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The File Browser

This File Browser appears when you (1) click the **Load toolbar button,** (2) select **File|Load** from Main Menu or (3) double-click on an open child Window.   You can resize this Window to any size and adjust the width of file and directory lists via the **Column Resizer**.

Column Resizer

From it's Pop-Up menu, you can **Align Window Right** (for default, right-handed operation); **Align Window Left** (for left-handed operation); **Reset Window**; change the font of file and directory lists with **Window Font**.

To Load (or Preview) Image or Multimedia Files:
1. Change desired drive, directory or filter from **Type** dropbox.
2. Highlight a filename from **Files** listbox and double-click it.   You can also, click ,   press **<ret>** or **<Spc>** or select **Open** from the Pop-Up Menu.

   To Preview graphics, set **Preview Graphics** from it's Pop-Up menu.   When you double-click a filename or press **<ret>** or **<spc>**, the image is centered on screen (cropped, if necessary) and disappears after clicking it or previewing another file.   JPG files are previewed in grayscale for speed on 256-color displays.   All other methods of opening a file remain the same.

Note: The last eight (8) files can be recalled via **File|Recall** (from Main menu), which is updated with each new file.

To Get File Information:
1. Highlight a filename from **Files** listbox.
2. Right-click on the filename (or click or select **Info** from the Pop-Up Menu).   **JPG** file comments are included in a special information window with variable font.

To Delete an Image File:
1. Highlight a filename from **Files** listbox.
2. Select **Delete** from Pop-Up Menu or press **<Del>**.

Scanning, Saving or Converting Images

To Scan an Image:
1. Optionally, select **File|TWAIN Source** to select device.
2. Select **File|Acquire** from Main Menu.

To Save or Convert an Image File:

1. Select **File|Save** from Main Menu.

2. Change desired drive, directory or filter (format) from **Type** dropbox.   To convert file format (eg., JPG to BMP), save a loaded file to desired format.   Depending on current color depth, certain file formats will be available from the Type dropbox.

3. If saving to **CMP** or **PIC** (or KQP), **JPG** (or JIF), click **Quality button** to set compression level.

Note: PIC (or KQP) and JPG (or JIF) files can be saved with variable color (chroma) and luminance (gray) compression settings. 4:1:1, 4:2:2 or 4:4:4 YUV subsampling can also be speficied.   For great quality in small files, start with a low luminance compression setting (eg., 5) and 4:2:2 subsampling ; then gradually experiment with greater color compression settings (eg, 12).

CMP files can be saved with custom compression level.   It also has convenient preset compression settings and unique Perfect Quality preset options for small files with impressive quality.

4. Highlight a filename from **Files** listbox to overwrite or enter a new filename in the **Filename** Edit box.

5. Click **Ok button** or press **<ret>** to save.

Drag & Drop, File Association & Uninstall

To Drag & Drop Image or Multimedia Files:
1. Select/highlight file(s) from **My Computer** or **Explorer** (or File Manager).
2. Left-click (without releasing mouse button) on any selected file.
3. Move mousepointer into VidFun's main window then release the mouse button.

Note: Multiple image files will be automatically loaded; with multimedia files (eg., **AVI** or **MOV**, **MPG**, **WAV**, **MID**, **FLI**), you can play multiple devices at the same time but only one file per multimedia device can be played.

To Associate Files in Windows 3.1: Select **File|Associate** from VidFun's menu.

VidFun will accept a filename parameter whenever invoked and immediately display or play it;   by "shelling" to installed **VIDFUN.EXE** (not VFUN.EXE) and passing a filename parameter, Internet Browsers can associate VidFun as their default viewer/player (see your Browser's documentation regarding Helper Applications).   One instance of VidFun does it all via multiple documents interface and multimedia windows. **Mulltimedia files (eg., AVI, MPG) have to be specifically associated from File Manager to override Media Player association.**

To Associate a New File Type in Windows 95:
1. Select/highlight desired file with **My Computer** or **Explorer.**
2. Right-click and select **Open With**.
3. Select VidFun.

To Change Association of an Existing File Type in Windows 95:
1. Select/highlight desired file type with **My Computer** or **Explorer**.
2**.** Select **View|Options** for a new dialog.
3. Click **File Types** tab and select desired file type from **Registered file type** list box.
4. Click **Edit** for a new dialog.
5. In the **Actions** list box, double-click **open** for a new dialog.
6. Click **Edit** and specify **VIDFUN.EXE** (not VFUN.EXE) as the **application used to perform action**; click **Browse** if you don't know where VIDFUN.EXE it is installed.

To UnInstall: Run VidFun's UNINSTAL.EXE utility.

Note: Required VBX, DLL and DRV files are copied to VidFun's \BACKUP directory before they are updated.   **Do not delete these backup files if you intend to uninstall**.

To manually uninstall, you overwrite a few files in your \windows\system directory with those in VidFun's \BACKUP directory; delete VidFun's directory and it's files and/or recycle it's folder (i.e., delete it's Program Group).   **VidFun's UNINSTAL.EXE does not keep track of new applications installed after setup.** If new applications update system files backed-up by VidFun, you must compare each file that exists in VidFun's \BACKUP directory with those in the \windows\system directory to determine which one to retain or overwrite.

Printing

To Print an Image:

1. Select **File|Print**. A print dialog box will show the current paper size, orientation, resolution (in dots per inch), and image print position on a **simulated document**.

2. Optionally, click the **Setup button** to change printer settings.   The simulated document will be repositioned and resized depending on the paper and orientation selected.

3. Optionally, resize and position the image by setting the **Size Scrollbar**   (10% to 100%) and **horizontal and vertical scrollbars**; a dark rectangle on the **simulated document** shows relative size and position when printed.

4. Click **Print It button**.

Enhanced Printing

Select gray or color **Enhance** option, if image is in memory.   When you click **Print It button**, choose a **dithering** method for superior gray shades or color rendition.   For best results, experiment with Contrast, Brightness and Gamma adjustments with different paper types and paper settings; also, try:

o   Stevenson dithering for color and set Printer to highest resolution **without** color matching or smoothing options;

o   Jarvis dithering for gray shades and set Printer to it's highest B/W print mode, **without** smoothing options.

Viewing Options

Note: These options can also be accessed via **right click** (mouse) on any open image.

Icon   **Menu Item**

n/a   **View|Image Info** and **View|Image Histogram** displays image statistics and histogram (gray scale and/or RGB levels) respectively.

n/a   **View|Page** decodes next page (or recycles) of multiple-page **DCX** or **TIF**.

n/a   **View|Zoom** and **zoom scrollbar** adjusts zoom factor from 10% to 800%.

View|FullScreen centers and fits to full screen; clicking image or press **<Esc>** to exit.
View|Reset Window resets window to defaults (centered, optimized, actual view).
View|Optimize Window minimizes background or shows most of magnified image.

View|Fit To Window and **View|Actual View** fits image to window or shows 1:1 aspect ratio.   The icon changes to reflect current viewing mode of child window with focus.

n/a   **View|Fit Image To** is similar Fit To Window but auto-adjusts to largest possible Window.

n/a   **View|Preferences|**

Photo CD (**PCD**) images are loaded at 512x768; to change resolution,   select one of five resolution settings before opening the ImagePac.

Scaleable MPEG option treats **MPG** files as **AVI** or **MOV** video files.   Default treat files as animation files.   **See README.txt regarding MPEG compatibility.**

Show Slide Controls hides/shows the **control buttons** on the lower right of screen for more structure in your multimedia presentations.   **Slides advances only with advance button**. Stop button aborts slideshow.   Reverse button goes back one slide.

Hide Toolbar and **Hide Status Bar** hides/shows the Toolbar and Status bar, respectively, for more desktop real estate**.**

Fast JPG Decode enables/disables fast offscreen decode with new functions.   When disabled, image is decoded to screen with original routines.   **Decoding to screen** *seems* **faster; if you clock the difference, decoding offscreen is up to 300% faster.**

AutoReduce PIC enables palette mapping in **PIC** (or KQP) files when viewing on 256-color displays.   Disable this feature, on 256-color displays, for the 16M-color image.

Editing Options

Edit|Undo restores a modified image.

Edit|AutoBackup enables or disables copying image in memory (or disk, if low on memory) prior to image processing to undo changes.

Edit|Copy (DIB only) copies image to Windows clipboard in   Device-Independent Bitmap format.

Edit|Copy (DIB + DDB) Copies the entire image to Windows clipboard in DIB and Device-Dependent Bitmap format (uses more memory, but is useful for apps that require DDBs).

Edit|Paste copies a DIB from Windows clipboard and pastes it into a new child window.

Edit|Empty Clipboard clears Windows clipboard and frees more memory.

Edit|Mask|Select marks a rectangular area in an image for subsequent cropping.
Edit|Mask|Clear clears selection mask for current child window.

Edit|Crop copies image portion bounded by selection mask and creates a new child window.
Edit|Trim crops the image bounded by selection mask on the current child window and clears the selection mask.

Image Filters, Resizing & Rotation

The following menu options present an **Image Process Dialog** for experimenting with different settings on a sample (or area of interest) before changing the whole image.

Image|Smooth filters render a smoother (albeit, more blurred) appearance.   Despeckle option is particularly useful for removing noise from *dirty* images.

Image|Sharpen filters render a sharper image using edge enhancement techniques.

Image|Enhance Edges highlight only the edges of the images.

Image|Special Filters|Posterize quantizes (reduces color depth) of the image.

Image|Special Filters|Mosaic replaces neighborhoods of pixels with one pixel representing the average of the neighborhood.

Image|Special Filters|Emboss applies edge enhancement techniques and a bias.   You can vary perceived depth between 1 (for a minumum effect) and 1000 (for an exagerrated effect).

Image|Special Filters|Add Noise splatters random dots on the entire image; quite useful for testing compression as well as a special effect.   **Add RGB Noise** option is similar and adds the flexibility of specifying noise levels for each RGB channel.

Image|Resize|Normal quickly resamples the image to any rectangular specification using Closest Neighbor interpolation method.   Select from preset image sizes, or custom Width and Height pixel parameters (or percentages).   Aspect ratios can be kept or distorted.   **Image|Resize|Enhanced** resamples in a similar fashion and smooths out the *jaggies* using BiCubic interpolation method.

Image|Flip mirrors the image (Horizontal Flip) or inverts the image (Vertical Flip).

Image|Rotate|[90,180,270,Custom] renders one degree accuracy from -359 to 359 degrees.   **Image|Rotate|High Precision** renders 1/100th degree accuracy from -89.99 to 89.99 degrees.

Image|Split RGB separates 24-bit (True color) images to Red, Green and Blue components for subsequent, independent manipulation.   RGB components are represented as gray image.   This option is disabled if image uses   **disk-based memory**.

Image|Combine RGB creates a 24-bit image from RGB components (eg., combining separate RGB scans for wide color range).   This option is disabled if image uses **disk-based memory**.

Color Processing & Conversion
See also **Image Filters**

The following menu options present an **Image Process Dialog** for experimenting with different settings on a sample (or area of interest) before changing the whole image.

Color|Tune All Colors adjusts the Hue, Saturation, Brightness and Contrast of the image.

Color|Gamma Correction adjusts **gamma** factor for all color channels or individual Red, Green and Blue channels.   Options are disabled if image uses **disk-based memory**.

Color|Adjust Brightness adjusts brightness level for individual Red, Green and Blue channels (RGB Model) or Cyan,   Magenta and Yellow channels (CMY Model).   Options are disabled if image occupies **disk-based memory**.

Color|Adjust Contrast adjusts contrast level for individual Red, Green and Blue channels (RGB Model) or Cyan,   Magenta and Yellow channels (CMY Model).   **Color|Adjust Contrast|Histogram** calculates the median to adjust image contrast (-1000 to 1000).   Options are disabled if image uses **disk-based memory**.

Color|Equalize Brightness linearly, spreads the color distribution to enhance brightness.
Color|Equalize Contrast evenly stretches and reassigns intensity values to improve contrast.

Color|Negative creates a negative image similar to photographic film.

Color|Gray Shades converts any image to true, 256 gray shades.   Since a gray appearance can be illusory, use this function to ensure a true gray scale (eg., for combining RGB channels).   Right-click on the image or select **Image|Info** to find out if image is true gray scale

Color|Promote Colors boosts color depth up to 16M colors.
Color|Convert to 32K colors converts color depth from 16M to 32K colors.

Color|Convert to 256 colors decreases color depth of 32K and 16M-color images to 256 colors.   Use **Best Method** for optimal results or select **[Optimized** or **Fixed] Palette Methods** to choose dithering method via **Image Process Dialog**.

Color|Convert to 16 colors decreases color depth of 256, 32K and 16M-color images to 16 colors.   Use **Best Method** for optimal results or select **[Optimized** or **Fixed] Palette Methods** to choose **dithering** method via **Image Process Dialog**.

Color|Convert to BW decreases any color image to Black & White.   Use **Best Method** for optimal results or select **User Methods** to choose a custom dithering method.   For a high-contrast image, use **Threshold Method**; adjust the Low Cutoff variable to taste or select a specific gray scale range by adjusting the High Cutoff variable as well.

Video Window

The Video Window plays **AVI** and **MOV** video (and **MPG** files with "Scaleable MPEG" option ON).   Click the play button to play the video file; when playing the pause button appears.   After playing, the rewind button appears.   To view specific frames, use the **video scrollbar** to jump to a frame, reverse one frame, or advance one frame.

The Video Window is resizeable and automatically corrects the aspect ratio.   It also sports many features availabe from it's Pop-up Menu.   This Pop-Up window can be accessed by clicking ▦ (Menu button) or right-clicking the Status bar.

Note: Some optimized drivers for video playback from CD, conflict with CD Audio; as a precaution, the CD Audio player is automatically closed (if open), when video is played.

Zoom Window doubles, triples or quadruples the Video Window size.

Optimize Window adjusts window to minimize background borders.

Video Status Bar hides/shows the Status bar**.**

Status Update adjusts how often the **video scrollbar** is updated.   Options range from "1:1 second" (once every second) to "6:1 second" (six times a second).   Since playing video uses a lot of the CPU's time, keep default of   "1:1 second" on a 386.

Configure Video activates the standard configuration screen.   Full Screen playback is supported.   For MOV files, loop and reverse loop are also supported.

Playback Options lets you change the playback speed and volume.   Note: AVI video does not seem to support volume control with current drivers).

Quiet Playback sets audio playback on or off.

Loop Playback replays the video file indefinitely (until paused or closed).   This feature is missing with AVI files and adds that functionality.   MOV files already have it their video configuration.

Play and **Pause** are menu equivalents of video control buttons (for those that prefer menus and accelerator keys).

Multimedia Windows

Multimedia Windows are subsets of the Video Window and are all alike.   These are used for WAV, MID, and **FLI** (FLC, FLX) playback.   Click the play button and it will play the animation or audio file; when playing the pause button appears.   After playing, the rewind button appears.   To move to a specific *frame* (in milliseconds for audio, actual frames for animation), use the scrollbar to jump to any *frame*, reverse one *frame*, or advance one *frame*.

You can play many devices at the same time!   An **FLI** animation, **WAV** and **MID** device can all be open at the same time, including the Video Window.   Playing a WAV file before playing **AVI** or **MOV** video will supercede it's audio track.   If audio is playing from AVI or MOV video, then WAV playback will not be heard.   MIDI music will always be heard no matter what is playing.   Depending on **MPG** compatibility setting (ie., "Scaleable MPEG" option), MPEG playback will appear via Video Window or regular Multimedia Window and behave as a video or animation file, respectively.

The **Loop Playback** button automatically replays the animation, audio or music file indefinitely (until you pause or close the Multimedia Window).

The CD Player window is slightly different.   It displays buttons typically found on a *real* CD player .... play, pause, stop, next track, previous track,   and eject.   CD Audio can be played with animation and mixed with other audio devices.   To avoid conflict with CD-optimized video drivers, the CD Audio player is automatically closed if a video file is played ...   and vice-versa.

Multimedia Slideshows

There are essentially three *tracks*: graphics, audio and video.   WAV or MIDI music plays independently until assigned a new audio file or a video file with audio takes over.   Graphics (eg., JPG) can overlap with various effects and remain as a background for video or animation.   In addition, you can mix CD Audio with graphics and an additional audio track (eg., narration).

Select **File|Slideshow** for the Slideshow Dialog.   It is a simple spreadsheet with pop-up menus assigned to each cell.   Each row represents a slide; rows can be moved around by dragging and dropping the fixed column of selected row to a new position.   Columns can be adjusted by resizing the fixed row.   To modify a cell with focus, double or right-click it or press **<spc>**.

Individual Slide Parameters

- o   **Filename** is graphics, video or audio file.   It's full pathname appears underneath the dialog title. When activated, you can add a slide via the standard Open File dialog.

- o   **Clr** [Yes or No] determines if background is cleared with a specific color; you can choose a standard or custom color via Color Dialog; actual color appears in a box beside command buttons, whenever row has focus.   This option does not apply to audio files.

- o   **Effect** assigns one of 30 display effects to graphics files.   For video and animation, it determines how many times to loop playback.

- o   **Wait** (seconds) adds a delay to the end of a slide.   **WAV** and **MID** (music) files keep playing without a delay; add a wait if next slide is another audio or video file with sound.   If next slide is video file with sound turned off, audio is not interrupted.

- o   **H Pos** and **V Pos** assigns the leftmost and topmost position of graphics or video file (in pixels). The default (Mid) centers the image and resizes to fit the screen, if necessary.

- o   **Vid%** assigns a zoom factor for video files.
- o   **Vol%** assigns a volume factor for video files.   Setting volume to zero turns it off.
- o   **Spd%** assigns a speed factor for video files.

Add Slides button activates an Open File dialog with multiselect capability.   Several files can be selected and appended to your script.   Rearrange the order by dragging and dropping the fixed column of selected row (slide) to a new position.   **Kill Slide button** deletes current row (slide).

CD Track button adds a specfic selection to your script.   It will play the whole selection until it is superceded by another selection or slideshow ends (or loops).   To avoid conflict with CD-optimized video drivers, CD Audio is automatically closed if a video slide follows.

New button creates a new script.   **Open** and **Save button** loads or saves an AVL file, respectively. **Test button** plays the currently loaded AVL file.

Supported File Formats

VIDFUN supports the following file formats:

AVI(load only)
AVL(load/save)
BMP(load/save)
CAL(load/save)
CMP(load/save)
DCX(load only)
DIB(load/save)
FLI(load only)
FLC(load only)
JIF(load/save)
JPG(load/save)
KQP(load/save)
MID(load only)
MOV(load only)
MPG(load only)
PIC(load/save)
PCX(load/save)
PCD(load only)
PCT(load/save)
PNG(load/save)
TGA(load/save)
TIF(load/save)
WAV(load only)
WPG(load/save)

Questions & Answers

Q. **How can I import unsupported graphics formats?**

Q. **Why do I get a warning to close multimedia windows?**

Q. **Can I design a slideshow for different video modes ?**

Q. **Can the slideshow wait for a keypress before showing next slide?**

Q. **Why is my image grainy?**

Q. **Why can't I run AVI or MOV or MPG movies?**

Q. **Why can't I run FLI animation?**

Q. **Why can't I play WAV or MID (MIDI) files?**

Q. **Why is video or animation playback jerky?**

Q. **Why is video playback silent?**

Questions & Answers (Video)

Q.   **Why can't I run AVI or MOV or MPG movies?**

A.   You must have the Video For Windows runtime drivers installed in Windows; download the drivers from BBSs or online serves (eg., CIS, AOL, GEnie ...); search using "VFW" as a keyword. Apple Quicktime MOVie playback requires the Quicktime for Windows (QTW) drivers (see README.TXT).

For MPG playback get Eckarts VMPEG v1.7 (or later) MCI drivers.   Some video cards include MCI drivers.   **See README.txt regarding compatibility issues.**

Q.   **Why can't I run FLI animation?**

A.   You must have the AAWIN.DLL and MCIAAP.DRV files installed in your Windows environment (see README.TXT); search for "AAWIN" or "AAPLAY".

Q.   **Why can't I play WAV or MID (MIDI) files?**

A.   You must have a sound card and appropriate drivers installed.   Audio files must match your hardware setup (i.e., 16-bit **WAV** and stereo files cannot play on 8-bit and mono sound cards, respectively, without appropriate emulators).   Also, only **MID** files with matching instruments mapped by your MIDI Mapper can be played.

Q.   **Why is video playback silent?**

A.   Playback of AVI or MOV files with sound requires a sound card and Windows driver capable of hardware-assisted **WAV** playback.   **Some file video files do not have audio.**

Q.   **Why is the video or animation playback jerky?**

A.   Make sure your video or animation files are placed on an uncompressed hard drive; decompression drivers interfere with smooth playback.   160x120x256 video files running at 15 fps should run smoothly on an 386/DX33; thereafter a faster computer and/or video accelerator is required.   MPG playback demands more ... a 486/DX100 or better.

Questions & Answers (Graphics)

Q.　　**How can I import unsupported graphics formats?**

A.　　If other Windows apps can decode it, *copy* it to the Windows clipboard then select **Edit|Paste** and it will be imported into VidFun.　　You can also use other apps to convert the unsupported graphics format to one of VidFun's　**supported format**.

Q.　　**Why do I get a warning to close multimedia windows?**

A.　　VidFun can really exercise you system.　　To avoid undue system stress, it appears when critical timing is required with **disk-based memory**.

Q.　　**Can I design a slideshow for different video modes ?**

A.　　Yes, provided the target display is larger than the display mode you designed it on.　　Write the script in 640x480 video mode for widest audience.　　Remember that (1) **FLI** (FLC, FLX) playback (or non-scaleable **MPG**) is always centered and is not resizeable.　　(2)　**WAV** and **MID** playback requires a sound card.　　(3)　Setting the position of an image to "mid" triggers automatic resizing which is video-mode dependent and can slow down the transition effect if the image is larger than the screen.　　(4) Graphics, video and animation placed in user locations will not be in the same spacial relationship as those set to "mid".

Q.　　**Can the slideshow wait for a keypress before showing next slide?**

A.　　Yes.　　Pressing **<spacebar>** terminates the wait/delay added to a particular slide.　　If you set the wait/delay to maximum (32,000 seconds), it will wait over **eight hours** before moving on to next slide or until you press <**spacebar>** (eg., after discussing the slide in a presentation).　　If you set **View|Preferences|Show Slide Control** on, then each slide advances only when you click advance button (you can also stop or go back one slide).

Q.　　**Why is my image grainy?**

A.　　What you see is **dithering** which is automatically applied when viewing with a video mode that is less than the image file's color depth (eg., 16M-color JPG file on a 256-color video mode).　　The image in memory is unaltered, only the display is affected.

Image Process Dialog

VidFun's common interface to most image processing functions.   It includes a fitted 256 x 256 sample image which can be zoomed to show an actual area of interest.   It facilitates liberal experimentation on a small sample before committing changes to entire image.

AVI (Audio Video Interleave)
AVI is the full-motion video format used with Microsoft's Video for Windows (VFW).   It supports 16-color to True-color (24-bit) video frames (images) at any resolution.   Video playback can vary from 1 to 30 frames per second and are compressed with a growing variety of algorithms.   Installed VFW runtime files are required (see README.TXT).

MOV (Quicktime for Windows MOVie)

MOV is the full-motion video format of Apple Computers originally designed for the Mac; it can be used in various PC/Windows applications via Apple's Quicktime for Windows (QTW) adaptation.   Although similar to the AVI video format, QTW driver behavior varies widely with video hardware.   Video files are compressed with a growing variety of algorithms; installed QTW runtime files are required (see README.TXT).

JPG/JIF (Joint Photographic Experts Group)

JPG files contain 256 grayshades or 24-bit color images and are compressed with a variety of methods; the common, non-proprietary JPEG File Interchange Format (JFIF) is supported.   With variable color and luminance compression settings, you can compress files with virtually "lossless" quality or create tiny files with no noticeable loss.   This version has a 2728 x 32767 pixel limit (if memory permits).   Portions of VidFun's JPEG compression code is owned and copyrighted by Pegasus Imaging Corp., Tampa FL (813) 875-7575.

MPG (Motion Pictures Experts Group)
MPEG video is supported via MCI (Media Control Interface).   This requires a specific driver from the card's manufacturer and is not widely available.   At this writing, less than a handful have included MCI support.   There are several MPEG standards; MPEG-1, MPEG-2, MPEG-4 and numerous proprietary variants (eg., motion JPEG).   On the upside, it plays full screen video smoothly with matching hardware. If Media Player can play it, so will VidFun.   **Important: Read MPEG Playback section in README.txt file regarding compatibility.**

PNG (Portable Network Graphics)

PNG ("ping")was born out of the **GIF/LZW controversy**.   It embodies advanced features for GIF24 (eg. **lossless TrueColor images**); like GIF, it supports 256-color images, data streams (eg., for WWW pages), transparency, interlacing, lossless compression, ...   Moreover, it is legally unencumbered, well-specified and well-compressed (**15% or more compression than GIF**).   Currently, VidFun will encode and decode B/W, 16-color, 256-color and 16M-color (24-bit) images; decompression support is quite fast. Compressing 24-bit images, however, is time consuming but well worth the wait since lossless compression ratio results are outstanding (usually between 2:1 and 3:1) .   Many graphics apps now support PNG;   to learn more or download the latest GIF2PNG utility visit the **PNG Home Page**.

PNG Home Page (WWW)

To learn more or get programming code, visit:

http://quest.jpl.nasa.gov/PNG/png.html.

To download latest **GIF2PNG** conversion utility visit:

http://quest.jpl.nasa.gov/PNG/pngcode.html

GIF/LZW Controvery (FTP site)

To read all about it, download and read giflzw1.txt from:

ftp://ftp.accessnv.com/fg/misc/giflzw1.txt

CAL (CALS)

CAL files are based on CCITT, G4 B/W 'fax-like' format.   It is commonly used by U.S. Government offices.

CMP (LEAD CoMPressed)

CMP files use a proprietary *JPEG-like* format with superior quality and compression. Try the Perfect Quality preset options for compressed images that are virtually indistinguishable from lossless formats. This version has a 1350 x 32767 pixel limit (if memory permits).

PCX (Zsoft)

PCX files originated with Zsoft's Paintbrush program, supporting a maximum of 16-colors; this quickly became the default industry standard.   The current format supports B&W to 24-bit color.   Files are either uncompressed or use run-length encoding.

DCX (Intel Multi-Page Fax)

These files are essentially multiple-page PCX files originated with Intel's product line of fax hardware and software.   VidFun provides read support for these files; write support will be included in future update. These files use run-length encoding.

TGA (TARGA/Truevision)

Although, originally created for Truevision's products, this format quickly became an industry standard due to its 32768-color format.   TGA files support 256-colors, 32768-colors (16-bit), 24-bit and 32-bit color files.   Files are uncompressed or use run-length encoding.   32-bit files are essentially 24-bit files with additional overlay information; loading and saving them as 24-bit files does not lose any image information.

TIF (TIFF/Tagged Image File Format)

TIFF files were originated by Aldus to handle just about any possibility.   TIFF files supports B&W to 24-bit color files; VidFun supports uncompressed, Huffman/CCITT, Pack Bits, Group3, and Group4 TIFF files ... as well as multiple-page TIFF fax documents.   VidFun provides read support for multi-page fax files; multi-page write support will be included in future update.

BMP/DIB (Windows Device Independent Bitmap)

The format originated with OS/2's Presentation Manager.   The Windows BMP and DIB formats are actually enhanced OS/2 versions; they may be uncompressed or use run-length encoding.

PIC (Pegasus Imaging Corp.) & KQP (Konica Quality Photo)

PIC and KQP files use a proprietary *JPEG-like* format with superior quality, compression and associated palettes (for fantastic quality on 256-color displays). **It is widely used by Excalibur BBS software and related applications.**   With variable color and luminance compression settings, you can compress files with virtually "lossless" quality or create tiny files with no noticeable loss.   This version has a 2728 x 32767 pixel limit (if memory permits).   Portions of VidFun's PIC compression code is owned and copyrighted by Pegasus Imaging Corp., Tampa FL (813) 875-7575.   **Note: Use KQP extension to avoid confusion with other formats using PIC extension.**

PCT (PICT/Apple Macintosh)

This is the most commonly supported format for Macs.   It may contain vector data (graphic commands) or raster data (bitmap); supports up to 24-bit color images.   Version 1 and 2 files are supported.   **Note: PCT files with bitmaps can be viewed; also, some PCT files have a copyright notice in the middle of the file which causes an error.**

PCD (Kodak Photo CD)

An exciting true-color (24-bit) image format from Kodak, composed of Image Pacs on CDROM; these are actually several image resolutions of the same picture (i.e., 64x96, 128x192,256x384, 512x768, 1024x1536 and 2048x3072.   The 2048x3072 resolution is displayed with 256 colors on 256-color displays; in other modes, with enough swap disk space, the full 18 Mb image is loaded !!!

dithering
A technique used to *show* more colors by displaying a pattern of pixels instead of a single color. Ordered dithers have a fixed pattern of pixels; error diffusion uses varied patterns to enhance *perceived* color depth.

disk-based memory

Images that exceed 16Mb (Windows' memory object limit) or require more contiguous memory than available, reside on disk and are processed several lines at a time.   Although slow, it lets you see *impossible* images and apply most image processing methods.   If more free memory is available, try **Window|Change Memory** to convert into Windows memory.   **Window|Compact Memory** *defrags* global memory to free more contiguous memory.

WAV (Windows Waveform)
WAV is a digitized sound format for Windows; an audio card and corresponding drivers are required. **WAV files must match hardware; you cannot play 16-bit audio on an 8-bit sound card.** The software driver for PC speakers is not supported.

WPG (WordPerfect Graphic)

WPG is both a raster (bitmap) and vector (graphics command) format.   Version 5.0, and 5.1 **bitmap formats are supported**.   Images can be read and saved in B/W, 16-colors and 256-colors.

FLI/FLC/FLX (Autodesk)

FLI files were one of the first animation formats; they have no sound and are limited to 320x200x256 colors at about 10 fps; FLC files have higher resolutions.   Installed MCIAAP.DRV and AAWIN.DLL files (see README.TXT) are required.   **FLI/FLC files cannot be scaled.**

MID (MIDI - Musical Instrument Digital Interface)

MID files contain data to play selected instruments and notes in a predetermined fashion; a sound card and corresponding MIDI drivers are required. **Note: Only MIDI files with instruments that match those mapped by your MIDI Mapper are played.**

AVL (VidFun's Audio/Video playList)

AVL files are plain text files that act as a script for Multimedia Slideshow presentations.   It's syntax is similar to Windows *.INI (initialization) profile files.   You can use text editors for *global search and replace* functions on filenames, but should allways use the Slideshow Editor to edit individual slide parameters.

Gamma Correction (Tonal Quality)

The brightness level of midtones (technically, the slope where density is linearly proportional to logarithmic exposure).   Adjust this to see more midtones (eg., flesh tones) with minimal change to contrast and brightness settings.

Registering VidFun

You can use the automated registration in VidFun when prompted or Select "File-Print Topic" from the menu bar to print this form.   (Also, please read VidFun's README.TXT file.)

NAME:

COMPANY:

STREET:

STREET:

CITY:

STATE (or PROV.)   ZIP:

COUNTRY:

EMAIL:

VidFun Registration Fee

$35.00   (USD)
 or
$45.00   (CND;

GST incl.)

Outside USA or Canada
add shipping/handling $10.00 (USD)

(Cheque, Money Order or Traveller's Cheque
drawn on   US   or Canadian bank)   ....TOTAL   ============

Please make payable to: Applied Insights

Mail to: Applied Insights
           100 Oriole Parkway #310
           Toronto, Ontario M5P 2G8 (Canada)

           Attn: Lawrence Gozum

If you don't know the postage from the USA, simply stick two domestic stamps and it will arrive.

Once received, you will be provided with a personal Serial Number that corresponds to your name, as specified above; **your S/N is valid for ALL VidFun 1.x versions**.   In appreciation of your registration, you will also receive the latest version of VidFun.   Please allow about 4-6 weeks to process your registration.   Thank you.