ADOBE® PHOTOSHOP® 4.0.1 READ ME

This file contains last-minute product information and updates to the Adobe Photoshop documentation. Please refer to the Getting Started guide for installation instructions. For troubleshooting and performance information, see the user guide or online Help.

IMPORTANT

Please complete your registration card and mail it today or use the on-line registration software provided with Adobe Photoshop to register your copy. You must register to receive technical support and important product update information.

Serial Numbers

You can find the serial number on the registration card or on the first page of the user guide. Use this new number to initialize the program. Do not use the serial number on the Adobe Photoshop box.

If you are upgrading from an earlier version of Adobe Photoshop, use the original serial number that came with that version. The seven-digit number that appears on your Upgrade Registration Card (e.g. PWW401V) is for reporting purposes only; you cannot use this number to install the application.

If you are upgrading from Adobe Photoshop LE, your old serial number will not work; please use the serial number included in your upgrade package. If your serial number does not work or you did not receive a full version serial number with your Photoshop LE upgrade package, please contact the reseller from whom you purchased the upgrade, or contact Adobe Systems at 800-492-3623 or 206-628-2749.

Initialization and Preferences Files

Adobe Photoshop's initialization file (Photos40.ini) is located in the Prefs subdirectory under the directory where Photoshop is installed. The preferences file (Photos40.PSP) is also located in the same Prefs directory. Versions 3.0.4 and earlier of Photoshop installed these files under the Windows directory.

Using QuickTime® for Windows®

The Adobe Photoshop 4.0 Application CD-ROM includes version 2.12 of QuickTime for Windows. QuickTime for Windows is required to run the interactive movies on the Adobe Photoshop Application and Tutorial CD-ROMs. QuickTime 2.12 may be found in the Quiktime folder at the root level of the Photoshop 4.0 Application CD-ROM. To install QuickTime, follow the instructions in the Read Me file in the Quiktime folder.

4.0.1 Changes

Photoshop 4.0.1 is an update to Photoshop 4.0 that fixes a variety of minor problems that were discovered after Photoshop 4.0 shipped. The most notable fixes include the following:

* The fastcore.8bx plug-in--which in version 4.0 contained optimizations for both standard Pentium(tm)/Pentium Pro systems and systems with MMX(tm) technology--has now been divided into two separate plug-ins. The fastcore.8bx plug-in provides standard Pentium/Pentium Pro optimizations. The new mmxcore.8bx plug-in provides optimizations for systems with MMX

technology. The previous fastcore plug-in could cause crashes on some MMX systems, but those problems have been fixed with these two new plug-ins. (NOTE: Both fastcore.8bx and mmxcore.8bx are installed in the Extensions folder inside your Photoshop Plugins folder. The mmxcore plug-in will not affect Photoshop's performance if you are not using a system with MMX technology.)

* Photoshop 4.0.1 can now support systems with more than 1 GB of RAM. In addition, Photoshop can now create a scratch disk on a hard disk partition or volume that is greater than 2 GB.
* Decimal percentages are now allowed when resizing images using the Image Size dialog.
* The quality of the results obtained when scaling images by large percentages using Free Transform has been improved.
* LZW-compressed TIFF files will now open faster.
* Inaccuracies of the Info palette's reading of the white point in CMYK images have been corrected.

In addition, the Fade command in the Filter menu can now be used on paint strokes as well as filter operations.

UNDOCUMENTED FEATURES

The following sections describe features in Photoshop 4.0 that are not described in the documentation.

Support for 16 Bits/Channel Images

Adobe Photoshop 4.0 can read and import RGB and grayscale images that contain 16 bits of data per channel. You can also convert a flattened 8 bits/channel image to 16 bits/channel by choosing Image > Mode > 16 Bits/Channel. When working with a 16 bits/channel image, you can make selections using the marquee, lasso, and polygon lasso tools, and apply Levels and Curves adjustments. In order to take full advantage of Photoshop's features, you can convert a flattened 16 bits/channel image to 8 bits/channel by choosing Image > Mode > 8 Bits/Channel.

Image Cache Preference

Photoshop 4.0 uses a scheme called image caching to help speed the redraw of high-resolution images. With image caching, Photoshop uses lower resolution versions of an image to update the image on-screen when performing basic operations, such as compositing, layering, and applying color adjustments. You can adjust the image cache setting and determine whether or not Photoshop uses the image cache to display histograms.

To change the cache settings:

1. Choose File > Preferences > Memory & Image Cache.

2. For Cache Levels, enter a value between 1 and 8. A higher value results in greater image caching and quicker screen redraw, but also uses more hard disk space and RAM, and can increase the time it takes to open a file.

If you are working with small files (for example, frames of QuickTime movies or screen images), you may want to use a Cache Levels setting of 2 or 3. If you are working with large files (for example, files larger than 4096 pixels high or wide), you may want to use a setting higher than 4.

3. To increase the speed of histogram displays, select Use cache for histograms. Selecting this option produces a faster, though slightly less accurate, histogram display when you choose Image > Adjust > Levels or Image > Histogram.

4. Click OK.

Support for ICC profiles

As documented in the User Guide, Photoshop 4.0 can use ICC profiles to generate separation tables automatically. In order to use this feature, you must select the Custom Install option when installing Photoshop and choose to install the ICC profiles. Note that you must install the Photoshop application at the same time in order for the ICC profiles to be recognized. You should not install the Photoshop application and the ICC profiles separately.

Pasting data from Adobe Illustrator®

You can paste artwork copied to the Clipboard from Adobe Illustrator (version 4.0 and later). Also, see the information below, under Improving Performance and Troubleshooting, for more information about importing Adobe Illustrator files.

Batch processing

When batch processing a set of files, you can choose to override Open commands that have been recorded. To do this, choose Batch from the Actions palette menu and select Override Action 'Open' Commands. This option is useful when you would like to batch process a set of files that are stored in a different folder than is specified by a previously recorded Open command.

Also note that you cannot batch process a Windows shortcut. You must place the actual file in the batch folder in order for it to be processed.

Desaturate Command

The Image > Adjust > Desaturate command removes all color values from a color layer or image, leaving only the grayscale values.

Relative Move Option in Numeric Transform

Deselecting the Relative Move option in the Numeric Transform dialog box causes transformations to occur with respect to the 0, 0 position on the rulers.

Guides

Guides snap to the edges of current selections and to the 50% boundaries of alpha channels. The 50% boundary of an alpha channel is the border that encloses all pixels lighter than 50% gray. Guides also maintain their relative positions to the image contents when you resize the image or resize, rotate, or flip the work canvas.

Lock Guides Command

The View > Lock Guides command lets you lock or unlock the position of guides in an image. You cannot move or change the orientation of a locked guide. If guides are locked they will not be scaled when the image they are in is resized. A checkmark next to the Lock Guides command indicates that guides are locked.

Selecting

You can drag a selection marquee partially beyond the canvas boundaries without clipping the selection border. The original selection border remains intact when you drag it back within the canvas boundaries.

Viewing

To zoom in or zoom out on an image without resizing the window, press Ctrl+Alt+(+) or Ctrl+Alt+(-), respectively. There are no shortcuts for zooming in to the maximum magnification or zooming out to the minimum magnification.

Layers

You can use the following features and shortcuts when working with layers:

* To display the context menu listing the layers in the image at the current pointer location, press Ctrl and click with the right mouse button in the image.

* To move a selected layer one level up in the Layers palette, press Ctrl+]. To move one level down, press Ctrl+[. To move a layer to the topmost level of the Layers palette, press Ctrl+Shift+]. To move to the bottommost level of the palette (above the background), press Ctrl+Shift+[.

* When a layer mask is visible (when you are viewing its grayscale channel), double-clicking the layer mask thumbnail in the Layers palette lets you change the layer mask options. Otherwise, double-clicking the layer mask thumbnail in the Layers palette lets you change the layer options.

* To toggle the layer mask channel display on and off, press \.

* To duplicate an existing layer mask on the selected layer, click on the layer where you want to add the duplicate layer mask to make it the active layer, then drag the layer mask thumbnail you want to duplicate to the New layer mask button at the bottom of the Layers palette. To duplicate the layer mask and reverse the hidden and revealed areas, press Alt as you drag the layer mask thumbnail.

* To load the boundaries of a layer mask as a selection, Ctrl-click the layer mask thumbnail in the Layers palette. To add or subtract the layer mask boundaries from an existing selection, press Ctrl+Shift or Ctrl+Alt, respectively, and click the layer mask thumbnail. To intersect the layer mask boundaries, press Ctrl+Alt+Shift, and click the layer mask thumbnails.

* When dragging a layer from one document to another, you can align the dragged layer with the destination document by holding the Shift key. If the two documents are of the same pixel dimensions, the dragged layer will be dropped into the destination document in the same location. If the two documents are of different dimensions, then the dragged layer will be centered in the destination document.

Rebuilding the Font Menu

If you've added or removed fonts from your system since starting Photoshop, you can rebuild the Font menu in the Type Tool dialog box to include all the fonts that are installed on your system. To do this, hold down Shift and click in the image with the type tool pointer.

Saving in JPEG format

When saving in the JPEG format, you can choose to save the image without paths by deselecting the Save Paths option in the JPEG Options dialog box. Saving an image without path data can help reduce file size.

Using Photoshop JPEG files with JAVA applications

Many JAVA applications have trouble reading JPEG files that include thumbnails. If you find that a JAVA application will not read your Photoshop JPEG files, try saving JPEG files with the thumbnail turned off. The Thumbnail option can be disabled in the Save dialog box.

Filling the Work Canvas

To fill the work canvas (the area surrounding the image when the window is resized to be larger then the image) with the current foreground color, Shift-click in the canvas with the paint bucket tool selected.

Resetting the Timer

To reset the timer in the Timing display, hold down Alt, position the pointer over the triangle at the bottom of the program window, hold down the mouse button, and choose Timing from the menu.

Resizing Large Images

Adobe Photoshop supports a maximum image size of 30,000 by 30,000 pixels. When you resize or resample large images, your results are limited by this constraint. For example, if the height of the image is 14 inches, the maximum resolution is 2142 (i.e., 30,000/14 = 2142). If you edit the resolution of the image, Photoshop will adjust the dimensions accordingly.

USING ADOBE PHOTOSHOP WITH WINDOWS

The following sections include useful information about using Adobe Photoshop 4.0 with different versions of Windows.

Shared Files

Many files installed by Photoshop - such as Win32s 1.30.167 (installed on Windows 3.x only), TWAIN, TWAIN_32, Kodak PhotoCD, MSVCRT20.DLL and MSVCRT40.DLL (Photoshop does not install MSVCRT20.DLL under Windows 95 because it is included in the operating system) - are shared with other programs. When you install or uninstall other programs that use these shared files, the file versions used by Photoshop may be overwritten or deleted. If you experience problems with features that depend on shared files, reinstall Photoshop.

Note that you must manually uninstall shared files installed by Photoshop if you are running under the Win32s subsystem. Shared files are not automatially uninstalled by choosing the Uninstall command.

Windows 3.1 and the Win32s Subsystem

In order to run Adobe Photoshop 4.0 under Windows 3.1x, you need to have the Microsoft Win32s subsystem installed on your system. Win32s allows 32-bit applications like Adobe Photoshop 4.0 to run unmodified under 16-bit Windows 3.1x. If you are installing under Windows 3.1x and have selected Typical Install, Compact Install, or have selected Program Files in the Custom Install dialog box, Adobe Photoshop Setup will install Win32s (version 1.30, build 167) automatically unless a newer version is present on your system. Older versions of Win32s on your system are overwritten.

Windows for Workgroups

If you are using Windows for Workgroups 3.11, you may experience problems with Adobe Photoshop, especially when printing files larger than 40 MB. These problems are due to the inability of some system BIOS chips to handle 32-bit file access. To correct the problem, you can turn off 32-bit file access. In the Windows Control Panel, choose the 386 Enhanced option. Select Virtual Memory, and then click on the Change button. Disable the "Use 32-bit File Access" option and click OK.

Windows 95

If you are using Windows 95 and experience memory errors or errors when saving an Adobe Photoshop document, change the minimum and maximum virtual memory settings in Windows 95 to 2 times the amount of RAM on your system. For example, if your system has 32 MB of RAM, navigate to Control Panel > System > Performance > Virtual Memory>Let me specify my own virtual memory settings, and set the minimum and maximum virtual memory values to 64. Setting the virtual memory to these fixed values enables Photoshop to control use of the hard drive space for its scratch disk for the best performance, rather than letting Windows 95 manage it. For optimum performance, make sure that Photoshop's primary scratch disk is assigned to a partition or hard drive that is not the same partition or hard drive Windows 95 uses for its virtual memory. For more information, see "Assigning scratch disks" on page 364 of the user guide or see the same section in online Help.

Windows NT

Adobe Photoshop 4.0 can be run under Windows NT 3.51 and 4.0 for Intel-based systems only. It will not run under other types of Windows NT such as Windows NT for DEC Alpha or Windows NT for PowerPC.

Running Adobe Photoshop under Windows NT with dual processors can improve by 80% the program's performance on mathematical or computational-intensive operations (such as converting a document from RGB mode to CMYK); by 20% to 30% for less intensive operations; and by 10% for screen redrawing.

Some third-party plug-in modules (such as those for scanners) may not work with Adobe Photoshop under Windows NT because they are 16-bit modules, whereas Adobe Photoshop is a 32-bit application. Windows NT requires a 32-bit TWAIN source module to scan images, and will not work with the same scanner software that worked with Windows 3.1. If you experience problems when trying to scan images under Windows NT, try using the scanner manufacturer's TWAIN_32 source module. Contact the third-party manufacturer for information on the availability of 32-bit versions of scanning modules.

Changing Monitor Bit Depth in Windows NT

When using Adobe Photoshop with Windows NT, do not attempt to change bit depth while running Adobe Photoshop. If you need to change your monitor's bit depth, Quit Photoshop. Change your monitor's bit depth, then relaunch Photoshop.

File Associations in Windows 95 and Windows NT 4.0

Upon installation, Photoshop will automatically register itself with Windows as the default editing application for many of the graphics file formats that it supports, such as TIFF, EPS and JPEG files. If you have any files on your system in one of the registered formats, they will be displayed with Photoshop icons, and double-clicking on one of these files will automatically launch the Photoshop application. This will be true even if the files were originally created with a different application. Windows requires that all files with the same three-letter extension be registered with the same application.

If you would prefer to define a different default application for opening a particular file type, it's easy to do so yourself:
1. On the desktop, use the mouse to select a file of the type you want to open.
2. While holding down the [Shift] key, right-mouse-click on the file.
3. In the context menu that appears when you right-mouse-click, select the "Open with..." option. The Open With dialog appears.
4. In the Open With dialog, select the name of the application you want to use to open the file. If you don't see the desired application in the list, you can use the Other... button to find it.
5. Enable the "Always use this program to open this type of file" checkbox.
6. Click O.K.

Alternatively, you can reinstall the application that you want to use to open a given file type, and it will re-register itself as the default application.

Batch Processing in Windows NT

If you are using the Batch command when running Photoshop under Windows NT, you must save your batched files to a folder other than your source folder to avoid having Photoshop continuously process the same files.

Windows NT and Wintab32.dll

If you are running Windows NT 3.51 or NT 4.0 and have the file Wintab32.dll present on your system the following error message will appear while Adobe Photoshop 4.0 is loading:

"Tools:Photoshp.exe-Entry Point Not Found. The procedure entry point UTRegister could not be located in the dynamic link library kernel32.dll."

This message is harmless and will allow you to continue.

OS/2 Warp

Adobe Photoshop 4.0 is not designed (nor was it tested) to be run under the IBM® OS/2® Warp operating system.

Running Adobe Photoshop Over a Network

Adobe Photoshop 4.0 is not designed (nor was it tested) to be run when Windows is multi-launched over a network. If you want to run Adobe Photoshop on multiple Windows systems,

make sure that each system has its own copy of Windows and Adobe Photoshop installed on the hard drive.

IMPROVING PERFORMANCE AND TROUBLESHOOTING

The following sections describe how to improve your system's performance when working with Adobe Photoshop 4.0, and how to correct some common problems which may occur.

Compressed Drives and Virtual Memory

Adobe Systems recommends that you do not set either the Windows swap file or Adobe Photoshop's scratch disk to a compressed disk drive. For more information, see "Assigning scratch disks" on page 364 of the user guide.

Redrawing Images

When your video driver is set to 256 colors, Photoshop does not redraw an open image in the background when the foreground image is edited. To have Adobe Photoshop redraw every open image when a palette change occurs in 256-color mode, add the following line to your Photos40.ini file:

    REDRAWBKDOCS=1

Matrox Millennium® Graphics Board

If you notice slow screen redraw speeds on a system using the Matrox Millennium graphics board, make sure that you are using the latest version of the video driver for this board. Alternatively, adding the following line to your Photos40.ini file may improve performance:

    INVERTDIB=1

Importing Adobe Illustrator® Files

The EPSParsr.8by plug-in installed with Photoshop 4.0 should successfully import most generic encapsulated postscript files as well as most Adobe Illustrator files. If you are having problems importing Adobe Illustrator files in 88 or 1.0/1.1 format, or Illustrator files containing text which uses Multiple Master fonts, you may have more success with the aiparser.8by plug-in. To use the aiparser plug-in, drag it from the the goodies/plugins folder on the Photoshop 4.0 Application CD to your Photoshop 4.0 plug-ins folder. You must also remove the EPSParsr.8by plug-in from your Photoshop 4.0 plug-ins folder.

Please note that, when you use the aiparser instead of the epsparsr plug-in, you will not be able to import generic postscript files that were not created with Adobe Illustrator. Also, some advanced features of Adobe Illustrator, such as gradient and pattern fills, may not be supported.

Incompatibilities with Utilities and Device Drivers

This section describes some common problems that may result when using pressure-sensitive tablets or the Powertoy utility.

* Pressure-sensitive Pens and Tablets

After restarting your computer, the tablet and stylus report a pressure level of zero. Click or drag once with the stylus on the tablet to reset the tablet's pressure sensitivity and to paint.

Under Windows 3.1, Adobe Photoshop 4.0 supports only pressure-sensitive digitizing tablets that are 100% compatible with the Microsoft Pen Windows specification. Under Windows NT and Windows 95, Adobe Photoshop 4.0 supports only pressure-sensitive digitizing tablets that are 100% compatible with the WinTab32 specification.

If the pen's highest pressure doesn't reach 100%, a problem exists in the driver software. For the latest driver software, contact the tablet manufacturer. The following are contact phone numbers for some of the leading manufacturers:

Wacom Technology Corporation: www.wacom.com Tel: 800-922-6613
ALTEK Corporation (Kurta tablets): Tel: 301-572-2552
CalComp: www.calcomp.com Tel: 800-451-7568
Hitachi: 408-735-0577

<u>* QuickRes Utility and Color Depth</u>

After changing the color depth of a Photoshop image using QuickRes, the color in the image may appear altered. (QuickRes is a Microsoft Powertoy utility that allows changing the color depth without restarting the system or the application.) To set the colors correctly, restart Adobe Photoshop.

Enabling a Printer Device to Convert RGB to CMYK

RGB graphics created in Adobe Photoshop 2.5 and later include data called RGB tags that instruct Photoshop to use its own algorithms when converting RGB data to CMYK for separations. Unless RGB tags are disabled, Photoshop converts all RGB data to CMYK rather than letting the printer perform the conversion. When printing to a PostScript Level 2 device, disabling the RGB tags enables the printer to convert the RGB data to CMYK data.

To disable RGB tags in Photoshop for Windows:

1. Make a backup copy of the Photos40.ini initialization file.
2. Use a text editor that saves in text-only format and open the original Photoshop initialization file.
3. In the [Photoshop] section of the Photoshop initialization file, add the following line, exactly as shown:

    DISABLERGBTAGS=1

4. Save the Photoshop initialization file as text-only and restart Photoshop.

Enabling Asynchronous I/O for Virtual Memory

When asynchronous I/O is enabled for Photoshop's virtual memory, it allows multiple virtual memory operations to be overlapped. In some cases, this can make Photoshop seem to be more responsive, but it can also cause slower overall performance on some systems. In Photoshop 3.0, asynchronous I/O for virtual memory was enabled by default. In Photoshop 4.0, asynchronous I/O is disabled by default.

You can enable asynchronous I/O yourself in order to find out whether it improves Photoshop's performance on your system. Simply add the following line, exactly as it appears, to your

Photos40.ini file:

VMASYNCIO=1

If you find that performance is degraded with asynchronous I/O enabled, you can turn it off simply by deleting the line above from your Photos40.ini file.

Multiprocessor Extension

The MThread.8bx plug-in installed with Photoshop 4.0 provides support for systems with multiple processors. If you are experiencing problems running on a multiprocessor machine, ensure that you have only one copy of this plug-in in your Plugins folder.

Function Key Defaults

F1 - Help
F2 - Cut
F3 - Copy
F4 - Paste
F5 - Show/Hide Brushes Palette
F6 - Show/Hide Colors Palette
F7 - Show/Hide Layers Palette
F8 - Show/Hide Info Palette
F9 - Show/Hide Actions Palette
F12 - Revert
Shift-F5 - Fill
Shift-F6 - Feather
Shift-F7 - Select > Inverse

Viewing Desktop File Thumbnails

Some video drivers may cause the Photoshop 4.0 desktop file thumbnails to appear as black rectangles. If you experience this problem, select the icon, right-click to display its context menu, and choose Properties from the menu. Click Photoshop Image and try some of the other settings under Icon Thumbnails. You will only see Icon thumbnails if you have 32,767 or more colors, and are running Windows 95 with the Plus! Pack or Windows NT 4.0. To force Windows to update a Photoshop (or any other) icon, select the icon and press F5.

Enabling Debug Messages

If you are a software developer (or anyone who uses debuggers) running Windows 3.1x or Windows for Workgroups 3.1x, installation of Photoshop may cause your debug messages to be ignored. To correct this, simply remove the following entry from your system.ini file:

    OutputTo=NUL

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