USITT Stage Expo 2016: The right place in Salt Lake City

BY KARL G. RULING

IN 1847, A MORMON PARTY OF 148 PEOPLE came to the Great Salt Lake Valley, looking for a place to settle. Their leader, Brigham Young, when he came to the pass above the valley, said, “This is the right place, drive on.”

For about 4,500 people the USITT Conference and Stage Expo was the right place this year. The conference and trade show was held at the Salt Palace Convention Center, a few blocks from Temple Square in downtown Salt Lake City, Utah, with the Conference running from March 16 – 19, and the Stage Expo starting one day later on the 17th. The Stage Expo featured 274 exhibitors, with 53 of them being new. The Expo was just a bit smaller than last year’s with seven fewer exhibitors and about 10% fewer attendees, but I didn’t hear complaints from exhibitors. Everyone seemed to feel that it was a fine show; less than a week after the show closed, 180 exhibitors had already re-booked for Stage Expo 2017. They know their business; I’m sure that’s a wise move.

The Stage Expo was the right place to see lots of new things. I did what I usually do: wander around and look at things that catch my eye. Then, I sit down with my pile of notes and product literature and try to stitch some of it together into a story. A lot of what follows is about LED luminaires; that fits my interests, but there really was a lot new in that field, and the educational theatre market is prime for it. At many universities, you can get funding for a new all-LED lighting system more easily than you can get funding for lamp and socket replacements.

ETC had a big crowd with two new LED product lines: the Source 4wrd LED retrofit and the ColorSource luminaires and control desk. The Source 4wrd replaces the HPL lamp and socket on an
ETC Source Four with a white LED source and with no need to do anything to the reflector. Students were challenged to see how fast they could do the swap. It takes less than a minute. It puts out less light than a Source Four with an HPL 575/115, but it’s brighter than one with the long-life version of that lamp, while drawing less than a third of the power and being predicted to last 15 times as long. It can be controlled by DMX512 or a regular dimmer.

ColorSource is a lower cost line of ETC color-changing LED luminaires and a control console. The luminaire part of the line consists of a profile Spot and a PAR, and each of those lines has two color flavors: regular and Deep Blue. The line uses four color emitters—red, blue, green, and lime—instead of the seven found in the existing Source Four LED line, which is how it is lower cost. The spot optics and the accessories are the same. The two color versions are distinguished by the blue emitter, which is either simply blue or indigo in the Deep Blue model. Both gamuts are large but different; some colors can be produced by one but not the other. The lumen output of a ColorSource Spot is a little bit more than you would get from a Series 2 Lustr. The ColorSource consoles are designed to control up to 40 or 80 multi-parameter luminaires, depending on the model.

Chauvet Professional debuted the Ovation E-910FC color-changing profile LED spot that uses five sets of emitters: red, green, blue, amber, and lime. The photometric data on cut sheets is not nearly as detailed as the data available from ETC (Thank you ETC!) but the data indicates this unit will outshine the Century Strand 2331 Lekolites with EGE lamps of my youth while consuming less than half the power and obviating the need for gels. It has several operating modes, using from five to 15 DMX512 channels, with most featuring a virtual color wheel that will dial up on one channel a range of 31 popular Rosco gel colors. The PWM frequency is variable in five steps from 600 Hz to 15 kHz; something is bound to work in front of any camera. “Works perfectly with industry standard lens tubes and accessories” says the user manual; that gives you an idea of its size and shape.

For those needing something smaller, Barbizon showed the new OSRAM KREIOS FRESNEL and KREIOS PROFILE. (I’m not yelling; OSRAM PUTS NAMES IN UPPER CASE.) The fresnel comes in a warm-white and an RBGW version. Spot to flood range is 14° to 77°, with the white delivering 1,400 lux at 2 m at full flood and the color-changing one delivering a bit less than half that. The warm-white numbers compare favorably with the output of a CCT Minuette Z0642, but the total power consumption of the KREIOS is 100 W while the Minuette uses 650. It’s just slightly larger than a Minuette fresnel—274 mm long versus 250—but the KREIOS PROFILE is shorter than the comparable Minuette Z0602 profile while putting out more light with less than a sixth of the power consumption and having a wider zoom range. The profile spot is warm-white only. PWM frequency is adjustable from 610 Hz to 10 kHz.
Arri Inc. showed for the first time this year at the USITT Stage Expo, and brought a range of LED fresnels and Skypanel soft lights. The fresnels surprised me by offering colors as well as color-temperature control. You can dial up any CCT from 2,800 K – 10,000 K, or make it any color within the RGB gamut. Shown were the L5-C, L7-C, L10-C, and Skypanel, with the L10-C and Skypanel being the products new to the market. The L10-C has a 15° to 50° beam (half-peak) angle, providing a center illuminance at 5 m of 5,200 lux at full spot and 700 lux at full flood while consuming a maximum of 510 W. The S60-C Skypanel was ridiculously broad and bright: 110° beam angle and 1092 lux at 3 m. It had to be kept turned down to avoid annoying nearby exhibitors.

Fifteen years ago LED followspots were impractical. Not now. Three caught my eye at the Stage Expo. The smallest was the Drama FS-LED 700 in the Mega Systems booth. It’s less than 2’ long, and puts out a strong beam of light. However, there’s no published photometry specs on it, other than saying it uses a 320 W LED source “comparable to a 700 W lamp or brighter,” which is meaningless. It’s easy to use, with six buttons on the back for the color wheel, and sliders for CTO, dimmer, iris, and strobe.

There were a couple of larger LED followspots at the Stage Expo. Next up in size was the Macoster Romer G919, shown by Nova Lume. It uses a 200 W white source rated at 6000 K, but the 90 CRI renders skin tones well. At 9° full spot it will deliver 1,260 lux at 16 m; at 19° full flood, 1,186 lux at 9 m. A.C.T. Lighting showed the longer Robert Juliat Roxie LED followspot, which uses a 250 W white source rated for 3100 K and 92 CRI. Zoom range is nominally 10.5° to 22.5°, with 910 lux at 15 m full spot and 860 lux at 10 m full flood. You get slightly more lumens out of the Roxie than the Romer at full flood; it’s lighting a larger area. The Roxie iris completely closes; you can iris down to nothing with one finger. Color control for both the Romer and Roxie is by conventional boomerangs on the front: five colors for the Romer and six for the Roxie.

Spotrack Visual Tracking Systems showed two systems to use a moving light—or a chorus of them—as a remotely controlled followspot. VidFspot is the simpler system of the two and is for a single moving light. A video camera or webcam positioned near the moving light provides an image to the operator, who controls the light with a mouse or trackpad connected to a computer. The computer translates the pointing device movement into Art-Net or DMX512 control commands, and also does target height correction for performers on a raked stage or platforms at different levels. The Spotrack is a similar system in that it uses a camera, computer, and mouse or trackpad, but it allows a single operator to control up to 20 moving lights—good for arena performance spaces. The number of moving lights in use can vary from cue to cue. Liam Feeney, a lighting designer in Western Ireland, is the sales director for the company; at the Stage Expo he explained that the system was developed to meet needs he had as a designer but couldn’t find met in existing products.

Bill Hewlett was in the A.C.T. booth showing his product, the ImageCue, a media server a little smaller than the Viking hard-back edition of The Satanic Verses. It’s controlled from a lighting console with a mere 12 DMX channels. It comes with a library of 255 images or videos but you can supply your own using a USB flash drive or external solid-state hard-drive. It allows you to overlay images, adjust color, and brightness and to use images as masks for others. There is no mapping of images to three-dimensional objects with ImageCue, but it’s inexpensive and so simple that you can busk with video—relive the days of liquid projections but without the spills! Hewlett also had a small display promoting the offerings of Broadway Motion Design, a company with a catalog of scenic projections for popular high school musicals such as The Sound of Music, Hairspray, and Grease. Of course, the ImageCue will handle the Broadway Motion Design content nicely. Add DMX controller,
video projector, and screen, and you have vivid backdrops for your show and no paint on your clothes!

Fred Mikeska at A.C. Lighting showed me the ArKaos Pro, which is a family of media server products more expensive than ImageCue but also more powerful. The MediaMaster Pro will “turn any powerful computer into a full-fl edged professional media server,” but the listed hardware requirements actually are modest. I could run it on the notebook I am using to write this now. Mikeska showed me how images could be quickly adapted to fit surfaces with multiple planes at odd angles by grabbing points and dragging them. Extensions will allow the MediaMaster Pro to map LED devices too. ArKaos also offers a line of rack-mounted servers with multiple video outputs and shock resistance up to 2G.

Flying by Foy showed its Aereographer flight control system, which allows you to create virtual flight paths and then have the system create them in reality. The system was used to demonstrate the new Foy Featherweight winches, by having them levitate and fly a glowing orb around the Foy booth in a spiral. Of course, it wasn’t magic, but three small hoists using fishing reels supporting and moving the prop with almost invisibly thin lines. The maximum load is 5 lbs, and the speed is variable from imperceptible to 12’ per second on the winches used at USITT, but up to 20’ per second is possible.

Sapsis Rigging showed a winch you can wear! It’s not much of a fashion statement, but it is useful for getting you up into a tall rig without tiring you and for helping rescue a worker dangling at the end of a fall arrest line. The PowerQuick PQ660 Ascender clips to the chest ring on a harness and moves you up or down a supporting line at variable speed. The nickel metal-hydride battery is said to hold enough charge for three miles of lifting. The maximum load is 300 kg, the weight of several people.

I spent less time looking at fancy sewing machines than I did last year; I spent time looking at fancy seamrippers. Rich Wolpert showed Union Connector company switches at the Stage Expo, and also showed a line of seamrippers with hand-turned hardwood handles from his small side-business, Sawyer Creek Artistry. Besides being beautiful, the handles come in different shapes and sizes; the larger ones are comfortable for people with arthritic hands. Many of them feature a long thin metal point, called a “stiletto” by quilter Becky Wolpert, on the opposite end from the ripper. Quilts typically have tiny seam allowances; you use the stiletto to guide the last little bit of cloth under the presser foot without fear of stitching your finger. The working ends of the seam rippers turn around to fit into the handles for safe carrying.

The Buckle Boutique showed fancy rhinestone-encrusted buckles and embellishments, including adhesive-backed rhinestone and glitter sheets in a variety of bright colors. I was taken with a rhinestone encrusted metallic fabric that handled like liquid silver. These are primarily costuming and prop items, but photographs were offered of game show sets covered with the sparkly material.
“Rhinestone” describes the look of the self-adhesive sheets, but not the material. They and the glitter sheets are soft plastic, so you can cut them with scissors. Do you have a solid-body electric guitar you’d like to make purple in honor of Prince? The Buckle Boutique’s “Purple Glitzy Glitter Vinyl Peel & Stick Sheet” might do the job for you.

I’ve covered here a very, very small fraction of the products shown by the 274 exhibitors at the USITT Stage Expo. Next year, the Stage Expo will be at the America’s Center Convention Complex, in St. Louis, Missouri, from March 9 – 11, with the USITT Conference starting the day before. I plan to wander around the exhibition hall there too, and write up what I see that catches my eye and fits into 2,300 words or so, so again I won’t cover it all. If you really want to know what’s new and interesting at the Stage Expo—particularly what is new and interesting to you—you have to be there. Come on! St. Louis isn’t really in America’s center, but it’s often called “The Gateway to the West.” I’ll see you there. ■