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Credits

This program was developed by Allen C. Kempe (CompuServe Id 71220,23) with a major contribution by Paul Hachey (CompuServe Id 76247,3716) who designed the Icon, Cover screen and provided other invaluable assistance in the testing and development of PixFolio.

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Allen C. Kempe 298 W. Audubon Dr. Shepherdsville, KY 40165 (502) 955-7527 The Index contains a list of all Help topics available for the Help Example. For information on how to use Help, press F1 or choose Using Help from the Help menu.

Catalog Menu

The Catalog menu includes commands that enable you to maintain and view the contents of catalogs of images.

For more information, select the Catalog menu command name.

Select Catalog	Add, delete, rename or select a catalog.
Catalog	Catalog an image.; add, delete or update catalog entry.
Browse	Browse through a catalog and search for specified criteria.
Build	Build a catalog via mass update.
Rebuild Index	Rebuild a catalog index & recover lost disk space due to deleted records.

Edit Menu

The Edit menu includes commands that enable you to manipulate images, access the Windows clipboard and undo a previous operation..

For more information, select the Edit menu command name.

<u>Copy</u> Copies an image or selected area to the clipboard

<u>Cut</u> Cuts an area from an image and places it in the clipboard.

<u>Crop</u> Crops an image .

Expand Expand the size of an image.

<u>Resize</u> Resize an image by a given percentage.

Palette Paste a palette saved on the clipboard.

Paste Copies an image from the clipboard.

<u>Undo</u> Undo the last edit operation.

File Menu

The File menu includes commands that enable you to open and save files, delete or move files, and to print.

For more information, select the File menu command name.

<u>Open</u>	Open a file.
<u>Move</u>	Move or copy a file.
<u>Print</u>	Print all or part of an image.
<u>Select Printer</u>	Select a printer
<u>Save</u>	Save a file and optionally convert to another format.
<u>Delete</u>	Delete a file.
<u>Clear</u>	Clear the screen.
<u>Tech Info</u>	Technical Information
<u>Exit</u>	Exit PixFolio

Option Menu

The Option menu includes commands that enable you to set operating options.

For more information, select the Option menu command name.

Background	Set background color.	
Solid Background	Select Solid or dithered background.	
DIB	Paint screen with DIBs.	
<u>Display Warnings</u>	Control Display of warning messages.	
Default Options	Set program defaults options.	
<u>Transparent</u>	Control display.	

View Menu

The View menu includes commands that control how images are displayed.

For more information select the View menu command name.

Change PaletteChange palette.Gray PaletteGray palette.Restore PaletteRestore palette.Slide ViewDisplay catalog as a "slide display".Normal ViewDestroy "slide display".Play Image"play" a GIF animation or GIF89a composite image.Single Step PlaySingle step through a GIF animation.Set Play RateVary the speed at which a GIF animation "plays".

Glossary Bitmap Clipboard Color Resolution Device Dependent Bitmap Device Independent Bitmap GIF

Edit Copy Command

To copy an image to the clipboard, select COPY on the Edit menu. The selection will be greyed if no image is being displayed.

In order to copy part of an image, first locate the cursor at one corner of the area that you wish to copy, hold down the left mouse button and stretch the box to encompass the desired area. Release the mouse button and then select COPY from the EDIT menu.

Edit Cut Command

EDIT-CUT works similar to <u>EDIT_COPY</u> except that it is only effective when an area has been selected using the mouse. When COPY is then selected from the EDIT menu, the area will be cutout and placed in the clipboard. The background where the image was cut will be painted to the current background color. (See OPTION BACKGROUND).

Edit Paste Palette

This command can be used to replace the palette of the currently displayed image with the palette stored with the bitmap in the clipboard. Normally, data is pasted from the clipboard using the palette currently in use.

Edit Paste Command

If there is compatible data in the clipboard, it may be "pasted" by selecting the EDIT-PASTE command. You can determine whether there is data in the clipboard by looking at the EDIT-PASTE menu entry. If it is "grayed", there is no compatible data in the clipboard.

Data to be pasted from the clipboard could have been put there by some other program, for example the Windows Paint program or by PixFolio itself, earlier.

To paste data from the clipboard, select EDIT_PASTE. The cursor will then change from an arrow to a crosshair. Move the crosshair cursor to the upper left corner of where you want to place the clipboard data.

When you are at the desired location, press the left mouse button and hold it down. While it is down, a box of the same dimensions as the clipboard data will be displayed. When the box is located where you desire, release the left mouse button and the clipboard data will be written to the screen at the location of the box.

Edit Expand does not alter the aspect ratio of the image, this can be done with Edit Resize.

Edit Expand

This command can be used to expand the area of an image so that additional images can be pasted together to form a larger image. Alternatively, an image can be cropped.

To change the size of an image, use the mouse to drag the window borders to the desired. size. Then select EDIT-EXPAND. If the new borders are inside the old borders, the image will be cropped, otherwise it will be expanded. Edit Expand does not alter the aspect ratio of the image, this can be done with Edit Resize.

The expanded area of the image will be colored to the Background color. (see <u>OPTIONS-BACKGROUND</u>).

Edit Resize

Use this option when you wish to resize an image (make larger or smaller) by a specific amount. You will be presented with a dialog box with two values to be inputted, one for the X (width) dimension percentage and the other for the Y (height) dimension. The default value for both is 100 (%). Accompanying each percentage input box is an alternative pixel size edit box which can be used as an alternative to the percentage change. Any change entered into the size box will be automatically reflected in the pixel size and vice-versa.

The height can be changed independently of the width and vice-versa allowing an image to be "stretched" one way or the other. For example to increase the width by 50%, type in 150 for the X dimension percentage and leave the Y at 100%. For best results, the increased or decreased image should be some multiple of the original, otherwise the image will be distorted.

Flipping an Image

Two check boxes allow for reversing the image along the X axis (left - right) or along the Y axis (top - bottom) or along both. If the X mirror checkbox is checked, the image will be reversed left to right and if the Y mirror checkbox is checked the image will be flipped top to bottom.

Edit Crop

This command may be selected to crop the image to the dimensions of the current selection rectangle or the window borders. The selection rectangle can be drawn by holding the left mouse button down at the upper lefthand corner of the area that you want to enclose and then dragging the mouse to stretch the rectangle out. When you release the mouse button, the rectangle will stay on the screen and EDIT CROP can be selected to crop the image to the size of the rectangle.

Edit Undo

Sometimes it may be desirable to "undo" the previous edit operation if the result is not what was desired.

PixFolio saves the current image before performing any operation on it so it is possible to back up by selecting EDIT-UNDO..

Note: The undo buffer is only one deep. You can only undo the last operation. It would be wise to save your file at critical steps if necessary.

File Open Command

Select this command to read and open a new image for viewing. If the file is cataloged, the <u>CATALOG-</u> <u>BROWSE</u> command may also be used to open a file.

PixFolio will automatically specify a list of extensions to search for. This default extension list is loaded from WIN.INI whenever PixFolio starts up; different file extension lists can be established for each catalog. If you do not want to default to certain file extensions, the entry "Extensions=" under [PixFolio] in the WIN.INI file and for each catalog in the Catalog Select command may be changed to suit your requirements. A valid file extension list is of the form "*.xxx; *.yyy;" etc. Note that each extension is separated by a semicolon ";".

File Print Command

Select this command to print the currently displayed image. A portion of the image only may be printed by first using the mouse to (see <u>Copy</u>) select a rectangular area to print.

Note: Printing takes a long time. Printing once initiated, can be cancelled by pressing "Cancel" in the dialog box that is displayed while printing is taking place.

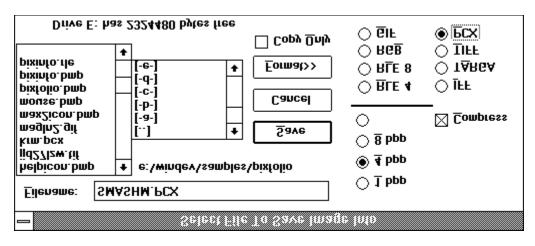
File Select Printer

This command can be used to select which printer you wish to use for a subsequent print command. Depending upon the printer, you may also be able to set various printer options such as portrait or landscape mode.

File Save Command

Select this command to save an image or create a new copy of an image in a different format.

FILE_SAVE defaults to the current filename. If you wish to change the name and/or directory, you may do so. The extension used will determine the file format although this can be overridden by pressing the "format" button which will display a number of radio buttons that can be used to select the desired format and color resolution of the output file.



File Formats:

File formats supported by PixFolio are:

- <u>GIF</u> CompuServe Graphics Interchange Format. PixFolio supports both the GIF87a and GIF89a standard. ("The Graphics Interchange Format (C) is the Copyright property of CompuServe Incorporated. GIF(sm) is a Service Mark Property of CompuServe, Incorporated.")
- PCX Z-Soft Paintbrush files.
- TIFF Tagged Image format.
- <u>BMP</u>Windows bitmap format.
- <u>RLE</u> Windows Run Length Encoded file format.
- <u>IFF</u> Deluxe Paint II LBM & IFF files. The file extension "CE" is created by Digital Vision's Computer eyes video capture product.
- <u>TGA</u> Targa file format. (TrueVision Advanced Raster Graphics Array)

Color Resolution Formats

Images can be saved in several resolutions:

- <u>**1** BPP</u> I bit per pixel or two colors, black & white.
- <u>4 BPP</u> 4 bits per pixel or 16 colors.

<u>8 BPP</u> 8 bits per pixel or 256 colors.

<u>24 BPP</u>24 bits per pixel or 16 million colors.

Not all file format and color resolution combinations are valid either because the combination is not supported or because the format specification does not provide for it. Invalid color resolution options will be "grayed" and cannot be selected.

File Compression

Although most of the file formats supported provide for compressing the pixel data, PixFolio currently only supports compression for GIF, PCX, TARGA & RLE files. PCX and TARGA files can be saved in either compressed or non-compressed format. When PCX or TARGA is

chosen, a check box will be displayed.; if checked, the file will be compressed otherwise it will be written uncompressed.

File Delete Command

Selecting this command will cause the currently displayed image to be deleted from its location on disk. If the file is present in the currently selected catalog, it will be deleted from there as well. FILE_DELETE will not deleted catalog entries from other than the current catalog.

File Move/Copy Command

This command may be selected to move or copy the currently displayed file to another location. For example, to organize your files or to create a backup copy. The change of location will be updated to the catalog.

Move/Copy does not change the file's format. It simply copies the disk data from one location to another. "Move" implies that the original file will be deleted after copying. To copy, that is to say, end up with two copies of the file, select the Copy option checkbox.

If the file is located in the currently selected catalog, the catalog entry will be updated to reflect the new location of the file. If doing a move or copy and the file is renamed, the catalog entry will also be renamed.

File Clear Command

This command will close a file without exiting PixFolio. The screen will be erased of the current image.

File Tech Info Command

If an image is currently displayed, this option will display a dialog box that contains a scrollable window that lists various technical attributes of the file. Also, if any errors were encountered while reading the file, they will be displayed here.

The technical attributes of a file format may be significant when attempting to which determine specific format options are used. For example, if the file is compressed, it will be displayed here. PixFolio does not support all permutations of format options for all files and of course is unaware of new options that might be added to a format specification in the future.

The format and content of the display is dependent upon the file format; some formats may display more information than others.

File Exit Command

Use this command to exit PixFolio.

File Main Command

Use this command to close a view window; the image will subsequently be displayed in the main window.

Catalog Select Catalog Command

This command will cause a dialog box to be displayed that will enable you to select, add, delete or change the name of a catalog.

A catalog has a "Title" which can be anything that you wish it to be. It could be descriptive of the type of images, e.g. "GIF 640x480" or relating to a topic, e.g. "Nature". Each catalog has a DOS file name and path associated with it. This path will also be the default path for files in that catalog. An ther property associated with a catalog is the default extensions fo files that will be displayed in the File Open and Catalog Build dialogs.

The first time that PixFolio starts up, it will create a catalog titled "Default" and named "PIXFOLIO.CAT (its corresponding index is PIXFOLIO.CIX). The default catalog and its index will be located in the same directory as PIXFOLIO.EXE.

You may establish as many catalogs as you wish. The names of defined catalogs and their pathnames are saved in WIN.INI.

Select New Catalog

PixFolio can only work with one catalog at a time. This requires you to "select" which of the catalogs that you have defined. Until you change the selection, this is the catalog that will be updated by any subsequent catalog commands.

To select a catalog, highlight the desired catalog in the Catalog combo box. Make sure that the "Select New Catalog" radio button is checked and press "OK".

Change Catalog Title / Ext

Highlight the catalog whose title you wish to change. You may also change the list of file extensions that will be displayed in the File Open and Catalog Build functions while this catalog is selected. Then check the "Change Catalog Title". Next, enter the new name in the Catalog Title edit box. Then press "OK".

When a new catalog is selected, the current directory will be set to that of the Catalog's file name.

Note: changes to the default extensions for a catalog will not be effective until that catalog is selected again.

Delete Catalog

Highlight the title of the catalog you wish to delete. Then check the "Delete Catalog" radio button. Then press "OK".

Create New Catalog

Press the "Create New Catalog" radio Button, fill in the title of the catalog in the New Title edit box. Next, enter a filename for the catalog. An extension is not necessary! Use the file list box to select a path to where the catalog should be placed, enter a list of file extensions to be in effect for this catalog and then press "OK".

Note: It is suggested that the catalog be placed in the directory where the majority of the files that will be cataloged in this catalog because selecting the catalog will set the current directory to that of the catalog file name.

Default Catalog

The default catalog, that is to say, the catalog that will be selected upon startup, is definable via the Option Default Options command.

Catalog Catalog Command

This command can only be executed when an image is being displayed. This command is used to add or update an entry in a selected catalog. The previously selected catalog will be used but can be changed by selecting a new catalog with the Catalog combo box.

Selecting this option will bring up a dialog box with a number of fields that you can enter into. Other fields are updated by the program.

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GIF87a	†]		
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		-		
Time: 00:47:00	:el	1-		
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Size: 7194 Catalog:	şoã	ו		
A Backup Vol: GIF0004 Path: a:\		i.		
Upda	te	J.		
Pathname: E:\WINDEV\SAMPLES\PIXF0LI0				
Keywords: OPUS CARTOON				
SMASHM.GIF <u>T</u> itle:				
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User Fields

- <u>Title</u> This is the title of the image. If a GIF89a image has a title, it will be filled in automatically. The maximum number of characters that can be entered is 59, including carriage returns and line feeds.
- <u>Keywords</u> This field can contain a number, up to the length of the entry box, of keywords to be used for searching. These keywords can be used to select a list of files meeting requested search criteria. The maximum number of characters that can be entered is 87.
- <u>Description</u> This field can be used to enter any descriptive data concerning the file up to a limit of 1200 characters. This field can be scrolled and edited using standard editing commands. If a GIF89a image has text data included with it, it will be placed here.

Program Fields:

Filename The name of the file.

<u>Icon</u> This is a postage size view of the image. Clicking on the image will cause it to be regenerated. <u>Pathname</u> The primary location (hard disk) pathname and volume label are displayed as well as the backup(floppy disk) location. Therefore, there can be two access paths for the file.

Info The height, width , number of color bits and file format are displayed in a box in the lower left corner.

There are several functions which can be performed by pressing the following buttons:

- <u>Catalog/Update</u> Update the catalog; "Catalog" means that this is a new entry. If desired, the target catalog can be changed beforehand.
- <u>Uncatalog</u> Delete the catalog entry. This button will be grayed if there is no catalog entry to delete. This option does not delete the file itself.
- <u>Cancel</u> Cancels the dialog and returns you to the main menu.

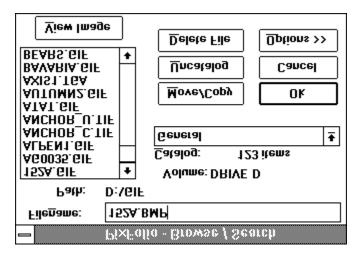
<u>Move</u> Moves the file to some other location.

(image) The "postage stamp" image is itself a button. When the original image is displayed, clicking on the "pstage Stamp" will cause it to be re-generated. this is useful if you had previously cataloged the original image and now have made a change to it like brightening it or cropping it. In Browse mode, clicking on the image has no effect.

Note: The above buttons are redefined if the dialog is entered via the <u>CATALOG_BUILD</u> command.; "Catalog" or "Update" becomes "Next", Uncatalog becomes "Previous" and "Move" becomes "View".

Catalog Browse Command

The CATALOG_BROWSE command provides a dialog box listing the files in a catalog. The target catalog can be changed by selecting another catalog from the Catalog combo listbox.



There are a number of functions that can be applied to a file:

Move /Copy File The file can be moved or copied to another location.

<u>Delete File</u> The file can be deleted from the hard disk. The file is also deleted from the catalog. <u>View Image</u> The file can be opened and viewed.

<u>OK</u> The catalog entry for the file can be viewed and updated. Double-clicking the file name is the same as pressing the OK button. When the catalog entry dialog is displayed, the OK, Delete and Move buttons are replaced by Prev, Next and View respectively.

<u>Cancel</u> Cancels the dialog returning you back to the main viewing window.

Uncatalog Deletes the file from the catalog only.

File Search

Four different search criteria can be applied to a catalog to restrict the catalog list to a subset. The four categories that can be used for the search are:

- 1. Whether a backup copy exists.
- 2. File Format, e.g. GIF87a, TIFF, PCX, etc.
- 3. Match on one or more keywords.
- 4. Match on special conditions, e.g. file size, width, height, number of colors or backup volume name.

The Search function can be accessed by pressing the Options >> button:

<u>V</u> iew Image		2 items displayed
	Delete File Options >>	Show <u>A</u> ll
	<u>U</u> ncatalog Cancel	NATURE ANIMAL
	Move/Copy Ok	Search <u>K</u> eywords
		@C=256
	General <u>+</u>	Special Conditions:
MRLAKE.GIF	<u>Catalog:</u> 123 items	@W>640
Volume: DRIVE C		<u>F</u> ormat
Path: c:\#	vindows	<u>Backup Exists on Floppy Disk</u>
File <u>n</u> ame: MR	Г А КЕ.ВМР	—
	PixFolio - Browse	:/Search

After a search operation.

To search, place the desired search value(s) in either the Format edit box (29 characters max.), Special Conditions (87 characters max) or the Keywords (87 characters max) edit box. If nothing is put in a box, it will not be used in the search. The "Backup File" checkbox is a three-state control. If the box is gray, then it will have no affect on the search. If the box is blank, then all catalog records that do <u>not</u> have a backup location will be selected. If the box is checked, only those catalog records with a backup file location will be selected. The three search criteria are ANDed to select a record. That is to say, if search criteria 1 (Backup) is satisfied AND search criteria 2 (File Format) AND search criteria 3 (Special Conditions) AND search criteria 4 (keywords) are satisfied, the record will be selected.

Wildcard characters "*" & "?" can be used in search arguments. For example, to select all "GIF" files, the search argument "GIF*" will select both GIF87a & GIF89a". Either spaces or Commas may be used to separate search arguments. The underscore character "_" may be used in place of a space in a search argument if that space is significant. For example STAR_TREK will search for the string "Star Trek" while STAR TREK will hit on either "Star" or "Trek".

In order to include in the search special conditions such as file size, image width, etc, PixFolio has 5 special search arguments that can be used in the Format and Special Conditions boxes. Do not use one of these special codes in the Keywords box! The special codes all start with an "@" sign followed by a Code for the particular value to be tested for, an operator ("<" - less than, "=" - equal . "#" - not equal, or ">" - greater than), followed by the value to be tested for.

The valid codes are:

- "B" backup volume name.
- "C" number of colors, 2, 16, 256.
- "D" date in format mm-dd-yyyy
- "H" height of image.
- "P" primary path name
- "S" file size in bytes.
- "W" width of image.

Some examples:

@W=320 select images whose width is 320 pixels.
@D=01-01-1991 select all dates later than January 1, 1991.
@B=GIF0020 select all images residing on backup volume "GIF020"
@C>16 select all images with more than 16 colors.
@P=C:\PIXFOLIO select all images in subdirectory "C:\PIXFOLIO"

The catalog will be searched for records meeting the desired criteria when the Search button is pushed. At the completion of the search, the new catalog list will be displayed in the listbox. To change the search criteria, enter new search values and press Search again.

The modified catalog list will be in force until the "Show All" button is pressed, a new catalog is selected or another search operation is performed. The VIEW SLIDE VIEW command will only display the currently selected catalog entries.

Catalog Build Command

This command provides the ability to select one or more files from a specified input directory for automatic updating to the catalog.

All files in the directory can be selected by clicking on the "Select All" check box.; all files will be highlighted. Any files that are not desired can be deselected by clicking on the file name. Clicking on the "Select All" box a second time will un-highlight all files.

All highlighted files will be cataloged if they are not already. PixFolio will not bother to read images into memory that are already cataloged. However, file volume and pathname information will be updated for existing catalog records. This feature provides an easy way to update PixFolio with information on backup copies of images stored on your hard disk. Just do a "Build" on the floppy disk in drive A or B and the backup location of the files will be quickly updated to the catalog. Another use for the "Build" command is to update the catalog to reflect the new locations of files on your hard disk after you have moved them outside of PixFolio.

If the "Auto Update" option is selected. all of the files will be cataloged without any intervention; otherwise you will be prompted for each file so that you may fill in the Title, Keywords and Description entries. The Auto Update option is useful for mass updates or for initial creation of a catalog.

PixFolio may halt for certain errors and warnings if the <u>Option Display Warnings</u> menu selection is checked. You may temporarily enable or disable this feature by checking the "Stop on Error" checkbox. You may also change the default setting via the Option Default Options command. This will prevent stopping the build process except for the most serious errors. Please keep in mind that processing 24 bit images may cause your computer to appear to "hang" while Windows processes the bitmaps.

The catalog that will be updated can be selected by using the Catalog Combo listbox.

Catalog Rebuild Index Command

This command should be used when it is necessary to recover lost disk space in a catalog. This may be necessary after doing a lot of maintenance to catalog entries, particularly editing and adding to descriptions. When the catalog record is re-written, the space previously allocated in the file for the record is not used and either a previously deleted record that is large enough is used or the file must be expanded.

CATALOG-REBUILD re-writes the catalog and eliminates any deleted records resulting in a smaller catalog file and index.

It is suggested that a backup of the catalog be made before CATALOG -REBUILD is executed.

Options Background Command

This command can be used to select a background color to be used when an image is resized with the_ <u>EDIT_EXPAND</u> command. It presents a dialog box that can be used to establish a custom color.

The default background color when PixFolio starts is Green. The background color may change due to reading in an image that specifies a background color. GIF files do specify a background color.

The background colors that can be selected will be one of the colors in the image's palette.

Options Solid Color Command

If this option is checked, the background will be written with a solid color. Otherwise, a dithered color will be used.

Options DIB To Screen

This option controls the way that PixFolio displays images. If this option is checked, the screen will be painted directly using the current Device Independent Bitmap (DIB) rather than a device dependent bitmap (DDB). Displaying a DIB is slower than displaying a device dependent bitmap. However, the downside is that there could be a lengthy delay, especially when 24 bit color images are read in, while the device dependent bitmap is being created.

Options Display Warnings

This option toggles on or off an option to suppress the display of certain warning messages. Once you have experience with PixFolio, you may wish to turn this option off.

Any change to this option affects only your current session of PisFolio. The default value upon startup can be set via the Option Default Options command.

Options Transparent

This option controls how certain bitmap operations such as drawing a sizing box are performed. With transparent off, a solid color is used. Otherwise, a contrasting color is used.

Options Default Options

This command displays a dialog box enabling you to establish startup options that take effect when Pixfolio is started up. The options that can be set are:

- 1. Default Catalog, the initial catalog that will be selected.
- 2. Default file extension list that will be used to set up the corresponding option in the Select Catalog function when a catalog is created. An extension file list is a series of wildcard file specifications. Multiple selections can be made; each selection must be separated by a semicolon ";". An example is: "*.GIF; *.TGA" to display GIF and Targa files.
- 3. The default subdirectory that will be in effect initially. Once a new catalog is selected, the current directory will be set to that of the catalog. If this option is not specified, the initial subdirectory will be that of the default catalog.
- 4. Whether warning messages are to be displayed. Warning mesages for the *session only* can be changed via the Options Display Warnings command.

View Change Palette

This command allows you to adjust the brightness and/or the contrast of an image. Which option is selected is determined by the state of the two radio buttons labelled "Brightness" and "Contrast.".

The brightness has a range of -200 to +200 and the contrast has a range of -10 to +10. A positive value for brightness will brighten the image, a negative value will darken it. Increasing the brightness will make all of the colors brighter by an equal amount. A positive value for contrast will increase the contrast while a negative value will decrease the contrast.

Contrast on the other hand alters the brightness of colors unequally. If you have an image with a very dark background, an adjustment of the contrast, say by -2, may be in order. Once details in the dark areas become discernable, the brightness may be increased.

Making contrast and brightness adjustments can result in a loss of image detail. You should be aware of this when attempting to find the right adjustment to make. You should avoid making an adjustment and then backing up. For example, adjusting the brightness by 100 and then backing up by 50 will result in loss of detail for the brighter colors, resulting in a "posterized" image. If you try an adjustment that is too much, restore the palette using the Restore Palette command and then adjust the brightness or contrast again using a smaller value.

Although a brightness and contrast adjustment cannot be made concurrently, it is permissible to, for example, to make an adjustment to the contrast and then follow with an adjustment to the contrast.

This command is enabled only if your video driver supports a palette. The VGA driver shipped with Windows does not support palettes.

The original palette can be restored with the <u>VIEW RESTORE PALETTE</u>. (Unless it is a 24 bit color image).

Note: 24 bit color images do not have a palette so invoking this command while displaying a 24 bit color or gray scale image requires that all of the RGB values in the image must be changed and new bitmaps rebuilt. This can take quite a while if your video driver does not directly support 24 bit color. It is suggested that 24 bit color images be saved as 8 bit (256 color) images first. PixFolio and Windows can process 8 bit color images much faster and if your video display only supports 8 bit color, you will not lose much picture resolution.

The huge memory requirements of a 24 bit color image preclude saving a copy of it so that it can be restored so the VIEW RESTORE PALETTE function is not available for 24 bit images.

View Gray Palette

This Command converts a color image to a gray-scale image.

Conversion of 24 bit color images can be lengthy. See <u>VIEW CHANGE_PALETTE</u>.

The original palette can be restored with the <u>VIEW RESTORE PALETTE</u>.(unless it is a 24 bit color or gray scale image).

View Restore Palette

This command restores the original Palette that you had before doing a VIEW CHANGE PALETTE or VIEW GRAY PALETTE command.

This command is enabled only if your video driver supports a palette. The VGA driver shipped with Windows does not support palettes. Because of the huge memory requirements, this command is not available for 24 bit color or gray-scale images.

This command restores the original palette from before <u>VIEW_CHANGE PALETTE</u> was run.

View Slide View

This command will display a series of small bitmaps of images in the currently selected catalog, side by side . The number of catalog entries displayed depends upon the size of the current viewing area.; the maximum number of slides can be displayed by maximizing the window. Also, the sizing border of the window can be moved to increase or decrease the viewing area.

The content of the display can be modified by utilizing the <u>CATALOG BROWSE</u>, Search operation to limit the catalog list to desired entries.

Slides displayed can be viewed by clicking the mouse on them. Holding the left mouse button down will display a popup menu with two options, VIEW and INFO. View will cause the image to be displayed. Info displays a dialog box with text information such as title, description, etc.

Keyboard control

The Page-Up and Page down keys will scroll the slide display through the catalog list.

The Up-arrow and down arrow will move the display up or down one line respectively.

Selecting VIEW-SLIDE VIEW will cause any currently displayed image in the main viewing area to be erased.

View Normal View

Selecting VIEW-NORMAL VIEW causes the slide display produced by VIEW_SLIDE VIEW to be destroyed. The main viewing window is erased to a gray background .

The VIEW-NORMAL VIEW command will be grayed if there are no slides being displayed.

View Play Image

This command when selected will "replay" a GIF87a animation or a GIF89a composite image. This command is only enabled if such an image was read.

GIF animations consist of a series of images that are displayed one by one in succession . The <u>Single Step</u> command can be used to step through an animation and the <u>Set Play Rate</u> command can be used to set the speed of the animation.

View Single Step Play

This menu option will toggle an option to either single step through a GIF animation sequence or play the sequence normally. When the menu is checked, GIF animation sequences will be played one frame at a time. To proceed to the next frame, double click the mouse in the window where the image is displayed or press any key.

View Set Play Rate

This command can be used to vary the delay time between successive frames in a GIF87a animation sequence. The time is entered in 1 thousandths of a second (milliseconds). A larger delay will slow down an animation sequence. The default setting is 100 milliseconds.

Note: This command only affects GIF87a animations. The delay between frames for GIF89a animations is defined within the GIF image itself by the creator of the image.

Context Sensitive Topics

This Help system includes topics that you can call directly from the PixFolio sample application. To get context-sensitive help from PixFolio, press Shift+F1 and click on any element of the PixFolio application window. You can also highlight any PixFolio menu command using the keyboard and press F1 to get help on the command.

Clipboard Operations

The ability to modify images is possible because of the Windows Clipboard. The image area can be expanded (see <u>Edit Expand</u>) Then portions of the existing image may be cut (see <u>Edit Cut</u>) or copied (see <u>Edit Copy</u>). Or, data in the clipboard from similar operations in other windows programs can be inserted via <u>Edit Paste</u>.

Currently displayed images can be resized by cropping them(see Edit_Crop).

Format Conversions

PixFolio can be used to change the format of an image form one format to another. This is useful when you have an image that you wish to input to another program that doesn't support that format. In this case, read the image into PixFolio and then save it to the desired format.

PixFolio images may be saved in the following formats:

CompuServe Graphics Interchange Format.
Tagged Image Format.
Windows paint.
Targa
Windows bitmap format.
Windows Run Length Encoded.

Stretching an Image

An image or portion of an image can be stretched by using the mouse first to select an area. This is done by holding the left mouse button down and stretching out a box to cover the desired area. Then place the cursor at the upper left corner of where you want to origin the stretched image and hold the right mouse button down until the stretch box is of the desired size. Releasing the right button will cause the stretched bitmap to be written to the screen.

If you know the amount that you want to stretch an entire image to, the <u>Edit_Resize</u> command may be used.

Exit PixFolio

Several methods may be utilized to exit PixFolio.

- 1.. Select CLOSE from the system menu or double-click on the system menu icon.

 Select EXIT from the FILE menu or press ALT-F4
 Select CLOSE from the FILE menu. However, if an image is currently being viewed from the slide layout screen, only that image will be closed.

Edit Window

When displaying an image in the Edit window, the mouse may be used to select an area for subsequently copying or cutting to the clipboard or to select and stretch a portion of the image.

Maximize Icon

Press this icon to make the screen the maximum size. This may be desirable before executing the VIEW-LAYOUT SLIDES option.

Minimize Icon

This icon may be pressed to reduce the screen to an icon. The icon may be selected later to restart PixFolio where you left it.

Sizing Border

The size of the image displayed may be altered by dragging the mouse on the sizing border to make the window larger or smaller. The image's size can be permanently changed to the new size by use of the EDIT-EXPAND function.

If slides are currently being displayed as a result of the VIEW-LAYOUT SLIDES command, the number of visible slide windows will be increased or decreased in accordance with the new area of the window.

System Menu

This topic describes the system menu.

Title Bar

This topic describes the title bar that is used for application and document windows.

Windows Keys

Choose from the following list to review the keys used in Windows:

<u>Cursor Movement Keys</u> <u>Dialog Box Keys</u> <u>Editing Keys</u> <u>Help Keys</u> <u>Menu Keys</u> <u>System Keys</u> <u>Text Selection Keys</u> <u>Window Keys</u>

<u>PixFolio Keys</u> Keys defined by PixFolio.

Cursor Movement Keys

Key(s)	Function
DIRECTION key	Moves the cursor left, right, up, or down in a field.
End or Ctrl+Right Arrow	Moves to the end of a field.
Home or CTRL+Left Arrow	Moves to the beginning of a field.
PAGE UP or PAGE DOWN	Moves up or down in a field, one screen at a time.

Dialog Box Keys

Key(s)	Function
ТАВ	Moves from field to field (left to right and top to bottom).
SHIFT+TAB	Moves from field to field in reverse order.
ALT+letter	Moves to the option or group whose underlined letter matches the one you type.
DIRECTION key	Moves from option to option within a group of options.
ENTER	Executes a command button. Or, chooses the selected item in a list box and executes the command.
ESC	Closes a dialog box without completing the command. (Same as Cancel)
ALT+DOWN ARROW	Opens a drop-down list box.
ALT+UP or DOWN ARROW	V Selects item in a drop-down list box.
SPACEBAR	Cancels a selection in a list box. Selects or clears a check box.
CTRL+SLASH	Selects all the items in a list box.
CTRL+BACKSLASH	Cancels all selections except the current selection.
SHIFT+ DIRECTION key	Extends selection in a text box.
SHIFT+ HOME	Extends selection to first character in a text box.
SHIFT+ END	Extends selection to last character in a text box

Editing Keys

Key(s)	Function
Backspace	Deletes the character to the left of the cursor.
	Or, deletes selected text.
Delete	Deletes the character to the right of the cursor.
	Or, deletes selected text.

Help Keys

Key(s)	Function
F1	Gets Help and displays the Help Index for the application. If the Help window is already open, pressing F1 displays the "Using Windows Help" topics.
	In some Windows applications, pressing F1 displays a Help topic on the selected command, dialog box option, or system message.
SHIFT+F1	Changes the pointer to so you can get Help on a specific command, screen region, or key. You can then choose a command, click the screen region, or press a key or key combination you want to know more about.
(This feature is not	available in all Windows applications.)

Menu Keys

Key(s)	Function
Alt	Selects the first menu on the menu bar.
Letter key	Chooses the menu, or menu item, whose underlined letter matches the one you type.
Alt+letter key	Pulls down the menu whose underlined letter matches the one you type.
LEFT or RIGHT ARROW	Moves among menus.
UP or DOWN ARROW	Moves among menu items.
Enter	Chooses the selected menu item.

System Keys

The following keys can be used from any window, regardless of the application you are using.

Key(s)	Function
Ctrl+Esc	Switches to the Task List.
Alt+Esc	Switches to the next application window or minimized icon, including full-screen programs.
Alt+TAB	Switches to the next application window, restoring applications that are running as icons.
Alt+PrtSc	Copies the entire screen to Clipboard.
Ctrl+F4	Closes the active window.
F1	Gets Help and displays the Help Index for the application. (See <u>Help Keys</u>)

Text Selection Keys

Key(s)	Function
SHIFT+LEFT or RIGHT ARROW	Selects text one character at a time to the left or right.
SHIFT+DOWN or UP	Selects one line of text up or down.
SHIFT+END	Selects text to the end of the line.
SHIFT+HOME	Selects text to the beginning of the line.
SHIFT+PAGE DOWN	Selects text down one window.
	Or, cancels the selection if the next window is already selected.
SHIFT+PAGE UP	Selects text up one window.
	Or, cancels the selection if the previous window is already selected.
CTRL+SHIFT+LEFT or RIGHT ARROW	Selects text to the next or previous word.
CTRL+SHIFT+UP or DOWN ARROW	Selects text to the beginning (UP ARROW) or end (DOWN ARROW) of the paragraph.
CTRL+SHIFT+END	Selects text to the end of the document.
CTRL+SHIFT+HOME	Selects text to the beginning of the document.

Window Keys

Key(s)	Function
ALT+SPACEBAR	Opens the Control menu for an application window.
ALT+Hyphen	Opens the Control menu for a document window.
Alt+F4	Closes a window.
Alt+Esc	Switches to the next application window or minimized icon, including full-screen programs.
Alt+TAB	Switches to the next application window, restoring applications that are running as icons.
Alt+ENTER	Switches a non-Windows application between running in a window and running full screen.
DIRECTION key	Moves a window when you have chosen Move from the Control menu. Or, changes the size of a window when you have chosen Size from the Control menu.

PixFolio Keys

Key(s)	Function
ESCAPE key	Can be used where ever a Cancel button is displayed.
CONTROL + INS	Copy to the clipboard. See Edit Copy.
SHIFT + DELETE	Cut a portion out of an image. See <u>Edit Cut</u> .
SHIFT + INSERT	Paste from the Clipboard to the current image. See <u>Edit Paste</u> .
SHIFT + F12 keys	Save an image. See Edit Save.
CONTROL + F12	Open image. See <u>File Open</u> .
CONTROL + SHIFT +F	12 Print image. See <u>File Print.</u>
ALT + F4	Exit PixFolio.
BACKSPACE + ALT	Undo last edit operation. See <u>Edit Undo</u> .
CONTROL + "P"	"Play" a GIF animation sequence.

Clipboard

The Clipboard is used by PixFolio to transfer bitmap information to and from other applications that utilize compatible formats. PixFolio only supports standard Windows Clipboard formats (palette info, device dependent bitmaps and device independent bitmaps or DIB's.

The <u>Cut</u> or <u>Copy</u> commands transfer image data from PixFolio to the Clipboard. If a region is not selected by using the Mouse and the left mouse button, the entire image will be copied to the Clipboard.

The <u>Paste</u> command can be used to transfer a image or portion of an image in the clipboard to your current image. Selecting Paste will change the cursor to a crosshair. Then, while you hold the left mouse button down, a box whose dimensions are the same as the Clipboard data can be moved around until it is positioned properly. Releasing the left mouse button will allow the clipboard data to be displayed.

The <u>Paste Palette</u> command can be used to replace the current palette with one from another image in the clipboard. When the Cut or Copy commands are used, a copy of the palette in use is also copied to the Clipboard. This palette can then be "pasted" just like the image except that not being an entity in the physical sense, it is not necessary to position it. While pasting a palette may be necessary in some instances, the use of this function is limited; the images must have a similar color map structure to avoid unwanted changes to the colors in the image.

Device Independent Bitmap (DIB)

Device Independent Bitmaps are a way of representing an image in a manner that is independent of the hardware upon which they are displayed.

DIB's are used to store images which must be displayed in a number of different environments. They contain all elements which might be needed by different display hardware. Windows BMP files are simply DIB's with a header tacked on.

Device Dependent Bitmap (DDB)

Device dependent Bitmaps are a way of representing an mage that is dependent upon the hardware characteristics of the display device. Windows uses DDBs internally. However, a DDB created for one device such as VGA can only be used for VGA. For this reason, the DIB format is used when images must be transferred to another environment.

Color Resolution

Windows can handle four different color resolutions defined as bits per pixel or the number of bits used to describe the color. 1 bit of color resolution can result in 2 colors, (usually Black or White). 4 bits will allow for 16 colors. 8 bits will allow for 256 colors. These are the most common values found in most images. Note that in order to display 256 colors, you must have a video board and Windows video driver capable of displaying 256 colors; the standard VGA driver can only display 16 colors.

Many images produced by scanners have 24 bit color resolution which is good for several million colors. Unless you have one of the newer graphics cards capable of displaying 24 bit color, 24 bit images will be displayed in 8 bit mode.

GIF

GIF stands for Graphics Interchange Format. It is a bitmapped graphics format introduced by CompuServe. "The Graphics Interchange Format (C) is the Copyright property of CompuServe Incorporated. GIF (sm) is a Service Mark property of Compuserve Incorporated".

There are two specifications for GIF images in use. The older of the two is the "GIF87a" format. Most GIF images adhere to this format. A newer file specification, "GIF89a" provides for additional features such as text and graphic overlays which can be timed or keyed to user input. PixFolio supports these features.

Bitmap

A bitmap in the general sense is an array of pixel (picture elements) . A bitmap to Windows , being a Graphical environment, is the basic element of the windows display just like a character is in an non-graphical environment. The windows display is made up of scores of bitmaps, large and small which make up different elements of the display. Bitmaps are used for such things as buttons, frames, title bars and also text.

The term Bitmap can also be used more specifically to refer to an image stored on disk. Commonly, these files have a .BMP extension. BMP files consist of a Windows bitmap along with some header information such as the size of the image, etc..

Cannot Open File xxxx...

If this file name was entered on the command line, you have probably made a mistake in entering the name. If this file was selected from the Open File dialog, this error could be caused by Window running out of file handles. In this case, check your CONFIG.SYS file to insure that the entry FILES= is big enough. You may need to set it to 30 or greater depending upon how many applications you have running on your machine.

Unrecognized or invalid File Format

PixFolio cannot read the image. This could be caused by one of the following conditions:

The file extension is wrong. That is to say, it does not match the file's format. PixFolio assumes that the format, eg GIF has a file extension of ".GIF". The file has been corrupted. The file format is not supported by PixFolio. Read the Tech Info to see if there are any messages detailing the format option giving the problem. Windows has run out of memory. Software bug in PixFolio.

Could not create BitmapFromDib

This message can occur when the DIB To Screen option is turned off and an error occurs creating the device dependent bitmap copy of the image. This can happen with very large images when you get low on memory. Program execution may continue but you may encounter other errors caused by low memory later, particularly when editing images or using the VIEW-LAYOUT SLIDES command.

Must be different path/filename xxxx...

The path/filename that you specified for the target file is the same as the input file. Either rename the file when you copy it or copy it to another directory or disk.

Copy failed

When copying or moving a file, a fatal error occurred. Most likely this is because there is insufficient space or a write error has occurred in the target directory.

Duplicate File / File already exists at xxxx...

You are attempting to catalog an image and the catalog already shows a file of the same name located in some other location on a hard drive. Only one hard drive location can be maintained for an image. You may choose to continue by pressing OK or you may quit this operation by pressing Cancel. If you choose to continue, the catalog will be changed to the new location.

Insert Disk / Insert Volume xxxxx in Drive x:

The Image that you are reading is located on a floppy disk whose volume ID is xxxxx. Please insert the requested disk and press OK or press Cancel to abort the operation.

Incorrect Volume Label

This error occurs when trying to read a file from a floppy drive. The expected volume label is compared to the expected one. This error results if they differ. You may continue by pressing OK, retry by pressing Retry or cancel or abort the operation by pressing Cancel.

Rebuild Catalog Index / Are you ready to rebuild the index?

PixFolio is ready to rebuild the catalog index file. If you have not backed up the catalog, it may be prudent to do this first. To continue, press OK. To abort the rebuild, press Cancel.

Insufficient space to create xxxx.....

Prior to performing a Move or Copy operation, PixFolio checks the output volume to see if there is enough space. This message results if there is not.

Your only operation is to press ok which will abort the operation. Then select another volume or location to move/copy to.

Overwrite existing file?

If PixFolio finds a file of the same name at the target location for a save or move/copy operation, you will be prompted with this message. If ok to continue, press OK, else press cancel to abort the operation.

Confirm Delete

If you do not wish to continue, press Cancel. Otherwise press OK to delete the file.

Warning! / This may take a while...

Displaying a 24 bit image may take quite a while. This warning is here to notify you that his will happen and you should not prematurely assume that your machine has "locked up".

Options:

Yes - The screen will be painted "real time" so you can see it happen. This is the same as if the DIB to Screen option was turned on.

No- The program will attempt to create a device dependent bitmap. Your machine will "hang" for quite a while.

Cancel-Quit processing this image completely.

In testing on a 20mhz 386, bitmaps in the size of 640 x 480 took as much as 20 minutes to display.

The reason for this is that Windows must lookup each 3 byte RGB color triplet in your image and attempt to match it to one of the 256 colors (16 colors if you do not have a 256 color video driver) that it has available to display.

It is recommended that once the image is displayed that you save the image to some other 8 bit format such as GIF for later use. Also, you may wish to set the <u>DIB to Screen</u> option on. This will display the bitmap as it is being converted rather than after the entire bitmap has been processed.

Note: the same delay that you will experience here will apply whenever PixFolio has to manipulate the image such as during the various edit commands, stretching an image, or creating a the postage stamp image when cataloging an image or when part of the screen has to be repainted because another window invalidated part of it.

Note: This warning message can be inhibited by selecting the <u>Display Warnings</u> command.

Have patience!

xxx... has been modified / do you want to save it?

You have initiated some action that will erase the current image from the screen. but the image currently displayed has been changed. Do you want to save it before continuing? Press the "Yes" button to save the image, "no" to not save the image or "cancel" to abort the requested operation.

Empty Catalog / The selected catalog is empty...

The currently selected catalog is empty. This can happen if you have never cataloged any images; possibly you have just created a new catalog or you are running PixFolio for the first time. Also, if the last Catalog Browse search command failed to find any images, this error could result.

To catalog an image, use File Open to read in an image, then select Catalog Catalog to catalog it; or - select the Catalog Build command to build a catalog.

New Catalog Created / Do you want to make xxx your current catalog?

The new catalog has been created. Do you now wish to select this catalog as your active, current catalog? Enter "Yes" if ok, else, enter "NO" to continue using the currently selected catalog.

Warning / xxx already exists, is it OK?

The filename that you have entered as the catalog file name already exists! Do not allow this name to be used unless you are sure that no other catalog name references it.

Verify Uncatalog / Do you want to uncatalog xxx...?

This message is presented when you have selected a catalog entry to be uncataloged. Press "YES" to continue, othewise, "No".

Catalog xxx... not found

A catalog name entered on the command line when PixFolio was started is invalid. Check the command line to insure that the correct catalog name is given. PixFolio will use the default catalog (CATALOG1=) in your WIN.INI file.

Error / Unable to create the specified file format

This error occurs when attempting to create a new bitmap with a different number of bits per pixel in order to save the file in a different format from what it was read as. The most likely cause is not enough memory to create the new bitmap.

Error / Unable to save the specified file

The save has failed. Two possible causes are insufficient disk storage space or a lack of memory.