Photography • DTP
Flatbed Scanning

Scanning or digitizing is the process of converting an image into numerical (digital) information which can be stored, read, and manipulated by computers. Most scanners use a type of "reflection" technology—where light is projected at an image and the light that is reflected back (like a mirror) is recorded by a light sensitive device (like an eye). There are a variety of scanning or digitizing products on the market today (B&W and/or color); flat-bed scanners, 3D scanners, drum scanners (professional quality), slide scanners, hand held scanners, paper only scanners, etc... There are also digital cameras which record scenes directly to a disk or RAM (random access memory). The technology to convert video from a camcorder or VCR tape to digital movies (a series of still frames) is also available at an ever decreasing cost!

The advantages of digital images are numerous—ease of storage, transport, unlimited manipulation, along with the ability to be sent anywhere almost instantly (electronically: e-mail, FTP). Combine that with the long term cost savings of not using photographic chemicals, papers, and darkroom equipment and digital images become very cost effective. The greatest disadvantage has been the quality of the final image. It has often fallen far short of what could be accomplished by traditional methods. However, as the technology continues to develop, the quality gap between traditional and electronic is shrinking rapidly!

The first step in the digitizing process is to scan black & white or color images. Once again the development of software and hardware have made this a relatively simple task. However, if you are a professional involved in some area of computer imaging you would know that there is nearly an infinite range of visible colors, and that each of these colors is seen subjectively within their environment—meaning the color blue on a gray background looks a different shade of blue when positioned on a green background AND that each individual usually perceives color differently. Computer equipment is very similar in this regard—each individual piece of equipment (computer, scanner, monitor, printer, software package, etc..) inputs, manipulates and displays color a little differently, making true color reproduction the 'Holy Grail' of computer imaging.

All this means one thing; one step scanning is simple— but quality color reproduction is a task which requires a great deal of attention to detail and experience is an extremely valuable asset.

The following are instructions for scanning typical flat color prints. If presentations can be eye catching in black & white only; with color they can be dazzling. *Jpr*

In the following assignment you will begin the digital journey...

Scan your photograph.

1. Using **VistaScan™**—scanning software found under the programs menu (only on the computer with the scanner attached), scan your photograph following these steps.
   a) You MUST turn the scanner ON — BEFORE you load the program. Switch is located on the back right hand side of the scanner.
   b) Remove the protective tissue, CLEAN glass if necessary. DO NOT USE PAPER TOWELS!
   c) Place your photo/image FACE DOWN with the edge of the photo aligned with the edge of the glass.

2. CHECK the Scan Controls, the following items should be selected:
   a) Flatbed (Reflective)
   b) True color, RGB (or appropriate selection for material being scanned)
   c) 300dpi
   d) No Descreen
   e) No Filter
   f) 100%

4. SCAN your photo / image
   a) Click the Preview button ONCE!
   b) When the preview scan is completed, use the rectangular marquee selection tool to select final image area to be saved.
   c) Be sure that you have selected an area that includes ALL photo, NO crooked edges or portions of border. Use the magnifying glass (zoom) tool if unsure.
   c) After the selection marquee has been drawn, select SCAN.

5. SAVING your Scan.
   a) VistaScan will automatically save your scan as a TIFF (Tagged Information File) file called TMP.1, in the folder called NewScans located on the computer you are working on. (Be sure to pay attention to the number after the prefix TMP. If others have scanned images before you, yours might be TMP.7 or some other number!)
   b) When scanning is finished, open the NewScans folder found on the 'C' drive and MOVE your scan into your network folder!
   c) BE SURE that you Quit the program and turn the scanner off, if no one else is to be using it!
   d) Log Off and move back to your normal workstation.