Scanning with Adobe Photoshop & HP Precision Scan Pro

Getting Started

Scanning photos “MultiMedia Center-style” actually involves two pieces of software:

• Adobe Photoshop, and
• HP PrecisionScan Pro.

Photoshop is used as a “launching pad” for the HP scanning software, and also as a destination for the scanned image.

1. Place your photo on the scanning bed.
2. Launch Photoshop.
3. Choose File / Import / TWAIN_32.

NOTE: Choosing File / Import / TWAIN_32 will cause two things to happen:

• HP Precision Scan Pro software launches, and
• HP Precision Scan Pro performs a preview scan.
Scanning

1. Define your scan area by clicking-and-dragging a rectangular shape with the mouse.

Be sure to check your:
- output type and
- output resolution

2. Usually, HP PrecisionScan Pro will choose the most appropriate output type. If your preview scan looks bad, it may not have chosen the best output type. You can choose an output type manually by using the Output Type menu.

3. Output resolution is another important factor to consider when scanning images. Resolution is defined in units of dots per inch, or dpi. Often there will be a small floating palette.

The higher the resolution:
- the better the image quality,
- the longer the scan will take, and
- the larger the image file will be.

Once you’ve defined the Output Resolution and Output Type that you want, you are ready to continue.

4. Choose Scan / Place Image.

This accomplishes two things:
- Completes the final scan, and
- Places the scanned image into Photoshop as an untitled document for editing and saving.
Editing
Rotating

When scanning, it is common for images to come out crooked. It’s possible to set a photograph neatly into a corner of the scanning bed, and this sometimes you’ll get a straight scan. Sometimes, however, you’ll set the cover down and your photograph will get nudged out of its neat little perch.

In any event, not all scanning situations adapt themselves well to this technique. Fortunately, Adobe Photoshop obliges us with the ability to rotate digital images right in the application.

There is no need to select any part of the picture in order to rotate it.

Choose Image / Rotate Canvas. A submenu of choices will pop up. You can quickly rotate by 180 degrees, 90 degrees, or flip your image. If you want to make small adjustments, as in the example on this page, you should choose Arbitrary.

You will then see a small dialog box that allows you to enter the number of degrees of rotation to apply, and also the direction of rotation (clockwise or counterclockwise). Enter a value for degrees of rotation and choose your direction. Click OK to see how well you’ve guessed.

Most likely, it will take more than one adjustment to straighten out a crooked scan, so be patient and allow yourself to experiment with different values. A few rotations may be necessary.

NOTE: Use Undo (Edit / Undo or Ctrl-Z) to reverse your last action, if you want to start over. Or, use the History palette to back all the way up to the beginning. Choose Window / Show History if the History palette is not visible.
Editing

Cropping

Once you’ve gotten your image straightened out, you’ll want to clean it up. You can easily remove the irregular, ugly white space around your image by using the crop tool. The crop tool is available in the toolbox, in the upperleftmost position. If you don’t see the crop tool, click and hold the left mouse button over the upperleftmost position in the toolbox, no matter what tool it is displaying. Soon you will see five tools pop up. The crop tool is the one all the way to the right. Release the mouse button over this tool.

Click-and-drag with the crop tool to define THE AREA OF YOUR IMAGE THAT YOU WANT TO KEEP. Cropping cuts away everything OUTSIDE the selection cursor. When the crop tool is in use, you will see a marquee (marching ants) around your selection area. The marquee will have resize handles, just like the selection marquee in HP PrecisionScan Pro. If you want to resize the selection marquee after you’ve released the mouse button, then you can use the resize handles. Just click-and-drag to resize the marquee.

Press Enter to apply the crop.
Editing
Rubber Stamp

The rubber stamp tool is one of the most useful toys in the toolbox.

Using the rubber stamp tool, you can sample an area in an image, and then paint the sampled area over trouble spots.

Activate the rubber stamp tool by clicking it in the toolbox. Double-click the rubber stamp tool to see the options associated with it.

You will see the Rubber Stamp Options palette. Set the mode to Threshold, the Opacity to 100%, and uncheck Aligned.

Now, hold down the Alt key while you click over an area that you want to use to paint over some photographic annoyance, such as the date stamp in this picture.

Before

Once you have taken your sample by Alt-clicking, you can then click-and-drag the rubber stamp tool over those problems areas to make them go away. Using the rubber stamp tool takes practice, but it’s well worth it.

After
Editing

Image Size

Now is the time to think about what size you want your finished image to be. You can check your image size by choosing Image / Image Size.

You will see the Image Size dialog box, which gives you all kinds of information about your scanned image. You can view the Pixel Dimensions, Print Size and Resolution in dots per inch.

Pixel dimensions, print size and resolution are relatives. They are related by a simple formula. Here's two versions of the same thing:

- **Pixels = Resolution X Print Size**
- **Print Size = Pixels / Resolution**

*NOTE: Print size is in inches, while resolution is in dots (or pixels) per inch (abbreviated dpi).*

Therefore, it is possible to have two images whose pixel dimensions are identical, but whose print sizes are quite different. It all depends on the resolution! (Remember setting the Output Resolution in HP PrecisionScan Pro?)

Notice that there are two check boxes at the bottom of the Image Size dialog box. Constrain Proportions and Resample Image. Both of these boxes should be checked.

**Make sure that the Constrain Proportions box is checked. If it is not checked, your image width can be changed without the height coming along for the ride. The reverse also holds true. So be careful! If the Constrain Proportions box is not checked, you may end up with a distorted, squashed or stretched image.**

Saving

As a rule of thumb, save your images in either JPG or GIF format. GIF format is best for flat-color, cartoonlike images, whereas JPG format is best for photographs and images with gradients. Make sure you flatten your image first! (Choose Layer / Flatten Image)

If you intend to do considerable additional work to your image after saving it, then I recommend that you keep it in Photoshop format (PSD), to avoid losing image quality under compression (JPG and GIF format are both compressed formats). Of course, if your file is in Photoshop format, then you will have to use Photoshop to work on it. Any image editor can work with GIF or JPG files. Another option would be to save it in TIF format (tagged image format), a format that preserves the maximum amount of image data.
Terminology

Scanning
Converting an analog image into a digital image using a scanner.

Output Type
Defines the type of scan to be performed. Options include True Color (millions of colors), Grayscale (shades of grey), Black & White and 256 Color.

Resolution / Output Resolution
The number of dots per inch (dpi) in a digital image.

Palette
An interface element that provides options that can be applied to a document or elements within a document, such as text or images. Palettes are like dialog boxes, except that they remain open until closed without interfering with the workflow in the application.

Floating palette
A palette that “floats” in your interface, as opposed to one that is fixed in position in the application interface. Some palettes can be “docked” to one or more sides of the interface; these are not considered floating palettes by definition.

Selection Marquee / “Marching Ants”
In Photoshop, as well as other applications, selections have a life of their own. Selected areas are always indicated by a “selection marquee,” which is a dashed line that appears to be moving. That is why a selection marquee is sometimes called “marching ants.”

Resources

Adobe Systems Incorporated
http://www.adobe.com

Hewlett-Packard Company
http://www.hp.com