Wallpaper Manager Plus Help Index

Introduction to Wallpaper Manager Plus
Version 2.80

Wallpaper Manager Plus is a flexible utility for managing and displaying desktop <u>wallpapers</u> under Windows™. Wallpaper Manager allows you to assemble and edit multiple wallpaper display lists; each list stored in its own *Gallery* file. Rather than using DOS filenames to refer to these wallpapers you can assign each one a descriptive title. Wallpaper Manager offers four <u>Switching Modes</u> governing when new wallpapers are selected and three <u>Selection Modes</u> that determine the order of selection. Wallpaper Manager can display `BMP/DIB`, `RLE`, `GIF`, `PCX`, and `GLZ` <u>format</u> files. It can also convert files between all these formats.

Wallpaper Manager is available in both Win16 (16-bit) and Win32s (32-bit) builds. Information in this help file applies to both variants unless otherwise noted. Your build type is indicated on your distribution diskette and is also shown in the <u>Help/About</u> dialog.

Certain limitations apply when using an unregistered copy of Wallpaper Manager. Your copy will be unregistered if you downloaded it from a BBS or other shareware source and have not obtained a registration number from me. <u>Click here</u> for more information about shareware limitations and obtaining a registered copy of the program.

Requirements

Win16 build: Windows/Windows for Workgroups 3.1x running in standard or enhanced mode or Windows NT 3.1 (fully compatible with the WoW subsystem).

Win32s build: Windows NT 3.1 or Windows/Windows for Workgroups 3.1x with Win32s extension DLLs.

Both builds: VGA or higher display and mouse. Approx. 600K hard disk space for the basic program package.

New since Version 2.54

1. Wallpaper Manager now supports playing both `WAV` and `MID` <u>sound</u> files whenever a new wallpaper is displayed. See <u>Gallery/Wallpaper Sounds</u>.

2. You can now put any bitmap in the <u>Main Window</u> logo panel.

3. The wallpaper list can now display either <u>titles or filenames</u> in selectable fonts and colors.

4. The main window is now sizable.

5. Wallpaper Manager can now operate as a stand-alone <u>screen saver</u>.

6. A new "boss" <u>hot key</u> lets you instantly blank whatever wallpaper is being displayed.

7. Network operation is supported and a network server version is separately available. <u>Click here</u> for more information.

Removed in Version 2.80

1. The Setup/Make WINALT.COM alternate start-up logo option (was in v2.60 and later).

2. The Setup/Enable `WAV` Hook option for `WLZ` sound files (was in v2.72 and later).

Win32s Build Now Available

As noted above, Wallpaper Manager is now available in a 32-bit, Win32s build. This runs as a native 32-bit application under Windows NT and under Windows 3.1x if you have the Win32s extension DLLs installed. <u>Contact me</u> for a free copy.

Support Policy

Support for Wallpaper Manager Plus is available by phone Monday through Friday, 9:00 am to 7:00 pm Eastern Time. If I do not answer please leave a message on my machine and I will return your call usually within one working day. You can also contact me through CompuServe.

Refund Policy

If for any reason you are not completely satisfied with this program you may return it to me within 60 days of purchase for a full refund.

Click here for my address, phone, and CServe account number.

Changes Wallpaper Manager Plus Makes To Your Windows System

Files: Setup copies the Wallpaper Manager files to the hard disk directory you specify in the Install dialog. The Help/Uninstall menu option will delete all and only these files. It will also delete the Wallpaper Manager directory provided it is empty following the file deletions.

WIN.INI: Wallpaper Manager may modify the `load=` line in the `[windows]` section if you enable Autostart. Any change is undone if you Uninstall. Wallpaper Manager also changes the `wallpaper=` line in the `[desktop]` section. If you Uninstall and the current wallpaper is not in `BMP`, `DIB`, or `RLE` format then this line will be set to null; otherwise it is unchanged. Under Windows NT the Win32s build makes these changes in the Registry instead.

SYSTEM.INI: No changes.

AUTOEXEC.BAT and **CONFIG.SYS:** No changes.

Program Items and Groups: Setup creates a Wallpaper Manager Plus program group. This contains a WallPlus program item that you can use to launch Wallpaper Manager Plus and a WM+ ReadMe item that will display the `README.TXT` in your default editor (usually Windows Notepad). Uninstall does not delete the items or the group.

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Registering Wallpaper Manager

Wallpaper Manager is sold directly in a registered version and is also distributed as shareware in an unregistered version.

If you obtained your copy from a BBS or other shareware source it is (or should be) an unregistered copy. You can determine if yours is an unregistered shareware copy by clicking Help/About. The word Unregistered will appear in the **Registered to:** box.

You are free to try the unregistered program out and see if it meets your needs. You are also free to copy the unregistered distribution files and to pass them on unmodified and complete to others.

If you like the program and make regular use of it you must purchase a registered copy. Not doing so is, for one thing, a violation of my legal copyright. More importantly it hurts the shareware marketing system which helps make good software widely available for low cost and minimal risk to the buyer.

It has been my experience that well-intentioned individuals (myself included) will occasional overlook registering a shareware product they routinely use. To help prevent this oversight the unregistered version of Wallpaper Manager displays a nag message when it starts and occasionally thereafter during wallpaper changes. As a further inducement the unregistered version does not support `GLZ` and `GIF` format wallpapers. Otherwise, it is identical to the registered version.

When you register you will also get the most current version of Wallpaper Manager (shareware postings can be quite out of date). In addition you will be entitled to automatic notification of any major upgrades. These will be made available either for free or for minimal cost.

For your convenience an order form is available in this help. Just click below to get to the form. Once there you can click File/Print Topic in the Help window menu to print a copy.

Click here for Order Form

Wallpaper Manager

Registration Order Form

From: _____   To: Curtis Marx
                                                        52 Highland Avenue
       _____   Arlington, MA   02174
                                                        tel: (617) 648-8919
       _____   fax: (617) 648-8921
                                                        CIS: [72560,1110]
       _____

       Tel:_____   FAX:_____   Date:_____

       E-Mail:_____
             (Internet, CIS, Genie, AOL, or Prodigy)

Please send me the latest version of Wallpaper Manager Plus.

Operating System (please   Windows 3.1 or Windows for   _____
check one or both):   Workgroups 3.1x (Win16)
You will be sent the Win16
build if neither selection   Windows NT 3.1 or Windows 3.1x w/   _____
is marked.   Win32s Extensions (Win32s)

Media type (please check one):   3.5" (1.44M)   _____
You will be sent 3.5 diskettes
if neither selection is marked.   5.25 (1.2M)   _____

       Qty: _____   x $ 20.00   =   _____

       Mass. Residents Only: (5% sales tax = $1.00)   _____

       Add $3.00 for additional postage if outside the continental
       United States (all shipments by Air Mail/First Class):   _____

       Total: _____

Make check payable to Curtis Marx and mail with this form to the address above.

Where did you get your shareware copy of Wallpaper Manager? _____

Comments or suggestions: _____

_____

_____

Thank you for purchasing a registered copy of Wallpaper Manager!

Site licenses are also available. Please contact me for more information.

Running Wallpaper Manager

Autostart

When the <u>Autostart</u> menu item in the Setup menu is checked Wallpaper Manager will be loaded automatically whenever you start a Windows session.

Autostart in Windows 3.1

Under Windows 3.1 you can also launch Wallpaper Manager at the start of every Windows session by including its program item (icon) in the StartUp program group. If you do so, you may want to check the "Run Minimized" box in the Program Item Properties dialog. See your Windows documentation for more information about the StartUp program group and setting icon properties. If you use Autostart to load Wallpaper Manager then do not put it in the StartUp program group.

`GAL` File Association

Wallpaper Manager supports file association. You can associate the `GAL` file extension with Wallpaper Manager by adding the line,

```
gal=[d:\some\path\]wall.exe ^.gal
```

to the **[extensions]** section in your `WIN.INI` file. You can also do this using File Manager's Associate dialog.

Drag and Drop

You can drop a gallery file on Wallpaper Manager's icon or window and it will open that gallery.

When Wallpaper Manager is running you can also drop bitmap files in any of the supported formats on its window or minimized icon. It will add these to the current gallery in <u>Add All</u> mode.

Popped Up, Iconized, and Hidden States

Wallpaper Manager can be in one of three states when it is running:

Popped Up   Wallpaper Manager's main window is showing

Iconized   Wallpaper Manager's icon is displayed somewhere on the desktop

Hidden   Wallpaper Manager is invisible

As a primarily "background" utility you will probably want to run Wallpaper Manager in the hidden state most of the time so it does not clutter up desktop real estate. To do this you should make sure that the Always Iconize Instead of Hide checkbox in the <u>Setup/Modes</u> dialog is unchecked. You should also define a pop up <u>hot key</u> to make it easy to bring up the program's window when you want access to it.

Wallpaper Manager Switching Modes

The Switching Mode determine when Wallpaper Manager selects the next wallpaper to display. Switching Mode is set via the <u>Modes</u> dialog. The Switching Mode setting is specific to each <u>gallery</u>.

Manual   Use Wallpaper Manager in this mode if you only intend to select wallpapers manually.

Startup Only   In this mode Wallpaper Manager will display a new wallpaper on the desktop every time a new Windows session is started.

Timer Only   In this mode Wallpaper Manager puts a new wallpaper on the desktop at fixed intervals.

Startup & Timer   This mode combines the above two so that a new paper appears at the start of every Windows session and thereafter at fixed intervals.

For information on how Wallpaper Manager determines which paper to select next see <u>Selection Modes</u>.

Startup and Timer modes require that Wallpaper Manager be loaded during the Windows session (see <u>Running Wallpaper Manager</u>).

Wallpaper Manager Selection Modes

The Selection Mode determines the order in which Wallpaper Manager picks wallpapers from its display list. Selection Mode is set via the <u>Modes</u> dialog. The Selection Mode setting is specific to each <u>gallery</u>.

Random   Wallpaper Manager randomly picks a new wallpaper from the display list. The display list order itself is not modified.

Ran/Seq   Wallpaper Manager increments through the display list until it reaches the end. Then it randomly shuffles the list and resumes stepping from the beginning.

Sequential   Wallpaper Manager increments through the display list but does not reshuffle when it reaches the end.

Wallpaper Manager allows you specify a display sequence in Sequential Mode (using the <u>Order</u> dialog). Hence, you can use Wallpaper Manager as a simple presentation tool if your slides are in a supported <u>format</u>. In <u>Timer Only Mode</u> Wallpaper Manager will flip through your slides automatically.

The Wallpaper Manager Main Window

Menu Bar

Gallery, Setup, Browse, Window, and Help.

Several menu selections are also available via the two button bars described below.

Upper Button Bar

Add, Remove, Org'ze, + (plus), Display, and - (minus)

When visible the upper button bar can be hidden by selecting Hide Upper Buttons in the Window menu. When hidden select Show Upper Buttons in the Window Menu.

Wallpaper Manager Logo Panel

When visible the logo panel bitmap can be hidden by selecting Hide Logo in the Window Menu. When hidden select Show Logo in the Window Menu. You can display any bitmap in the logo panel. See Window/Pick Logo File.

Mouse Shortcuts:

Double-click left anywhere in the logo panel to display the current logo bitmap as wallpaper.

Double-click right anywhere in the logo panel to pop up the Pick Logo File dialog.

Lower Button Bar

Open, Modes, 123\ABC, Hide, and Exit

When visible the lower button bar can be hidden by selecting Hide Lower Buttons in the Window menu. When hidden select Show Lower Buttons in the Window Menu.

Upper Message Bar

The left panel lists the current gallery file. The middle panel shows a count of wallpapers in the current gallery. When Wallpaper Manager is running in a timer mode the time remaining until the next wallpaper change is displayed in the right panel.

Wallpaper List Box

This list box shows all the wallpapers in the current gallery. You can list wallpapers either by their titles or by their filenames (see Window/Show Filenames\Show Titles). Titles can be up to fifty characters in length. You assign titles to wallpapers whenever you add them to the list. You can select wallpapers from this list for editing, removal, deletion, or display.

When titles are displayed a symbol appears to the right indicating the format of the underlying bitmap file (i.e., `BMP`, `GIF`, etc.).

You can control the font and colors used in the wallpaper list with the Setup/Wallpaper List Font and Setup/Wallpaper List Color dialogs.

Mouse shortcuts:

Double-click left on a selection to display it.

Double-click left with the shift key depressed to display a selection in the logo panel.

Double-click right anywhere in the list box to return the highlight to the currently displayed wallpaper.

Lower Message Bar

When you select a title in the list box the left panel shows the bitmap file associated with that title. If the

main list is displaying filenames then the left panel shows the associated title instead. The center panel shows the size of the file in bytes (b), kilobytes (K), or megabytes (M) as appropriate. The right panel shows the wallpaper's <u>display mode</u>, **T** for tiled or **C** for centered.

The Help Menu

This menu offers three options:

Contents   Accesses this on-line help.
                         Keyboard: F1

_____

About...   Pops up the About Dialog which shows the program version number, build
                         type (Win16 or Win32s), current operating system, and user name (or
                         Unregistered for shareware copies). My address and phone are also listed
                         there.

_____

Uninstall

Uninstall

Uninstall causes Wallpaper Manager to remove itself from your system.

What Uninstall Removes

Uninstall will remove all of the files transferred by Setup from the Wallpaper Manager distribution diskette to the Wallpaper Manager directory. It will also delete the Wallpaper Manager directory itself unless you have placed additional files or subdirectories there.

If Wallpaper Manager is referenced on the `load=` line in your `WIN.INI` file (see Autostart) it will remove this reference. If the current wallpaper is not in `BMP`, `DIB,` or `RLE` format then the `wallpaper=` line in `WIN.INI` will be set to null; otherwise it is unchanged. For Win32s builds under Windows NT these changes are made in the Registry instead.

What Uninstall Does Not Remove

Uninstall will not remove gallery files other than `WALL.GAL`.

It will not delete any of your wallpaper (bitmap) files except for those that come with Wallpaper Manager itself (usually `WALL.GLZ`, `TVENUS.GLZ`, and `MAJA.GLZ`).

It will not delete the Wallpaper Manager Plus program group or WallPlus program item (icon) created by Setup.

The Gallery Menu

Gallery Files

Unlike some wallpaper utilities Wallpaper Manager does not limit you to a single wallpaper list. Instead Wallpaper Manager can maintain multiple wallpaper collections. Each collection is stored in a separate "gallery" file. Note that galleries do not actually contain wallpapers. Instead they incorporate a list whose entries "point" to the hard disk locations of the actual bitmap files.

Galleries let you organize your wallpaper collection into different viewing groups. For example, you can have a working hours gallery that sets a suitably conservative tone during the daylight hours. Then, after 5:00, you can switch to an after hours gallery with more free-wheeling contents.

In addition to a wallpaper list Gallery files also contain various operating settings such as Switching Mode, Selection Mode, Duration, etc. (See the Sample Gallery File for a detailed list of gallery settings). Each gallery also has a title. The title is displayed in the Main Window caption after the gallery has been opened.

Gallery Menu Options

New...	Keyboard: Alt+N
Clear	Keyboard: Ctrl+C
Open...	Keyboard: Alt+O Mouse: Click the Open button [lower]
Save As...	Keyboard: Ctrl+S
Merge...	Keyboard: Ctrl+G
Delete...	Keyboard: Ctrl+D

Organize...	Keyboard: Alt+Z Mouse: Click the Org'ze button [upper]
Add...	Keyboard: Alt+A Mouse: Click the Add button [upper]
Remove	Removes the selected wallpaper from Wallpaper Manager's list. This does not delete the underlying wallpaper file from your hard disk. Keyboard: Alt+R Mouse: Click the Remove button [upper]
Delete	Keyboard: Ctrl+W
Edit...	Keyboard: Ctrl+E or Enter
Order...	Keyboard: Ctrl+R
Sound...	Keyboard: Ctrl+Z

Exit	This terminates Wallpaper Manager. Keyboard: Alt+X Mouse: Click the Exit button [lower]

Gallery/New

The Gallery/New dialog allows you to create a new empty gallery. The dialog provides file and directory boxes with which you can locate gallery files. If you select a gallery file in the files list its current title is displayed in the Gallery Title box.

To create a new gallery type the new filename in the edit box above the file list. If you do not enter an extension Wallpaper Manager uses `.GAL`. Each gallery must have a non-blank title which you enter in the Gallery Title edit box.

If you specify an existing gallery its wallpaper list will be cleared. This has the same effect as Gallery/Clear except you also have the option of changing the gallery's title.

To change a gallery's title without clearing it use Gallery/Save As.

The new or cleared gallery inherits local settings such as Switching Mode, Selection Mode, Duration, etc. from the current gallery.

Gallery/Clear

Gallery/Clear empties the wallpaper list of the current gallery. This does not delete the underlying wallpaper files. No other gallery settings (i.e., Switching Mode, Selection Mode, Duration, etc.) are changed.

If you want to change the title of a gallery in addition to clearing its wallpaper list use Gallery/New.

To change a gallery's title without clearing it use Gallery/Save As.

Gallery/Open Gallery

The Gallery/Open Gallery dialog provides file and directory boxes with which you can locate gallery files. When you select a gallery file in the files list its title is displayed in the Gallery Title box. You cannot type into the title or filename boxes in this dialog. The selected gallery is opened and becomes the current gallery.

Gallery/Save As

The Gallery/Save Gallery As dialog provides file and directory boxes with which you can locate gallery files. If you select a gallery file in the files list its title is displayed in the Gallery Title box. To save a gallery under a new name just type your selection in the edit box above the file list. If you do not enter an extension Wallpaper Manager uses `.GAL`.

You can optionally use the Gallery Title edit box to change the title of the gallery before you save it. Otherwise the new gallery file will keep the original title.

Use Gallery/Save As if you just want to change the title of a gallery. Simply select the current gallery as the "Save As" file, type in the new title, then click OK.

NOTE: Changes you make to the current gallery are immediately reflected in the underlying Gallery file. This is why there is no Save option in the Gallery menu; it is unnecessary. However, for this reason, if you want to create a new gallery by editing the contents of the current one, first save the current gallery under the new name and then make any changes.

Gallery/Merge Galleries

The Gallery/Merge Galleries dialog provides file and directory boxes with which you can locate gallery files. If you select a gallery file in the files list its title is displayed in the Gallery Title box. You cannot type into the title or filename boxes in this dialog.

When merging Wallpaper Manager reads in the wallpaper list from the gallery file you select. Wallpapers are only merged in if they are unique as to both title and underlying file. This is the same restriction that applies when <u>adding</u> wallpapers.

Gallery/Delete Gallery

The Gallery/Delete Gallery dialog provides file and directory boxes with which you can locate gallery files. When you select a gallery file in the files list its title is displayed in the Gallery Title box. You cannot type into the title or filename boxes in this dialog. Click OK to delete the selected gallery. You cannot delete the current gallery.

Gallery/Organize Wallpapers

Overview

The Gallery/Organize Wallpapers dialog allows you to manage the locations and formats of your wallpaper files. With it you can move or copy wallpapers from one directory to another. It also provides an update feature to help you keep galleries which share wallpapers in sync with one another when you move wallpapers around.

Move or Copy

To move or copy wallpapers first select one or more titles from the Wallpaper Titles box. Hold down the left mouse button to select a range of titles. Hold down CTRL in conjunction with the left mouse button to select additional titles or ranges of titles. You can also use the SHIFT key in conjunction with the movement keys (Up Arrow, Down Arrow, etc.) to select a range of titles. The total number of bytes in the files you select is displayed immediately above the list.

If you would prefer to look at wallpaper filenames instead of titles just click the Filenames button on the right. Clicking it again changes the list back to titles.

Pick out a destination directory for the selected wallpapers using the directory and drive lists. The total number of bytes free on the destination device is displayed just above the directory list.

Use the Conversion combo box to select a conversion mode. This governs what conversion, if any, to perform during the copy or move operation. See Wallpaper File Formats for more information about these formats. Use None if you simply want to move or copy files without affecting their formats.

Click the Copy or Move button to begin transferring files. The current gallery is updated to reflect the changes.

Copy N/U (Copy No Update)

Click Copy N/U to copy files without updating your gallery to reflect their new locations. This is useful if you want to copy some wallpapers to a floppy disk, for example.

Note: For any conversion setting other than None you will generally be compressing or expanding files. As a result the Bytes Selected indicator may not accurately reflect the total size of the selected files on the destination device.

Update

Sometimes you may have wallpaper files that are listed in more than one gallery. If you open one gallery and move such multiply referenced wallpapers then any other galleries that include these files will no longer refer to the right locations for them. To update other galleries to changes you make to shared wallpaper files:

       1) Open each affected gallery

       2) Select the changed files, their destinations, and conversion settings

       3) Click the Update button instead of Move or Copy.

This updates the gallery's internal wallpaper list without actually moving or copying any files.

List Wallpaper of Type Combo Box

Use this combo box to control which types of wallpapers are listed. You can restrict the list to files of any one format or the following combination types:

All Bitmaps	All formats listed
Compressed	`PCX`, `RLE`, `GIF`, and `GLZ`

LZ Compressed	`GIF` and `GLZ`
Run Length Compressed	`PCX` and `RLE`
Windows Native	`BMP`, `DIB`, and `RLE`
Windows non-Native	`PCX`, `GLZ`, and `GIF`

Other Pushbuttons

Display	Displays any single selected wallpaper. If multiple wallpapers are selected clicking this button has no effect.
Select\Clear All	Button toggles to select all files in the list or clear them all.
Close	Closes the dialog box. (Hitting the Esc key also closes this dialog).
Help	Gets this help.

Notify if compression is poor

If this checkbox is checked Wallpaper Manager will notify you if compressing a `BMP` file will not achieve at least a 10% size reduction and give you the option to skip the file. You will also be notified when converting between compressed formats if the target file would be larger than the source.

Rename Duplicate

This dialog pops up during a <u>Gallery/Organize</u> move or copy operation. It indicates that one of the wallpaper files being moved or copied would either:

       1) duplicate a file or title already in the wallpaper list or,

       2) overwrite an existing file in the destination directory.

In the first case you can type in a new filename (no extension), click Skip to skip over just this wallpaper, or click Skip All to skip this and any other wallpapers remaining to be moved or copied.

In the second case if you click on OK without changing the name, the file in the destination directory is overwritten by the one being moved or copied. Skip and Skip All work as above.

Wallpaper File Formats

Wallpaper Manager can display and convert between wallpaper files in six different formats. The Gallery/Organize dialog is used to convert files between formats:

File Extension	Format Type
`BMP`	Microsoft Bitmap (uncompressed)
	This is the most common format for wallpaper files. `BMP` files are usually not compressed. As a result, they are typically the least space-efficient of the five formats but, conversely, are the quickest to display. Note that the Microsoft specification for `BMP` actually allows files with this extension to be RLE compressed but common practice is to use the `RLE` extension in this case.
`DIB`	Usually the same as `BMP`
	The `DIB` extension is a common "synonym" for `BMP` (uncompressed).
`RLE`	Run Length Encoded Microsoft Bitmap (compressed)
	`RLE` files are generally not as small as `GLZ`'s or `GIF`'s but are faster to compress and considerably faster to display. Only 16 and 256 color `BMP` files can be `RLE` compressed; monochrome and 24-bit "true color" bitmaps cannot. See `RLE` Problems.
`PCX`	ZSoft Run Length Encoded (compressed)
	`PCX` is a run length encoded format developed by ZSoft Corporation. It is quite similar to Microsoft's `RLE` format and achieves similar compression results. It will not display as fast a `RLE` because, like `GLZ` and `GIF`, it is not "native" to Windows and so needs to be expanded to `BMP` first (see note below). Most DOS, Windows, and MacIntosh graphics programs can read `PCX` format.
`GIF`	CompuServe's Graphic Interchange Format (compressed)
	`GIF` uses an enhanced variant of the basic Lempel-Ziv algorithm. Its performance is comparable to or slightly worse than `GLZ`. An advantage of `GIF` is that it is widely used, especially by BBS's. On the downside the `GIF` protocol does not support 24-bit "true-color" bitmaps. Not supported for unregistered copies. See Registering Wallpaper Manager for more information.
`GLZ`	Lempel-Ziv Encoded (compressed)
	`GLZ` uses another variant of the Lempel-Ziv algorithm similar to the one used by `GIF`. The `GLZ` DLL has been optimized in assembly language and will almost always out perform `GIF` in terms of speed and size. `GLZ` can compress `BMP`'s of any color resolution. Not supported for unregistered copies. See Registering Wallpaper Manager for more information.

The compressed file formats can be significantly smaller than uncompressed `BMP` format (better than 80% smaller in some cases). However, the degree of compression depends heavily on the complexity and statistics of the image and for certain files these formats can end up being slightly larger than the original file.

Depending on how fast your computer is you may find `GLZ` to be the best formats for larger wallpapers as they usually offer the best compression and tolerable display times. `GLZ` is almost always faster than `GIF` for the same image. As a rough benchmark, on a 486/66 a typical `GLZ` compressed 1280 x 1024 x 256

image requires 2 to 3 seconds to decompress while a 640 x 480 x 256 image will usually decompress in less than 1 second.

For simpler images (monochrome, 16 color, or any image with large areas of uniform color) `RLE` is worth a try since it often compresses these well and displays almost as quickly as `BMP` (but see <u>`RLE` Problems</u>).

`PCX` and `GIF` formats are supported primarily to facilitate import and export of images. You will probably not want to keep wallpapers you view regularly in either of these formats.

Temporary Files and the TEMP directory

When Wallpaper Manager displays compressed format files (other than `RLE`) and when it converts between any two compressed formats it creates a temporary file to hold an uncompressed (`BMP`) copy of the wallpaper file. By default this file is created in your Windows `TEMP` directory if one is defined or, if not, in the root directory of the first hard disk on your system. You should make sure that there is enough free space on the temporary file device to hold your largest wallpaper file (in `BMP` format). See your windows documentation if you need information about creating a `TEMP` directory.

If you do not want Wallpaper Manager to use your `TEMP` directory for this purpose then you can use the <u>Setup/TempDir</u> dialog to specify a different location.

Gallery/Add Wallpapers

How to Add Files

The Add button opens a dialog box which resembles a typical Windows File/Open dialog but with some differences. For one, the files list is a multiple selection list. This means you can select more than one wallpaper at a time for adding.

Hold down the left mouse button to select a range of files. Hold down CTRL in conjunction with the mouse to select additional files or ranges of files. You can also use the SHIFT key in conjunction with the movement keys (Up Arrow, Down Arrow, etc.) to select a range of files. After you have selected the files you want, there are two different ways to actually add them.

Add All Method

If you press the Add All button Wallpaper Manager will add all the selected files to the wallpaper list. It will use default titles formed by taking the filename and upper-casing the first letter, e.g., `C:\WIN\BMP\ FOOBAR.BMP` will get the default title "Foobar". Wallpaper Manager will skip any files which are already in the list or whose default titles are already in the list. Such unprocessed files are left highlighted after the Add All so you can see what was skipped.

Add File Method

An alternative is to use the Add File button. When you press this the cursor moves down to the Wallpaper Title edit box in which is displayed a default title determined as above. The Add File button changes to Accept Title and the Add All button is retitled Cancel Add.

At this point you have the option to type in a longer descriptive title. If you change your mind about adding the file press Cancel Add. Otherwise, press Accept Title and the file will be added with the title you specified.

The Accept Title button will then change back to Add File, Cancel Add will revert to Add All, and the highlight will be cleared from the file just added or canceled. You can repeat the process for any other files still highlighted.

Drag and Drop Method

You can also add wallpapers by dragging and dropping wallpaper files from any drag and drop "sourcer" applications such as File Manager (Windows 3.1 version). Just select the wallpaper files you want and drop them anywhere on the Wallpaper Manager main window (**not** the Add Wallpapers dialog window). This will result in an Add All type add of the dropped files.

Wallpaper File Restrictions

The wallpaper files you add must be in one of Wallpaper Managers supported <u>formats</u>: BMP, DIB, RLE, GLZ, PCX, or GIF.

Wallpaper Manager allows up to 1000 wallpapers in a <u>gallery</u> file. However, large galleries can be slow to process during operations such as loading and saving. A 1000 wallpaper gallery takes about 1.5 minutes to load on a typical 33MHz 80386 system (versus a 100 wallpaper file which loads in one or two seconds).

Wallpaper titles must be non-blank and can be up to 50 characters in length. They cannot contain the character **|** (vertical bar) which is used internally by Wallpaper Manager.

Radio Buttons

The two radio buttons select either tiled or centered <u>display mode</u> for the wallpaper you add.

Other Pushbuttons

Select\Clear All	Button toggles to select all files in the list or clear them all. Title changes accordingly.
Display	Displays any single selected wallpaper to allow you to preview it before adding. If multiple wallpapers are selected clicking this button has no effect.
Close	Closes the dialog box. (Hitting the Esc key also closes this dialog).
Help	Gets this help.

Gallery/Delete Wallpaper

This deletes the wallpaper file currently selected in the Main Window wallpaper list. Unlike the Remove pushbutton this not only removes this wallpaper from the current gallery file's wallpaper list, it also deletes the underlying file from your hard disk.

Like the Move command in the Gallery/Organize dialog this operation should be used with care. Not only does it actually delete files but, also, any other galleries that refer to such deleted files will no longer be able to find them.

The Setup Menu

Modes...	Keyboard: Alt+M
	Mouse: Click the Modes button [lower]
Hot Keys...	Keyboard: Ctrl+H
TempDir	
Autostart	
Use Wallpaper\Logo Palette	
Wallpaper List Font	Displays a standard font selection dialog that lets you choose the display font and font color used in the Main Window's wallpaper list box.
Wallpaper List Color	Displays a standard color selection dialog that lets you pick a background color for the wallpaper list.

Mute	Turns Wallpaper Manager sounds on and off. This does not change any of the sound assignments specified in the current gallery. It merely inhibits playing them. Mute is a global setting. Keyboard: Ctrl+M

Screen Saver	Keyboard: Alt+V

Setup/Modes

Radio Buttons

Use the radio buttons to set the Switching and Selection Modes.

Duration

The duration box lets you set the time interval between wallpaper changes for the two timer modes. The duration can be any positive number between 0 and 999. The radio buttons determine whether the value is interpreted as minutes or seconds.

Switching Mode, Selection Mode, and Duration settings are specific to each gallery file.

Always Iconize Instead of Hide

This checkbox is provided to prevent Wallpaper Manager from running hidden. Check it if you want Wallpaper Manager's icon to remain visible whenever it is running but not popped up.

When unchecked Wallpaper Manager runs hidden when Autostart'ed (see Running Wallpaper Manager) and when you hide it using the Hide pushbutton. When this box is checked the Hide pushbutton will minimize the program instead of hiding it.

This is a global setting that applies regardless of what gallery is loaded.

Setup/Screen Saver

Wallpaper Manager can operate as a stand alone screen saver. When activated the screen saver displays the current wallpaper in front of all windows and icons (thereby hiding them). You can choose from a number of colorization effects to dynamically vary the appearance of the wallpaper. The screen saver display is deactivated and your desktop reverts to normal as soon as any key is pressed or the mouse is moved.

Screen Saver Hot Key

Use this box to select a screen saver hot key. Hit this key to immediately activate the screen saver. This will work even if the screen saver time-out is disabled (see below).

The combo box selects the root key. The checkboxes determine whether the root key works when pressed alone or in combination with one or more of the prefix keys: Shift, Control, and/or Alt. For combination a hot key first depress the prefix key(s), then with the prefix key(s) still held down, depress the hot key.

Source

Wallpaper List	The screen saver bitmap is chosen from the current wallpaper list. If you are in a timer mode then the screen saver image changes exactly as the wallpaper would.
Saver Wallpaper	The bitmap file shown in the Saver Wallpaper box is displayed. You can choose a saver wallpaper by clicking the Pick button. This opens a standard file selection dialog.

Effects and Effects Rate

Use the combo box to choose an Effect. All of these effects work best with 256 color bitmaps.

None	No effects.
Orange Sunshine	A bright colorization effect that is captivating on most images.
Blotter	This produces highly random colorization on most color bitmaps. Its effect on gray scale images is more orderly.
Window Pane	A relative of Orange Sunshine, this has a longer cycle time.
Purple Haze	This does differential hue rotation. It is usually more subtle than the effects above.
Green Tambourine	A variant of Purple Haze in which the rate of hue rotation is directly proportional to the saturation (chroma) of the color. It is usually more orderly than Purple Haze.
Warhol	A gradual posterization effect that makes most images end up looking something like the artist's famous Campbell Soup cans. After "Warholizing" is complete the image is held for a short time (so you can contemplate it) then is redrawn and the process repeats. Random parameters assure that no two Warhols look the exactly same.
Posterize	A straight posterization in steps down to black at which point it repeats.
Flash Out	This drops out palette colors one by one in a flickering effect. Quite pretty in a dark room. (Formerly called Drop Out).
Fade Out	Fade to black.
Drop Out	This fades palette colors to black one by one. Sort of a combination of Flash Out and Fade Out.

NOTE: The colorization effects are available only if your display card is a 256 color "palette-ized" device. Most 256 color Super VGA cards meet this description as does 8514/a. Standard VGA does not; nor do high and true Color devices (16 and 24+ bits) which are not palette-ized. If Wallpaper Manager detects that your display does not support colorization effects it will show only the None option in the Effects list.

The Effects Rate changes the "speed" of the selected Effect (except for None). The Warhol and Posterize effects begin slowly and can take a few minutes to complete even at the maximum rate.

Click the question mark button to have Wallpaper Manager assign a default rate. This is calculated so that the screen saver bitmap will undergo one complete effects "cycle" for the duration it is displayed (same as wallpaper duration). The default rate is generally rather slow. You may prefer to run at or near the maximum rate.

Screen Saver Enabled and Delay

When enabled the screen saver activates after the system has been idle (no mouse or keyboard input) for the number of minutes specified in the Delay edit box. The screen saver hot key is not effected by this setting.

WARNING: It is not recommended that you enable Wallpaper Manager's screen saver if you are using another screen saver product such as Berkeley System's *After Dark.*

PushButtons

Click OK to save your selections, Cancel to close the dialog and abandon any changes. Click Test to view your selections without having to quit the dialog.

Gallery/Wallpaper Sounds

If your Windows system supports the playing of `WAV` (Waveform) and/or `MID` (MIDI) files then you can use the Pick Wallpaper Sounds dialog to:

associate a sound file to each wallpaper in a gallery,

test play one or more sounds,

set a default sound file or directory.

Whenever Wallpaper Manager displays a new wallpaper it plays the associated sound file, if any. If there is no associated sound then the default sound, if any, is played. For the default sound it is possible to pick sounds randomly from a directory. You can suppress the playing of sound files by checking Setup/Mute. Also, if Wallpaper Manager is playing a long MIDI tune and you get tired of hearing it hit Ctrl+M twice. This toggles Setup/Mute off and on once and kills the tune.

All sound settings are specific to each gallery.

Associating Sounds to Individual Wallpapers

The Pick Wallpaper Sounds dialog behaves like an enhanced version of the Sounds applet in the Windows Control Panel. Both the Wallpaper Title and Sound File list boxes are extended selection boxes which means you can select more than one item in each.

To assign a sound to a single title:

Select the title. Its associated sound file is automatically shown in the Sound File list. Select a new sound file and it will replace the current association.

Note: You can uncheck the Show Current Assignment box to disable showing the current association when you first select a title. You may wish to do this when you initially assign sounds to a gallery so the file box does not "jump around" as you move down the title list making assignments.

To assign a sound to several titles at once:

Select several titles. Then select a single sound file. All the selected titles become associated with that sound file.

Selecting multiple titles when multiple sound files are selected will clear the sound file selections and vice versa.

If you click OK to end this dialog the changes you have made are recorded in the current gallery file. If you click Cancel any changes are lost.

Test Playing One or More Sounds

Before test playing sound files you may want to click the Off button above the Wallpaper Titles list box. This will disable the title box and prevent you from accidentally changing file associations when you select sound files to play.

To test play a single sound file:

Select the file and then press the Test button. The sound will be played immediately.

To test play multiple sound files:

Select several sound files and then press Test. Each is played in turn. You are prompted before each sound is played.

The Compress and Expand Buttons

The current version of Wallpaper Manager no longer supports the proprietary `WLZ` sound compression format and `WAV` Hook available in some earlier versions. Future versions will provide support for sound compression using Microsofts ADPCM format together with their Sound Compression Manager which can

play ADPCM files on the fly.

For the present the Compress button has been disabled and is grayed. Expand is still available and you should use it to decompress any `WAV` files you may have `WLZ` compressed.

To expand one or more `WAV` files:

   Select the `WAV` files you wish to process and then click Expand.

Compressed WAV files are indicated by a small white-on-blue LZ mark to the right of the name in the Sound File list.

Expansion is skipped for `MID` files and for `WAV` files that are not compressed.

This menu item will be grayed if your system does not support sound files.

Setting a Default Sound File or Directory

Clicking the Default... button activates the subsidiary Pick Default Sound(s) dialog. This is essentially a file open dialog except the files list always contains the entries <none> and <random> in addition to a list of sound files in the selected directory.

> Select a file to assign this as the default wallpaper sound.

> Select <none> if you do not wish there to be any default sound.

> Select <random> if you wish the default sound to be chosen randomly from the sound files in the selected directory.

Click Test to hear any selected sound file.

Click OK to close the dialog and enact any changes. Cancel closes the dialog without changing the previous default sound setting.

All sound settings are specific to each gallery.

Gallery/Edit Wallpaper Title & Mode

Radio Buttons

The two radio buttons let you modify the <u>display mode</u> of the selected wallpaper.

Wallpaper Title

Type the new title in the edit box. It must be non-blank and can be up to 50 characters in length. It cannot contain the character **|** (vertical bar) which is used internally by Wallpaper Manager. It also cannot be the same as any other title already in the list.

Gallery/Wallpaper Order

The Gallery/Wallpaper Order dialog gives you precise control over the sequence in which wallpapers are displayed. Because of the way Wallpaper Manager's Selection Modes operate this dialog is disabled (grayed) when Wallpaper Manager is not in Sequential Mode.

The current display list order is shown in the dialog's list box. You change the order by selecting a title and then pushing the buttons at the right. Up and Down move the title up or down by one place in the list. PgUp and PgDn move the title up or down by several places. Home and End move the title to the beginning or end of the display list, respectively.

Push the Display button or double-click left on a title to display it.

Push the OK button to save the new display order when you are finished arranging it.

Push the Cancel button or hit Esc to leave the dialog without saving any changes you have made.

NOTE: Remember that Ran/Seq Mode can permute the display list order. So, if you do use the Order dialog to specify a preferred display sequence, you may not want to subsequently put Wallpaper Manager in Ran/Seq Mode.

Setup/Hot Keys

The Setup/Hot Keys dialog allows you to define five hot keys. Wallpaper Manager responds to these keys whenever it is running regardless of whether or not its <u>Main Window</u> is visible or has the input focus. The hot key functions are:

Pop Up	Exposes Wallpaper Manager's Main Window and gives it the input focus even if it was previously hidden or minimized.
Next	Displays the next wallpaper in the display list (same as <u>Browse/Next</u>).
Previous	Displays the previous wallpaper in the display list (same as Browse/Previous).
Correct Palette	This hot key causes Wallpaper Manager to attempt to optimize the Windows palette for displaying the current wallpaper. See also <u>Color Palette Problems</u>.
Boss Key	Use the boss hot key to immediately blank the current wallpaper and hide the Wallpaper Manager logo panel (as by <u>Window/Hide Logo</u>). Hitting the key again restores the display.
	NOTE: When the Wallpaper Manager Main Window is visible this function is also bound to the Alt+B key sequence.

If Wallpaper Manager is in <u>Random Mode</u> the Next and Previous hot keys both select a wallpaper at random.

Use the combo boxes to select the hot keys you want. The checkboxes determine whether the hot keys work when pressed alone or in combination with one or more of the prefix keys: Shift, Control, and/or Alt. For combination hot keys first depress the prefix key(s), then with the prefix key(s) still held down, depress the root key.

Hot Key settings are global and apply regardless of what <u>gallery</u> file is currently loaded.

NOTE: Depending on how your Windows environment is configured it is possible that some hot key assignments will not work properly. If this happens try some other keys and Control/Shift/Alt settings. Also some keyboard drivers do not translate Left Shift and Right Shift in the same way. If Left Shift does not work with some key try Right Shift with it.

Setup/Autostart

When this menu item is checked Wallpaper Manager loads automatically whenever Windows is started. Autostart enabled is the recommended way to configure the program.

Autostart works by listing Wallpaper Manager on the `load=` line in your `WIN.INI` file. Therefore, if you use Autostart then you should not also list Wallpaper Manager on the `run=` line in `WIN.INI` or include it in your StartUp program group (Windows 3.1 only). See also Running Wallpaper Manager.

See your Windows documentation for more information about the `load=` and `run=` lines in `WIN.INI`.

Setup/TempDir

When Wallpaper Manager displays compressed format files (other than `RLE`) and when it converts between any two compressed formats it creates a temporary file to hold an uncompressed (`BMP`) copy of the wallpaper file. By default this file is created in your Windows `TEMP` directory if one is defined or, if not, in the root directory of the first hard disk on your system. You should make sure that there is enough free space on the temporary file device to hold your largest wallpaper file (in `BMP` format). See your windows documentation if you need information about creating a `TEMP` directory.

Initially the edit box will display "`Windows TEMP directory`" indicating that Wallpaper Manager will use the default directory for its temporary files. To change this enter a directory path in the edit box. Specify a path only (no filename), e.g.,

```
c:\dir1\dir2\
```

Wallpaper Manager will append a terminating backslash if you do not type one in. If you do not specify a drive the drive containing your `WIN.INI` file will be used. Click OK to accept the entry.

To revert Wallpaper Manager back to using the Windows `TEMP` directory click the Default button.

This is a global setting kept in `WALL.INI`.

Using Wallpaper Manager on a Network

Wallpaper Manager can be used on most computer networks without any special considerations. Depending on your network one or more additional buttons may appear in certain dialog boxes. These buttons activate network specific dialogs that let you connect to other network directories.

In general, wallpapers and sound files may be located in any network directory to which you have read access. You must also have write access to directories containing galleries.

IMPORTANT: If you purchased Wallpaper Manager on a single user license it is not legal to install it on a server for others to use over a network. Wallpaper Manager is available in a server version which includes a site license. The basic price is $6.00 per node but is negotiable for larger orders. For more information about the server version and site license pricing please contact me.

Window/Pick Logo File...

This pops up a file open dialog that lets you pick a bitmap file to display in Wallpaper Manager's <u>main window</u> logo panel. The bitmap can be in any supported format. The bitmap is scaled in such a way as to preserve its aspect ratio.

This is a gallery specific setting.

Setup/Use Logo\Wallpaper Palette

Unless the logo panel bitmap and the currently displayed wallpaper happen to be the same file they may not have identical color palettes. As a result if you have a 256 color display it may be impossible for Windows to display both the logo bitmap and the current wallpaper with equal color fidelity. This toggle tells Wallpaper Manager which of the two bitmaps should "win" when allocating the available colors in the system palette. You will probably just want to experiment with this to see which setting you prefer.

This option will be grayed on systems that do not support color palettes (e.g., standard VGA). It is not grayed but will probably have no perceptible effect on high color and true color systems (16 and 24 bit).

This is a gallery specific setting.

The Browse Menu

Display Selection   Displays the wallpaper currently highlighted in the wallpaper list.
Keyboard: Alt+Y
Mouse: Double-click left on any title or click the Display button [upper]

Next   Next steps forward through the display list.
Keyboard: Ctrl+N
Mouse: Click the + (plus) button [upper]

Previous   Previous steps backward through the display list.
Keyboard: Ctrl+P
Mouse: Click the - (minus) button [upper]

NOTE: Clicking right on the + (plus) or - (minus) buttons steps through the display list but displays in the logo panel instead of on the desktop.

_____

None   Clears any wallpaper currently displayed and returns the desktop to the default background color.
Keyboard: Ctrl+O

If Wallpaper Manager is in Random Mode Next and Previous both select a wallpaper at random.

The Window Menu

List Alphabetically\ In Sequence	The wallpapers in the Main Window can be listed either in alphabetical order or in display list order. Select this item to toggle between them. This toggle is a global setting and applies regardless of what gallery file is currently loaded. Keyboard: Alt+E Mouse: Click left on the 123\ABC button [lower]
Show Filenames\ Titles	This toggle controls whether the wallpaper list in the Main Window displays titles or filenames. This setting is also global. Keyboard: Alt+F Mouse: Click right on the 123\ABC button [lower]

Show\Hide Logo	This toggle controls whether or not the logo panel bitmap displays above the wallpaper list. Users of VGA displays may wish to hide the logo panel to increase the size of the list. You can display any bitmap in this panel. This is a global setting. Keyboard: Ctrl+L
Show\Hide Upper Buttons	This toggle controls whether or not the upper button row is displayed. All the button functions are available as menu items and by keyboard shortcuts so the buttons are not essential to using the program. This is a global setting. Keyboard: Ctrl+U
Show\Hide Lower Buttons	This toggle controls whether or not the lower button row is displayed. This is a global setting. Keyboard: Ctrl+B

Show Selection as Logo	Displays the currently selected wallpaper in the logo panel. Keyboard: Ctrl+Y Mouse: Click right on the Display button. Click right on the + (plus) button to show the next wallpaper in the list sequence. Click right on - (minus) to show the previous one. NOTE: You can also display a wallpaper by depressing the shift key and double-clicking left on it in the wallpaper list box.
Pick Logo File...	Keyboard: Alt+P Mouse: Double click right anywhere in the logo panel. NOTE: Double-clicking left in the logo panel displays the current logo bitmap as the desktop wallpaper.

Hide Window	This hides Wallpaper Manager's window (see Running Wallpaper Manager). If a Pop Up hot key is defined hitting the Escape key will also hide Wallpaper Manager. When "Always Iconize Instead of Hide" is checked in the Setup/Modes dialog then the Hide button and the Escape key will minimize Wallpaper Manager instead of hiding it. Keyboard: Alt+I Mouse: Click the Hide button [lower]

Color Palette Problems

On systems with 256 color displays you may notice some interaction between Wallpaper Manager and other applications. Color intensive applications such as paint programs will usually affect wallpaper colors and occasionally their own colors may become scrambled. If colors in your application and/or wallpaper colors become scrambled try using the Correct Palette hot key to reset them. Briefly popping up Wallpaper Manager's Main Window will also usually unscramble color mix ups.

Error Conditions

Wallpaper File Problems

Wallpaper files can cause problems for at least three reasons.

>   1) a file may be moved or deleted after being added to Wallpaper Manager's list.

>   2) a file given to Wallpaper Manager may not be in valid `BMP`, `DIB`, `RLE`, `PCX`, `GIF`, or `GLZ` format.

>   3) a wallpaper's pixel dimensions or color resolution may be greater than your display device can produce.

Wallpaper Manager deals with the first two errors by looking for the next good wallpaper in its list and if none are usable reverting to background color. The third problem can be trickier. If the dimensions of a wallpaper are too large some display drivers will either generate a UAE or lock up the system. Higher color resolutions usually will display successfully (if less colorfully). However, 24-bit color wallpapers have been known to cause problems on some drivers. Wallpaper Manager does not check whether wallpaper files exceed your display's pixel dimensions or color resolution.

A related problem can occur if the startup wallpaper file listed in `WIN.INI` is invalid for one of the reasons discussed above. In this case, windows may not start at all or hang during loading. If it does start the desktop will display its background color (like Browse/None).

Also, wallpaper colors may not produce correctly in some circumstances. See Color Palette Problems.

Moving Files from CD-ROMs

If you want to use Wallpaper Manager to transfer files from a CD-ROM to your hard disk using the Organize Wallpapers dialog click Copy, not Move. Move will attempt to delete the source file after copying it which is impossible on a read-only device such as a CD-ROM.

Format Conversion Errors

Wallpaper Manager's converter DLLs will return an error code and general description of the error if for some reason they are unable to expand or compress a file. If you encounter one of these errors and you are confident that your source file is valid please make a note of the error number, conversion type (to/from `RLE`, `GLZ`, etc.), and file involved and then contact me.

NOTE: Error descriptions that are marked with an asterisk represent serious anomalous conditions and Windows may not be stable in their aftermath.

`GLZ`, `PCX`, or `GIF` Display Problems

If Wallpaper Manager seems to be unable to display a valid wallpaper in one of these formats check to make sure that your `TEMP` directory device has enough free space. When displaying one of these compressed file formats Wallpaper Manager uses the `TEMP` directory to store a temporary copy of the file in uncompressed `BMP` format. Many people set up a RAM drive to hold their `TEMP` directory to improve system performance. This is fine as long as the RAM drive has enough extra space to hold your biggest compressed Wallpaper in uncompressed from. You can force Wallpaper Manager to use another directory for temporary files using the Setup/TempDir dialog.

`RLE` Problems

Four and Sixteen Color `PCX` File Conversions

Older four and sixteen color `PCX` files will be reformatted if you use Wallpaper Manager to convert them to `BMP`, `RLE`, `GLZ`, or `GIF` and then convert them back to `PCX`. This reformatting allows for faster subsequent conversion and display. It will not affect their display colors or appearance. Most paint programs that read `PCX` will have no trouble reading these reformatted files since they are fully compliant with the `PCX`

specification (in particular, all ZSoft and Microsoft products can decode them). However, some applications with improperly implemented decoders (such as the Norton Desktop for Windows 2.0 Viewer, for example) may not be able to read these files.

Some `BMP`s are actually RLE compressed

Files with the `BMP` extension are sometimes RLE compressed (this is permissible under Microsoft's specification). Wallpaper Manager handles RLE compressed `BMP`s transparently when displayed or converted to other formats. When converting to `BMP` it always creates uncompressed files.

Some DIB Files are Bogus

`DIB` does not seem to be as well standardized as `BMP`. As a result, some `DIB` files will not display properly. Try converting them to `BMP` format. Wallpaper Manager does some house-keeping on the image header during the conversion which can fix certain broken `DIB`s. When you use Wallpaper Manager to convert a file to `DIB` you get exactly the same file you would get converting to `BMP`. Only the extension is different.

Interlaced `GIF`s and `GIF`s Containing Extension Blocks

Wallpaper Manager can display interlaced `GIF`s (which are less common than non-interlaced). However, interlaced `GIF`s take longer to decompress. You can convert an interlaced `GIF` to non-interlaced by first using Wallpaper Manager to convert it to a `BMP` and then converting it back to `GIF`. Wallpaper Manager's `GIF` encoder always generates non-interlaced `GIF`s.

The `GIF` specification permits `GIF` files to contain various types of non-image data. Wallpaper Manager will ignore these non-image blocks when reading a `GIF`. `GIF`s may also contain multiple images in which case Wallpaper Manager will only decompress the first image in the file. Finally, it is also possible to have a legal `GIF` with no image data at all. This will generate a decoder error message.

No Windows Timers Available

Wallpaper Manager uses a Windows timer when operating in Timer Only or Startup & Timer <u>switching</u> modes. There are a limited number of timer resources available under Windows and it is possible for them all to be used up. Wallpaper Manager will notify you if it detects this condition and switch itself into a non-timer mode (Manual if it was Timer Only and Startup Only if it was Startup & Timer). This is unlikely to happen unless you have many applications open. It may also indicate that one of the applications you are running is ill-behaved.

Wallpaper Manager uses a maximum of two timers (the second timer is used by the <u>screen saver</u> when active with an Effect other than None).

Fatal Errors

Wallpaper Manager can detect several unexpected conditions from which there is no easy way to recover gracefully. In these cases the program puts up a message box with a cryptic description of the error and then terminates. While Windows will probably be stable in the aftermath of these errors it's always a good idea to clean up and restart. Please feel free to <u>contact me</u> if this should happen. Be sure to make a note of the error code and the circumstances under which it occurred.

If the <u>initialization file</u>, `WALL.INI`, or the current <u>gallery</u> file becomes corrupted Wallpaper Manager may not operate correctly. Wallpaper Manager responds to some gallery file problems by creating an empty, temporary gallery. This allows the program to at least start up in this situation.

If Wallpaper Manager behaves strangely you may want to take a look at these files in an ASCII test editor such as Windows Notepad. If they appear garbled the simplest solution is to just delete them. Wallpaper Manager will then make a new `WALL.INI` and a new, empty gallery, `WALL.GAL`, the next time you start it.

Bugs and Incompatibilities

Please contact me if you observe any new bugs or compatibility problems not mentioned below.

V1.50 and prior: Due to a bug in the Windows API function *WritePrivateProfileString* Wallpaper Manager could occasionally corrupt Program Manager's program group files. A work around for this API bug has been implemented post V1.5. This API bug was fixed under Windows 3.10.

V1.70: Another bug in *WritePrivateProfileString* could cause large gallery files not to clear properly and sometimes to generate a UAE. This was observed under Windows 3.10.061d. Under Windows 3.00a this may also have also caused problems with Program Manager (this latter side effect has not been confirmed, however). A work around for this bug has been implemented post V1.70.

V2.04: A bug was discovered when compressing BMP to RLE files under Windows 3.1 using the distribution VGA driver. This is related to a Windows bug in the GetDIBits function. V2.04 and previous also had a problem with 24-bit BMPs. Attempting to RLE convert such files resulted in an application error. The correct behavior should be to message the user that such conversions are not supported. This has been fixed post v2.04.

RLE Conversion Bug: Files RLE compressed under one display driver, for example, 1280 x 1024 x 256 TIGA, may not produce correctly under a different one, say, generic 16 color VGA. This seems to be a Windows or display driver bug and is being looked into. It is unlikely to present a problem for wallpapers used on a single system.

Norton Desktop for Windows v2.0 and Windows 3.1: If you are using Norton Desktop for Windows version 2.0 with Windows 3.1 you may notice that wallpaper colors are more likely to get jumbled than is the case when using Program Manager as shell. You can usually correct this by using the Correct Palette hot key or by popping up Wallpaper Manager. This seems to be a Norton bug since it can occur even when Wallpaper Manager is not running. The Refresh function in the Norton Desktop also seems to fix color scrambling. (See also Color Palette Problems)

V2.54: A bug existed in the Wallpaper Order dialog prior to this version. The PgDn button would malfunction when there were fewer than 22 wallpapers in the list. The wallpaper shifted down would disappear from the order and the gallery file would become corrupted on exit from the dialog.

V2.70: Certain bitmaps in conjunction with certain display drivers have caused problems in the screen saver. This appears to be a Windows bug and occurs only very rarely.

V2.71: RLE conversion is now handled by internal Wallpaper Manager routines rather than relying on the Windows API function GetDIBits(). This solves the problem of color loss which could occur during these conversions due to Windows palette management. Also some display drivers (which implement the low level portion of GetDIBits()) would cause UAEs when attempting to convert larger files.

Miscellaneous

1) The timer and all hot keys are disabled while any of Wallpaper Manager's dialog boxes are showing.

2) The timer is also disabled when there are less than two wallpapers in the display list.

3) There is an obscure problem that can occur when Wallpaper Manager is minimized, Palette Correction is enabled, and Wallpaper Manager's minimized icon is active. In this situation Palette Correction will not operate. This is an unusual situation since one rarely has much use for activated icons in Windows. This is not a problem in Windows 3.1.

FYI: Single clicking an icon will make it the active "window" and cause it to display its system menu. Single clicking again hides the menu but leaves the icon active.

Wallpaper Manager Plus Distribution Files List

Application Files:

WALL.EXE	Main executable
WALL.HLP	Wallpaper Manager on-line help
README.TXT	ASCII Read Me file
WKEY??.DLL*	Hot keys DLL

16-bit or 32-bit Converter DLLs:*

WRLE??.DLL	RLE converter DLL
WPCX??.DLL	PCX converter DLL
WGIF??.DLL	GIF converter DLL
WGLZ??.DLL	GLZ converter DLL

Setup and Installation Program:**

SETUP.EXE	Wallpaper Manager Setup and Installation executable
SETUP.HLP	Setup on-line help

Sample Wallpaper:

<u>Shareware Distribution</u>

MAJA.BMP	F. Goya's *Nude Maja* (320 x 240 x 256 color)
TVENUS.BMP	Titian's *Reclining Venus* (640 x 480 x 256 color)
WALL.BMP	Wallpaper Manager Plus Logo Bitmap (apologies to Michelangelo)

<u>Registered Distribution</u>

WALL.GLZ	Wallpaper Manager Plus Logo Bitmap
ADAM.GLZ	Michelangelos Creation of Adam (640 x 480 x 16)
BOTVENUS.GLZ	Botticellis Birth of Venus (640 x 480 x 16)
SOCRATES.GLZ	Davids Death of Socrates (640 x 480 x 16)
STRILION.GLZ	Babylonian Panel of Striding Lion (640 x 480 x 16)
GEISHA.GLZ	Utamaros Courtesan Holding a Fan (640 x 480 x 16)
PARASOL.GLZ	Goyas The Parasol Adam (640 x 480 x 16)

Initialization and Gallery Files***

WALL.INI	Wallpaper Manager initialization file
WALL.GAL	Default initial gallery file
WALL????.GAL	Alternate gallery file if WALL.GAL already exists

Some of these files are named differently on the distribution disk. Files with extensions ending in an underscore (e.g., EX_) have been compressed. Files with extension CR_ are encrypted and compressed (encrypted files are only included in shareware distribution package). The Setup program decompresses and decrypts the distribution files as needed during installation.

* The ?? is replaced by 16 for Win16 (16-bit) versions and 32 for Win32s (32-bit) versions.

** Setup does not transfer these files. They are not used by Wallpaper Manager.

*** These files are only created if they are not already present (as might be the case if you are installing an upgrade). If WALL.GAL is already present WALL????.GAL is created instead where ???? is replaced by the current Wallpaper Manager version number, e.g., WALL280B.GAL.

Sample Gallery File

Gallery file are ASCII text files in Windows "profile" format (like `WIN.INI`). Gallery files store wallpaper lists along with several operating settings.

Other "global" operating settings are stored in WALL.INI (see <u>Sample Initialization File</u>).

Sample Gallery File

```
;;  Key values shown are defaults unless otherwise indicated

[SETUP]
GalleryTitle=Sample Gallery

SelectionMode=3
;; 1 - Random
;; 2 - Ran\Seq
;; 3 - Sequential

SwitchingMode=5
;;  5 - Manual
;; 12 - Startup Only
;; 10 - Startup & Timer
;;  2 - Timer Only

Duration=60
;; Duration for timer modes
;;    0 to 999 duration is minutes
;;    65535 to 64537 duration is 1 to 99 seconds (-1 to -99
;;    in 16-bit 2's-comp)

WPTime=0
;;    Keeps track of time on the current wallpaper. WM uses this
;;    value in Timer Only mode so that the time on any one wallpaper
;;    does not exceed value set for Duration above even across
;;    multiple Windows sessions.

CurrentSequence=
;;    A list of the bitmap key numbers (see below) that specifies
;;    wallpaper selection order. This list is mandatory and should
;;    contain each key number exactly once.

CurrentIndex=
;;    Index into the CurrentSequence. Must a be number between 0 and
;;    the total number of wallpapers listed below minus 1.

DefaultWAVFile=
;;    Name of default sound file to play when changing to a wallpaper
;;    with no explicit associated sound file (see below). Initially
;;    empty. This element can be a fully qualified pathname of a file
;;    in which case that is the default sound. It can also be in the
;;    form,
;;
;;              d:\some\path\*.*
;;
;;    In this case the default sound is chosen randomly at need from all
```

```
;;     WAV or MID (MIDI) files in the given directory. Note that, in
;;     spite of the name of this key, both WAV and MID files are
;;     accepted.

WPPaletteWins=1
;;     When non-zero the wallpaper palette takes precedence (foreground
;;     realization) over the logo panel bitmap palette. When 0 the logo
;;     palette is given precedence (wallpaper palette is background
;;     realized).

LogoBMPFile=[wall directory path]/WALL.GLZ
;;     Determines what bitmap file is displayed in the main window logo
;;     panel. This is initially set to WALL.GLZ by Setup.

WPLSettings=-15,0,0,0,400,0,0,0,0,3,2,1,18,"Lucida Bright",128,15793151
;;     Font and color settings in Main Window list box. Above is a sample
;;     setting not the default.

WindowPosition=389,197,336,443,495,1
;;     Main Window position and size. Above is a sample setting not the
;;     default.

[Bitmaps]
;;-------------------------------------------------------------------
;; Entries for bitmaps have the following form:
;;
;;     KeyNum=Filename|DMode|Title[|WAVFile]
;;
;; where,
;;
;;     KeyNum is a number > 0.
;;
;;     Filename is a fully qualified filename.
;;
;;     DMode is the character 'C' or 'T' meaning the bitmap is to be
;;     centered or tiled, respectively.
;;
;;     Title is a text string of up to 50 characters. It cannot contain
;;     the field delimiting character '|'.
;;
;;     WAVFile is a fully qualified WAV (waveform) file to be played
;;     when this wallpaper is displayed. This element is optional.
;;
;; An example,
;;
;;     1=C:\WIN\MONALISA.BMP|C|Mona Lisa|E:\WAVEFORM\WOLF.WAV
;;-------------------------------------------------------------------
```

Sample Initialization File

The initialization file, `WALL.INI`, contains several "global" operating settings as well as a pointer to the current gallery file. It is an ASCII text file in Windows "profile" format (like `WIN.INI`).

Additional "local" settings are kept in each gallery file. See Sample Gallery File for a detailed list of local settings.

Sample Initialization File (`WALL.INI`)

```
;;  Key values shown are defaults

[Setup]
Version=0280
;;  Current WM+ version. 0280 = V2.80

NextHotKey=0
PrevHotKey=0
PopUpHotKey=0
CorrectPaletteHotKey=0
BossHotKey=0
;;  Hot keys for next and previous wallpaper, main window pop up,
;;  and Correct Palette, and Boss functions.
;;
;;  Value is VK_CODE + ShftCtrlAltState * 256 where,
;;      VK_CODE is the virtual key code of the selected key.
;;      ShftCtlAltState is bitwaise OR of:
;;          1 - Shift key is pressed
;;          2 - Control key is pressed
;;          4 - Alt key is pressed
;;
;;  A value of 0 disables the key.

ListMode=0
;;  Controls ordering in main window wallpaper list
;;      0         - Order titles alphabetically
;;      Non-zero  - Order titles according to display list order

ShowTitles=1
;;      0         - show filenames
;;      Non-zero  - show titles in Main Window wallpaper list

ShowMode=7
;;  Controls display elements in main window. Bitwise OR of:
;;      1 - Show Logo
;;      2 - Show upper button bar
;;      4 - Show lower button bar

LoadIconized=0
;;  Controls whether Wallpaper Manager loads hidden or iconized. This
;;  setting also affects the behavior of the hide button and Esc key.
;;      0         - Load hidden. Allow hide.
;;      Non-zero  - Load iconized. Iconize instead of hide.

GalleryFile=
```

```
;;   The fully qualified pathname of a wallpaper gallery file. The
;;   initial default gallery is WALL.GAL in the Wallpaper Manager
;;   directory.

TempDir=
;;   NULL or set to a directory path, e.g., C:\WALLTEMP\.
;;
;;   This key to forces Wallpaper Manager to use the specified
;;   drive and directory for temporary BMP files created during display
;;   of GLZ, PCX, and GIF files and during conversions to and from these
;;   formats.
;;
;;   When TempDir is NULL (the default) then the Windows TEMP directory
;;   is used or the root directory of the first hard disk if TEMP is
;;   also unspecified.

AddStickyDirectory=
OrgStickyDirectory=
WAVStickyDirectory=
GalStickyDirectory=
LogoStickyDirectory=
SaverStickyDirectory=
;;   Pathnames for last accessed directories in the Add, Organize,
;;   WAV file, Gallery, Pick Logo, and Saver Wallpaper dialogs.
;;   Allows these selections to persist between sessions.
;;   Initially all null.

Mute=0
;;   When non-zero suppresses the playing of WAV and MID files if any
;;   are assigned.

[ScreenSaver]
SaverHotKey=0
;;   Specifies the screen saver hot key. See hot keys above for
;;   decoding

Enabled=0
;;      0          - Screen saver time-out disabled
;;      Non-zero   - Screen saver time-out enabled

Source=101
;;      101        - Source is wallpaper list
;;      102        - Source is SaverBMP (see below)

Effects=0
;;      Effects number (0 is None)

Delay=60
;;      Screen Saver time-out delay in minutes

EffectsRate=0
;;      Effects rate

SaverBMP=
;;      Fully qualified pathname of saver wallpaper
```

Wallpapers

Wallpapers are bitmap picture files that Windows can display on the desktop as a background to your application windows. Several are included with the retail Windows distribution disks.

Wallpaper Manager supports bitmaps in standard `BMP/DIB` format as well as four <u>compressed</u> formats, `RLE`, `PCX`, `GIF`, and `GLZ`.

Display Mode

Windows can display wallpapers in either *centered* or *tiled* modes.

In centered mode the wallpaper is centered on the screen and, if it does not occupy the entire display, the gap between the edges of the wallpaper and the edges of the screen will be drawn in the desktop background color.

In tiled mode the wallpaper is duplicated and tiled to cover the entire display surface.

If the wallpaper is exactly the same size as the display then the display mode setting has no effect.

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`WAV` (Waveform) and `MID` (MIDI) Sound Files

`WAV` files contain a digitized representation of sound. They were introduced in Windows with Multimedia Extensions V1.0 and are a standard part of Windows 3.1. In order to play them your system must be equipped with the appropriate hardware such as a SoundBlaster or Pro Audio Spectrum audio card.

`MID` files contain MIDI (Musical Instrument Digital Interface) format data that can be used to play music on systems equipped with appropriate hardware. Add-in cards such as the SoundBlaster mentioned above also contain synthesizer/sequencer electronics that can play MIDI files.

RLE Problems

Prior to v2.71 Wallpaper Manager used the Windows API function `GetDIBits()` to perform conversion to and from `RLE`. While convenient from a programming point of view `GetDIBits()` often modifies the palette of 256 color wallpapers. (The change is usually slight and is an inherent side-effect of Windows palette management).

A more serious problem arose from the fact that low level portions of `GetDIBits()` are actually implemented in the display driver code not in Windows proper. It has been found that the driver software for some video cards does not reliably implement `GetDIBits()`. The result is that converting larger images to and from `RLE` could cause UAEs and other generally fatal conditions.

Accordingly, from v2.71 on the RLE conversion code has been re-implemented so the operation is handled entirely by Wallpaper Manager. This has eliminated UAEs and other problems during conversion. The conversion also appears to be faster.

However, Wallpaper Manager still relies on Windows to actually display wallpapers on the desktop. When you display an `RLE` wallpaper Windows may access some of the same low level driver code that causes difficulties in `GetDIBits()`. As a result there a possibility that you will still experience problems when you try to display larger `RLE` wallpapers.

See also the section Wallpaper File Problems in Error Conditions.

Windows NT Limitations for the Win16 Build

Hot key functionality is different under Windows NT. NT restricts keyboard hooks set by Win16 applications to the WoW subsystem. The upshot is that hot keys in the Win16 build will only work when you are using other Win16 applications. They will not operate if the focus is in a Win32 application.

The screen saver is also a problem in that it fails to detect keyboard or mouse activity if the focus is not on a Win16 application. You probably do not want to use the Win16 screen saver under Windows NT.

The Win32s build solves these problems under NT. It also works properly under Windows 3.1 with Win32s extensions. Furthermore, the converter DLLs are somewhat faster (especially `GLZ` which has separate assembly language optimization in both the 16 and 32-bit builds). If you are presently using the Win16 build of Wallpaper Manager under Windows NT or Win32s you may wish to try the Win32s build instead. Contact me if you are interested in obtaining a free copy of the 32-bit build.