

VESAVIEW.EXE v 6.3

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Keywords: VESA BMP EPS GIF IFF/LBM IMG JPG MAC PCX TGA TIF HPGL PRINT CATALOG VIEWER DESKJET LASERJET PAINTJET BJC600

Brief Desc: View and print BMP, EPS, GIF, IFF/LBM, IMG/GEM, JPG, MAC, PCX, TGA & TIF images & HPGL plotter files. Arrays of up to 144 images/screen can be generated and saved for easy cataloging. HPGL plot files can be saved as B&W files. Mouse support. Requires a VESA driver for your graphics card and enough extended memory to hold entire image. Supports VESA modes thru 1280x1024x256. Quick panning of images larger than your screen resolution. Color/brightness/contrast adjustments, scaling & cropping of color images. Fade control for slide shows. 24 bit color reduction for BMP, JPG, TGA & PCX. Excellent Black & White printing to HP DeskJet, LaserJet or Epson Stylus 800. Superb Color printing to HP PaintJet, PaintJet XL, PaintJet XL300, DeskJet 500C/550C and Canon BJC600. Images can be selected graphically from previously created arrays.

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CompuServe ID: 71170,2340

The VESAVIEW product is Shareware. If you find it useful, please register your copy and tell your friends about it. This product may not be sold or packaged, either individually, or as part of any other product without the express written consent of the author. This product may not be changed or altered and then distributed without the express written consent of the author. The VESAVIEW.DOC & VESAVIEW.LGO files must accompany VESAVIEW.EXE whenever the non-registered version is distributed.

The JPEG decoding and encoding portion of this program "is based in part on the work of the Independent JPEG Group". "The Graphics Interchange Format (c) is the Copyright property of CompuServe Incorporated. GIF (sm) is a Service Mark property of CompuServe Incorporated."

REGISTRATION:

INDIVIDUAL USER: \$35.00 each

QUANTITY DISCOUNTS &/or SITE LICENSES FEES:
(Includes one diskette with Program, Documentation and sample images)

1 - 9	copies @ \$35.00 each
10 - 24	copies @ \$31.00 each
25 - 49	copies @ \$27.00 each
50 - 99	copies @ \$23.00 each
100 - 249	copies @ \$19.00 each
250 - 500	copies @ \$15.00 each
500 +	copies or for use on CD-ROM - Call for pricing

Extra program diskettes are available at \$6.00 each when purchasing multiple copies or site licenses.

When ordering in quantity, you must supply the names and addresses of all users and a main contact person so that I can provide each of them a unique User Name and Access Code and can honor their technical support requests on an individual basis. If you desire a Site License, the above pricing schedule still applies, but all copies will be registered to a single company (or corporation) name with a single access code, and all technical support would be through a single contact. Please supply the company name and contact person for site licenses.

For foreign orders, please send a check drawn on a U.S. Bank, International or U.S. Postal Money Order, Travelers Checks or cash, since banks charge a sizable fee for foreign check processing.

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Please send your registration fee to:
William M. White
P. O. Box 2273
Glen Allen, VA. 23058-2273

By Registering your copy(s), you will receive an unhindered copy of the latest version of VESAVIEW on 3 1/2" HD floppy (unless you note otherwise), technical support by mail or BBS, and help support the continued development of the product. You will also receive a personal **User Access Code** so that you can easily convert any new shareware versions from the following BBSs into your new registered copy, thus eliminating additional fees for update mailings. Current shareware versions of the product will always be available on Compuserve in the GRAPHSUPPORT forum (GO PICS) and on the Blue Ridge Express Bulletin Board (804)-790-1675. Replacement or upgrade disks will be available for \$10.00 each to cover handling. **NOTE:** Your registered copy of the program produces a file named VESAVIEW.REG which should never be distributed since it will be encoded with your name and access code..

Non-hindered versions of VESAVIEW are available to incorporate on CD-ROMs. If the CD-ROM version is copied and not run from the original CD-ROM, it will revert back to a non-registered version. Please contact the author at the above address for fees and more information.

DISCLAIMER:

VESAVIEW is offered to you on an as-is-basis without any guarantee as to the correct functioning or fitness for a specific purpose. The author believes this program to work as described but you use the program entirely at your own risk. The author will not be responsible for any hardware or software damage, loss of data, or incidental or consequential damage that may result from its use, whether or not such use is in accordance with the instructions.

PROGRAM FILE LIST:

The following files make up the shareware version of VESAVIEW which may be distributed to other BBSs or friends:

VESAVIEW.EXE	- Main program
VESAVIEW.LGO	- Logo Screen for SVGA
VESAVIEW.LGX	- Logo Screen for VGA
VESAVIEW.ICO	- Icon for use when running from Windows 3.1
VESAVIEW.DOC	- ASCII version of document file
VESAVIEW.WP	- WordPerfect v 5.1/5.2 version of document file
FILE_ID.DIZ	- Brief program description used by some bulletin boards

NOTE: After running VESAVIEW for the first time, a personal access file will be created named VESAVIEW.REG. Please DO NOT distribute this file. If you select the 'SAVE CONFIGURATION' item from the Options Menu, a file will be created named VESAVIEW.CFG.

Occasionally, VESAVIEW needs to write out temporary files (includes the configuration file). By default, these files are written to the same directory that the VESAVIEW program resides in. If this drive and directory is not available for writing (as on CD-ROMs), VESAVIEW will use the Disk and Drive pointed to by the DOS environmental variable **TEMP** (ex: SET TEMP=C:\TMPFIL) and if that environmental variable is missing it will use **C:** .

REQUIREMENTS:

- o IBM compatible 286 or better
- o DOS version 3.0 or higher

- o Extended memory (and driver such as HIMEM). For 256 (& higher) color files, you'll need 1 byte/pixel in your image. For 2 color files, you'll need 1 byte per 8 pixels in your image. This program conforms to XMS 2.0 specification. 8MB of extended memory is recommended especially if you will be using graphic array menus and working with JPEG files.
- o Will use a math coprocessor if available
- o A graphics card that supports the VESA BIOS EXTENSIONS for the 'Super VGA modes' either through hardware or a software driver. NOTE: If no VESA driver is found, you will be limited to 320x200x256 or 640x480x2 non-VESA modes which won't allow arrays to be generated.

FEATURES:

- o Will read in any size up to 1280 x 1024:

BMP (Windows) -	16, 256 color & 24 bit (16 million colors)
EPS (Encapsulated Postscript)	B & W (the TIFF previews embedded in the Postscript file)
GIF (Compuserve 87a/89a) -	16 & 256 color (includes GIFs with MAC Headers)
IFF/LBM (Amiga/Deluxe Paint)-	2, 16 & 256 color
IMG (GEM/Digital Research) -	B & W
MAC (MacPaint) -	2 color
JPG (JPEG/JFIF) -	Grayscale & 24 bit (16 million colors)
PCX (Zsoft) -	2, 16, 256 color & 24 bit (16 million colors)
TGA (Targa) -	8,16, 24 & 32 bit (non-compressed RGB & Run length encoded
- o RGB)

TIF -	B & W, 16c, 256c & 24 bit (non-compressed, run length encoded
and Huffman)	
HPG -	(Hewlett Packard) HPGL plot files (.HPG or .PLT)
TEXT -	ASCII files with up to 2000 lines with extensions of
- o .1ST, .ANS, .ASC, .ASM, .BAT, .BAK, .C, CONFIG.SYS, .DIZ, .DOC, .INI, .H, .LIS, .ME, .TXT and .VNX.
- o Files can be selected either from a text directory listing or graphically from a previously created array of images (mouse required for graphic selection). Multiple selections are displayed in the order selected.
- o If the file is larger than the screen mode you selected, you can quickly pan around the image. Size of image is limited only by the amount of extended memory you have. NOTE: The entire image is read into Extended memory to allow for quick panning of large images. Black & White images are stored in memory with 1 byte per 8 pixels. 16 (4 bit) and 256 color (8 bit) images are stored in memory with 1 byte per pixel. 24 & 32 bit images are stored in memory as 256 color images so only 1 byte per pixel is required.
- o Black & White printing (color images will be dithered) and Color printing are supported. Prints can be sized, rotated and positioned on paper. Printers supported are HP LaserJet Series, DeskJets, DeskJet 500/500C/550C, PaintJet, PaintJet XL, PaintJet XL300, Canon BJC600 and Epson Stylus 800.
- o Red/Blue/Green/Contrast/Brightness values may be changed while viewing a color image. Image can be converted to GrayTone or colors reversed.
- o Filters are available to enhance image and include blurring (smoothing), sharpening, edge detection and mosaic.
- o Color screen images can be saved as a 256 color BMP, GIF, JPG or PCX file. These images may be cropped & scaled before saving.
- o Black & White images can be saved as an IMG or 2 color PCX file. This is useful to save a HPGL file that is displayed on screen out to a quicker retrieving raster file. If these images are displayed in a color VESA mode they can also be saved &/or cropped as 256 color BMP, GIF, JPG or PCX files.
- o Arrays of up to 144 images can be displayed on a single screen at once. This screen can then be saved as a single BMP, GIF, JPG or PCX file for cataloging or printing or use as a graphic menu for

VESAVIEW.

- o Supports VESA modes (assuming your graphics card can handle):
 - 100 - 640 x 400 x 256
 - 101 - 640 x 480 x 256
 - 103 - 800 x 600 x 256
 - 105 - 1024 x 768 x 256
 - 107 - 1280 x 1024 x 256
- o Will support a 800 x 600 x 2 color B&W mode if your card has one. (See /SVn option below)
- o Supports command line operation in addition to the menu driven program
- o Supports the use of a MicroSoft compatible 2-button mouse.

NOTE: The annoying beeps and NON-Registered notices will be removed from registered copies. Also, the NON-Registered version does not support the new printing options (sizing, rotating and positioning), nor the Compressing of printer data.

INSTALLING PROGRAM:

Create a directory on your HardDrive to hold the VESAVIEW program files. Copy the zipped file you downloaded from a BBS or received on diskette into this directory. The ZIP file is usually named VESAVWnn.ZIP where nn represents the version number. Unzip it using PKUNZIP version 2.04g or higher (earlier versions will not work). Set your default directory to the VESAVIEW directory you've created and type in VESAVIEW to run the program. The first time you run it, you'll be asked to enter your registration information including User Name and Access Code. This personal access information will be stored in a new file named VESAVIEW.REG in your VESAVIEW directory. Please DO NOT distribute this file. All files in the original zipped file may be distributed to your friends or other BBS as the Shareware version. If you make a mistake keying in your User Name or Access Code, you will need to delete the VESAVIEW.REG file so you will be asked for them again.

RUNNING PROGRAM and OPTIONS MENU:

As of VESAVIEW version 6.0, most of the following command line qualifiers are available from the Options Menu within the program. It is suggested that you use the Options Menu to configure the program and then save it with the 'Save Configuration' option rather than use command line qualifiers. In future versions, some command line qualifiers may be discontinued. If a configuration file is found when VESAVIEW starts up, it will be used by the program. NOTE that if you also use command line qualifiers, they will override settings in the configuration file.

Make sure you have enough extended memory available and that a driver (such as HIMEM) is loaded. Make sure your graphics card has VESA BIOS EXTENSIONS (VBE) either built-in or that you have installed a VESA bios extensions (VBE) software driver. Then just keyin:

VESAVIEW [filename or @filelist] [optional qualifiers]

CAUTION: DOS has a limitation of 127 characters on the command line. If you exceed this when adding qualifiers, some may be truncated.

NOTE: Underlined (or *) qualifiers are only available in the REGISTERED VERSION. A 'space' is needed between each qualifier on the command line.

filename = The optional filename on command line is the name of a single image file (without paths) in your current directory. If this option is used, the image will display on screen without any of the usual screen messages (or error messages). If you also use the **/R** qualifier, the image will be displayed using either the currently saved delay factor or the delay value you include with the **/Dn** qualifier (see slide delay below) and then return to DOS or your calling batch file. If you don't use the **/R** qualifier, the image will be displayed until

the <ESC> key is pressed. Wildcards (*,?) are supported in the filename. If a wild card is used, the files will be sorted alphabetically.

@filelist = This option is the name of a file which contains the filenames (without paths) of images to display as a slide show. The file is an ascii file with the following format and can be created with any ASCII text editor. Example:

```
IMAGE01.GIF
IMAGE02.PCX
IMAGE03.BMP
```

The filenames should begin in column one and should NOT contain any paths, since you must be defaulted to the directory where these files reside before starting VESAVIEW . The images will display in a continuous loop, delaying between slides according to the Slide Delay (**IDn**) and Fade value (**IFn**) qualifiers on your command line or the delay and fade values previously saved in your configuration file.

[optional qualifiers]

The following qualifiers are available only when using a filename or @filelist from command line. NOTE than when running VesaView from the command line, some of the warning and error messages are suppressed, so make sure your command line has the correct syntax):

IR (Return) - Used to return to DOS or your calling batch file after displaying a single image which was supplied on your command line.

IAP (AutoPrint) - Used to automatically print your file(s) which were supplied on your command line as a single image name or the @filelist (see above). Returns to DOS or your calling batch file when complete. Print width, rotation, style etc. will be gotten from your last saved VESAVIEW.CFG file or can be supplied as additional qualifiers on your command line.

(The following 3 qualifiers can be used to auto-generate arrays from the command line. NOTE: All 3 must be used together. The preceding **IAP** qualifier can not be used with them.)

IAFx (Autoarray Filename) - x is the filename (1 - 6 characters, no wildcards) that will be used when saving your array image(s). The program will append a 2 digit number to this filename in case more than one page is required. NOTE: A disk and path can be prefixed to the 1-6 character filename to force the file to be written into a directory different from the images (needed when using CDROM), just as in the menu driven program. (Ex: **IAFC:\IMAGES\TEST**). No checking is done for existing duplicate filenames and they will be overwritten.

IAEx (Autoarray Extension) - x is the extension (3 characters, no wildcards) to use on the filename. This can be GIF, BMP, PCX or JPG. This tells the program which type of file to create.

IADn (Autoarray Dimension) - n is a value from 2 to 12 which indicates the dimensions of the array image. (Ex. **IAD5** would indicate a 5 x 5 matrix).

AUTOARRAY Example (assumes you have 40 GIF images in your current directory) :

VESAVIEW IAW IAM103 IAFTEST IAEGIF IAD5 *.GIF would generate 2 files. The first would be named TEST01.GIF and contain 25 images, the second would be named TEST02.GIF and contain 15 images. Both would be 5 x 5 matrixes with a white background at 800 x 600 x 256 resolution (mode 103).

Printer Setup -->

Printer Adjustments -->

Width * : (Input value) - The **IPWn** (print width) is used to specify a print width. n is a decimal value from 0.0 to 10.5. If you enter a number greater than 8.0, the print will automatically be rotated 90 degrees. The print width represents the width that you want the horizontal image dimension as seen on

your screen to be printed, no matter what rotation angle you use.

Rotation * : (Select angle from list) - The **IPAn** (print angle) is used to rotate your print on the printed page. Values for n can be 0, 90, 180 or 270.

Top Margin * : (Input value) - The **PTMn** (printer top margin) sets the number of inches from the current position of printhead that the image will start printing. n is a decimal value ranging from the minimum value of your printer (see /FTMn below) to 10.0. If set to **99**, your image will be centered from top to bottom.

Left Margin * : (Input value) - The **PLMn** (printer left margin) sets the number of inches from the left side of page that the image will start printing. n is a decimal value from 0.25 to 7.5. If set to **99**, your image will be centered from left to right. The maximum printable width on all printers is 8.0" (1/4" left & right margins).

Resolution: (Select from list) - The **PRn** (printer resolution) is used to specify the resolution in dots per inch (dpi) of your active printer. For the DeskJet/LaserJet series, n can be 75, 150 or 300 (600 for LJ4). For the PaintJet series (except XL300), it can be 90 or 180. Defaults to highest resolution for selected printer except the LaserJet IV which defaults to 300dpi.

Gamma Correction: (Input value) - The **IPGn** (print gamma correction) option will allow you to adjust the gamma of your Black & White or Color print. It only modifies your printout, not your screen image. Simply put, gamma correction will adjust the intensities of red, green & blue values logarithmically since the human eye's perception of color intensity is non-linear. The gamma value (n) is a decimal value between 0.5 and 2.0. If set to 0, no gamma correction will be performed. If this qualifier is not used and a configuration file has not yet been saved out from the options menu, the gamma defaults to a value best suited for the printer type selected from the command line. Using higher values will result in the darker colors in your image being printed lighter and the lighter ones remaining the same. This gives a much more natural looking printout. Suggested gamma values are:

1.25 for DeskJet, PaintJet, PaintJet XL, LaserJet
1.50 for DeskJet 500C & 550C, PaintJet XL300 and LaserJet IV at 600 dpi.

Print Compression * : (Yes or No) - The **IPC** (print compress) option will force the transfer of data from your computer to the printer to be in a compressed (encoded) format. This will speed up the transfer of data (especially for serial or networked printers). Time savings will vary depending on the type and size of plot. In some cases, you may find no time savings overall since the printer has to decompress the data, but your CPU should be freed up from processing sooner. (default is no compress). The PaintJet and LaserJet II don't support this type of data compression. If your printouts look garbled, don't use this qualifier.

Print Style --> (Select from list) - The **IPSx** (print style) option allows you to select the style of printing for Black & White or Color prints. It can be one of the following: /PSBQ (B&W Square Halftone), /PSBD (B&W Diamond Halftone), /PSBV (B&W Vertical), /PSBH (B&W Horizontal), /PSBB (B&W Bayer), /PSBS (B&W Scatter), /PSCQ (Color Square Halftone), /PSCD (Color Diamond Halftone), /PSCV (Color Vertical), /PSCH (Color Horizontal), /PSCB (Color Bayer) or /PSCS (Color Scatter). The Scatter styles will process slower than the other dithering types since it uses an error difusing algorithm, however, the Scatter styles will in most cases have much better detailing and quality. Square Halftoning is the default.

Print Model --> (Select model from list) - The **PTx** (printer type) is used to select your printer. It can be one of the following:

/PTDJ (HP DeskJet)	/PTLJ (HP LaserJet II or III)
/PTLJ4 (HP LaserJet IV)	/PTPJ (HP PaintJet)
/PTPJXL (HP PaintJet XL)	/PTPJXL3 (HP PaintJet XL300)
/PTDJC (HP DeskJet 500C)	/PTDJ5C (HP DeskJet 550C)
/PTBJC (Canon BJC600)	/PTES800 (Epson Stylus 800)

The new HP 1200C will work if you select the XL300 printer. Note that the Canon BJC600 emulates the Epson LQ-2550.

Printer Port --> (LPT1:, LPT2: or File) - The **/P1** or **/P2** (port) designates which printer port to use for printing (LPT1 or LPT2).

The **/PF** option forces printer output to a file instead of a port. The file will be created in your current directory with the same filename as your image file but with an extension of **.VVP** . This option works with multiple plots as well. No checking for duplicate filenames is done. To plot the file(s), from DOS keyin:

COPY/B filename.VVP LPT1:

where filename could be a wildcard and LPT1: could be LPT2:. The **/B** instructs DOS to use a binary copy mode. NOTE that if your files reside on a non-writeable drive (such as a CD-ROM), the **/PF** option will not be able to write the print files to the current directory. Try copying files to another drive.

Printer Pins -->The **/PPn** (printer pins) command line qualifier (not available on options menu) will allow you to adjust the number of pins used when printing to a Canon BJC600 printer or Epson Stylus. Values allowed for n range from 16 to 48 (48 is the default). If you experience banding when printing to the BJC600 or Stylus, try reducing the number of pins used in the print head on each pass(ex. **/PP32**, **/PP24** or **/PP16**). Sometimes this will lessen the effect of banding caused by diminished ink flow to one end of the printhead.

Array Setup -->

Array Background: (Black or White) - The **/AB** forces the array mode to use a black background and white text for the filenames in an array image.

/AW forces the array mode to use a white background and black text (saves black ink when printing).

Show Image Sizes: (Yes or No) - The **/IAS** (array sizes) enables the display of image sizes above each image of an array. The size will be displayed after the filename of each image only if it will fit. Typically at a resolution of 1024x768, the sizes will fit on 6x6 arrays and below. At 800x600, the sizes will fit on 5x5 arrays and below. At 640x480, the sizes will fit on 4x4 arrays. Each image is tested individually, so on a given array screen, some sizes may appear and some may not. You will see the sizes displayed after all images on a page have been processed.

Default Array Mode: (Select VESA mode from list) - The **/AMmode** (where mode is 100, 101, 103, 105 or 107) will let you default to a specific mode when creating arrays. The program will default to mode 101 if this switch is not used. Only use a mode number that your card can support!

Slide Setup -->

Delay Time: (Input time in seconds) - The **/Dn** (delay) is for setting the delay in seconds to use between slides. The n is an integer number from 1 to 999 and defaults to 5 seconds. This time is approximate and will vary depending on the size of the image being read in. Pressing the <ESC> key or Right mouse button will abort the slide show. Pressing any other key or the Left mouse button will skip to the next slide. NOTE: If you want your slides to remain on the screen until you press a key, use a high number (999) for the delay time.

Fade Speed: (Input number) - The **/Fn** (fade) option will fade in and out your images on screen when displaying them as a slide show. The n can range from 0 to 10. 0 is no fade, 1 is the fastest fade and 10 is the slowest fade.

Filename Mask --> (Select file extension(s) from list to include) - The **/Mx** (mask for filenames) will allow you to include only certain file types in your directory listing. It can be one of the following: **/MALL** (all filenames), **/MDIS** (all displayable graphics files), **/MBMP**, **/MGIF**, **/MIFF**, **/MIMG**, **/MJPEG**, **/MLBM**, **/MMAC**, **/MPCX**, **/MTGA** **/MTIF**. **Note:** Array index files (.VNX) are always accessible by the program, even if they are not being displayed in your directory listing. **Caution:** When you use this qualifier to eliminate the display of certain file types from your screen, and you display a previously created array image that includes file types that are not currently displaying, those files will not be found even though they are actually in the directory. (they will be flagged on screen with a red crosshatch)

HPGL Setup -->

HPGL line weights: (None, Half or Full) - The **/WF** (full weights) will display the weights as originally drawn.

The **/WH** (weight half) is similar to **/WN** except that the weights of lines will be halved (divided by 2).

The **/WN** (weight none) will not display weights of lines in an HPGL plot file if the **SP** (select pen) keyword was used when creating the plots. This will greatly speed up the screen drawing if you don't need to look at or print the weights. Some CAD programs which generate the plot files create weighted lines by simply drawing the lines multiple times in the plot file (each slightly offset) and not by using the **SP** (set pen) command. The **/WN** & **/WH** switches will have no effect on this type of plot files.

Default HPGL size: (A, B or C size) - The **/UPSA, /UPSB & /UPSC** (unknown plot size) qualifiers will allow the user to specify a default plot size (A, B, or C) if the program that created the .PLT file did not include the HPGL cmd **PS** to signify what the Plot Size was. If one of these qualifiers is not used, and the .PLT file doesn't have a **PS** cmd, VESAVIEW will default to a 'C' size plot.

Misc Setup -->

Use XMEM for array: (Yes or No) - The **/NLAM** (no load array into memory) will disable the automatic loading of the first graphic array menu into XMEM even if there is enough memory to do so. The program by default will load the first array image that will be used as a graphic menu into XMEM, if there is enough memory to hold this array and one more image (both are assumed to be the maximum size of 1280x1024x256). If you are low on XMEM and you wish to be able to pull up larger files (B&W for example) from the array menu, you will probably need to use this qualifier.

Fixed Top Margin: (Input value) - The **/FTMn** (fixed top margin) option will allow you to override the program's default values for that part on the top of a page that your printer can't print on. The defaults for n are:

0.1"	-	DeskJet, DeskJet 500, DeskJet 500C
0.05"	-	DeskJet 550C
0.0"	-	LaserJet Series, PaintJet XL, PaintJet XL300
0.0"	-	PaintJet (tractor feed)
0.2"	-	Canon BJC600, Epson Stylus 800

If your printed margins don't match what you set in the Printer Setup Menu, then use this qualifier to adjust them.

Override VNX drive: (Yes or No)

Drive to use: (Input drive letter or 0 for current drive) - The **/IDx** (index drive override) option will allow you to override the drive that is embedded in the graphic menu index files (.VNX). This is useful if you create graphic menus and their indexes on one drive and later move them to another drive. x is the drive letter (A-Z) you want to use instead of the one in the index file, or make x = 0 to use the current drive you're on. The other alternative to this qualifier is to actually edit the first line in the index file (.VNX) to reflect the new drive letter.

Other B&W SVGA: (Input mode number) - The **/SVn** (SVGA) will allow you to use a 800 x 600 x 2 color mode to display 2-color images or HPGL files in a high resolution mode if your graphics card supports it. The n is the decimal mode number that your card uses for this mode. Most Paradise cards use 41 decimal for this mode, and the Tseng cards (including Orchid) use 89 decimal. This special mode and the standard 640 x 480 x 2 mode will allow faster panning on screen than the same resolutions in VESA modes will for large B & W images.

Lockout VESA mode: (Select mode(s) from list) - The **/LOmode** (lockout mode) (where mode is 100, 101, 103, 105 or 107) will lock out a mode. This is useful if your VESA driver is designed for a graphics card which has been fully populated with memory chips but your card doesn't have all of this memory installed. You may use more than one of these switches on your command line.

B & W Foreground : (Black, White or None) - The **/FN**, **/FB** or **/FW** specify the foreground color (N=none, B=Black and W=White) of your Black & White images. By specified foreground color, the program will be able to save more of your image's original context when scaling down. This qualifier works best if your images are line drawings and not pictures. For example, if your image appears on the screen as black lines on a white background, use the **/FB** qualifier. If your images don't have a main foreground color such as the case with pictures, use **/FN**. Note that using either the **/FB** or **/FW** qualifiers will increase the processing time for B&W scaling. If you don't need the increased quality, use **/FN**.

24 bit Palette : (Standard, Optimize or Optimize and Dither) - The **/CO** (color-optimized) will force 16, 24 & 32 bit images to be processed using an optimized 256 color palette. The process reads in all the colors in your image, creates a histogram of the most used colors, and then creates an optimized palette of the results. The processing time is greater than if the **/CS** option is used, but the results are spectacular. The color reduction method used is much faster than that of other programs that I have tested. After the image has been displayed on the screen, you might want to save it as a 256 BMP, GIF, JPG or PCX file, so that the next time you want to display it, you can use the quicker 256 color version.

The **/COD** (color-optimized & dithered) qualifier is similar to **/CO** above, except that besides using an optimized palette, the image will also be dithered to smooth out the transition between colors.

The **/CS** (color-standard) will force 16, 24 & 32 bit images to be displayed using a standard palette. The colors will be adequate for previewing, but for more exact colors, use the **/CO**.

Beep after Display: (Yes or No) - The **/NB** (no beep) option will disable the beeps after images are displayed on screen. The default is to beep.

SYSTEM DEFAULTS: **/AB /AM101 /COD /D5 /F0 /FB /MALL /P1 /PTDJ /PW8.0 /PA0 /PTM0.25 /PLM0.25 /UPSC /WF**

Ex: VESAVIEW **/P2 /AW /D10** - Will use printer port LPT2:, display arrays with a white background, and delay 10 seconds between slides.

Ex: VESAVIEW **/LO105 /LO107 /AM103** - Will lockout modes 105 and 107 from being valid VESA modes and will use mode 103 when displaying arrays.

The program will test to see if your graphics card supports the VESA Bios Extensions by either hardware or software driver, whether you have a HIMEM driver loaded and how much extended memory you have available.

Use the <ESC> or <X> key to exit program or click on EXIT option on bottom of screen with left mouse button.

CHANGING DIRECTORY:

While the list of files is on your screen, you can change your current directory by placing the cursor on the lite blue entries (which are directory names) and pressing <ENTER>. The . (single dot) will take you back to the root directory, and the .. (double dots) will take you back one directory level. Selecting a yellow Disk Drive entry will change your disk drive.

You can also press the <C> key (or click on **C DIR** with mouse) to keyin a new path that can include a new disk drive. (Ex: B: or B:\ or C:\GIF or C:\IMAGES\GIF or \GIF or \GIF). NOTE that the program tolerates trailing backslashes.

VIEW SINGLE IMAGE (from Text directory):

To view a single image move the cursor (with arrows, pageup, pagedown, home or end keys) to the desired image file and press <ENTER>. Then select a Vesa Mode from the Mode Menu. An asterisk denotes the Best Mode (calculated by the program) which will display the most of your entire image on a single screen in the best resolution. After your image is displayed, press <ESC> (or right mouse button) to return to main menu. Note that when viewing IMG files or HPGL files, you can use a VESA mode (only B&W colors used), use the standard 640 x 480 x 2 mode or use the Super VGA mode that you optionally entered on the command line. Entries in gray on the Mode Menu are not available for your graphics card. See the 'Special Keys while Viewing' section below for available viewing options.

VIEW MULTIPLE IMAGES (slide show) (from Text directory):

To view multiple images as a 'slide show', use the <Space Bar> (or right mouse button) to select the images you wish to view. You can mark all images in the current directory with the <M> key (or click on **MARK** with mouse) or unmark them with the <U> key (or **UNMARK** with mouse). These can include any displayable image or plot files, but no ASCII text files. By pressing the <C> key, you can change your current Disk &/or Directory. Press <ENTER> (or left mouse button) to start the slide show. The files will be displayed one by one in the best VESA mode as determined by the program (640x480x2 mode is used for PLT & HPG files). The delay between slides will vary depending on the time it takes to read in the next file while one is on your screen and the value used in the /Dn switch. Fading in and out between multiple images can be done by using the /Fn switch. After the last file is displayed, the program will loop back to first slide. Pressing <ESC> (or right mouse button) during the display will stop the slide show. (this may take several seconds). **Note:** Files will be displayed in the order in which they were selected. You can pause the slide show by pressing the <Pause> key on keyboard. Any other key will continue the show.

VIEW / CREATE AN ARRAY OF IMAGES (from Text directory):

To view multiple images on a single screen at once, use the <Space Bar> (or right mouse button) to select the images you wish to view. These cannot include PLT or HPG files. Press <A> (or click on **ARRAY** with mouse) to select array display. Select the VESA mode from Mode Menu and then select the number of images to display per screen page. Then sit back and watch your images appear. Pressing <ESC> (or right mouse button) will abort the display after the current image is displayed. After each page is displayed, you could press to save the currently displayed page as a Windows BMP file, <G> for GIF file, <J> for JPG or <Z> for ZSoft PCX file or <PAGE DN> will continue to display the next page.

If you used the /AS qualifier or selected 'Show Array Sizes' from the Options Menu, the image sizes will be displayed alongside the filenames.

Since each image uses its own unique 256 colors, a special optimized color table and color dithering is used to display arrays. Note that when displaying a 2-color file in an array, the scaling down of the original image (especially a line type drawing) will cause much of the info to be lost on the screen unless the /FB or /FW command qualifier is used.

Creating arrays of your images is a good method of saving a sequence of images for a slide show. They are saved in the array in the order you selected them. To play them back, just pull up that array image, press 'M' to mark all images, and press left mouse button to display them.

WARNING: Files with more than 81 (9 x 9) images per page should not be viewed with versions of VESAVIEW prior to version 5.0 since a system hangup could occur because of internal array variable overflow!

NOTE: Arrays are only available in VESA modes. Files will be arranged in the array in the order in which they were selected.

AUTO ARRAY GENERATION/SAVING:

If you are going to have many pages (screens) of array images and you will be saving them all out as single

files, you can do this automatically by the <G> (or click on **AUTO/GEN** with mouse) to activate the generate option. This will automatically display the arrays on the screen and then save them out without any user intervention until the last one is processed. You begin just as you would for the standard array option by selecting the files to display, the VESA mode, and then the number of images/page. You are first prompted for the file type to use when saving. Then you are prompted for the first 1-6 characters of the filename that the program will use for the files it generates. You may precede the filename with a Disk & Directory if you don't want to use the current Disk/Dir. The system will append a 2 digit page number and appropriate extension to your input.

EX: You are going to have 3 pages of array images and you select <G>IF as the filetype and enter TEST as the filename. The System will generate 3 files named TEST01.GIF, TEST02.GIF & TEST03.GIF.

VIEWING FILES (from a previously created Array image):

If you have previously created and saved an array of images, you can use it to graphically select the images you want to display either singularly or as a slide show or for plotting. **NOTE: A mouse is required for this mode.** Just select the array image from the Text directory listing. After it is displayed, use the box shaped cursor to select the files. The left mouse button will select one file and display it immediately. The right mouse button is used to Mark/Unmark files for a slide show or multiple plotting. Files are outlined with a red box when they are marked. If a file on your array menu does not exist in your current any more, the file will be cross-hatched with red lines. After all files you desire are marked, press the left mouse button to start the display. The /Dn and /Fn (delay and fade) work with multiple selections from arrays. Files will be displayed in the order that they were selected on the screen. If you want to display all of the files in the same order they were created, just press <M> to mark them all, and press the left mouse button to start the show. **NOTE:** Normally a right mouse button is used to Quit the current image, but since that button is used to Mark/Unmark files in the array menu, you must simultaneously press both the left and right button to Quit. You can still use the <ESC> key to quit.

Array images created before VESAVIEW version 4.0 will not allow graphic file selection. Version 4.0 and above creates an additional index file for each array image you create. This file will have the same filename as your array image but with an extension of **.VNX**. If this files does not exist in the same directory as your array image file, you will not be able to use the array image as a graphic menu, but you can still view it as a normal image. The index file is very small, and unlike other graphic packages which allow graphical selection of images from the screen, VESAVIEW does not require separate *THUMBNAIL* files for each image which saves considerable time and disk space. As of version 4.3, the array image together with its index file may be stored (or saved) on a Disk/Directory that is different from the location of the images in the array. This will allow users to catalog images from CDROMs (which can't be written to) etc. VESAVIEW assumes that if your array images have nested arrays, all of these arrays are located in the same directory, but each of the array's images can be located on different Disk/Directories if needed. The index file stores the Disk & Directory of the images in the array. **NOTE:** If you ever move your images from where the array was initially created, you will either need to re-catalog them or use a text editor to change the path (first entry) in the .VNX file. To make the index file downward compatible with versions prior to 4.3, the program will accept index files that didn't store the images path in them as the first entry.

Up to six levels of array menus can be used (nested). For example, you could have one array image that had other array images in it. One idea would be to have individual array images for BMPs, GIFs, JPGs, PCXs and TGAs. Then have a master array image which would include the BMP, GIF, JPG, PCX and TGA arrays. While an array image is displayed, selecting another array image from it will pull up that new array menu and so on. If you have displayed an image out of a sub-level array menu, the <ESC> or right mouse button will return you to the previously displayed array menu. (remember that if you are displaying an array file, you must use both the left and right mouse button together to return to previous image).

If you need to add or delete an image from the array image, you will need to re-create it. New array images can only be created from the Text directory listing.

Additional Keys available while displaying an array image:

M1 (left mouse button)	Used to start displaying a single or marked multiple images
M2 (right mouse button)	Used to Mark or Unmark files
M1 & M2 (together)	Used to Quit from an array image

(See 'SPECIAL KEYS WHILE VIEWING' later for standard keys available)

Warning: You cannot have different array files with the same filename and different extensions in the same directory since each file will use the extension .VNX for its index file. **Ex:** You cannot have DIR01.GIF and DIR01.BMP array files in the same directory since the program would not know which one the index file DIR01.VNX should be associated with.

VIEWING GIF89A FILES - Special Case:

If you are viewing a single GIF89A file, most of the 89A extensions will be processed including multiple images, plain text and control blocks. Comments will not be displayed. Because of the way VESAVIEW reads images into Extended memory before displaying them, the plain text will only be displayed on the screen (not XMEM). This will prevent the printing of the text since printing is done from what is in Extended memory. One way around this, if your screen has enough resolution to display the entire file, is to save your screen out to another file with <G> and then pull up that file and print it. NOTE, that the save commands will only save out what is on the screen after all of the 89A extensions are processed. If the extensions include delays between images, or require the user to <press> a key, the program will continue after 15 seconds maximum so that slide shows will not be put in a wait state looking for user input.

If you are viewing arrays which include GIF89A files, the extensions will be processed entirely in XMEM before displaying them in the array. No text extensions will be displayed (they would probably be too small to read anyway). Delays between GIF89A extensions are not processed when displaying array images for increased speed.

VIEWING HPG or PLT FILES:

To view a plot file created in a HPGL format, move the cursor to the filename and press <ENTER>. Then choose the Display Mode and Plot Mode you wish to use. The program will try and determine the size of plot from the plot file header, but some CADD packages don't supply this info in which case the program will assume a "C size". The HPGL codes for Plot Sizes are:

PS4 = 'A' size
 PS0 = 'B' size
 PS1 = 'C' size

Choosing a display mode of FIT, 2X or 4X will speed up the drawing process but the resolution of the image will be diminished. As the image is decoded, you will see it being drawn in a preview mode at screen size. After the image is complete, pressing any key will swap you to the actual image as stored in Extended memory for panning around in. Pressing <ESC> (or right mouse button) as the image is being decoded will abort it.

Currently supported HPGL commands are: PU,PD,PA,PR,PS,IP,SC,SP, CI and AA

Even though the LB,SI,SR,DF,DI & DR commands are parsed and used to display the image on the initial preview screen, they are not supported as the drawing is being created in Extended memory. This won't usually pose a problem since this program was designed to view HPGL files created by CADD programs and most of those programs represent Text etc. as vector elements.

WARNING: Only plot files which were created as C size or smaller should be viewed, since the program does no checking for elements which could be drawn 'off' the page if too big. This check was omitted to speed up the drawing.

VIEWING ASCII FILES:

To view a single ASCII file on your screen, just select it as with any other filetype. The file will be displayed in a text window. The following file extensions are recognized as ASCII files - .1ST, .ANS, .ASC, .ASM, .BAK, .BAT, .C, CONFIG.SYS, .DIZ, .DOC, .H, .INI, .LIS, .ME, .TXT and .VNX. You may use the following keys while viewing an ASCII file:

Pan Up a Line	- UP ARROW or RIGHT MOUSE BUTTON
Pan Down a Line	- DOWN ARROW or LEFT MOUSE BUTTON
Pan Up a Page	- PAGE UP
Pan Down a Page	- PAGE DN
Abort	- ESC or Both LEFT & RIGHT MOUSE BUTTONS simultaneously

NOTE: ASCII files cannot be viewed from a graphics menu or in a slide show. Only the first 2000 lines of a file will be displayable. The entire file is not stored in memory but accessed from the disk drive as needed.

DELETING FILES:

While the file list is displayed on your screen, you may delete a file by moving the cursor to it, marking it with <spacebar> and pressing or <D> on the keyboard. To delete multiple files, mark them with the <spacebar> (or right mouse button) and then press . You will be asked to confirm each deletion.

RENAMING a FILE:

While the file list is displayed on your screen, you may rename a single by moving the cursor to it, marking it with <spacebar> and pressing <R> on the keyboard. You cannot select more than one file at a time for renaming.

SEARCHING FILENAMES:

While the file list is displayed on your screen, you may select files by searching their filenames for a specific string. Press <S> (or click on **SEARCH** with mouse) and keyin the search string. The file will be selected if it contains the exact string anywhere in its filename. Don't use the wildcard characters * or ? since they will be searched for literally.

SPECIAL KEYS WHILE VIEWING:

While viewing images in a VESA mode (other than arrays):

F1/F2	Decrease/Increase RED
F3/F4	Decrease/Increase GREEN
F5/F6	Decrease/Increase BLUE
F7/F8	Decrease/Increase CONTRAST
F9/F10	Decrease/Increase BRIGHTNESS
ALT F8	Inverse Colors (Negate)
ALT F9	Change to Gray tones
ALT F10	Restore original palette
B	Create a BMP file (256 c) of screen contents
C	Crop an image and save as BMP, GIF, JPG or PCX file
F	Filter the screen image with different functions
G	Create a GIF file (256 c) of screen contents
H or ?	Graphics Help
J	Create a JPG file (24 bit) of screen contents
O	Display Options Menu
P	Send XMEM contents to printer as B&W or Color image
S	Scale XMEM contents to screen and save as BMP, GIF, JPG or PCX file
V	Display the current VGA palette
Z	Create a PCX file (256 c) of screen contents

- + Zoom in (change VESA resolution to next lower mode)
 - Zoom out (change VESA resolution to next higher mode)
- NOTE: Mode 100 (640x400) is skipped when using +/- above.

See the 'FILTERING IMAGE' section below for use of the 'F' option.

While viewing an array (one about to be saved, not a previously saved one):

- B** Create a BMP file (256 c) of screen contents
- C** Crop an image and create a BMP, GIF, JPG or PCX file
- G** Create a GIF file (256 c) of screen contents
- J** Create a JPG file (24 bit) of screen contents
- Z** Create a PCX file (256 c) of screen contents

While viewing IMG or HPGL files in a B & W mode:

- P** Send XMEM contents to printer as B&W image
- I** Create an IMG file (2 c) of entire XMEM contents. The 'I' option may also be used if you are viewing an IMG or HPGL file in a color VESA mode.
- Z** Create a PCX (2 c) file of entire XMEM contents.

In both Color and B & W modes you may pan screen with:
(make sure the NUMLOCK key is on to use keypad)

- HOME** Top left of image
- END** Bottom right of image
- Page Up** Move up approx. 1 inch
- Page Dn** Move down approx. 1 inch
- ESC** Return to File Selection Menu

The arrow keys on either numeric keypad or separate arrow keypad pan the image approx. 1/4 inch in that direction. In addition, on the numeric keypad, the 1,3,7 & 9 keys pan the image diagonally and the 5 pans to center of image.

Use the Control key with left or right arrows to pan 1 inch to the left or right.

FILTERING IMAGE:

The **FILTER** option (<F> key) will prompt you for the type of filter you desire. It will be lur (smooth), <S>harpnen, <E>dge detection or <M>osaic . It only affects the screen image (not image as stored in extended memory), so when you pan or do a new window area on screen the filtering will be cleared. After you have filtered the screen, you may save that screen image as usual with the appropriate keyin. The Filter options are not recommended on 2-color files. Filters operations are accumulative. You may keep applying the same or different filters to the image to get more intense and sometimes very spectacular results. For instance, try applying a mosaic filter, then use the sharpening filter. The quality of the filtering operations are dependent on the '24 BIT PALETTE' setting on the Options Menu. For quicker (and less accurate) filtering, use the Standard option. For more accurate results (but longer processing time), use the Optimized or Optimized & Dithered option which will calculate a new palette for your filtered image. NOTE: After you have filtered an image, you must save the image and pull up the saved image in order to print it.

SAVING SCREEN AS a BMP, GIF or PCX FILE:

While viewing an image in a VESA mode, pressing will save the current screen (not necessarily everything in Extended memory) to a BMP file with the filename of your choosing. Pressing <G> will save to a GIF file. Pressing <Z> will save to a PCX file. The dimensions will come from the mode you are currently viewing the image in or the cropped size that you used. The color table written to file will reflect any adjustments you've made with the Function keys. When keying in the filename, if you don't include the period

or extension, the program will append the correct extension to your keyin. If you keyin the extension with your filename, the program will use that instead, but make sure you keyin the appropriate extension since the extension is how the program determines the file type to display! You may precede the filename with a Disk & Directory if you don't want to use the current Disk/Dir.

SAVING SCREEN AS a JPG FILE:

JPEG is a standardized compression method for full-color (24 bit) and grayscale images. JPEG is a lossy type of compression, meaning that the output image is not necessarily identical to the input image. This software implements JPEG baseline and extended-sequential compression processes and the file format used is called JFIF. This format has been agreed to by a number of major commercial JPEG vendors and probably will become the de facto standard. Some commercial JPEG implementations are incompatible, especially if they were written before the summer of 1991. Some other shareware JPEG program's output will only work if they have the option of outputting as JFIF standard files.

The procedure for saving the current screen to a JPG file is the same as for saving to a GIF, BMP or PCX (see above section), except that an extra question is asked after you key in the filename. You will need to enter a JPEG quality factor ranging from 25 to 95. The default if you just press <CR> is 75. A higher quality factor will result in larger files and less loss of image quality. A lower quality factor will result in smaller files with more loss of image quality.

It is not recommended to save array images as JPG files if they will be used as graphic menus, since they will take considerably longer to decode.

NOTE: Most error messages from the JPEG compression/decompression routines are due to corrupt or non-supported features in your JPEG file. However, the most common error will be 'Insufficient memory case ?' which usually means that you have insufficient low memory (RAM in the 0-640K range). Try and eliminate any non-crucial drivers &/or TSRs loaded into low memory. For saving or reading in 1024x768 JPEGs, you'll probably need 200K or more free RAM. The amount of free RAM can be found by using the VESA/MEMORY option under the HELP menu.

CROPPING SCREEN & SAVING AS a BMP, GIF, JPG or PCX FILE:

If you press <C> you will be able to crop your screen image before saving as a BMP, GIF, JPG or PCX file. You will see a box drawn around your screen image when you first press <C>. Press a <T> to move the TopLeft corner of box. Press to move the BottomRight corner. Use the arrow keys to move a single pixel at a time, or PageUp, PageDown, <CTRL>Leftarrow or <CTRL>Rrightarrow to move 10 pixels at a time. <HOME> will move the Topleft corner of box to Topleft of screen. <END> will move the Bottomright corner of box to Bottomright of screen. <ESC> will abort and a <CR> will start the screen save. You will be prompted whether to save as a BMP, GIF, JPG or PCX file. See 'Using a Mouse' below.

SCALING XMEM CONTENTS TO SCREEN & SAVING:

If you press <S> you will be able to scale the entire image in XMEM to your screen. You will see a box drawn around your screen when you first press <S>. If you just press the <CR> key at this time, your entire image will be fitted to your screen at the current VESA resolution. Use the arrow keys etc. (like in cropping above) to move the lower right corner of box. Scaling always occurs about the upper left corner of image, so you can't move this point. <ESC> will abort and a <CR> will start the screen save. See 'Using Mouse' below.

SAVING XMEM CONTENTS AS an IMG or PCX FILE:

While viewing a 2 color Black/White image (either IMG, 2-color PCX or HPGL files), pressing an <I> will save the entire eXtended memory contents to a IMG file, or pressing <Z> will save as a 2-color PCX file. You will have the opportunity to reverse the image before saving. It doesn't matter whether you are viewing the image in a color VESA mode or one of the Black & White modes in order to save with the <I> mode, as long as the original image was actually a 2 color image. Currently, there is not a cropping option before saving as a IMG file. However, if you are viewing the 2-color image in a color VESA mode, you could save out as a cropped

BMP, GIF, JPG or PCX file.

PRINTING IMAGES:

Before displaying an image that you will be printing, you should pull up the Printer Setup Menu and Printer Model Menu (submenus of OPTS menu) and make any necessary changes to model, style, size, margins, rotation and gamma etc. After an image is displayed, any adjustments to color/brightness/contrast will be reflected in your print. The gamma value (see description of /PGn qualifier above) is a good tool to use if adjustment to brightness is needed for printouts. The maximum size of image is limited only by the amount of free XMEM you have. The maximum size of print is 10.5 x 8.0 inches on most printers. On the DeskJet 550C printer, note that you can't print on the bottom 1/2" of page, so if you are centering your print, the maximum length can't be greater than 10.0", but if you set your Top Margin to the minimum of 0.05", you can squeeze in about 10.4".

If you want to print multiple images, select them from the file list with the <Space Bar> (or right mouse button) as for slides, and then press <P> (or click on **PLOT** with mouse). Each file will be displayed on screen and automatically plotted until the last one is processed. NOTE that all of the plots will use the same size, rotation, justification etc. from the plotting options menu. Pressing <ESC> (or right mouse button) will abort the plotting. NOTE: This option is only available in Registered Versions.

To print more than one copy of the same image, it is suggested that you change the Port Option to File (See /PF above under Printer Options). This will save your print in a file that you can just copy to your printer from DOS (must use COPY / B) as many times as you like, thus saving re-processing time for each copy.

While a color image file is displayed on the screen, pressing <P> will create a print on your active printer in the current print style. The scatter style will produce a better quality print in most cases, but will take longer than the other styles to process. You may cancel the plot by pressing <ESC> (or right mouse button) during the plot. The port defaults to LPT1 unless you specified a command line argument of /P2 or /PF when starting the program or selected another one from the Options Menu. The actual plot will be of your entire image (stored in extended memory) and not just what you may be viewing on your screen.

While viewing a 2-color (black & white) file or HPGL (.PLT or .HPG), pressing <P> will create a Black & White print.

See description of /FB, /FW & /FN above to preserve B & W image context when your print is being scaled down from the original size. You can use any of the printer qualifiers (available as command line qualifiers or from the Printer Menu within program) to change the defaults for Printer Port, Printer Type, Resolution, Rotation Angle, Width and Top & Left Margins.

If you select a Print Width greater than 8.5", the program will automatically rotate print 90 degrees (unless 270 was already selected). The program will beep if you try to use an invalid combination of size, rotation angle, margins or resolution.

MOUSE USE:

In most cases where the keypad is used to move the text cursor, a MicroSoft compatible mouse can also be used. You must install any required mouse drivers before running VESAVIEW.

The Left button is used just like the <CR> key on the keyboard to display one image. It is also used to select choices from pop-up menus, to select commands at the bottom of screen and to select the PageUp and PageDown icons from the vertical bar on the right side of screen.

The Right button is used just like the <ESC> key on the keyboard to abort displays and menus. It is also used to mark files for use in arrays or for displaying them as slides (like the <spacebar>).

If a large image has been displayed in one of the 256 color VESA modes, holding down the Left mouse button will display a panning icon on your screen. The green box represents your entire image size and the red box

represents your screen size. While holding down the Left button, move the mouse and the red box will pan around with the green box. When you let go of the button, the screen will be moved to reflect your new window area. This mode of panning is much quicker than using the arrow keys, although you will probably use the arrow keys for fine tuning the pan. If a double-beep is heard when trying to use this feature, your image is probably smaller than your screen and no panning is possible.

When Cropping an image, the Left mouse button will move the upper left corner of the cropping box and the Right mouse button will move the lower right corner of box. Pressing both the Left and Right buttons simultaneously will start the save (like pressing <CR>). Scaling works the same except the Left mouse button is not used (can't move the upper left corner of scaling box).

RUNNING Under WINDOWS 3.1:

VESAVIEW can be run in a Full Screen mode from Windows 3.1. Because of the way Windows 3.1 allocates memory, it is suggested that you use a .PIF file to run VESAVIEW. The following are recommended settings for the PIF file when running under Windows:

Program Item Properties

Description: VesaView
 Command Line: VESAVIEW.PIF
 Working Directory: C:\GIF <-- Path of initial image directory
 Shortcut Key: None

(NOTE: You can use the ICON that is delivered with VESAVIEW or your own. The supplied icon is in the file VESAVIEW.ICO.)

Use the following for 386 ENHANCED MODE -

PIF EDITOR - VESAVIEW.PIF

Program Filename: C:\VV\VESAVIEW.EXE <-- Path of VESAVIEW.EXE
 Window Title: VesaView
 Optional Parameters: /AW /AM103 /PTDJ /AS <-- Modify these as needed
 Start-up Directory: _____
 Video Memory: _ Text _ Low Graphics X High Graphics
 Memory Requirements: KB Required -1 KB Desired -1
 EMS Memory: KB Required 0 KB Limit 1024
 XMS Memory: KB Required 1024 KB Limit -1
 Display Usage: X Full Screen Execution: _ Background
_ Windowed X Exclusive
X Close Window on Exit

PIF EDITOR - Advanced Options

Background Priority: 50 Foreground Priority: 100
X Detect Idle Time
 Memory Options:
_ EMS Memory Locked X XMS Memory Locked
_ Uses High Memory Area X Lock Application Memory
 Display Options:
X Text _ Low Graphics X High Graphics
X Emulate Text Mode X Retain Video Memory
 Other Options: (leave as default)

Use the following for STANDARD MODE -

PIF EDITOR - VESAVIEW.PIF

Program Filename: C:\VV\VESAVIEW.EXE <-- Path of VESAVIEW.EXE
 Window Title: VesaView
 Optional Parameters: /AW /AM103 /PTDJ /AS <-- Modify these as needed

Start-up Directory:	_____		
Video Memory:	<input type="checkbox"/> Text	<input checked="" type="checkbox"/> Graphics/Multiple Text	
Memory Requirements:	KB Required	<u>-1</u>	
XMS Memory:	KB Required	<u>1024</u>	KB Limit <u>-1</u>
Direct Modifiers:	<input type="checkbox"/> COM1	<input type="checkbox"/> COM3	<input type="checkbox"/> Keyboard
	<input type="checkbox"/> COM2	<input type="checkbox"/> COM4	
	<input type="checkbox"/> No Screen Exchange	<input type="checkbox"/> Prevent Program Switch	
	<input checked="" type="checkbox"/> Close Window on Exit	<input type="checkbox"/> No Save Screen	

CAUTIONS:

The array used to store the files in current directory is limited to 999 files. More files than this will just be truncated from directory listing.

The program determines the type of file to display by the extension used on the filename. See 'Features Section' for supported extensions. Any other extensions are ignored. Incorrect extensions may cause program to hang (ie. Don't name a PCX file with a GIF extension).

Even though your VESA driver thinks it supports some of the higher resolution modes, your hardware may not have the required memory to do so. Therefore, you need to lockout these modes from the program with the /LOmode command line switch. If you don't lock out these modes, the program may hang and you'll have to do the 3 finger trick (<CTRL> <ALT>).

When printing, make sure your printer is online before pressing the <P> key, otherwise the printer may lose some of the data or lock up the program.

Most error messages are self explanatory, but occasionally you might get a misleading message. Most errors of this nature will be caused by corrupt image files. Try pulling up the same image with another viewer to see if you have similar problems.

HINTS:

When creating arrays of images that include 24 bit files, you may want to toggle the 24 bit palette option to STANDARD to speed up the processing. The color detail will not be too apparent at this small scale.

Besides using the '@FILELIST command line option to play a slide show, try the following: To create and save a slide show sequence, just create an array image and save it. The images on the array will be arranged in the order in which they were selected originally. All you need to do to play the slide show is pull up that array image, press 'M' to mark all files, and then press the left mouse button to start the show. You should set the delay and fade before pulling up the array if desired.

It is suggested that you prefix your array filenames with a 0 (zero) so that they will be alphabetized at the beginning of the directory listing for easier location. (Ex. 0DIR01.GIF, 0DIR02.GIF etc).

If you will be using your array images as graphic menus for file selection, a lower resolution array image will update on the screen faster. Even if you have just a few images to catalog, by placing them in a larger format array image (ie. You have only 9 images to catalog but create a 6 x 6 array image), the screen will be able to recall this array as a menu much faster than creating it in a 3 x 3 array image. This is due to the greater compression of large areas of blank space on the screen.

If you don't have a mouse, the graphic arrays you create can't be used graphic menus. You will need to manually delete the .VNX file for the array file so that the system will think the array file is just an ordinary image.

If you are using a printer supported by the DOS GRAPHICS command, you can get a quick print of a Black & White screen by using the GRAPHICS command before running VESAVIEW. Version 5.0 of DOS supports

the DeskJet & LaserJets and the syntax would be:

GRAPHICS DESKJET /r (the /r will reverse black & white)

Use <SHIFT><PRT SCR> while graphics are on the screen to initiate the print.

If your printouts are too dark and you need to lighten them up, try increasing the Gamma value instead of the brightness. This will lighten up the lower intensities and leave the higher intensities as they are. Raising the gamma value (to 1.5) will probably be necessary if you are using the 600dpi mode of the LaserJet IV since the close dot spacing will tend to darken the printout.

If you are using the Canon BJC600 or Epson Stylus 800 printers and you experience banding, try using the command line qualifier /PPn (see description above).

Besides using the SCALE option, there is a trick you can use to scale down an image by 1/2,1/3,1/4...1/9. Mark just one image and display it as an array. Select the Array Size according to the scale factor you wish to use. (The color table used to display a single image as an array will be the true color table of that image and not the standard palette). After the image is displayed, use the CROP feature to save the area you desire as a color image. Note that when a single array image is displayed, the background color and text colors will change according to the color table of the single image being displayed.

If you need a VESA driver for your graphics card, login to Compuserve and go to the IBMPRO forum (GO VESA). In Lib #12 (Vesa), you will find VESA drivers for almost any card.

If you are not sure what graphics card you have in your machine, there is a great little program in the GRAPHSUPPORT forum on Compuserve (GO PICS). In Lib #14 (Misc Util & Code) download VDEOID.EXE. This program will try and determine the card manufacturer & memory on it.

CARDS TESTED:

This program has been tested on the following computers and graphics cards:

DELL 325D - Using built-in Paradise card
DELL 325D - Using a CompuAdd Hi-rez card
DELL 433D - Using Trident 8900 card
DELL 433P - Using built-in Paradise card
DELL 433P - Using a Video-7 VRAM II card
DELL 486D/50 - Using built-in Paradise card
DELL 486D/66 - Using built-in Paradise card & ATI Ultra card
NEC 386SX - Using a CompuAdd Hi-rez card
AST 286/386 Premium - Using Orchid Designer Pro card
AST 286/386 Premium - Using Diamond Stealth card (has built in VESA Bios on card)
IBM 286 AT - Using a Paradise VGA Plus
IBM 286 AT - Using an ATI Wonder card & ATI Vantage
GATEWAY 2000 486/33 - Using an ATI Ultra card
GATEWAY 2000 4DX2-66V - Using an ATI Ultra XLR-2M card
DEC PC 486 - Using built-in graphics card

SUPPORT:

If you have any comments, suggestions or questions, please leave me a message in the GRAPHSUPPORT forum (GO PICS) on Compuserve. My CIS ID number is 71170,2340. The current shareware version of VESAVIEW will always be posted in the LIB #3 (Decoders & Encoders) of the GRAPHSUPPORT forum on Compuserve. It can also be found on the Blue Ridge Express Bulletin Board (804)-790-1675. The Zipped archival of VESAVIEW will usually be named VESAVW.ZIP or VESAVWxx.ZIP where xx is the version number. If you can't find it by filename, try searching for the keywords VESA and HPGL. You can also reach me at the P. O. Box listed in the Registration section.

REVISION HISTORY:

1.0 - 1.9 Developmental versions

2.0 -4.9 Changes for these versions have been removed from this document to save space.

5.0 (9/9/93) Added ability to create an array image (menu) of up to 12 x 12 images (144 total) per page if the resolution you select is high enough for the filenames to display above images. Added check for free disk space when auto-generating arrays. Fixed bug when displaying long JPEG error messages which cause system hangups. Made keyin field larger for filename of auto-generated arrays. Directory listing now returns as it was bracketed on the screen after viewing images etc. instead of resetting to display file number 1. New qualifier /IDx to override the embedded drive letter in index (.VNX) files. Trailing backslashes when entering a new path are now tolerated. Removed now unnecessary qualifiers /PYS and /PXS. Added new registration procedure using a username/access code combination.

5.1 (9/20/93) Added several new Text File types which can be displayed (.BAK, CONFIG.SYS, .INI). Slides can now remain on screen until a key is pressed to skip to next slide. Saving an image from screen will now default to use the original image size if it less then screen dimensions versus always using the screen dimensions. (This could only be done by cropping in previous versions.) Fixed a bug which caused some RAM memory to be used and not freed up when reading/saving GIF files.

5.2 (9/24/93) Added the reading of .IFF/.LBM (Amiga/Deluxe Paint) and .MAC (MacPaint) files. Added a smoothing, sharpening, edge detection and mosaic filters option when in graphics ('F' key). Also added an Inverse Colors option (ALT F8) while in graphics.

5.3 (10/4/93) Options menu is now available while viewing a graphics image ('O' key). Filters have been enhanced to use an optimized palette if desired by selecting the appropriate item on the Options Menu. Added a file Rename option ('R' key).

5.4 (10/14/93) Added 8 new printer styles. (NOTE that qualifier /PSBH & /PSCH now have different meanings. See the qualifier section of document). Fixed bug which caused printing B&W halftones on certain PCs to hangup.

5.5 (10/28/93) Added the reading of .EPS (the TIFF preview embedded in Encapsulated Postscript files). Revised directory scans to speed up processing large directories while using graphics menus. VESAVIEW can now be used by registered CD-ROM manufacturers as an unhindered version on their CD-ROMs.

5.6 (11/09/93) Fixed VESA mode 107h (1280x1024x256) code to correct palette register settings.

5.7 (11/19/93) Fixed a bug which erroneously showed 'Invalid TIF file format' when displaying any TIF file.

5.8 (11/22/93) Added support for 600dpi resolution of LaserJet IV and new printer type qualifier added (/PTLJ4).

6.0 (12/1/93) Added support for a list file of images (@FILENAME.LIS) or a single image filename to be supplied to the program from command line. All previous command line qualifiers are now available from the Options Menu. A 'Save Configuration' option was added on Options Menu. This is an easier way to save a setup rather than use the command line qualifiers. Fixed a minor problem with the /FTM qualifier if using LaserJet 4. Added more error checking to prevent hangups with corrupt image files.

6.1 (12/12/93) Added ability to automatically print file(s) supplied on command line by using the /AP qualifier.

6.2 (1/20/94) Added ability to automatically create array files from the command line with the new /AF, /AE and /AD qualifiers. Text (ASCII) files are now allowed in array images. Wildcards are now supported in the filename supplied to VESAVIEW from the command line.

6.3 (3/24/94) Added printer support for the Canon BJC600 color printer and Epson Stylus 800 black & white printer. Added support for TIF Huffman decoding. Added support for GIF files which have a MAC Header embedded in them.