

Shooting photos with a digital camera for use with Photovista Panorama 3.0

Before you shoot your photos, it's helpful to know the type of camera equipment to use and how to shoot your photos for best results. This tutorial provides information about:

- Choosing a camera and lens
- The benefits of using a tripod
- Determining the number of photos to shoot with your lens
- Digitizing, naming, and sizing your images

Choosing your equipment

You can shoot photos for a panorama using a film or digital camera. In addition, the type of lens you use affects how many photos you need. The most precise panoramas consist of evenly spaced photos shot on a level ground, and using a tripod can help achieve this.

Choosing a camera

The type of camera you choose affects the quality of your finished panorama. The following table compares film and digital cameras for creating different types of panoramas.

Camera	Output	Advantages
Film	CD-ROM authoring, high-end photography and Web content	CD-ROM authoring, high-end photography and Web content
Digital	Dynamic web content such as real estate offerings.	Immediate results, transfer the images directly on to your computer.

Choosing a lens

When choosing a lens, consider that a shorter focal length minimizes the number of photos you need and gives you a taller vertical field of view. You

can maximize the vertical field of view for your panoramas by shooting your photos in portrait mode, with the camera on its side.

Camera	Lens
Film	Use a focal length of 35mm or less for a greater field of view
Digital	Use the built-in lens or use an optical adapter for a greater field of view

Using a tripod

Although you can shoot photos for a panorama manually, using a tripod helps you shoot evenly spaced photos on a level plane. This helps Photovista calculate a more precise stitch, resulting in the most seamless finished panorama. For example, a slight tilt of the camera can cause uneven edges in your stitched panorama and you'll have to crop some of the panorama to get a smooth edge.

Note: For professional use, you can mount a panoramic bracket on your tripod to guide the camera rotation.

This gives you the most precise optical alignment and image overlap.

Using a tripod helps you:

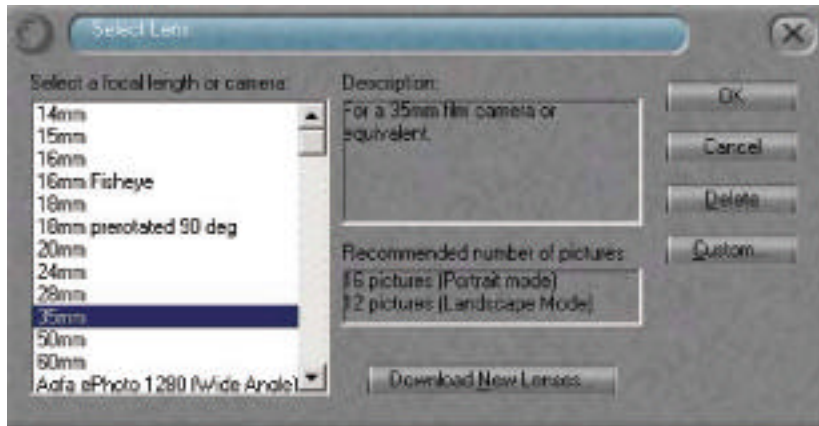
- Hold the camera steady and parallel to the ground
- Avoid vertical tilting during rotation
- Achieve more precise image alignment in Photovista
- Ensure a sufficient amount of overlap between adjacent images

Determining how many photos to shoot

The number of photos it takes to create a 360° panorama depends on your lens setting. Photovista requires a 20% to 50% overlap of source images to properly align them before a stitch. Before you go out to shoot your photos, you can enter your lens information into Photovista to see how many photos to shoot for your panorama. This ensures that you get enough overlap between images.

To determine the number of photos to shoot

1. Launch Photovista.
2. Choose Select Lens from the Image menu. The Select Lens dialog box appears.



3. If your lens appears in the list, select it. The Recommended number of pictures field displays how many photos to shoot with your lens. If your lens does not appear in the list, see 'Adding a lens type'. After you add and save your lens settings, you can view how many photos to shoot for your panorama.

How to shoot a panorama

When setting up your tripod, choose a suitable area on level ground and mount your camera securely. The camera can be mounted horizontally or vertically.

Divide the number of incremental markings on your tripod by the total number of shots that you will be taking so that you have an equal number of degrees by which to rotate the camera for each shot.

For outdoor panoramas, take a light meter reading. For indoor panoramas under low light conditions, use a flash for every shot. Regardless of whether you are indoors or out, the same exposure setting for all of your 12-18 shots must be used. This will create an even exposure, making it easier for Photovista to stitch the shots together, creating a more realistic panorama.

Digitizing your photos

If you shoot your images with a film camera, you need to digitize your photos before you can open them in Photovista. Make sure you save your digital images as one of the image formats Photovista accepts (BMP, FPX, JPEG, or GIF).

To digitize your photos use either a scanner or develop your film on CD-ROM.

When digitizing your photos, you need to consider the following:

- The way you name your images affects the sequence in which they open in Photovista when you open all the images at once using the Add All button. See the next section, “Naming your images”, for details.
- The size and resolution of your digital images affect the size and quality of your finished panorama. The digital images must be the same size so Photovista can stitch them.

Naming your images

Before Photovista can open your images, you have to add them to the Source Files list. To be able to automatically add all of your images to the Source Files list in order, you need to name them alphabetically or numerically. Photovista uses this information to open the images in order from left to right (clockwise).

For example, if you have more than nine images, you need to add a zero in front of numbers one through nine so Photovista will interpret the order correctly.

Note: You can add your images to the Source Files list one at a time if you don't want to name them in exact alphabetical or numerical order or, you can select images one at a time by holding down the Ctrl key as you click on filenames.

The following table shows examples of images named in correct alphabetical and numerical order, along with the Windows file extensions. You don't have to use an exact sequence as in this table, as long as the numbers and letters are in proper sequence (for example, 01, 04, 06, 11, and so on).

**Image named
Alphabetically**

image a.jpg

**Images name
numerically**

01.jpg

image b.jpg	02.jpg
image c.jpg	03.jpg
image d.jpg	04.jpg
image e.jpg	05.jpg
image f.jpg	06.jpg
image g.jpg	07.jpg
image h.jpg	08.jpg
image i.jpg	09.jpg
image j.jpg	10.jpg
image k.jpg	11.jpg

Setting image size and resolution

You can use any image-editing program to resize your images according to the type of panorama you want to create. Consult your image-editing program documentation for the exact procedure. Remember that all of the images must be the same size so Photovista can stitch them into a panorama.

The following table gives you some very general examples of panorama usage and image-file sizes. The example sizes are typically available when you develop your film on CD-ROM.

Panorama usage	Example size	Results
For CD-ROM or other local use	768 x 512 pixels or greater	Higher resolution image: larger file size
For Internet use	384 x 256 pixels	Lower resolution image: faster download time

Now that you've shot your photos and digitized your images, you can move on to the next tutorial: *Stitching a Panorama*; or consult the online manual. You can also find the most up-to-date information about Photovista on the iseemedia website at www.iseemedia.com.