Digital Slide Shows

Text and photos by Jack and Sue Drafahl

Over the years, one of the most popular methods for presenting photographic images was the slide projector. Single-projector shows were used for personal presentations, while the multi-projector format was more common for the professional extravaganzas. Many of these presentations included programmed dissolving images, special effects and sophisticated sound tracks.

But just like the 8-track tape, 8mm movies, typewriters, and vinyl record albums, the slide projector is slowly being replaced; in this case by digital slide show technology that gives photographers unrivaled creative potential.

Software Programs

These applications are commonly referred to as "digital slide show programs," but they are really video editing programs. With these software packages you actually create a video presentation—even if it only includes still images. These programs are available in two basic categories; those for amateurs and those designed for the working professional.

Two excellent programs from the first category are Ulead's VideoStudio 5.0, and VideoWave 4 from MGI Software Corporation. These programs walk you through the process, helping you add visuals, sound and transitions until you have a completed project. They enable you to design a quality production, but they do have fewer video and audio tracks available than the more sophisticated programs.

On a more professional level, Ulead's MediaStudio Pro 6.0
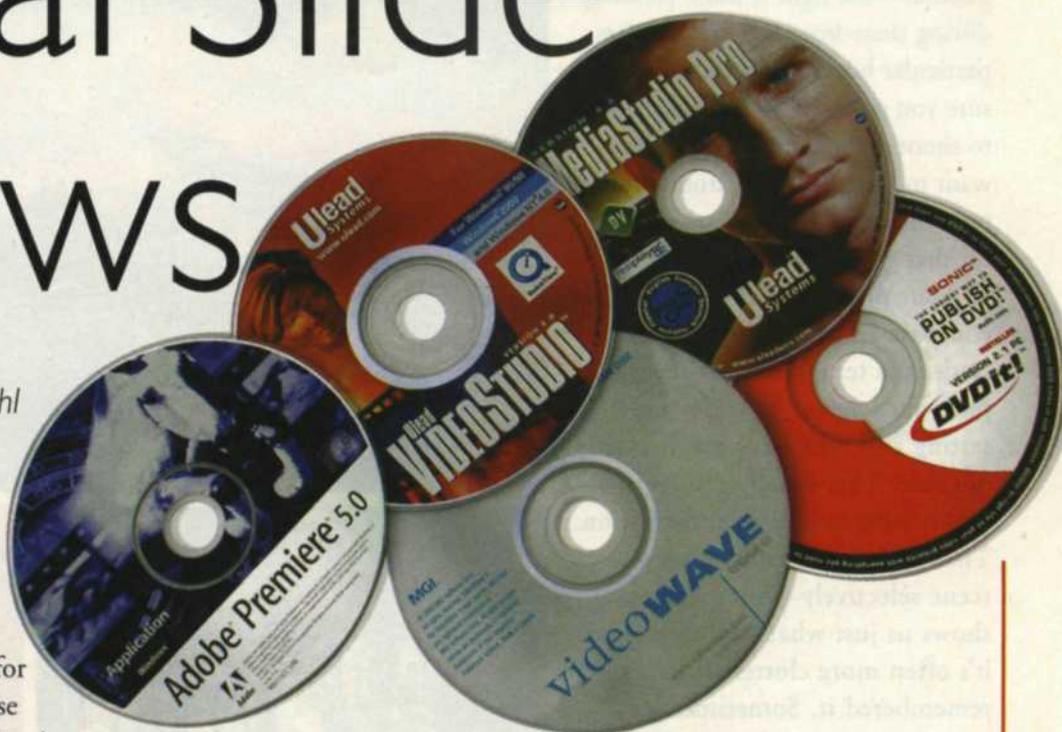
Software programs are available for photographers of all levels of expertise. They enable you to create interesting visual presentations, using video and still images. The more advanced programs offer sophisticated video and audio capabilities.

and Adobe's Premiere 5 provide all the bells and whistles necessary for video production. Elaborate time lines display all the components at your fingertips, and expand your creative freedom with up to 99 video and audio overlay tracks.

Importing Visuals

To begin creating a digital slide show, your prints, slides and color negatives must be scanned into the computer. The digital still images can be edited in an image-editing program such as Adobe Photoshop. Since digital video production uses a 720x480 format, it is a good idea to crop and re-size the images to fit this format. Try to keep the file size no larger than 1440x960 and in an uncompressed format such as TIFF. This uncompressed format enables your images to be processed faster.

Digital slide shows can incorporate still images, as well as files transferred from a video cameras. If your video camera is analog, you must import the data via the video input jacks on your graphics adapter card. Since digital video is already converted, it can be directly imported via the USB port or Firewire.
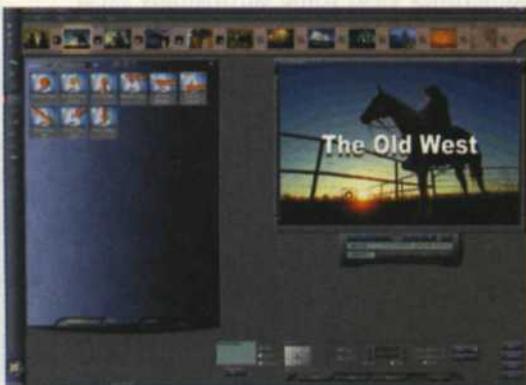
MGI's VideoWave4 helps you create quality presentations. The edit window at the far left shows the text-effect library and text-effect preview screen. The edit window to the immediate left shows the filter-effects library and preview screen.

Visual Timelines

Each of these software programs provides a visual timeline every time you open a new project. You then drag and drop visuals one item at a time along this timeline. A thumbnail of each image will be displayed on a track, along with the transition between each image and the accompanying sound files. At any time during the process, you can stop and preview the portion you have completed. If an image comes in a little late or doesn't match the soundtrack, simply drag it to the left or right and preview the file again. Once you are satisfied, save the file.

Soundtracks

Sound can be input through audio input jacks in the computer and converted to digital sound files. If the soundtrack needs editing, you can use one of many sound-editing programs that are included with your sound card. Otherwise, you can edit the sound using any of the digital slide show programs we mentioned.

The more professional programs allow you to cut, splice, and alter the way you hear the soundtrack. You can add multiple tracks of music and mix it with narration. Any part of the soundtrack can be faded, dissolved, sped up, or slowed down.

Transitions

Transitions are visual changes between scenes or from one video clip to the next. Unlike the traditional slide projector that was restricted to dissolves, these programs can perform just about any effect you have seen on television. You can zoom one image out and zoom in the next. One image can turn into a paper airplane that reveals the image underneath as it flies away. A special transitional effects library is also available with hundreds of special effects that allow images to transform from one to another.

If you don't like the transitions one program offers, you can buy additional third-party transitions, or create your own. Transitions are treated much like images themselves in that you can stretch them to cover a longer period of time, or more of one image than the other.
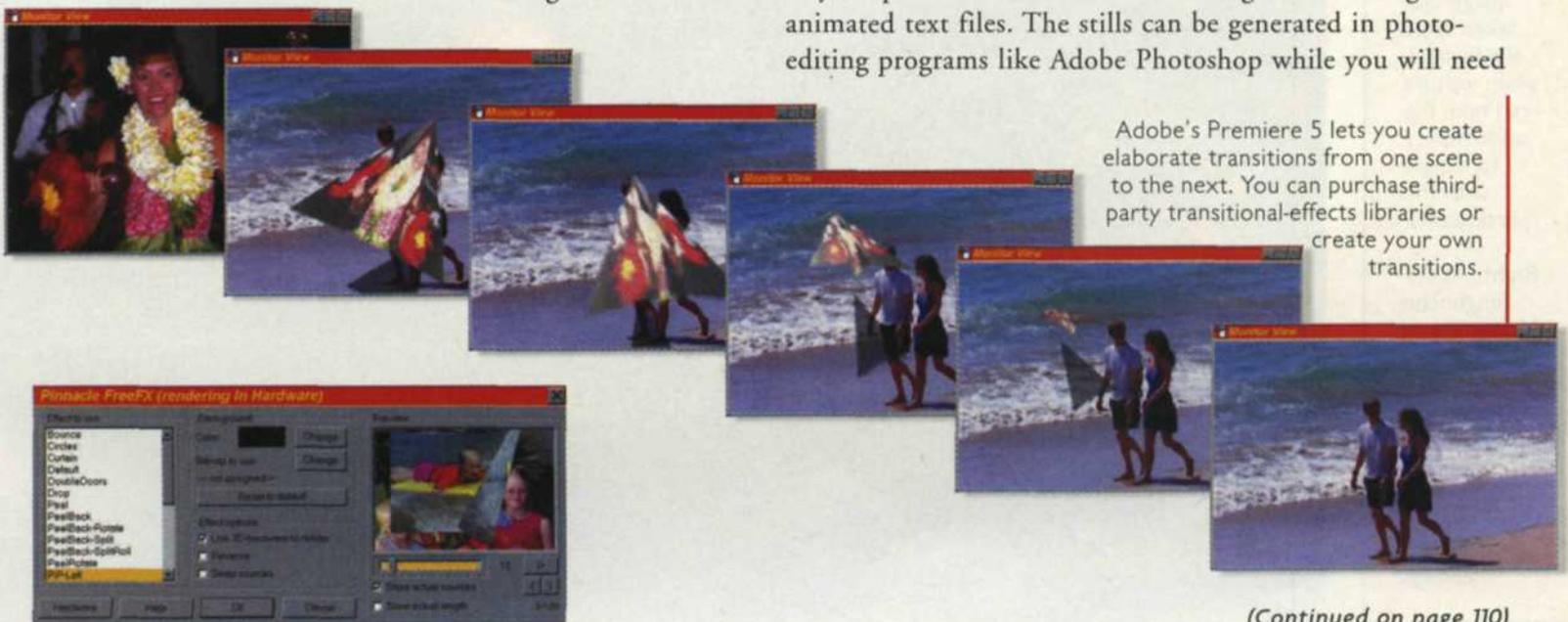
Ulead's MediaStudio Pro 6.0 is a pro-level program with a simple preview screen (left), and a detailed edit screen (below) with a timeline for drag-and-drop images.
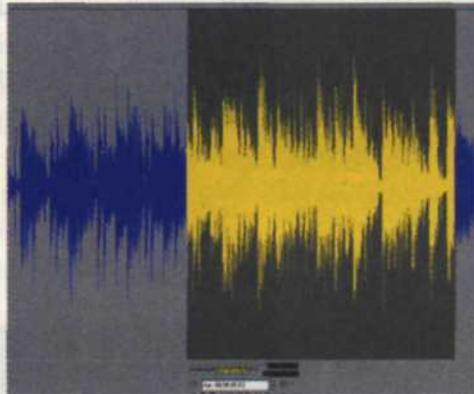
You can add digital sound files to your presentations via your computer's audio input jacks. This is the sound screen for Ulead's MediaStudio Pro 6.0. This sophisticated application enables you to add multiple music tracks, and mix them with narration.

Titles

Once you have all your images, transitions, sound and video collected on your hard disk, you can design any remaining titles or special effects you want to incorporate in your presentation. Titles can be single-frame images or animated text files. The stills can be generated in photo-editing programs like Adobe Photoshop while you will need

Adobe's Premiere 5 lets you create elaborate transitions from one scene to the next. You can purchase third-party transitional-effects libraries or create your own transitions.

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3D programs to generate the animated text files. With animated text programs, you type the text and give it a path or special effect to perform in an allotted amount of time.

The final animated file is output as an AVI, MOV, or MPG file that can be imported as a video file in your digital slide show program.

Output

The most inexpensive ways to output your file is with a video graphics card that has its own video output jack. These cards are normally used to drive the computer display in your system, but can also output your video production to television or VCR. We have tried several of the ATI graphics cards and found them to be an excellent way to produce digital slide shows without too much additional expense.

If you want more professional output, you should consider a video board specifically designed for input and output of video signal. For many years TrueVision had one of the best products for this task, and recently TrueVision became part of Pinnacle Systems. Pinnacle has expanded the line to include video boards for all levels of digital photography from beginner to advanced professional. Most of these boards can output broadcast video at 720x480 pixels for up to 30 fps.

DVD

DVD is the newest technology for final output of your digital slide shows. DVD recorders that were $30,000 a year ago now cost less than $5000, and the price is still dropping. DVD-RAM drives are available for less than $500 that will output your video directly from your computer. New software from Sonic, called DVDit, allows you to create a digital video file, assemble it in a DVD format, and output it to DVD, DVD-RAM, or even CD-R. This program can create titles,

Sonic's DVDit application enables you to utilize DVD technology when creating your digital slide shows. This new program walks you through the process of assembling a digital video file in the DVD format. You then output it to DVD, DVD-RAM or CD-R.

This is the main screen for Ulead's VideoStudio 5.0. It includes a control panel on the left, a large video preview window in the center, and a transition-effects library at the right. The easy-to-use program's edit timeline appears at the bottom of the screen.

chapters, and prepare the final DVD or CD program for viewing.

Compromises

This brings us to the downside of this new technology. With traditional slide shows we presented full-screen 35mm slides. According to Kodak, it would take a resolution of at least 3072x2048 pixels to match 35mm film (while video is only 720x480 pixels). This lower resolution is tough to swallow, but it all comes down to the perception of quality. People today are accustomed to watching television and video with this lower resolution. Often, the image resolution isn't as important as the content of the production.

Another problem is that to maintain broadcast video quality, these output devices need to continuously output 30 1MB+ files a second. Even with compressed files, the system requires a constant video stream than can process and output at least 3MB a second. Most hard disks can do that in a burst, but not for 10-15 minutes at a time. The solution is a device called a RAID (Redundant Array of Independent Drives). This requires a special board and 2-4 identical hard drives that act as one drive. It can deliver more than 25MB a second for as long as there is disk space.

Final Thoughts

It is sad to think that the slide projector is becoming extinct. No more dust on the images, jammed cardboard mounts, autofocus problems, burned out projector bulbs or dissolve unit failures. Now it is easy to make image changes, update sections of the show, modify the soundtrack and quickly output it all to videotape. With all that extra time on our hands there is now room for more creativity. ∎