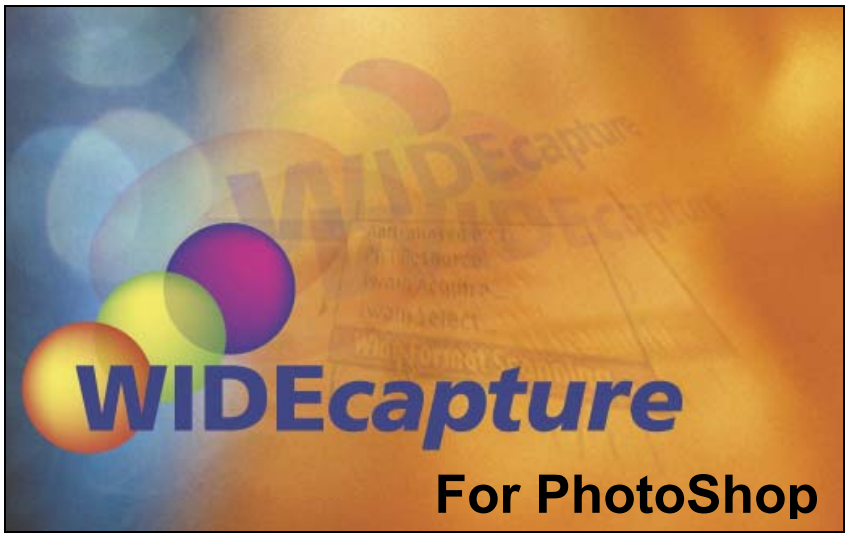
User's Guide



Wide Format Scanning Plug-in
for Photoshop on
Macintosh & Windows

Table of Contents

1. Introduction

1.1 About the Wide Format Scanning Plug-in

In recent years, digital image technology has made wide format scanners an affordable solution for many graphics businesses. In fact, wide format scanners as input devices offer so many advantages that they are hard to overlook. Usage of Adobe Photoshop on Apple Macintosh or Windows platforms is widespread among graphics professionals and this software is designed to supply convenient, direct and problem-free access to Wide Format Scanning input while working with Adobe Photoshop.

The software is designed as a plug-in, meaning it is a full software program that extends the functionality of the Adobe Photoshop program by enabling access to Wide format scanning. Install the program into Adobe Photoshop's plug-in folder and it immediately becomes accessible through the Photoshop main screen. You select the application through Photoshop's File menu and thus add advanced scanning to your workflow.

In Photoshop terms, this is an "*Import Plug-in*" meaning it imports images from the scanner into the Photoshop image editor. You can then use Photoshop's wide range of image manipulation options, just as if you had opened an image file from your hard disk.

Here are some of the main features obtainable through this application:

- Easy scanning directly into the Adobe Photoshop interface without leaving Photoshop.
- Standardized paper size options fitted to popular input media sizes.
- Custom paper size options, enabling full control over non-standard input media sizes.
- Offsetting – Selecting specific areas on the original for scanning.
- Advanced tonal adjustment features at scan time.
- Easy adjustment of Brightness, Contrast and Blur.
- Special scan modes fitted to different/specific original types.

The Plug-in can be obtained in a Macintosh version or a Windows version. For Macintosh users, this software is a necessary link between a Wide Format Scanner and an Apple Macintosh platform, because the standard scanning software normally supplied with your Wide Format scanner is designed for Windows. For Windows users, the software is a handy scanning interface specifically useful when working in Adobe Photoshop.

Screen illustrations in this user guide display the **Macintosh** user interface. Dialog structures, options and functionality are identical in both the Macintosh and Windows versions and this user guide applies for both.

1.2 Installation

It is recommended to read Adobe Photoshop's documentation regarding Plug-in applications and their installation.

Plugin installation

Macintosh version:
For installation instructions, please refer to the separate Installation Guide that is downloadable with the plugin from the web.

Windows version
Unpack the file you downloaded from the web and double click the setup.exe file. Follow the installation instructions that appear on your screen.

2. Getting Started

2.1 Starting the application from Photoshop

This wide format scanning application is constructed as a plug-in to Adobe Photoshop, and must be accessed through the Photoshop user interface. In Adobe Photoshop terms, wide format scanning is an “Import” action in which the scanner imports images into the Photoshop editor. Once in the editor, the image can be manipulated as if it were opened from the hard disk. Follow the following steps to start the Wide Format Scanning plug-in.

⇒ Start the Adobe Photoshop application
⇒ Select File -> Import
⇒ From the list of import sources, select Wide Format Scanning as shown in Figure 2-1 below.
⇒ The Wide Format Scanning interface is shown in Figure 2-2.

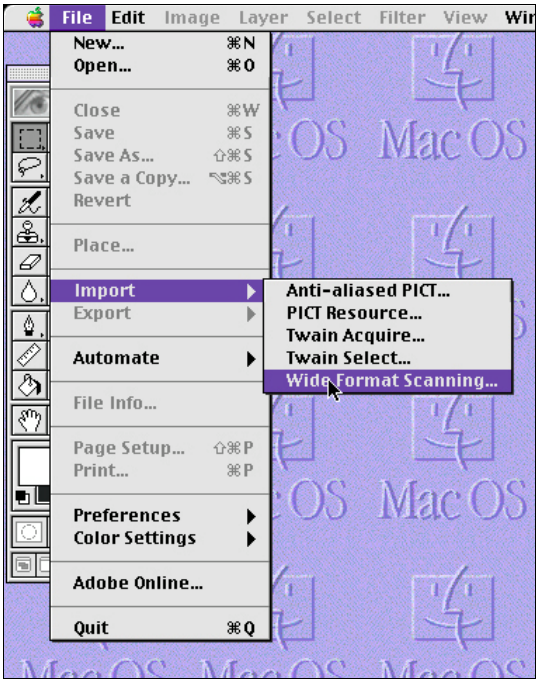


Fig. 2-1: Start the Wide Format Scanning Plug-in in Photoshop

2.2 An overview of the Plug-in user interface

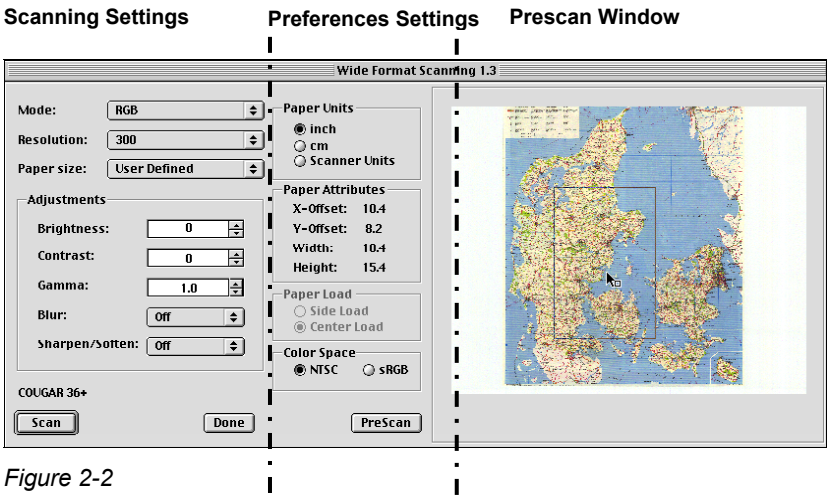


Figure 2-2

The Wide Format Scanning dialog can be divided vertically into three logical areas.

On the dialog's left side you find the main options, i.e., those related to the **scanning settings** including image quality parameters and control (start/done/prescan) buttons. This adjustments option group area contains options related to the current scanning *Mode* selected in the topmost option box. Therefore, the available adjustment options and the appearance of the *adjustment* group area changes with your selection of scanning *Mode*. In the above figure, the adjustment options for the *RGB* (color) mode are displayed.

The middle section of the dialog contains central **preference settings**, i.e., your choice of measurement units and your choice of how the original is going to be inserted into the scanner. Your current paper size settings are displayed below the unit option area, using the measurement units you selected just above. Here you select your color space calculation method i.e., NTSC or sRGB.

The **Prescan Window** allows you to define your scan window (capture area) directly and visually on screen. When you press the *PreScan* button, the image is loaded in the Prescan Window and a outlined box shows you the image capture area as defined by your current paper size and offset settings. You can then redefine both paper size and offsets by dragging the box and dragging its corners/edges with the mouse.

2.3 Scan into Photoshop – Basic Steps

The following is a quick overview of the minimum you must perform to scan an image into Photoshop. In the next chapter "Scanning Options and Features", we will look at each of these steps in greater detail, focusing on the available possibilities for achieving the best scan quality for your current original. For now, let's just see how the plug-in works:

1. Start the Adobe Photoshop application.
2. In the Adobe Photoshop interface, select File > Import.
3. Select the "Wide Format Scanning" import device
4. The Wide Format Scanning interface pops up
5. **Set your scanning *Mode***. Here you must decide if you wish to perform color, graytone of B/W scanning. With B/W scanning, you can select from different automatic image enhancement modes. Scanning modes, together with their specific characteristics and usefulness, will be described in the next chapter.
6. **Set your scan *Resolution***, i.e., the image resolution in the resulting Photoshop image. You can select one of the common resolutions or else specify your own resolution. Tips on choosing the best resolution for your specific job will be given in the next chapter.
7. **Set the *Paper Size* and position** of your scan. The scanner needs this information to determine the size of the area you want captured. It would be uneconomical to scan too much background by over estimating original dimensions and undesirable to scan only a portion of the image you wish captured. You can select commonly used standard sizes or you can customize new sizes for special originals. You can also pick out a limited area for scanning using *Offsets*, *Width* and *Height* settings. You can also press the PreScan button and then redefine the capture area's size and position (width, hight, offsets) directly on the image by dragging the outlined box with your mouse. These features will be described in the next chapter.
8. Select your insertion method in the *Paper Load* option group area. Central loading is recommended for most sizes and guide marks for many standard sizes are printed near the scanner insertion slot at the center loading point. Make sure your setting complies with the actual insertion position of the original (side or center).
9. Adjust your scanning mode through its specific adjustment parameters. Figure 2-2 shows adjustment parameters for the RGB (color) mode. *Brightness, Contrast, Gamma* values and a color *Blur* filter can be set/adjusted with the *RGB* mode. Other parameters apply for *BW* and *Adaptive* modes. Mode and tonal adjustments are described in detail in the next chapter.
10. When you have made all your settings, select the *Scan* button on the dialog's lower left side.
11. Check the image input by the scanner. If you are satisfied with your results, i.e., image size, adjustments, etc., then select the *Done* button. This action will remove the Wide Format Scanning dialog and return all control to Photoshop's editor with the scanned image loaded.
12. If you are not satisfied and wish to repeat the scan, make the revised adjustments and select the *Scan* button. Repeated scanned images will be opened in new Adobe Photoshop edit windows, or as long as the Wide Format Scanning interface remains active. This enables you to re-scan an original with different settings, compare the results at the end and then choose the best one for further editing in Photoshop.
13. The <ESC> key can be used at any time to back-step and finally abort the Wide Format Scanning dialog. Hitting <ESC> will also interrupt an ongoing scanning process.

3. Setting Scanning Options and Features

In the last chapter, we covered the steps necessary to scan into the Photoshop editor. You probably recall, that the bulk of the steps mentioned involve setting options relevant to your scanning task and your current original. In this chapter, we will look at each option separately and describe how best to use them. The options described here control your scanner's built-in enhancement features and if you use them optimally, they can make a big difference to your end result.

3.1 Scanning Modes and Adjustments

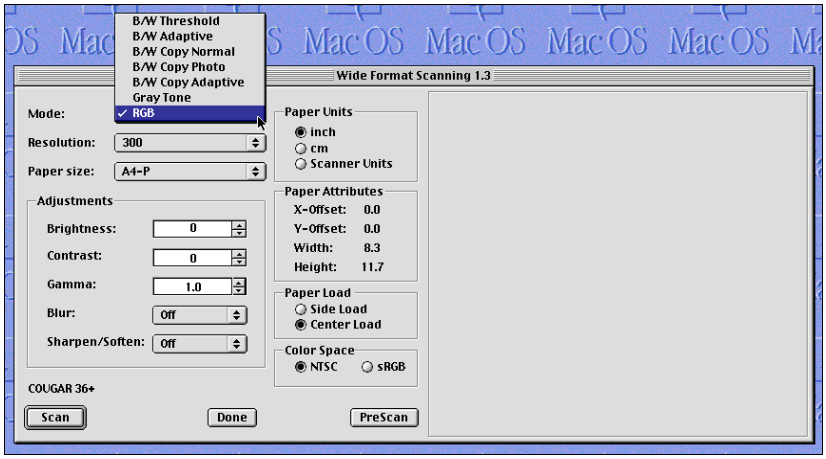


Fig. 3-1: Scan Mode Selection

The scanning mode is your central option. This is where you evaluate the kind of original you are scanning and determine the kind of image you wish produced. Some of the available scanning modes can be used to enhance the quality of unclear and low contrast originals. With the adaptive modes, the scanner makes scan-time assessments of your drawing using 2-Dimensional Adaptive Thresholding in which graytone information on each pixel is stored and compared with its neighboring pixels in order to rebuild a higher image quality. Copy modes create optimal black-and-white images for output on printers. The color and graytone modes are for reproducing images with all the colors/tones intact.

Each scanning mode has its own set of adjustments options. Only adjustments relevant to your selected scanning mode will be displayed in the dialog's adjustment area. Adjustment options relevant to the scanning *Mode* appear immediately in the *Adjustments* area when you select or change your scanning *Mode*.

Each scanning *Mode*, its characteristics, typical usage, and adjustment options are described in the next sections. Use these descriptions to find and adjust the scanning *Mode* that best suites your particular original or scanning task. A complete overview of the modes, recommended usage and relevant settings can be found at the end of this section.

3.1.1 Scanning in B/W Threshold Mode

This mode uses a threshold to determine whether a pixel is black or white. Use this mode for drawings and line art. You set the threshold value in the *Adjustments* area.

Setting the *Threshold*

When a camera in the scanner looks at a drawing, it converts what it sees to graytone levels between 0 and 255 with the dark tones represented by low values and the light tones by high values and middle tones by middle values. When scanning at a specific threshold all gray tones below the selected threshold value will be represented as black pixels, and all gray tones above will be represented as white pixels.

For example, if you have a very faded line drawing, you might want to increase clarity by setting a high threshold, thus forcing more shades of gray to black. In other words: the higher the threshold, the darker the result.

The Threshold value, ranging from 0 to 255, can be set in the *Adjustments – Threshold* edit field.

⇒ Set the threshold value in the *Adjustments* area edit field using the guidelines above.
⇒ Evaluate your setting in the resulting image loaded in the Photoshop window.
⇒ If the image is too dark, repeat the process with a lower threshold and if you wish it darker, try a higher threshold

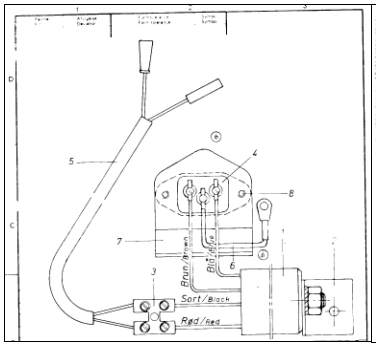


Fig. 3-2: Drawing Scanned at threshold setting of 45.

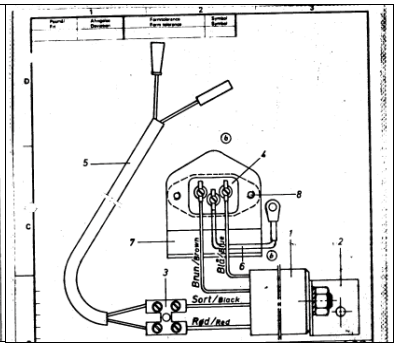


Fig. 3-3: Same drawing at threshold setting of 210

- **Blur**
  The *Blur* filter blends graytones and thus removes unwanted “noise” from the image. The value you set determines the degree of graytone blending.

- **Sharpen/Soften Filter:** The Sharpen/Soften filter intensifies or “mellows” identified edges. The value you enter in the filter field determines the degree of sharpening/softening. Positive values sharpen and negative values have a softening effect. Using this filter in combination with the *Blur Filter* can sometimes enhance image quality by first blurring away noise and then sharpening the result.

3.1.2 Scanning in B/W Adaptive Mode

In this mode the threshold **adapts** to darker or lighter areas in the original as opposed to the B/W threshold mode that uses a singular global threshold. The *BW Adaptive* mode is suitable for scanning all kinds of line drawings including difficult blueprints, brown transparencies (sepias), etc. A stained or faded original can be renewed as good sections are retained and bad ones clarified. This mode provides minimum file sizes and is, thereby, well suited for digitizing. The *BW Adaptive* mode uses the scanner's 2D Adaptive technology.

Setting the adaptive *Level*

Adaptive *Level* works like a threshold - the lower the value, the more of the background is picked up during scanning. You set the adaptive *Level* in the *Adjustments* area.

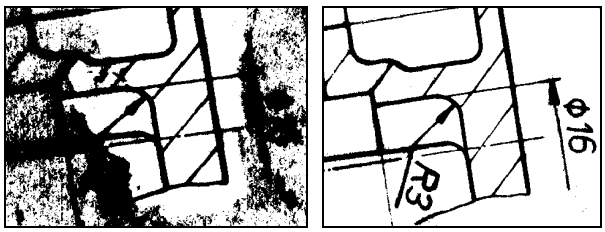


Fig. 3-4: 2D - Adaptive Scan – Before(original) and After(scanned image)

- **Blur**
  The *Blur* filter blends graytones and thus removes unwanted "noise" from the image. The value you set determines the degree of graytone blending.
- **Sharpen/Soften Filter:** The Sharpen/Soften filter intensifies or "mellows" identified edges. The value you enter in the filter field determines the degree of sharpening/softening. Positive values sharpen and negative values have a softening effect. Using this filter in combination with the *Blur Filter* can sometimes enhance image quality by first blurring away noise and then sharpening the result.

3.1.3 Scanning in B/W Copy Modes

B/W Copy Normal, BW Copy Photo, B/W Copy Adaptive

The Copy modes incorporate Dual 2D-Adaptive enhancement processing with different combinations of ADL+ Error Diffusion Halftoning, 2D-Background suppression, 2D-Auto edge enhancement and 2D-Adaptive thresholding. The copy modes are ideal scanning wide format documents that are intended for re-printing. The ADL+ Error Diffusion Halftoning supports visibility of graytones in printed output by adding toned shades of gray in regions between black and white.

Setting the adaptive *Level*

You set the adaptive *Level* in the *Adjustments* area. Adaptive *Level* works like a threshold - the lower the value, the more of the background is picked up during scanning.

- **Blur**
  The *Blur* filter blends graytones and thus removes unwanted "noise" from the image. The value you set determines the degree of graytone blending.
- **Sharpen/Soften Filter:** The Sharpen/Soften filter intensifies or "mellows" identified edges. The value you enter in the filter field determines the degree of sharpening/softening. Positive values sharpen and negative values have a softening effect. Using this filter in combination with the *Blur Filter* can sometimes enhance image quality by first blurring away noise and then sharpening the result.

3.1.4 Scanning in Graytone Mode

In this mode 256 gray levels are recognized for each pixel (1 byte, 8 bits per pixel). Gives good reproduction of complicated B/W images like B/W photos. You adjust *Contrast, Brightness, Gamma and Blur* in the *Adjustments* area.

Graytone Mode adjustments

- **Brightness**
  Use brightness to compensate for a light or dark original being scanned. Numeric values for brightness are defined by clicking on the up/down arrow buttons or by editing directly in the fields. The normal position is zero with negative values for reducing brightness and positive values for intensifying brightness.
- **Contrast**
  Contrast is the range between light and dark in an image. An image with little midtone detail, heavy shadows and bright highlights has too much contrast and, conversely one mainly with midtone detail, grayish shadows and highlights has to little contrast. Numeric values for contrast are defined by clicking on the up/down arrow buttons or by editing directly in the fields. The normal position is zero with negative values for reducing contrast and positive values for adding contrast.
- **Gamma**
  Gamma adjustment can be used to make tone distribution lighter or darker in an image with emphasis on midtones rather than the extreme (black, white) ends. Turn up the Gamma value to lighten the image tones and turn down the Gamma value to darken the tones.
- **Blur**
  The *Blur* filter blends graytones and thus removes unwanted “noise” from the image. The value you set determines the degree of graytone blending.
- **Sharpen/Soften Filter:** The Sharpen/Soften filter intensifies or “mellows” identified edges. The value you enter in the filter field determines the degree of sharpening/softening. Positive values sharpen and negative values have a softening effect. Using this filter in combination with the *Blur Filter* can sometimes enhance image quality by first blurring away noise and then sharpening the result.

3.1.5 Scanning in RGB Color Mode

24 bit true color mode for capturing all of the image’s colors. Distribution of tones can be adjusted in the *Adjustments* area.

RGB Mode adjustments

As with the Graytone mode, you can adjust *Contrast, Brightness, Gamma and Blur* in the *Adjustments* area, but here, the adjustments apply to the color tone channels.

- **Brightness**
  Use brightness to compensate for a light or dark original being scanned. Numeric values for brightness are defined by clicking on the up/down arrow buttons or by editing directly in the fields. The normal position is zero with negative values for reducing brightness and positive values for intensifying brightness.
- **Contrast**
  Contrast is the range between light and dark in an image. An image with little midtone detail, heavy shadows and bright highlights can have too much contrast and, conversely

one mainly with midtone detail, dull shadows and highlights can have little contrast. Adjusting the contrast can make colors more vivid and realistic. Numeric values for contrast are defined by clicking on the up/down arrow buttons or by editing directly in the fields. The normal position is zero with negative values for reducing contrast and positive values for adding contrast.

- **Gamma**
  Gamma adjustment can be used to make tone distribution lighter or darker in an image with emphasis on midtones rather than the extreme (black, white) ends. All three (Red, Green , Blue) color channels are effected together with each change. Turn up the Gamma value to lighten the image tones and turn down the Gamma value to darken the tones. For example, if you are scanning a picture of a blue sea, a lower Gamma value will change the sea's color towards a darker marine blue, and turning up the Gamma value will change the normal sea color to a light sky-like blue.

- **Blur**
  The *Blur* filter blends graytones and thus removes unwanted "noise" from the image. The value you set determines the degree of graytone blending.

- **Sharpen/Soften Filter:** The Sharpen/Soften filter intensifies or "mellows" identified edges. The value you enter in the filter field determines the degree of sharpening/softening. Positive values sharpen and negative values have a softening effect. Using this filter in combination with the *Blur Filter* can sometimes enhance image quality by first blurring away noise and then sharpening the result.

3.1.6 Overview of Scanning Modes*

Mode*	Usage	Adjustments
BW Threshold	Drawing and lineart	Threshold value Histogram. Despeckle, Holefilling Sharpen/Soften* Blur*
BW Adaptive	Scan to file of Line drawings difficult blueprints, sepias, faded/stained drawings.	Adaptive Level Back. Suppression* Despeckle, Holefilling Sharpen/Soften* Blur*
BW Copy Normal	Halftone copy to print of all normal originals with a relatively good quality image.	Adaptive Level Sharpen Soften Blur
BW Copy Photo	Halftone copy to print of continuos shades of gray such as in photos.	Adaptive Level Sharpen Soften Blur
B/W Copy Adaptive	Halftone copy to print of Sepia, Blueprint, and other originals with heavily distorted foregrounds and backgrounds in which the shades that create image noise are close to the shades that represent the image's data and the two are hard to differentiate.	Adaptive Level Sharpen Soften Blur
Graytone	Monochrome image reproduction with all tones retained.	Contrast Brightness Lightness
RGB Color	True Color image reproduction	Brightness Contrast, Lightness, Saturation, Balance, Gamma

* The availability of specific scanning modes will depend on your scanner model.

3.2 Setting Scanning Resolution

Scanning resolution is the number of pixels per inch (dpi) in the end (scanned) image. An image with a high resolution will contain more and thereby smaller pixels than an image with equal dimensions with a lower resolution. High resolution images will therefore normally display more detail and wider color ranges than low resolutions. However, high resolutions produce larger files with the usual setbacks in relation to disk space, load time, etc.
Your selection of resolution will therefore depend mainly on how you intend to display the image. For offset printing, high resolutions work best while for screen and web display, lower resolutions will suffice. Normally, 300 dpi and above are considered high resolutions. High resolutions can also be necessary if small details (like in maps) must be displayed clearly. Often, your printing device documentation will contain recommendations about scanning resolutions.
The image resolution should be determined before scanning i.e., before your original is digitized and the image transformed to pixel data. Using Photoshop to increase resolution of an image scanned at low resolutions will normally not improve the image's quality.

Click on the Resolution list arrow to reach the list of available resolution settings. The Wide Format Scanning plug-in offers two methods for setting resolution – Standard and User Defined.

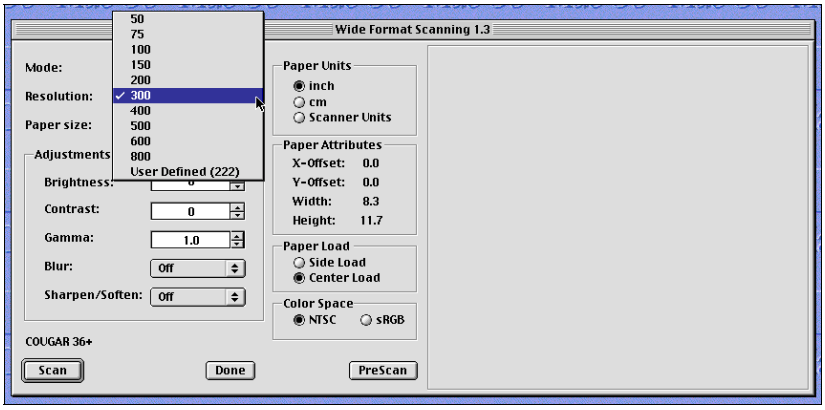


Fig. 3-5: Setting the Scan Resolution

Standard resolutions are round value settings from 50 dpi and up to the highest resolution supported by your scanner model. The application will detect your scanner model's capabilities and only valid resolutions will be listed. See the technical specifications that came with your Wide Format Scanner for information on its maximum resolution capabilities.

User Defined (custom) Resolutions – Sometimes you will need to set the resolution to a specific value in order to match your image with a specific display device, printer or software application. Or, you may be working with another image already loaded in Photoshop and wish to match the resolution of the new image with that of the existing one. If the resolution you need is not among the standard resolutions then perform the following steps:

⇒ Click the *User Defined* option at the bottom of the resolution list.

⇒ A new dialog with a single edit field appears in which you can write a specific resolution. Only whole numbered resolutions within the range of 50 and the scanner's maximum resolution are valid.

⇒ Your new resolution is called "User Defined" in the resolution field and its value is displayed will be displayed with the User Defined setting in the resolution list.

User defined resolution value

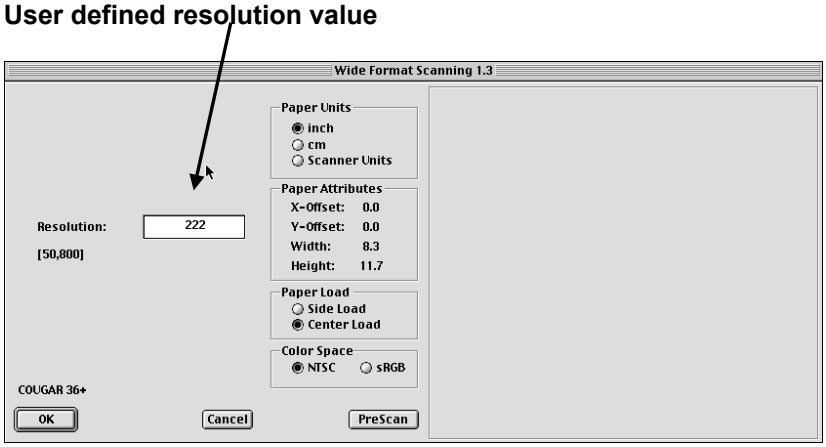


Fig. 3-6: User Defined Resolution

Your Adobe Photoshop manual also gives pointers on determining image/ scanning resolutions.

3.3 Setting the Original's Paper Size

In order to perform effective and high quality scanning, the scanner needs to know the size of the area you want to capture. In many cases this will be equal to the size of your original. This size is called the *Paper Size* and it directly defines the "scan field", which is the area on the image that the scanner will capture. One could of course choose to let the scanner digitize everything within it's maximum width, always capturing data over the original's edges, and then crop away the part you don't need. But with this method you would at best produce a lot of unnecessary and unusable data and at worse disturb effective thresholding and adaptive processing.
Sometimes, you will want to scan only a portion of the whole original. This can be performed by setting a *Paper Size* that best fits that portion you wish scanned and then repositioning the scan field through *Offsets*. You can also make the Paper Size and Offset settings visually through a prescan of the original.

3.3.1 Paper units

Before selecting a paper size, select the measurement unit (*Paper Units)* that best fits your purpose. Paper sizes can be entered and displayed in *Inches or centimeters. Paper Units* are marked above the scanner's insertion slot, so you can make size measurements directly off the scanner. Your choice of *Paper Unit* will be reflected in the *Paper Attributes* (display only) option group just under the *Paper Units* group.

3.3.2 Paper Attributes

The *Paper Attributes* value group is a display-only area that informs you of the current *Paper Size* dimensions and offsets. Whether using standard or custom sizes, paper dimensions are displayed in the measurement units selected in the *Paper Units* option group.

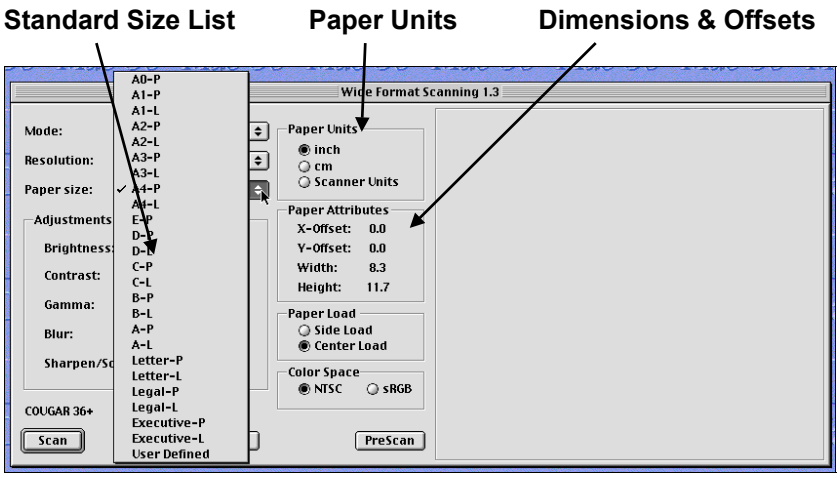


Fig. 3-7: Setting a standard Paper Size

3.3.3 Setting Standard Sizes

The available standard sizes will cover most of your needs. Click on the drop box arrow to view the available predefined standard sizes. Portrait and Landscape positioning is indicated by the letters “P” and “L” attached by hyphens to each standard size, for example, A4-P, Letter-L, etc. The *Paper Size*’s actual dimensions, given in inches or centimeters are displayed to the right in the *Paper Attributes* group.

3.3.4 Setting User Defined (custom) Sizes

Sometimes you will have an original that does not fit with any standard size or you may wish to crop an original to special dimensions in a specific image area. You can do both of these through the “*User Defined*” option, which is selectable at the bottom of the Paper Size List as shown in Figure 4-7. Here’s how you set a custom size.

⇒ Click on the down arrow in the Paper Size field.
⇒ Select *User Defined* at the bottom of the size list.
⇒ Enter *Paper Size* dimension values in the new dialog.
⇒ Enter your Offset values for scan area repositioning or leave them at 0,0 for normal top left corner positioning. (Details follow below)
⇒ Select OK. Your custom *Paper Size* (named simply *“User Defined*”) becomes the *current Paper Size*.

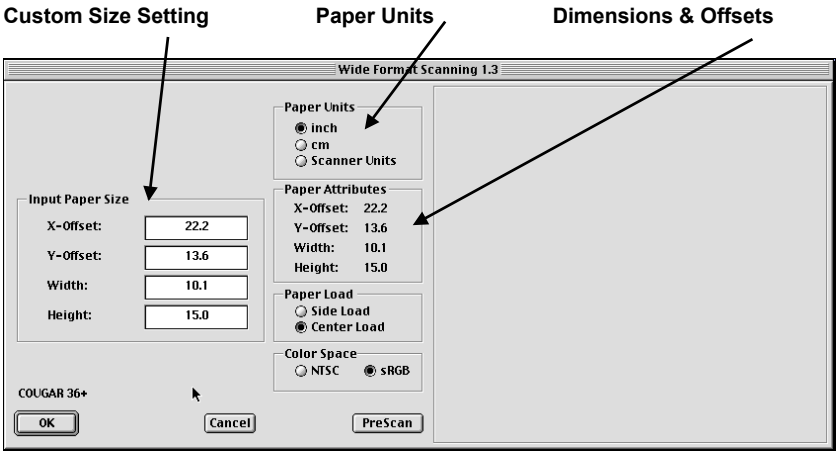


Fig. 3-8: Setting a custom Paper Size

Note: User Defined Sizes (and offsets) can be set visually with your mouse after a PreScan. See the next section for details.

The *User Defined* paper size retains its settings until they are changed. If you need a new custom Paper Size, repeat the process above and overwrite the previous values.

Move the scan area with offsets (X,Y)

The scanner's capture area is the area picked up by the scanner's cameras and the Paper Size defines its size. Normally and per default, the scanner's capture area is positioned over the original's top left corner.
The *X and Y Offsets* in the *Paper Size* dialog, allow you to move the position of the scan capture area, which means that you can point out any specific area on the original for scanning. The X and Y values you enter are like coordinates on a map and the scanning start-point will be shifted from the original's top left corner to the position indicated. Scanning itself will then cover the area specified in the dimensions fields. This could be a standard size or a custom size. For example, you might need to capture a logo imprinted somewhere in the middle of a large poster.

Example : Capture the Logo on a large Poster

⇒ Select the *User Defined* paper size option from the list of paper sizes.
⇒ Set the paper size to 5" x 5" or any size slightly bigger than the logo. This is the size of the scanner's capture area.
⇒ Use a ruler to measure the logo's position, using the measurement units selected in the Paper Units area. You measure from the 0,0 point which is at the original's top left corner.
⇒ Calculate and enter your offset coordinates so that your scanner's capture area (Paper Size) covers the logo. The coordinates you enter will indicate the position of the scan capture area's top left corner.

The above procedure is illustrated in Figure 4-9. The scan capture area is normally positioned in the top left corner of the original with offsets at X = 0 and Y = 0. The scan capture area dimensions (Paper Size) are set to 5" x 5". The offsets are then set to 8,3" in the *User Defined Paper Size* dialog. This moves the effective scan capture area 8" to the right and 3" down in relation to the original's top left corner.

Note: There is a much easier way to set User Defined offsets (and sizes). They can be set visually with your mouse after a PreScan. See the next section for details.

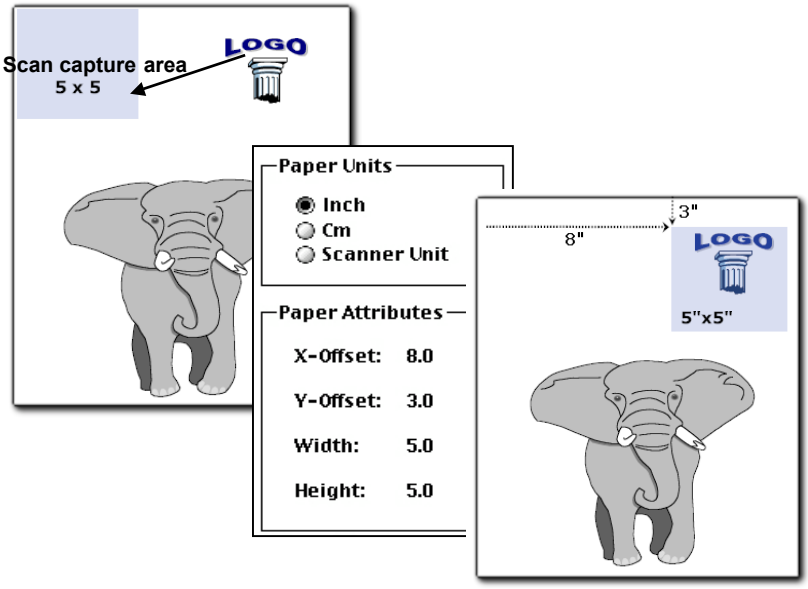


Fig. 3-9: Placing a Scan Window with Paper Size Offsets

Remember :

- The offset coordinates use the measurement units specified in the *Paper Units* area (inches, cm or scanner units.)
- Control your *Paper Load* setting with the original's position in the insertion slot. The *Paper Load* option will be described in the next section.
- The X and Y offsets should be set to zero for normal scanning of whole originals, i.e. with *Paper Size* dimensions that match the original's size.

3.3.5 An easier way – Set Paper Size/Offsets Visually

WIDEcapture incorporates a PreScan option that lets you define the capture area visually on your screen with your mouse.

⇒ Press the *PreScan* control button at the bottom of the main dialog.
⇒ An image of your original is loaded into the Prescan Window on the right.

⇒ A box in the window outlines the Paper Size and the offset, i.e., the capture area position as defined by your current *Paper Size* and *Offset* settings. See below:

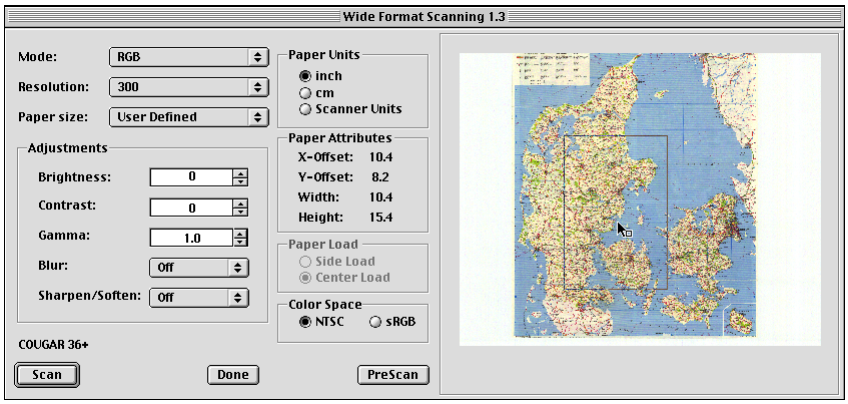


Fig. 3-10: Prescaned image with Paper Size and position outlined

⇒ Use your mouse to adjust the Paper Size and/or offsets. Drag the corners/edges of the box to resize the Paper Size.

⇒ Hold the mouse down as you point in the box and drag to position the capture area on the image.

⇒ Notice that your settings under *Paper Attributes* change in accordance with your adjustments to the outlined box.

3.4 Setting the paper feeding parameter

The *Paper Load* setting is found at the bottom right corner. Here you determine if you prefer center loading or loading from the scanner's side. *Center* loading works best with most originals and is strongly recommended *Side* loading is convenient when using specific measurements for size and offset settings because the side aligned units ruler imprinted just above the scanner's insertion slot lets you read the size off the scanner.

4. Trouble Shooting – Common Problems

No Scanner found - The Wide Format Scanning plug-in dialog tells you that no scanner is detected or known. This is likely because the scanner was not turned on and ready when you booted your computer. The scanner must be turned ON prier to booting for SCSI connections to take effect. If using FireWire or USB – see the scanner installation guide and plugin installation guide and check that setup was performed correctly. See the next section if the above procedures do not solve the problem.

Scanner ON still no scanner found – If you still get the message that no scanner was found/detected, then try to close and restart Adobe Photoshop. If you have just installed the plug-in, Photoshop needs to detect it's existence in the plug-in folder when it starts up.

Blank (white) image created after scanning - Check the *Paper Load* (*Center/Side*) setting. If your original was not placed according to this setting, for example, you inserted from the center but your setting is on "*Side Load*", then the scanner will scan and capture the white background plate. Make sure your *Paper Load* setting complies with your original's actual insertion position.
If the *Paper Load* setting is correct then you may have "exaggerated" your Threshold or Adaptive Level settings, rendering them much too extreme for the image being scanned.

Modes described in this manual not in Mode list – If you are looking for a scanning *Mode* described in this manual and it does not appear as an option in the Mode List, then it is probably not supported by your scanner model.

Part of the scanned image is cropped out – Check the *Paper Size* setting. The scanner only captures the size defined by the *Paper Size Width* and *Height* settings. Use the *PreScan* button to see how your settings will appear in your output.

Large white frame around the scanned image – Check the *Paper Size* setting. The scanner captures the whole size defined by the *Paper Size Width* and *Height* settings. If these setting extend the capture area over the originals dimensions, then the scanner picks up the white background plate.

Slow and jumpy scanning - The more available RAM in Photoshop, the smoother the Scanning Plug-in will process data and run. If the progress of the original through the scanner seems slow and in jerky movements the problem could be that Photoshop does not have optimal 'memory cash' size. Follow the instructions below to optimize your system:

- See Help > Help Contents....
- Under Index, type Memory and go to the bottom of the help page
- Click on: ... Increase the application memory size. The help text that appears (on Photoshop for Macintosh) is copied below:

1) Quit Adobe Photoshop if it is running.
2) Start all applications - except Photoshop - that you must use simultaneously with Adobe Photoshop. Keep in mind however, that running other applications with Photoshop uses RAM that could be allocated to Photoshop.
3) Return to the 'Finder'. Choose 'About this Computer' from the Apple Menu.
4) Note the 'Largest Unused Block' value (You will need this value in step 6). This value shows the amount of memory currently available.
5) In the 'Finder', select the 'Adobe Photoshop Program Icon' (Not the folder or the alias icon). And choose File > Get Info.

6) In the Adobe Photoshop Info Window, set the Preferred Size option to no more than 90% of the 'Largest Unused Block value' you noted in step 4.
7) Close the Adobe Photoshop Info Window.

In tests the Preferred Size was increased from 22Mbyte to 102 Mbyte. Scanning of a picture (A2-L 300DPI 24-bit color) went from 7 min to 47 seconds, and the scanning became smooth. Less RAM will also work fine, but the more RAM Photoshop has available, the faster the scanning will be preformed.

Not enough room on disk - Photoshop uses temporary space on the hard disk to store scanned pictures. If the picture size is too large to be saved on the hard disk, scanning is not performed, and a message appears" No scanning performed, Scratch Disk probably too small". If you have more than one hard disk the all should be in use. To control this, choose menu File: Preferences: Plug-Ins and Scratch Disks...
Note that Photoshop uses about 25% more than the theoretical size of the picture, when temporarily saving the picture on the hard disk. Example: An original with Paper Size = A0-P (33.1 Inch * 46.8 Inch) scanned at 300 DPI in RGB Color (3 byte per pixel) mode will have a theoretical size of 33.1*300 * 46.8*300 * 3 = 400 Mbyte. Despite this, Photoshop would use 500 Mbyte for storing such a scanned picture.

Other Problems related to the scanner
See the Operator’s Guide that came with the scanner.