



Clarity Matrix 3D

Planar's Clarity® Matrix™ 3D LCD Video Wall System is designed for professional 3D visualization environments seeking a large format, flicker-free, thin profile, stereoscopic display. Clarity Matrix 3D adds a new dimension to the Clarity Matrix LCD Video Wall System family utilizing its unique design with an ultra-shallow install depth of only 3.6"/93mm, integrated mounting system and off-board electronics and power supplies to create exceptional 3D visualization.

Clarity Matrix cutting-edge ultra-narrow bezel LCD technology is combined with a 3D optical system and passive glass that, when tiled together, enable viewing and analysis of 3D images across the entire video wall. This approach to 3D visualization provides a more comfortable viewing experience versus active glasses solutions. Other benefits to passive glasses include lighter weight, no batteries are required and are less expensive than active solutions. This unique design also incorporates off-board power supply and electronic components which reduces weight, heat load, noise, depth and points-of-failure at the LCD video wall extending the lifetime and reducing cost-of-ownership.

Clarity Matrix makes the most of LCD technology, including slim profile and vibrant visual performance while achieving perfect alignment, simplified service and extended operation.

Clarity Matrix Stereroscopic Technology

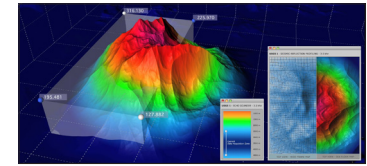
Clarity Matrix 3D utilizes micro-polarizing optics on the surface of the LCD to provide constant 3D visualization to each eye. This is done by polarizing the light from each horizontal row of pixels matching the polarization of the left and right eye in passive 3D glasses. The left eye only sees every other horizontal row of pixels, the right eye sees the remaining rows of pixels and the brain combines each

Passive Glasses

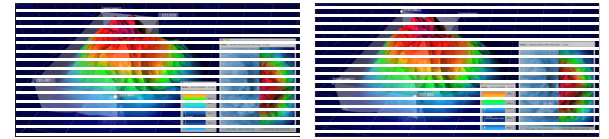
Passive glasses 3D is superior to active shutter glasses 3D because passive glasses create less fatigue and eye strain when viewing 3D images. The Clarity Matrix 3D also delivers great brightness and contrast levels unachievable with other 3D display technologies. The circular polarized passive glasses used with Clarity Matrix 3D are less expensive, lighter weight and do not require batteries.

Wide Viewing Angles

Clarity Matrix 3D offers wide viewing angles enabling multi-user use with acceptable stereo contrast over varying viewing angles. Having a wide viewing angle, both vertically and horizontally, ensures a more comfortable and superior viewing experience.

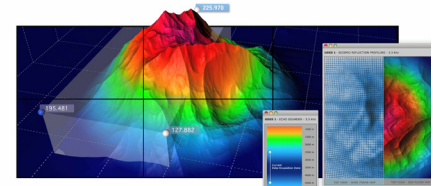


Stereo Image



Perceived Image of the Left Eye

Perceived Image of the Right Eye



3D Image



3D and 2D

The Clarity Matrix 3D can also display conventional 2D images maintaining the capability of a multi-purpose, high resolution video wall display. The Clarity Matrix 3D is compatible with numerous graphics cards and 3D visualization software tools in various applications such as:

- Data Visualization
- Molecular Modeling
- Engineering Design
- 3D Production Review
- Oil and Gas Exploration
- Simulation and Training

CLARITY MATRIX 3D SPECIFICATIONS	
	Clarity Matrix LX46HDU-3D
Weight	44 lbs / 19.7 kg
Brightness (Typ)	3D: 190 Nits
Power consumption (Typ)	124 Watts
Screen Diagonal	46"
Tiled bezel width	3.7mm
Resolution	1920x1080
Operating Temperature Range	5 - 40° C
Stereo Viewing Angle	Horizontal: +/- 40° Vertical: +/- 17°
Stereo Technology	3D Micro-polarizer Optical System
Stereo Glasses	Passive Glass Circular Polarized
Operating Humidity	20-90% RH Non-condensing
Mounting System	EasyAxis™ Mounting System Included
Off-Board Architecture	Clarity Matrix G2 Quad Controller Electronics and Power Supply Module
Input	4 single link HDMI with HDCP DisplayPort 1.1 in and out
Safety regulations	FCC Class A, EN55022/CISPR22, ICES-003, CNS 13438, EN55024, EN60950, RoHS
Dimensions Width x Height Depth w/ Mount	40.24" x 22.7" / 1022.1 x 576.6 mm 3.65" / 92.6 mm