

Chapter 6 - Computer Concepts and Legal Applications

Photographs

Supporting your clients' cases with photographs of accident scenes or of construction defects can be critical to your success in the case. There are three methods of having photographs digitized for use in a computer presentation or for insertion in a pleading. Paper photos can be scanned in, a regular roll of film can be sent to a film developer for digitized processing, or a digital camera can be used and photos can be downloaded into your computer.

Paper photos can be scanned into a computer and then used in a trial presentation program or in a number of low cost presentation programs. All that is needed is a scanner and scanning software. The quality of the scanned photo will depend upon the scanning equipment and the software. There are three scanners one can use for this purpose: film scanners, flatbed scanners, and snapshot scanners. Film scanners will take 35 mm slides and convert them to computer images. The best all-around scanner is a flatbed scanner that will handle documents and photos generally up to 8 1/2 by 14. Snapshot scanners are small, fast, and nearly foolproof. See also Chapter 2, *Hardware and Software, Scanners*.

Many firms outsource the scanning of photos to service bureaus. You can shoot conventional film and have the film-processing store convert the film into paper photos and/or have the film converted to Kodak Photo CD. You will not need to buy additional equipment, and the cost is around \$20 per roll. The Photo CD will also provide an archival storage for your images. It may take a while to get the images back and if you will be shooting a lot of film then the costs can add up quickly.

However, as a practical matter most photographs are being taken by digital cameras and instantly uploaded to computers for insertion into presentation programs.



Recently, low cost digital cameras have been introduced that enable anyone to take pictures and download them immediately into a camera in a digitized format. The cost of \$5,000 per camera for quality color digital photos has dropped to approximately \$100 per camera. Photo image editing software such as Photo-Shop™ (www.adobe.com) enables the user to touch up or manipulate the image. Within minutes, one can snap a picture, download it into a computer, edit it, print it, and present it in a legal proceeding.

The digital camera captures pictures electronically that your computer can upload and use. Shooting with a conventional film based camera or a digital camera are virtually identical except for two differences. One, all photographic images taken with a digital camera are recorded, not on film but on built in memory chips, interchangeable cards, floppy disks, or small hard drives. And two, once the pictures are taken, they can be immediately viewed on a television screen or monitor.

There are a number of advantages of a digital camera over a traditional film camera.

1. **Speed and Portability.** It is possible to shoot a picture with a digital camera, transfer the image to a computer, edit it if you desire and send it by e-mail from your handheld PC or desktop as an attachment to anywhere in the world within minutes.
2. **Convenience.** Filmless cameras completely eliminable the need for processing and printing as well as scanning to a CD-ROM, hard drive or floppy.
3. **Cost.** The cost is dropping rapidly, and remember that you will not have to spend any more money on film, processing and scanning.
4. **Preview.** Many cameras let you see a preview of the picture in a thumb nail size window on the camera,
5. **Reproduction.** Since digital cameras are stored as digital data - zeros and ones - they will reproduce the same every time. There is no degradation in quality, no matter how many copies you make. Nor will you have to worry about losing originals or the colors fading after many years.

Digital cameras come in a wide variety of sizes, shapes, and configurations. The most popular kind are portable, battery powered handheld types that look like conventional cameras. Some are very limited point and shoot cameras while others have interchangeable lens, auto focus capability, etc.

Some additional considerations:

- Resolution of the digital camera is important
- Additional computer RAM
- Additional hard drive space
- High-resolution video board

Your choice of which camera to purchase will depend upon your needs. If you are looking high-resolution quality pictures that can be reproduced or blown up for trial, then you will want a high-resolution camera. Technically speaking, photo image quality is determined by resolution (how much detail is in a picture, which is expressed in how many pixels are in the file), sharpness (what is in focus, and how crisp lines are), color (how accurate and realistic does it look), and exposure (having the right amount of light so the image doesn't look too bright or dark. The trick is to buy a camera that is capable of producing the resolution, sharpness, color and exposure required for your need without paying for extra image quality that you will not use.

Given the wide range of filmless cameras available and their cost, it is necessary to try out the cameras to see how complicated they are, what the pictures will look like in your presentation, and how easy it is to download the images. The best test is to actually take a picture and insert it into your presentation or printed material to see how it looks.

After you have the picture in your computer, you can use a color laser or inkjet printer to print color copies or send the file to a poster board printer for blow-ups.