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Installation

The PICPRESS™ disk contains a Windows Installation program that installs PICPRESS in a user specified directory. A small selection of .PIC images are included as examples of compressed images.

To Install:

- 1) Insert the PICPRESS™ disk in a 3.5" disk drive.
- 2) Choose File..., Run.. from Windows' File Manager
- 3) Enter "A:SETUP" (or B:SETUP) and press ENTER
- 4) Follow the Installation Program instructions to complete the installation.

Overview

PICPRESS™ is designed to solve several problems associated with the use of digitized photographic images. Color and grayscale images in many file formats are very large files that can be difficult to transport and slow to view. Viewing quality problems commonly arise when using hardware designed to display limited numbers of colors to view a photographic image or to simultaneously view multiple images.

PICPRESS™ utilizes sophisticated color mapping, dithering, and image compression technology to address each of these problems associated with the use of digitized photographic images. The large file sizes of color and grayscale images can be quickly and easily compressed to manageable sizes using PICPRESS' interface to the extremely flexible PIC image compression engine. These compressed images can then be quickly viewed in any of several sizes and displayed on 8 bit color and more capable display hardware with any of several palette options. PICPRESS also utilizes high speed color reduction techniques to enable users to create palettized BMP images from 4-bit, 8-bit and 24 bit uncompressed BMP, PCX, TGA, and TIF images. The output BMP images created can contain a palette derived from another image or the optimal palette for the image.

PICPRESS™ can significantly increase the potential of all users of digitized images. The home user can compress images for archival and to facilitate inexpensive transport via phone lines to other image users. The professional will appreciate the ability to create standard compressed JFIF JPEG image files as well as the advanced batch compression capabilities that allow the user to maintain directory structures and rename output files at compression time. All users will enjoy the ability to view images digitized and compressed through the Konica Quality Photo PC PictureShow™ program.

Viewing Images

PICPRESS™ will display PIC, JPEG, BMP, TGA, PCX, and TIF images. PICPRESS will display 24 bit color (true color) images in these formats without being palettized on displays capable of 32,000 colors or more. PICPRESS will also display true color images on displays capable of 256 colors by using color mapping and dithering techniques

PICPRESS™ provides significant flexibility in choosing and using color palettes. True color images will always display quickest and the most accurately without color reduction. However, hardware limitations are often the reason to display true color images with a palette. True color images can be displayed in 256 color mode using their own optimal palette or using a palette from another PIC, BMP or PAL file. Both techniques have advantages and disadvantages. Computing and using an optimal palette for a true color image will provide a truer rendition of the image than using a non-optimal or universal palette from another image. The optimal palette technique is excellent for displaying a single image on a 256 color display but can not be used to simultaneously display multiple images. On a 256 color display with two images with separate palettes being viewed the image with focus will always appear better than the image without focus, and as focus is switched from one image to the next a 'palette flash' will occur. For this reason an optimal palette approach is best used when displaying multiple images simultaneously.

PICPRESS™ provides similar functionality when viewing uncompressed palettized images. Palettized images can be viewed using the palette contained in the image (the optimal palette) or an external color palette can be chosen from another PIC, BMP, or PAL file chosen by the user. This provides the user with a 256 color display driver the ability to view multiple palettized images mapped to a common palette and avoid 'palette flash'.

A unique feature of the IMPACJ decompression libraries is to quickly display one of two separate sizes of thumbnail images derived from the JPG or PIC image. These thumbnail images are not separate images continued in the image file. The thumbnails are generated on-the-fly from the single image in the JPG or PIC file. The two thumbnail sizes generated have dimensions 1/4 x 1/4 the width and height, and 1/8 x 1/8 the width and height of the original image thus having areas of 1/16th and 1/64 the area of the original image. Thus, thumbnails sized 160 x 120 and 80 x 60 can be quickly displayed from a 640 x 480 PIC or JPG image. PICPRESS has extended this feature of the IMPACJ libraries to quickly display the same size thumbnails from PCX, TGA, BMP and TIF images. These thumbnails can be viewed using all the myriad palette and color reduction options available when displaying the full size images.

Compressing Images

Lossy vs. Lossless Compression

Image compression algorithms are classified as either lossy or lossless. Lossless algorithms retain all the information about an image so that once decompressed the source image is exactly reconstructed. Lossless compression can generally provide compression ratios no greater than 3 or 4:1. Lossy compression algorithms are designed to discard varying degrees of data so that visual image degradation is minimized. High quality lossy compression algorithms can attain compression ratios approaching 20-50:1 with minimal detectable visual loss. The IMPACJ algorithms used in PICPRESS to create JPEG and PIC images can extremely quickly generate high quality lossy compressed images. The IMPACJ algorithms provide the user with unlimited control over the compression process and thus the compressed file size and resultant image quality of the compressed image.

Compression Options

PICPRESS™ provides the user with control over the color sub-sampling rate as well as the amount of loss to the luminance and chrominance components of the compressed image. In addition PICPRESS allows the user to specify whether or not to use “Optimized Huffman tables”. Huffman table creation is one of the final steps of the JPEG image compression process. By creating Huffman tables optimized for the data in an image, 5% additional compression can be achieved. Color sub-sampling rates of 4:1:1, 2:1:1, and 1:1:1 are supported by PICPRESS. 4:1:1 sub-sampling is the process of storing the color value of 1 pixel for each of 2 horizontal and 2 vertical pixels in a block of 4 pixels. 2:1:1 sub-sampling is the process of storing the color value for each of 2 horizontal pixels and 1 vertical pixel in a block of 4 pixels. 1:1:1 sub-sampling is the process of storing the color value of each pixel in a block of pixels. 4:1:1 and 2:1:1 sub-sampling therefore introduce a certain amount of color loss in a compressed image, however with most photographic images the loss is very slight in comparison to the increase of compression. 1:1:1 sub-sampling stores the color value of each pixel and therefore will not obtain as high a compression ratio as the other 2 supported sub-sampling models, however 1:1:1 sub-sampling can be an excellent way to maintain detail in a compressed image particularly when compressing images with many straight lines.

Batch Compression

Among PICPRESS™' most powerful features is the ability to compress multiple images spanning any combination of disk drives and directories. The PICPRESS batch interface allows the user to specify a common set of compression parameters to any number of images and rapidly compress the selected images to any location on the system. The batch compression interface supports the optional creation of a compression log file that can be viewed with any text editor to display the results of a batch compression.

The batch interface supports maintaining a directory structure from one directory tree to another as well as the creation of output directories and renaming of output files.

Expanding Images

Although increasingly large numbers of Windows applications are able to make use of highly compressed JPEG and PIC images, the typical application is designed to import and view images in Windows native .BMP image format. However, these applications may not support the myriad options of viewing color images that PICPRESS provides. For these reasons there are times when the user will want to expand PIC and JPEG images to BMP format for use in a word processing, presentation, screen saver, or other software applications.

Expansion Options

PICPRESS™ supports many options at image expansion time. In PICPRESS, Image Expansion is a term describing the function of decompressing a compressed image to its uncompressed file size. PIC and JPEG images are stored as either 24 bit color or 8 bit grayscale images. PICPRESS allows the user to expand color compressed images to 24, 8 or 4-bit color depth and in creating palettized images supports expansion to either a specified palette or to an optimal palette. The user can also control the exact number of colors used in the palette of an expanded image. Grayscale images can be expanded to 4-bit or 8-bit grayscale and PICPRESS provides the capability to specify the number of gray values in the expanded image's palette.

The Expand function can also create 3 different width and height dimension versions of an image. PICPRESS™ will expand an image to either its full size dimensions or to 2 separate sizes of thumbnails. The thumbnails can be either 1/16th or 1/64th the area of the full size image.

One of the most powerful capabilities of PICPRESS™' expand function is to create a series of 8-bit or 4-bit color BMP images that share the same palette containing a user-specified number of colors. This is particularly useful in presentation software when the user would like to display multiple images simultaneously on a palettized device without image degradation. The Expand function will also allow the user to create thumbnail sized images for browsing in other applications.

Batch Expansion

The same batch interface used in the Compression and Color Reduction functions is used to Expand Images. The batch interface supports the expansion of one or many images to any output location with many options for bit depth, image size, numbers of colors, and the ability to use external palettes. The batch expansion interface supports the optional creation of an expansion log file that can be viewed with any text editor to display the results of a batch expansion.

Color Reduction Overview

PICPRESS' Color Reduction function is designed to support the creation of lower color bit depth uncompressed images from uncompressed images containing more colors. Many applications do a poor job of viewing true color images on 8 bit displays in terms of both speed and quality.

PICPRESS' powerful color reduction and dithering routines can be used to quickly create high quality 8-bit (or 4-bit) images from true color images that can be quickly viewed in other applications on palettized displays.

Color Reduction Options

PICPRESS™ supports many options for color reduction.. PICPRESS™ allows the user to create images with 8 or 4-bit color depth and in creating palettized images supports color reduction to either a specified palette or to an optimal palette. The user can also control the exact number of colors used in the palette of the resulting image. Color images can be converted to 4-bit or 8-bit grayscale and PICPRESS™ provides the capability to specify the number of gray values in the grayscale image's palette.

The Color Reduction function can also create 3 different width and height dimension versions of an image. PICPRESS™ will create an image with either its full size dimensions or 2 separate sizes of thumbnails. The thumbnails can be either 1/16th or 1/64th the area of the full size image.

Similar to the Expand function of PICPRESS™, the color reduction function allows the creation of a series of 8-bit or 4-bit color (or grayscale) BMP images that share the same palette containing a user-specified number of colors. These palettized images can be created from any series of supported uncompressed image types with any supported color bit depth.

Batch Color Reduction

Batch Color Reduction

The same batch interface used in the Compression and Expand functions is used for Color Reduction. The batch interface supports the color reduction of one or many images to any output location with many options for bit depth, image size, numbers of colors, and the ability to use external palettes. The batch color reduction interface supports the optional creation of a color reduction log file that can be viewed with any text editor to display the results of a batch color reduction.

File Open

The File, Open menu selection displays the “Display One or More Files” file selection dialog. This dialog supports the selection of one or more images using standard Windows mouse and keystroke conventions. To select a contiguous group of files use Shift-Click, to select a non-contiguous group of files use Ctrl-Click.

The “Display One or More Files” dialog also displays the current Image Options in effect and provides a button giving direct access to the Image Options dialog (see Image Options).

The file list in effect can be limited to a specific supported image type or to All Supported image types. This dialog will always display the file type and file location chosen at the last completed Image Open procedure.

Current Image Info

The File, Current Image Info menu selection displays the “Image Information” dialog box. The Image Information dialog box displays information about an image file. The information displayed in the dialog will change depending on which image file format is being displayed. Typically displayed are: file type, width and height in pixels, uncompressed and compressed file sizes in bytes, luminance, chrominance, and sub-sampling compression parameters for PIC and JPEG formats, and color depth in bits per pixel. This dialog box can also be displayed while viewing an image by clicking the right mouse button in the image window.

Image Info..

The File, Image Info menu selection displays the “Select File for Image Info” dialog which in turn displays the “Image Information” dialog box. The Image Information dialog box displays information about an image file. The information displayed in the dialog will change depending on which image file format is being displayed. Typically displayed are: file type, width and height in pixels, uncompressed and compressed file sizes in bytes, luminance, chrominance, and sub-sampling compression parameters for PIC and JPEG formats, and color depth in bits per pixel.

Compress

The File, Compress menu selection displays the Compression Options dialog box with the focus on the Input panel. This panel and all the Compression Options are more fully described in the section entitled "Options, Compress.." This menu selection provides access to a full-featured batch compression interface which, in its simplest form compresses a single file to a compressed file located in the same directory compressed with the last used compression options, and in its most sophisticated use allows the compression of several separate directory trees to newly created directory trees with modified file names.

Compression in PICPRESS is achieved using Pegasus' IMPACJ compression libraries to create PIC or JPEG compressed image files. PIC files created adhere to the Microsoft MultiMedia BMP extensions for JPEG compression with the addition of an orientation field in the BMP header and special use of contained palette fields. JPEG files created with PICPress adhere to the JFIF version 1.02 specification. PICPRESS compresses color and grayscale images in the BMP, TGA, PCX, and TIF file formats.

Expand

The File, Expand menu selection displays the Expand Options dialog box with the focus on the Input panel. This panel and all the Expand Options are more fully described in the section entitled "Options, Expand.." This menu selection provides access to the full-featured batch expansion interface mimicking the batch compression interface.

Expansion is a term used in PICPRESS to describe the decompression of a compressed PIC or JPEG image file to an uncompressed BMP format image file.

Color Reduction

Color Reduction

The File, Color Reduction menu selection displays the Color Reduction Options dialog box with the focus on the Input panel. This panel and all the Color Reduction Options are more fully described in the section entitled "Options, Color Reduction.." This menu selection provides access to the full-featured color reduction interface mimicking the batch compression and expansion interfaces described above.

Color Reduction is a term used in PICPRESS to describe the color reduction and color mapping of various color depth PCX, BMP, TGA, and TIF image file formats. One use of PICPRESS' color reduction features is the ability to create uncompressed BMP image files containing a specific palette from a series of unrelated images of various bit depths, thus allowing the simultaneous display of these BMP images on palettized displays. In general, PICPRESS' color reduction functions are the industry's fastest way to create high quality 8-bit images from true color images.

Exit

Selecting Exit ends the PICPress application.

Image Options

The Options, Image.. menu selection displays the Image Options dialog with the Image tab having focus. This menu selection provides the user with complete control over image display. The Image Options dialog is divided into 3 separate tabs: Image, Palette, and Window Size. This dialog box can also be displayed while viewing an image by double-clicking the left mouse button in the image window, or by pressing the Image Options button in the "Display One or More Images" dialog displayed from the File, Open.. menu selection.

Image Tab

The Image tab provides control over Image Size, Dithering, Color Depth and conversion to Grayscale of the current image, images opened in the future, or all open images. The user can select to modify the viewing options for logical combinations of all open images, future images, and / or the current image. Checking "future opens" changes the default Image Options in effect when performing File Open operations in the future.

Image Size choices are: Normal, 1/16th thumbnail, and 1/64th thumbnail. Normal size is the full size of the image. 1/16th Thumbnail is a thumbnail version of the image with the displayed width and height determined as 1/4 the width and 1/4 the height of the source image. 1/64th Thumbnail is a thumbnail version of the image with the displayed width and height determined as 1/8th the width and 1/8th the height of the source image.

Color Depth is the number of bits per pixel to use when displaying an image. The Color Depth choices available will depend on the capabilities of the video driver being used. When using a display driver capable of unpalettized display (32,000 colors or more) all 3 choices (4-bit, 8-bit, and 24-bit) are available. When using a display driver capable of displaying only 8-bit color depth, only the 4-bit and 8-bit choices are available.

Dithering is available only when displaying images to palettized color bit depths. Generally, dithering of photographic images on palettized displays provides a more pleasing image.

Converting to grayscale will display an image with the appropriate number of grayscale values. 8-bit grayscale contains up to 256 levels of gray, 4-bit grayscale contains up to 16 levels of gray. Specifying "24-bit color depth" and setting convert to grayscale to "yes" will display an 8-bit grayscale image.

Window Size

The Window Size tab provides control over Window Sizing and Aspect Ratio. Maintaining an image's aspect ratio is the process of keeping the ratio of displayed image width to height constant. The "Maintain Aspect Ratio" selection is available only when Window Sizing is set to "Size Image to Window" since the other Window Size options display the image at its native size. The Window Sizing options provide control over the window that contains an image. Selecting "Size Window to Image" causes images to initially display in a window that is the full size of the image. Resizing the window of an image displayed with this option set creates scrollbars in the image window when the window is smaller than the image, but this image window cannot be resized larger than the image. Selecting "Size Image to Window" initially displays an image at its full size, when resizing the image window the displayed image size changes, optionally maintaining aspect ratio. Selecting "Window Size Unrestricted by Image Size" causes images to initially display in a window that is the full size of the image. Resizing the window of an image displayed with this option set creates scrollbars in the image window when the window is smaller than the image, when the image window is resized larger than the image the window will display the image at its full size surrounded by the default Windows background color..

Palette Tab

The Palette tab of the Image Options dialog is only available when the Color Depth selection of the Image tab specifies a palettized display. The Palette tab provides control over the display of images to their optimal palette or to a palette contained in another image, as well as control over the number of colors to use in the selected palette.

Selecting to Palettize to Internal Palette displays an image with the optimal palette. In the case of a true color image the optimal palette is computed by the color reduction algorithms contained in PICPRESS. In the case of a palettized image this is the palette contained in the image. Selecting to Palettize to an External Palette enables the Select Palette File button allowing the user to choose a PIC, BMP or PAL file to color map an image to. Choosing an image file that does not contain a palette of the specified color depth will generate an error curing display. The Number of Colors control provides control over the exact amount of colors to use when displaying an image.

Compress Options

The Options, Compress.. menu selection displays the Compress dialog with the Options tab having focus. This menu selection provides the user with complete control over image compression. The Compress dialog is divided into 3 separate tabs: Input, Output, and Options. This dialog box can also be displayed by selecting the File, Compress.. menu option. The Compress Now button located on all 3 tabs allows immediate access to the Compress function from each screen. Press Compress Now from any tab to initiate image compression of the images selected in the Input tab to the file names and locations specified in the Output tab using the compression parameters specified in the Options tab.

Options Tab

The Options tab provides control over Luminance, Chrominance, and Sub-Sampling compression parameters, image quartering at compression time, PIC or JPEG file type, optimized Huffman codes, and PIC palette colors. Also available are options for creating and displaying compression log files, and options for overwriting existing compressed files with the same name. **WARNING: the output File Type should ALWAYS be specified before selecting input files..**

Luminance and Chrominance compression parameters have an available range of 0 to 255. A value of 0 for Luminance or Chrominance compression specifies the minimum amount of loss to the respective component of the image and results in the least amount of compression. Conversely, a value of 255 specifies the maximum amount of loss for that component of the image and results in the largest amount of compression.

4:1:1 sub-sampling is the process of storing the color value of 1 pixel for each of 2 horizontal and 2 vertical pixels in a block of 4 pixels. 2:1:1 sub-sampling is the process of storing the color value for each of 2 horizontal pixels and 1 vertical pixel in a block of 4 pixels. 1:1:1 sub-sampling is the process of storing the color value of each pixel in a block of pixels. 4:1:1 and 2:1:1 sub-sampling therefore introduce a certain amount of color loss in a compressed image, however with most photographic images the loss is very slight in comparison to the increase of compression. 1:1:1 sub-sampling stores the color value of each pixel and therefore will not obtain as high a compression ratio as the other 2 supported sub-sampling models, however 1:1:1 sub-sampling can be an excellent way to maintain detail in a compressed image particularly when compressing images with many straight lines. However, decompression speed is slowed by going from 4:1:1 to 2:1:1 and again from 2:1:1 to 1.

Quartering provides the capability of resampling the image before compression. Selecting Quartering when compressing a source image with a width of 1,000 pixels and a height of 1,000 pixels would create a compressed image with a width of 500 pixels and a height of 500 pixels. This feature enables the creation of screen sized images from source images too large to view on most reasonable resolution displays.

The File Type selection determines the file format of compressed images. JFIF version 1.02 compatible JPEG images or PIC images can be created with PICPRESS. PIC images can be viewed with image viewing products using the IMPACJ decompression libraries that support the PC file format. The advantage of using PIC files is the rapid viewing of these images on palettized displays due to the color palettes included with the image file. The inclusion of these palettes allows the application program to forego the creation of an optimal palette at display time.

The PIC Palette Colors control can be set to either the PIC default creation of 2 palettes: 1 16 color and 1 236 color, or to create a single palette with any number of colors from 2 to 256. This feature has no effect over the number of colors contained in the compressed data of a PIC file which is always either 24-bit color or 8-bit grayscale.

PICPRESS provides control over the use of "Optimized Huffman codes". Huffman table creation is one of the final steps of the JPEG image compression process. By creating Huffman codes optimized for the data in an image, approximately 5-10% additional compression can be achieved

Compression Log File creation can be specified to create text files which can be reviewed to determine the results of a batch compression. The Select button displays a File Create dialog box allowing the naming of the log file. The Display Log control allows the viewing of the progress of a compression procedure and does not require that a log file be created.

Typical use of the PICPRESS compression module entails multiple compression and viewing of images to determine the optimal compression parameters for a specific type of source image. This can often result in several image files with similar names. The overwriting of these files can be controlled, specifying to Overwrite, Rename or Skip files that already exist. When using the batch interface it is recommended to Overwrite existing files to avoid a series of compression's being paused while waiting for operator intervention to rename a file.

Input Tab

The Input tab provides control over the selection of image files to compress. Select "List Files of Type" to display All Supported file types, or individually list BMP, TGA, PCX, or TIF image files to be selected for compression. All image file names of the selected Type in the chosen Drive and Directory will appear in the Files list. The Files list is a multi-file selection box. Individual files or groups of files may be selected using Shift-Click or Ctrl-Click. The Move Selected (button with a single right arrow) or Move All (button with double right arrows) buttons move files to the Selected Files list box. The Remove Selected (button with a single left arrow) or Remove All (button with double left arrows) buttons move files out of the Selected Files list box.

Files may be moved into the Selected Files from any number of Drives and Directories by adding files from a directory to the Selected Files list box, then using the Drives and Directories to traverse paths on the system and repeatedly moving files into the Selected Files list box.

Output Tab

The Output tab provides control over the output location and file names of files compressed with PICPRESS. The Output Directory buttons: Change Output Path and Append Output Path, provide extremely flexible capabilities in the placement of compressed images. The default setting of the Output File path is the same location as the location of the source image. The default Output File Name is the same as the source image with the extension of the Compressed File Type chosen on the Options tab. Thus the use of the batch compression interface can be as straightforward as compressing one or many files to the current location with only a change in the file extension, or as complex as creating new directory trees mimicking an existing directory tree on a separate drive.

The Input Files list box is not modifiable on this tab but reflects the list of Input Files chosen on the Input tab. The Output Files list box is a multi-file selection list box that displays the resulting location of the Input Files. Output Paths and names are modifiable using combinations of the controls on this tab.

Pressing the Change Output Path button modifies the output path of selected files in the Output Files list box to the full path specified in the Drives and Directories controls. Optionally, an Output Path can be typed into the Output Path control, pressing the Change Output Path button modifies the output path of selected files in the Output Files list box to the full path specified in the Output Path control. Typing a non-existent path into the Output Path control causes PICPRESS to create the directory once the Compress Now button is pressed.

Pressing the Append Output Path appends the existing output path of selected files in the Output Files list box to the path specified in the Drives and Directories controls. Optionally, an Output Path can be typed into the Output Path control, pressing the Append Output Path button appends the

output path of selected files in the Output Files list box to the full path specified Output Path control. Typing a non-existent path into the Output Path control causes PICPRESS to create the directory once the Compress Now button is pressed.

Below the Output Files list box is the Modify File Name control. The currently selected Output File is displayed in the Modify File Name control. Typing a new File Name and pressing the Change button changes the Output File name to the File Name entered in the Modify File Name control.

Expand

The Options, Expand.. menu selection displays the Expand dialog with the Options tab having focus. This menu selection provides the user with complete control over image expansion. The Expand dialog is divided into 3 separate tabs: Input, Output, and Options. This dialog box can also be displayed by selecting the File, Expand.. menu option. The Expand Now button located on all 3 tabs allows immediate access to the Expand function from each screen. Press Expand Now from any tab to initiate image expansion of the images selected in the Input tab to the file names and locations specified in the Output tab using the expansion parameters specified in the Options tab.

Options Tab

The Options tab provides control over Image Size, Dithering, Color Depth and conversion to Grayscale of the current image, as well as the palette to use for expansion and the specific number of colors to use from that palette. Also available are options for creating and displaying expansion log files, and options for overwriting existing compressed files with the same name.

Image Size choices are: Normal, 1/16th thumbnail, and 1/64th thumbnail. Normal size is the full size of the image. 1/16th Thumbnail is a thumbnail version of the image with the expanded width and height determined as 1/4 the width and 1/4 the height of the source image. 1/64th Thumbnail is a thumbnail version of the image with the expanded width and height determined as 1/8th the width and 1/8th the height of the source image. Color Depth is the number of bits per pixel to use when expanding an image. Specifying the creation of a palettized image enables the controls to specify the exact number of colors to place in the palette, as well as the ability to expand the image to the optimal palette or to an external palette. Specifying expansion to an external palette enables the Select Palette File.. button which is used to select a palettized BMP, PAL or a PIC file to use for image expansion.

Dithering is available only when displaying images to palettized color bit depths. Generally, dithering of photographic images to palettized images creates a more pleasing image.

Converting to grayscale will create an image with the appropriate number of grayscale values. 8-bit grayscale contains up to 256 levels of gray, 4-bit grayscale contains up to 16 levels of gray.

Expansion Log File creation can be specified to create text files which can be reviewed to determine the results of a batch expansion. The Select button displays a File Create dialog box allowing the naming of the log file. The Display Log control allows the viewing of the progress of an expansion procedure and does not require that a log file be created.

Typical use of the PICPRESS expansion module can often result in several image files with similar names. The overwriting of these files can be controlled, specifying to Overwrite, Rename or Skip files that already exist. When using the batch interface it is recommended to Prompt on duplicate filenames to avoid overwriting original image data.

Input Tab

The Input tab provides control over the selection of image files to expand. Select "List Files of Type" to display All Supported file types, or individually list PIC, KQP, or JPG image files to be selected for expansion. All image file names of the selected Type in the chosen Drive and Directory will appear in the Files list. The Files list is a multi-file selection box. Individual files or groups of files may be selected using Shift-Click or Ctrl-Click. The Move Selected (button with a single right arrow) or Move All (button with double right arrows) buttons move files to the Selected Files list box. The Remove Selected (button with a single left arrow) or Remove All (button with double left arrows) buttons move files out of the Selected Files list box.

Files may be moved into the Selected Files from any number of Drives and Directories by adding files from a directory to the Selected Files list box, then using the Drives and Directories to traverse paths on the system and repeatedly moving files into the Selected Files list box.

Output Tab

The Output tab provides control over the output location and file names of files expanded with PICPRESS. The Output Directory buttons: Change Output Path and Append Output Path, provide extremely flexible capabilities in the placement of expanded images. The default setting of the Output File path is the same location as the location of the source image. The default Output File Name is the same as the source image with a BMP file extension. Thus the use of the batch expansion interface can be as straightforward as expanding one or many files to the current location with only a change in the file extension, or as complex as creating new directory trees mimicking an existing directory tree on a separate drive.

The Input Files list box is not modifiable on this tab but reflects the list of Input Files chosen on the Input tab. The Output Files list box is a multi-file selection list box that displays the resulting location of the Input Files. Output Paths and names are modifiable using combinations of the controls on this tab.

Pressing the Change Output Path button modifies the output path of selected files in the Output Files list box to the full path specified in the Drives and Directories controls. Optionally, an Output Path can be typed into the Output Path control, pressing the Change Output Path button modifies the output path of selected files in the Output Files list box to the full path specified in the Output Path control. Typing a non-existent path into the Output Path control causes PICPRESS to create the directory once the Expand Now button is pressed.

Pressing the Append Output Path appends the existing output path of selected files in the Output Files list box to the path specified in the Drives and Directories controls. Optionally, an Output Path can be typed into the Output Path control, pressing the Append Output Path button appends the output path of selected files in the Output Files list box to the full path specified Output Path control. Typing a non-existent path into the Output Path control causes PICPRESS to create the directory once the Expand Now button is pressed.

Below the Output Files list box is the Modify File Name control. The currently selected Output File is displayed in the Modify File Name control. Typing a new File Name and pressing the Change button changes the Output File name to the File Name entered in the Modify File Name control.

Color Reduction

The Options, Color Reduction.. menu selection displays the Color Reduction dialog with the Options tab having focus. This menu selection provides the user with complete control over color reduction. The batch interface to the Color Reduction function is exactly the same as the interface to the Image Expansion interface.

PICPRESS™' Color Reduction function is designed to support the creation of lower color bit depth uncompressed images from uncompressed images containing more colors. Many applications do a poor job of viewing true color images on 8 bit displays in terms of both speed and quality. PICPRESS' powerful color reduction and dithering routines can be used to quickly create high quality 8-bit (or 4-bit) images from true color or palettized images that can be quickly viewed in other applications on palettized displays.

Options Tab

The Options tab provides control over Image Size, Dithering, Color Depth and conversion to Grayscale of the selected images, as well as the palette to use for reduction and the specific number of colors to use from that palette. Also available are options for creating and displaying expansion log files, and options for overwriting existing compressed files with the same name.

The controls on the Color Reduction Options tab are exactly the same as the controls on the Image Expansion Options tab.

Input Tab

The controls on the Color Reduction Input tab are exactly the same as the controls on the Image Expansion Input tab.

Output Tab

The controls on the Color Reduction Output tab are exactly the same as the controls on the Image Expansion Output tab.

see Also

[Image Expansion](#)

Zoom Settings

The Zoom Settings dialog provides the capability to specify the amount of zoom percentage. An image is zoomed in (enlarged) by the specified zoom percentage by each right mouse button click when in Zoom mode. An image is zoomed out (decreased) by the specified zoom percentage by each left mouse button click when in Zoom mode.

To enter Zoom mode, press the magnifying glass icon on the toolbar.

DLL Versions

The Help, DLL Versions.. menu selection displays information about the version information of several of the key DLL files used by PICPRESS. This information is most useful to technical support personnel at Pegasus.

About PICPRESS

The Help, About PICPRESS.. menu selection displays information about contacting Pegasus Imaging Corp as well as the current video mode and available GDI and USER resources of the Windows system.

Cancel Color Reduction

Press Cancel to Stop the Color Reduction Process

Cancel Image Compression

Press Cancel to Stop the Image Compression process

Title

Press Cancel to Stop the Image Expansion Process

Cancel Viewing Compression Log

When a compression is in progress press CANCEL to stop the compression. If the compression process is complete, press OK to close the compression log display window

Cancel Viewing Expansion Log

When an expansion is in progress press CANCEL to stop the expansion. If the expansion process is complete, press OK to close the expansion log display window

Cancel Viewing Reduction Log

When a color reduction is in progress press CANCEL to stop the color reduction. If the color reduction process is complete, press OK to close the color reduction log display window

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Title

