

## SPECIFICATIONS FOR CREATING FILES FOR DUAL PROJECTORS FOR 3D

In order to project stereoscopic (3D) images on a screen for viewing with polarized glasses, two projectors are required, one for the left eye view, and one for the right eye view. These projectors are normally controlled by a computer that has a dual video card.

A common way to prepare images for a computer with a dual video card is to create a JPEG file that contains the stereo pair side by side. For example, if the resolution of each video card is 1400 x 1050 (a common resolution with an aspect ratio of 4 x 3), a stereo pair placed into a single file would consist of the LEFT and RIGHT images in a side-by-side format of 1400 x 1050 pixels each, resulting in a single image file of 2800 x 1050 pixels.

The Cascade Stereoscopic Club uses software (StereoPhoto Maker) which can read and automatically resize side by side JPEG files of any resolution (provided that the resolution of the left and right images is identical). StereoPhoto Maker can also read and automatically resize MPO files (a common file format created by stereoscopic cameras, such as the Fuji FinePix W3). However, some competitions may require entries to be in side by side JPEG format with a specific resolution (e.g. 1400 x 1050 for each eye, or 2800 x 1050 total). This article describes how to format such files. SPM can effortlessly Resize images With Borders option.

### Steps A. through E. below explain the process.

**A.** Here is a LEFT file and a RIGHT file of 1400 x 1050 pixels, for example, each saved at medium quality **JPG** format. Resolution of file is not critical, just use same resolution on all files.



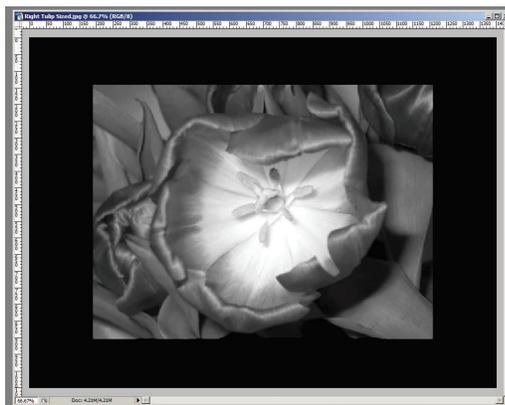
**B.** In Photoshop (or other image editing software) the size of the images is adjusted. Each image must be exactly 1400 x 1050 pixels. (Both together will be 2800 x 1050 pixels.) This equals the correct aspect ratio of 4:3 for each LEFT/RIGHT image.

**C.** Here is the final file composed of both the LEFT and RIGHT images with 2800 x 1050 pixels size without a gap between images.



D. In case your images have a **DIFFERENT RATIO** than 4:3 and you cannot crop [Page One](#) your images to that aspect ratio, size them so the largest dimension falls within the final 1400 x 1050 pixel size.

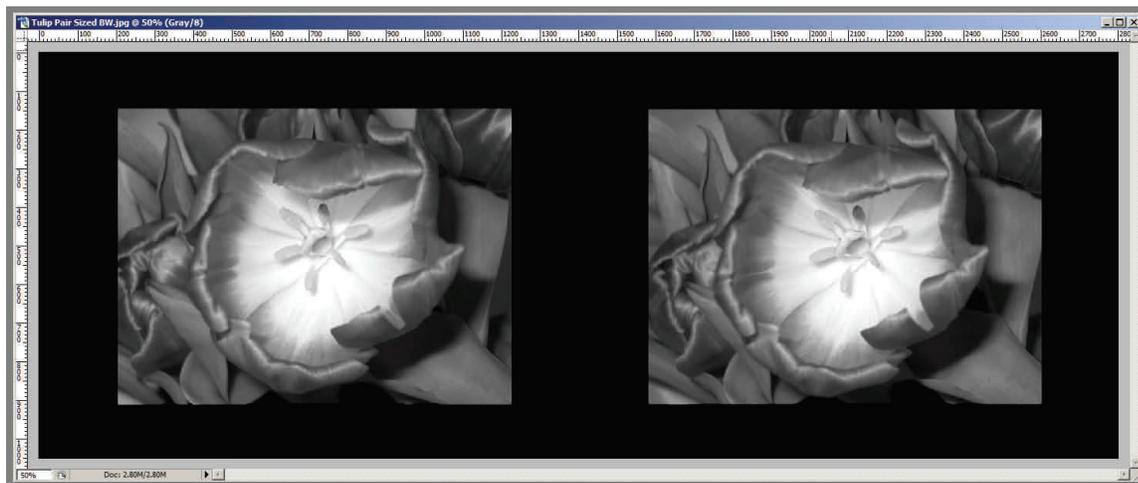
1. Create two black files of 1400 x 1050 pixels.
2. Copy each of the LEFT and RIGHT images onto and centered inside each of these black files.



3. To create the final combined LEFT and RIGHT file image. (LEFT on LEFT side, RIGHT on RIGHT side.)

- a. Create one black file of 2800 x 1050 pixels.
- b. Copy the LEFT image from 2. above onto this black file and drag it LEFT so LEFT edges are aligned.
- c. Copy the RIGHT image from 2. above onto this same black file and drag it RIGHT so RIGHT edges are aligned. **No GAP** is allowed between the LEFT and RIGHT images.
- d. Check that all top and bottom edges align with the edges of the new file.

Here is the final file that resulted from two images that had an unique aspect ratio. Note the two images occupy the centers (VERTICALLY & HORIZONTALLY) of each half of the large rectangle. This geometry is essential for successful projection of your entry.



## **E. SAVING FINAL FILE AS AN ENTRY FOR THE PROJECTED IMAGE EVENT.**

**Name the parallel pair file exactly in the following format:**

**01\_title\_firstname\_lastname.jpg**

**Maximum file size of each entry file should not exceed 2.5 MB - total of four entry files not to exceed 10 MB.** [Page One](#)

If you do not understand any of this, please email Ron Kriesel: [dddphoto@easystreet.net](mailto:dddphoto@easystreet.net)