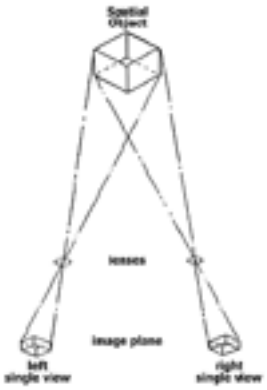
Shooting and Posting for 3D

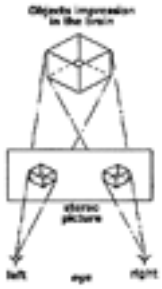
By Ann Tegnell

3D production has moved out of movie theaters and into the board room. It's become a feature at trade shows, conferences and exhibit spaces where companies are finding that 3D presentations are a great way to attract attention to their presentations. It turns out we still love to put on those wacky glasses and have a sense-ational experience.

The Shoot in Short

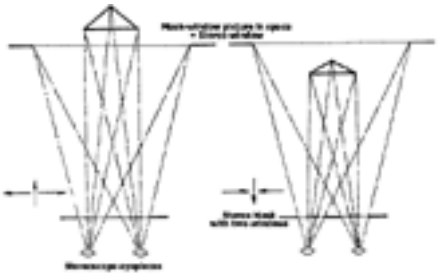


Working on the back lot of Universal Studios in Orlando, Hall Media Productions shot a series of vignettes to help promote a medication that helps people struggling with sleepiness. Our approach for 'Alertness Matters' was to literally put our audience in the place of sleepy patients. So we put a stereoscopic camera right on the heads of our actors as they woozily played their scenes. The two linked cameras separately recorded the left and right eye images POV and we used a clapstick on set so that the tapes could easily be sync'd in post.



Back home in Edit 1, cutting the short sequences for 'Alertness Matters' was a breeze. It was all about shot selection and a cut or two. And syncing the two tapes was simple. My 16mm dual system film days came flooding back. Once you know how to keep multiple strands in sync, you don't forget. I just had to keep track of all my changes without using a grease pencil!

Seeing Double



There were two challenges in the posting of this project. The first was defining the horizontal offset that would best support the 3D effect. In the field, the linked cameras were calibrated to cross their images at a particular point on the z-axis, the axis that moves directly toward or away from the camera lens. It's very like what your eyes do when you 'focus' on something near or far. Your eyes work together to focus on that object at that distance. To clearly see something near us, our eyes look in a 'V' pattern toward the object. To see something far away, our eyes look out in a more parallel, or 'II', path. In post, I could adjust the 3D effect by shifting the left and right eye, or camera views, farther apart or closer together. The farther apart they were, the closer to the viewer the 3D effect appears. The closer they were, the farther away the effect. The calibration of the cameras along the z-axis, combined with the horizontal offsets I made in post, determined what space in the vignette appeared most 3D. I should also say that this was a delicate adjustment, because if I moved either side too far other areas of the image would separate and the 3D effect would be ruined by an uncomfortable double vision. Eye-rubbing at best.

HALL MEDIA PRODUCTIONS, Inc.

441 N. 5TH STREET #200, PHILADELPHIA, PA 19123-4008

PHONE: 215-564-0711 FAX: 215 564 1036 WEB: HALLMEDIA.COM

The other challenge was in augmenting the effects of sleepiness. We ran all the vignettes through After Effects. We played with blurs, waves, glows and fades, all designed to simulate what it is like when you just can't keep your eyes open any longer. It was surprising what worked and what didn't. The result was the simpler the better. The most complex effects were simply swallowed up by the 3D. The glows and blurs were most effective because they functioned the same for both 'eyes'.

Feeling It

3D graphics were created by developer Mickey DeLorenzo using 3D Studio Max. Each 'eye' had to be drawn and rendered separately with a horizontal offset equivalent to the distance between our eyes. When the exclamation point reaches it's stopping point the tip continues to bend as if inertia is acting on it. This slight effect makes the logo appear to jump out and tap you on the head. Wake up!

To make the sensual experience complete, we worked with John Anthony of the MAJA Audio Group on our sound design and mix. John took this opportunity to drag out his binaural recording head to lay down location specific surround sound. John's highly adapted hair salon dummy is adorned with small mics on all sides and 'hears' very much like we do. On a good stereo system or with headphones, you feel the sound.

Headgear

In the post production process we worked with 3D consultant Ron Labbe of Studio 3D in Maynard, Mass. Ron advised us on 3D theory and also supplied viewing devices and software that wed the image streams so they could be seen in their true 3D greatness.

This brings us back to the various ways you can record and see 3D. There are quite a few. We used two: the stereoscopic way, where two image streams are gathered, then projected as a pair and viewed with those goofy cardboard glasses; and an interlaced method where field 1 of the frame (scan lines 1-3-5 and so forth) are the right eye image and field 2 of the frame (scan lines 2-4-6 and so on) are the left eye, then viewed from a single source in special goggles. Since we shot the vignettes stereoscopically, it meant that both means of presentation were open to us.

Hall Media premiered 'Alertness Matters' to rave reviews at a 500 person sales meeting. For this event we projected the piece onto a extra-bright classic silver screen from two slaved DVD players. The audience was issued their keepsake 3D glasses.

The subsequent roll-out of the campaign called for specially designed, self-contained kiosks with multiple 3D viewing stations which would be moved from site to site over a period of weeks. These public kiosks were equipped with 3D stereo audio-visual headsets that play an interlaced image. Hall Media's multimedia developer, Mickey DeLorenzo, used proprietary third party software to combine the stereoscopic images into a single interlaced image on DVD. Each file had to be tested on a CRT with specially designed wireless 3D glasses before burning and release to the client.

Grab their attention! Alertness Matters

The result is a completely immersive experience that drove many thousands of interested people to logon to the website during the first week of roll-out. The biggest problem has been that the lines to see 'Alertness Matters' are too long. Feeling sleepy?

HALL MEDIA PRODUCTIONS, Inc.
441 N. 5TH STREET #200, PHILADELPHIA, PA 19123-4008
PHONE: 215-564-0711 FAX: 215 564 1036 WEB: HALLMEDIA.COM