PhotoMorph v1.2a for Sirius 5ft 10 Pak

README.WRI

I. New Features in 1.2a

A. New Output Option - FLC

New to v1.2a is the option to output to Autodesk FLC files. Choose Output in the Animation Parameters section of the Project Editor. Use the Setup button to configure the FLC output. Compression can be RLE or None.

B. New Autoplay feauture

The AVI player now has an "AutoPlay" feature which allows you to play a sequence of AVI files. Choose the AutoPlay icon from the AVI player to access the AutoPlay dialog box. This dialog box allows you to specify the order, number of times to play the animation, and the repeat-flag for the entire presentation.

C. New Menu: Filter

The Filter menu is used to apply effects directly to images. These effects include: emboss, trace edges, noise, and many others. Once these effects are applied to an image, you must save the edited image to save these changes.

II. Common Questions

A. Which buttons load which types of PhotoMorph Files? -also-

I get error messages when I try to load images and / or Projects. PhotoMorph uses many different file formats. The first type uses the extension .PMP which stands for PhotoMorph Project. A PhotoMorph Project file contains the information to make the morph. (Points, filenames, etc.) There are a number of .PMP's that ship with PhotoMorph (CHRIS2ED.PMP, JEN2DOG.PMP, etc.). PMP's are loaded and saved using the large file folder in the upper left hand corner of the project editor. Only .PMP files can be loaded and saved with those buttons.

Image file formats (like .JPG, .PCX, .BMP) are loaded using different buttons. Under the Start and End image windows you will see a small file folder button located next to the words <<No Image>>. Use these buttons to load your images. Just as you cannot load images when you press the load project button, you cannot load projects when you press the load image button.

Finally, PhotoMorph creates digital video in the .AVI file format. To create digital video, press the Create Animation Button after you've set up your morph. You will be presented with a Save As dialog box to save your video as an .AVI. Once the video has been created, load the AVI into the AVI player. The AVI Player is accessed from the Project Editor; the button that looks like a movie projector.

As you can see, there are many types of files that PhotoMorph uses: Projects, Images, and Video. To help keep them all straight, we've implemented different buttons to load each type of file. Understanding which button to press to load the type of file desired will become second nature in only one or two sessions.

- B. I get the following error message: "Cannot Initialize Compression: Unknown Error." Certain compressors limit output size to be no larger than 320x240 (in pixels). Usually, this error message is generated when the image size exceeds these boundaries. To solve this, either choose a different compressor (e.g.: Cinepak instead of Indeo) or use the image menu to scale your images to be no larger than 320x240.
- C. How do I play my videos "full screen"? One way to do this is with the Media Player. The Media Player is a standard Windows application that

can be found in the Accessories Group. Load an AVI file into the Media Player. Under the Device menu, choose Configure and then enable the Full Screen Option. This will play an animation at full screen.

For higher quality real time interpilation, we recommend video graphics accelerators that perform real time scaling of AVI files.

D. Why does my finished video look poor?

1. AVI video files are 24-bit color:

Just like a 24-bit image will appear washed out if only 256 colors are being displayed, a 24-bit .AVI file will appear washed out on a 256 color system. Use the Windows Setup icon in the Main group to determine how many colors your system is currently displaying and to make adjustments. Contact your computer manufacturer for more information. For those who wish to remain in 256 colors, PhotoMorph will output to .FLC files which, by definition, contain no more than 256 colors. Although PhotoMorph cannot play FLC files within the application, there are many DOS and Windows FLC players available as freeware. If you have difficulty locating one, give us a call. We provide DOS and Windows FLC players on our Morphology 101 CD-ROM. Call 800-274-9674 to order Morphology 101.

2. PhotoMorph Quality Setting:

Use the Animation Parameters Button to open the settings for Output, Compression and Quality. Setting the quality to high increases rendering time, but significantly increases the quality of the output.

3. Compression Issues:

Because digital video files are very data intensive, they need to be massively compressed to play back properly form the hard disk. There are three main compression algorithms: Microsoft Video 1, Intel Indeo, and Supermac Cinepak. Video 1 is a good general purpose compressor, however it does not compress as compactly as the others. Indeo works very well, however, its artifacts can be very noticeable, making the video look blocky. Cinepak is an excellent compromise; it compresses very well and its artifacts are not as noticeable. Unfortunately, it takes much more time to compress with Cinepak. Certain video capture cards come with their own compressors and others are available from third party vendors. Any 24-bit compression that is installed on your computer can be used by PhotoMorph. For a full discussion of compression algorithm, see the Digital Video Kick Start CD-ROM. Call 800-274-9674 to order Digital Video Kick Start.

E. How do I create pauses in my animation so that I can display the original image before morphing it?

Use the Storyboard to create a clip in the location where the pause is to take place. Use the image you want to pause on as your start image, choose Transition for your filter type and press Edit. From the list, choose Duplicate Start and press OK. The start image will be duplicated for the number of frames in that clip.

F. What's the difference between the Frames per Second setting and the Frames setting in the Project Editor?

The Frames Setting, located under Filter, next to the Edit Button in the Project Editor refers to the number of frames that the animation will take. For example, a setting of 20 means that the clip will take 20 frames to occur. This setting can change from clip to clip using the storyboard.

The animation Frames Per Second (FPS) setting specifies the speed at which one second of animation will occur. Television runs at 30 FPS. CD-ROM playback is typically at 15 FPS. Settings over 30 are generally overkill and settings under 15 will look 'jerky'. The FPS setting applies to the overall project and cannot be changed from clip to clip using the storyboard.

For example, a frames setting of 20 with a FPS setting of 20 will result in a 1 second video clip upon rendering. A frames setting of 60 with a FPS setting of 30 will result in a 2 second video clip.

G. When I try create my video, nothing happens after I press OK. What's wrong? Typically, this occurs when attempting to save AVI files to a CD-ROM drive. Ensure that a hard disk is selected in the lower right hand corner of the Save As dialog box before pressing OK.

H. What are some of the issues surrounding AVI performance?

There are several factors that you should take into consideration for optimal video playback:

1. Disk fragmentation:

If your hard disk is highly fragmented then it will take more time to access data within files and therefore reading and writing AVI files will take up more of your system's bandwidth. Make sure that you periodically defragment your disk (several utilities for doing this are available commercially -- PC Tools, WinMaster, etc., as well as the one built into DOS 6.2: DEFRAG). Make especially sure that your disk is defragmented before you create the AVI file that PhotoMorph will write to.

2. Disk Transfer Performance:

A hard disk which is slow at transferring data will impair playback rates since data will not be able to be transferred from the disk fast enough to keep up with the rate at which data is being displayed. On these slower hard disks you may find that playback rates actually go up when the data is being read from a file located on a compressed disk volume (logical disk drives created by utilities such as Stacker that maintain the data on the disk as compressed). This is due to the reduced amount of data needing to be read from the disk during the playback process as a result of data compression.

3. System Processor:

More powerful CPU chips will allow a greater amount of processing in a given amount of time. Much of the playback process depends on software execution on the system processor, so it follows that more powerful CPU's will yield higher playback rates. This is in fact the case, as you can expect to get higher playback rates on '486 CPU's versus '386 CPU's.

4. System Clock Speed:

For the same reasons stated in 3. above, higher playback rates will be achieved on systems that have a higher system clock speed. Thus, 50 MHz systems will yield higher playback rates than 33MHz systems which will yield higher playback rates than 25MHz systems.

5. System Bus Speed:

Most AT compatibles have adapter card buses which are set at 8MHz. Some compatibles allow the bus speed to be set higher with the tradeoff that some adapter cards may not correctly work at the higher bus speed. If all the adapter cards in your system function correctly at a higher bus speed then you can realize higher playback rates at the higher bus speed.

6. Local Bus Speed:

The use of a local bus video adapter can give you up to 4 times the playback speed of a nonlocal bus video card.

III. History of Release

A. 1.0

Original Release

B. 1.2

Added Distortion Filter, increased CD-ROM compatibility.

C. 1.2a

Added Filter Menu.

D. 2.0

See "Andover On-line" for a complete description of PhotoMorph 2. Call 800-274-9674 for upgrade information.

IV. Technical Support

A. Where can I get technical support after I've read this document.

Call 603-664-6000 and ask for technical support. Hours are Monday - Friday 9AM to 6PM EST. Our FAX number is 508-392-0458. You may also reach us on Compuseve: type GO PMORPH to access our support forum. Our Internet Address is: 74774.1423@compuserve.com.