How You Can Easily & Cheaply get into Your Own 3D Photography!
by Philip Steinman

I've put together some introductory information containing my recommendations for getting into 3D photography and learning more about it. Please share this with anyone who might be interested.

I discovered 3D by seeing a 3D projected 35mm slide show (with polarized lenses) at the Southern California Stereo Club. They handed out polarized glasses (not those silly red and green anaglyph glasses) and the 3D photography was just so beautiful that I joined SCSC. The shows are open to the public and I encourage others to attend the monthly slide shows every 3rd Thursday of the month at 7:30pm at the Wilshire United Methodist Church, 711 South Plymouth Blvd., just off Wilshire near Crenshaw, west of downtown Los Angeles and south of Hollywood. Just come and watch high quality 35mm stereo slides projected, it's breathtaking!

To learn more about SCSC check out.. http://www.3dgear.com/scsc/

Now to start taking your own 3D pictures & enjoying them I recommend getting a classic 3D camera! For 3D photography you need a picture for your left eye and one for your right eye. Notice that each eye sees slightly differently, combined they give you stereo vision depth. To get a stereo image you could use a simple 35mm point & shoot by taking a left image shot, then moving the camera over horizontally almost 3 inches and taking a right image shot. You just have to hold real still, keep the camera on the same horizontal plane, and don't shoot any moving subjects! But with a 3D camera you get 2 lens and 2 shutters that fire together, and you can photograph movement and anything else!

So what do I recommend? I recommend buying into the Realist format of 3D photography. This format uses standard 35mm film and each image is 5 perforations wide (24x23mm). So with each stereo pair a Realist format camera gives you two 5 perf film chips (images), as opposed to a single 8 perf film
chip (24x36mm) in the 35mm film camera that you now shoot with. This will yield up to 29 stereo pairs in a 36 exposure roll of film! This is by far the most popular and widely supported form of 3D photography today, and has been since it took off in the 1950s. It is the most highly recommended format to start out with!

A budget near $100 could get you into..

1) A F3.5 vintage Realist Camera

2) A cheap plastic realist format 3D viewer

3) And a standard roll of 35mm slide film to start shooting your 1st roll of 3D!

4) For simplicity, just send your film to Kodak for processing and specify Stereo Mounting. Try.. Kodak Premium Processing, 1201 West Broadway, Minneapolis, MN 55411. Phone: 1-800-377-7861

If you have $300 or more I recommend..

1) The same common F3.5 vintage Realist Camera $100-$200. This is my favorite brand.. the original David White Co Realist., but you might also consider the other popular Realist 5p format cameras such as the Kodak Stereo, Revere "33" or the deluxe model, F2.7 lensed Wollensak "10", Iloca II, Iloca Rapid, Kindar, TDC Stereo Colorist I, and TDC Stereo Vivid. In good condition, the Realist camera and these others have sharp lenses that still take great photos today. You can read more about the Realist at http://www.sscc.asn.au/sscc/realist.htm and Dr. T's http://home.att.net/~drt-3d/toys/realist/ with simple steps for loading film in your realist and a picture taking routine.

Realist format cameras are regularly sold on ebay's 3D equipment listings
at http://listings.ebay.com/aw/listings/list/all/category4692/index.html There are often cool ebay pictures like these that you can view in the auctions. Also try an ebay search and specify Realist, or Realist camera, or stereo camera, and stereo viewer as the search word(s).

You can also check out Southern California's largest monthly camera swapmeet.. The Buena Park Camera Swapmeet at 7530 Orangethorpe Ave. in Buena Park where you'll find 20-100+ stereo cameras. You can also try the used/vintage camera section at Samy's Cameras, LA's largest camera store on 431 S. Fairfax Ave (South of 3rd St.) 323-938-2420.

2) A cheap plastic realist format 3D viewer $3.20. Everyone should get a few Realist STL Plastic Viewers because they're cheap enough to give out to friends & family. You just drop in a Realist format slide and hold it up to the light for nice stereo viewing.

3) For high quality viewing with achromatic glass lenses get a vintage Realist ST-61 Red Button Viewer $100. Dr. T has a great review at http://home.att.net/~drt-3d/toys/RedButton/index.htm Don't rule out the other quality stereo vintage viewers made like Kodak's Kodaslide II, Revere, TDC Deluxe and Brumberger, or the new $100 Star D viewer at http://www.berezin.com/3d/viewers.htm

4) If you buy one book, get DrT's book for the Stereo Realist Camera $35. This is a new (c. 1999) and quintessential book for the Realist Camera. If you are the studious type, you might want to buy this book first to read about all your options with the Realist camera,
and get a head start on how to pick out a good one! Over 230 pictures in 125 pages, covering: How to Use the Realist, Different Realist Models, Realist Accessories and Techniques, How to Repair the Realist, Unique Realist Modifications Plus... Basic Photographic Concepts, Requirements for Stereo Photography Mounting, Viewing, Projection Practical Guidelines & Advanced Stereo Techniques. See his website at http://home.att.net/~drt-3d/catalog/index.htm He's always selling something on eBay, see what's available now at http://cgi6.ebay.com/aw-cgi/eBayISAPI.dll?ViewListedItems&userid=drt-3d@worldnet.att.net

5) A vintage Realist Film Cutter $30 (or the really nice vintage Stereo Realist Mounting Kit $75+). You can use a scissors to cut your film strip and mount the chips yourself in cheap cardboard mounts. But why not use a classic Realist Film Cutter! It's more fun because it's so easy to cut precisely. Or get the new Reel 3-D cutter for $30 at http://stereoscopy.com/reel3d/mounting-supplies.html

Mounting stereo images yourself is simple and gives immediate pleasure. You can have 35mm slide film processed the same day at many 1 hour photo stores, just specify "Do Not Mount". This way you don't have to wait a week or two for the film to come back stereo mounted. You just cut the images yourself and put the two film chips into a realist mount. You can read An Illustrated Guide to Stereo Slide Mounting at http://www.rmm3d.com/3d.encyclopedia/mounting/mounting.html


7) Light Meter. Classic stereo cameras are all manually operated with no built in light meter, so you determine the proper aperture and shutter speed. You can also use your 35mm SLR camera's meter to give you a reading and then apply the settings to your manual stereo camera. Or, without any metering, you can apply the basic Sunny 16 rule of thumb: F16 aperture with shutter speed at 1/ASA of film. So with 100 ASA film you can use your camera as a "point and shoot" for most subjects on a sunny day by dialing in f/16, 1/100, focus set at 15ft 7ft to infinity should be in focus.
Adjust exposure to available light:

<table>
<thead>
<tr>
<th>Shutter</th>
<th>f-stop</th>
<th>Rating</th>
<th>Light Conditions</th>
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<tbody>
<tr>
<td>1/100</td>
<td>f22</td>
<td>+1</td>
<td>Extremely bright w/ sand or snow</td>
</tr>
<tr>
<td>1/100</td>
<td>f16</td>
<td>0</td>
<td>Sunny and Bright, distinct shadows</td>
</tr>
<tr>
<td>1/100</td>
<td>f11</td>
<td>-1</td>
<td>Weak sun, soft shadows, side light</td>
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<tr>
<td>1/100</td>
<td>f8</td>
<td>-2</td>
<td>Cloudy bright, no shadows</td>
</tr>
<tr>
<td>1/50</td>
<td>f8</td>
<td>-3</td>
<td>Heavy overcast, bright shade</td>
</tr>
<tr>
<td>1/50</td>
<td>f5.6</td>
<td>-4</td>
<td>Dark shade</td>
</tr>
<tr>
<td>1/25</td>
<td>f3.5</td>
<td>-7</td>
<td>Bright interiors; Max exp. handheld</td>
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You can buy new stereo supplies and products at Reel 3-D Enterprises (Susan Pinsky and David Starkman are longtime SCSC members!)
http://stereoscopy.com/reel3d/

Berezin Stereo Photography Products (Steve is also SCSC member!)
http://www.berezin.com/3d/ including many of their viewers at
http://www.berezin.com/3d/viewers1.htm
http://stereoscopy.com/reel3d/slide-viewers-realist.html

You'll also notice that I recommend shooting slide film as opposed to negative film because this is more standard & enjoyable in the 3D world IMHO. But you can also shoot negative film and view 2 side by side prints, StereoCards!, with appropriate viewers at..
http://www.berezin.com/3d/cardvwr.htm
The View Magic Print Viewer, only $33, is especially simple & easy to use in enjoying 3x5 or 4x6 prints, one on top of the other.
http://stereoscopy.com/reel3d/print-viewers.html
The Do-It-Yourself Holmes-Style Stereoscope Replica Kit, for only $40, is especially high quality for classic StereoCards that you could make yourself from 1 hour photo prints.

To learn more about 3D in general check out.. Rocky Mountain Memories 3D Encyclopedia http://www.rmm3d.com/3d.encyclopedia/index.html
And use Dan Shelley's 3D links as a springboard..
http://www.dddesign.com/3dbidan/3dlinks/default.htm

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Good luck, and if you have questions email philipsteinman@earthlink.net