Carleton Graphics

MyPictureShow32   (Demo Version)

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Hardware Notes

MyPictureShow is a screen saver for Microsoft Windows 95. For it to display images properly, you must have the following ("*or better,*" in all cases):   an IBM-compatible PC with a 486-class microprocessor, and a video adapter capable of displaying 256 simultaneous colors at a screen resolution of 640 x 480 pixels.   Performance is enhanced if you have a *local bus* (either PCI or VLB), and 8 Mb of main memory are recommended. The program itself occupies about 180K of hard disk space.

About "Color Depth"

There are important differences between video adapters that display 24-bit images directly ("TrueColor" & "HiColor" adapters), and those that display at most 8-bit (ie, 256 color) images directly. The number of colors your adapter can display simultaneously is referred to as its "color depth."   It affects how MyPictureShow runs on your system. If you have a 24-bit card, you can select either 24-bit or 8-bit operation, just by choosing the appropriate video driver in the "Settings" tab of Control Panel's "Display Properties" dialog box.   But if you have an 8-bit card, you are hardware-limited to 256-color operation.   (Fortunately, however, this is not that severe a limitation!)

MyPictureShow automatically detects and adjusts to your currently-selected video driver. Here is a summary of the practical differences between 24- (or, to a lesser extent, 16-) bit, and 8-bit operation:

Displaying a 24-bit file on an 8-bit display requires a "trick" --an intermediate software step between loading and drawing. This is because what you are doing is representing a picture composed of   (in theory) 16 million possible colors, by a careful choice of the 256 colors that best represent that picture.   The software step--that is, choosing the 256 colors--takes a little extra time, but once it's done, you can hold the picture in a smaller block of memory. Therefore, you can re-draw it much faster.

The practical implications, then, are that 24-bit files shown by 8-bit adapters take longer to load, but move around on-screen much more quickly, than they would on 24-bit displays. Furthermore, since you're devoting the entire color capability of your display to best matching the colors of one picture at a time, you can't show 2 different pictures at once on 8-bit displays, without significant loss of image quality.   (This is why Display Modes 5 and 7 of MyPictureShow are different in 8- and 24-bit operation.)

The color accuracy of a 24-bit display is perfect, so it's no surprise that it will be better than that of an 8-bit display. But what *is* surprising, is that the 8-bit quality is often so good, that at a glance, you can scarcely tell the difference!

MyPictureShow supports 3 basic groups of graphics files, identified by their 3-character *extensions*:

▶ .BMP: Both the Windows and OS/2 "flavors" are supported.
▶ .JPG: The types of JPEG most frequently found on computer bulletin boards and in on-line graphics forums (most of these bear the "JFIF" marker) are supported.
▶ .GIF: The type of GIF most frequently found on computer bulletin boards and in on-line graphics forums--the 87a standard--is supported.   The 89a standard's extensions are not themselves supported, but MyPictureShow can read 89a files and display their LZW-encoded images.   Supported GIF's must have global (and *no* local) color maps (this is most often the case, for on-line graphics collections).   In the case of multi-image GIF's, only the first image in the file is read.   "Interlaced" GIF's are supported.

Error Messages

When running in full-screen mode, MyPictureShow detects 2 basic kinds of errors, and signals them via MessageBox messages. Additionally, when showing its Preview in the "Display Properties" dialog box (in the small picture of a computer monitor on the Screen Savers tab), MyPictureShow will signal errors by showing an unhappy "Smiley" icon, and specifying an error code. These codes are summarized below.

The first major error type ("Can't read file FileName.XYZ -- Name, Location or Integrity Error.") names a specific file. It has several possible causes, and is most often related to the particular file. These are the most frequent causes:

▶ There is something wrong with the file itself. Not infrequently, a file you download from an on-line source may be "corrupt"--the information is not packaged properly, or has lost some essential part.
▶ Suppose you select a "current image" in SetUp, then later move this file to another directory (or rename it, or delete it). When MyPictureShow becomes active, it still expects to find this file with the name and location you last informed it of. When it learns you've changed things without telling it, it will express its disappointment with this same error message.
▶ The file type may not be supported by MyPictureShow. For example, GIF's with local color maps, and unusual 89a GIF's that consist *only* of "extensions" and have no LZW image in them--will lead to this error message.
▶ Occasionally, if you have some combination of too many applications running at once, or too little memory, there may not be enough memory left to be able to load in a new image. This condition also produces the same error message.

In any case, if there's a problem with a particular file, MyPictureShow will tell you so, and then will quit. If you get this error message, and no "simple" cure is at hand (i.e., you suddenly recall deleting the image file whose old name now appears on the Message Box, or you realize you have 4 or 5 large programs running simultaneously), you will probably have to move the offending file out of the selected directory (or--what amounts to the same thing--give it an extension which is not .gif, .jpg, or.bmp) to make MyPictureShow run smoothly again.

The other major error category is signalled by "Can't Create Process!" This message should appear only in unusual circumstances, and when it does, it should most often be when running with a 256-color video adapter. It basically means that when memory was needed for some internal process (most notably the conversion of 24-bit image files to the 8-bit format needed for 256-color displays), it wasn't available. Should this message appear, one could perhaps try closing down some of the other running applications, in an effort to free up memory.

Here is a guide to the Error Codes shown in the "monitor window" of the Display Properties dialog box:
      1 - Same as the first error discussed above
      2 - Same as the second error above
      3 - Means your video driver is most likely set for 16 colors. It needs to be at least 256 colors, for MPS to run.
      (4) - The message "Click 'Settings...'" occurs when you've just installed MPS. It means you should click the 'Settings...' button below, to bring up the SetUp dialog box (where you choose your initial settings).

Picture Sources

There are countless sources of image files that will run under MyPictureShow:

▶ Most image files on computer BBS's, on the Internet, and on other major on-line services are in either JPG or GIF format.   Sometimes they can be downloaded directly in these formats; sometimes they have been "uue-" or "zip-" encoded, and must be decoded before they are ready for display.   [Decoder programs, such as Wincode or PKUNZIP, are widely available on-line, and the decoding of a downloaded image takes only a few moments.]
▶ *All* Windows "wallpaper" files are BMP files, so they can be displayed with no changes needed.
▶ *Any* image you create or modify with an image-processing program can be saved as a BMP or JPG.
▶ You can transform *any* personal photograph into a JPG file in several ways:

        -- You can have the photograph scanned, and the resulting image saved to disk as a JPG (this is most efficient, in terms of saving disk space).   Most businesses dealing in desktop- publishing, and many copy services, will scan photos for only a   few dollars per image; and there are on-line offers for only   about $1 per image.
        -- Many photo-developing businesses can take your   negatives and have the images written onto a PhotoCD.   This process may take a few weeks, costs about $1 per image, and requires of course that you have a "PhotoCD-ready" CD-ROM drive.   The resulting images are in a special PCD format, and are of very high quality. Any good image-processing program [such as PhotoStyler or Photoshop] can read these images in from the CD, scale them to common screen sizes such as 640x480 pixels, and save them as JPG's.

▶ Here's a very useful trick: Wherever you are in Windows, whether it's on-line, or in any program (including DOS programs that you're running from Windows):   Whenever you see something on the screen that you'd like a picture of, simply press the "Print Screen" key. This puts a copy of the screen onto the Clipboard (an area of memory).   Then you can go into any image- processing program (like PhotoStyler, etc), and Paste the Clipboard contents (ie, a picture of the whole screen) into a new document. You "crop" (= trim) this document, so you're left with whatever initially drew your interest to the screen.   And this part, you can save as a JPG file.

Once you've selected a current image and a file format, if you're in one of the multi-image modes (5-9), and you haven't checked the "Random" box, the order of display goes like this: The first image shown will be your selected current image.   This will be followed by the current directory's other image files of the same format -- in *alphabetical* order.   The display will then rotate to the next file format (if "All Formats" was chosen in the File Formats box). Here too, the order will proceed alphabetically.   (Actually, numbers precede letters, so a file named "1MyParty.jpg" will come before "Andy.jpg.")   Then the order will rotate to the next format. If only 1 particular file format has been selected, only pictures of that format are shown.

▶ If you wanted to display a group of pictures in a certain order, you could simply rename them, placing the desired order-number in front of the file name (so that "GrandCanyon.jpg" becomes "1GrandCanyon.jpg," etc.)

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MyPictureShow SetUp

This dialog box lets you choose which images your screen saver will display, and the display mode.
Choose one of the following buttons for information about any of the dialog box's controls:

▶ "OK" Button

▶ "Cancel"

▶ "Colors..."

▶ Image File boxes

▶ Directory list box

▶ File Format selection box

▶ Drive selection box

▶ Display Mode selection box

▶ Transition Style list box

▶ Random check box

▶ Speed/Interval Spin Controls

If you click "OK" *after* selecting an image file, the dialog box will terminate and store all current settings. *Before* you've chosen an image file (i.e., when the Image File edit box at the dialog's upper left contains no valid file name-- which it may not, when you make changes in the Directory list box or the File Format box), "OK" can be used to help select your desired directory.

If you click "OK" and the SetUp dialog does *not* terminate, it means no valid file name has yet been selected.

Clicking "Cancel" (or pressing Esc) simply terminates the dialog box. None of the new changes are saved.

Clicking "Colors..." brings up the "Choose Background Color" dialog box. Here, there are 3 slider controls--one for each component (red, green and blue) of a color that you can define as the background color for MyPictureShow's operation.   As you adjust the 3 components, you can see the resulting color in the "Sample" box.   Each component can have an intensity ranging from 0 to 255.   If you don't use this option, the default background is deep blue (components are 3,58,255).

If you adjust the sliders to make a color that you want as your new background, choose "OK" in the "Choose Background Color" dialog box, and also choose "OK" in SetUp, for your choice to take effect.   MyPictureShow will remember your color choice, and will use it until you choose another background color.

The Image File list box shows the names of all image files of the currently-selected format, in the currently-selected directory. You may select any one of these images by clicking its file name, or by typing the name in the edit box (just above the list box). A valid name *must* appear in this box, before you can close the dialog (by clicking OK or pressing Return).

Display Modes 1-3 show only <u>one</u> image when the screen saver is active--namely, the one you select into the Image File edit box.

Display Modes 4-9 show <u>all</u> the images in the directory you select, rotating through them one after the other.   The specific image you choose will be the first one shown, followed alphabetically by others of the same format.   If you choose "All Formats" in the File Format selection box, MyPictureShow will then cycle through images of the other file formats as well (also alphabetically).   If you choose one particular format, display will be limited to that format only.

The Directory list box shows the directory tree of your hard disk. When you want to switch the set of images your screen saver displays, you can choose a new directory by one of two methods:

▶ You can use the Directory list box alone, by double-clicking on a directory at a different tree level from the current directory.   You may have to go "up" to the root directory, then "down" another branch of the directory tree, until you   get to the subdirectory containing the images you want to see.
▶ Or, you can click once on a new directory name, then once on the OK button.   This will also move you from one sub-directory level to another.

Either way, when you get to a directory that contains files with .JPG, .BMP, or .GIF extensions, the file names will immediately appear in your Directory list box, and you can choose any of them as the new current image.   The effective current directory is always shown   just above the list box.

In the Format box, you can either choose a particular Image File format--.JPG, .GIF, or .BMP--or you can choose "All Formats."   The file names in the Image File list box (just above the Formats box) will be those that conform to your Format selection, and the images shown in Display Modes 4-9 (i.e., those that cycle through all images in a given directory) will be restricted to the format you choose.

This means, for example, that you can run a Slide Show (Mode 6) of all the .GIF images in a given directory; then, by changing *only* the Format setting, you can have the Slide Show now cycle through all .JPG files, instead.

When you change formats, you must select a new current image from the Image File list box, if the old current image has a format excluded by your new selection.

You can switch the drive you are reading images from, by selecting from this drop-down-style selection box.

Password Protection

MyPictureShow keeps a separate password; it does not use   the "centralized" Windows 95 Screen Saver password.   However, it uses the same 2 password-related controls in the Display Properties dialog box, as the built-in screen savers.

▶ If you check the box labelled "Password protected" in your Display Properties dialog box, the "Change..." button just to the right of it is activated.   Clicking this button brings up the **Change Password** dialog box.   Click here
▶ for information on using the Change Password dialog box.

If you close the Display Properties dialog (by clicking "OK" or "Apply") with the "Password protected" box still checked, then once the screen saver starts its display, you'll need the correct password to be able to turn it off.

You can choose any one of 9 Display Modes by using this drop-down box. The first 3 are single-image modes; the last 6 cycle through all images of a given format, in the current directory.

Click here ▶ for descriptions of each of the different display modes.

If you've set the Display Mode to Slide Show, you can choose any one of 16 Transition Styles by using this drop-down box.   This governs the way that one image gives way to the next, in Slide Show mode.   The default is "Standard." The last on the list is "Kitchen Sink," which makes each transition a random selection of all those available.   Attempting to describe each style is really a case where "a picture is worth a thousand words" -- it's easier to just try these styles out directly, than to read about them!

In the single-image Display Modes 1-3, checking this box results in a random image being chosen from the current directory at each start-up. In the multi-image Modes 4-9, it causes a quasi-random ordering of displayed images -- with care taken not to choose the same image twice in a row.

In Display Modes 1, 2, 4, 5, 8, and 9, the leftmost of the 2 Up-Down (or "Spin") controls sets the speed of the moving image.   In mode 3, the control is inactive.   In modes 6 and 7, it sets the interval (in seconds, up to a maximum of 60 seconds) between successive image appearances.

The rightmost of the two controls is active in Display Mode 9 ("Desktop"), where it sets the "Off Time" between successive images.   In Mode 4 ("Telescope") it sets the interval ("On Time") for which the image is at rest.

Change Password

Use this dialog box to set a password for the screen saver.   The Change Password dialog box includes these options:

Old Password
Use this option to specify the old password. This box is unavailable if   you are specifying a password for the first time.
▶ Type your old password in the box.

New Password
▶ Type your new password in the box. Passwords can contain up to 20 characters, including punctuation,   and are not case-sensitive. An asterisk (*) appears in the box for   each character you type.

Retype New Password
Use this option to confirm your password.
▶ Type your new password again in the box.

Choosing "OK" now saves the new password; "Cancel" abandons the process and the old password remains valid.   If you enter an incorrect Old Password, or non-matching New and Retype New Passwords; or choose OK with a correct Old Password but no New Password entered, you will receive various "No Can Do!" messages.

<u>Display Modes</u>

Choose one of the following buttons for a description of each   individual display Mode:

▶ 1. Traverse

▶ 2. Billiard Style

▶ 3. Simple Viewer

▶ 4. Telescope

▶ 5. Sequenced

▶ 6. Slide Show

▶ 7. Tile Display

▶ 8. Side Show

▶ 9. Desktop

Single-image display.   The image traverses the screen from side to side, makes its way to the bottom, then starts over again from the top. Speed is adjustable via the left spin control in SetUp.

Single-image display.   The image starts from a random location, moves until it hits a screen boundary, bounces, and continues this sequence indefinitely.   Speed is adjustable via the left spin control.

Single-image display.   The image is centered, and if either of its dimensions are larger than the corresponding screen dimension, it is scaled down so that *that* dimension just fits the screen.   If its actual dimensions are smaller than the screen's, it is displayed without scaling.

 Together with the "Settings..." & "Preview" buttons of your Display Properties dialog box, this mode can be used, for example, to quickly view image files that you've just downloaded from your favorite on-line sources.

Multi-image display.   Each image "starts in the distance," approaches, recedes, then returns to normal size. The speed of the movement is adjustable via the left Spin control, and the length of time for which the image is finally stationary ("On Time") is adjustable via the right Spin control.

Multi-image display.   All image files in your current directory (of the selected format--or of "All Formats") are displayed sequentially. This mode is different for 256-color and TrueColor displays.

For TrueColor displays, two different images appear simultaneously. The first moves left to right in the screen's upper half, while the next moves right to left in the screen's lower half. These two then switch places.   Then the sequence is repeated, but with the next image pair--i.e., the second and third images, rather than first and second.   One cycles through the entire directory in this manner.   All images are scaled to fit the half-screen.   Speed is adjustable via the left spin control.

For 256-color displays, the action is generally the same, with the difference that the 2 on-screen images are copies of the same 1 file.

Multi-image display.   All image files in your current directory (of the selected format--or of "All Formats") are displayed sequentially, one at a time.   Images are scaled to fit the full-screen if either of their dimensions are larger than the screen's corresponding dimension. The interval between the appearance of successive images is adjustable (in seconds) via the left spin control in the SetUp dialog box.

Multi-image display.   All image files in your current directory (of the selected format--or of "All Formats") are displayed sequentially. This mode is different for 256-color and TrueColor displays.

For TrueColor displays, 6 different images appear at a time--3 on the screen's upper half, and 3 on the lower. Images are scaled; those with scaled-width greater than 1/3 of   screen width, will have their right-sides overlapped when the next image is placed on-screen (or will have their right-most sides clipped, when they come up on the screen's far right side). The interval between projection of successive images is adjustable (in seconds) via the left spin control in the SetUp dialog box.

For 256-color displays, the action is generally the same in terms of scaling, screen placement, and clipping, but only one image will appear at a time.   It is erased before the next one is placed.

Multi-image display.   All image files in your current directory (of the selected format--or of "All Formats") are cycled through.   Each moves left to right across the screen, starting from off-screen left and going to off-screen right.   Images are scaled to fit the screen only if they are larger than screen-size, vertically.   Speed is adjustable via the left spin control.

All image files in your current directory (of the selected format--or of "All Formats") are cycled through.   Each image moves across your screen, left to right, as in "Side Show" mode -- except that here, there's no solid "background color."   Instead, the background is just what's on your screen at the time that the screen saver starts, so the images appear to be floating across the desktop.   The left-most of SetUp's 2 spin controls sets the speed, while the right spin control sets the "Off Time" between successive images.

Two cautions about using Desktop mode are in order :
▶ As each image moves by, your desktop is redrawn using a "snapshot" of it, which is taken when MPS starts up.   Thus, if the system time usually appears on your Taskbar, please realize that once Desktop mode is invoked, you're no longer seeing the current time -- you're merely seeing a snapshot of the time when the screen saver started.   So you shouldn't rely on the Taskbar clock for anything important, when using this Display Mode!
▶ If you use as your Windows Wallpaper a BMP image of 8-bit (or greater) color depth, and you also have your video card's color depth set to 256 colors, there will be a conflict between the Wallpaper's palette, and the palettes of the images displayed by MPS, in Desktop Mode.   This will cause your Wallpaper to look   very strange!   Setting your video card to 256 colors   essentially means that only ONE picture at a time can be displayed with high color accuracy -- and in this situation, the Wallpaper picture will be displayed badly, so that MPS can display its pictures correctly.   The "cure" is simply switching your video driver to a higher color-depth (Hi-Color, or above).

To Create a Hot Key ...

It takes only moments to set up a "hot key" that gives you instant access to your MPS display. Here's one easy way to do it:

▶ A right-click on your Windows 95 desktop brings out a pop-up menu. Point to "New," then choose "Shortcut" from the resulting pop-up menu. A Create Shortcut wizard appears to guide you through 2 steps for creating a new shortcut: You simply need to supply the wizard with the path to, then a name for, your MyPictureShow32 program file. Typical responses here might be "c:\windows\MyPictureShow32.scr" and "MPS32" (or any identifying name you wish). This will produce an icon on your desktop (which, when double-clicked, will invoke MPS).

▶ To create the hotkey, right-click on the icon, and choose "Properties" from the resulting pop-up. Choose the tab marked "Shortcut." In the lower half of this page is a line titled "Shortcut key." Click in the box where it says "None," then press one of your F keys (F11, F12, etc -- But don't use F1), or any of your regular letter keys. If you press "R," for example, the line will show Control + Alt + R. (If you choose F11, it will simply show F11.) Now close the page by clicking OK.

 The key combinations you just selected (here, either F11 alone, or Control + Alt + R) will now promptly invoke your display. If you further wish to move the icon off your desktop, while retaining the hot-key access, follow these steps:
          ▶ Right-click the Start button. Choose "Open" from the resulting pop-up. Now the items displayed by your usual "Start" button are editable. You'll see a window containing these usual items -- "Programs" will be there, and possibly a few other items as well. You can now drag the MPS shortcut icon off of the desktop and drop it into any of the folders or sub-folders that appear in this hierarchy. For example, if you double-click on "Programs," then (in the next window that appears) on "Accessories," you can drop the icon in the Accessories folder. The hot-key property is retained, so the same key-strokes still invoke the display. You'd also be able to start the display with your mouse by clicking the Start Button, then pointing at Programs -> then Accessories -> then clicking the name you assigned for MPS.