Clarity Matrix 3D
LCD VIDEO WALL SYSTEM

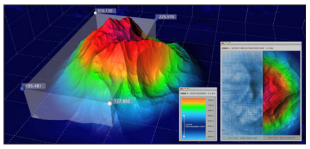
Clarity Matrix 3D

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. The Clarity Matrix 3D adds a new dimension to the Clarity Matrix LCD Video Wall 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.

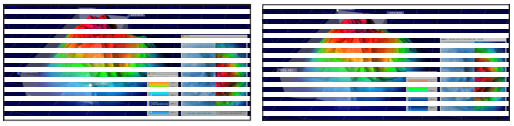
The Clarity Matrix cutting edge ultra-narrow bezel LCD's technology is combined with a 3D optical system and passive glass that when tiled together enable viewing and analysis of 3D images across the entire video wall. This approach to 3D visualization provides a more comfortable viewing experience versus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

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

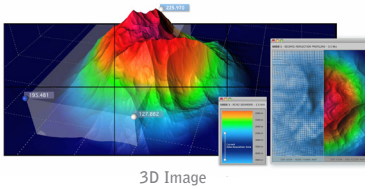
The Clarity Matrix 3D utilizes micro-polarizing optics on the surface of the LCD to provide constant 3D visualization to each eye. This is done by polarizing the light from each horizontal row of pixels matching the polarization of the left and right eye in passive 3D glasses. The left eye only sees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



Stereo Image



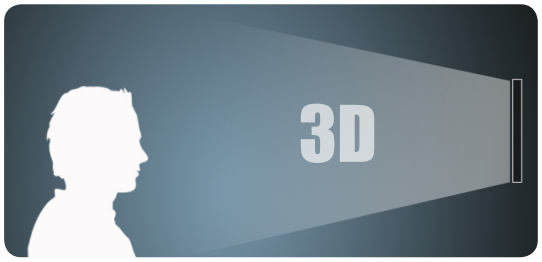
Perceived Image of the Left Eye Perceived Image of the Right Eye



3D Image

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 unachiveable with other 3D display technologies. The circular polarized passive glasses used with the Clarity Matrix 3D are less expensive, lighter weight, and don't 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.

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 LX46-L 3D	**Clarity Matrix MX46-L 3D**
Weight	52 lbs / 24 kg	58 lbs / 26 kg
Brightness Max	2D: 300 Nits 3D: 120 Nits	2D: 460 Nits 3D: 185 Nits
Power consumption	290 Watts per panel (Max)	350 Watts per panel (Max)
Screen Diagonal	46"	
Tiled Image to Image Gap	7.3 mm	
Resolution	1366x768	
Operating Temperature Range	5 - 35° 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 Quad Controller Electronics and Power Supply	
Safety regulations	FCC Class A, EN55022/CISPR22, ICES-003, CNS 13438, EN55024, EN60950, RoHS	
Dimensions **Width x Height** **Depth w/ Mount**	 40.4" x 22.8" / 1025.7 x 579.8 mm 3.6" / 93 mm	

PLANAR
When image experience matters.

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