Planar Launches the Future of 3D at Home

Engineering a 3D solution under its Runco brand, Planar delivers an incomparable 3D experience at home.

BEAVERTON, Ore., Sept. 23 /PRNewswire/ -- Planar Systems, Inc. (Nasdaq:PLNR), a worldwide leader in specialty display solutions, unveiled its new Runco 3Dimension™ Series projectors. Integrating 3D visualization technology that is based on the science of how the human eye and brain process actual depth and dimension in real life, Runco has created a flawless stereoscopic video reproduction that is unlike anything else in the home or private cinema market.

Runco's revolutionary 3D solution is based on Runco's proprietary CSV™ (Constant Stereoscopic Video) architecture and was created in tandem with the years of experience Planar has with 3D stereoscopic displays for professional applications. Runco CSV is a vastly-superior approach to 3D visualization that enables seamless decoding, syncing and merging of stereo images and delivers a constant HD image to each eye without the flicker, distortion, or discomfort inherent in other approaches. Runco CSV utilizes unique passive-glasses technology, which is proven to be superior for the viewer and is usually only available in the finest public theaters. Further, Runco is the first home theater brand to license RealD's Processing Package, which is used in Runco's 3Dimension Processor that is paired with the company's D-73 projector. The RealD Processing Package includes multiple proprietary technologies for the delivery and display of high-definition 3D content, for a high-quality 3D display experience in the home. Also incredibly important when choosing a 3D display, the Runco 3Dimension Series will deliver both a spectacular 2D and 3D viewing experience with zero compromise.

"The biggest buzz right now in home displays is 3D and Runco has worked to create a solution that is truly superior to anything else available in the market," stated Planar CEO Gerry Perkel. *"Unlike the mass-market 3DTV's available today that have been met with a lukewarm response, Runco's approach to 3D mirrors, and, to a large extent, surpasses, the experience that consumers have seen in public theaters. Using passive glasses, our large-screen solution creates an incomparable 3D experience in the home."*

Constant Stereoscopic Video reduces eye fatigue

Current 3D technology relies on the viewer wearing a pair of glasses designed to filter a separate image to each eye. The illusion of depth is created by sending a slightly different image to each eye. The left and right eyes are spaced so that everything seen is at an angle. The human brain processes and combines these two images into one complete picture with the perception of depth. Runco CSV is based on the human brain and eye physiology (called stereopsis) and mirrors it precisely to create perceived depth with a constant HD image to each eye. In contrast, time-sequential based 3D display systems, like those found on 3D televisions, flicker the image on and off at the eye, which can degrade the 3D effect and often results in eye fatigue and discomfort.

Passive glasses improve the 3D at home experience

Runco's 3Dimension Series pair passive glasses with a design unique to Runco formulated for precise stereo separation, called PreciseLight™. Runco's passive glasses are not like current 3D TV glasses, which are based on "active" LCD shutter-glass technology and have inherent design challenges. Active glasses are bulky and expensive because they include electronics. And, because active glasses have LCDs in each lens, and turn black every other frame (or more frequently), active glasses need a transmitter that is synced to the frame rate. If you are out of range of the transmitter, low on batteries, have multiple TVs in a single room, or have any obstructions, the image may stutter or simply not work.

The concept for passive glasses paired with Runco CSV is very simple; project constant images to both the left eye and the right eye simultaneously into the same space, and then use Runco's proprietary passive glasses to show the dedicated image to its intended eye without sacrificing refresh rate or introducing flicker. In addition to the standard proprietary glasses, Runco is also offering an optional upgrade of its passive glasses, which is both stylish and optimized to provide curvature without distortion, as well as prescription options, which will be available soon.

New evolution in 3D projection, all new design

The new Runco 3Dimension Series D-73d projector is based on an evolution of Runco's award-winning lampless LED technology. Runco's InfiniLight™ boasts a significant reduction in power consumption, a mercury-free illumination system, and InstantOn™, which instantly produces an image and eliminates the need to put the projector in standby mode. These breakthroughs combine to create an energy-efficient solution with high reliability.

Beyond light-source innovation, Runco's LED-based projectors produce the largest color gamut ever available in front projection; achieving and exceeding the Society of Motion Picture and Television Engineers (SMPTE) and Digital Cinema Initiative (DCI) standards. The D-73d offers Runco's Personal Color Equalizer™ (PCE), which enables owners to create color settings from the largest pallet ever available and project images exactly to their preferences. Further, the D-73d outputs more perceived brightness than other 3D solutions because of Runco's proprietary LED technology and its ability to create exceptional chromaticity. Perceived brightness is a function of not only luminance, but also chromaticity and more saturated colors are perceived as brighter than pastel versions at the same measured brightness levels. In other words, the D-73d is 60-percent brighter than the specifications would indicate and can be used in similar environments and in similar screen dimensions as other projectors that specify significantly higher brightness. The combination of colors, perceived brightness and performance enable the Runco D-73d to set a previously unseen standard on the 3D and 2D viewing experience to deliver flawless video at home.