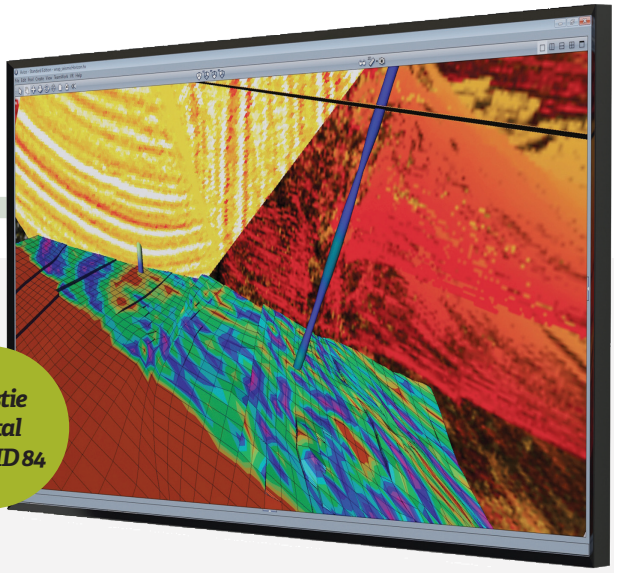
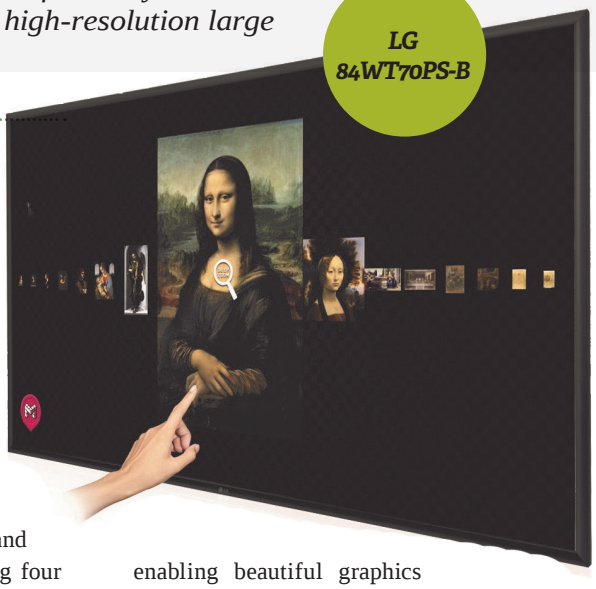
LARGE FLATPANEL DISPLAYS

By Christopher Maione



Christie Digital QuadHD 84

This month, we take a look at a variety of large flatpanel displays. For our primary criteria, we established the bar at 70in. or larger with 4K Ultra HD (UHD) resolution (or higher). Take a look at this field of best-in-class large flatpanel displays. Remember when the going price of a large flatpanel display was $70,000 or more? Remember when we needed an image larger than 60in., we moved toward projection? It's amazing how this technology has evolved and improved, and how the cost has become workable for today's various AV environments requiring high-resolution large displays.



LG 84WT70PS-B

Mimo Magic Touch Deluxe HD

Christie's ***QuadHD84*** is a visually stunning 84in. LCD panel featuring Quad HD resolution (3840x2160). It provides a unique interface for true 60Hz performance, twice the actual update rate versus consumer Ultra HD TVs available on the market today, and is ideal for high-tech visualization applications and sectors including medical, government, automotive, oil and gas, aerospace, and research. Using four times as many pixels as a standard 1080p HD screen and super-fast image processing, the native resolution of panel is driven by four frame-locked HDMI or DVI sources at 60Hz. Users can quickly connect to high-performance workstations or image processors for greater flexibility. The panel has three additional single channel HDMI 1.4a inputs capable of full Quad HD resolution (at 30Hz) and each of those inputs are HD compatible enabling beautiful graphics scaled to fill the screen at up to 60Hz.

The ***LG 84WT70PS-B*** 84in. 4K Ultra HD IR-based multi-touch signage display is optimized with 4K technology (with more than 8 million pixels) and features LG's unique IPS (In Plane Switching) panel technology. LG's 10-point touchscreen technology represents the next generation of interactive whiteboard and allows for a more intuitive user experience than a screen requiring a stylus. In addition to zooming, rotating, or writing onscreen messages with your fingers, the monitor is easy to use with one gesture, making it ideal for a variety of commercial and educational applications.

Here is a twist—need something small? ***Mimo Monitors*** focuses on a different end of the market—small. In this case, Mimo is bringing together small and large. Large displays are great for consuming content where a small touch display is great for interacting

NEC X841UHD

Panasonic TH-98LQ70

Samsung 4K UHD JU6500

with it. The company imagines its displays along with large screens at information kiosks and conference rooms. The large display gets the message across and the small Mimo would provide the perfect point for interacting with it. Its largest runner is 10.1in., while only 1280x800, the pixel density is 2.5 times better than a 70in. 4K display. The ***Mimo Magic Touch Deluxe HD*** increases the resolution to 1366x768. The Mimo Magic Touch Deluxe HD is a perfect solution where higher resolution is desired along with its innovative HID-compliant capacitive touchscreen. It is most often used as the human interface and control panel in such applications as corporate videoconferencing, data entry/capture, smart home entertainment systems, and industrial/manufacturing controls. Its dock/base is also a USB hub with two convenient USB ports for external USB accessories.

NEC is ushering in a new era of visual experience with the 84in. ***X841UHD***. The display sets new standards in image size and quality with Ultra HD (3840 x2160) resolution. State-of-the-art innovation delivers 24/7 runtimes with high-end components and LED backlighting. It is ideal for any industrial application, including control rooms, conferencing, and life-size digital signage. Imagery is delivered by an LED edge-lit backlit UHD S-IPS panel. Enhanced image performance comes with advanced settings of all relevant visual parameters for full control of brightness, color, gamma, and uniformity via Spectraview Engine. This display also offers reliable color reproduction with 10-bit color and amazing viewing angles.

Panasonic engineered its ***LQ Series*** 4K LED backlit LCD displays to produce stunningly sharp images in a streamlined form factor with the system expandability required for professional 4K applications. The 98in. TH-98LQ70 and 84in. TH-84LQ70 4K displays are ideal for a number of growing 4K resolution B2B applications including broadcast production, control rooms, rental and staging, and eye-catching digital signage. These displays include the company's next generation of image enhancement technology, which upconverts non-4K sources to a higher level of picture quality, transforming ordinary full HD resolution and a variety of PC signals into breathtakingly vivid images. The displays also feature protective front glass, a reinforced frame for flexible install including tilt (up to 10 degrees), and support 4K content over Digital Link, a technology based on HDBaseT technology.

At 2500 nits, the ***Samsung OMD Series*** displays deliver ultra-high brightness. The display's high contrast ratio of 5,000:1 allows consistent, clear, and vivid delivery of visual messaging. With thin bezels of 9.3mm and less, these displays are ready to install and keep all

Sharp PN-R903

the focus on the content. With an energy-efficient LED backlight, the OMD Series also incorporates an automatic brightness sensor which helps reduce power consumption and provides optimal visibility. Additionally, all OMD Series displays are equipped with Samsung's circular polarizing technology, which allows for viewing content on the display while wearing polarized sunglasses. This new high brightness solution is available as both a ready-to-mount display for indoor use or as a panel kit for use outdoors within a custom-built enclosure.

Sharp's ***PN-R903*** boasts an ultra-large 90in. class diagonal screen with its full-HD resolution, brilliant image quality, 24/7 reliability, and streamlined profile. This premium professional LCD monitor was designed to meet the rigors of most any commercial display or digital signage application while providing captivating images. Local dimming of the LED backlight partnered with 700 cd/m2 brightness keep the PN-R903 brilliant and ensure outstanding energy efficiency with high-contrast images.

Sony X950B

The ***SiliconCore Lavender*** 1.2mm pixel pitch display provides seamless scaling up to 4K resolution at 220in. The Common Cathode LED manufacturer provides very tight pixel pitch, which further enhances close proximity viewing within corporate, broadcast, command and control, and simulation, all at a fraction of the power consumption of traditional displays. With a close proximity viewing distance of less than 1 meter, LED is now operating in the same space as existing large-format display technologies. The display also comes with the additional benefit of being scalable for any size or shape application and due to the nature of LED is truly seamless. The clarity, uniformity, and viewing angle are other market leading benefits that now new markets can use for comfortable large-screen viewing. SiliconCore has made all of this possible by developing a new way to drive the LEDs using Common Cathode Technology, replacing the traditional Common Anode approach. The Common Cathode Technology design is a much more efficient at generating a given brightness for a given amount of power, ensuring that less power is wasted as heat, reducing power consumption, and increasing the lifespan of the display.

The ***Sony X950B*** flagship 4K Ultra HD TV delivers outstanding performance in black saturation. As a result of the deep blacks, the wide color palette is enhanced yielding a good color range and saturation for an LED-backlit TV. One aspect of this TV that bears special mention is the X-Reality 4K engine for formatting and converting all types of content and resolutions to the 4K native panel**.** Fast-motion images are processed through Motionflow XR 960. The panel supports HDMI 2.0, which makes resolutions at 60p possible for future 4K content.

SiliconCore Lavender

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