

DYNACOLOR™ and Gray Level Definition (GLD): New Color Matching Optimizations for BARCO's SIM 6 Ultra LCD projector

Ultimate Performance 1600x1200 LCD Projector for Professional Simulation Display

Xenia, Ohio – BARCO raises standard offering optimal fidelity and highest resolution currently available for professional simulation applications. As part of its WARP6™ technology BARCO has recently optimized its BarcoReality SIM 6 Ultra projector with DYNACOLOR™ and Gray Level Definition (GLD) to achieve ultimate Color Uniformity for multi-channel installations.

Barco's SIM 6 line of Simulation-optimized LCD projectors already set a high standard in multi-channel color matching through careful selection of optical components. The novel DYNACOLOR™ now adds a high-precision digital "color space transformation", thereby raising the bar even further by eliminating channel-to-channel color variations through direct control of the primary colors. This unique feature in LCD projectors draws upon the processing power of the WARP6™ geometry distortion processor to perform the real-time floating-point calculations, required to achieve this remarkable result.

At the same time, Barco also introduces the proprietary Gray Level Definition (GLD), that takes care of improved grayscale tracking across the different channels of the multi-channel set-up by controlling the black, white and grays. This guarantees accurate color matching across the whole dynamic range of the display.

The BarcoReality SIM 6 Ultra is fully customizable through Barco's Application Specific Optimizations (ASO's) to meet the high demands of the simulation market. Barco's WARP 6™ is the ASO used in curved-screen applications, offering the very best picture quality that can be achieved with any Non-Linear Image Mapping (NLIM) processor.

Other optimizations, which make the SIM 6 Ultra the ultimate choice for high-end multi-channel applications, are True Motion Reproduction (TMR) to minimize smearing, Optical Soft Edge Matching (OSEM) to seamlessly blend channels for all brightness levels, Extended Contrast Ratio (ECR) for dynamic range enhancement in night-time simulation and Transport Delay Reduction (TDR) for zero-delay response in "man-in-the-loop" applications.

Barco's SIM 6 UXGA LCD projector features an extremely high contrast ratio (>700:1), based on novel polarization technology, and has a brightness of 3000 ANSI lumen. The UXGA version of the SIM 6 is especially designed for simulation applications where a combination of photo-realistic appearance and high light output is required. Its compact size makes it easy to implement and its rugged design makes it the ideal projector for motion base platforms.

The BarcoReality SIM 6 Ultra will be on demonstration at the BARCO booth #1312 at I/ITSEC in a three-channel configuration on a spherical screen with WARP 6™.