

What's Popping Out of 3-D?

By Jennifer Marino

Grand opening of 3D lab at USC's Entertainment Technology Center (ETC)

Photo Credit: ETC



3D Sandbox Image at ETC

3D has become increasingly popular; leading more companies to incorporate the medium into their product line. As more options arise in the stereoscopic world, cutting-edge products and 3D education have created the newest industry buzz.

Panasonic has been especially busy promoting 3D products. The company debuted its unique 3D full HD Plasma Home Theater System, which incorporates a Plasma HDTV and a Blu-ray Disc player, at the **CEATEC** trade show in Japan in September 2008. And in February 2009, the company established the Advanced Authoring Center within the Panasonic Hollywood Laboratory to support Hollywood studios in developing 3D Full HD Blu-ray disc titles.

Panasonic has also begun developing their professional 3D Full HD production system that includes a twin-lens P2 professional camera recorder,

which allows the capturing of natural and high-quality live 3D images. The system also enables the recording of two separate full HD images onto Panasonic's proprietary P2 flash memory system, and includes a 3D-compatible HD Plasma display.

The **University of Southern California** is helping to advance 3D production; their Consumer 3D Experience Lab at the USC Entertainment Technology Center is impressive for many reasons. "We provide the only facility we know of in the world — our Consumer 3D Experience Lab, where the content companies can get together with CE manufacturers, technology vendors and even with consumers to understand the issues related to 3D," says David Wertheimer, executive director and CEO of the Entertainment Technology Center. "We pool the knowledge and help expand it in the areas of 3D production, distribution and consumption."

Although digital has empowered the quality of 3D, bringing it back into vogue, there is concern over whether enough theaters are equipped to supply the medium. However, Wertheimer predicts that a large percentage of new digital screens to spring up over the next couple of years will be 3D-enabled. "3D is working extremely well in theaters. Films like *My Bloody Valentine* saw a 7:1 difference in revenues in 3D screens over 2D," he says. "We did some research with the CEA that showed quite clearly that the more people experience 3D, the more they want. So 3D moviemaking, which just gets more and more effective at the box office, will continue to grow and expand in genre. As a result, consumers will demand 3D enhancements in their home as well, and the gaming companies and Hollywood will have an interest in delivering product to homes as well to create that secondary market for feature films."

Since 3D has advanced by progressing to digital, it has eliminated the technical mechanisms that caused viewer discomfort, and Wertheimer believes it will therefore succeed as a long-term medium. "I think that games

Element Technica's 3D camera system in (L) parallel and (R) beam splitter configurations

Photo courtesy of Evergreen Films, Inc.



will be a critical component of 3D growth, movies and eventually sports," he says. "The faster the content comes online, the faster the business will grow. ... We already have seen 3D solutions running on existing Blu-ray players. There will be 3D broadcast and satellite to set-top boxes, and there will also be digital download. ... Several vendors plan to bring 3D TVs to market in 2010. The groundswell is happening."

The mechanism behind digital 3D deters those looking to work with the emerging medium. **3ality Digital, LLC**, behind U2 3D and the live 3D sports broadcast of the FedEx BCS Championship Game, will provide a solution by launching 3ality Digital Image Quality (3D IQ), a training and certification program in the field of live-action digital 3D.

According to 3ality, 3D IQ will provide sessions ranging from instruction on the general principles of 3D production to actual fieldwork with hands-on experience in operating state-of-the-art cameras, production and broadcasting systems. Each of the following certificates — valid for one year and eligible for renewal — can be achieved through 3D IQ training: Certified 3D Director, Certified Stereographer, Certified 3D Technical Director, Certified 3D Camera Operator, Certified 3D Platform Technician, Certified 3D Broadcast Engineer and Certified 3D Production Engineer.

In addition, 3ality states that 3D IQ certifications entitle the holder to operate 3D IQ-certified products, such as 3ality Digital's 3flex camera systems and Stereo Image Processor Advanced Functionality Packages (SIP AFPs).

Stephen Pizzo and Hector Ortega at **Element Technica** have introduced a line of 3D camera platforms called Technica 3D. "Until now, any production interested in filming in 3D had only a few very expensive choices when it came to renting gear. Most of those choices include prototype equipment, and all come with a specialized crew and a rigid post path," Pizzo explains. He says that they have created a more sophisticated set of 3D tools that are as simple to use as the most modern 2D camera systems.

The systems are available in beam splitter and parallel configurations, which share the same basic components and interface for interocular and convergence. "Most of the systems will accommodate zoom lenses and offer synchronous control of focus, iris and zoom with the embedded electronics," Pizzo notes. Three sizes were created to fit cameras from the smallest Iconix to the Silicon Imaging 2K to most full size digital imagers. "To date, our full size system has been outfitted with the RED One, the Phantom and the Sony 1500 T-Block," he adds.

As 3D grows increasingly popular, companies like Element Technica continue producing prod-

ucts to accommodate the growing trend. Be on the lookout for the 3D Technica systems, which will be available this fall at **Keslow Camera**. "Our 3D acquisition tools now make it possible for filmmakers to create stunning 3D content in the style they want with the crew they prefer," Pizzo concludes. 🎥

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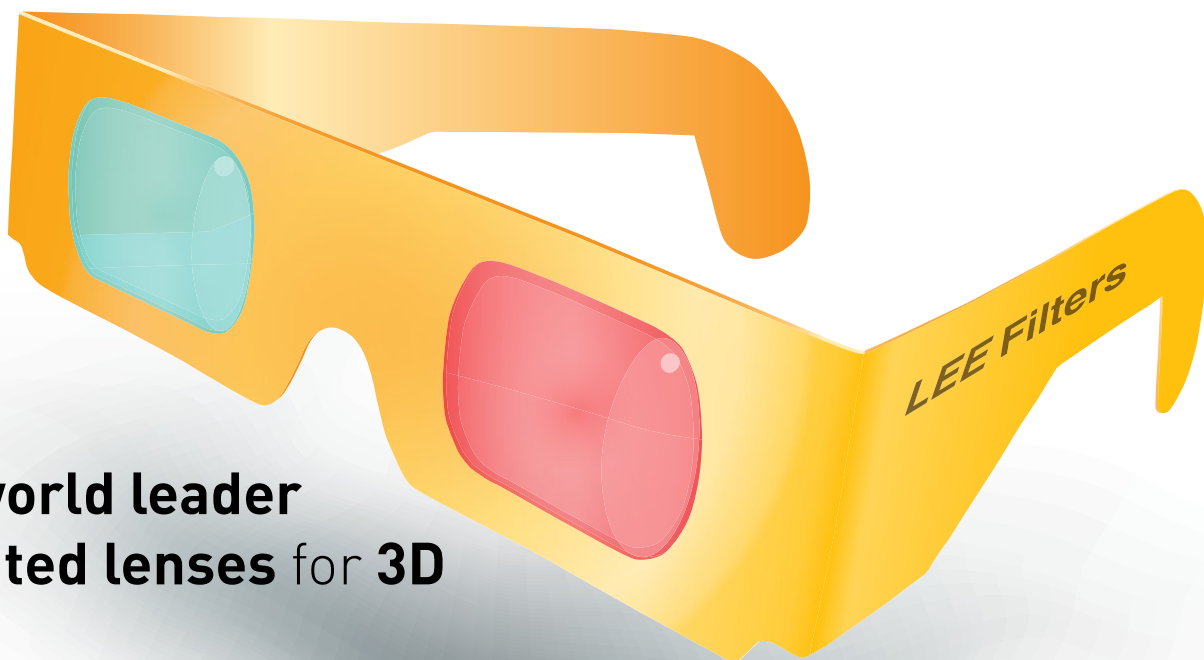
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