22 The Way They See It
Dave Gunness of Fulcrum Acoustic describes his fully integrated approach to speaker design.

24 Executive Q&A
Gabriel Antonini looks to expand educational outreach at DPA Microphones.

74 Viewpoint
According to Matt D. Scott, when it comes right down to it, we’re all in the service industry.

Video Wall Solutions
Whatever architecture you prefer—we have you covered.

MediaWall
Embedded Processing

MediaWall
Embedded Processor
Plus PC Processor for Apps

Galileo
PC Based
The Big Picture

THE LATEST ADVANCEMENTS IN FLAT PANEL TVs AND PROJECTION SCREENS

Over the last few years, many of the most exciting developments in pro AV technology have been on the latter half of that two-letter acronym that encapsulates our industry. While audio has hit a plateau of maturation to some extent, video continues to skyrocket with new technologies to render images bigger, brighter, clearer, and more colorful than ever before.

The following product showcases focus on the two chief canvases of video presentation—flat panels and projection screens—and the technological developments that have allowed them to display content in an increasingly captivating, versatile, and affordable manner for almost any kind of visual application imaginable.

NEC X551UHD
The What: The NEC X551UHD is a new 55-inch display that rounds out its lineup of UHD models in 65-, 84-, and 98-inch models.

The What Else: The X551UHD features UHD/60Hz support through its Open Pluggable Specification (OPS) slots, and enables users to insert the optional NEC SB-08DC card into the OPS slots to give users an extra HDMI 2.0 or DisplayPort 1.2 input. The SB-08DC also is fully HDCP 2.2 compliant. The X551UHD and the other displays also have the ability to enhance content non-native to the resolutions of their panels. Expanding on normal upscaling—when a full high-definition signal is brought into the system—the new UHD upscaling feature uses algorithms to adjust pixels based on the intensity and color of surrounding pixels in order to provide an even sharper and richer image.

The Bottom Line: Featuring 4,000:1 contrast ratio and up to 10-bit color performance, X551UHD’s high-resolution imagery and versatility make it well suited for a variety of applications, including design, corporate, retail, and transportation.

LG Dual-View Flat OLED
The What: LG’s Dual-View Flat OLED is the first digital signage solution to offer OLED technology to the commercial marketplace, according to the company, and provides a two-sided media experience in 1080p resolution.

The What Else: OLED is a new category of display that delivers a dynamic picture with deep blacks and vibrant color, even from wide viewing angles, unlike what LCD/LED displays can deliver. With OLED, each of the screen’s 8 million pixels can be turned on and turned off. That means blacks rendered by LG’s OLED displays are up to 200 times deeper than those of an LCD panel, creating an infinite contrast ratio and bringing colors to life like never before possible.

The Bottom Line: With its very slim profile, measuring 8.94mm (0.4 inches), and three different installation options—ceiling suspension, wall-mount, and floor stand—this unique, flat OLED commercial display allows retailers to plan the most efficient use in any retail space while utilizing a high-end display solution.

ViewSonic CDE7061T
The What: ViewSonic’s CDE7061T is a 70-inch, 10-point touch interactive flat panel display. Delivering a highly collaborative display solution, this large-format display is designed for stimulating interactive learning in classrooms and collaborative brainstorming in boardrooms.

The What Else: This display, when paired with PC-less operation and pre-installed annotation software, allows multiple users to simultaneously write or draw using fingers or styluses. With 350 nits of brightness and wide viewing angles, the CDE7061T provides high visual performance in bright settings or rooms. With a built-in dual-core processor, 8GB of internal storage, and versatile connectivity options including HDMI, VGA, RS-232, RJ45, and USB ports, this commercial display provides powerful computing for annotation and multimedia playback without the need for a PC.

The Bottom Line: ViewSonic’s CDE7061T is designed to assist with teamwork and collaborative sharing. From corporate huddle spaces to teaching through interactive applications using the integrated ViewBoard for Education software and Mersive’s Solstice collaboration...
software, the CDE7061T is engineered to help bring viewpoints, concepts, and designs to life. This display can be utilized in Android-, iOS-, and Windows-based environments.

**Planar UltraRes Series**

**The What:** Planar Systems is now shipping its next-generation UltraRes Series 4K LCD display line, designed for ultra-high resolution commercial applications.

**The What Else:** Available in 98-, 84-, and 75-inch diagonal models, the latest generation of Planar UltraRes Series includes built-in Planar MediaPlex Plus Processing for enhanced versatility and control of multi-source viewing. It also offers cutting-edge video performance with support for native 4K resolution at up to 60Hz that can be driven via single-cable HDMI 2.0 or DisplayPort 1.2. Other features include advanced multi-source viewing, flexibility with Intel's Open Pluggable Specification, and advanced energy efficiency and ruggedness.

**The Bottom Line:** The Planar UltraRes Series is designed for professionals in a wide variety of commercial uses who require a large viewing area, very high pixel density, and enterprise-level features that allow teams to collaborate around highly immersive and detailed visual information. It is also well suited for interactive digital signage in diverse settings such as retail stores, corporate lobbies, airports, and museums.

**Barco LDX-8482**

**The What:** Barco's LDX-8482 is a large, high-quality display that was optimized for use in critical business environments.

**The What Else:** With a screen diagonal of 84 inches and UHD resolution (3840x2160 at 60Hz), this screen offers the accuracy of four full HD displays. Features include picture-in-picture support, offering users the possibility to display even more information. Using the display's integrated OPS slot, the functionality of the display can be further enhanced to include additional sources.

**The Bottom Line:** Engineered using the most durable components available, the LDX-8482 was designed for professional applications in which reliability is of utmost importance. This includes control rooms and crisis rooms, but also boardrooms, high-end meeting rooms, and retail and advertising applications.

**Sony FWD-85X850D**

**The What:** The Sony FWD-85X850D is an 85-inch Pro Bravia 4K HDR UHD display with Android operating system.

**The What Else:** The FWD-85X850 features a number of features to enhance the viewing experience. In addition to heightened contrast through high dynamic range, it features Sony's TRILUMINOS color technology, which enhances color depth for noticeably brighter and more realistic colors. 4K Processor X1 technology further enhances video presentation: flat panels

---

**Lowell**

Ready to install

**ES Series in-ceiling speaker system**

- with 6.5 in. coaxial or 4 in. dual cone driver
- Built-in reversible mounting dogs and back can for fast installation
- Full frequency response for music, excellent intelligibility for speech
- Wide dispersion pattern may reduce quantity of speakers required for even coverage
- Ported enclosure tuned for extended low frequency response
- Includes transformer, grille, C-ring, support rails, and more

Lowell Manufacturing Company
lowellemfg.com | 800.325.9660
Symetrix Solus NX Series

The What: Symetrix has added the open-architecture Solus NX Series to its lineup of DSPs. Designed to serve in standalone DSP applications not requiring Dante network audio, Solus NX provides the same DSP power and delay memory as Symetrix’ Radius, Prism, and Edge DSPs.

The What Else: The series includes the Solus NX 4x4, 8x8, and 16x8, the models differing only in their number of analog audio inputs and outputs. All three feature a high-resolution graphic OLED which displays system status and metering. A single push-button is used to navigate menus. Onboard GPIO adds one more layer of control, flexibility, and economy. With Solus NX’s integration with Symetrix’ award-winning Composer CAD-based design software, integrators need only to be familiar with a single programming platform to manage all Symetrix open-architecture DSPs, including Solus NX, Radius, Prism, and Edge.

The Bottom Line: Solus NX is well suited for small to large installed sound applications, easily handling DSP-intensive processing, routing, and delay in complex environments requiring sophisticated loudspeaker management, auto-mixing, paging, zone mixing, routing and distribution, mic/line processing, AGC, room combining, and more.

ViewSonic LS Series

The What: ViewSonic has introduced a new line of laser phosphor-based projectors for a bright and immersive experience for home entertainment, education, and business applications.

The What Else: Well suited for business and education environments where high ambient light can be an issue, the ViewSonic LS810 and LS830 ultra-short throw projectors feature high brightness levels at 4,000 lumens. With the company’s proprietary SuperColor and SonicExpert technologies, these projectors deliver advanced color and enhanced sound reproduction. The LS810 is a native WXGA-based projector, and the LS830 boasts native 1080p resolution. Featuring intuitive design, both laser projectors are network capable for easy installation across multiple rooms or locations.