

VuePrint Users Guide

Topics

[Introduction](#)

[Screen Saver](#)

[File Formats](#)

[File Manager](#)

[Program Manager](#)

[Interrupting](#)

[Options](#)

[Mouse](#)

[Keyboard](#)

[Internet Graphics \(Uuencode, Base64, Binhex\)](#)

[Hints for Improving Display Quality](#)

[Limitations](#)

[Acknowledgements](#)

Copyright 1997 Hamrick Software

Menus

[File](#)

[Edit](#)

[Image](#)

[Sound](#)

[Movie](#)

[Slideshow](#)

[Options](#)

[Utilities](#)

[Help](#)

Utilities

[ZIP Utilities](#)

[MCI Drivers](#)

Introduction

VuePrint is a program that lets you view, print, and convert graphics files, while at the same time playing sound and movie files.

Some of the main features of VuePrint are:

- Reads and writes 6 different types of graphics files
- Reads and writes internet graphics files
- Has a built-in screen saver
- Includes a slide show feature with more than a dozen options
- Displays multiple images in a window (thumbnails)
- Supports all graphics displays, including 16-color laptops
- Supports copying to the clipboard, and pasting from the clipboard
- Uses 12 different effects for repainting the screen
- Has menu options to install and remove VuePrint

There are two Editions of VuePrint:

- 16-bit Edition - all versions of Windows
- Pro/32 Edition - Windows 95, Windows NT, Windows 3.1/win32s

The Pro/32 Edition loads JPEG files significantly faster than the 16-bit Edition, and includes support for long file names on Windows 95.

To view images, use the <File|Open...> command and choose the image you want to view. When you are done viewing images, choose <File|Exit...> to leave VuePrint. Note that each of the common commands in VuePrint has a one-letter keyboard shortcut. For instance, to open a file for viewing, press the <O> key, and to exit VuePrint, press the <X> key. The shortcut keys for each command are displayed on the right-hand side of each menu.

The most common way of viewing images is pressing <O> and using the mouse to double-click on the image you want to view. If you then want to view other images in the same directory, just press the <Space> bar to go to the next image in the list, the <Backspace> key to go to the previous image, and the <Enter> key to display a randomly selected image in the same directory.

If you are looking through a large number of images, and want to view them quickly, press the <Q> key. To view the full-size image, just press the <Q> key again. Note that many of the options in the various menus can be turned on and off this way by pressing a single key.

If you want to get rid of the menu bar entirely, you can turn it on and off by pressing the <Esc> key. This is sometimes useful if you want an uncluttered screen.

You have probably figured out by now that VuePrint has a lot of different options. The one thing to remember is that you can always get the program back to reasonable (i.e. default) option values by pressing <F7>, and you can save the current option settings by pressing <F5>. VuePrint will start up with the options in effect that you have saved when you press <F5>. You can always get access to this

help file by pressing <F1>.

If you want to view many images per screen, you can use the Thumbnails feature of VuePrint. Press <O> to open up some files, then press <T> to display a page of thumbnails. Every time you press <T>, you will get a new page of thumbnails, and when you are on the last page, pressing <T> for the last time will revert back to no thumbnails. You can also press the key to turn on thumbnails, but then you have to press the space bar each time you want to load a new image. The key toggles thumbnails on and off.

Printing the current image (or the thumbnails) can be done by pressing <P> or choosing <File|Print...>. You can control the placement of the image on the page by using the <File|Margins...> command or pressing <M>.

You can save the current image in a new file format by pressing <V> or choosing <File|Save as...>. If thumbnails are being displayed, the thumbnails will be saved in the file.

If you want to use VuePrint as a screen saver, use <Utilities|Install screen saver> followed by <Utilities|Configure screen saver>. If you want to turn the screen saver off, use <Utilities|Remove screen saver>.

If you decide to remove VuePrint from your system, use the <Utilities|Remove VuePrint> command. This will restore the File Manager Associations that were in place before VuePrint was installed. You can also use the File Managers <File|Associate...> command to do this. If you want to remove the VuePrint screen saver, run VuePrint and choose the <Utilities|Remove screen saver> command

Each of the menu commands and options are described in more detail below.

Screen Saver

VuePrint can be installed as both a viewer and as a screen saver. When installed as a screen saver, it displays graphics files on the screen when there is no activity for more than 5 minutes. The default setup causes it to search out all graphics files on the same drive as Windows, and to display these graphics files in random order every 15 seconds. Any keypress, mouse click, or mouse movement will cause the program to exit. Each time the screen saver exits, it remembers the last file that was displayed, and starts over again after 5 minutes of inactivity displaying this same file.

The screen saver can be installed by choosing <Utilities|Install Screen Saver>. The screen saver is just a copy of VUEPRINT.EXE that is copied into the Windows directory (normally c:\windows) and named VUESAVER.SCR. This help file is also copied into VUESAVER.HLP. The Pro/32 Edition uses VUEPRO32.EXE, VUEPRO32.HLP, VUESAV32.SCR, and VUESAV32.HLP.

All the options for the screen saver are stored in the Windows directory in the file VUESAVER.INI for the 16-bit Edition and VUESAV32.INI for the Pro/32 Edition. Any VuePrint option can be set up in this file. For example, to disable the mouse during the screen saver, set MouseButtonEvent=11 and MouseMovementEvent=11.

To configure the screen saver, you can either choose the <Utilities|Configure Screen Saver> menu item, or choose the <Setup> button from the <Desktop> Control Panel.

All the options that can be set on the screen saver setup screen are the same as the options in the VuePrint menus. All these options do is set up the VUESAVER.INI or VUESAV32.INI configuration file.

File Formats

VuePrint reads six types of files:

Image files (.GIF, .BMP, .DIB, .RLE, .PCX, .TGA, .JPG, .CAM, .TIF, .WMF)

Sound files (.MID, .WAV, .MCI)

Movie files (.AVI, .MPG, .MMM, .MOV, .FLI, .FLC)

Slide Show files (.SLI)

Encoded files (.UUE, .UU1, .01, .MSG, .MME, .HQX)

Zip files (.ZIP)

A file that does not have a sound or movie file extension is automatically recognized by the first few bytes in the file. If the first few bytes of the file are not recognized, the software checks to see if the file is a Macintosh GIF or JPEG/PICT file. If it is a Macintosh GIF or JPEG/PICT file, the header information is skipped and the file is read normally. Note that any image file may be optionally compressed with the zip format. This means that you can compress files such as BMP or TGA, and they can be read directly by VuePrint without needing to decompress them first. Note also that if the file is a UUENCODE or BASE64 (MIME) file, it will also be automatically recognized and read.

GIF Files (.GIF)

VuePrint will read both GIF 87a files and GIF 89a files. GIF files that have Macintosh headers are also recognized. The only GIF 89a attribute that is used is transparency, the other GIF 89a extensions (such as text overlays) are ignored. Multiple Image GIF files are supported, and the image that is displayed is the composite of all the multiple image segments. Comments that are contained in the GIF file are stored in the Comments window, and are saved when a GIF, JPEG, or TIFF file is written.

Bitmap Files (.BMP, .DIB, .RLE)

All BMP, DIB, and RLE bitmap formats are supported, including compressed and OS/2 bitmaps.

PC Paintbrush Files (.PCX)

PCX files that are version 3.0 or less are supported, including reading the 24-bit format. The CGA color palette information is ignored. The <File|Save as...> option creates 8-bit PCX files.

Targa Files (.TGA)

All Targa file formats are supported.

JPEG Files (.JPG, .CAM)

VuePrint reads JPEG files that use either the JFIF format (.JPG extension), the Macintosh JPEG/PICT format, or the Casio QV-10 .CAM format. Comments that are contained in the JPEG file are stored in the Comments window, and are saved when a GIF, JPEG, or TIFF file is written.

TIFF Files (.TIF)

VuePrint reads and writes TIFF files that conform to the TIFF 6.0 specification, including files compressed with LZW, CCITT Group 3, and CCITT Group 4 methods. Tiled TIFF files are not supported. Comments

that are contained in the TIFF file are stored in the Comments window, and are saved when a GIF, JPEG, or TIFF file is written.

Sound Files (.MID, .WAV, .MCI)

Standard MIDI and WAV files are supported. If you only have the PC Speaker sound driver, you will need to select the <Sound|Synchronous> option. MIDI files can not be played with the PC Speaker sound driver.

MCI files contain MCI commands. Refer to various Microsoft descriptions of MCI command strings for more details. In order for MCI files to interact properly with the slide show feature, one MCI command should use the <notify> parameter. When the command completes, VuePrint will automatically issue the <close all> MCI command. For example, the following MCI file will play track two of an audio CD player, and will continue a slide show after the track completes:

```
# This script plays track two on an audio cd
open cdaudio alias cd
set cd time format tmsf
play cd from 2 to 3 notify
```

Movie Files (.AVI, .MPG, .MMM, .MOV, .FLI, .FLC)

If you have the MCI drivers for AVI, MPG, MMM, MOV, FLI, or FLC files installed, VuePrint is able to play these movies. You can also use the Media Player that's included in the Accessories folder to play these files.

Slide Show Files (.SLI)

Slide Show files (.SLI) are just text files containing a list of image, sound, and movie files, one file name per line. This list can contain other .SLI files, which can refer to other .SLI files, and so on (up to eight times). A slide show list is also automatically created when you use the <File|Open...> menu to select a single file. A slide show list is also created when you choose the <Slideshow|File spec...> menu.

Slide show files can contain image, sound, and movie files, and the slide show can play back sound and movie files at the same time the images are changing. The minimum delay between any two image, sound, and movie files can be set with menu options.

Encoded files (.UUE, .UU1, .01, .MSG, .MME, .HQX)

Uuencoded files are commonly used on the Internet to convert image files into a text file that can be sent over the Internet as e-mail. Please refer to the section on Internet Graphics for more details.

ZIP files (.ZIP)

ZIP files are compressed files that can contain multiple files within them. VuePrint will directly read zip files produced by pkzip version 2.04g, which has been widely used since February 1, 1993. You may need other ZIP utilities to read zip files produced by older versions of pkzip.

File Manager

VuePrint can be integrated with the Windows File Manager by choosing the <Utilities|Install VuePrint> to associate VuePrint with the Image, Sound, Movie, and Slide Show file types. You can use <Utilities|Remove VuePrint> to disassociate VuePrint and restore the previous associations. When VuePrint is installed, you can use the File Manager to double-click on any Image, Sound, Movie, or Slide Show file, and VuePrint will be automatically started to display (or play) the file. If you double-click on an encoded file (.uue, .uu1, .01, .msg, .mme, or .hqx) VuePrint will attempt to automatically decode and display any image contained within this file. VuePrint will also print images chosen in the File Manager.

You can also use the <Utilities|Install Extension...> and <Utilities|Remove Extension...> commands to install and remove File Manager associations for individual file extensions.

Program Manager

VuePrint provides a complete command line argument processing system that gives you the capability to install different VuePrint icons to do different things. Because the command line processing is also performed when VuePrint is started from another program, you can use VuePrint as a viewing subsystem for other applications. The command line can contain two types of arguments - options and file names. File names have complete wildcard support, and the additional feature that filenames ending in <...> will recursively descend a directory tree looking for additional files.

The command line is processed from left to right. Valid command line options can have the following forms:

```
-name  
/name  
-name=value  
/name=value
```

If there is no value specified, the value 1 is used.

The names of the options are the same as those in the VUEPRINT.INI option file, and override the settings in that file. Command line options can be abbreviated, are not case sensitive, and the first one matching the command line option is used. There are four additional command line options that are not used by the .INI file:

```
/Directory=name  
/Print  
/ConvertToXXX (where XXX can be GIF, BMP, PCX, TGA, JPG, or TIF)  
/Install
```

The /Directory=name option changes the current drive and directory to <name>. This is useful when VuePrint is used as a subsystem of another program.

The /Print option causes every file on the command line to be displayed and then printed. Only the first file sets up the printer options, the remainder use the same printer options. This lets you do unattended printing of large numbers of image files.

The /ConvertToXXX option causes every file on the command line to be displayed and then converted to another format. This lets you do unattended conversion of large numbers of files.

The /install option invokes the <Utilities|Install VuePrint> menu item when VuePrint starts up.

Interrupting

VuePrint has been designed to let you interrupt loading files, since this operation can sometimes take some time. Any menu choices that need to read or change the current image will interrupt the currently loading file. Other options that interrupt loading the current image include those that save and restore option settings, change the number of thumbnails, install or remove VuePrint or the Screen Saver, invoke Help, or display any dialog box.

For example, pressing the <X> key while a file is being loaded will execute the <File|Exit> command, causing VuePrint to immediately exit.

Options

There are more than 100 different options that can be used for VuePrint. These options are stored in a file in the same directory as the program. The name of the .INI file matches the name of the program. For instance, if you copy C:\WINDOWS\VUEPRINT.EXE to C:\TEST\VUETEST.EXE and then run VUETEST.EXE, the file C:\TEST\VUETEST.INI is used to hold the options for this program. This lets you install multiple copies of VuePrint, each with different options.

Each option has a default value, a minimum value, and a maximum value. In addition, there are different default values when the program is run as a viewer and as a screen saver.

The following options can be used in the .INI file and on the command line. Their names, default values, default screen saver values, minimum values, and maximum values are:

Options from File menu

<u>Option Name</u>	<u>Default</u>	<u>Saver</u>	<u>Min</u>	<u>Max</u>
OpenIndex	8	8	1	15
SaveAsIndex	1	1	1	6
DeleteIndex	8	8	1	15
DecodeIndex	12	12	1	15
EncodeIndex	8	8	1	15
UnzipIndex	14	14	1	15
ZipInfoIndex	14	14	1	15
TopMargin	0	0	0	none
LeftMargin	0	0	0	none
RightMargin	0	0	0	none
BottomMargin	0	0	0	none
ShowComments	0	0	0	1
ShowLog	0	0	0	1

Options from Image menu

<u>Option Name</u>	<u>Default</u>	<u>Saver</u>	<u>Min</u>	<u>Max</u>
Rotate	0	0	0	7
Brightness	5	5	1	9
Contrast	5	5	1	9
Invert	0	0	0	1

Options from Sound menu

<u>Option Name</u>	<u>Default</u>	<u>Saver</u>	<u>Min</u>	<u>Max</u>
SoundEnable	1	1	0	1
SoundSynchronous	0	0	0	1
SoundLoop	0	0	0	1

Options from Movie menu

<u>Option Name</u>	<u>Default</u>	<u>Saver</u>	<u>Min</u>	<u>Max</u>
MovieEnable	1	1	0	1
MovieSynchronous	0	0	0	1
MovieLoop	0	0	0	1

Options from Slideshow menu

<u>Option Name</u>	<u>Default</u>	<u>Saver</u>	<u>Min</u>	<u>Max</u>
RunSlideshow	0	1	0	1
DelayBetweenImages	5	15	0	none
DelayBetweenSounds	0	0	0	none
DelayBetweenMovies	0	0	0	none
RandomOrder	0	1	0	1
EraseNewPages	1	1	0	1
KeystrokeEvent	0	9	0	10
MouseButtonEvent	0	9	0	10
MouseMoveEvent	0	9	0	10
ImageDisplayEvent	0	0	0	10
ScreenDoneEvent	0	0	0	10
SlideshowDoneEvent	0	0	0	10

Options from Options menu

<u>Option Name</u>	<u>Default</u>	<u>Saver</u>	<u>Min</u>	<u>Max</u>
RememberOptions	0	0	0	1
ThumbnailsEnable	0	1	0	1
ThumbnailsRandom	0	0	0	1
ThumbnailsAnnotate	1	0	0	1
ThumbnailsOutline	0	0	0	1
ThumbnailsAcross	8	1	1	999
ThumbnailsDown	6	1	1	999
FillWindow	0	1	0	1
AlwaysOnTop	0	1	0	1
DisplayInColor	1	1	0	1
DisplayDithered	0	0	0	1
DisplayCaption	0	0	0	1
EnableTrueColor	1	1	0	1
Enable3dControls	1	1	0	1
EnableLargeDialogs	1	1	0	1
EnableWin95Dialogs	1	1	0	1
PrintInColor	1	1	0	1
PrintDithered	0	0	0	1
PrintCaption	0	0	0	1
BackgroundRed	192	0	0	255
BackgroundGreen	192	0	0	255
BackgroundBlue	192	0	0	255
ForegroundRed	0	192	0	255
ForegroundGreen	0	192	0	255
ForegroundBlue	0	192	0	255
GIFInterlaced	0	0	0	1
GIFTransparent	0	0	0	1
GIFColors	256	256	2	256
GIFLZWEnable	1	1	0	1
JPEGTwoPass	0	0	0	1
JPEGUseDithering	1	1	0	1
JPEGUseMonochrome	0	0	0	1
JPEGOutputMonochrome	0	0	0	1
JPEGOutputOptimize	1	1	0	1
JPEGOutputQuality	75	75	0	100
JPEGOutputSmoothing	0	0	0	100
JPEGKBytesMemory	2048	1024	1	none
TIFFCompression	5	5	1	5
QuickLook	0	0	0	1
SortPalette	1	1	0	1
OutputWidth	0	0	0	none
OutputHeight	0	0	0	none
EncodeLines	32767	32767	1	none

DitherQuality	2	2	1	3
Effect	1	1	1	12
AutoScale	0	0	0	1
AutoFit	1	1	0	1
AutoCrop	0	0	0	1
AutoDither	0	0	0	1
AutoComments	0	0	0	1
AutoSearch	0	1	0	1
AutoResume	1	1	0	1
SlideshowPassword	0	0	0	1
StartupPassword	0	0	0	1

Window position settings

<u>Option Name</u>	<u>Default</u>	<u>Saver</u>	<u>Min</u>	<u>Max</u>
XImage	0	0	0	999
YImage	0	0	0	999
WImage	1000	1000	1	1000
HImage	1000	1000	1	1000
MImage	0	0	-1	1
XComments	0	0	0	999
YComments	667	667	0	999
WComments	1000	1000	1	1000
HComments	333	333	1	1000
MComments	0	0	-1	1
XLog	0	0	0	999
YLog	667	667	0	999
WLog	1000	1000	1	1000
HLog	333	333	1	1000
MLog	0	0	-1	1

The options for controlling window positions are designed to be independent of the display resolution. These values range from 0 to 1000, where 1000 is the full width (or height) of the display. The option beginning with M is -1 for a minimized window, 0 for a normal window, and 1 for a maximized window.

Note that all options are stored as a 16-bit signed number, so the maximum value for any option is 32767.

Mouse

The left mouse button can be used to select a rectangular subset of an image. This subset of the image is used when displaying, printing, or saving an image. The right mouse button is used to move a zoomed-in image within the window (you will see a hand icon when moving). A double-click of the right button will select the whole image.

When the left mouse button is clicked, and less than 16 pixels are selected, the image is zoomed by a factor of two, centered on the position of the mouse. If the control key is pressed while the left mouse button is clicked, the image will be zoomed out by a factor of two. If the shift key is pressed with the left mouse button, the image is cropped, and if the control and shift keys are both pressed, the image is rotated.

If the display has multiple thumbnails and the left mouse button is clicked on an image, then thumbnails will be turned off and the image that you click will be displayed by itself in the window.

If both mouse buttons are pressed at once, the program will exit.

Keyboard

Most menu items have a keyboard equivalent. The key that corresponds to the menu item is displayed along with the menu.

The arrow keys on the keyboard will move a zoomed image. If the shift key is pressed along with an arrow key, the zoomed image will move in window-sized jumps. If the control key is pressed along with an arrow key, the zoomed image will move in single-pixel jumps. If the Alt key is pressed with an arrow key, the size of the zoomed area will be adjusted in single-pixel jumps.

You can press one of the numeral keys from 1 to 9 before you press the space bar, backspace key, or enter key. This will set the number of times to repeat this sequence. For instance, to skip forward 8 files, press the 8 key followed by the space bar.

Long-running MCI commands can be aborted by pressing Control-Break.

Hints for Improving Display Quality

If you get a display that seems fuzzy or grainy, you probably have your Windows display adapter configured for 16 colors.

If you are running Windows 3.1, you can configure your display adapter for 256 (or more) colors by going to the Program Manager and opening the <Main> window. Then open the <Setup> window, and choose the <Options|Change System Settings> menu. Choose a display mode that has 256 (or more) colors, and then press <OK>. If you can not find a display mode for 256 (or more) colors for your display type, select the last item in the list <Other display (requires disk from OEM)...>. You will have to insert the diskette containing the display driver for your computer. This diskette probably came with your computer, or came with your display adapter if you bought it separately.

If you are running Windows 95, use the right mouse button to click on the desktop and choose <Properties>. Then click <Settings> and set the number of colors in the <Color Palette> section.

If your display still seems fuzzy or grainy when you configure your system for 256 colors, you probably have the Effects option set to something other than Direct, or you have the number of thumbnails across or down set to a number larger than one. The reason for this is VuePrint needs to use a fixed palette for the display under these conditions, because two or more images (with 256 colors each) may be displayed on the screen at a time. VuePrint has to make a compromise palette in order to display several images at the same time, and the compromise (fixed) palette is not always optimal for either image. The solution to this is to configure your display for more than 256 colors (if your hardware supports it), or to set the effect to Direct, and the number of thumbnails across and down to one.

If your display is configured for more than 256 colors, you can improve the display quality of JPEG files by making sure the <Options|JPEG|Two pass> option is turned off. When this option is turned off, the full 16 million colors in the JPEG files are displayed. This will also let you read JPEG files faster, particularly very large JPEG files.

If you have several hard drives, you can set up an environment variable TEMP to tell VuePrint where to write temporary files when processing very large JPEG files with the <Options|JPEG|Two pass> option.

If you have a JPEG file that you suspect is bad, you can still view whatever is present in the file by turning off the <Options|JPEG|Two pass> option.

Internet Graphics (Uencode, Base64, Binhex)

You can find many different kinds of graphics files in the Internet usenet news groups. For instance, the alt.binaries.pictures... hierarchy contains the majority of the Internet traffic in graphics files.

The graphics files in the usenet news groups are usually in a <uuencoded> format (it stands for Unix-to-Unix-Encoded). These files are often broken up into several pieces, because there is a limit on the size of a file that can be sent by e-mail to some Internet systems. A uuencoded file begins with a line that looks like <begin 660 file.jpg>. It is then followed by multiple lines that begin with <M> and are 61 characters long. The last three lines are usually a line that is shorter than 61 characters long, a line with the single character <`>, and a line that contains <end> by itself.

There is another type of file that looks a lot like uuencoded files. This type of file consists mainly of fixed length lines that do not all begin with <M>, but have only the characters A-Z, a-z, 0-9, +, /, and =. There is also a line beginning with Content-transfer-encoding: base64. These are called base64 or MIME files, and they can be read directly by the <File|Open...> command or decoded by the <File|Decode...> command.

A third encoded file format that VuePrint can read is called Binhex. These files are usually produced by Macintosh computers. This type of file consists mainly of 64 character fixed length lines containing letters and special characters. The file begins with "(This file must be converted with BinHex 4.0). Binhex files can be read directly by the <File|Open...> command or decoded by the <File|Decode...> command. The file name of the decoded file is the original file name that was on the Macintosh.

An encoded file can also contain a few dozen lines of extraneous information at the top and bottom of the file. You do not have to edit these lines out by hand, since the VuePrint program automatically discards this information when processing these types of files.

The first step to decoding these images is to download the encoded files to your hard drive on your computer. Once you have downloaded the encoded files to your hard drive, use VuePrint to decode these files. To decode these files, put the pieces of the file in order in files named something like <file1.uu1>, <file1.uu2>, ... Then choose <File|Decode...> and double-click on the first file in a multiple file group (i.e. file1.uu1). When you press OK, the pieces will be put together, and the original image file will be put in the same directory as the encoded files. You can also skip the <File|Decode...> step and just use <File|Open...> to open file.uu1.

If only the top part of the image is decoded, you have probably forgotten to name the file containing part 1 of N with an extension of .uu1, part 2 of N with an extension of .uu2, etc.

You can get information about what the <File|Decode...> command is doing by turning on the Log window. Press the <L> key to toggle the Log window on and off.

If you want to diagnose problems, use a text editor to look at the uuencoded files. The first file should look something like:

```
(some header text which is ignored)
begin 644 FILE.GIF
M1TE&.A=A`19`O<`A@P+)R9<VQI0\'*P'.':JFTFFZBAIA8GDE22'EC0ZF0
MN(&3=JBCCE];1FY[8-G?YlW3VIVBKWJ/F[:_M9)Z6[6[QB5;8IZ)665ZA+A2
M9;^=;X1M7$1A/&BG<,'T$Q.5I:AQL*KB)ABDFQ51H1YAIBX;9R1GIR$>:&N
(lots of 61-character lines beginning with <M>)
(some trailer text which is ignored)
```

The last file should look something like:

```
(some header text which is ignored)
(lots of 61-character lines beginning with <M>)
MQ-$X3>3AR$<:UPT*, $) ]L3AB?XBJA(9(Q`N8XY_W0B*2(?S!&`4HX!A&5P!C
MJ*$83Q`& (?0P!3WLH`MEH`8D]!$>0ACB+6A(PPA2D`8HW*(G/=D:(DP0`6BX
9P`,JWA,RGC`>JKV6/C?JAD/L,[ ]>!`0`.VA(
`
end
(some trailer text which is ignored)
```

Each file in-between should consist of 61-character lines beginning with <M>, with header and trailer text that is ignored. Note that the 61-character lines above are just examples - your specific files will have different text.

If one of the files ends with a line that begins with <M> but is shorter than 61 characters, then it probably has been shortened, and the resulting file will be corrupt. When VuePrint reads a file that is corrupt, it displays ??? for the file type in the menu bar.

Limitations

VuePrint reads GIF, DIB, BMP, PCX, TGA and TIFF files that have a maximum width of 6000 with the 16-bit Edition, and 8192 with the Pro/32 Edition. JPG files can have a maximum width of 4000 with the 16-bit Edition, and 8192 with the Pro/32 Edition. All image files can have a maximum height of 6000 with the 16-bit Edition, and 8192 with the Pro/32 Edition. If an image can not fit into the available memory, every other pixel and line is dropped until it fits.

The maximum number of files that can be selected in the <File|Open...> is limited by a 2048 character buffer for holding the file names.

MCI commands can be a maximum of 249 characters long. The MCI command result can also be a maximum of 249 characters long.

Acknowledgments

VuePrint is based in part on the work of the Independent JPEG Group.

GIF, Graphics Interchange Format, and CompuServe are trademarks of CompuServe, Inc., an H&R Block Company.

Microsoft is a registered trademark and Windows is a trademark of Microsoft Corporation.

The Copyright information for the TIFF 6.0 code is:

```
* Copyright (c) 1988, 1989, 1990, 1991, 1992 Sam Leffler
* Copyright (c) 1991, 1992 Silicon Graphics, Inc.
*
* Permission to use, copy, modify, distribute, and sell this software and
* its documentation for any purpose is hereby granted without fee, provided
* that (i) the above copyright notices and this permission notice appear in
* all copies of the software and related documentation, and (ii) the names of
* Sam Leffler and Silicon Graphics may not be used in any advertising or
* publicity relating to the software without the specific, prior written
* permission of Sam Leffler and Silicon Graphics.
```

The Copyright information for the TIFF LZW compression code is:

```
* Copyright (c) 1985, 1986 The Regents of the University of California.
* All rights reserved.
*
* This code is derived from software contributed to Berkeley by
* James A. Woods, derived from original work by Spencer Thomas
* and Joseph Orost.
*
* Redistribution and use in source and binary forms are permitted
* provided that the above copyright notice and this paragraph are
* duplicated in all such forms and that any documentation,
* advertising materials, and other materials related to such
* distribution and use acknowledge that the software was developed
* by the University of California, Berkeley. The name of the
* University may not be used to endorse or promote products derived
* from this software without specific prior written permission.
```

File Menu

The File menu provides commands to open files, save files in six different formats, print images, advance the slide show list, copy and delete files, process uuencoded files, process zip archives, control the comments and informational windows, and exit the program.

Open...	opens an image, or sound, or movie file. You can select multiple files by using control-click to add single files, or shift-click to select a range of files. If only a single file is opened, the other <u>image, sound, and movie files</u> in the same directory are added to the slide show list. Only files of the type specified in the File Types control are added to the slide show list.
Close	closes the currently open files and clears the screen. This can be used even while a file is being loaded.
Save as...	saves the currently selected image in a file. The file format is determined by the file extension. If the file extension is not recognized, then the file format is determined by the File Type control in the dialog. The image is saved in its rotated and cropped format, with the same palette as currently displayed. The width and height of the image saved can be changed by the <u><Options Output Output width...></u> and <u><Options Output Output height...></u> menu items (if zero, the current image width or height is used). The contents of the comments window will also be saved to GIF, JPEG, and TIFF files.
Save wallpaper...	saves the currently selected image (rotated, clipped, and dithered) to the Windows directory. The image is scaled up to the size of the screen if the AutoScale option is enabled, and is always scaled down to the size of the screen if larger than the screen. This command then sets this file as the desktop wallpaper.
Print...	prints the current image.
Print setup...	displays a printer setup dialog box.
Print margins...	lets you specify the size of the margins (in millimeters) Note that these are not always margins to the edge of the paper, only margins relative to the print area. If you want to be precise about the margins, your printer manual will probably give you information about the positioning of the print area on the paper. There are 25.4 millimeters per inch, but an integral number of millimeters must be entered. Note that often one dimension of the printed image will not extend all the way to the margin, since the aspect ratio of the image does not always match the aspect ratio of the print area.
Decode...	lets you decode files that have been encoded using uuencode or base64 (MIME). These files are commonly used for transmitting <u>Internet Graphics</u> in Internet news groups. The files may contain extra header and footer lines, and files may contain parts of a uuencoded files, entire uuencoded files, or multiple uuencoded files. The only restriction is that the files will be processed in alphabetical order. The most convenient naming scheme is file.uu1, file.uu2, ... file.uu9, file.u10, file.u11, etc. You can also use .01, .02, .etc. Note that you only have to select the first file name in the series (.uu1 or .01) and the remainder will be read

automatically.

<i>Encode...</i>	lets you encode files in the uuencode format. Files are written using the same file name as the input file, but with extensions .uu1, .uu2,uu9, .u10, .u11, etc. The maximum number of lines per file can be changed by changing the <u><Options Output Encode lines...></u> menu item. This option is used to compute the number of files that must be written, and then the actual number of lines per file is computed to try to make each file roughly equal size. Very large input files may have more lines than expected, since at most 99 output files are created per input file.
<i>Display thumbnails</i>	lets you display the currently opened file list in thumbnails. Each time this command is run a new page of thumbnails is displayed. After the last page is displayed, the thumbnails are turned off.
<i>Next</i>	loads the next file in the Slide Show list.
<i>Random</i>	loads a random file from the Slide Show list.
<i>Previous</i>	loads the previous file in the Slide Show list.
<i>Copy image to...</i>	lets you make a copy of the current image file.
<i>Copy sound to...</i>	lets you make a copy of the current sound file.
<i>Copy movie to...</i>	lets you make a copy of the current movie file.
<i>Delete image...</i>	lets you delete the current image file.
<i>Delete sound...</i>	lets you delete the current sound file.
<i>Delete movie...</i>	lets you delete the current movie file.
<i>Delete files...</i>	lets you delete a number of files at once.
<i>Convert to ???</i>	lets you specify image files that will be converted to GIF, BMP, PCX, TGA, JPG, or TIF. The new file will be written in the same directory with the new extension.
<i>Unzip...</i>	lets you extract files from a zip archive. You will be asked to specify the directory that you want to extract the files into. VuePrint is able to read any zip file created by pkzip version 2.04g, but older zip files can not be read. Please refer to <u>ZIP Utilities</u> for information about utilities for reading older zip files or creating zip files.
<i>Zip info...</i>	lets you display information about files in a zip archive.
<i>Show comments</i>	displays a window containing comments contained within the currently displayed image (up to 100 lines).
<i>Show log</i>	displays a window containing a log of the last 100 VuePrint events since the program was started.
<i>Exit</i>	exits VuePrint.

Edit Menu

The Edit menu provides commands to exchange data with the clipboard. It lets you copy and paste the current image, copy and paste the comment text associated with an image, and copy the picture in the window to the clipboard. Note that the clipboard can hold either an image or comments, but not both at the same time. When an image is pasted from the clipboard the comments window is cleared.

<i>Copy image</i>	copies the current image to the clipboard. If the image has 24 bits per pixel, it is converted to 8 bits per pixel before copying to the clipboard. The image is copied in its rotated and cropped format, but at the original resolution of the image and with the original palette. If the image is dithered on the display, it will not be dithered after copying to the clipboard.
<i>Paste image</i>	copies an image from the clipboard to the current image. The clipboard must contain a bitmap, a metafile, or a device-independent bitmap.
<i>Copy comments</i>	copies the text in the comments window to the clipboard.
<i>Paste comments</i>	copies text from the clipboard to the comments window.
<i>Copy window</i>	copies the current window to the clipboard. The window is copied at the resolution of the window and with the same palette as the window.

Image Menu

The Image menu provides commands to manipulate the current image. Note that images are saved with the zooming, cropping, rotating, mirroring, and flipping applied, with the same brightness, contrast, and invert settings as currently displayed. The brightness, contrast, and invert settings for the image are also used for adjusting the brightness, contrast, and invert settings on the printouts.

<i>Zoom in</i>	zooms the image by a factor of two. If the <u><Options Auto Scale></u> is selected, images smaller than the window will be scaled up to fill the window.
<i>Crop</i>	crops borders off the edges of the image. A border is detected by searching for borders that contain significantly fewer colors than the image as a whole.
<i>Zoom out</i>	zooms out by a factor of two.
<i>Rotate</i>	rotates the image 90 degrees clockwise.
<i>Mirror</i>	mirrors the image horizontally.
<i>Flip</i>	flips the image vertically.
<i>Brighter</i>	increases the overall brightness of the image (and printout).
<i>Dimmer</i>	decreases the overall brightness of the image (and printout).
<i>More contrast</i>	increases the contrast (gamma) of the image (and printout).
<i>Less contrast</i>	decreases the contrast (gamma) of the image (and printout).
<i>Invert</i>	inverts the image. This is useful if you want to print an image, such as a map, that consists of white graphics on a black background.
<i>Reset</i>	resets the image to the default zoom factor, rotation, brightness, contrast, and invert settings.
<i>Reload</i>	reloads the currently displayed image. This is useful if you have changed options that effect how an image is loaded, particularly JPEG options.

Sound Menu

The Sound menu provides commands to manipulate the currently loaded sound file.

<i>Enable</i>	enables playing sounds.
<i>Synchronous</i>	enables playing sounds synchronously. This is useful if you have a sound driver for the PC speaker, which requires playing sounds synchronously. MIDI files can not be played using the PC speaker sound driver.
<i>Louder</i>	increases the volume for .WAV files. Does not work with the PC speaker driver.
<i>Softer</i>	decreases the volume for .WAV files. Does not work with the PC speaker driver.
<i>Loop</i>	replays the current sound file when it reaches the end.
<i>Replay</i>	replays the current sound file.

Movie Menu

The Movie menu provides commands to manipulate the currently loaded movie file.

<i>Enable</i>	enables playing movies.
<i>Synchronous</i>	enables playing movies synchronously. This is not really useful, but is provided in case you have an MCI driver that does not work without this option.
<i>Loop</i>	replays the movie file when it reaches the end. This only works if you play movies asynchronously.
<i>Replay</i>	replays the current movie file.

Slideshow Menu

The Slideshow menu provides commands to set up a slide show. When the slide show is running, all other functions in VuePrint can be used. The only thing that running a slide show does is advance to the next image, sound, or movie file after the delay between images, sounds, or movies completes. This menu also provides options for controlling what happens when various events happen while the slide show is running.

<i>Run slideshow</i>	controls the running of slide shows. The list of files for the slide show can come from two places - multiple files opened with <u><File Open...></u> ,or <u><Slideshow File spec...></u> . The order of displaying files in a slide show is either the next, previous, or a random file in the list, depending on how the current file was selected. If the <u><Slideshow Random order></u> option is selected, then a random file is always selected as the next image in a slide show sequence.
<i>Go to slide...</i>	lets you enter the file name of a file that is already in the slide show list. This file, if it is found in the list, will be loaded and displayed, otherwise the current file will be reloaded and displayed.
<i>File spec...</i>	lets you enter the file specification of files for the slide show list. The first file found is loaded and displayed. Note that this file spec can be a single file name of a .SLI file (e.g. c:\test\slides.sli), a directory where images are located (e.g. c:\images\), a wildcard specification (e.g. c:\images*.gif), or a special name indicating that all subdirectories should be searched (e.g. c:\images...). If a directory name is specified, and the Auto Search option is enabled, all subdirectories will also be searched. The types of files that are selected are those selected in the <u><File Open...></u> dialog box.
<i>Delay between images...</i>	lets you enter the minimum delay between successive image files in a slide show.
<i>Delay between sounds...</i>	lets you enter the minimum delay between successive sound files in a slide show.
<i>Delay between movies...</i>	lets you enter the minimum delay between successive movie files in a slide show.
<i>Random order</i>	displays images in the slide show list in random order while the slide show is running.
<i>Erase new pages</i>	erases the whole screen when the slideshow is running with thumbnails, and slideshow advances from the last thumbnail to the first thumbnail.
<i>Keystroke event</i>	controls what happens when a key is pressed during a slide show. There are 11 possible actions. The default is to do what normally happens when a key is pressed (i.e. do a menu item). You can instead choose to have the print command or save command automatically executed when a key is pressed, stop the slideshow, exit the program, or do nothing.
<i>Mouse button event</i>	controls what happens when a mouse button is pressed during a slide show. The different events are described above.

<i>Mouse movement event</i>	controls what happens when the mouse is moved during a slide show. The different events are described above.
<i>Image display event</i>	controls what happens after an image is displayed in a slide show. The different events are described above.
<i>Screen done event</i>	controls what happens after the last thumbnail is displayed in a slide show. The different events are described above.
<i>Slideshow done event</i>	controls what happens after the last image in a slide show is displayed. The different events are described above.

Options Menu

The Options menu provides commands to manipulate various VuePrint options, and to save and restore all options (including window positions).

Save options	saves the current setting of all <u>options</u> in VUEPRINT.INI. This file is located in the same directory as VUEPRINT.EXE. If you're running VuePrint with a different file name (i.e. VUEPRO32.EXE), then the options will be stored with the same name (i.e. VUEPRO32.INI).
Restore options	restores all <u>options</u> from the .INI file.
Default options	sets all <u>options</u> to their default values. If you want to save these default settings in the .INI file, choose <u><Options Save options></u> after this.
Remember options	saves the current setting of all <u>options</u> when the program exits.
Thumbnails enable...	turns on thumbnail display mode. This will divide the window into a rectangular grid for displaying multiple images in the window at the same time.
Thumbnails random	displays images in thumbnails in random positions on the screen. The size of these thumbnails is determined by the number of thumbnails across and down. This option has no effect if both the number of thumbnails across and down are set to 1.
Thumbnails annotate	displays the file name of the image at the bottom of the thumbnail. This option has no effect if both the number of thumbnails across and down are set to 1, or if the <u><Options Thumbnails Random></u> option is selected.
Thumbnails outline	displays an outline around each thumbnail.
Thumbnails across...	lets you enter the number of images to display in thumbnails in a window in the horizontal direction. Note that if you are using a 256-color display and multiple thumbnails across, the image will appear grainy due to VuePrint using a fixed palette for dithering.
Thumbnails down...	lets you enter the number of images to display in thumbnails in a window in the vertical direction. Note that if you are using a 256-color display and multiple thumbnails down, the image will appear grainy due to VuePrint using a fixed palette for dithering.
Fill window	removes the border and menu bar from the window. You can toggle this on and off by pressing the Escape key.
Always on top	displays the VuePrint window in front of all other windows. For instance, if you have a clock displayed on top of all your windows and you run VuePrint, this option will make the VuePrint window cover the clock window.
Display in color	enables displaying images in color.
Display dithered	on a 256-color display, uses a fixed color palette that is optimized to look good for a wide range of images. Use this option if you want to run multiple copies of VuePrint at the same time on a 256-color display.

<i>Display caption</i>	displays a caption at the bottom of the picture containing the file name.
<i>Enable true color</i>	lets VuePrint use the full capabilities of a display with more than 256 colors. If this option is not enabled, then VuePrint will display at most 256 colors on the display. This option is useful to compensate for bugs in display drivers, particularly some older Cirrus Logic display drivers.
<i>Enable 3d controls</i>	lets VuePrint use the 3-D controls library to give 3-D effects to dialog boxes. It searches for the 3-D controls DLL in the Windows system directory to determine whether to use 3-D controls. The 3D controls library is not used with Windows 95.
<i>Enable large dialogs</i>	causes VuePrint to use larger Open/Save dialogs instead of the standard Windows File Open/Save dialogs.
<i>Print in color</i>	enables printing images in color.
<i>Print dithered</i>	lets you print images using VuePrint dithering. You may want to enable this option when working with some types of dot-matrix printers that normally use a coarse pattern to approximate continuous tone images. If you use this option, set up the printer dialog to use no dithering since it is redundant and will just make the printout take longer.
<i>Print caption</i>	displays a caption at the bottom of the printout containing the file name.
<i>Background color...</i>	lets you choose the background color for images, which is used for the border around images.
<i>Foreground color...</i>	lets you choose the foreground color, which is used to display text and borders for thumbnails.
<i>GIF Interlaced</i>	causes GIF files to be written with interlacing. This makes the files appear progressively when viewed by some types of interactive viewers.
<i>GIF Transparent</i>	causes GIF files to be written with transparency. VuePrint finds the most commonly used color on the border of the image, and uses this for the transparent color. This is useful when creating GIF files for use on Web pages.
<i>GIF Colors...</i>	sets the maximum number of colors to be written to a GIF image. If this is less than the number of colors in the image, a new color palette will be computed and the image reduced to this new color palette.
<i>GIF LZW enable</i>	causes GIF files to be written with LZW compression. You may want to write the GIF files without any LZW compression for specialized applications.
<i>JPEG Two pass</i>	causes JPEG files to be read in two passes. The first pass analyzes the colors, and the second pass reduces the data from 24-bits to 8-bits per pixel. If this option is turned off, the full 24-bits per pixel will be stored in memory. Note that only 8-bits per pixel will be kept in memory if the <u><Options JPEG Use Monochrome></u> option is selected, or if the JPEG file only has one color component. Note also that the image will still look quite good on an 8-bit display if this option is not chosen. If the <u><Options JPEG Two pass></u> option is not selected, images will load a bit faster, but will take a bit longer to be painted on the screen on 8-bit

displays. However, very large JPEG files will load much faster with this option turned off because the JPEG code will not need to write a temporary file between passes.

<i>JPEG Use dithering</i>	enables using Floyd-Steinberg dithering with the two-pass algorithm.
<i>JPEG Use monochrome</i>	enables converting the JPEG file to 8-bits per pixel of monochrome data when loading. This also significantly speeds up loading JPEG files.
<i>JPEG Output monochrome</i>	causes JPEG files to be written in monochrome (black/white).
<i>JPEG Output optimize</i>	performs entropy optimization when writing JPEG files, which should improve the quality of the image.
<i>JPEG Output quality...</i>	lets you set the quality of the image when writing a JPEG file. The quality ranges from 0 to 100, with 75 being the normal setting. The lower the quality, the smaller the size of the JPEG file.
<i>JPEG Output smoothing...</i>	lets you set the amount of smoothing done on the image before writing a JPEG file. The smoothing ranges from 0 to 100, with 0 being the normal setting. Smoothing is sometimes useful when the image is dithered, or has a lot of noise in it.
<i>JPEG Kbytes memory...</i>	lets you set the maximum amount of memory used for buffering data when you are using the <u><Options JPEG Two pass></u> option. This should normally be about half the amount of physical memory on your system.
<i>TIFF No compression</i>	writes TIFF files with no compression.
<i>TIFF CCITT RLE</i>	writes black/white TIFF files with CCITT RLE compression.
<i>TIFF CCITT Group 3</i>	writes black/white TIFF files with CCITT Group 3 compression.
<i>TIFF CCITT Group 4</i>	writes black/white TIFF files with CCITT Group 4 compression.
<i>TIFF LZW</i>	writes grey-scale and color TIFF files with LZW compression.
<i>Quick look</i>	causes images to be read quickly, and every 8th pixel and line to be discarded. This is particularly useful for getting a quick look at JPEG files, since it is approximately seven times faster than normal JPEG file loading. Choosing this option causes the currently displayed image to be reloaded.
<i>Sort palette</i>	causes images that have palettes to sort the palette according to how often the colors are used. This is useful because Windows can only display 236 different colors, but many images have 256 colors. If the palette is sorted to favor the more commonly used colors, the appearance of images is often improved.
<i>Output width...</i>	sets the width of the file written with <u><File Save as...></u> (if non-zero).
<i>Output height...</i>	sets the height of the file written with <u><File Save as...></u> (if non-zero).
<i>Encode lines...</i>	sets the maximum number of lines to write to a single file while encoding files. Note that the number of lines in a file may be larger than this if the

total number of files would otherwise be larger than 99. The default value of 400 is set so these files can be sent in pieces on America Online.

Dither quality

lets you trade off between dither quality and speed. The low quality setting paints the screen the fastest, and the high quality setting looks the best. The default is the medium quality setting.

Effects

lets you choose how the screen is repainted. There are 12 different effects you can choose for repainting. Note that if you are using a 256-color display and an effect other than <Direct>, the image will appear grainy due to VuePrint using a fixed palette for dithering.

Auto Scale

automatically scales images to fill the window. It maintains the width/height ratio of the image, so one dimension of the image may not extend to the edge of the window.

Auto Fit

when the <Options|Auto|Scale> option is off, automatically reduces large images to fit inside the window. Also causes the areas of an image selected by the mouse to be fit within the window borders.

Auto Crop

automatically crops images after loading. The borders around an image are cropped if they contain substantially fewer colors than the image as a whole.

Auto Dither

automatically dithers images if there is a substantial percentage of the picture that can not be represented accurately with the colors that are available on the display.

Auto Comments

automatically displays the comments window after loading an image that contains comments, and removes the comments window if the image contains no comments. Only GIF, JPEG, and TIFF files can contain comments.

Auto Search

automatically searches all subdirectories (up to 8 levels deep) for image files when a directory is specified in the File spec... option.

Auto Resume

automatically saves the current directory and current image on exit. If the slide show is running when the program starts, the slide show starts up where it left off. The current directory is also restored when the program is restarted, unless VuePrint is started from the File Manager (i.e. has file names on the command line). The current directory can be overridden by the /Directory=xxx command line option.

Startup password

causes VuePrint to prompt you for the screen saver password (if it has been set up) before starting VuePrint.

Slideshow password

causes VuePrint to prompt you for the screen saver password (if it has been set up) before stopping a running slide show.

Set password...

lets you set up or change the screen saver password. If it has previously been set up, you need to enter the old password before being able to set up a new password. You can delete the old screen saver password by editing CONTROL.INI in the Windows directory and deleting the line that begins with <Password=>.

Utilities Menu

The Utilities menu provides commands to install and remove VuePrint, and to install, remove, and configure the VuePrint Screen Saver.

<i>Install VuePrint</i>	saves current <u>File Manager</u> associations, sets up associations for VuePrint, and installs the VuePrint icon in the Accessories window.
<i>Remove VuePrint</i>	reverses the above, restoring the system to the original state.
<i>Backup VuePrint</i>	makes a backup copy of VuePrint to a floppy disk.
<i>Install screen saver</i>	installs VuePrint as a screen saver for Windows. VUEPRINT.EXE is copied to VUESAVER.SCR in the Windows directory, and VUEPRINT.HLP is copied to VUESAVER.HLP. VUESAVER.INI is deleted.
<i>Remove screen saver</i>	reverses the above, disabling the Windows screen saver.
<i>Configure screen saver</i>	lets you specify the options for the VuePrint screen saver. These options are stored in VUESAVER.INI in the Windows directory. Note that any option that can be set up in VUEPRINT.INI can also be put into VUESAVER.INI. The only difference between the two option files is that the default options for the screen saver are different from the default options for VuePrint.
<i>Test screen saver</i>	starts the currently installed screen saver. If you have installed the VuePrint screen saver, it will be started. Otherwise, whatever screen saver that is installed will be started.
<i>Install extension</i>	lets you tell the File Manager that a given three-letter file extension is associated with VuePrint. Whenever a file with this extension is double-clicked in the File Manager, VuePrint will be started to display this file.
<i>Remove extension</i>	removes an extension that was previously configured, and restores the previous association for that extension. Note that all VuePrint file associations can be removed with the <u><Utilities Remove VuePrint></u> menu item.

Help Menu

The Help menu provides commands for getting help and other information.

<i>Contents...</i>	displays the table of contents of this Help file.
<i>Using help...</i>	displays help about the Help program.
<i>About...</i>	displays information about VuePrint, including how to get support and upgrades.

ZIP Utilities

VuePrint is able to read zip files created by pkzip version 2.04g and later. If you have a zip file created by an older version of pkzip, or if you want to create zip files, you will need to get a zip utility.

The most commonly used MS-DOS utility for reading and writing zip files is pkzip version 2.04g. It can be found on-line on America Online, CompuServe, and most other on-line services. There are several excellent Windows programs for working with zip files, most notably WinZIP. To find WinZIP on America Online, go to keyword <Software> and search using <WinZIP> as the keyword. On CompuServe, GO IBMFF and search using <WinZIP> as the keyword.

MCI Drivers

To play sound files and movie files, you need to install MCI (Multimedia Command Interface) drivers. You can tell what MCI drivers are already installed on your system by looking in WIN.INI in the section labeled [mci extensions]. .WAV files should be <waveaudio>, .MID files should be <sequencer>, .AVI files should be <AVIVideo>, .MMM files should be <MMMovie>, .MPG files should be <mpegvideo>, .FLC and .FLI files should be <Animation1>, and .MOV files should be <QTWVideo>.

The waveaudio and sequencer drivers usually come with sound cards.

To install AVIVideo, you need to get the Microsoft <Video for Windows> add-on. The Animation1 driver is part of the Autodesk Animator add-on. QTWVideo is part of <Quicktime for Windows> from Apple Computer.

All of these video MCI drivers can be found by going to keyword <Viewers> on America Online, the IBMFF (IBM File Finder) area on CompuServe, or via WWW at <http://www.hamrick.com/upg.html>.

