

SPM Quick Tip: Multi-Rename

Multi-Rename is located in the File pop down menu (File > Multi-Rename). This will allow you to rename groups of images from the cryptic number names given by the cameras (for example: DSC000561) to more useful names such as Name001_L and Name001_R. Even if there were holes in the original number sequence due to deletions, the batch rename function will number them 1 to the total number in the file, consecutively. This is very useful. It will make it much easier to identify the two images that form a stereo pair (if you are doing cha-cha or twin camera images), and is essential if you use the Multi-Conversion function in StereoPhoto Maker, which can automatically batch process countless stereo pairs. Here are the steps:

1. Select your files.

Once you've chosen File->Multi-Rename, a box comes up.

2. In the Look In box, **browse** to the folder where you stored your original files.

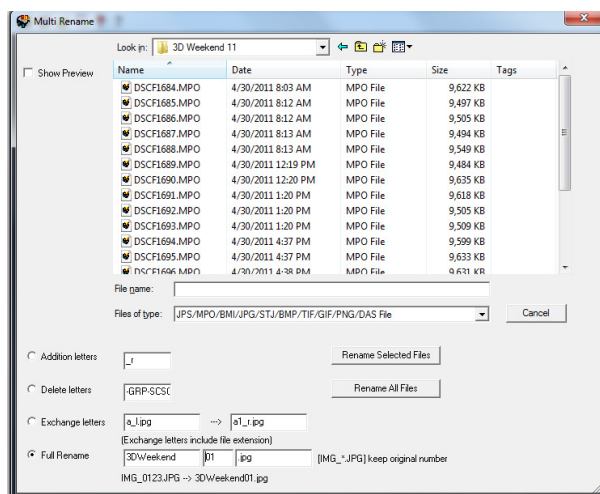
3. Select **Full Rename** at the bottom.

4. Name the files.

Suppose there are 25 images you took at the 3D Weekend.

- * In the box next to Full Rename replace the name with "3DWeekend" or with any meaningful notation you wish.
- * In the numbering box start with "01", since you really only need two digits for 25 images.
- * In the third box, leave the ".JPG". Do this for both the left and right image folders if you have individual left and right images. In that case, the third box of the Left files should say "_l.jpg" and the right files will say "_r.jpg".

Now it will be much easier to identify your files.



SPM

QUICK TIPS VOLUME I

Ten short articles on using features of the photo editing program StereoPhoto Maker created by Masuji Suto.

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Multi-rename - back cover

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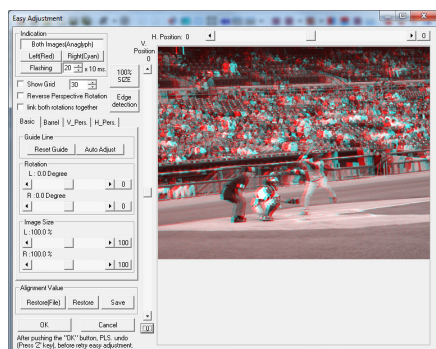
SPM Quick Tips - How To Straighten an Image

Knowing that SPM can fix many problems and improve your stereo images is fine, but unless you have worked with it a lot, you may not know how to do a particular fix. This season, we will have a series of “Quick Tips” to demonstrate some image fixes.

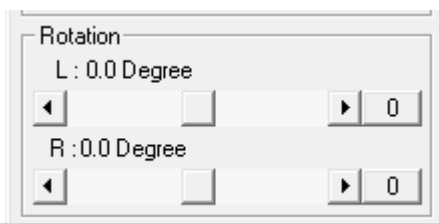
For the first one, it is common to take a nice image in the heat of photographing an event or scene, only to realize later that the image is crooked. Here is an example:



This image can be made more pleasing by rotating it. To do that, just open the image in SPM and go to the “Easy Adjustment” item under the Adjust menu (or press the “K” key) and you will see this:



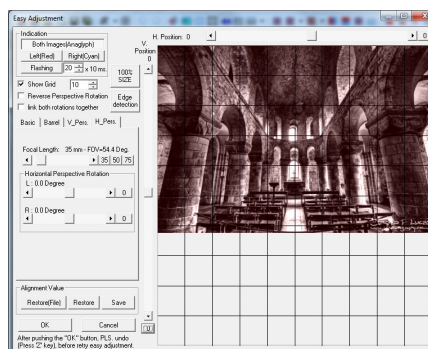
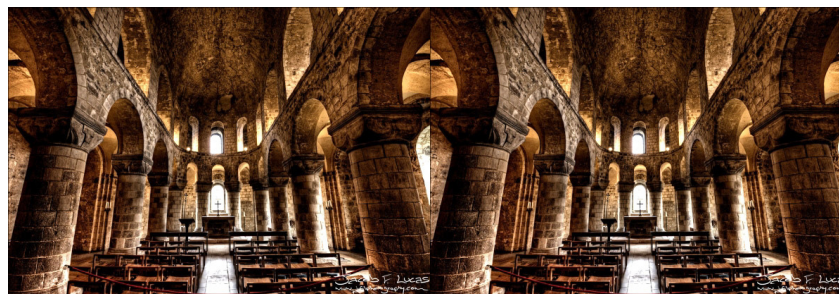
In the middle of the panel on the left are these sliders:



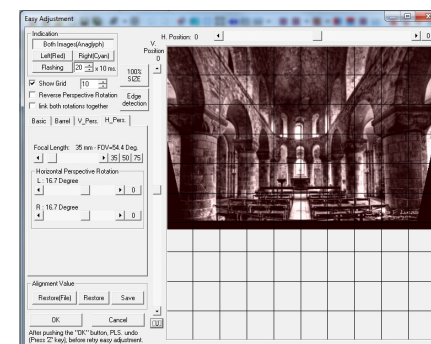
SPM Quick Tip: Correcting Distortion

by Dennis Green

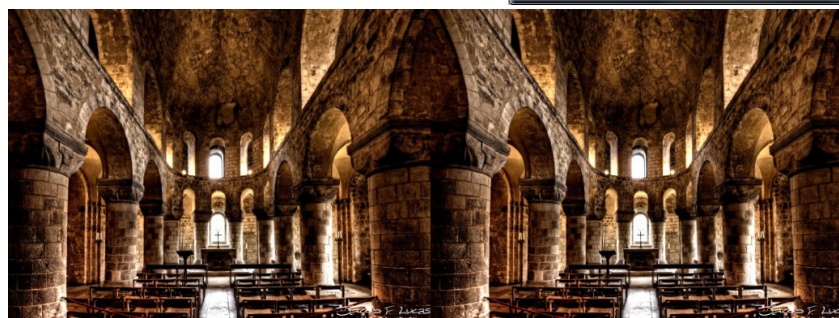
Images taken with a wide-angle lens can suffer from distortion, especially when the camera is pointed up, as in this image of a building interior. This can be easily corrected using SPM’s “Easy Adjustment” and clicking on the “H_Pers.” tab.



Apply a grid so you can see some vertical lines, then move the sliders until both images appear to be straight. In this case, it took about a 16.7 degree rotation.



Save the image under a new name, so you do not overwrite your original, in case you want to re-do the change later. Voila!

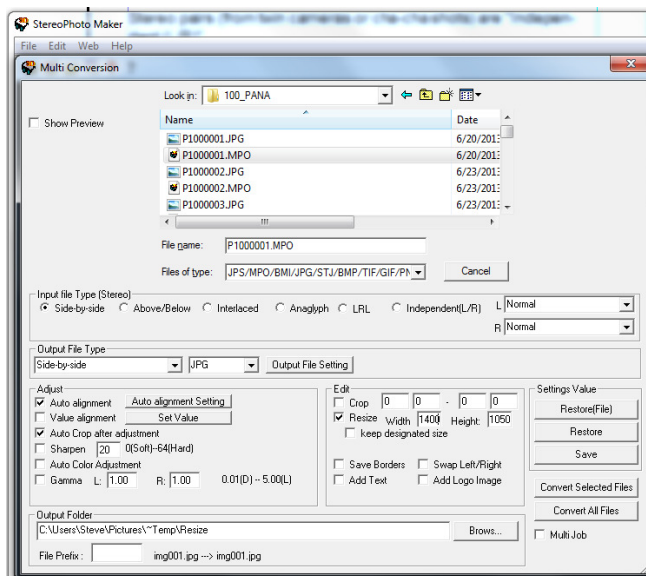


SPM Quick Tip - Resizing Images

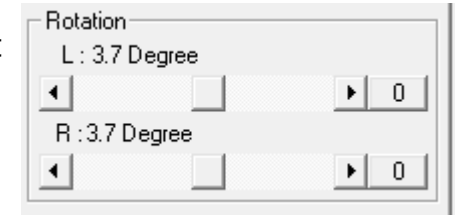
Open StereoPhoto Maker (SPM) and go to File...MultiConversion.

Here are the settings you need. Find the images you want to format using the "Look in:" dropdown box. Select the images you want and check the following options:

1. Input file type - MPO files (from a Fuji camera) are Side-by-side. Stereo pairs (from twin cameras or cha-cha shots) are "Independent (L/R)".
2. Output file type - should be Side-by-side in JPG format.
3. Check the "Auto alignment", "Auto Crop after adjustment" and "Resize" boxes. The resize width should be for one chip (e.g. 1400 Wide and 1050 High for our current competitions).
4. Do not check the "keep designated size" box. SPM will ensure that neither dimension exceeds the maximum you input.
5. Output Folder - click the Browse button to find the folder where you want to save your formatted images. Do not save in the same folder, as you may overwrite your original!
6. Click on the "Convert Selected Files" button. SPM will do the rest.

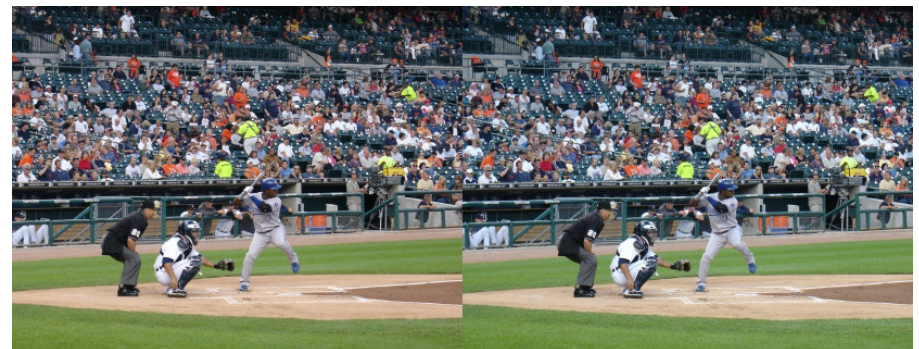


Those rotation sliders are used most often to be able to align the two images in a pair that have been taken with a single camera or using the advanced 3D setting on a Fuji W3. They allow you to remove any unintentional rotation between the two chips. But if you enter the same value in both the L and R side, the image is rotated as a whole:



Now just click the OK button at the bottom of the adjustment screen, and the image pair is automatically rotated and cropped to get rid of the black triangles created when the image was rotated - and it does it to both sides at the same time!

Here is the new straightened image:



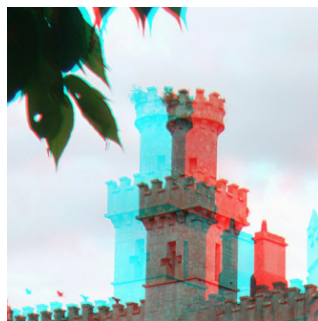
Always save your corrections with a new name so you can go back and readjust the image if you decide that it needs more or less rotation. If you have any questions on this, send me an email or see me at a club meeting.

Dennis

SPM Quick Tips - How To Check for Excess Deviation

What is “excess deviation” and why would you want to check for it using StereoPhoto Maker?

As you may know, stereo images are made up of two nearly identical pictures. The difference between the two is that objects that are farther away in the image are also farther apart than objects in the front of the image. This difference is known as the stereoscopic deviation. In this anaglyph image the leaf is the near point and the castle turret is in the distance.



If your image has too much depth, the deviation will be too large and it will be uncomfortable to view. The maximum deviation should be around 3% or 1/30 of the width of the image.

Excess deviation occurs most often when taking close-ups or macro shots. If you are using a Fuji W3 or a pair of cameras with the lenses about 75mm apart (same as the W3), you will probably have too much depth if your nearest object is less than 7 feet from the camera (assuming you have other objects in the image that are more than 25 feet away).

It is natural to want to fill the frame with your subject, so if you have taken a picture of a flower or other small item, you should check to see if the deviation will be too great to view in projection. Even if it looks OK on a monitor, when it is projected (for our competitions), it is being magnified and may have too much depth.

SPM has a couple of easy ways to check the deviation when you are deciding which images to enter into a competition or have projected for the members in our Open Projector slot.

One thing to be aware of is the relationship between the size of your text zone and the size of the font. If the text zone is too small, you may find the bottoms of your descending characters are being clipped off, which you may not notice at first. Having to redo a whole set of titles due to this effect is not ideal.

The good thing is that once you find a font and text zone that works, SPM will remember that, even if you close the program or use it for other actions in between sessions of adding text.

Clicking the “Enlarge this dialog for next time” box will make the preview image larger and will also make the dialog box fill your screen to make it easy to see the final effect.



Try adding some text to your next project!

SPM Quick Tip - Adding Text

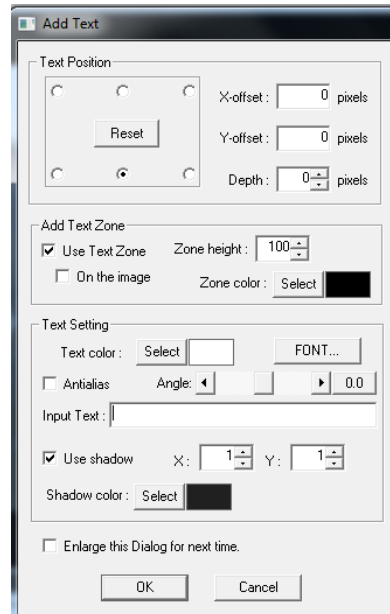
There are many reasons why one might want to add text to a stereo image. The most common is to add a caption to be able to identify the content - a location or people, or the significance of what the viewer is seeing. Before StereoPhoto Maker, captions in stereo took a lot more effort using programs like Photoshop or Elements, but now with a few mouse clicks, you can add text to your images.

To do so, open your image in SPM and select "Add Text" from the Edit menu (or use the shortcut [Ctrl - T]). You will get a dialog box that includes these controls on the left side:

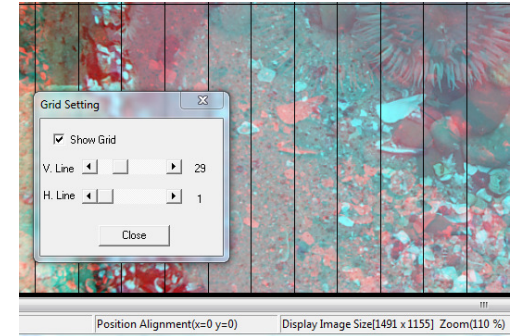
The top section determines where the text will be placed, first setting one of six general locations, then moving the spot on any axis (positive values in the "Depth" box bring the text forward in front of the image).

The second section allows you to create a text zone with colored background, either above or below the image or overlaying it (which can be done with or without the text zone. If placed at the top or bottom, this zone will be added to your image height, so if you need a specific height (as with many exhibitions), you will need to reduce your image height by that amount or resize after adding the text zone.

The last section allows you to specify a font, including the size and style, and add a shadow if you like. It also has the box where you input the text you want. You will be able to see the text in a preview pane to the right of this box, which will give you an idea of what it will look like when you click the OK button. You can try out different fonts and sizes, as well as seeing whether the amount of text in your caption is too much to fit the image width. Only one line of text can be added - extra characters do not wrap to a second line.

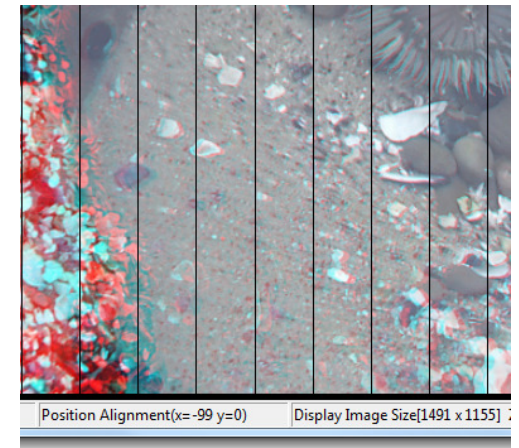


First, open your image with SPM and view it in anaglyph (or interlaced) mode. Go to the "View" menu and at the bottom you will see a selection for "Grid Settings...". Select that and click on "Show Grid" with 29 as the number of vertical lines. This will divide your image into 30 sections.



The distance between any two adjacent lines is 1/30 of the total width, which is what your maximum deviation should be. You can see in this image of a tide pool that the triangular object (circled) is more than twice the desired distance apart. This deviation will cause eye strain, especially when projected.

If you want to know what your percentage value is, just tap the left arrow key until the left and right far point objects coincide. Then read the "X" value at the bottom of the screen. In this case it is "99". Divide that by the total image width, which is also shown at the bottom - in this case "1491". This picture's percentage is about 6.6%, again slightly more than twice the recommended value.



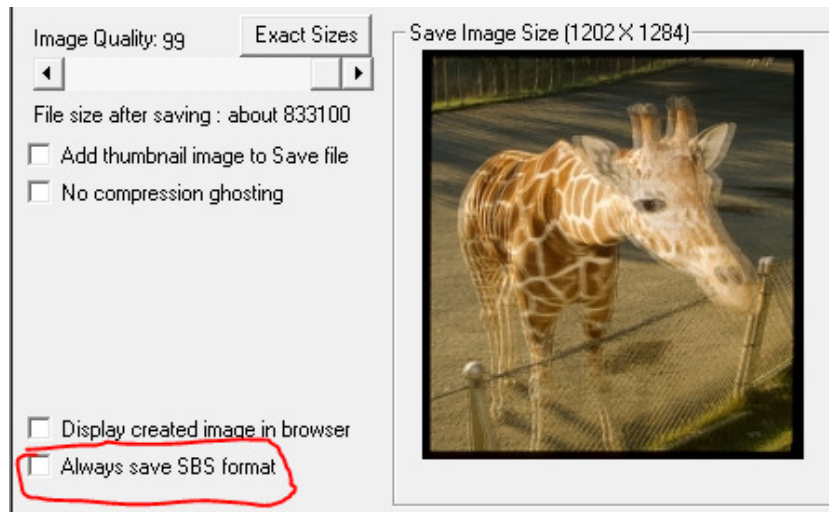
Use this quick tip to check your images before showing them to others or submitting them to a competition. If the image can't be fixed (possibly by realigning and cropping), it might be better to choose another image to share. At least you will be aware of a possible problem.

SPM Quick Tips - 3 Notes on Saving Stereo Images

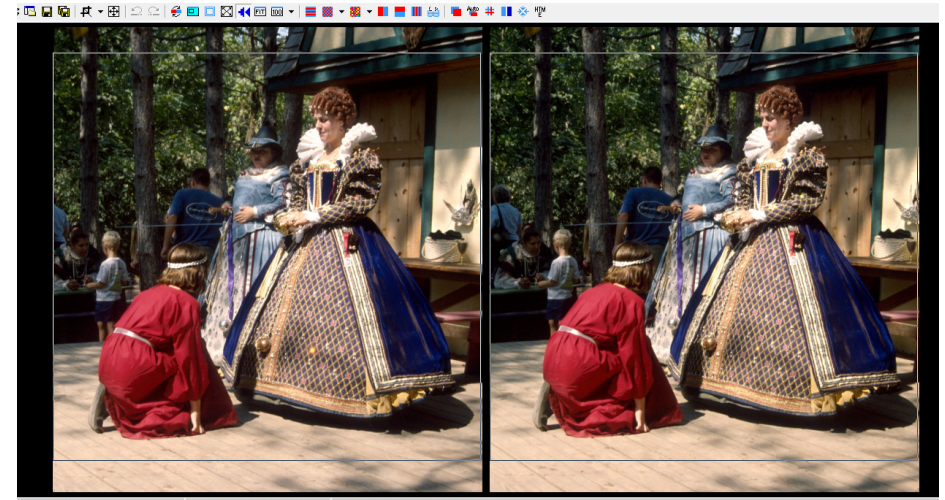
by Dennis Green

1. Shortcut: When editing images in StereoPhoto Maker, whether to align or crop an image, or just to set the stereo window, you need to save the adjusted image. While most Windows programs use the keyboard shortcut “Ctrl + S” to save, that shortcut in SPM is to “Save Left/Right Images...” which will give you two individual images instead of the combined image. A simple save is done by just pressing the “S” key.

2. Format: If you have a 3D monitor, laptop or TV that you use to view images while you are editing, or if you edit in anaglyph mode on a 2D monitor, you may forget to go back and change to the side-by-side view before saving and find you end up with another format, like interlaced or anaglyph. At the bottom of the “Save” dialog box there is a checkbox that allows you to save in SBS format even when you are viewing in interlaced or anaglyph. This can save a lot of frustration when working on images.



Check the “Two-stage cropping” and “Resize to above after cropping” boxes, click OK and when you press a number key, SPM will be in crop mode for that size. Just drag across the image to get the desired height, then you can reposition the crop box to keep the image area you want.



Example of a 4:3 crop box on a 1:1 image

If you do not crop the image to your display aspect ratio, the image will be shown with black bars on the sides or on the top and bottom (depending on which type of mis-match you have).



4:3 image on a 16:9 screen



16:9 image on a 4:3 screen

Your images always look better when the subject fills the frame, and in a similar way, your images should ideally fill the display for the greatest effect. Try cropping some images to fit your display and see if you prefer the results!

SPM Quick Tip: Crop to an Aspect Ratio

by Dennis Green

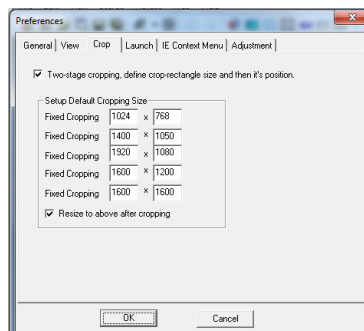
The aspect ratio of an image indicates the relationship between its width and height given in a proportion, such as 4:3. The three most common aspect ratios for stereo photography are 4:3, 16:9 and 1:1, although you can crop an image to any ratio you prefer.

The historical “standard” of 4:3 was established by William Dickson and Thomas Edison in 1892 when they settled on their movie film height of 4 perforations, which resulted in the 4:3 ratio when applied to the available film area of a 35mm strip. 16:9 is the standard for HD TVs and monitors, as well as for widescreen video supported by the DVD standard. 1:1 ratio was the standard for medium format cameras. It is the format of choice for mobile apps like Instagram, and is supported by Facebook and Twitter. It is also the best for displaying Left/Right stereo pairs on a phone display for viewing in a stereo viewer like View-Vaster or Google Cardboard or for creating standard Holmes-style stereo cards.

Most digital cameras, including the Fuji W3, allow the user to choose a default aspect ratio of either 4:3 or 16:9, a choice that will probably be made based on how you want to display your images. If you have a 3D TV or monitor, the 16:9 ratio may be a good choice, although it does not take advantage of the full area of the camera sensor.

If you have 4:3 images that you would like to reformat to fill the screen of a TV, or if you have 16:9 images that you would like to project with 4:3 projectors (as the DSS has done to date), you can use the crop tool in StereoPhoto Maker to do so.

The SPM Crop Tool has several fixed crop options that can be set by going to Edit -> Preferences and selecting the Crop tab. If you put in your most used sizes (like 1400 x 1050 for our club competitions), you can just hit the number (2 in this example) to get the crop tool for that size (or 3 for 16:9).



3. Image Quality: This setting can be adjusted to reduce the size of the new image file. But how much can you reduce it before you would see visible deterioration of the image?

Jay Horowitz of the Ohio club sent a link to a website that shows the effects on actual images of different compression values.

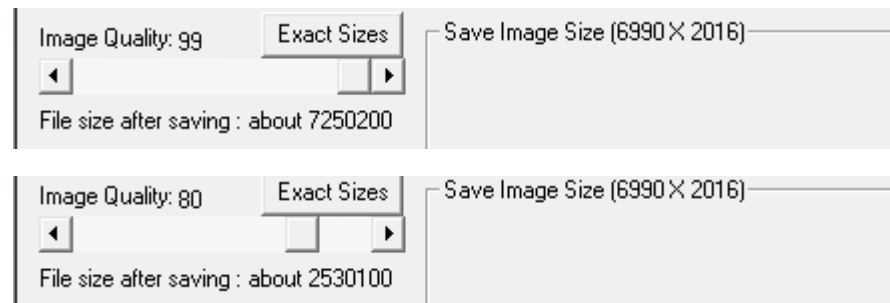
<http://regex.info/blog/lightroom-goodies/jpeg-quality>

He gave these tips with the link:

“I strongly suggest everyone take a look at it. It shows a variety of good test images and how the ‘quality’ setting affects them. For each image, there is a close up of the most-affected area and tabs below for different quality settings. You move your mouse over the tabs and see (or not see) the difference, and also check the red bar on the left which shows the resulting file size. Just moving between the first two tabs (loss-less versus Quality=10 out of 100) shows how decent the compression looks even though the file size is less than 1 tenth the original!”

*“But one word of caution. Repeated editing of jpegs and **saving at lower quality** will quickly degrade your image. So save your original at the highest resolution and quality, and only re-size and save at lower quality for e-mailing or uploading to websites.”*

Here are the file sizes as shown in SPM for settings at the highest setting (99) and at a moderate (80) setting:

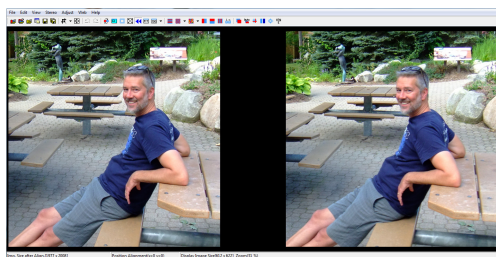
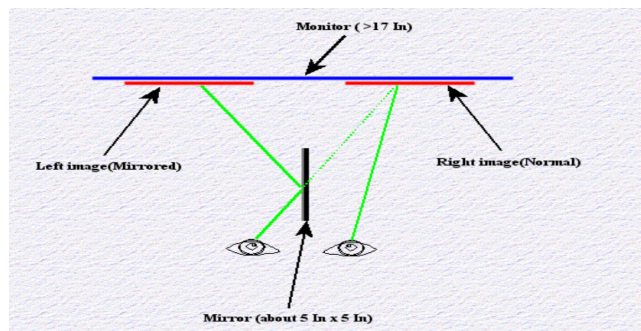


Note that the image size (right) stays the same, but the file size drops from 7.2 MB to 2.5 MB - almost 1/3 the size! Check out that website and experiment with your own images! [][]

SPM Quick Tips - Mirror View Method for Stereo Images

by Dennis Green

One way to view your stereo images if you cannot freeview and do not have a 3D monitor is to view them with a regular (2D) monitor using a mirror and this arrangement:

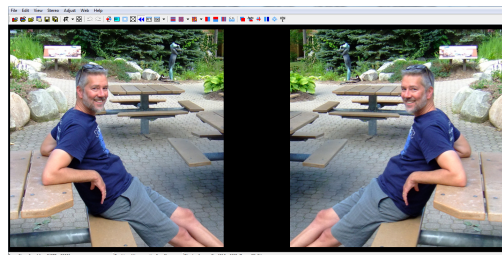


Display your image in SPM using side-by-side mode and press the 'E' key to set the image spacing to wide. The key toggles through narrow, medium and wide spacing.

This example has the left-image mirrored.

To do this, press Shift+F9. Place a mirror about 5"x5" square against your nose and view the right image with your right eye. Focus your left eye on the right image but carefully adjust the angle of the mirror until the reflected left-image merges with the right one.

You may wish to share your stereo images with others using this method by batch-converting them to SBS (mirror-left) format.



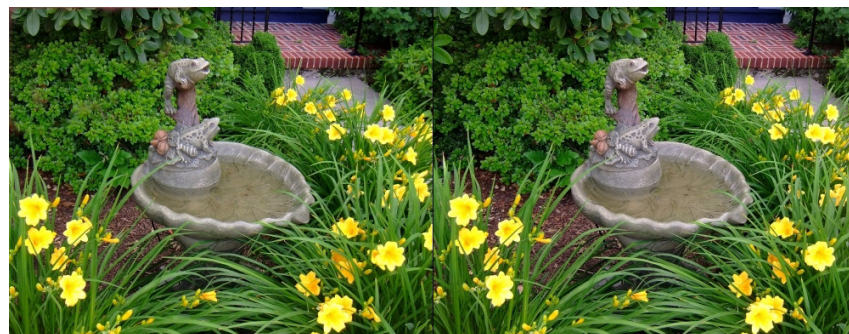
SPM Quick Tips - Clone Out a Finger Blocking Part of an Image

Due to the way the Fuji W1 and W3 were designed, one of the most common issues with images is having a finger blocking part of one image like this:



Since most of the blocked portion of the image is in the background, the SPM Clone Tool can be used to repair this quickly.

1. Put image to be changed on the right and hit "K" to go into Easy Adjustment. Enlarge to 100% and superimpose the area around where the cloning will happen (to clone at the same depth).
2. Return to side-by-side view, place cursor where you want to start cloning, hold SHIFT and LEFT CLICK and hold.
3. Drag the clone cursor over the area to be cloned
4. Save the image - that's it! For more details, go to [stereo.jpn.org/eng/stphmkr/SPM Clone Tool Instructions PDF_Starkman.pdf](http://stereo.jpn.org/eng/stphmkr/SPM%20Clone%20Tool%20Instructions%20PDF_Starkman.pdf)



Images from www.lhup.edu/~dsimanek/3d/stereo/tricks.htm