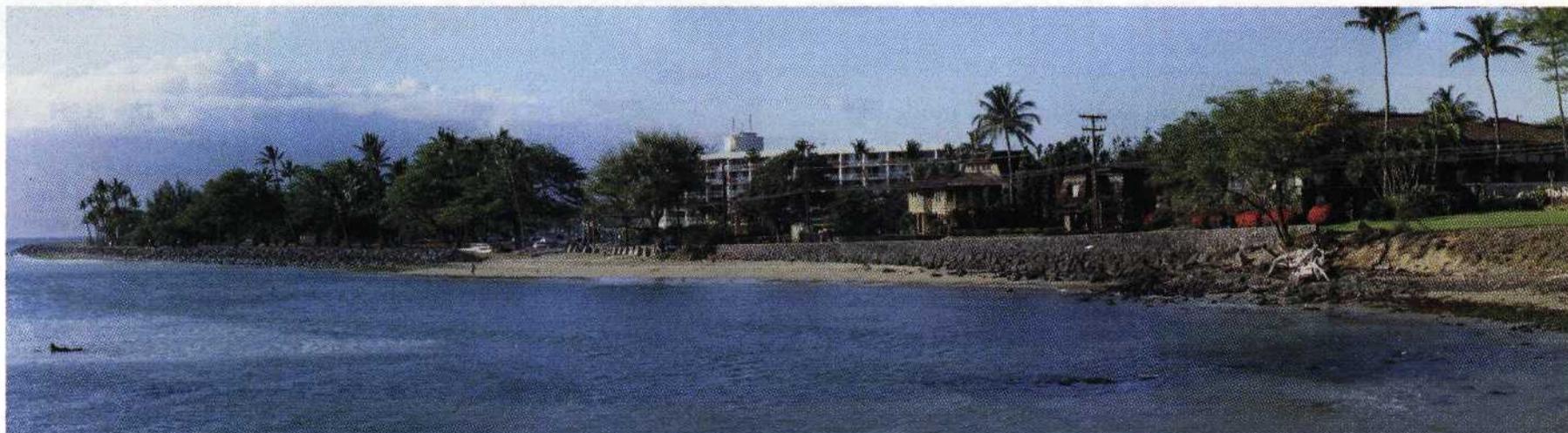


VideoBrush Photographer

by Jack and Sue Drafahl



In the past, the challenge of creating panoramas required a panoramic camera and a special enlarger system to print the processed images. Today, all of that has changed with the introduction of software programs that allow you to create full 360° panoramas from a series of ordinary snapshots. You don't need expensive cameras to create this magic—most any point-and-shoot or video camera will do the trick.

VideoBrush Corporation has recently introduced two software programs that let you create several variations of panoramic images. The main program, called VideoBrush Photographer, gives you the option of creating three types of panoramic images.

The Panoramic Strip allows you to take a series of consecutive overlapping images to form up to a 360° circular pattern. Original images are taken from left to right in sequence with an 1/3 to 1/2 overlap from image to image. The best way to overlap images is to find a landmark at the side of the frame and include it in the next image. If you want a full 360° view, you must make sure that you overlap the last image onto the first.

The camera should be held steady and relatively level. A key feature of the VideoBrush applications is that a tripod is not required, making it much easier to shoot wide-angle

and high-res images with only your hand-held camera. In particular, the VideoBrush applications compensate for both tilting up and down and rotating from side to side. It is best to avoid moving objects and objects too close to the edge of the scene, as this will cause distortion.

Once you have processed the film, slides and negatives must be scanned into the computer system (digital images can be imported directly). To create a panoramic strip, you select the sequence of images from your hard disk and tell the program to make a wide-angle (less than 360°), or a full 360° image. Pretty simple, huh? We told you it was magic!

The Big Picture is used to capture the scene at both a higher resolution and a wider field of view. You can capture these images by creating overlapping multiple photos with an irregular layout and no fixed grid. You can pan a 'Z' pattern by starting at the upper left and pan to the right, move down, and then back to the left. If you want an even bigger picture, you can continue adding rows of images moving in this pattern.

After selecting your series of images, you are given the choice of normal or perspective rendering. The normal view will provide a final image much like a super wide-angle lens, where a building will have a distorted look. The perspective view will correct most of this distortion, and give the

appearance of being shot from a distance with a long lens.

When you are shooting images for the Big Picture, you should increase the image overlap when the intensity changes a lot, or there is a lack of detail. A 1/3 to 1/4 image overlap on most of the images usually guarantees good image alignment. When the image is put together the program blends each section, taking into consideration changes caused by image brightness, lens distortion, and misalignment caused by the photographer.

The Smart-Res Enhanced View mode captures a full frame scene in several images in order to increase the final resolution. Since hand-holding a camera will give you slight

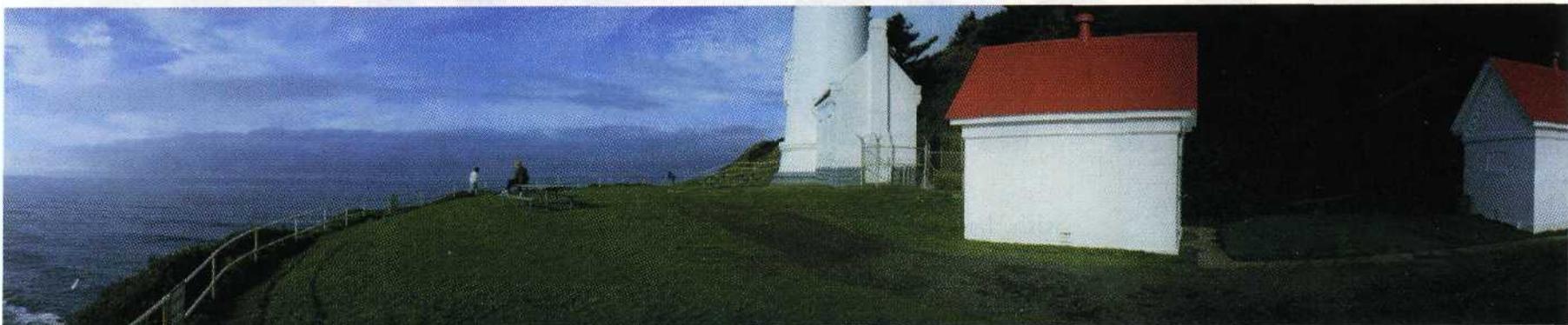
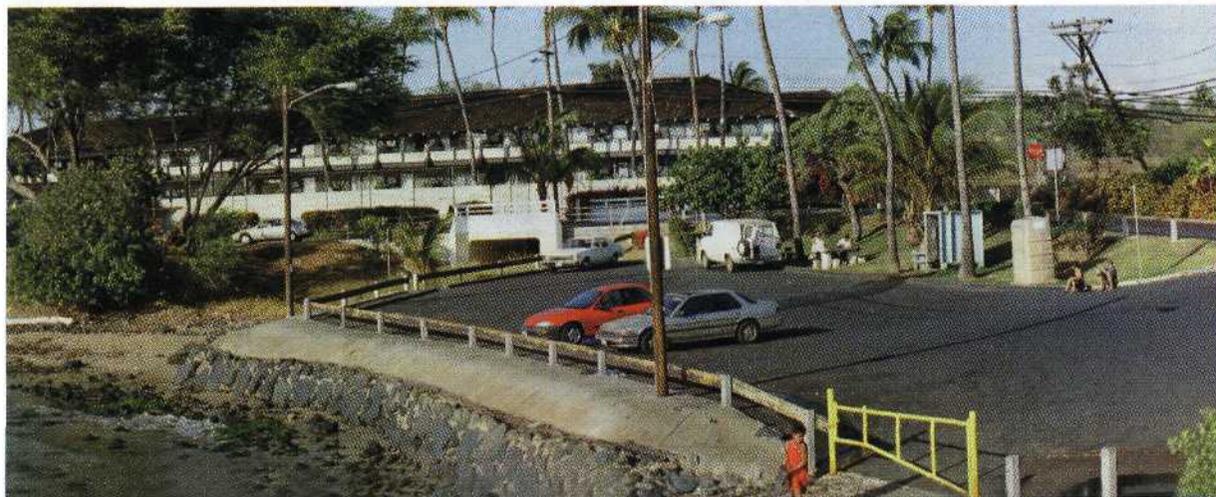
will let you select from hundreds of combinations of lenses, digital cameras, and film formats.

A second program from VideoBrush is called VideoBrush Panorama. This program creates still panoramic images from video cameras and video captured files. This program is quite amazing in the fact that it stitches together live motion video in real time. The program works very much like VideoBrush Photographer, except that it pulls sequential panned images from a video file or video camera.

VideoBrush can save your images in two standard formats, uncompressed Bitmap (.bmp) or compressed JPEG (.jpg). Images created and saved on your hard drive can be

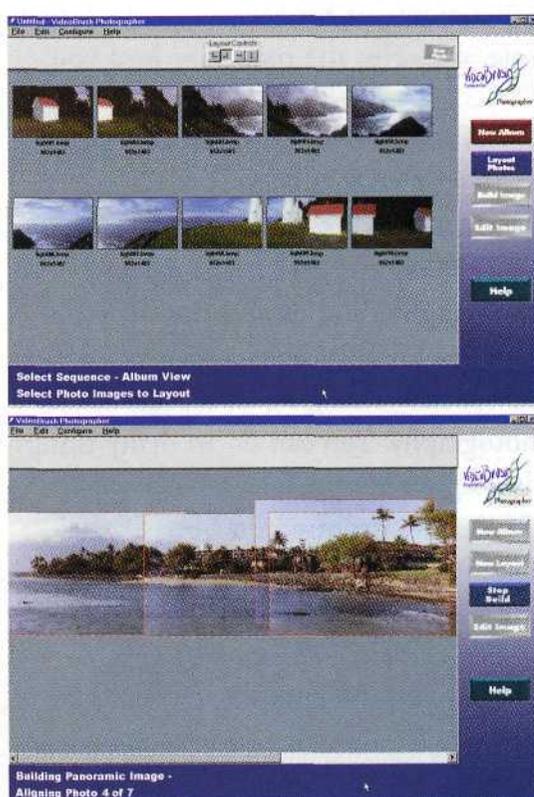
viewed using your favorite photo-editing program such as Adobe Photoshop, Corel Paint or Micrografx Picture Publisher. Since 360° panoramic images are typically too large to fit on the display monitor, you can scroll around in a Web browser or use a paint program to zoom in or out to view the image.

VideoBrush can also export panoramic images to be used in panoramic viewers. When you use these



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variations of a scene, each image will record different information. Combining a group of these images into one final scene will provide a higher resolution image than a



single image of the scene.

Once you have captured images using VideoBrush Photographer in any of these three modes, you have additional advanced options that can be applied. You can increase or decrease image intensity, color variations, and contrast. Advanced options includes the ability to trade off image quality vs. memory use in order to run on computers with less memory. You can also enable the lens focal length box that

programs, you are able to make a continuous pan of the scene. The pan will go on forever in a full circle until you stop panning with the mouse control.

SmoothMove from Infinite Pictures exports to a single panorama file (.pan) image. You can download a plug-in for your Web viewer or use the stand-alone program to view the files directly on your computer (www.smoothmove.com).

RealSpace from LivePicture, Inc., exports an image-based Virtual Reality file (*.ivr) and a related JPEG file format. The JPEG file can be viewed separately in any photo-editing program as a wide-format image (www.livepicture.com).

Grab your camera and capture this marvelous panoramic world. New horizons are yours—all you need is VideoBrush. For further information contact VideoBrush Corp., 4690 Carpinteria Ave., Carpinteria, CA 93014; 805/566-0030. On the Internet at www.videobrush.com. ■

Using VideoBrush, full 360° panoramas can easily be created from a series of snapshots.

Top: Wide pan final image of a hotel.

Middle: Full 360° pan with Virtual Reality potential.

Left, above: Computer screen showing a selection of a full 360° panorama.

Left, below: Computer screen showing the assembly of a panoramic image.