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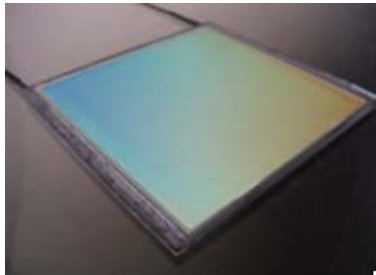
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Technology, Product, Market and Business News and Analysis for Large Area Display Systems, Components, and Supply Chain

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400 Hz Polarization Rotator” Comes to US

3D projector supplier [Lightspeed Design](#) (Bellevue, WA) and [LC-Tec Displays AB](#) (Borlänge, Sweden) have signed a new agreement that grants Lightspeed the exclusive rights to market and sell high-speed liquid crystal polarization rotator devices manufactured by LC-Tec Displays AB for stereoscopic 3D visualization products.



LC-Tec Displays developed a new type of liquid crystal polarization rotator that is capable of switching the polarization of a projected image at a speed of 400 Hz. Drive voltage is a 24V square wave. With the optional input polarizer, the system can produce two orthogonal polarizations output from unpolarized input light. One major application of the device is to be used with an unpolarized projector to produce 3D that can be viewed with either linear- or circular-polarized passive viewing glasses.

An engineering prototype of the new polarization rotator was demonstrated at the recent SIGGRAPH 2009. A data sheet containing specifications of the [rotator](#) is available online at the LC-Tec Web site. In an email exchange with Chris Ward, the president of Lightspeed Design, we learned that at least two rotator sizes will be available:

- Small venue– targeted at 3D projectors with small lenses and up to 4K ANSI lumens. (DepthQ WXGA, for example.)
- Large venue– targeted at 3D projectors with larger lenses and 6K ANSI lumens and up. (Christie Mirage, for example.)

Both rotators will be available in a configuration that outputs linearly or circularly polarized light. Ward said pricing would be available towards the end of this month, and that the products will be competitively priced. Pricing is to include linear and circular configurations, one for small work group, industrial use, such as caves or university classroom use, the other for commercial theater use, such as museums, attractions, or other ticketed venues. Products based on the polarization rotator are expected to be commercially available in 30 to 45 days.

Lightspeed also plans to sell the product as an OEM component to qualified companies that are able to make volume commitments.



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Also launched at SIGGRAPH was a new high-brightness Lightspeed Design - InFocus DepthQ HDs3D stereoscopic projector. Ward said top level specifications for the new projector include:

- WXGA (1280 x 720/120p)
- 4K ANSI lumens
- 120 Hz page-flip S-3D
- Centered lens, two-axis lens shift
- VGA and HDMI input
- Keystone/pincushion/barrel distortion correction

The expected ship date of the new projector is late December. - *Arthur Berman and Matthew Brennessoltz*

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