MacFlix

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Table of Contents

Loading the Program
The Menu Screen
Load Picture
Set Save Filename
Print Picture
Invert Picture
Catalog Disk
Delete File
Quit
Status Lines
Loaded Picture
Macintosh Filename
Save Filename
Display Mode
File Information
Picture File Size Limitations
Using Pictures from IBM PC Disks
Other Notes
MAX-RLE Warning
Downloading MacPaint Pictures
Obtaining MacPaint Pictures
Flicker when Saving to MY-Art Format
Trademarks
Thank You

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MacFlix allows you to convert MacPaint™ pictures created for the Macintosh™ to either MY-Art or TI-Artist formats for the 99/4A and 9640. It also allows you to print out MacPaint pictures on Epson compatible printers and the Prowriter. MacPaint pictures are 8 inches by 10 inches when printed, and the entire picture can not be displayed on screen at one time. MY-Art and TI-Artist pictures are no larger than what is seen on the screen. When pictures are saved from MacPaint format to MY-Art or TI-Artist, only the portion of the picture on display on screen is saved. You can move the image around in order to select the portion of the picture you want saved, as explained below.

Pictures are available from a variety of sources. You can download MacPaint pictures via modern from Macintosh bulletin boards or interest groups on the major telecommunications networks, as long as they are not compressed files. A set of pictures is also available from The Boston Computer Society software library for a small fee.

Loading the Program

MacFlix is a program image assembly language file. You can load it to the 99/4A or 9640 GPL mode from Editor/Assembler Option 5, TI-Writer Option 3, or various equivalent loaders. The file name is MACFLIX. It will also load automatically from Extended BASIC, if the program disk is in drive 1.

The Menu Screen

When the program loads, the main menu is displayed. The menu contains 6 options and three items of status information.

1. Load Picture

This option allows you to load a new MacPaint picture into memory. Once the picture is loaded, you will automatically be put into Display Mode, which is described below. A small amount of error checking is performed on the picture before it is loaded to see if a valid MacPaint header is present. If not, the picture will not be loaded. Unfortunately, some MacPaint pictures (often converted via the PC) don't have standard headers. If you press the " (quote) key from the main menu, error checking on the Load File will be disabled for the remainder of the session. This can cause serious problems if you attempt to load truly invalid MacPaint pictures. This option is for your convenience. It's use is not recommended.

2. Set Save Filename

This option allows you to set the filename to which the MacPaint picture will be saved. MacFlix can save in three different file formats: TI-Artist, MY-Art Lo-Res, and MY-Art Hi-Res. If you are viewing a picture in lo-res (low resolution) mode and the filename ends with _P (the TI-Artist extension), it will be saved in TI-Artist format. If you are viewing the picture in lo-res and the filename ends in anything other than _P, it will be saved in MY-Art lo-res format. If you are viewing a picture in hi-res (high resolution) format, it will be saved in MY-Art hi-res format. If you are viewing the picture in hi-res mode with interlace turned on, only every other row of the picture will be saved due to a limitation of MY-Art.

3. Print Picture

This option allows you to print the picture currently in memory. A MacPaint picture is always an 8" by 10" image, or a full page. You are given 4 printer options. The best choice is Epson Medium Resolution, if you have it available on your printer. Not all so-called Epson compatibles support this mode. To find out if yours does, try it and see. You can set the printer name from this screen by typing a P. Once you have selected a printer type, you can print successive pictures in this

session by simply pressing ENTER. Which ever printer type you selected before will automatically be selected.

Printing with Epson Low Resolution loses the right 20% of the picture, and printing with Epson High Resolution causes the picture to appear somewhat compressed horizontally.

Print Picture is only a valid selection after a picture is loaded. Any attempt to use it with no picture in memory will be ignored.

4. Invert Picture

This option simply reverses all pixels, so that black becomes white, and white becomes black. This effects all operations including viewing, printing, and saving. To change back to normal, simply invert again. This option can not be selected if there is no valid picture in memory.

5. Catalog Disk

This option allows you to catalog any device you have on-line. You can catalog a disk drive by entering the drive number such as 2, or DSK2, or even DSK2. (with the period). You may also catalog a hard drive with subdirectories. WDS1.ART.MACPICS., for example, would give a catalog of all files in the subdirectory MACPICS of the directory ART.

6. Delete File

This option is provided to allow you to make space on a disk for saving a picture, without having to exit the program and load a disk manager. Simply enter the name of the file you wish to delete.

7. Quit

This option leaves the program.

Status Lines

Loaded Picture

Below this line, the filename of the current picture in memory is displayed. If there is no picture in memory, the line is blank.

MacIntosh Filename

The TI file system only allows for 10 character names, while the Macintosh allows for up to 31 character names. When a picture is in memory, its Macintosh filename is displayed below this line. This filename often provides more information about the image than the TI filename.

Save Filename

Below this line is listed the name of the file that will be created if you choose to save a portion of the MacPaint picture to disk from the Display mode. For more information on filenames, see menu option 2, Set Save Filename, above.

Display Mode

When a picture is first loaded you are automatically placed in display mode. To return to the main menu, press F9. If there is a picture in memory, you may enter display mode from the main menu by pressing the ENTER key.

When you enter Display Mode for the first time in a given session, you will be in lo-res mode, with interlace off.

You can press ENTER to have the picture written to the file you specified in the Save File at start up. If there is an error the screen will briefly flash.

You can switch to hi-res mode by pressing H. This will only work on a 9640. To go back to lo-res press L.

A MacPaint picture is an 8" by 10" image when printed. This will not fit on a single screen, not even on a regular Macintosh. You can scroll around the picture by pressing the ESXD (or arrow) keys. To set the scroll step press a number key from 1 to 9. 9 is the largest step. Step size 1 is the smallest and under 4 will allow no horizontal motion.

In hi-res mode you can turn on interlace which will give you a correct hi-res aspect ratio of 1:1 (the interlace can be toggled in

low-res mode on a 9640 as well, but this does not effect aspect ratio). To turn off interlace press I again.

Also in hi-res mode the screen can be set to long (212 instead of 192) pixels by pressing the Z key. Press Z again to go back the shorter screen. MY-Art uses long screens. Note that if interlace is turned on, pressing Z makes the screen alternate between 384 and 424 pixels high.

Sound effects are used to let you know the status of actions in progress. In particular, a high tone is emitted each time the program accepts a key press, and a low tone each time the screen redraw is complete. Because of the time it takes to redraw a screen, these tones can make using the program less confusing. The sounds are fairly quiet so as not to be a distraction.

File Information

MacPaint pictures on the TI and 9640 appear as DIS/FIX 128 files. Many other types of files also use this format. When you try to load a file, MacFlix looks for certain header bytes which identify the file as a MacPaint picture. If these bytes are not found, the file will not be loaded. As mentioned above, you can override the header check with the quote key from the main menu. Use the override sparingly. If you try to load a file other than a MacPaint file and the check is disabled, you may crash the program.

Picture File Size Limitations

In theory a MacPaint picture can be up to 51K in size. In practice they rarely exceed 20K, and almost never exceed 32K. On a standard TI-99/4a system, MacFlix can load a picture up to 24K in size which is about 102 sectors on disk.

If you are running on a 9640 or have a Super-Cart of some sort installed on your 99/4a, MacFlix will automatically take advantage of this extra memory to increase the maximum picture size to

32K. This means that the largest file you can load is about 134 sectors.

If you try to load a file that is too big, MacFlix will load as much as possible. The bottom of the picture will appear as random garbage. When this happens you should avoid using the Invert option from the main menu. Other than this precaution, the program will operate normally.

Using Pictures from IBM PC Disks

A great source of MacPaint pictures is from IBM PC disks. The PC compatible users have had MacPaint viewers for years, and as a result have built up large libraries of these pictures. Genial Computerware markets a program called PC-Transfer which allows you to move text files between TI-99/4a and PC disks using a double density controller on the TI-99/4a or 9640.

PC-Transfer has the unique ability to convert other types of files besides text files through the use of special "Conversion" files. A conversion file is provided on the MacFlix disk for owners of PC-Transfer. To use the file, simply load PC-Transfer normally. When prompted for "Conversion filename" on the first entry screen, enter the name of the conversion routine filename, such as DSK1.PCT/***** If you have the MacFlix disk in drive one.

MACFLX

PC-Transfer then operates as described in its manual, except that it now will move MacPaint files back and forth between PC and TI disks, rather than text files. Because it can be difficult to accurately identify a MacPaint picture, it is possible to move files that are not MacPaint format using this conversion routine, but obviously they will not be useable.

Other Notes

MAX-RLE Warning

When MacFlix saves a picture in TI-Artist format it does not create a color file (_C), it only creates a picture file (_P). This saves considerable disk space, as a MacPaint picture contains no color information. TI-Artist pictures saved with MacFlix may be viewed

using MAX-RLE but you must not specify the _P extension to the filename. MAX-RLE does not expect to find this extension when loading a TI-Artist picture and therefore fails to load the picture. For example, to view the picture DSK2.CRANES_P with MAX-RLE simply enter a filename of DSK2.CRANES.

Downloading MacPaint Pictures

Like TI-99/4a community, the Macintosh community has developed ways to compress a file for downloading. The most common methods for this are referred to as ".PIT" and ".SIT" files. MacFlix cannot handle MacPaint pictures in these formats. Fortunately, many pictures available through telecommunications are not compressed in this manner.

Obtaining MacPaint Pictures

In addition to being able to download MacPaint pictures from major information services like CompuServe, GEnie, and Delphi, MacPaint pictures are also available from user groups. For information on MacPaint pictures from the Boston Computer Society's TI User Group send a self addressed stamped envelope to: The Boston Computer Society, TI-99/4A User Group, One Center Plaza, Boston, MA 02108.

Flicker when Saving to MY-Art Format

When saving MY-Art pictures on a 9640, the screen will appear to flicker in the upper third of the picture. This is a result of the way disk access is performed on the 9640. The garbage on the screen caused by this is not saved with your picture.

Trademarks

Macintosh is a registered trademark of Apple Computer, Inc. MacPaint was a registered trademark of Apple Computer, Inc. and is now a registered trademark of Claris Corporation. MY-Art is a registered trademark of MYARC, Inc.

Thank You

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