

DIGITAL DIRECTIONS

Nikon Super Coolscan

4000ED and 8000ED Scanners

Jack and Sue Drafahl



Above is an old faded slide with color shift toward red. Embedded ROC technology in the Nikon scanner corrects color, GEM reduces grain, and ICE removes scratches.





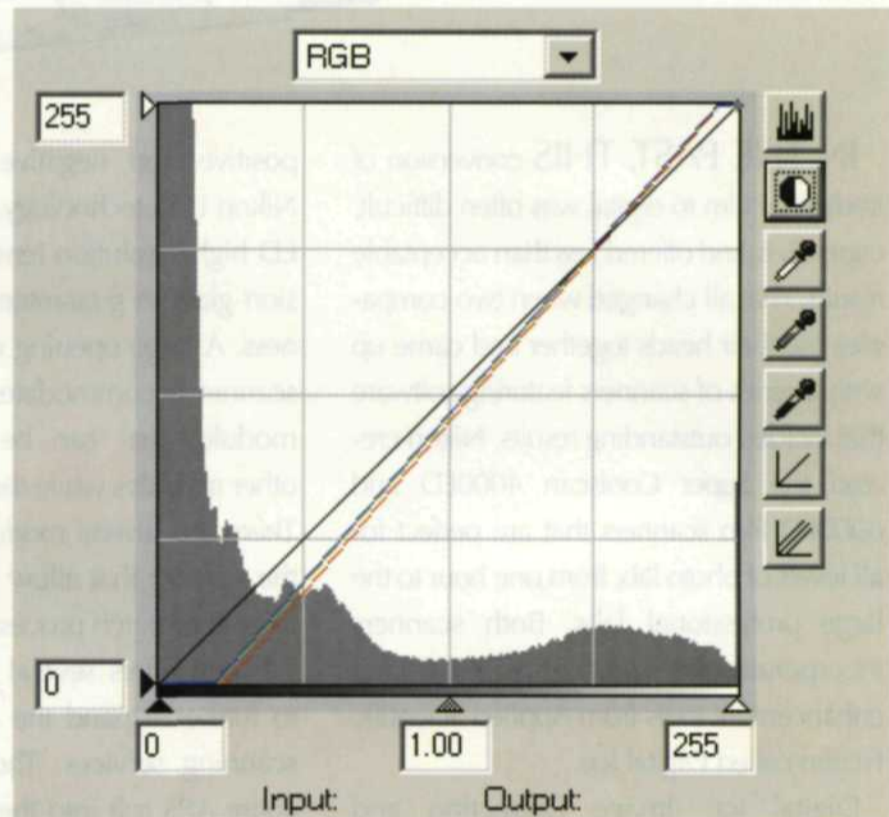
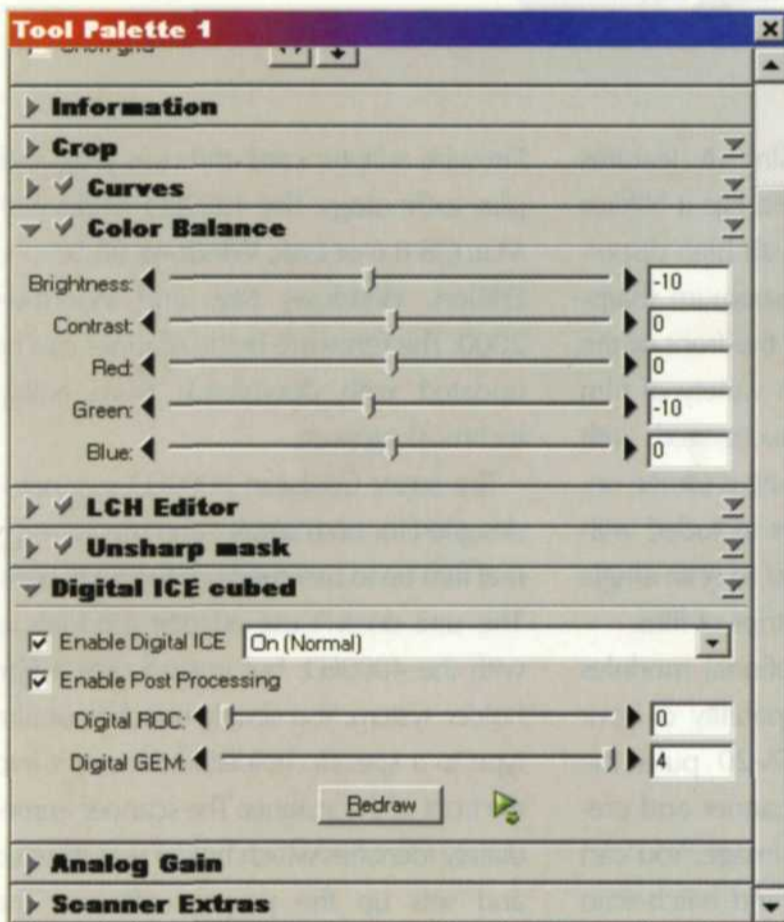
On this 2 1/4 transparency dust and scratches are first located and then removed with digital ICE.



Fades and color shifts are common in old transparencies.



The Torrey family freshens up with the application of Applied Science Fiction's embedded ROC/ICE technology.



Nikon Coolscan scanner menus

Although digital photography is quickly becoming a part of the photographic world, it is important to remember that there are billions of film images that have been taken and still more to come. These film images aren't going to just disappear because digital is becoming a popular way to take pictures. There is a huge resource of potential jobs that lie in shoeboxes, photo albums, slide trays, and negative pages. Your job as a photo lab is to educate your clients and provide an increased awareness of how images can be converted to digital and shared with friends and family.



(left) Optional bulkscan module for Nikon 4000ED scanner

(right) When a film holder is inserted into the 8000ED, the scanner immediately identifies the holder, and sets up the proper software.



(left) The complete setup for the Nikon 4000ED scanner. This model uses adaptor modules.



IN THE PAST, THIS conversion of traditional film to digital was often difficult, expensive, and offered less than acceptable results. That all changed when two companies put their heads together and came up with a series of scanners featuring software that yielded outstanding results. Nikon created the Super Coolscan 4000ED and 8000ED film scanners that are perfect for all levels of photo lab, from one hour to the large professional labs. Both scanners incorporate the suite of sophisticated enhancement tools from Applied Scientific Fiction called Digital Ice.

Digital Ice (Image Correction and Enhancement) is designed to remove small scratches, fungus, dust, and fingerprints during the scan. ROC (Reconstruction of Color) technology gives new life to images that have faded and lost color over time. This scanner software analyzes the color layers and reconstructs the color to closely match the original photo. GEM (Grain Enhancement and Management) is used when you scan high-speed film or pushed film that has a large grain pattern. Using different levels of grain reduction you can achieve a perfect combination of reduced grain, while still maintaining image detail.

The Super Coolscan 4000ED is designed to handle both 35mm and APS

positive and negative film. It features Nikon LED technology, and has a Nikkor ED high-resolution lens with high dispersion glass to guarantee maximum sharpness. A large opening on the front of the scanner accommodates a variety of film modules that can be exchanged with other modules while the unit is turned on. There are several modules included with the scanner that allow you to scan single images or batch process strips of film.

Nikon offers several optional modules to further expand the capability of your scanning services. The IA-20 pulls the entire APS roll into the scanner and creates thumbnails for each image. You can then adjust each image, and batch-scan selected images from the roll. If you want to scan large amounts of slides at once, you can use the optional SF-200 Slide Feeder. This module has a tray that feeds, scans and re-stacks up to 50 slides at a time. The SA-30 Roll Film Adapter allows you to feed unmounted film from 2-40 frames for unattended batch scanning.

The 4000 dpi optical resolution of the 4000ED has a dynamic range of 4.2 to provide detail throughout the image. It allows you to scan images up to 3,946 x 5,959 pixels in as little as 38 seconds. Computer communication is with a

Firewire adapter card and uses plug-and-play technology. The 4000ED works with Mac OS 8.6 or later, Windows 98 Second Edition, Windows Me, and Windows 2000. The firmware in the scanner can be updated with downloads from Nikon technical support.

The Super Coolscan 8000ED scanner is designed for both small- and medium-format film up to 6x9 medium format images. This unit doesn't use adapter modules as with the 4000ED, but instead uses a film holder system. You simply match your film type to a specific holder and insert it into the front of the scanner. The scanner immediately identifies which holder was inserted and sets up the proper software. The 8000ED scanner system supports more than 20 different film and film strips, including scientific microscope slides.

This scanner has a 4.2 dynamic range, 4,000 dpi optical resolution and can scan an area up to 10,000 x 13,860 pixels. The resulting scan can result in 48-bit images with file sizes up to 790 megabytes. The 8000ED also uses Firewire board communication, and works with Mac OS 8.6 or later, Windows 98 Second Edition, Windows Me, or Windows 2000.

Which scanner you choose will depend on the customer base you service. Keep in

mind that although both scan 35mm slides, the 4000ED is best suited for large groups of slides using the batch scan module. On the flip side, the 8000ED can scan a wider selection of film formats, including 120 and 220 films. You may even find that your lab needs both models!

It seems to be getting harder and harder to earn a living and make ends meet. Photo labs need to become more creative and expand the direction of their lab services. Most customers cannot visualize what a service can provide; therefore it is up to you to physically show them. Provide comparison samples that show scans before and after the use of the ICE technology. Everyone will be amazed, even your professional clients. You need to remember that image restoration is becoming big business. When customers discover that old photos, once thought to be beyond repair due to scratches and fading, are now salvageable, they start rooting through shoeboxes. With a little promotion, you will quickly find that your scanner will be your busiest employee, and you don't have to pay it overtime.

Although it takes longer to scan an image using the ICE technology (at least twice as long), it is worth the added time. The results are cleaner, less editing is necessary and in the end, the customer is happier. Isn't that what it's all about?

In talking with several photo labs that use the Nikon scanners, we found that many have created services beyond normal scanning. One lab found a niche for scanning in old negatives and slides and creating a digital slide show on CD or DVD. These automated slide shows were then duplicated for friends and relatives to view on their TV or computer screens.

Another lab took advantage of the APS attachment and created digital files from customers' APS film so they could share digital files and inkjet prints with friends and relatives. Some labs use project software to import the customer's scans and create calendars, greeting cards, and wedding invitations. There is no end to the possibilities when you put your mind to it.

Let's face it: The economy today is not

what it used to be. It will recover, but it might take some time for it to really turn around. This means that every equipment purchase needs to have sure-fire return income potential to be considered. The key to remember is that the scanner is your connection between the digital and traditional worlds. The teamwork of

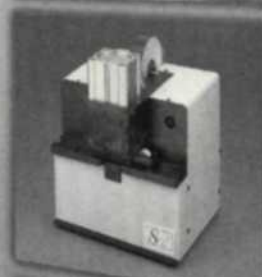
Nikon's Super Coolscan 4000ED and 8000ED scanners with their Digital ICE technology makes quality and cost effectiveness a reality. ●

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