lens. As you would expect from a world leader in optical technology, Nikon has incorporated lenses of the highest quality in our film scanners. Compared to ordinary glass, our ED (Extra-low Dispersion) lens elements are superior in edge-to-edge sharpness, definition and contrast, as well as color registration, saturation and accuracy. No other scanner manufacturer can match this level of optical performance.

Low-heat, high-accuracy LED light source



Most competitors' scanners use halogen or fluorescent lamps as light sources, but they require time to warm up and the heat they generate can cause damage to film. Nikon's SUPER COOLSCAN models are the only scanners to employ LEDs as their source of light. LEDs are a stable, precise light source requiring neither maintenance nor warmup time, and there's no risk of your film suffering heat-related damage. LED illumination also assures stability in color characteristics, which contributes to faithful reproduction.

Nikon Color Management System



The Nikon Color Management System, or Nikon CMS, provides consistently accurate reproduction of image data on monitors and in printouts. This powerful tool permits the manipulation of colors in the calibrated RGB color spaces before the data are transferred to the host application. Profiles detailing the color characteristics and the output device (monitor or printer) ensure high color-accuracy in almost any operating environment. Both of Nikon's SUPER COOLSCAN scanners are compatible with ICC (International Color Consortium) version 4 standards.

Digital ICE⁴ Advanced™



Nikon's world-renowned optics and innovative lighting help to optimize the effectiveness of Digital ICE⁴ Advanced™ components, making Nikon scanners and the automatic image correction technology an ideal match.

These latest editions of Nikon's COOLSCAN film scanners are the first ever to offer Digital ICE™, Digital ROC™, Digital GEM™ and Digital DEE™ all in one package. In addition to providing superb image correction, the power of these technologies also serves to improve the time- and cost-efficiency of your enterprise, regardless of scale.

Digital ICE⁴ Advanced™ are technologies developed by Applied Science Fiction.

Comprehensive Scanner Control

Progressive features for high-quality images

Color negative scanning



With SUPER COOLSCAN



With other film scanners

Multi-sample scanning



With multi-sample scanning (16x) Without multi-sample scanning
In order to clearly present the benefits of this function, the above images' gamma values have been adjusted.

Improved color negative scanning

Nikon has upgraded its negative film scanning algorithm, significantly boosting image quality. Details that were once hidden in the darker portions of an image are now revealed. Correction of color casts found in color negative film has also been achieved, and monochrome negative film scans now offer smoother, more natural gradation.

Efficient autofocus delivers crisp, accurate images

Scanning curled film strips and film mounts of varying thickness means that the film plane will not always be in the same position relative to the lens. This makes accurate focusing essential in producing superior-quality scans. Nikon's latest film scanners feature fast, precise autofocus, for crisp, clear images quickly and easily. For even higher accuracy, you can select a particular focus point on an image about to be

scanned.

Superior scans through Nikon's image control

By using image control features such as Unsharp Mask, Tone Curve and LCH editor during the scanning process, you are virtually guaranteed images of higher quality than would result from post-scan adjustments made using other image control software.

Multi-sample scanning for rich, noise-free images

The multi-sample scanning feature exposes details in the darker portions of photos while eliminating nearly all noise that can appear in those areas after only one scan. By making as many as 16 passes, multi-sample scanning —

only available with the SUPER COOLSCAN 9000 ED and 5000 ED — helps ensure faithful reproduction with smoother gradation.



Fast, efficient scanning

Quick operation

Simply turn on the power, and the scanner is ready for operation.

When using the SLIDE MOUNT ADAPTER MA-21, focus is achieved automatically once the scanner recognizes the type of film about to be scanned. You can begin scanning right away, as necessary exposure adjustments are made during image preview.

Batch scanning for increased productivity

You can easily initiate the automatic scanning of multiple frames. For example, using the STRIP FILM ADAPTER SA-21 with the 5000 ED enables batch scanning of as many as

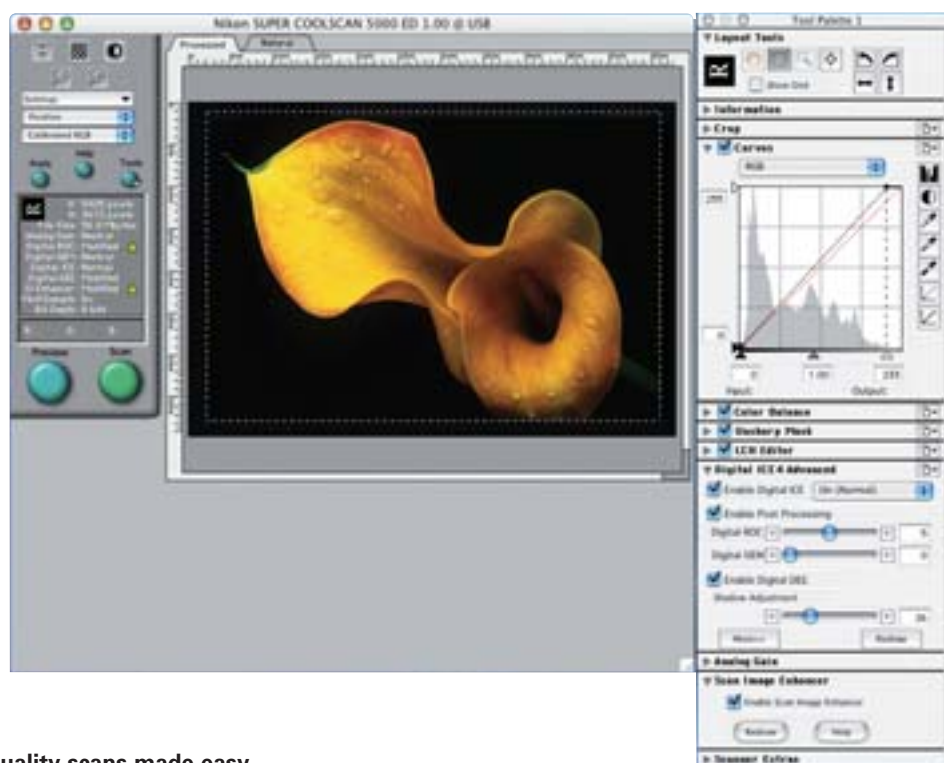
6 frames, or the 35mm STRIP FILM HOLDER FH-835S with the 9000 ED for up to 12 frames — and you can select different settings for each frame.

The 5000 ED can batch-scan up to 40 frames of an uncut roll of film (optional ROLL FILM ADAPTER SA-30), or up to 50 mounted slides (optional SLIDE FEEDER SF-210), giving you time-efficient, high-quality scanning capability.

The 5000 ED with SLIDE FEEDER SF-210



Simple, user-friendly operation



Quality scans made easy

Even first-time scanner users will be astonished at how simple quality film scanning can be. Nikon Scan 4 features an intuitive GUI (Graphical User Interface) that allows you to quickly and easily preview images and even make necessary adjustments before scanning.

Easy Scanning Guide

Nikon SUPER COOLSCAN film scanners come with an Easy Scanning Guide CD-ROM



which features a Flash™ animated explanation of the setup and operation of your new scanner. It also advises you on the quickest way to scan images based on the film type, the desired quality and the application.

Unmatched image restoration functions

Scan Image Enhancer for one-touch image correction

Without the trouble of complicated control settings, the Scan Image Enhancer automatically adjusts brightness and color saturation to produce images with optimal contrast.



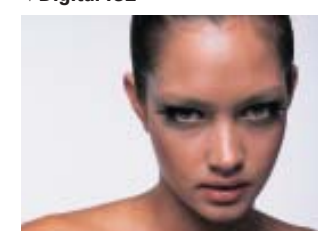
With Scan Image Enhancer

Without Scan Image Enhancer



Stunning image corrections with Digital ICE™ Advanced™ technology

Digital ICE™



Digital ICE™ ON



Digital ICE™ OFF

Digital ROC™

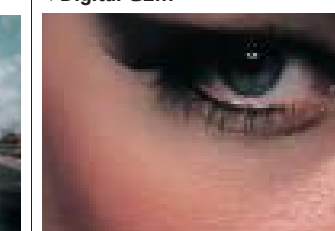


Digital ROC™ ON

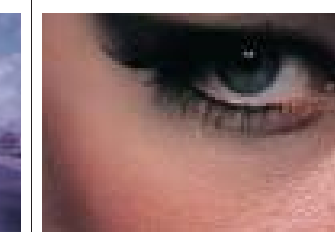


Digital ROC™ OFF

Digital GEM™



Digital GEM™ ON



Digital GEM™ OFF

Digital ICE™ (Image Correction & Enhancement)

Digital ICE™ works in tandem with Nikon's special LED illumination to remove surface defects like dust and scratches from a scanned image without altering the underlying composition, details or any other elements of the original image.

Digital ICE Professional™

The 9000 ED features Digital ICE Professional™ which is an advanced version of Digital ICE™ and compatible with Kodachrome film.

Digital ROC™ (Restoration Of Color)

Digital ROC™ restores colors lost through fading of the original film. After calculating the amount of color shift, it then instantly rebuilds and restores the deteriorated color values automatically. The results are faithfully rendered digitized images.

Digital GEM™ (Grain Equalization & Management)

Digital GEM™ reduces the effects of film grain. It reads the grain details in film, extracting all the vital data related to image quality and color. The resulting images are sharp, clear and devoid of grain clumping or graininess.

Notes:

- Digital ICE™ is compatible with both color film and color process monochrome film, but is not recommended for use with monochrome film.
- With the 5000 ED, when Digital ICE™ is applied to Kodachrome film, blurred images or localized loss of detail may occasionally occur, depending on the film used.
- With the 9000 ED, when using Digital DEE™ to scan medium-format film in a Windows® operating environment, "Crop" palette settings must be adjusted so that the file size is 169MB or less.

Digital DEE™ (Dynamic Exposure Extender)

Digital DEE™ makes its debut in Digital ICE™ Advanced™. This new feature helps reveal details that are sometimes lost in shadows and highlights. It compensates for the underexposure of backlit subjects or shaded areas as well as the overexposure of brightly lit areas.



With Digital DEE™



Without Digital DEE™



SUPER COOLSCAN 5000 ED

Speeding Into a New Era in Professional Film Scanning

The new SUPER COOLSCAN 5000 ED is the only choice for professional photographers who demand both quality and speed. Boasting a true optical resolution of 4,000 dpi and 16 bit A/D conversion, the 5000 ED provides amazing image quality, amazingly fast. An unmatched scanning speed of 20 seconds per image brings desktop scanning

to an entirely new level. Optional adapters enhance productivity further by enabling the automatic scanning of mounted slides and uncut rolls of film. The features, quality and speed found here make the SUPER COOLSCAN 5000 ED ideal for imaging professionals needing quality scans at the fastest speed possible.



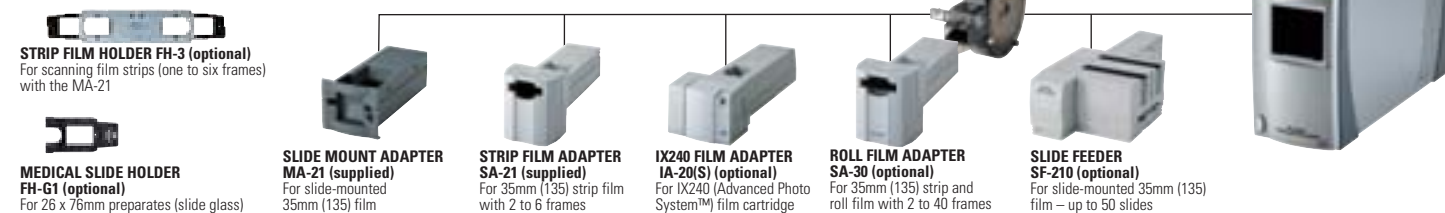
Major Features

- 4,000 dpi true optical resolution
- 16-bit A/D converter
- New Scanner Nikkor ED lens
- Amazingly fast 20-second scanning
- Newly-developed, high-quality 2-line CCD sensor
- New advanced image processing algorithm for color negative film
- Multi-sample scanning
- Quick AF & Quick Preview
- Scan Image Enhancer
- High-speed USB 2.0 interface
- Digital ICE⁴ Advanced™ (Digital ICE Quad Advanced)
- Optional SLIDE FEEDER SF-210 for up to 50 mounted slides
- Optional ROLL FILM ADAPTER SA-30 for up to 40 frames from a film strip

SUPER COOLSCAN 5000 ED Accessories

For efficient, versatile film scans

An impressive array of versatile adapters and holders enables users to scan a variety of film formats:



Unrivaled scanning speed

The SUPER COOLSCAN 5000 ED features a new low-noise, 2-line CCD sensor which dramatically reduces scanning time compared to conventional 1-line CCD sensors. You can now scan a frame of 35mm film at super-high resolution in only 20 seconds. In addition, autofocus speed has also been cut to a mere 4 seconds.

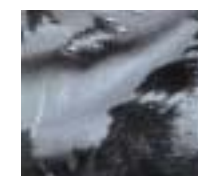


2-line CCD sensor

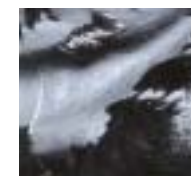
The 5000 ED's **Multi-sample scanning** function makes as many as 16 passes, revealing details in shadowy areas while virtually eliminating noise.

Stunning Image quality

With a 4,000 dpi optical resolution creating high-resolution, 21-megapixel image data from your 35mm film, you can create large, high-quality prints. The 16-bit A/D converter reads each color's gradation (RGB) in approximately 65,000 steps, so details which are sometimes lost in shadows and highlights will appear in your digital images. A multi-sample scanning feature eliminates random noise seen as pixel artifacts in dark, shadowy areas.



16-bit A/D conversion



14-bit A/D conversion

In order to clearly present the benefits of this function, the image's gamma values have been adjusted.

Accomplish more in less time

The 5000 ED's USB 2.0 interface dramatically increases data transfer speed, while various adapters help maximize productivity. The optional ROLL FILM ADAPTER SA-30 enables scanning of uncut film rolls, while the optional SLIDE FEEDER SF-210 offers continuous scanning of mounted slides. When used together with the batch scanning function, you can leave the 5000 ED unattended while it scans up to 40 images with the SA-30 and up to 50 slides with the SF-210. No other film scanning system offers this level of productivity.



The 5000 ED with ROLL FILM ADAPTER SA-30

Specifications

- Media**
Negatives and positives, in color and monochrome
- 35mm slides**
Slides with mounts 1.0 – 3.2mm thick, 49 – 50.8mm wide; optional SLIDE FEEDER SF-210 can be used to scan up to 50 slides with mounts 1.5mm thick
- 35mm film strips**
2 – 6 frames (2 – 40 frames with optional ROLL FILM ADAPTER SA-30); strips of 1 – 6 frames can be scanned with optional STRIP FILM HOLDER FH-3
- Advanced Photo System (IX240) film**
Cartridges of 15, 25, and 40 frames can be scanned with optional IX240 FILM ADAPTER IA-20(S)
- Preparates (slide glass for microscope)**
Prepared slides (26 x 76mm, 0.8 – 1.5 mm thick) can be scanned with optional MEDICAL SLIDE HOLDER FH-G1
- Aperture/Scan range/Effective aperture**
MA-21, SF-210
25.1 x 36.8mm/3,946 x 5,782 pixels/
Same as slide mount
SA-21, SA-30
25.1 x 38.0mm/3,946 x 5,959 pixels/
23.4 x 36.0mm
IA-20(S)
18.6 x 28.4mm/2,916 x 4,453 pixels/
16.1 x 27.4mm
- Scanning system**
Fixed film, movable plane single-pass optical scanning system
- Light source**
R, G, B and Infrared (IR) LEDs
- Image sensor**
Linear CCD image sensor with 3,964-pixel in two adjacent lines
- Color separation**
Performed by RGB LEDs
- Optical resolution**
Up to 4,000 pixels per inch
- A/D conversion**
16 bits per color
- Density range**
4.8
- Output**
Full color or grayscale at 8 or 16 bits per channel
- Focus**
Auto and manual; autofocus point selectable
- Interface**
USB 2.0
- Power requirements**
AC 100 – 240V, 50/60Hz
- Operating environment**
Temperature: 10 – 35°C (50 – 95°F)
Relative humidity: 20 – 60%
- Dimensions (W x H x D)**
96 x 172 x 315mm
(3.8 x 6.8 x 12.4 in.)
- Weight (approx.)**
3kg (6.6 lbs)
- Orientation**
Horizontal or vertical (with SF-210: horizontal only; with SA-30: vertical only)
- Scanning time**
(time to complete preview or scan when no options selected)
Preview: 11 seconds
Scan*: 20 seconds
*Includes time required to display the scanned image



SUPER COOLSCAN 9000 ED

A Breakthrough in Professional Multi-Format Film Scanning

The SUPER COOLSCAN 9000 ED's multi-format capability is specifically designed for imaging professionals. Scanning is possible for 120/220, 35mm, 6 x 7, 6 x 9, 16mm, electron microscope and other film formats. The 9000 ED's large-diameter Scanner Nikkor

ED lens, 3-line CCD image sensor and LED light source with rod dispersion have all been improved for enhanced image quality with faster scanning speeds. These premium features give you the leading edge in professional desktop imaging.



Major Features

- Multiple film formats (120/220, 35mm, etc.)
- 4,000 dpi true optical resolution
- 16-bit A/D converter
- Large-diameter new Scanner Nikkor ED lens
- Improved rod dispersion LED illumination
- High-speed scanning (35mm slide film: 40 seconds; 6 x 9: 185 seconds)
- Newly-developed, high-quality 3-line CCD sensor
- New advanced image processing algorithm for color negative film
- Multi-sample scanning
- Quick AF & Quick Preview
- High-speed IEEE 1394 interface
- Scan Image Enhancer
- Digital ICE⁺ Advanced™ (Digital ICE Quad advanced) with Digital ICE Professional™

SUPER COOLSCAN 9000 ED Accessories

Film holder variety covers multiple formats

An impressive array of versatile film holders enables users to scan a variety of film formats:

List of holders

35mm STRIP FILM HOLDER FH-835S (supplied)

- Strip type
- 35mm strip film with 1 to 12 frames, up to 2 strips
- 35mm MOUNTED FILM HOLDER FH-835M (supplied)**
- Mount size
- Width: 49-50.8mm (1.9-2.0 in.)
- Thickness: 1.0-3.2mm (0.04-0.13 in.)
- Up to 5 slides

120/220 STRIP FILM HOLDER FH-869S (supplied)

- Strip type
- 6 x 4.5 strip film with 1 to 4 frames
- 6 x 6 strip film with 1 to 3 frames
- 6 x 7/8/9 strip film with 1 to 2 frames
- 59 x 82mm electron microscope film
- 120/220 MOUNTED FILM HOLDER FH-869M (optional)**
- Film type
- 6 x 4.5/6 film with 1 frame
- 6 x 7/8/9 film with 1 frame

120/220 STRIP FILM HOLDER WITH GLASS FH-869G (optional)

- Strip type
- 6 x 4.5 strip film with 1 to 4 frames
- 6 x 6 strip film with 1 to 3 frames
- 6 x 7/8/9 strip film with 1 to 2 frames
- 59 x 82mm electron microscope film
- 120/220 FILM ROTATED HOLDER WITH GLASS FH-869GR (optional)**
- Strip type
- 6 x 4.5 strip film
- 6 x 6 strip film

6 x 7/8/9 strip film

- 59 x 82mm electron microscope film
- 24 x 58mm panoramic film
- 24 x 65mm panoramic film
- 16mm FILM HOLDER FH-816 (optional)**
- Film type
- 16mm film up to 3 strips
- MEDICAL SLIDE HOLDER FH-8G1 (optional)**
- Slide glass type
- 26 x 76mm preparates (slide glass) up to 3 frames
- Max. total thickness: 2mm



Nikon Scan 4's comprehensive image control options afford you freedom in image quality control and enhancement, helping to ensure high-quality professional printing.

Pro quality and multi-format versatility



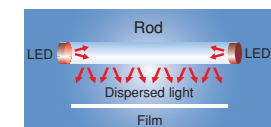
3-line CCD sensor

The SUPER COOLSCAN 9000 ED scans a variety of film formats, including medium format (120/220), 35mm (135) format, 16mm, electron microscope and preparates (glass slides for a microscope). To reproduce the high definition of medium-format films, the 9000 ED boasts special optics and a new 3-line CCD image sensor. The Scanner Nikkor ED

lens has a larger, specially designed diameter which ensures high-resolution reading of medium-format film while delivering unparalleled optical purity to the CCD.

Crisp, vivid, color-true images

With 4,000 dpi optical resolution and 16-bit A/D conversion, astoundingly vivid images are produced. For example, using 8,946 x 8,946-pixel image data in a 6 x 6 format, over 65,000 steps per color (RGB) are at the 9000 ED's disposal. The LED light source is also specially designed for multi-format scanning, with LEDs for each color (RGB plus IR) using dispersed rod illumination (see illustration). The result is a smoother reproduction of picture grain and more accurate reading and rendering of every color.



Rod dispersion LED illumination

Expert image control features

The SUPER COOLSCAN 9000 ED with Nikon Scan 4 provides you with comprehensive digital darkroom capability. Enhanced LED illumination has enabled the incorporation of Digital ICE Professional™, which is effective with Kodachrome film. With only a few pre-scan adjustments, you can achieve high-quality images that remain faithful to the original color composition — something other image-control applications struggle with. Nikon's Color Management System (CMS) also ensures that every shade and hue can be accurately reproduced in nearly all operating environments.

Specifications

- Media**
- Negatives and positives, in color and monochrome
- 35mm film**
- 1 – 2 strips of 1 – 6 frames; up to 3 frames of 24 x 48mm or 24 x 65mm panorama film can be scanned with optional 120/220 FILM ROTATING HOLDER WITH GLASS FH-869GR
- 35mm slides**
- 1 – 5 slides with mounts 1.0 – 3.2mm thick, 49 – 50.8mm wide
- Medium-format film**
- 1 – 4 frames (6 x 4.5), 1–3 frames (6 x 6), or 1 – 2 frames (6 x 7, 6 x 8, or 6 x 9)
- Medium-format slides**
- Slides with mounts 1.0 – 3.2mm thick can be scanned with optional 120/220 MOUNTED FILM HOLDER FH-869M
- 16mm film**
- 1 – 3 strips of 1 – 20 frames can be scanned with optional 16mm FILM HOLDER FH-816
- Preparates (slide glass for microscope)**
- 1 – 3 prepared slides (26 x 76mm, 0.8 – 2mm thick) can be scanned with optional MEDICAL SLIDE HOLDER FH-8G1

Aperture/scan range (pixels)

- FH-835S**
- 25.4 x 37.5mm/4,000 x 5,904
- FH-835M**
- 37.5 x 25.6mm/5,905 x 4,032
- FH-869S, FH-869G**
- 6 x 4.5:** 56.9 x 42.5mm/8,964 x 6,696
- 6 x 6:** 56.9 x 56.9mm/8,964 x 8,964
- 6 x 7:** 56.9 x 70.0mm/8,964 x 11,016
- 6 x 8:** 56.9 x 77.5mm/8,964 x 12,204
- 6 x 9:** 56.9 x 83.7mm/8,964 x 13,176
- 5.9 x 8.2:** 56.9 x 83.7/8,964 x 13,176
- FH-816**
- 15.0 x 21.48mm/2,362 x 3,384
- FH-8G1**
- 46.02 x 24.0mm/7,248x 3,780

Scanning system

Fixed optical, movable media, parallel single-pass scanning system

Light source

R, G, B and Infrared (IR) LEDs; light source with rod disperser and light output slot

Image sensor

10,000-pixel, three-line monochrome linear CCD image sensor

Color separation

Performed by RGB LEDs

Optical resolution

Up to 4,000 pixels per inch

A/D conversion

16 bits per color

Density range

4.8

Output

Full color or greyscale at 8 or 16 bits per channel

Focus

Auto and manual; autofocus point selectable

Interface

IEEE 1394

Power requirements

AC 100-240 V, 50/60 Hz

Operating environment

Temperature: 10 – 35°C (50 – 95°F)

Relative humidity: 20 – 60%

Dimensions (W x H x D)

249 x 498.5 x 202 mm

(9.8 x 19.6 x 8.0 in.)

Weight (approx.)

9kg (19.8 lbs)

Scanning time

(time to complete preview or scan when no options selected)

35 slide (with FH-835M)

Preview: 13 seconds

Scan*: 40 seconds

120/220 slide (with FH-869S)

Preview: 38 seconds

Scan*: 185 seconds

*Includes time required to display the scanned image