

# Cropped 6x4.5 scan.

# Jack and Sue Drafahl

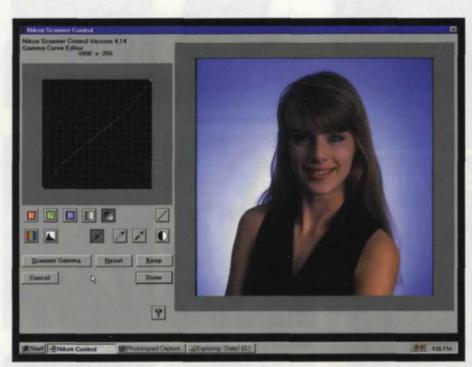
Good communication has always been the key to a healthy relationship between photographers and their photo labs. Digital photography has made effective communication even more vital. In the digital photo world there are so many new variables that a

job can quickly head the wrong direction if not explained or prepared properly.

One of the most important questions a lab asks the photographer is "What are you going to do with your digital photo?" You might be slightly insulted and say that it is none of the lab's busi-

ness. Relax, because in order for the lab to provide the highest quality output from your digital file, they must know its end purpose. This will determine exactly how the images are handled during the digital lab process.

Some photographers have little or no



Adjustment of Gamma curve in film scanner for transparency scan.



Color balance of 6x4.5 scan in Photoshop.



Resize of image in Painter 3D.



Hi-res scan of 6x4.5 transparency.

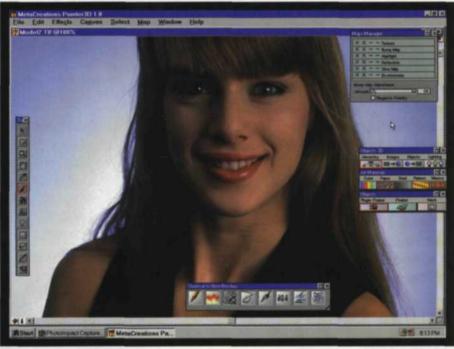


Image editing of 6x4.5 scan in Painter 3D.



Color adjustment in Painter 3D using MetaCreations Plug-in filters.

digital capabilities. They will require the lab to convert traditional images to digital and then output them to inkjet paper or film. In this case, the photographer should rely on the recommendations made by lab. They have invested a lot of time and money determining the best combination for quality digital output.

Other photographers have the capability of converting a traditional image to digital via a scanner. They also have the software capability to crop and make image adjustment and just require the services of the lab for the final output. Here is where many of the problems arise. Many things differ from system to system that often cause problems when the digital files are brought to the lab for final output. The following are some of the problem areas that photographers should be prepared to address before creating digital files.

## File Size

When you have determined exactly how the image is going to be used, you will then know what size to scan the photo. Small digital output images require small file sizes and large file sizes are necessary to maintain quality in large image output. Each lab usually has its own recommendation for file size to correctly match print output, so ask before scanning images. For example, in our lab we scan 35mm images to 8 MB for 8 x 10 prints, 18 MB for 11 x 14, and 36 MB for 16 x 20 digital color prints. Some labs also require a specific page size and DPI setting for correct image output, so communication wards misunderstandings. Remember that in the end, file size always controls the overall image quality.

# Page Size and Aspect Ratio

This problem seems pretty straight forward, but often creates some of the biggest misunderstandings. You must set up the proper page size to match the final output. If you don't, quite often you will have a surprise when you pick up your job. If you want a 35mm slide made from your scanned file, then set up the page size to match the 35mm aspect ratio (i.e., 1:1.5). If you want to output the image to an 8 x 10 print, then the 35mm aspect ratio will cause the image to be cropped. It is

better for you to make the cropping determination when you scan in the image, rather than leaving it to the discretion of the lab. Not only may you not get the end product you envisioned, but you may also have to pay extra for additional editing time.

#### **Monitors and Color Balance**

Most editing systems today have controls over monitor color balance and brightness. It is very critical that what you see on your edit screen matches the output from the digital lab. This means



that you will have to adjust your scanner, monitor, and editing program to match the image output from the digital lab. This can only be accomplished by taking one of your test files and comparing it to the lab output image. You will have to keep adjusting your monitor until you have a match. Be sure that once you have your system balanced with the lab's, don't mess with it again

or you will be back to square one.

# Gamma Control of Shadow Detail

The one area where digital can lose over traditional is in the shadow areas. Digital output devices don't all output the same way, so be prepared to run test images in order to adjust the gamma curves. Generally, color negatives can be

scanned with little adjustment, but transparencies usually require an exposure increase in the shadow areas.

# RGB Vs. CMYK

You will need to know if the lab requires the scanned images to be RGB or CMYK for output. If CMYK is required, make sure that you edit in CMYK mode. This will require a 32-bit color video card, but once this mode is set up properly, you will be able to see the difference between RGB and CMYK on screen. Be sure to ask your lab if they require any special settings for use with their CMYK output devices.

# **File Format**

There are literally hundreds of file formats possible for photo digital files. The one you use isn't necessarily the one that the lab will accept. Don't assume that your "TIFF" format (more than 50 types) is the same one the lab uses. Talk to your lab and tell then what you have, and ask them what they can accept.

# **File Transport**

So now that you have scanned and edited your images, you are ready to take them to the lab for output. How do you get them from your system to theirs? There are over a hundred types of devices for storing and transporting images. There is no way that a lab can have them all, so you need to check to see what will work.

If you cross platforms (MAC to PC or PC to MAC) be sure that you are truly compatible. We have found that the most universal transport media is CDs created on a CD writer. You can buy blanks for under \$3 today and each can store over 650 MB of data.

We have only scratched the surface concerning possible problems between the photographer and the digital lab. There is hope for harmony—ask questions, listen carefully, make notes, and don't assume anything. The key to making it all run smoothly is proper communication.

Jack and Sue Drafahl are freelance journalists/photographers living in the Pacific Northwest. They have owned and operated a custom lab and service bureau, Image Concepts, for many years. They can be reached at: concepts@pacifier.com/.

