

Using a Scanner

How will you be using the scanner?

Think about how you will be using the scanner before you purchase one. Will you be scanning documents with numerous pages? Single-page documents? Photos? Slides? Book or magazine pages? There are scanners for one or more of these uses, but possibly not for all of these uses.

If you purchase a separate scanner and printer, you can upgrade or replace either one if there is a desire or need. Good quality scanners and printers can be purchased for under \$100 (each). If you buy a multi-purpose machine the scanner and printer are built-in and can't be upgraded or replaced without replacing the entire unit. Repairing a (HP, for example) multi-purpose machine may cost over \$300.

A flatbed scanner can scan documents one page at a time. It can also scan photographs of any size up to 8.5" by 11". This is important when scanning membership cards or small photos. A flatbed scanner can also scan a book or magazine page, and part of a newspaper page.

Sheetfed scanners have a document feeder for feeding many pages. The document feeder can also lift up so the scanner becomes a flatbed scanner for scanning small photos, books, or magazines.

Some multi-purpose machines may have a minimum document size, such as 4.7x7.9. This would, for example, prevent the scanning of 3.5x5 and 4x6 photos. Also, some multi-purpose machines cannot scan a book or magazine page. Other multi-purpose machines are a combined copier, flatbed scanner, and color printer. These machines can scan 3.5x5 and 4x6 photos and book and magazine pages.

Purchase a scanner that is easy to use

Every scanner comes with software for use with the scanner. The user interface of the software is different for each scanner manufacturer, and is very important in determining the ease-of-use of the scanner. Visioneer (<http://www.visioneer.com/dynahome.html>) is a manufacturer of scanners that have an excellent user interface, which means they are easy to use in scanning documents and photos.

Scanner interface to the computer

The scanner will probably connect to the computer through the parallel (printer) or USB interface connector. Some scanners have both interfaces. The USB interface is needed if you want to print at the same time as you scan. The parallel interface can be used if you won't be scanning and printing simultaneously. Most recent computers have a USB connector. Make sure your computer has a USB connector before buying a scanner with a USB interface.

Read the system requirements for the required operating system, memory required, and to determine if a CDROM is required.

Connect the scanner and install the software

Read the manual for information on the procedure for connecting the scanner and installing the software.

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The manual contains information on the installation and use of the scanner and associated software.

Options

Read the manual for information on the scanner and software options; understand them; and use them to obtain better images with smaller sizes.

Some common options are:

Resolution: The first thing you need to consider before scanning an image is the resolution you'll need. The higher the resolution, the larger the file size. There's no use in scanning something at a high resolution when it will be viewed on a low resolution device.

To best determine the resolution you need for your scan, you need to know how you plan to display the final image. Once you have that information, use the following guidelines.

PC monitor	96 ppi
300 dpi laser printer	100ppi
600 dpi laser printer	150 ppi
720 dpi inkjet printer	150 ppi

Size of scanned area, and Cropping: Scan only the area you want scanned by setting the scan dimensions, or by choosing the “crop” option to automatically size the scanned area.

Gamma: If a scan appears darker or lighter than normal, chances are it's because of the device's gamma settings (the relationship between the input levels and the output levels). If your software lets you correct the gamma settings, always do this before you attempt to solve the problem with the much less sophisticated brightness and contrast.

Brightness: Adjust the brightness for the best image.

Black and white, greyscale, color scans: Use black and white for text material, greyscale for low-file-size images, and color for color, large-file-size images.

Output file format: The file format can greatly effect the file size. The two primary formats used with today's scanners are TIFF and JPEG. The use of the resulting scan will dictate the file format you should use. Whenever you scan an image that you'll print, use the TIFF format. The compression method used in the TIFF format is lossless, which means that you'll have a smaller file without loss of detail. If you're going to be using the scan for the Web or possibly as an email attachment, you might use the JPEG format, or you can use the TIFF format and then post-process your scan, using a program such as Paint Shop Pro.