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1: Overview

PhotoGIF™ is the most powerful tool available for creating optimized GIF images and editing GIF animation files for the Web directly from Adobe Photoshop. It uses advanced color reduction and compression technology combined with powerful features and a fully interactive, intuitive interface to make production of GIF and GIF animation files easy and efficient.

PhotoGIF™ is a set of two Adobe Photoshop plug-ins, each providing key capabilities and flexibility, which may be used interchangeably, as needed, during production.

PhotoGIF™ 3.5 (Format) is a file format plug-in that allows opening and saving GIF images and animations in a transparent manner.

There are many advantages to this approach, but there are limitations from the file format plug-in API imposed that prevent any layer access.


PhotoGIF™ 3.5 (Filter) is a filter plug-in that functions in the manner of an export plug-in, which was added to PhotoGIF™ to overcome the layer limitation, and provide widespread compatibility with popular image editing applications.

By using both plug-ins together as needed, the best of both worlds is gained, while still maintaining a familiar and consistent interface.
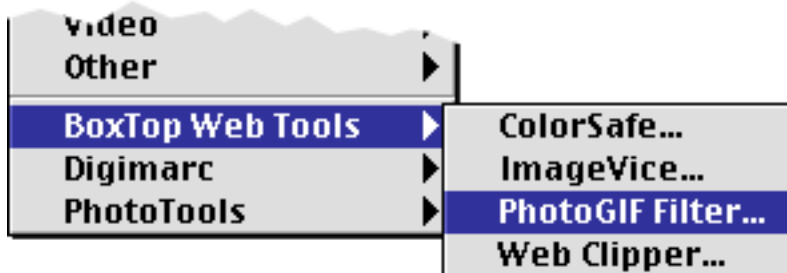
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2: Installation

To install PhotoGIF™, simply drag the two plug-ins, PhotoGIF™ 3.5 (Format) and PhotoGIF™ 3.5 (Filter), from their folder to your plug-ins folder. It is normal to place filter plug-ins such as PhotoGIF™ 3.5 (Filter) within the Filter sub-folder and file format plug-ins such as PhotoGIF™ 3.5 (Format) within the Formats sub-folder, but this is only for organizational purposes. It is not required for Photoshop to load the plug-ins.
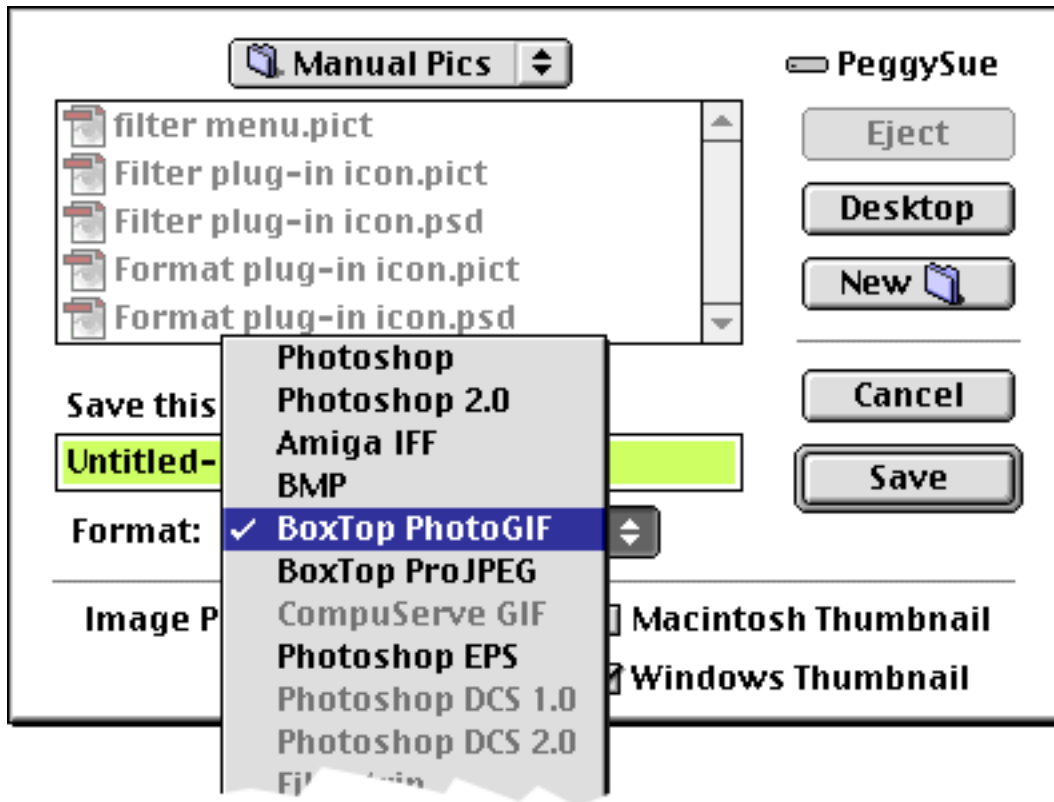
When you re-launch Photoshop, PhotoGIF™ 3.5 (Format) will add a new file format option to Photoshop in the format menu of its standard open and save dialogs. PhotoGIF™ 3.5 (Filter) will appear in the filters menu, under the BoxTop Web Tools sub-menu.

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If you have any difficulty installing PhotoGIF™, these trouble shooting tips should help you resolve the problem.

Assuming you have placed the plug-ins in the proper place, if either does not appear in their respective locations within Photoshop after re-launching you should check the following in order:

1: If using Photoshop, delete its preferences file, which is located in the System Folder with versions 3.0 and 4.0. If you have Photoshop 5.0 or newer, the preferences file is located in the application folder within the Adobe Photoshop Settings folder. It is common for Photoshop to slightly corrupt its preferences file, and this will often prevent it from recognizing any new plug-ins.

2: Confirm the location that Photoshop is set to look for plug-ins in its preferences, and reset this location as needed to the intended plug-ins folder if it has been inadvertently changed.

3: Confirm that your install of Photoshop is in fact PPC native if using Photoshop 3.0 or 4.0. 68K installs of Photoshop cannot use PPC only plug-ins such as the PhotoGIF™ plug-ins. You can check this by looking in Photoshop's About dialog, which will denote PowerPC next to the version number if it is PPC native. It may be necessary to install a native version of Photoshop.

4: If you used Stuffit Expander to decompress the original PhotoGIF™ archive, it is possible that it corrupted the plug-ins during decompression, which will happen if Stuffit Expander's preferences have become corrupted in certain ways. This has recently been reported in increasing frequency, so we are under the impression it is a new problem with the new version of Stuffit Expander. You should delete your Stuffit Expander preferences and decompress the original archive again if a PPC version of Photoshop will still not recognize the plug-ins.

5: If using another application besides Photoshop as your host application, it may be that it is simply unable to run one or both of the PhotoGIF™ plug-ins. PhotoGIF™ 3.5 (Format) will most likely not work with any host application besides Photoshop, but PhotoGIF™ 3.5 (Filter) should work with most other host applications. However, we can only guarantee that either will work with Photoshop. Many applications that claim to support Photoshop plug-ins do so only in limited ways.

3: The GIF Format

'GIF' stands for the 'Graphics Interchange Format' and was developed in 1987 by CompuServe, Inc. to provide a simple, efficient format for the presentation of graphics over the CompuServe online service. Because the needs of CompuServe, Inc., when developing the GIF format, closely matched the needs presented by the Web, GIF was adopted as the in-line graphics format for early Web browsers. It has since become the primary graphics file format for the Web and is supported by all graphical browsers now.

GIF is an 'indexed color' format, which uses a palette limited to 256 colors or less. RGB data is stored only in the palette of GIF files, and pixel colors in a GIF image are referenced to the RGB values stored in the palette with one byte indexes into the palette. This means that an uncompressed indexed image will be exactly a third as big as an uncompressed RGB image.

In addition to the reduction in image size by the indexed image, GIF is a compressed format that uses 'lossless' LZW compression to further reduce the size of stored image data in GIF files.

There are two versions of the GIF format, GIF87a and GIF89a. GIF87a files are based on the original file format specification, while GIF89a files are based on a latter revision of the specification which added transparency and multi-image capability to the GIF format. GIF89a is also backwards compatible with applications only supporting GIF87a files.

GIF animations, as supported by all current graphical Web browsers, are nothing more than GIF89a files containing multiple images. They are only animations by virtue of the viewing application's handling of the multiple images contained in them.

There is no difference in the file format of single image GIF89a files, as are used for the majority of graphics on Web pages, and multiple image GIF89a files, which would play as animations in a browser.

4: GIF File Size Basics

File sizes are very important for Web graphics. Smaller files mean shorter transmission times and more viewers that stick around to read your Web pages. With this in mind, we've taken great pains to develop superior technology for PhotoGIF™ that allow you to make the smallest, best looking GIF files possible with it.

This includes the adaptive and fixed palette color reduction, which uses: a new variable intensity; selective dithering technique that minimizes entropy and produces more compressible image data; a palette usage optimization feature that removes redundant colors from the image and reorganizes color usage to specifically improve compression; the most efficient LZW compression there is; and the fully interactive interface to take the mystery out of GIF file sizes.

PhotoGIF™ interactively reports the final size of your GIF as you're setting parameters. This is the exact and accurate size of your GIF file, and invaluable feedback to help you produce optimized GIFs.

With this information and a very basic understanding of the factors that effect GIF file size, making the smallest files possible is simple, repeatable, and fast with PhotoGIF™.

Color reduction, above all else, is most determinant of final file size for GIF files. Color reduction from original RGB data to indexed data determines what data will actually be compressed.

Identical indexed images will compress to nearly identical file sizes given any competent LZW implementation. It's not the compression that makes the real difference in GIF file sizes.

PhotoGIF™ provides an additional color reduction method to you for using, but you may also still take full advantage of Photoshop's own color reduction. Each has its advantages and disadvantages outlined in the Advanced GIF Optimization section of this manual.

When performing color reduction on an image you will save as a GIF file, you should always start low and work high. Begin with settings lower than you think are required to preserve suitable image quality and work upwards until the image is acceptable.

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This way you will be less likely to choose parameters that are overkill and needlessly make your GIF files larger than they could be.

The same applies to dithering settings. You should begin with little or no dithering, and only increase dithering amounts as needed.

Following this simple methodology, you will achieve much smaller file sizes, and when using PhotoGIF™ you will always know what effects the setting you have chosen will have on file size, making it easier to choose the best settings for each individual image.

"Pushing the button" isn't advisable, because color reduction is image dependent. The same settings that work well for one image may well not work at all for the next.

Appropriate settings must be made for each individual image for the best results.

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5: File Sizes on Macs

Because Macs use a file system that references two separate files, one called a "resource fork" and one called a "data fork", as a single file visible on your desktop, and displays file size information as a combined total of these two separate file, it can be difficult and misleading to try to determine the true size of any GIF file using the Finder.

Information contained in the resource fork is Macintosh specific and often application specific information that is not part of the cross–platform GIF file, which is contained in the data fork as the "data" of the file.

All files created using PhotoGIF™ 3.5 (Format) will contain a resource fork that has additional Macintosh and Photoshop specific information in it. This can include custom icons, image previews, printer settings, last window position, etc. Often this resource information is larger than the actual size of the GIF file it is associated with. Photoshop adds this information directly, so there is no way to avoid it in a file format plug–in.

Files created using PhotoGIF™ 3.5 (Filter) will never contain any resource information.

Both versions of PhotoGIF™ display the accurate and exact GIF file size in the GIF options dialog. There is no need to go out of your way to check file sizes in the Finder.

However, if you do need to check the size of any GIF (or JPEG) file in the Finder, you should follow this procedure to make sure you accurately de–termine the true size of the file as it applies to the Web.

First, drop the files you need to check onto GIF Prep, a free utility available from the BoxTop Software, Inc. Web site. GIF Prep will strip the resource fork if present from the files, so the Finder will only report the size of the file's data.

Second, select the file in the Finder and press Command – I, or select File–> Get Info –> General Information... in the Finder.

In the Get Info dialog two numbers are displayed for file size in the format:

Size: 8K on disk (3,329 bytes)

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The first number to the left expressed in whole K is not the size of the file. It is the allocation block size on your hard drive for the file.

This is analogous to the box that holds the file, which always has to be bigger than what the box contains. This number will always be in even multiples of the minimum allocation block size for your hard drive. 4K is very common now with HFS+ drives, but not the only allocation block size possible.

The second number to the right expressed in bytes is the actual size of the Macintosh file. As already stated, this is always the combined size of both data and resource fork files.

However, since you used GIF Prep to previously strip the resource fork of the file, you know that the current size of the resource fork for your GIF file is zero, and the remainder is the true size of the GIF file.

Following this simple procedure, and the size of a GIF file reported by PhotoGIF™ as you save the file will always agree with the size of the file reported by the Finder after you have saved the file.

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6: Opening Files with PhotoGIF™

PhotoGIF™ 3.5 (Format), when installed, will become the default method for opening all GIF files in Photoshop. (The filter version of PhotoGIF™ is not capable of opening files since it is a filter plug-in.)

No special action is needed to open a file using PhotoGIF™. Double clicking on a Photoshop owned GIF file, dragging a GIF file onto Photoshop to launch it with the document, or using the File -> Open... command in Photoshop all will use PhotoGIF™ to read GIF files.

There are no variations of GIF files, which PhotoGIF™ cannot open. However, should you desire to use the standard CompuServe GIF plug-in to open any specific GIF file, this can still be done from the File -> Open... command in Photoshop, by selecting the Show all Formats option and choosing "GIF" to read the file instead of "BoxTop PhotoGIF".

PhotoGIF™ automatically determines if a GIF file contains one or multiple images. If the file is a single image GIF file, no additional user input is required to open the file, and the file is opened directly into Photoshop transparently, with no open options dialog shown.

However, if PhotoGIF™ determines that the file being opened contains multiple images, additional input is required before the file can be opened, and the multiple image open options dialog is presented.

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The multiple image open options dialog allows you to specify the mode in which you would like to edit the multiple image file, and if needed choose which image within the file to open for editing.

There are four editing modes available, each having its specific advantages for working with multiple image GIF animation files.

The first mode, Edit single image, allows you to directly edit one image within a multiple image GIF animation file while maintaining the integrity of the multiple image structure of the original file. If you select Edit single image as the editing mode, the current image selected in the multiple image open options dialog will be opened into Photoshop for editing.

The second mode, Edit cell-strip, is most useful for viewing all the images within a multiple image GIF animation file at the same time. It is not suitable for editing animations, unless all the images within the animation are the same size as the logical screen size of the multiple image GIF animation file. If any of the images within the multiple image GIF animation file are smaller than the logical screen size of the multiple image GIF animation file, re-saving the file from Edit cell strip, mode will increase the size of the file, because the images smaller than the logical screen size will be increased in size by filling the area between the image size and the logical screen size with the GIF background color. You can view either vertically or horizontally in Edit cell-strip mode.

The third mode, Extract single image, allows you to extract a copy of a single image contained within a multiple image GIF animation file to edit. The original file will be left unaltered and a new single image GIF file will be created and opened into Photoshop for editing. The new file created is automatically named with the original file name and the sequential number of the image being extracted. If a file already exists with this name, PhotoGIF™ will not create a new file and will open the existing file instead.

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The forth and last editing mode, Extract all images, operates in much the same way as Extract Single Image, except that all images are extracted into new single image GIF files and then opened into Photoshop for editing. The new files created are automatically named with the original file name and the sequential number of the image contained in each new file. If a file al–ready exists with the same name as PhotoGIF™ tries to assign to a new file, PhotoGIF™ will not create a new file and will open the existing file instead.

7: Saving Files with PhotoGIF™

There are three ways to save GIF files using PhotoGIF™. The first two are accomplished by PhotoGIF™ 3.5 (Format) and are the traditional Save and Save as commands in Photoshop, which differ only slightly from each other and are familiar methods.

The third way is by invoking PhotoGIF™ 3.5 (Filter) and exporting the open image or selection to a GIF file, bypassing the normal methods of saving files within Photoshop.

The basic PhotoGIF™ interface is consistent, with small exception, between PhotoGIF™ 3.5 (Format) and PhotoGIF™ 3.5 (Filter).

The Save As command may be used for images in RGB, Indexed, Greyscale, or Bitmap modes, with any number of alpha channels in the working document. However, if the working document contains more than a single layer, you will need to either manually flatten the image prior to saving or use the Save a Copy command with the flatten image option checked. File format plug–ins such as PhotoGIF™ 3.5 (Format) cannot access layer information because of limitation in the plug–in API, and Photoshop will disable all file formats that are plug–in based for working documents with layers.

If the working document was opened using PhotoGIF™ (Format) or was first Saved As using it, then the Save (Command – S) command can be used for subsequent saves while editing the image. The Save command will preserve previous settings, however, you should not generally use the Save command repeatedly from RGB mode images, as the actual effects of color reduction will not be reflected in the open working document. Another limitation of file format plug–ins is they can only create a new file, they can not directly alter the open document.

PhotoGIF™ 3.5 (Filter) or the PhotoGIF Filter command may be used on any RGB or Grayscale mode image, with any number of layers or any number of alpha channels. Like most filters, PhotoGIF™ 3.5 (Filter) will operate on the current selection if there is one, or the entire active image layer if there is not.

When saving a file in RGB mode from PhotoGIF™, the first dialog shown is the color reduction options dialog. This is identical between filter and format versions of PhotoGIF™, and used to set color reduction parameters.

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You should minimally set the appropriate number of colors in the color reduction options dialog and dithering amount using the indexed preview and size display as a guide for what will work best for the particular image.
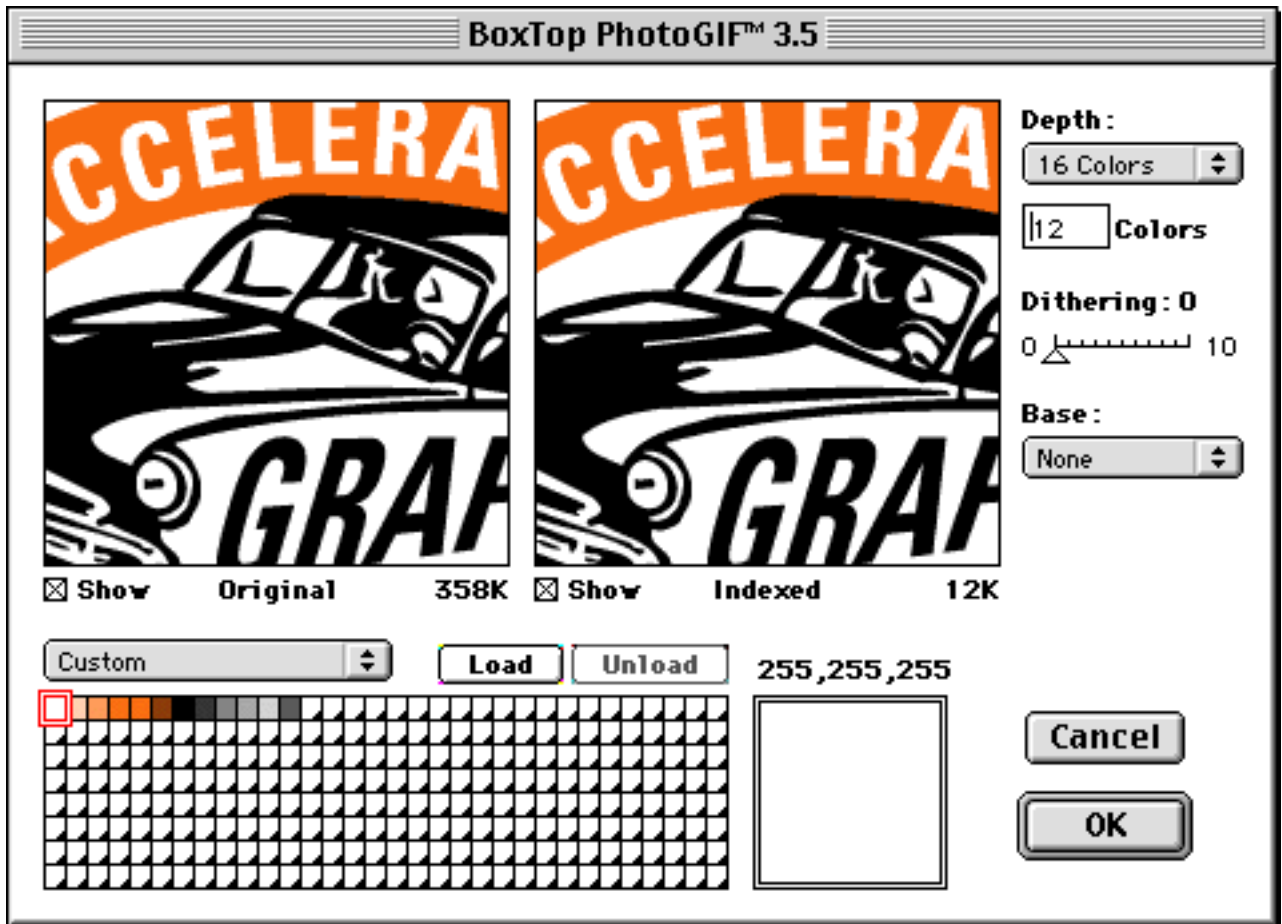

Other settings are discussed in greater detail in the PhotoGIF™ Interface section. This section is only a familiarization with the process of saving files with PhotoGIF™.

When you have made color reduction settings, PhotoGIF™ will enable the OK button in the color reduction options dialog after color reduction has been completed. While color reduction is still in progress, an indicator line will blink under the Show check box for the indexed preview.

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Clicking OK in the color reduction options dialog will take you to the GIF options dialog. If you are saving a file that has already been color reduced and is in Indexed, Grayscale, or Bitmap modes, then the GIF options dialog will be the only dialog shown during saving.
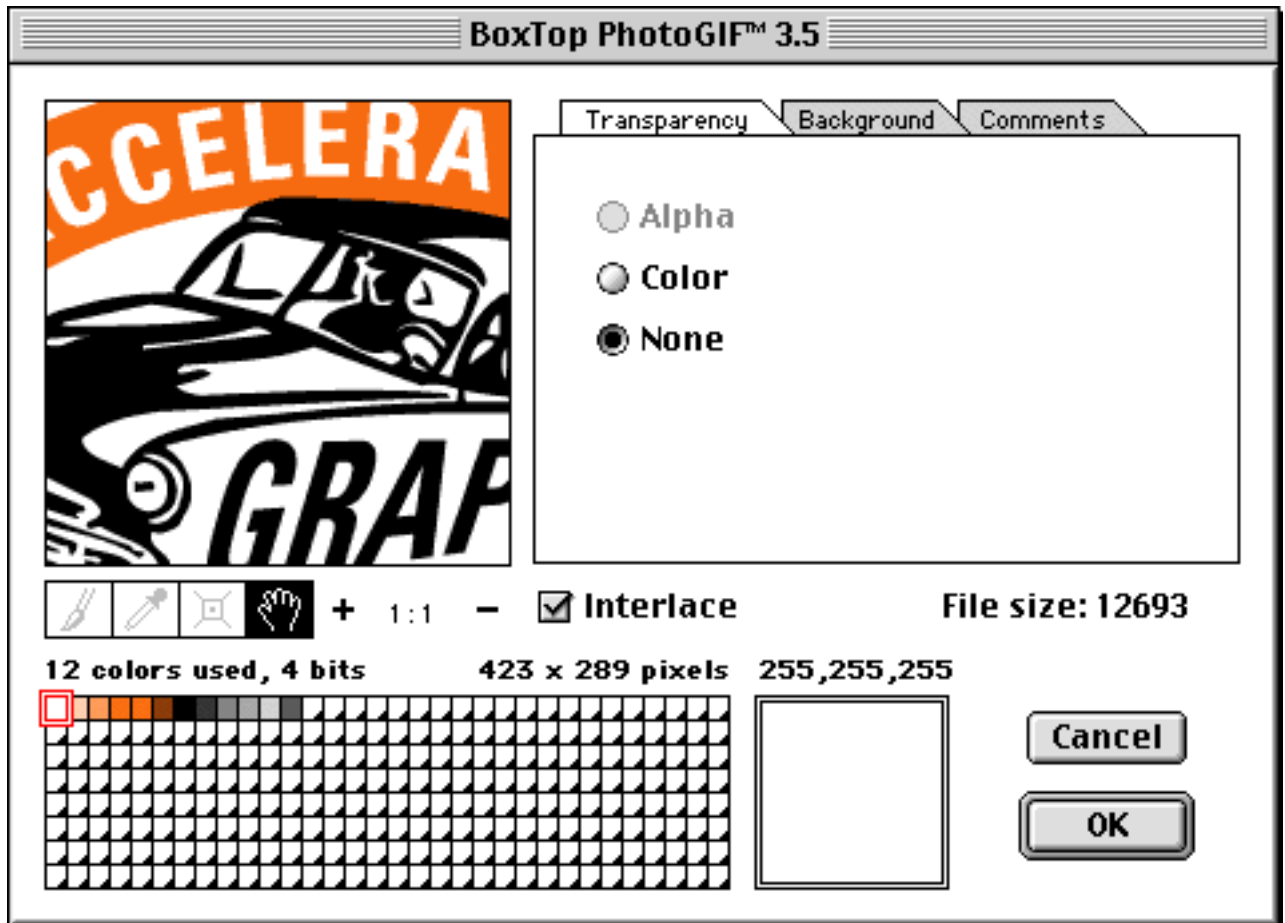
In the GIF options dialog, transparency options, background color, and interlacing are set. Text comments can be added to the file, and colors in the palette may also be edited directly as needed.

The file size shown in the GIF options dialog is the final, exact file size for your GIF file, and will change as you change any settings that effect size such as interlacing or adding comments to the GIF file.

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When you click OK in the GIF options dialog, the GIF file will be written to disk when using the format version of PhotoGIF™; but if using the filter version, a standard put file dialog will be shown first to set the location and name of the file to be created.

PhotoGIF™ automatically creates ready to paste image tags for GIF's saved in the Finder comments for the file. By selecting Get Info from the File menu in the Finder, these can be easily pasted into your HTML source, and edited as needed for the proper full file path.

<IMG WIDTH="176" HEIGHT="74" SRC="sample.gif">
<!-- File size: 5506 -->

Files created with PhotoGIF™ 3.5 (Filter) will have the proper file name in the SRC attribute of the image tag, but because file format plug-ins must work with temp files created and supplied by Photoshop, the file name in the SRC attribute for files created by PhotoGIF™ 3.5 (Format) will be the name of the temp file used for saving. This will usually be the name given the file by you, plus a series of random numbers on the end of the name, which will need to be changed in your HTML source when you supply the full file path for the actual location of the file in relation to your HTML document.

NOTE: If you use PhotoGIF™ 3.5 (Format) to save over an existing file and cancel the save for any reason, be sure to re-save the document again before closing it. File format plug-ins were never intended by Adobe to have preview capabilities, and Photoshop incorrectly assumes that it is safe to delete the original file, when replacing an existing one, before it really is when using the format version of PhotoGIF™ because of the preview.

This is not an issue when using PhotoGIF™ 3.5 (Filter) as the filter version has direct control over file creation and deletion. It will not delete the file being replaced before it should.

8: The PhotoGIF™ Interface

The multi–image options dialog.

The multi–image options dialog allows you to choose what method with which to open a multi–image GIF file. It will only be presented if the file being opened contains multiple images. If the file being opened does not contain multiple images no dialogs will appear when opening the file.

There are four methods that can be used when opening multiple image GIF files: Edit single image, Edit in cell–strip format, Extract single image, and Extract all images.

Edit single image

Opening a mulitple image GIF file with the Edit single image method opens a single image from the multiple image file to edit, while preserving the multiple image structure of the original multiple image GIF file.

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Edit in cell–strip format

Opening a multiple image GIF animation file with the Edit in cell–strip format method causes all of the images contained in the multiple image GIF file to be opened into one document oriented either horizontally or vertically. This method also preserves the multiple image structure of the file upon saving. The Edit in cell–strip format method will only be available as an option if all the images in the multiple image GIF animation file use a common, global palette. If any image from the file uses a different palette from the other images, this option will be disabled. Note that Edit in cell–strip format will add redundant information to your multiple image GIF files if they are not composed of images that are the full logical size of the animation.

Extract single image

The Extract single image method does not open the original file. It creates a new single image GIF file of the image selected from the multiple image GIF file, then opens the new file for editing. The new file created is always placed in the same folder containing the original file.

Extract all images

The Extract all images method does not open the original file. It creates a new single image GIF file for every image contained in the original multiple image GIF animation file and then opens all of the new files for editing. The new files created will always be placed in the same folder containing the original multiple image GIF animation file.

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The Color Reduction Options Dialog.

When using either version of PhotoGIF™ to save a file from RGB mode the first dialog that is presented, not including Photoshop's put file dialog where you supply the name of the file and designate the location to place the file if performing a traditional save, is the color reduction options dialog.
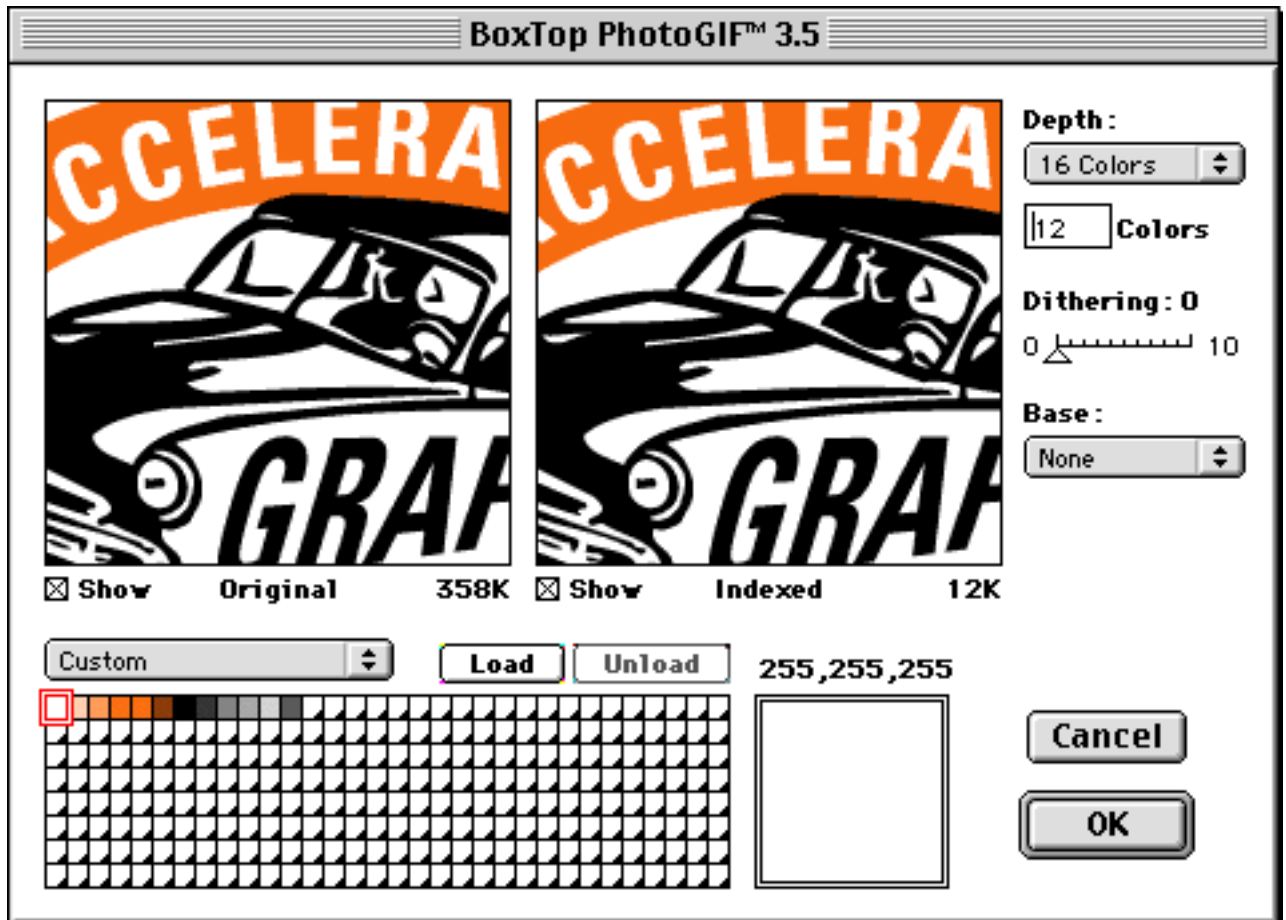
When saving to GIF from RGB mode, the image must first be color reduced to 256 colors or less, because the GIF format supports a maximum of 256 unique colors in an image. The color reduction options dialog allows you to control how color reduction will be performed on the image.

From top left in the dialog, the first dialog item is the original image preview. This shows the original image for comparison to the indexed image item located next to it. By comparing original image quality to indexed image quality, it is easy to choose parameters for color reduction that work best.

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Below the original image preview are three associated items. The first is the Show check box that turns this preview on and off. Disabling both the original and indexed image previews provides a slight speed increase, but generally it is more valuable to enable the previews.

To the right of the Show check box for the original preview is the label for the preview, and to the right of the label is the original image size. This is the size of the original uncompressed RGB data in the image.

This IS NOT the size of the original file, if the current image in Photoshop was opened from an existing GIF file or other type of file. Most file formats use some type of compression, so file sizes are usually much smaller than image size. The image size of any RGB image can be calculated as width times height times three. It takes 3 bytes per pixel of memory for RGB data.

To the right of the original image preview is the indexed preview. This shows what the visual effects of color reduction at the current settings are, and is invaluable feedback to help you choose the best settings for each individual image.

Similar items are below the indexed image preview. Again, the associated Show check box enables and disables the indexed image preview, and to the right of the Show check box is the preview label. To the right of that is the indexed image size. This is the size that the indexed image will be as a GIF, accurate to within a byte. Other settings made in the GIF options dialog can still influence the final file size, so this size is not shown in bytes. It is an accurate indicator of how current color reductions settings will effect the final file size. Your file may be slightly smaller or slightly larger than the size shown in the color reduction options dialog, but no other settings will have nearly so much effect on the final file size as color reduction setting.

Right of the previews, and in the top right corner of the color reduction options dialog, is the Depth pop-up menu. This corresponds to the bit-depth, or bits per pixel required to store the palette. The Depth pop-up menu gives the maximum number of colors a given bit depth may contain. An 8 bit image may have up to 256 color in its palette, a 7 bit image may have up to 128 colors in its palette, and so on, with the number of possible colors being reduced by half for each bit less in depth until a 1 bit image, which may only have 2 colors in its palette.

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The Depth pop-up menu provides a rough mechanism to set the number of colors used, by changing this menu to a lower setting, the actual number of colors used for color reduction will default to the maximum possible for the given depth, though the actual number of colors used for color reduction can be more precisely set using the Colors text box immediately below the Depth pop-up menu.

The Colors text box shows the actual number of colors used for the indexed image. It can be used to precisely set any number of colors to be used for color reduction. This can be between 1 and 256. When the original RGB image has fewer than 256 colors to begin with, color reduction defaults to using an exact palette, and the number of original colors used is shown as the Colors default. When the original RGB image contains more than 256 colors to begin with, the number of Colors used will default to 256, last used settings, or if configured in the preferences for PhotoGIF™ 3.5 (Format) a user specified number of colors every time. To achieve better file size results, you should always use the least number of colors possible to satisfactorily represent the individual image, and as a practice, begin with settings that you suspect are lower than required, and increase the number of colors until the image quality is acceptable. This will prevent saving files with overkill settings and causing unnecessarily large files.

Below the Colors text box is the Dithering slider. This is used to control the amount of dithering used during color reduction. Dithering will improve the indexed image quality, but will also increase the final file size. You should use the least amount of dithering possible to achieve satisfactory image quality, given the intended use of the individual image.

Directly below the Colors text box is the Base or "Base Palette" pop-up menu. The Base pop-up menu is a control for protecting sets of colors in the original image and preventing color drift in those sets of colors during color reduction.

The colors in the base palette will be preserved exactly in the final palette produced. For example, if you have created an image using a specific color from the Netscape palette and wanted to ensure that RGB value was maintained exactly in the final GIF's palette, all you would need to do was set the base palette to the Netscape palette. Any palette can be loaded and used as a base palette during color reduction in this manner. If you did not set a base palette in this instance, the RGB color values could "drift" slightly in the final palette. 204, 204, 102 might become 205, 206, 101, for example.

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On the left of the Color reduction options dialog, directly below the Original image preview and its associated information, is the Palette pop–up menu, which shows which palette, whether a custom palette based on the actual colors in the original image or a pre–defined fixed palette applied to the image, such as the Netscape palette, is currently being used for color reduction.
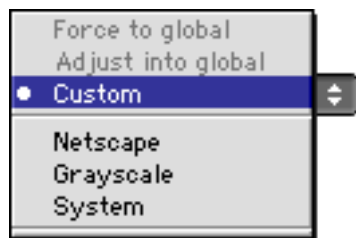
PhotoGIF™ 3.5 (Format)   **PhotoGIF™ 3.5 (Filter)**
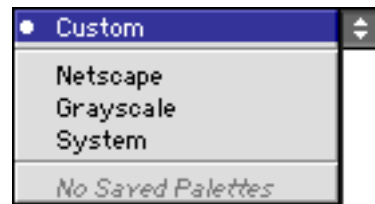
The Palette pop–up menu is the only difference in the color reduction option dialogs presented by both versions of PhotoGIF™. There are two extra options available in the Palette menu of PhotoGIF™3.5 (Format) that can be used when working with images from multiple image GIF files.

Force to global when selected in the Palette pop–up menu instructs PhotoGIF™ to force the image being saved to the current existing global palette in a multiple image GIF file. It is simply a special case of using a fixed palette, like the Netscape palette, except the fixed palette to use is supplied by the current multiple image GIF file.

Adjust into global palette when selected in the Palette pop–up menu instructs PhotoGIF™ to create a new super palette based on the colors used in all the images within a multiple image file and those in the open image being ed–ited, and remap all images in the multiple image GIF file to this new palette on saving.

Custom when selected in the Palette pop–up menu instructs PhotoGIF™ to create a palette for the indexed image based on the original colors in the RGB image. This option applies to both single and multiple image GIF files. If the image being saved is from a multiple image GIF file, the custom palette will be saved as a local palette that applies to that image only, and not change any other images or palettes in the existing multiple image GIF file.

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All other options in the Palette pop–up menu instruct PhotoGIF™ to per–form color reduction to an existing fixed palette, either one of the factory default fixed palettes, or one that has been loaded for use.

To the right of the Palette pop–up menu are the Load and Unload buttons. Both of these are controls that allow you to manage fixed palettes in PhotoGIF™, loading and unloading them for use as needed.

The Load button when clicked will show the Palette GIF file dialog, discussed next in the PhotoGIF™ interface section, which allows palettes to be loaded from Photoshop CLUT files or any existing GIF file, and provides means to name the palettes as they are loaded.

The Unload button will, after a confirmation alert, unload the currently se–lected fixed palette in the Palettes menu. You can unload any palette that you previously loaded, but not any of the factory fixed palettes.

Below the Palette pop–up menu and Load / Unload buttons is the Palette. This shows the actual palette in use for the indexed image. Clicking on any individual color in the Palette, will show the color in the Swatch to the right of the Palette, and the color's RGB value over the Swatch. In the Color Re–duction Options dialog the Palette only provides feedback. It can not be used to modify colors in the images Palette from this dialog as it can be used to from the GIF Options dialog.

To the right of the Palette, is the Swatch, which shows a larger size sample of the current color selected in the Palette, and the color's RGB value over the Swatch. This is a feedback mechanism in the Color Reduction Options dialog, and can't be used to modify individual color values here, as it can be from the GIF Options dialog.

Lastly, in the bottom, right corner of the Color Reduction Options dialog are the OK and Cancel buttons, which do the usual things. Cancel will cancel the process and revert control back to Photoshop. OK will proceed to the next step in saving a GIF.

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NOTE: If you use PhotoGIF™ 3.5 (Format) to save over an existing file and cancel the save for any reason, be sure to re-save the document again before closing it. File format plug-ins were never intended by Adobe to have preview capabilities, and Photoshop incorrectly assumes that it is safe to delete the original file, when replacing an existing one, before it really is when using the format version of PhotoGIF™ because of the preview.

This is only a concern when you have originally selected Save As from the File menu in Photoshop, and specifically chosen to save over an existing file with one of the same name. It is not a concern for simple Save operations or normal Save As operations where a new file is being created instead of an existing file being replaced.

This is, also, not an issue when using PhotoGIF™ 3.5 (Filter) as the filter version has direct control over file creation and deletion. It will not delete the file being replaced before it should.

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The Palette GET File Dialog.

The Palette GET File Dialog is shown when the Load button is clicked from the Color Reduction Options dialog, and allows you to load palettes for use in PhotoGIF™ from any Photoshop CLUT file or any GIF file.
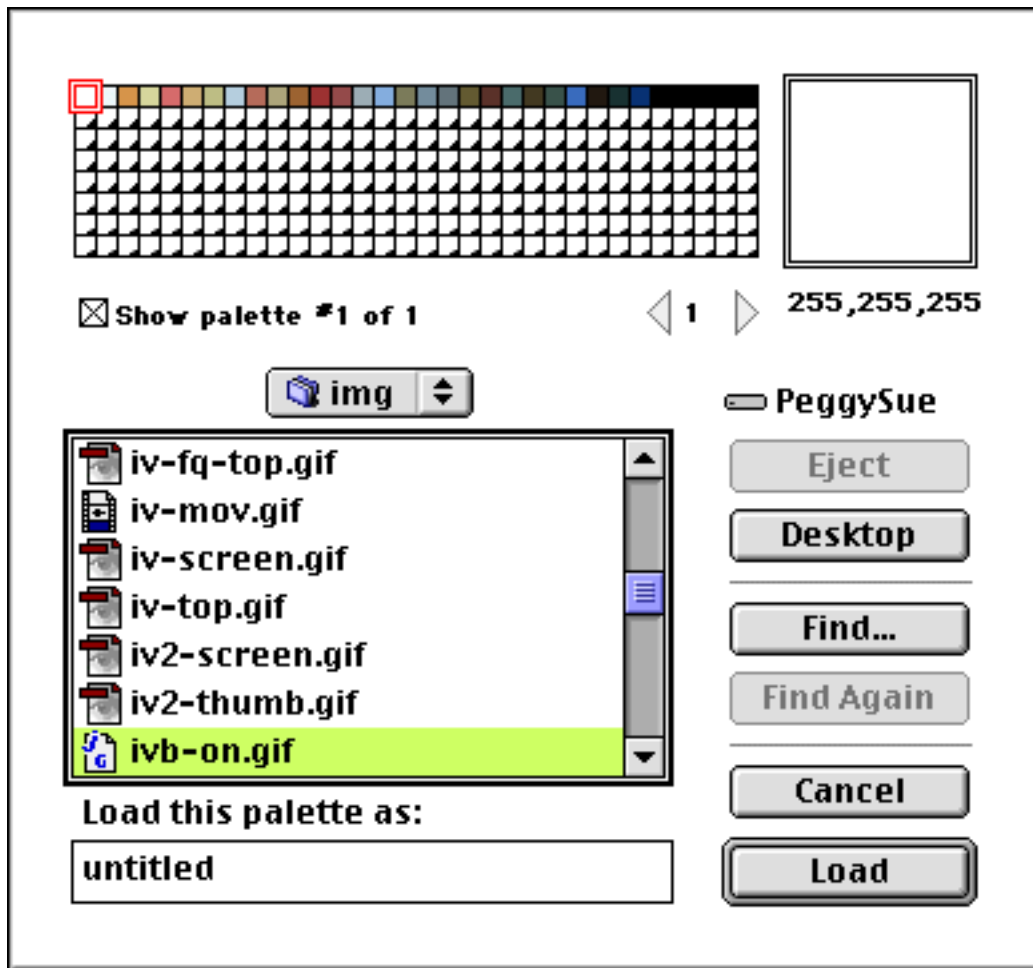
The Palette GET File Dialog works as most dialogs for selecting files on the Macintosh in the sense that you are able to navigate through folders and locate the desired file. However, there are some notable exceptions.

You must select the desired source file, the specific palette within the source file if it is a GIF with multiple palettes, and supply the name for the palette as it will appear within PhotoGIF™'s Palette menu, which is not derived from the source file.

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From top left in the Palette GET File, the first item in the dialog is the Palette Preview, which shows the colors within the currently selected palette. You can click on individual colors within the palette to show them in the Color Swatch.

To the right of the Palette Preview is the Color Swatch, which allows you to examine more closely the colors contained within palettes, since it is often difficult to discern small differences in colors by eye. The Color Swatch shows a large swatch of the selected color, and its exact RGB value below the Color Swatch.

Beneath the Palette Preview is the Show Palette check box which enables and disables the preview mechanism in the Palette GET File Dialog. It can be disabled, but there is no real reason to ever do so.

Appended to the title of the Show Palette check box is the index of the current palette within its source file and the total number of available palettes from the source file selected. Photoshop CLUT files only contain a single palette, but GIF files may contain any number of palettes, so it is important to know which palette within the source file is current.

To the right of the Show Palette check box and palette index information is the Palette Navigation control. This is a spinner control with two directional arrows that allow you to step forwards and backwards through the palettes contained in a source file, and will be disabled unless the source file contains multiple palettes.

Below the Palette Preview group of controls in the top of the Palette GET File dialog are the standard get file controls found in every similar dialog in Macintosh programs. These should need no special explanation of use.

Below the file list, in the bottom, left of the Palette GET File dialog is the Load This Palette As edit text item. This is the name that you assign to the palette being loaded. This name will appear in PhotoGIF™'s Palette menu for the palette after it has been loaded.

When a source file and palette within the file, and a name has been supplied, the Load button in the Palette GET File will activate. Clicking Load will then complete loading the palette for use in PhotoGIF™.

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The GIF Options Dialog.

The GIF Options dialog allows you to set GIF specific file options such as interlacing, transparency, background color and comments, as well as make precise adjustments to the final image's palette. It is always shown when you initially save any document as a GIF file, unlike the Color Reduction Options dialog, which is only shown when saving from RGB mode documents.
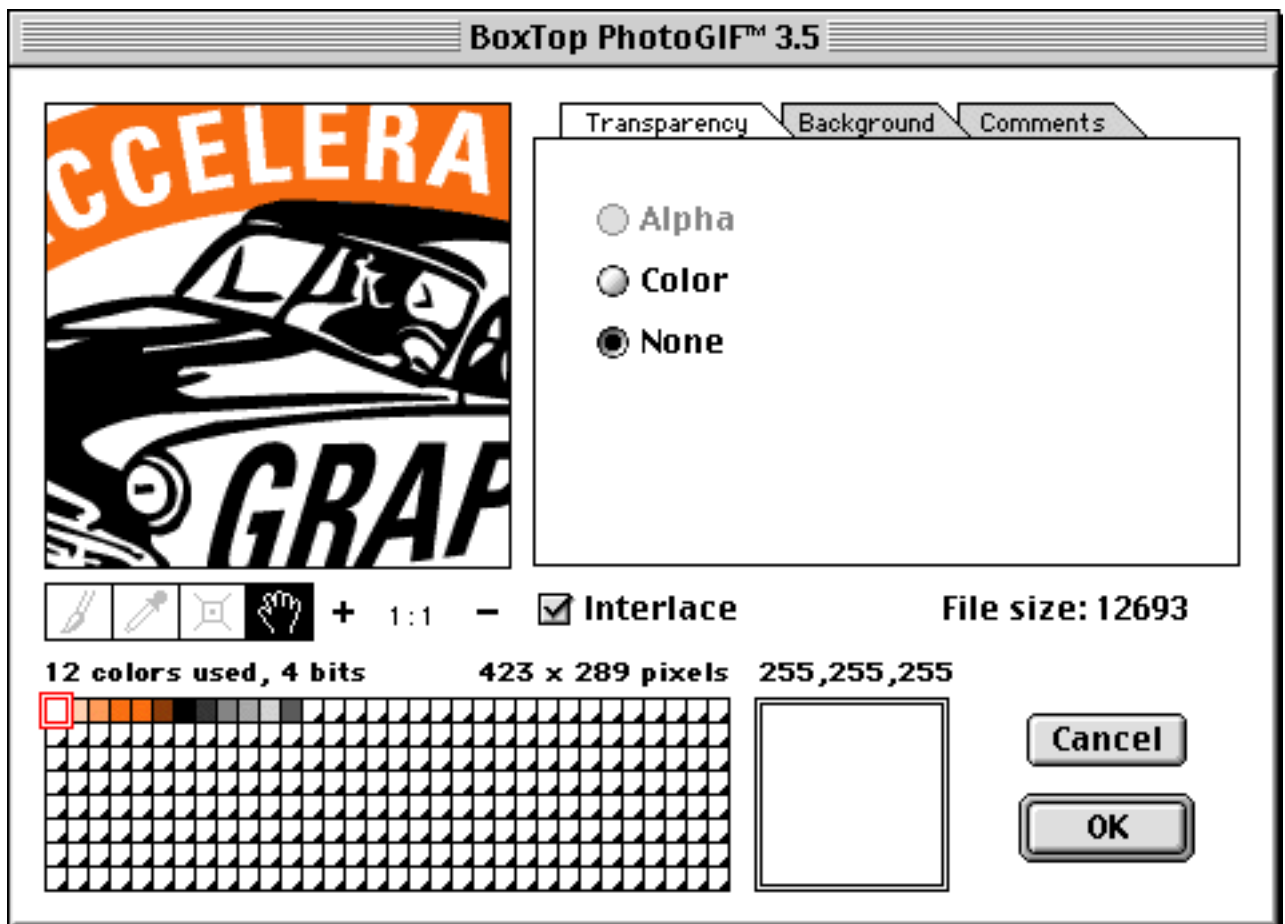
From top left in the dialog, the first item is the GIF preview. This shows you your GIF as it would appear with transparency in a browser, and provides a canvas to precisely edit transparency, using the transparency tools below the preview.

Directly below the preview, to the left of the GIF Options dialog are the transparency tools. These are the brush, dropper, edge, and hand tools, which have familiar icons. Transparency must be set to either Alpha or Color in the

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Transparency Tab Panel of the GIF Options dialog for the transparency tools to be available. Using any of the transparency tools is the same as using a tool from Photoshop's tool palette. You select the tool, and the cursor in PhotoGIF™ changes when over the GIF Preview to show the current tool.

The Brush Tool –

The brush tool allows you to paint with transparency. It is a fixed size 2 x 2 pixel brush for making corrections to transparency. Stray pixels and rough edges are easily cleaned up using the brush tool, but there is also a specific tool for making clean transparency edges.

The Dropper Tool –

The dropper tool allows you to choose colors that you wish to be transpar–ent in your GIF file. The GIF file format allows for a single transparent color in GIF files, but PhotoGIF™'s sophisticated capabilities allow transparency to be set based on an alpha channel mask, color, colors or a combination of colors and alpha channel mask. This is done by intelligently re–mapping ar–eas you designate to be transparent to a single assigned transparent color when the GIF is created.

Multiple colors for transparency can be selected with the dropper tool by shift clicking with it, and individual colors can be removed from the current set of transparent colors by command clicking.

The Edge Tool –

The edge tool can be used to easily and quickly remove unwanted halo ef–fects from the edges of your transparency caused by antialiasing. The edge tool works much like a brush, except that absolute precision is not required. The position of the edge tool is only used by PhotoGIF™ as a starting point to determine the location of the intended edge of the transparency in your image and the length of the edge that has the unwanted halo effect. The operations performed to remove the halo effect after the affected edge has been located with the edge tool are automatic. One pass with the edge tool is generally all that is required to achieve perfect transparency edges.

The Hand Tool –

The hand tool allows you to reposition the area of the image shown.

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NOTE: The transparency tools operate on a transparency mask maintained internally by PhotoGIF™ and do not actually change the image data in the preview or the original open document in Photoshop. If you make detailed changes affecting transparency within PhotoGIF™, you should close the open document and open the saved file again to reflect those changes to your document. If you continue to make subsequent changes on an open document after editing transparency directly in PhotoGIF™ your changes may be overwritten by subsequent saves.

To the right of the transparency tools, beneath the GIF Preview are the magnification controls. These are a Plus and Minus button with a magnification ratio shown in between them. They may be used to adjust the magnification of the preview as needed.

To the right of the GIF Preview is a tab panel group that contains the Transparency Tab Panel, the Background Tab Panel and the Comments Tab Panel, each containing controls for related functions.
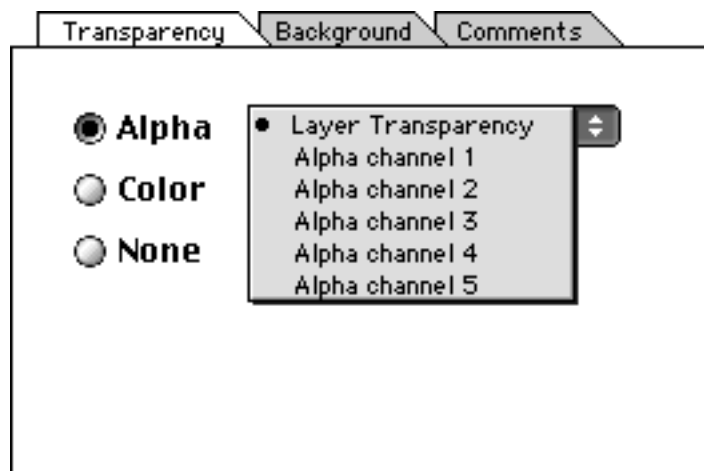
The transparency controls in PhotoGIF™ are three radio buttons, and a pop-up menu associated with the Alpha radio button.

The Alpha pop-up menu is one of the areas where the two PhotoGIF™ versions differ slightly.

PhotoGIF™ 3.5 (Filter) has an additional item in this menu that allows transparency to be set using Photoshop's layer transparency. This option is not available in PhotoGIF™ 3.5 (Format) because Photoshop does not allow file format plug-ins to have access to layer information.

When the Alpha radio button is selected, PhotoGIF™ will use the alpha channel, also known as saved selection, selected in the corresponding pop-up menu as a transparency mask. Layer transparency, available as an option in PhotoGIF™ 3.5 (Filter) is just a special case of this, where the alpha channel is an internal one maintained directly by Photoshop.

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Transparency in GIF is either on or off for a pixel. It is not true alpha trans–parency, even if PhotoGIF™ is able to set GIF transparency by using an alpha channel as a transparency mask.

PhotoGIF™ will translate gradated alpha channels to black and white dith–ered masks, which will approximate well the effects of smooth alpha blends in GIFs, however.

NOTE: When creating alpha channels to set GIF transparency with using PhotoGIF™ you should remember that the black in the alpha will be the trans–parent in the GIF. If you save a selection in Photoshop to create the alpha channel, be sure to select the non–transparent part of the image.

The Background Tab Panel allows you to set the embedded background color of your GIF file and works to let you preview the transparency of your GIF against different background colors easily.
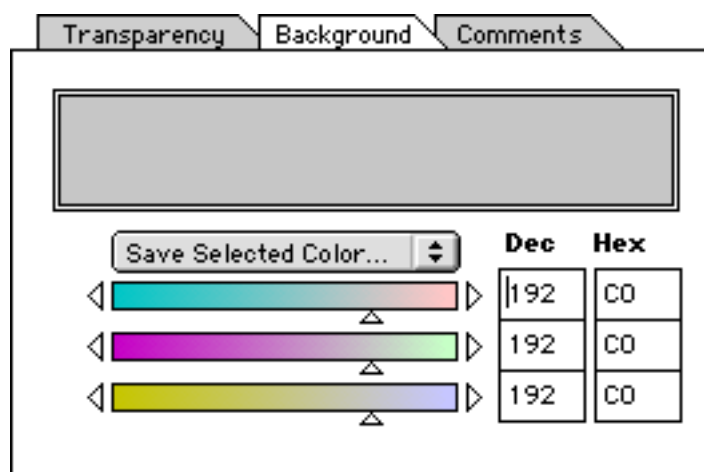
With the exception of mul–tiple image GIF animation files and some browser ver–sions, the embedded GIF background color is normally ignored by browsers and the Web page background is used instead. However, since you cannot be assured this will always be the case because of browser quirks and inconsis–tencies, you should as a prac–tice set an appropriate back–ground color for your GIF file. This should be the same as the Web page back–ground color the GIF will appear over, or if it will appear over a background graphic, an approximate color match for the background graphic.

As you change the background color using the RGB sliders, the swatch above will split, showing the starting color on the left and the current color on the right. This makes it easier to judge color changes by providing a reference point.

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Color values may be directly entered in decimal or Hexadecimal RGB values if known, and precise color adjustments can also be made using the nudge buttons on each slider. The nudge buttons will adjust the color in increments of one, allowing all possible 256 component values to be set without manually entering numbers.

Using the pop-up menu above the RGB sliders in the Background Color Tab Panel, you can save colors that you frequently use, and select saved colors quickly. Choosing Save Selected Color from the pop-up menu will show a dialog allowing you to give the color a name and complete the process of saving a frequently-used color.

The Comments Tab Panel is the last of the tab panels, and contains only an edit text area where text comments, such as copyright statements, may be added to your GIF file.
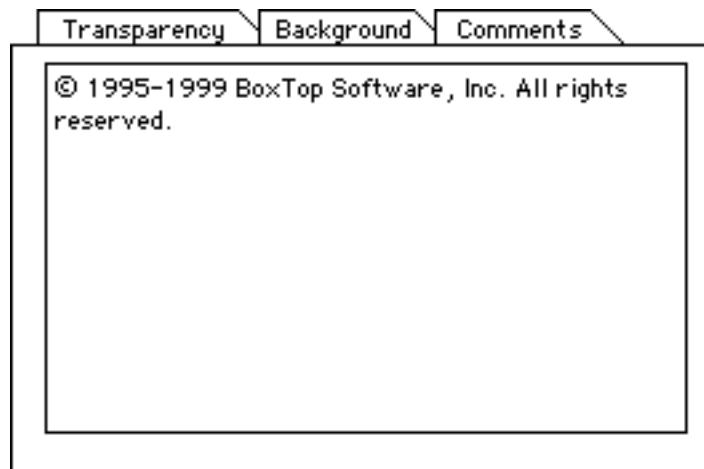
Comments are embedded in the actual GIF file structure, and though not normally visible in browsers, can be read with many graphics utilities.

Adding comments to your GIF files will increase the file size in direct relation to the size of the comment – a byte per character plus a small fixed amount.

NOTE: Any character may be in a comment except the return character. If you hit return while typing a comment, it will OK the GIF comments dialog prematurely.

Below the tab panel group in the GIF Options dialog is the Interlacing check box. Checking this will create an interlaced GIF file, and unchecking it will create a non-interlaced GIF file.

Interlaced GIF files are usually slightly larger than non-interlaced ones of the same image, but the difference in size is usually minor. Even though in reality an interlaced file is often bigger and takes the browser more time to render, it gives the perception of loading faster for your Web page viewers.

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As a general rule of thumb, you should not save any GIF files which would be less than 3K non–interlaced as interlaced. Doing so on small images will only slow your pages down. On larger images that will take several seconds to load under the best of circumstances interlacing provides incremental rendering as the image downloads, and can help hold viewer's attention while larger graphics download completely.

To the right of the Interlacing check box is the File Size display. This is the single most important piece of information you have at your disposal when you use PhotoGIF™. It shows the final, exact file size of your GIF as you make settings, so you can make the best settings possible for the image.

Unlike the file size shown in the Color Reduction Options dialog, which is a rounded figure accurate only to the nearest K, the file size shown in the GIF Options dialog is accurate to the byte. Any changes you make in the GIF Options dialog that affect file size will be instantly reflected. Type a comment, the size will increase, paint a few pixels transparent, the size will decrease.

NOTE: The Macintosh Finder can report conflicting information for your GIF file size unless you are looking at the right information in the right place, as the Finder shows several different numbers for "file size" and most of them are allocation sizes, which are always larger than the size of a file. If you are not already well familiar with the workings of the Finder and the Mac File System, you should review the GIF File Sizes on Macs section earlier in this manual. It tells you how to properly check GIF files sizes from the Finder so you see an accurate representation of the true GIF file size.

Below the GIF Preview and transparency tools is the Palette and associated information. The text above the palette indicates the number of colors used and the bit depth the GIF file will be saved as, along with the dimensions of the GIF file.

The Palette itself functions identically to the Palette in the Color Reduction Options dialog. Clicking on a color in the Palette will show that color in the Color Swatch to the right of the Palette.

The Color Swatch to the right of the Palette allows you to directly edit colors in the final Palette from the GIF Options dialog. Clicking on the Color Swatch shows the Adjust Color Dialog, which has an RGB color picker very similar to the one in the Background Tab Panel. With this you can make any desired corrections to individual colors in the palette.

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The last two items in the GIF Options dialog are the usual Cancel and OK but–
tons. From PhotoGIF™ 3.5 (Format) clicking OK will complete the save pro–
cess and then return control to Photoshop; however, when using PhotoGIF™
3.5 (Filter) an additional put file dialog will be shown after you OK the GIF
Options dialog. This is a standard Macintosh put file dialog that lets you set
the name and location to save the GIF file being created.

The Adjust Color Dialog.

The Adjust Color Dialog provides a means to directly edit individual colors
from the GIF palette. The color picker in the Adjust Color dialog is the same
as found in the Background Tab Panel in the GIF Options dialog.
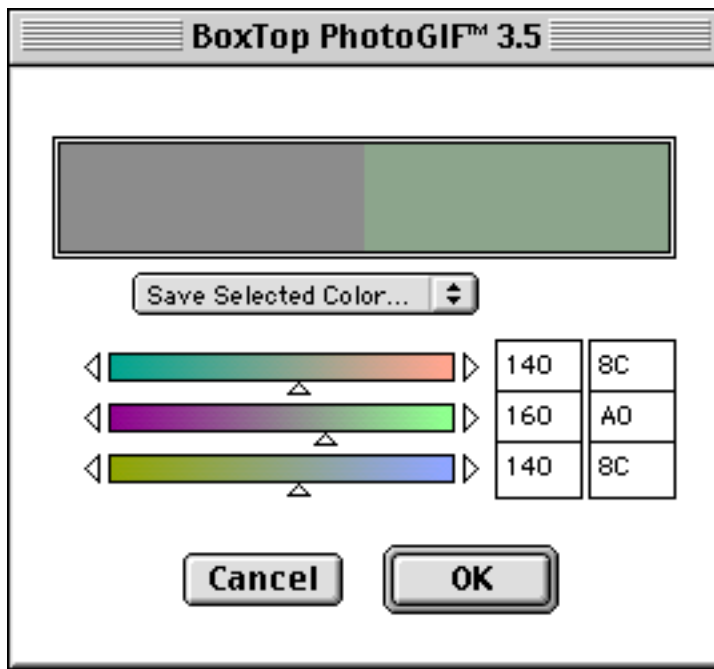
As you change the color using the RGB sliders, the swatch above will split,
showing the starting color on the left and the current color on the right.
This makes it easier to judge color changes by providing a reference point.

Color values may be directly entered in decimal or Hexadecimal RGB values
if known, and precise color adjustments can also be made using the nudge
buttons on each slider. The nudge buttons will adjust the color in increments
of one allowing all possible 256 component values to be set without manu–
ally entering numbers.

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Using the pop–up menu above the RGB sliders, you can save colors that you frequently use, and select saved colors quickly. Choosing Save Selected Color from the pop–up menu will show a dialog, allowing you to give the color a name and complete the process of saving a frequently used color. A Saved color will be available globally in the version of PhotoGIF™ being used, but are not currently shared between versions of PhotoGIF™.

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9: Setting Preferences

PhotoGIF™ 3.5 (Format) has very advanced preferences capabilities, with configurable default behavior for nearly every aspect of operation through the PhotoGIF™ preferences dialog. PhotoGIF™ 3.5 (Filter) does not currently share configurable preferences, and will instead always default to last used settings.

PhotoGIF™'s preferences dialog is not located in an immediately obvious place. To access the preferences dialog select the BoxTop PhotoGIF menu item from the About Plug-ins sub-menu of the Apple menu. The PhotoGIF™ about box will be shown first. Clicking anywhere within the about box to dismiss it will cause the Preferences dialog to be shown.

The Preferences Dialog has three tab panels, General , Quantization, and Color Reduction, with controls that correspond to the controls in the various options dialogs in PhotoGIF™ 3.5 (Format).
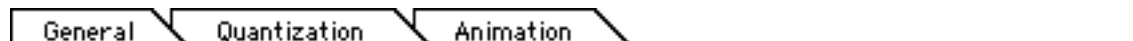
Each tab panel also has a radio group of two buttons, titled Initialize to default settings and Initialize to last used settings, that control more general behavior of the preferences.
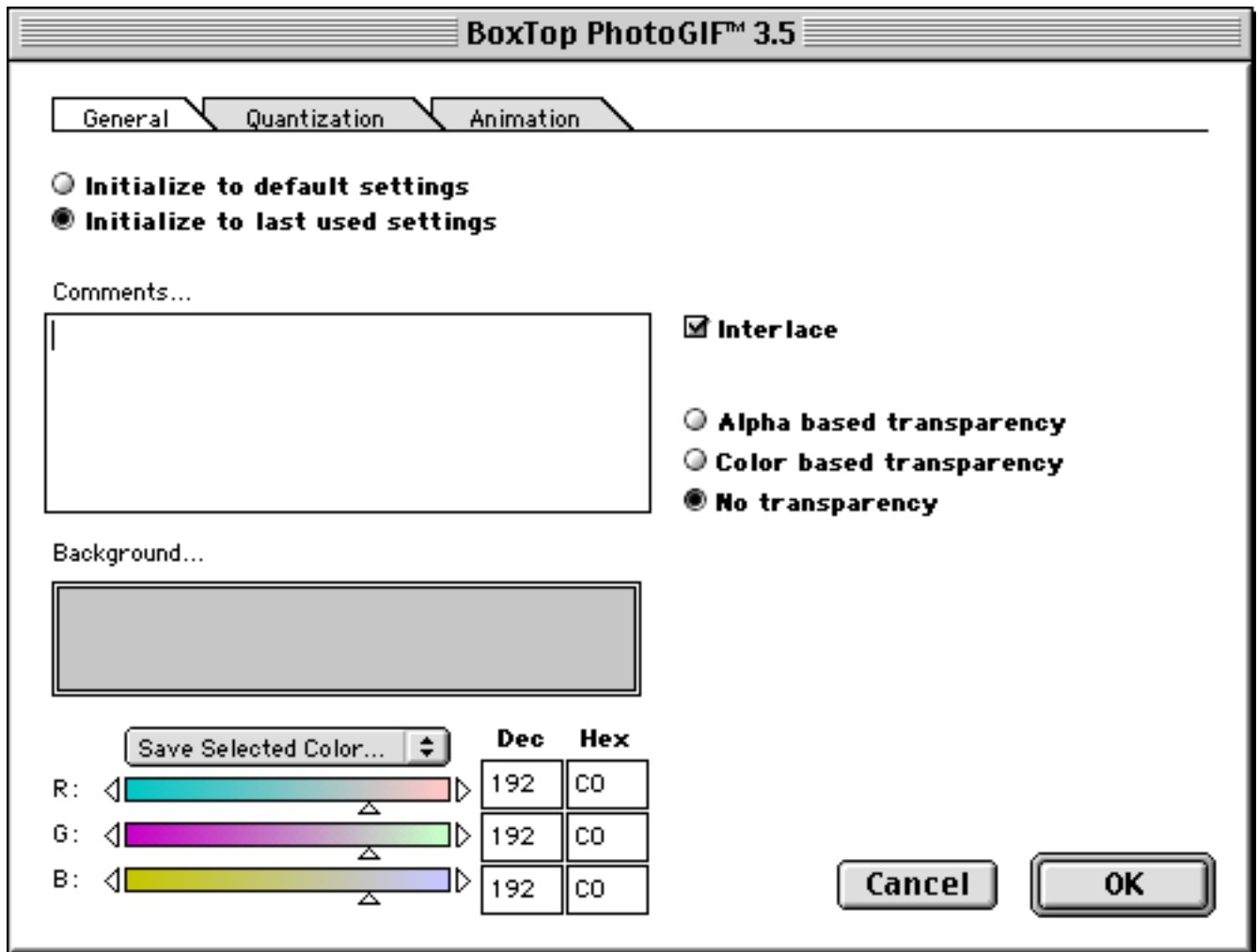
If Initialize to last used settings is selected the corresponding controls from the preferences group will, whenever possible, be initialized in dialogs with the last used settings, instead of default values defined in the Preferences dialog.

If Initialize to default settings is selected the corresponding controls from the preferences group will, whenever possible, be initialized in dialogs with the values defined in the Preferences dialog.

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The General Tab Panel corresponds to the GIF Options Dialog in PhotoGIF™ 3.5 (Format). With it you can set default values for comments, interlacing, transparency method, and GIF background color.

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The Quantization Tab Panel corresponds to the Color Reduction Options Dialog in PhotoGIF™ 3.5 (Format). Quantization is another term for Color Reduction. With it you can set default values for number of colors, dithering, GIF animation palette handling, preview visibility, palette, and base palette usage.
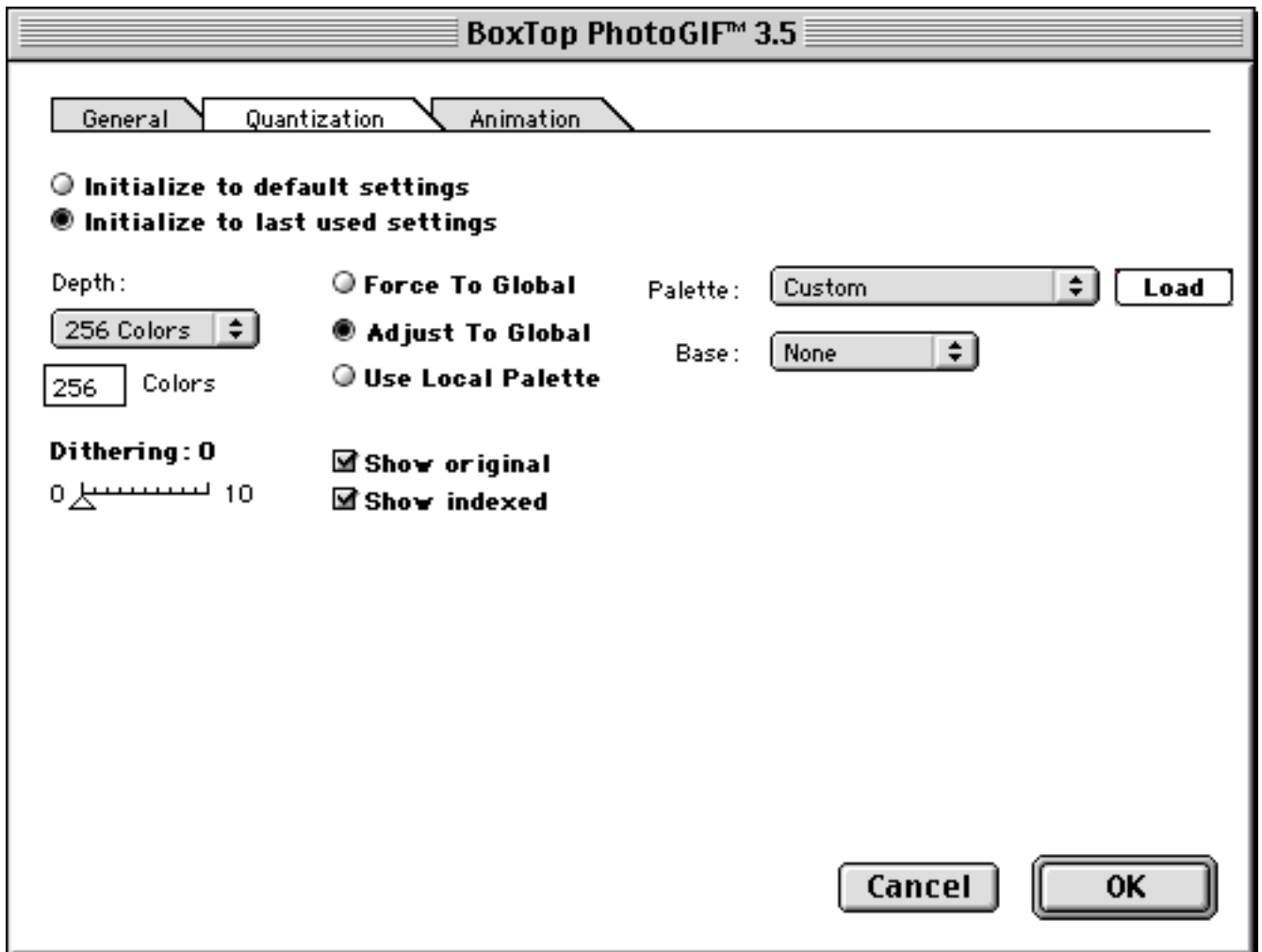
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The Animation Tab Panel corresponds to the Open Options Dialog in PhotoGIF™ 3.5 (Format). With it you can set default values for preview visibility, and multiple image editing mode.
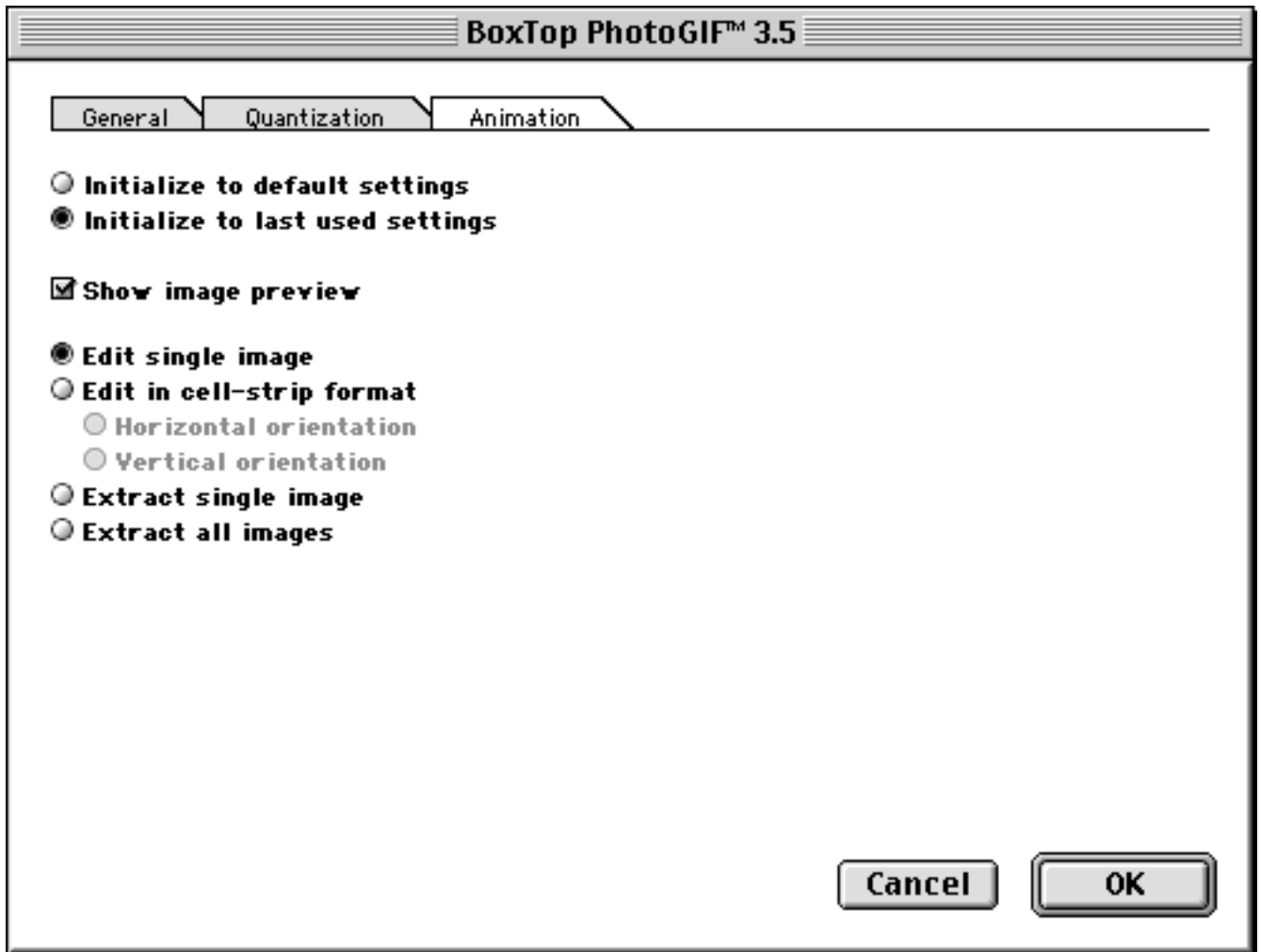
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10: Actions Support

When using PhotoGIF™ 3.5 (Filter) with Photoshop 4.0 or newer, automation with actions is fully supported. Actions support is limited to PhotoGIF™ 3.5 (Filter), however, at this time.

All parameters in PhotoGIF™ 3.5 (Filter) may be controlled by actions. See the Photoshop manual for information about creating and using actions.

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11 : Contact Information

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http://www.boxtopsoft.com

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12: Licensing Agreement

Software Evaluation License Agreement

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