

# CREATE PANORAMIC PHOTOS USING FREE SOFTWARE

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In recent years, shooting multiple pictures of a scene and then stitching them to form a panoramic picture has become a popular project with digital photographers. It is so popular, in fact, that Photoshop Elements now ships with a tool that combines a series of photographs into a single picture by ensuring that the edge details of each successive image are matched and blended so that the join area is not detectable. Once all the individual photographs have been combined the result can be a picture that shows a scene of any angle up to a full 360°.

Picture perfect panoramas. An awe-inspiring horizon can never fit into a single picture. Many people take multiple shots and manually patch them together. The results seem to lessen the effect. Why not use free computer technology to stitch these individual pictures together into a beautiful panorama?

In addition to the fact that you must have a digital camera, there seems to be only two major requirements while taking your digital photos to obtain “pano” views – they must overlap and they must be taken from a single point of view (position). The process will even work if some of the photos were taken with slightly different zoom settings!

To ensure accurate stitching, successive images need to be shot with a consistent overlap of between 15 and 30%. The camera should be kept level throughout the shooting sequence and should be rotated around the nodal point of the lens wherever possible. The focal length, white balance, exposure and aperture need to remain constant while shooting all the source pictures.

## **A common stitching problem**

One of the banes of the panoramic photographer's life is the subject that moves during a shooting sequence. The source of the problem may be people, cars, or even clouds, but no matter how carefully you capture and stitch your source photos, the final panorama often features half a person, or object, as a result of the photo merge trying to match the edges of dissimilar pictures.

The “stitching” process is used to create virtual tours of homes and museums. As you move back and forth around the room (you are standing in the middle of the 360° cylinder), you may find that there is a hyperlink at a door or exit. Clicking on the hyperlink will take you to the next room where another “pano” will greet you.

This hyperlink will provide you with an excellent visual demonstration of how panoramic scenes can be stitched together.

<http://www.cs.ubc.ca/~mbrown/autostitch/autostitch.html>

You can take a virtual tour of the rooms of the White House by clicking:

<http://www.whitehouse.gov/history/whtour/>

Thinking about taking an Amtrak excursion? Here are some virtual tours of their Superliner Sleeping Car:

<http://www.360360.com/trains/slsleep.html>

Now, let’s look at a free program that will allow you to stitch individual photos into a panoramic scene.

**AutoStitch (XP and Vista).** Although this program doesn't have much of a user interface, it could hardly be easier to use: Just select your series of photos, and AutoStitch automatically lines them up and stitches them together.

If you like the result, save your finished panorama. You don't get any frills, and the advanced options are too geeky for most people. But it certainly is free.

<http://tinyurl.com/2chq5t>