Subject: 3-D obsessions
Posted by tones3-d on Wed, 07 Apr 2010 10:43:23 GMT
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My Twin Wide Angle Lens Adapter arrived ... just in time for my walking trip in the Fiordlands National Park in New Zealand:

Here it is, with machined brass thread inserts fitted.

Here the lenses have been screwed in.

Here, fitted up to the Twin Rig (http://www.shapeways.com/model/72937/baseplate_for_stereo_3_ d_twin_rig_camera.html) and ready.

Here, with the twin lens cover (http://www.shapeways.com/model/93536/twin_wide_angle_lens_ca p.html).

Here, with the win back-cap fitted (http://www.shapeways.com/model/72950/twin_rear_lens_cover.ht ml), for dust-free storage when not in use.

File Attachments

1) wide-angle-with-brass-rings.jpg, downloaded 857 times
2) wide-angle-with-lenses.jpg, downloaded 849 times
3) wide-angle-twin-rig-2.jpg, downloaded 866 times
4) wide-angle-twin-rig-with-cover.jpg, downloaded 862 times
5) wide-angle-with-back-cover.jpg, downloaded 852 times

Subject: Re: 3-D obsessions
Posted by aeron203 on Wed, 07 Apr 2010 13:33:29 GMT

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Impressive work getting all these parts to fit together so precisely. Especially the inserts. The brass is held in with adhesive? I have been considering what approach to take for bonding like that, and I've been thinking mostly hot-pressed and/or barbed inserts, which would work for screw bosses but not on something like this. After your trip I'm sure you'll have a wealth of knowledge about how 3D prints function in the field. Please share!

I'm also thinking you may miss some good shots if you have to assemble the rig each time you use it. A frame would give it support and a regular shape that you could put in a bag.

One of the most jaw-dropping camera rigs I've seen is the Red One. Man, I want one of these.

http://www.red.com/accessories/

If you took that sort of approach and used metal for the structural elements and SLS for the joinery, this thing would be rock solid enough to carry assembled.

Subject: Re: 3-D obsessions
Posted by gibell on Wed, 07 Apr 2010 15:22:43 GMT
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Great job fitting together the metal and plastic. It looks very professional with the dust covers and all.

Keep those cameras dry in Fjordlands! I was there many years ago ...

Subject: Re: 3-D obsessions
Posted by virtox on Fri, 09 Apr 2010 16:54:58 GMT
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Impressive engineering ! Good stuff !

Subject: Re: 3-D obsessions
Posted by tones3-d on Sun, 18 Apr 2010 10:40:10 GMT
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Thanks for the positive feedback, people.

I machined the inserts after the print arrived, so that I could measure what I had, very carefully. They're a slight interference fit, shallow-grooved on the outside diameter, and then glued in with loctite 680 (the strongest variety I have)

aeron203:
I do not need to assemble it each time, it is quite strong enough to carry assembled. With appropriate design, and printed thickly enough, the WS&F is surprisingly rigid, and the cross-piece on the adapter strengthens the assembly even more.

Also, I have about 20 years' experience in 3-D photography, so I know where I am headed with this project.

I'll post a link when I've had the time to publish some photos. (most of my photos are transparencies, which I show using a stereo projector, and the more recent digital pairs are also projected using a double-head video adapter driving two projectors; both systems utilize polarizing filters for left-right discrimination)

The Belt:

Opened, ready to remove camera:

Ready to shoot:

File Attachments

1) WA_bag-closed.jpg, downloaded 667 times
2) WA_bag-open.jpg, downloaded 662 times
3) WA_ready-to-shoot.jpg, downloaded 664 times

Subject: Re: 3-D obsessions
Posted by dizingof on Sun, 18 Apr 2010 17:11:06 GMT
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wow , Impressive !

Glad to see i'm not the only one designing real products using 3D printing !

Is there a link to see some of 3D pics you took with those cameras?
Do we need an active-shutter 3d glasses to view them?

Subject: Re: 3-D obsessions
Posted by maartje on Mon, 19 Apr 2010 13:34:34 GMT
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Great, I'm also very interested in the pictures U made with it!

Subject: Re: 3-D obsessions
Posted by aeron203 on Wed, 21 Apr 2010 15:40:59 GMT
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Fits like a glove. Clearly that experience is a rich resource for you, and for us by extension. I'll try not to irritate you with too many questions, since my machine shop time would be measured in hours.

I'm also looking forward to seeing some 3D photos!

Subject: Re: 3-D obsessions
Posted by tones3-d on Thu, 22 Apr 2010 01:41:59 GMT
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Please ask!! If I can share any experience and/or thoughts, I'm always delighted.

Subject: Re: 3-D obsessions
Posted by tones3-d on Sun, 25 Apr 2010 11:51:40 GMT
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Here are some photos .... more will follow as time permits.

http://www.abignell.id.au/stereo_photo_albums.html

Subject: Re: 3-D obsessions
Posted by 4m3D on Mon, 26 Apr 2010 13:12:50 GMT
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Nice!!! Crazy project. This sort of stuff makes my head spin!

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