HOW IT'S DONE: UNDERSTANDING IMAGE LUMINANCE

CITY STYLE
MOVING FROM A BACKGROUND ROLE TO THE FOREGROUND, THE CITY OF MISSISSAUGA'S AV GROUP DELIVERS KEY SERVICES.

SPECIAL GUIDE
9 Remedies for Everyday Video Problems

20+ User-Friendly New Products
New Video Points of Light to Navigate

In an ever-crowded product category, what new video technologies are worth watching?

by Kirsten Nelson

For every star in the sky, there is a story about its particular brightness, color, and position. Knowing the details helps to distinguish each astronomical object from what can look like an endless field of indistinguishable twinkling lights. So it is with an astronomer’s viewpoint that we try to parse the unique points of new video products launched so far in 2016 as we hurtle toward the gigantic astrological event known as InfoComm 2016.

1.) LIGHT HAS BECOME MORE THAN JUST AN OUTPUT THING

We talk about all the reductions in cost and downtime associated with lampless projectors, but another bonus is their diminutive nature. Barco took it upon itself to dominate the featherweight category with its new F90 series of single-chip DLP laser phosphor projectors. Offering up to 13,000 lumens of brightness for as many as 40,000 hours, the first two series models launched at SE 2016 in 4K UHD and WUXGA native resolution. The WUXGA F90-W13 will be shipping from early Q3 2016 onwards, and the 4K UHD F90-4K13 will be commercially available from Q4 2016. These rugged projectors have serious range, lighting boardrooms and auditoriums just fine, but ready to make the leap to museums and planetariums with motion platform compatibility and 30 function capabilities.

Additionally, the solid-state Barco laser light engine allows the projectors to run in any orientation, and a multitude are made possible with the addition of one of Barco’s high-resolution FLR and FLR+ lenses, ranging from ultra-short throw (0.28:1) to long throw (9.75:1), and each providing a wide lens shift range.

2.) LET’S JUST COVER COLLABORATION RIGHT AWAY HERE

Focus is combining the strengths of its recent acquisitions, Jupiter Systems and Viastar, in its new ConX videoconferencing platform. This kit of products, software and services covers all the bases: it’s customizable, it’s configurable, it’s scalable, and it facilitates the large-scale connection of people and ideas via multiple streams of information across mobile devices, desktops, huddle rooms, board rooms and video walls. Use the ConX Wall and ConX Exec for any video wall size from a single display to a multi-screen setup, and rely on the built-in videoconferencing multipoint control unit (MCU) server to instantly throw input images to any number of the displays. The video collaboration bit is made possible by ConX Video Meeting, InFocus’ cloud-based meeting service, which enables connection via ConX Phone, Mondopad, PC, smartphone, tablet or third-party SIP-compliant and H.323 systems.

3.) ANYTHING 4K IN, ANYTHING 4K OUT

Most likely, you’ve got a multitude of display sizes of varying resolution, and you’re spending a lot of time sizing content. Well, smile and click your heels, because alongside its debut of CORIOmaster 4K input and output and 4K streaming media input modules, tvONE has released the new and improved CORIOgrapher v2.2 control software for its CORIOmaster and CORIOmaster mini products, featuring new ways to quickly and easily configure the systems. New features like “immediate mode” have been added, which allow edge-blending and video monitor placement to occur in real time rather than clicking “take” after each adjustment. Also included are new test generator patterns to help with system configuration and Edge in and Ease Out, which makes transitions smoother and more natural. Other upgrades include undo configuration changes/settins in Wall Editor; redo configuration changes/settins in Wall Editor; support undo and redo in Edge Blend Mode; undo and redo Wall Editor Selection as part of the Revision History; Wall Editor Immediate Mode; and much more.

4.) AUGMENTED REALITY FOR PRACTICALITY

It’s here, augmented reality has entered the day-to-day world of technology managers and AV designers. It’s not just a whiz-bang feature in a museum exhibit, it’s a tool for use in selection of a video display. Planar’s new PlanarView Visualization App allows users to overlay actual display designs, themselves showing moving video content, onto real-world images of a space. The free app, developed for Planar by SpaceView, with help provide a realistic preview of video arrays and display positioning, comparing and contrasting dis-
play types via iOS smartphone or tablet (future versions will support Android and Windows). Designs can be saved and shared via e-mail and Facebook, and may be sent for a quick quote from Planar.

5.) WIDESCREEN WORKORCHE

Looking for a solid contender for a massive projector upgrade to classrooms or meeting spaces? Perhaps Eiki’s EK-402U widescreen DLP model, with its 4,700 ANSI lumens of brightness and 80 percent uniformity rating with a 10,000:1 contrast ratio, is a good prospect. Complete with HDMI and DisplayPort Digital connectivity and HDCP compliance, the native WXGA resolution projector is compatible with inputs up to UXGA and WUXGA. It also supports analog and digital video inputs in all color standards up to 1080p, and includes a 3D function. Easy to add to a room via Crestron RoomView or AMX Device Discovery Technology, the EK-402U displays both 4:3 and 16:9 aspect ratios via a mid-range manual zoom and focus lens with fixed image offset. A built-in 3 Watt sound system and Closed Caption decoding, with wired network monitoring control options and a security bar with Kensington MicroSaver security slot, make this a projector that ticks all the boxes.

6.) THE POWER TO CONNECT WITH NO ADDITIONAL POWER

Connect those sources to video wall or digital signage displays with less drama. Time to pull some lighter cable that is capable of long-haul delivery of video signal without need for additional power. Datapath’s ActiveConnect long-range fiber optic DisplayPort1.2 and HDMI2.0 cables are available in lengths up to 100m and measure just 7mm in diameter. They are designed to provide a direct connection from any graphics card, including the Datapath ImageDP4, to either DisplayPort or HDMI monitors or from media players to Datapath’s HDMI or DisplayPort capture cards. Along with the absence of additional power requirements, the Plenum-rated, HDCP-compliant ActivePath cable offers transmission of full 4K signals at 60 fps.

7.) NO BIGGER THAN A MATCHBOX, MIGHTIER THAN AN OX

There are still gadgets in the world, and they are getting smaller. Take for example the new 4K Extender from Black Box, which provides HDMI and transparent USB extension over fiber in a package no bigger than a matchbox. With a range of 300 meters for 1080p or 40 meters in the case of 4K UHD over a standard multimode cable, this exceedingly compact device extends video with resolutions up to 4K UHD (3840x2160). In addition to supporting USB HID, it also supports transparent USB 1.1 for touchscreen or KVM applications. Just tuck this 4K Extender behind a screen or computer and use USB power or the optional external power adapter and enjoy the benefits of fiber optic cables being immune to electromagnetic interference (EMI/RFI).

8.) GO LOW MAINTENANCE, GET HIGH BRIGHTNESS

Continued advancements in laser projectors are bringing new marvels to the fore. Digital Projection International has launched its new E-Vision Laser 8500 Laser, which perhaps not coincidentally delivers 8,500 lumens. Its solid-state light source is capable of producing more than 20,000 hours of illumination, rendering this single-chip projector a qualified member of DPI’s “Fit and Forget” product designations for models requiring minimal maintenance throughout their lifetime. This low-maintenance, no lamp replacement necessary factor will also appeal to TCO concerns. Bonus: image edge blending is included as standard, and HDCP1.2, DisplayPort 1.2 and HDMI ensure that connectivity is well-positioned for future display options.

9.) REMEMBER THE AUDIO

The picture may look good, but is the audio pixelated and blurry? Try harder to get better sound, and use something like Hall Research’s new EMX-I-AMP 4K HDMI audio extractor with audio amplifier. Not forgetting the video, this device even provides EDID management alongside its built-in 50-watt audio amp for direct connection to 8 Ohm speakers. It also provides a line-level stereo aux audio input and allows audio mixing of HDMI audio with the aux input. Volume can be controlled from the front panel, RS-232, or external digital rotary pot (encoder) that can be mounted on a wall-plate. The EMX-AMP also features a second independent RS-232 output port that can be used to control other devices. The EMX-AMP can also be used as a standalone control system, as it has the ability to store power ON and OFF commands for connected displays. Users can recall those commands, or it can operate autonomously, detecting video and sending ON or OFF commands as required with a programmable delay. An IP enabled version is also available (Model EMX-I-AMP) which adds the ability to control volume, aux input mix and power of connected display via a built-in WebGUI that can be accessed from any PC or smartphone. It also includes a full set of Telnet commands for advanced installations with third-party LAN-based control systems.

10.) GLAM SIGNAGE

Looking to dazzle? With eight feet of video wall real estate from a single screen, the 98-inch ViewSonic CDP9800 Ultra HD commercial display will certainly create an eye-catching display. The display can support 4K video across four connected displays for a 2x2 daisy-chain application, providing 32 feet of striking 4K content. And its built for 24/7 commercial use, with full metal construction and a scratch-resistant tempered glass screen. More than a pretty picture, the CDP9800 features a user-friendly interface and built-in dual 10W speakers. An integrated USB multimedia player and OPS slot provides flexible compatibility for seamless connectivity with external PCs or media players. It supports multiple connectivity options, including DisplayPort, HDMI, VGA, YPbPr, CVBS, Audio, RS232 and RJ45.

11.) MAXIMAL VIDEO WALL WITH MINIMAL BITRATE

Crunch the numbers one more time and cheer for the new era of super efficient video wall controllers that work in the standard IP universe. That’s right, the Matrox Mura IPX Series 4K capture and IP encoder/decoder cards present high-quality, low-bitrate, multi-channel 4K or HD encoding and decoding over standard IP. Designed to work with Mura MPX video wall capture and display cards and Matrox C-Series multi-display graphics cards, Mura IPX packs 4K capture plus high-density encode and decode functionality onto a single PCIe card to simplify integration and reduce installation costs. The MURA/IPX-HDF 4K capture and IP decoder card provides four HDMI inputs for direct high-resolution 4Kp60 or 2560x1600p60