Multimedia Commons Scanning

How to start

Scanning may be done through many applications.

You should choose the application based upon how you will use the scanned image.

How will you use the image?	Application	Method	File types saved as
photo-composite for printing	**Adobe PhotoShop**	*File: Import: CanoScan 9950F*	.psd (also .jpg .tif .bmp .gif .eps .pct .pdf)
print or email image by itself	**Adobe Acrobat Professional**	*File: Create PDF: From scanner*	.pdf (also .jpg .tif)
photo-composite for the web	**Adobe ImageReady**	*File: Import: Twain Acquire*	.psd (also .gif)
used directly in Microsoft apps	**Microsoft Office**	*Insert: Picture: From Scanner or Camera*	.doc .ppt and others

For example, this is how you would start in Adobe Acrobat:
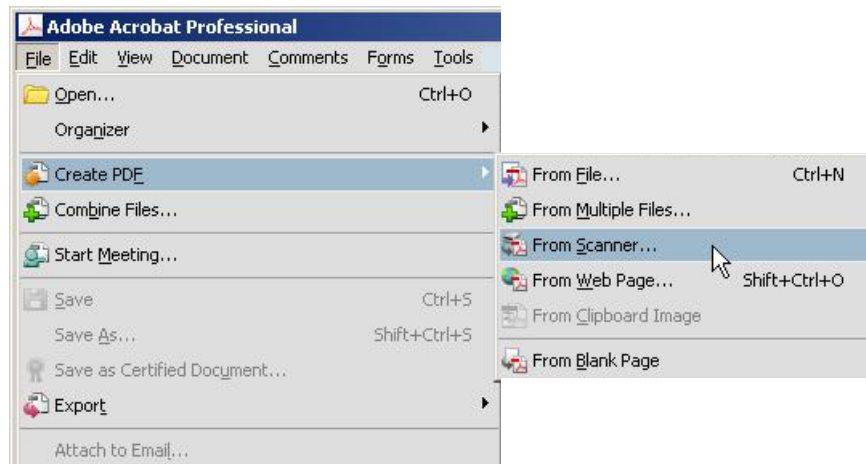
With most applications, the methods listed in the table start the native scanning software (ScanGear CS) and then you scan your document using the native software. With Microsoft Office and some other applications, you can scan without actually seeing the scanning software, although as an advanced option, the scanning software can still be invoked.

You would use the native scanning software to have more control over the scan. The next part of this tutorial provides a description of the "Simple Mode" interface to the scanning software.
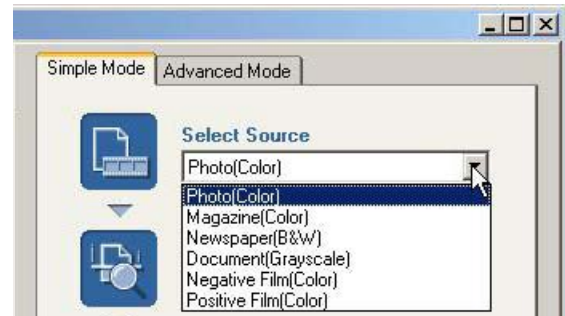
Simple Mode Functions

When using the scanning software,
the Simple Mode allows you to scan
in just 5 simple steps.
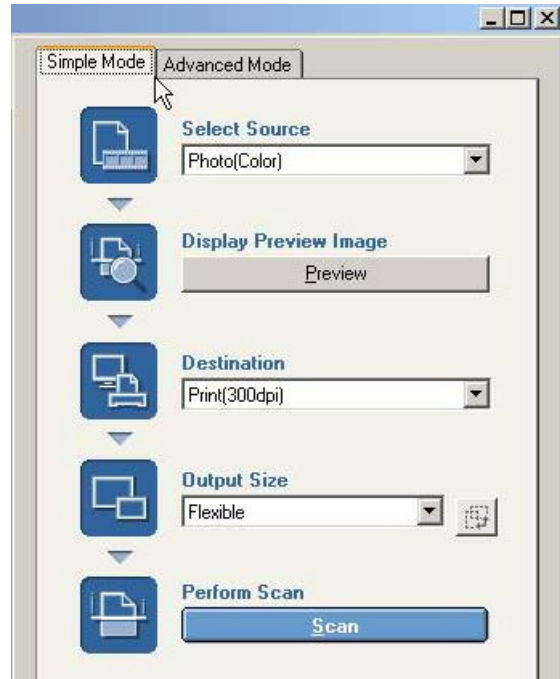
Step One: Select Source

Select the source type
according to the following table:

Source Type	How to Use
Photo (Color)	To scan color photographs
Magazine (Color)	To scan color magazines
Newspaper (B&W)	To scan text or line drawings
Document (Grayscale)	To scan color images or text in monochrome. Especially appropriate for scanning high-resolution monochrome images
Negative Film (Color)	To scan 35mm color negative film strip
Positive Film (Color)	To scan 35mm color positive film strip or slide

Step Two: Display Preview Image

When you click the Preview button, the image is automatically cropped (auto crop) to the selected paper size.

Step Three: Select a Destination

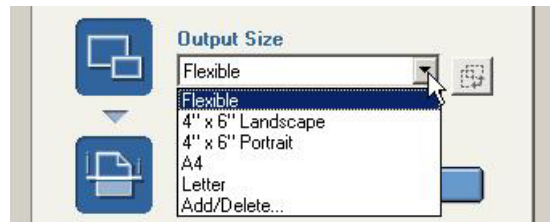Select the destination according to the following table:

Destination Type	How to Use
Print (300dpi)	Select this if the scanned image is to be printed
Image display (150dpi)	Select this if the scanned image is to be viewed on a computer display

The options available in the Output Size category (next step) will vary with the Destination option you select.

Step Four: Set the Output Size

Sets the size at which the scanned image is printed or shown on the display. Flexible (the default) works well for most scans. Selecting Flexible scans the item at the same size as the original, however, selecting Flexible enlarges 35 mm film to the Photo Size (4"x6").

Destination	Output size options
Print	When the Print (300dpi) destination is selected, you can set the output size to match standard paper formats. The scan area is enlarged or reduced to fit the output to the specified paper size.
Image	When the Image display (150dpi) destination is selected, the horizontal and vertical dimensions of the output size can be selected in pixels (the individual picture elements that form the image). The horizontal and vertical pixel figures correspond to common display (computer monitor) sizes so images can be used unaltered as desktop wallpaper images. They also correspond to digital camera output sizes so scanned images can be kept and managed with digital camera images.

Step Five: Perform Scan

When you click this button, the item is
scanned and the image passed to the
host application program. The scanned
image displays in the application
program's window.

Tips

Choosing an Output Resolution (Image Quality) Setting

Images reproduced with scanners are composed of collections of dots assigned individual
brightness and color data. The density of these dots is called the "resolution." It is the Output
Resolution (Image Quality) that determines whether an image is fine or grainy in appearance.
The larger the value, the finer the image. Smaller values are more granular

Resolution and File Sizes

As a rule, you should set the resolution to the smallest setting accommodating the ultimate
use of the scanned image. If the resolution is doubled, for example, the file size quadruples.
And if files become too large, processing takes longer and computer memory resources may
be stretched. Avoid raising the resolution any higher than absolutely required.

File Formats for Scanned Images (File Types, Formats)

You can select the file format when you save a scanned image. You need to select a format
appropriate to the way in which the scanned image will be used and the application programs in
which it will be used. The formats that different application programs and computer systems
(Windows, Macintosh) can handle vary. The table on the following page describes the
characteristics of each file format.

File Formats for Scanned Images (File Types, Formats)

JPEG Files	Image format advocated by the Joint Photographic Experts Group, an ISO subgroup. Often utilized on websites and by digital cameras, the format's main characteristic is a high compression ratio, which ranges from 1/10 to 1/50 of the original file size. **NOTE:** JPEG utilizes an *irreversible* or lossy compression method; it loses some of the data and it cannot be reversed. Consequently, the image quality deteriorates somewhat—the deterioration in the image gradually becomes noticeable after it has been opened, edited and saved several times. It generally employs the **.jpg** file name extension.
TIFF Files	Tagged Image File Format—this format can be used on various computer platforms and in many applications, ranking it relatively high on the compatibility scale. However, sometimes TIFF contains incompatible data since it adds to the start of the file some data (called a tag) that controls how the image is decompressed. It generally employs the **.tif** file name extension.
PDF Files	Portable Document Format—this format was developed by Adobe Systems and is based on the Postscript (page description) language for use with the reader program, Adobe Acrobat, for viewing and printing images. Adobe Acrobat Reader is distributed as free software and since it can be used with various computer platforms and operating systems, people using different operating systems and fonts can exchange PDF files. In addition, the file sizes are relatively small, making PDF files suitable for network environments. It employs the **.pdf** file name extension.
BMP Files	The standard bitmap format for Windows. Almost all Windows applications support BMP and it is often used when an image file will only be used with Windows. It generally employs the **.bmp** file name extension.
PICT Files	The standard graphics file format for the Macintosh. Most Macintosh applications support PICT. You are not likely to encounter problems if you use it for images that will only be handled by Macintosh systems. It generally employs the **.pict** or **.pct** file name extensions.