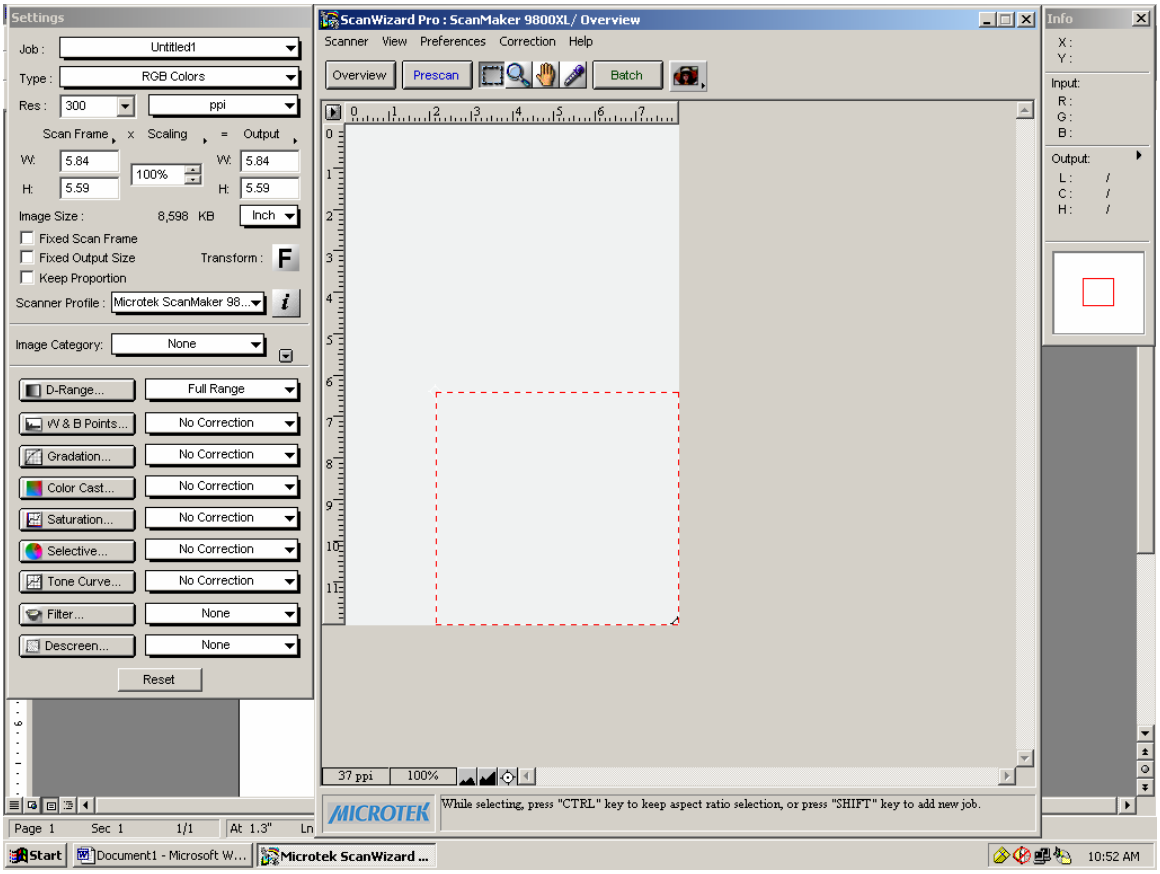
Using 11 x 17 Microtek Scanner

From the Start menu select Programs … Multimedia … Microtek ScanWizard Pro v6.13
The Settings, ScanWizard Pro, and Info windows will open. To Exit the program click the close button on the ScanWizard Pro window.



Place your media on the glass platen

Note that the upper left corner of the ScanWizard Pro window corresponds to the front, left corner of the glass (closest to where you are sitting). Also note, the software uses the clear slot near the front of the Scanmaker 9800XL to perform calibrations – this slot must always be clear of paper, smudges, etc. for best scan quality. One should also take care to keep the glass platen clean and avoid SCRATCHING THE GLASS!!!!. There is a bottle of Windex and paper towels in the Lab for cleaning the scanner glass.

Match your Overview to your Original Media

Determine how much of the platen glass you will be using, ScanWizard defaults to a letter size (12”x8”) overview area. If you want to use the entire glass (17”x12”) then you will have to reset the overview area. Using a large overview area will cause the previews to take longer – good to use only as large of an overview as you need.

To resize the overview area, from the ScanWizard Pro window select Preferences … Overview Setup. Click the Overview Area Size button and pick a standard size (Maximum is an option) or select a custom size. Click OK to apply the preference and then click the Overview button on the ScanWizard Pro window to see the new overview area.

Selecting your Scan Area

You will probably not want all of the overview window to be scanned to a file. Click the Frame Tool button on the ScanWizard Pro toolbar and then you can resize, move or redefine a Scan Frame (defined by a red flashing marquee frame). The cursor icon will change as you move the mouse indicating whether you will pan, relocate an edge, relocate a corner, or define a totally new Scan Frame. One can also define the actual dimensions (inches by default, one can change the default units in the Settings window) of the Scan Frame in the Settings window. Within the Scan Frame two markers will appear (circles with four barbs) these mark the light and dark extremes of the Scan Frame.

Click the Prescan button on the ScanWizard Pro window to rescan the Scan Frame and zoom to fill the ScanWizard Pro window with the Scan Frame.

Adjusting Scan Settings

The Settings window has too many options to deal with each one, some of the more significant settings are:

Resolution – The greater the number of pixels in your final image the larger the file size, double the ppi and the file size increases by 4x. Your image will look better as the resolution is increased but your file size will quickly increase…a compromise between extremely high resolution and file size is necessary. Note also that grayscale images require less space than color.

D-range and W & B Points – Use these tools to adjust the dynamic range of the image to use the full brightness gamut. These both have auto setting options. Generally these will improve photo images the best. Examine the histograms to see if your image is taking advantage of the full dynamic range available.

Color Model – There are two primary schemes to portray color in an image: a red-green-blue (RGB) model, or a cyan-yellow-magenta-black (CYMK) model. If the ultimate destination for the image is a luminous display (computer monitor, PowerPoint on a LCD projector, etc.), then use RGB; if the destination is a CYMK printer (most high-end printers), then use CYMK.

Descreen – When scanning from a printed image with a coarse dot screen (such as a newspaper), one will often seen a diagonal bright moire lines due to interaction between the array of dots used to make the image and the raster of the scanned image. The Descreen setting can be used to minimize this effect. For images from high quality print sources this might not be necessary – even if the moiré appears on the prescan. A prescan moiré might be a misleading screen artifact. Bring the images up in Photo Shop or Photo Paint to verify the quality of the scan.

Picking an Output File Type

ScanWizard Pro supports several output file types. In different situations different formats may have advantages over other formats. A review (below) of these different file formats was shamelessly ripped-off from several sources (e.g., http://dx.sheridan.com, http://www.prepressure.com). Please support their advertisers.

.tif – A Tagged Image File Format (TIFF) file is the most widely used file format in desktop publishing today. It is a raster-based file that supports the following:

- RGB
- CMYK
- Grayscale
- Lab color
- Indexed color

TIFF files can be compressed by using an LZW lossless compression approach or JPEG lossy compression. For high-end print production, it is the best practice to use either LZW compression or a very small amount of JPEG compression. The JPEG compression approach is a lossy compression that will degrade image quality when used in large amounts.

When placing a TIFF file on a page, any clipping path that has been defined can be retained and applied. However, Photoshop's Alpha channel information will not be translated when placing a TIFF.

.bmp -- Bitmap files have some confusion associated with them. Some refer to any pixel-based image as a bitmap file. However, a true bitmap image file refers to the standard Windows image format. This type of file is mostly used on DOS- and Windows-based machines.

A bitmap file is a raster- (or pixel-) based format that only supports the RGB color space and bit depths of 1, 4, 8, or 24 bits per channel. These attributes make bitmap images unsuitable for use in a high-end print production workflow.

Even though bitmap images are in the RGB color space, they are not supported by any Web browsers or Web coding languages. Therefore, they are not suitable for use as images in a Web application. You would be able to use such a graphic in an HTML export from InDesign by having the automatic conversion to a GIF or JPEG file occur. Bitmap images are best used for their intended purpose, as a system support on a PC Windows-based computer. Do not use the placement of a bitmap image when designing for a high-end print production job.

.eps -- An Encapsulated PostScript file is an image file that can contain either vector or bitmap information. An EPS file can be created using any color space and any image bit depth. An EPS is really a collection of several other image files all in one. EPS files are

generated from several sources and are structured to published code constraints. An EPS file has two main parts:

• The preview
• The high resolution image data

The preview of an EPS file is necessary to display the image in a page layout application, and the high-resolution portions of the file are necessary for imaging to a particular output device.

An EPS file is a variation of a PostScript language file. The two file types contain the same PostScript code, but an EPS file does not include the "showpage" command. Leaving this code out of the file allows an EPS to be placed into a page layout application.

EPS files have been built specifically for the print production world, and are not supported by Web browsers.

.jpg -- Uses of the JPEG (Joint Photographic Experts Group) file format are far and wide. Initially, the file format was intended for use in Web applications, but has found a home in the high-end print production markets, as well. The JPEG file format can be your best friend if used properly, or your worst enemy if implemented incorrectly.

A JPEG file is encoded by using an adjustable lossy compression approach. This means that to achieve smaller file sizes, image data is actually thrown away. In small doses, the JPEG compression approach can be very effective and efficient. However, in larger amounts, the resulting file will contain "noise" and undesired artifacts in the image. Be very careful when preparing JPEG files for use in a print production workflow.

The JPEG format will support the RGB, CMYK, and grayscale color spaces. The use of JPEG images is supported in HTML and Web applications. However, unlike a GIF file, all of the color information is stored in the file. There is no support for transparency in a JPEG file.

.psd – The native Adobe Photoshop file format. Photoshop files are generally written and read by Photoshop, however, there are several other applications that will read this format. Most page layout applications (except Adobe InDesign), do not allow native Photoshop images to be placed.

A Photoshop file will retain all of the original file's attributes. Saved file characteristics include the following:

• Resolution
• Color space (CMYK, RGB, grayscale)
• Spot color channels
• Image bit depth

In order to use Photoshop Files in other applications, you must first export them to the .tif format which entails flattening them before export.

.pdf – PDF stands for Portable Document Format. Developed by Adobe Corporation to allow electronic information to be transferred between various types of computers, the software which allows this transfer is called Acrobat. In order to view and print a PDF file you need not own full Adobe Acrobat, but can use the free Adobe Acrobat Reader. .pdf files are operating system independent and use an efficient compression to reduce file size. The PDF standard is tightly held by Adobe, thus non-Adobe applications may not produce .pdf files that work well.

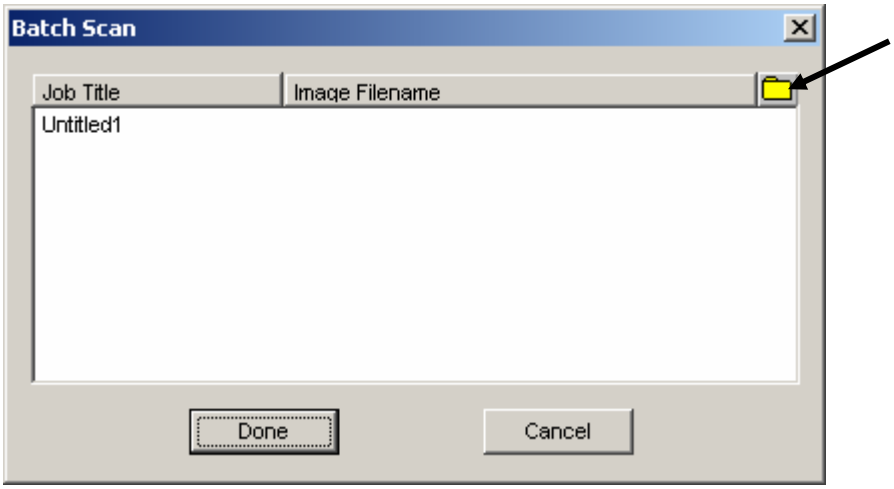
.sct – The proprietary Scitex Continuous Tone (CT) files are generated from a Scitex workstation or from Adobe Photoshop. These bitmap files contain all the information necessary to render images in a high-end prepress workflow.

The Scitex CT file contains information using either the CMYK color mode or grayscale. These files tend to be on the large side, and are not very transportable across slower networks. Incorporating the CT file into page layouts is typically achieved by using special plug-ins or a Scitex workstation.

Usually CT files are created at the printer's location and can be used in an Automatic Picture Replacement (APR) workflow. HTML and Web browsers do not support these types of images.

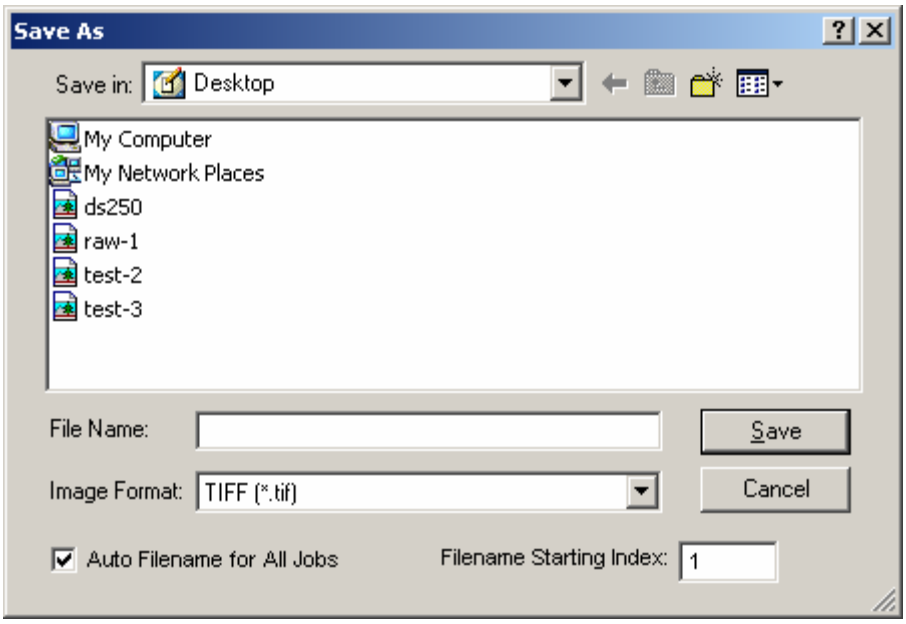
Saving the Scanned Image

Once you have the prescan image as you like it, click the Batch button to save the image file. The Batch Scan window is a little obscure in its use, you must click the yellow folder icon (arrow below) to pick a output filename, location, and format.



The Save As dialog box allows you to pick the file format as well as name and location. If you check the Auto filename box, then ScanWizard will append a –1, -2, -3, etc. to

whatever is in the Filename box. The appended number will start with whatever Starting index you provide.



Other tips etc.

- ScanWizard can be invoked from within PhotoShop by selecting File … Import … Scan Wizard Pro from the Photoshop menubar. Running from within Photoshop has many advantages as you can examine the scan quality as you acquire the scans.

- If the scanner appears to be unresponsive after you haven't used it for 15 min. or so, click a control that you expect to generate a response and then give it a couple minutes. When the unit is dormant for a while it turns out the scan light – as the scanlight comes back on again the unit does a warmup and recalibration