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PROJECTION, LIGHTS & STAGING NEWS

NEWS SPOTLIGHT

- 5** Biden and Harris Celebrate Victory with Pyro and Drone Show
- 5** PLSN's Parnelli Recap Backed by Sponsors of Annual Awards Show
- 5** Covid-19 Surge Forces Renewed Shutdowns and Event Restrictions
- 5** Congress Mulls Covid Relief as Unemployment Insurance Cliff Looms

BUYERS GUIDE



28 White Light LED Fixtures

22 SPECIAL FEATURE

Jingle Beat

Nashville's Holiday-Themed Drive-Through Experience

COVER PHOTO BY JONNY KINGSBURY/EAMOTION

14 PRODUCT SPOTLIGHT

Chauvet COLORado Batten Q15



WHAT'S HOT



16 Production Profile
Revamping Wynn's Lake of Dreams



20 Designer Insights
Benee Fills New Zealand Arenas



24 Event Production
Canada's Gémeaux Awards Show

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- Highlights
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- In Memoriam of Those We've Lost This Year
- and More

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FEATURES

16 Production Profile

Wynn Las Vegas' Lake of Dreams attraction, first launched in 2005, has undergone a \$14 million upgrade led by a creative team including Kenny Ortega (director), Michael Curry (animatronics), Patrick Woodroffe (lighting), Gary Jaeger (video) and Peter Hylenski (sound). Terry Cook, Chris Lose, Evan Bloom and Lawrence Wright also played key roles with the lighting, video and laser effects.

20 Designer Insights

Show/production designer Ben Dalglish from Human Person returned to his native New Zealand to support Bennee's sold-out arena tour — made possible by the island country's success at controlling Covid-19. Some 6,000 fans packed Auckland's Spark Arena for each of the final two shows in October.

22 Special Feature

Jingle Beat, a drive-through spectacle, celebrates the season with an immersive drive-through experience. Eamotion teams up with Gallagher Staging and a cast of local creatives for the ultimate extravaganza in holiday décor.

24 Event Production

The Gémeaux awards, a.k.a. *Prix Gémeaux*, honor Canadian shows broadcast in French. For 2020, CBC presented viewers with a mostly virtual gala, with Luz Studios' augmented reality technology providing a dazzling touch.

27 Staging Solutions

Stageline's massive portable stage (and sturdy video wall) helped Toronto's new CityView Drive-in venue bring live music and entertainment back to carloads of music fans.

28 Buyers Guide

There was a time when most popular moving LED light fixtures offered an all-white version. As LED technology advances, that seems to be less necessary. But a number of white-light-only fixtures are still out there, for a variety of reasons.

COLUMNS

32 1000 Words With...

Angrette McCloskey. Michael Eddy interviews this noted and multidisciplinary scenic designer and production manager who creates dynamic spatial experiences for live events in theater, opera, fashion shows and public spaces.

34 Designer Watch

Debi Moen reports on the limited-capacity live shows returning to Austin City Limits Live, LD Sooner Routhier's new home-staging side hustle, Trans-Siberian Orchestra's virtual holiday concert plans, the Oak Ridge Boys' Christmas in Tennessee shows and more.

36 LD-at-Large

Chris Lose notes that, even for those lucky few who are able find work during the pandemic, Covid-19's new normal takes away the little things that crews love about completing a gig, such as a dinner out with your backstage compatriots or toasting a job well done at the hotel bar.

DEPARTMENTS

4 Editor's Note	14 Product Spotlight
5 Industry News	15 Showtime
10 Global News	35 Marketplace
12 New Products	35 Ad Index



ON THE COVER

22 Special Feature

Jingle Beat turns the Nashville Fairgrounds Speedway into a multimedia drive-through spectacle. Eamotion worked with Gallagher Staging and others to fill a two-mile-long course with immersive holiday splendor.



26

Installations

Dodd Technologies and SGM brightened downtown Indianapolis' iconic Monument Circle.



30

Cinematography

Cinematographer Tami Reiker helped film director Regina King take *One Night in Miami* from the stage to the screen.

2020

EPD

Online

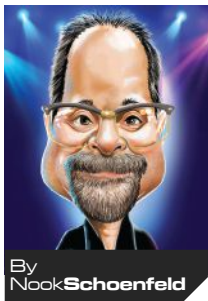
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EDITOR'S NOTE

The Comfort Zone

By Nook Schoenfeld

As our first and only Thanksgiving of the Covid year has passed, I realized that the absence of friends and relatives at our dinner table was just another bummer to add to the list of things Mother Nature has given us this year to take us out of our comfort zones.

Besides the usual feast, I quite enjoy the candor, storytelling and laughs that made me comfortable at the afternoon table. Having all the friends at the table usually leads to filling your plate a second time, which of course takes you out of your physical comfort zone. Then the fight is on for the most comfy seat to fall back in and watch the football game through the comfort of your closed eyelids. Until the pie comes out, of course.

» Out of Our Comfort Zone

This last year brought our whole industry out of its comfort zone. There's a whole slew of folks who would just love to get back to coiling cable, cleaning lighting lenses, painting road cases and all those mundane tasks that shop crews can almost do with their eyes closed. Those jobs may have been tough on the knees, but they brought comfort to your soul. Yes, those Ground Hog days were the livelihood of many in our biz. You worked hard in the trenches and enjoyed an afternoon barbecue or an after-work beverage at the local. You were comforted in work and play by your colleagues. It's not comforting that we didn't see these folks every day for the most part in 2020.

I'd like to give a shout out to the road crews and corpo-



Nook, working from the comfort of his home

rate show work force that have started new careers that are in no way comfortable, as most have steep learning curves. I hope they find some comfort in their paycheck, but not enough to want to stay there when our biz comes roaring back. The one thing I do hear from a lot of these people is how easy their new job is compared to their old 16-hour workdays. They are in uncharted territory with new positions in new fields. But the longer they stay in those positions, the more comfortable they may become.

But that's not for everyone. I spoke to my friend running a crew at an Amazon warehouse the other day. He just entered his sixth month of employment as a civilian, outside of the road force. I asked him if he was comfort-

able. His reply was simple. "I am living comfortably with this job. But it is not emotionally comforting. I could be pumping gas at a Costco and not feel any less stimulated. You know when I'm gonna be comfortable again? When I get back on a tour bus."

» Finding Your Own Comfort Zone

With so many from our work force having to find alternative means of employment, I wonder if this will lead to a more permanent life choice. Heck, with Covid looming, I've bypassed my daily trips to the office in favor of working out of a comfy chair in my basement. I may never get used to it. For those new to steady employment in one location, the prospect of having weekends off may have become addictive. Voluntarily signing up for weekend work and being paid for it may be a new comfort to some.

The true irony of the year 2020 is that, despite everyone having the year off from travel, we still couldn't attend every wedding, kid's ballgame or piano recital anyway. But the thought of attending such events looms as a possibility that was never there before.

What will happen when we're all vaccinated and every band in the world wants to hit the road? Will you feel you've become too comfortable with your new life, or will you look for the longest world tour with the most comfortable buses?

Serve up a portion of comfort food-for-thought to Nook. Reach him at nook@plsn.com.



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President Terry Lowe	tlowe@timelesscom.com
Group Publisher Greg Gallardo	gregg@timelesscom.com
Editor Nook Schoenfeld	nook@plsn.com
Managing Editor Frank Hammel	fhammel@timelesscom.com
Art Director Mike Street	mstreet@timelesscom.com
Production Manager Mike Street	mstreet@timelesscom.com
Graphic Designer Angela Marlett	amarlett@timelesscom.com
Senior Staff Writer Kevin M. Mitchell	kmitchell@timelesscom.com
Contributing Writers Chris Lose, Debi Moen, Mike Wharton	
Photographer Steve Jennings	
Web Designer Mike Hoff	mike@mikehoff.com
Sales Manager Matt Huber	mh@timelesscom.com
Sales Manager Jeff Donnenwerth	jdonnenwerth@timelesscom.com
Greater China	C: 0086-13810325171
Worldwide Focus Media Judy Wang	judy@timelesscom.com
Office Administrator Naomi Crews	ncrews@timelesscom.com
Vice President William Hamilton Vanyo	wvanyo@timelesscom.com

BUSINESS OFFICE

6000 South Eastern Ave. Suite 14-J
Las Vegas, NV 89119
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BILLIE EILISH LIVESTREAM

LD Tony Caporale shifts from stage to studio with Robe Esprites, **8**

**ANDREA BOCELLI IN SICILY**

Prolights fixtures set six Unesco Heritage sites aglow, **10**



INDUSTRY & GLOBAL NEWS

The Biden campaign celebrated with pyro and drones from Strictly FX and Verge Aero.

The Sky's the Limit

» **WILMINGTON, DE** — When U.S. president-elect Joe Biden delivered his long-awaited victory speech in his home town of Wilmington, Delaware Nov. 7, the celebrations culminated with a drone and pyrotechnic show from Strictly FX.

"The creative on this originated with executive producer Ricky Kirshner, of Kirshner Events, who has been the nexus of all the work we've done with the DNC," said Ted Maccabee, CEO of Strictly FX.

In partnership with drone effects pioneer Verge Aero, Strictly FX deployed a fleet of 200 drones for the event. As those below celebrated, the GPS-guided drones lit up the sky with precision choreography, synchronized to a soundtrack which began with Coldplay's "A Sky Full of Stars."

The large-scale aerial imagery, created and refined in line with the Biden campaign's vision, included red, white and blue stars, Biden's campaign logo, a map of the USA, "46" and "Harris" — all with Strictly FX's pyrotechnic accompaniment.

The team worked fast to organize not just the content of the show, but the permissions and logistics required to carry it out. "Since this was a national security situation, the permissions that we had to get from various government entities were incredibly detailed. Thankfully, we started on this process three weeks ahead of the election, and we were able to wade through all the authorizations in time to create this once-in-a-lifetime event," said Maccabee.

The crew from Verge Aero had challenges as well. Nils Thorjussen, CEO of Verge Aero, adds, "Naturally, there was a vigorous vetting process to satisfy the authorities that the show could be flown safely. However, the flexibility and redundancy built into our system allowed us to meet every security request and scenario that was posed to us."

With the election's result delayed, the team was on standby from Tuesday until Saturday, ready to fly the show at a moment's notice. Thanks to the system's rapid deployment capability, this was not a problem.

"Our 10-person East Coast special effects team didn't know if we were even going to be doing the event until we got the green light from a member of the Biden Camp on Saturday night," said Maccabee.

To maintain secrecy and surprise, there was no rehearsal. "The first time we flew the show there was on the night," says Thorjussen. "This really speaks to the accuracy and robustness of our flight planning software. The client was amazed at the accuracy of our pre-show rendering."

The resulting show topped off a joyous occasion for those gathered below, including Biden and vice president-elect Kamala Harris, their families and campaign teams, all of whom clearly enjoyed the spectacle playing out in the sky. "We've done numerous presidential campaign events, and this one was especially memorable since we were able to add drones into the mix, thanks to our partnership with the very talented professionals at Verge Aero," concluded Maccabee.

Covid-19 Surge Forces Renewed Shutdowns and Restrictions on Gatherings

» **LOS ANGELES** — In late November and early December, even as the prospects of successful vaccines were shining bright on the horizon, the horrendous toll of the Covid-19 pandemic kept getting worse, setting new daily records in terms of cases, hospitalizations and deaths.

With hospital resources stretched to the limit across the U.S., government officials in some particularly hard-hit areas were applying new restrictions on gatherings like an emergency tour-niquet.

The city and county of Los Angeles banned in-person restaurant dining and cautioned against gatherings of people from different households from Nov. 30 to Dec. 20. In Nevada, governor Steve Sisolak announced a three-week

see COVID on page 8

Congress Mulls Covid Relief Package as Unemployment Insurance Cliff Looms

» **WASHINGTON, DC** — In early December, a months-long logjam blocking additional Covid-19 relief funding from congressional approval showed some promise of breaking free. Supporters of the HEROES act, a \$3 trillion stimulus package passed by the House but blocked by the Senate since mid-May, said they would be willing to use a \$908 billion bipartisan stimulus plan as a starting point for relief negotiations.

ExtendPUA.org, a nonprofit support of extending pandemic unemployment assistance to the millions who have lost work since March, underscored the urgency of pandemic relief by Dec. 26, noting the "cliff" faced by 12 million people on that date. "Congress must do more and we must demand more of them," the group noted. For funding updates and action resources, go to extendpua.org.

ESA Updates The Event Safety Alliance Reopening Guide

» **USA** — The Event Safety Alliance (ESA), which released its first Covid-19 reopening guide on May 11, released an updated version of that guide in early November. The original reopening guide had been downloaded more than 30,000 times, translated into several languages, and cited by industry professionals and organizations around the globe.

"We hope this update will serve as a useful companion to the original guidance," ESA noted. To download *The Event Safety Alliance Reopening Guide — Six Month Update*, go to plsn.me/ESA-6.

Parnelli Sponsors Support Awards Show Retrospective in PLSN's Jan. 2021 Issue

» **LAS VEGAS** — As previously announced, the Parnelli Awards, which have coincided with the Winter NAMM show in recent years, will take a "gap" year in 2021. Instead, as NAMM goes virtual this year with its Believe in Music Week (Jan. 18-22), a retrospective of the Parnelli Awards' 20-year history will appear in a special section within the Jan. 2021 issues of *PLSN* and *FRONT of HOUSE* magazines.

"We are grateful to our sponsors stepping up to be part of this special section which is sure to be something of a keepsake," said Terry Lowe, executive producer of the Parnelli Awards and publisher of *PLSN* and *FOH*. "It's important to 'keep the torch lit' and honor our rich tradition."

These "Keep the Torch Lit" Gold Sponsors

for the Jan. 2021 special section include 4 Wall, All Access Staging, Bandit Lites; d&b audiotechnik, Harman, Maryland Sound, Meyer Sound, Rock-it Cargo, Sound Image and Strictly FX. Silver Sponsors include Chauvet Professional, Elation Professional, Global Trend Productions, Hemphill Brothers and Stageline. (To add your company's name to this list, contact Greg Gallardo at gregg@timelesscom.com.)

"Believe me, there's nothing I'd rather be doing than being knee deep working around the clock preparing for the Parnelli Awards show right now," said Kevin Mitchell, Parnelli Awards producer. "That said, it has been an honor and a privilege to pause during this 'gap year' and dig deep in the archives and relive all the incredible moments

we have shared together. I am personally and professionally grateful to our sponsors for making this possible."

The special magazine section will include the history of the Parnelli Awards, commentary from co-founder Terry Lowe and longtime Parnelli board chairman Marshall Bissett, listings of award recipients in the career achievement categories over the years — Lifetime Achievement Award, Visionary Award, Audio Innovator Award and Parnelli Hall of Fame — and other highlights of the awards ceremonies staged over the last two decades. Lowe adds that a special video including 20 years of Parnelli highlights is now being prepared.

For more information, go to www.parnelli-awards.com

IN MEMORIAM

Joe Adams, 53

» **OKLAHOMA CITY** — Joe Adams, owner of Epic Pro Sales and 20-year rep for ADJ and Elation products, died Nov. 14. He began in the lighting industry in 1998 with his own company as an American DJ dealer and came to the Elation family from rep firm PSLP. Services were held Nov. 28 in Noble, OK.



Ken Rengering, 54

» **LAS VEGAS** — Ken Rengering, the founder/operator of Ken's Events, an event production company serving Las Vegas and the Southwest U.S., passed away Nov. 24 from multiple organ failures. He was 54.



Peter Wright, 54

» **NEW YORK** — IATSE stagehand Peter Wright died Nov. 12 after falling from scaffolding while performing restoration work at Broadway's Winter Garden Theatre. Police reported that the accident took place around 8:45 a.m. while Wright was performing routine maintenance on the 109-year-old theater. Wright, a resident of Milford, CT, was 54.



Ron "Bear" Jones

» **NASHVILLE** — Hemphill Brothers reported that Ron "Bear" Jones, the company's "most senior driver — not in age, but in seniority," died Dec. 2 from Covid-19. "He was already dealing with some other health issues, but the virus brought on pneumonia and then his other issues became worse." Jones joined the company in 1982.



» News in Brief

» **ADJ** fixtures on two outdoor stages lit the 2020 Birds of a Feather festival, held in August in northern Kentucky. Staged at the Thornhill Dragstrip in Morning View, KY, the gear list included 16 Focus Spot 4Z, 8 Hydro Beam X1, 12 Inno Spot Pro, 12 12P HEX IP and two Entourage fixtures from Waveform Live. Covid precautions included masks, hand sanitizers and social distancing.

More details at plsn.me/birds

» **Avolites'** Tiger Touch II console is being used for LIT Live livestream shows staged in a 40-by-30-foot portion of LIT Lighting's warehouse space that owners Chris Brodman and Cody Lisle quickly converted into studio space after the Covid-19 shutdowns began in March. The console, running Titan v13 software, controls a 130-fixture rig, with an occasional assist from a Titan Mobile Wing.

More details at plsn.me/AvoLIT

» **Big Picture**, a production company in Sydney, Australia, hosted Keith Urban for a two-day shoot within the live event studio they opened in June in response to the Covid-19 pandemic. Urban's production partner, Human Person, reached out to Big Picture before Urban's performances, which were seen in the U.S. on NBC's *The Tonight Show Starring Jimmy Fallon* and *Late Night with Seth Meyers* along with the virtual iHeartRadio Music Festival 2020 and *Good Morning America*. The performances support Urban's latest album, *The Speed of Now Part 1*.

More details at plsn.me/BigPic

» **Chauvet Professional Strike 1** fixtures supplied by Envizion Group lit a livestream show designed by LD Julien Reux for the Dirty Knobs at the Troubadour in Los Angeles. The Nov. 20 gig supported the launch of the band's debut album, *Wreckless Abandon*.

More details at plsn.me/knobs

» **GLP's** Highlander Wash fixtures brightened Cologne, Germany's Lanxess Arena for two Association of Tennis Professionals tournaments in October. Eighty of the fixtures lit up the hard courts for the players and the cameras. POOLgroup GmbH supplied the gear.

More details at plsn.me/GLP-tennis

» **The LEVL UP Fest** will stream live from Nashville's Ryman Auditorium on Dec. 16 at 8:30 p.m. Eastern. Featuring more than 25 artists, it will honor all the backstage pros who help performers "go live," with funds earmarked for MusiCares, The Roadie Clinic and CMAF.

More details at plsn.me/LEVL

» **PRG** supported the lighting and video needs for the 21st Annual Latin Grammy Awards. Along with a 1,200-fixture rig and LED screens for LD Tom Kenny and set designer Jorge Dominguez for the Nov. 19 broadcast from Miami's American Airlines Arena, the show featured streams from Latin artists coming in from locations around the world.

More details at plsn.me/LatGram

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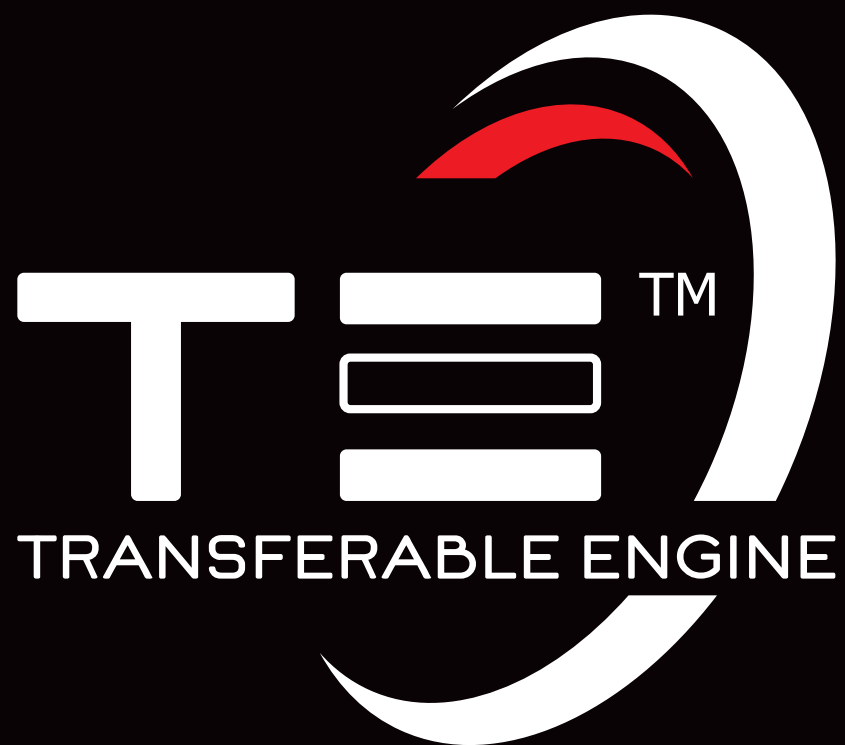


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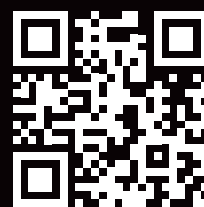
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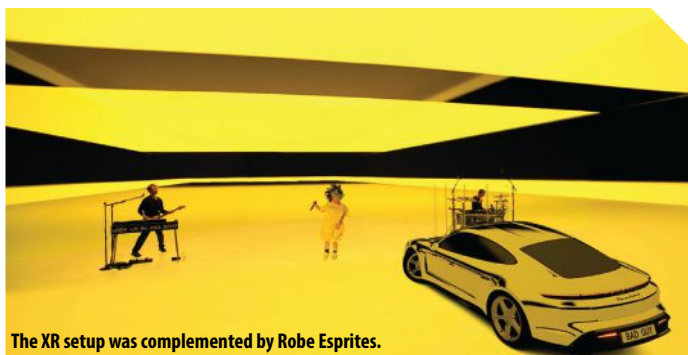




Billie Eilish *Where Do We Go* Livestream Concert Goes Global

» LOS ANGELES — After Covid crushed her 2020 tour plans, Billie Eilish sprang back with *Where Do We Go? The Livestream*, a PPV XR production that aired Oct. 24 from the Grammy-winning artist's website, billieeilish.com.

LDTony Caporale, who had been working on the planned-for March to September live tour, worked on the livestream along with lighting



director Madigan Stehly. XR Studios Burbank staged the show, with Tarik Mikou from Moment Factory serving as director.

The overhead rig at XR Studio included 48 Robe Esprites, six of which ran on a Robe RoboSpot system. The fixtures complemented immersive XR imagery that transported the artist and audience through a series of monochromatic and stylish visual adventures.



Elation fixtures from Darvik Productions brighten the shows in San Diego and Ventura, CA.

Southern California's "Concerts in Your Car" Drive-in Shows Keep the Music Going

» SAN DIEGO — CBF Productions' "Concerts in Your Car" series of drive-in shows kicked off June 26 at the Ventura County Fairgrounds north of Los Angeles then branched out to a second site, the Del Mar Fairgrounds near San Diego, on Sept. 25. Shows are held on a four-sided stage with a 14-by-26 foot (HxW) video screen on each side.

A typical week at the 700-car Del Mar site includes movies, local bands and theater, with bigger acts like Snoop Dogg, The Beach Boys and Slightly Stoopid on the weekends. Sundays are reserved for church services or private events.

Victor Ortiz, owner of Darvik Productions of Ventura, worked on the project with CBF CEO Vincenzo Giammanco. "It all started back in April when our first spring festival of the year was cancelled," recounted Ortiz, who normally teams with CBF on a dozen events a year. "By the end of April we knew we'd have to pivot, and the idea for 'Concerts in Your Car' was born."

Both the Ventura and San Diego drive-in shows were lit with similar Elation-centered rigs. The Ventura setup included 12 Seven Batten 72's, 24 Seven Par 71P's, 24 SixPar 100's, 8 Cuepix 161P's, four Protron 3K Colors and two Antari M-11 hazers.

"Concerts in Your Car" has not only been a success with many events selling out, it has fulfilled a need for music lovers to experience live events again. "With the limitations we have to face today, it has been a form of entertainment that our community has truly enjoyed and appreciated," Ortiz concluded. "We're glad we've been able to be a part of it."



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Covid *continued from page 5*

"statewide pause" on Nov. 24 that lowered the number of attendees at public venues from a maximum of 250 people back down to just 50 attendees.

The new restrictions present another hurdle for Las Vegas productions that have been struggling to inch their way back. A number of productions, including shows presented by Caesars Entertainment and MGM Resorts, began opening this fall after earlier restrictions in Nevada were eased in September.



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The shows were lit with Robe Esprites and other fixtures from the lighting company's inventory.



Nothing but Thieves Performs PPV Livestream Shows from Liteup's U.K. Warehouse

FAREHAM, U.K. — Nothing But Thieves recently played a rocking series of "Live from The Warehouse" pay-per-view live stream concerts from Liteup's warehouse in the U.K. The streamed shows reached audiences as far away as the U.S., Australia and Asia.

LD Warren Hutchison and lighting director Tim Perrett used a Robe-centered rig for the band, which recently released a new single, "Impossible," and announced a major tour of venues in the U.K., Ireland and Europe, starting in late 2021. The band also announced a forthcoming album, *Moral Panic*.

After this year's Covid shutdowns, Liteup repurposed its premises to support streaming gigs. Hutchison, a regular freelance LD and technician for Liteup, worked with the band and production manager Andy Sweeney on an in-the-round setup, with a B-stage area for acoustic performances.

Liteup project manager Gordon Torrington noted the overall goal of creating "a live concert look in the studio" and credited Hutchison for achieving that within the 46-by-40 performance space within the warehouse, which features three flown roof trusses.

The rig included 16 Robe Esprites, used as the main profiles, key lights and specials, along with 16 LEDBeam 150s, 16 Mega-Pointes and 16 Spider LED wash beams, all divided between the overhead rig and the floor.

Hutchison also used 132 LED pixel tubes as a video complement, also pulled from Liteup's inventory, to create a colorful and dynamic visual showcase for the band. Liteup also provided the seven-camera package for the stream along with PPU/control for the band's three streaming presentations.

Andrea Bocelli Performs Outdoor Show with Sicily's Noto Cathedral as a Colorful Backdrop



LD Massimo Tomasino relied on Prolights fixtures.

NOTO, Italy — Italian opera singer Andrea Bocelli performed in late October on the steps of Noto Cathedral. The televised event, adapted for Covid-19 health guidelines, celebrated the cathedral, which is a Unesco heritage site, and six other Unesco sites on the island of Sicily.

LD Massimo Tomasino lit Bocelli along with the orchestra and choir of the Teatro Massimo Bellini in Catania, which was directed by Alberto Bartolini, with a rig that included fixtures from Italy-based lighting manufacturer Prolights.

Massimo's design included 40 Prolights ArenaCob 4FC units, a full color LED flood and blinder fixture. Ten were used to backlight the orchestra; 20 were deployed to light the highest part of the cathedral, and 10 more were set up behind the public, lighting up the porches of the town hall.

"They are excellent for their incredible power, color saturation and even wash lighting. The LEDs render the colors extremely well," said Tomasino.

Massimo, who is no stranger to Prolights, credited the fixtures for their "incredible power, color saturation and even wash lighting. The LEDs render the colors extremely well."

Dinosaur Exhibit at Scottish Safari Park Lights Up with Weatherproof LED Fixtures at Night



The "World of Dinosaurs" attraction at Blair Drummond Safari Park is lit with ADJ fixtures.

STIRLING, Scotland — To celebrate its 50th anniversary this year, Blair Drummond Safari Park has opened a new walk-through attraction in a wooded outdoor area with face-to-face encounters with life-sized, animatronic dinosaurs.

As an added bonus, the "World of Dinosaurs" also welcomes visitors (by reservation, and carefully distanced, during the Covid-19 pandemic) with dramatic lighting after dark.

The lighting comes from 55 of ADJ's LED-powered "outdoor ready" wash fixtures, including 15 x 32 HEX Panel IP units and 40 x Encore Burst RGBW IP fixtures.

Blair Drummond Safari Park has been welcoming visitors since 1970 with a variety of exotic animals, including Scotland's only giraffes. The new dinosaur attraction features the prehistoric beasts along a trail that winds through about 10,000 square feet of a wooded area — with 20 dinosaurs in all.

Alex Darling, with Cornwall, England-based Essential Supplies, served as the LD for the project and specified the fixtures. He chose a colorful palette for illuminating the trees in the area, then opted for simple warm white illumination of the dinosaurs themselves to highlight the intricate detail of the models.



Millennium Productions provided 24 Astera Titan Tubes to give ClearCast's employee-dancers a unique vibe.

Jerusalem Dance Challenge Participants Add a Twist with Creative Lighting Looks

PRETORIA, South Africa — It's not easy to stand out if your group is one of many competing in the viral Jerusalem dance challenge craze on social media.

The dance challenge has spread via TikTok, starting in Angola and festive weddings in other countries in Africa and around the world. Dancers step lively to the hit song from South Africa, sung by Nomcebo Zikode and produced by DJ Master KG.

Along with a troupe of 60 distanced employee dancers, broadcast/IT company ClearCast got a visual edge for their corporate team-building exercise with 24 Astera Titan Tubes. Millennium Productions provided the fixtures, which worked in sync with two 10W multi-color lasers.

Marius van Rooyen from Pretoria-based EventCast worked with ClearCast to transform one of its long, white empty rooms into a unique dance setting, using the Astera fixtures as part of the choreography. The 24 Titan Tubes, in three sets of eight, then added to the visuals with changing colors, a few chases and some strobing action.

"The Titan Tubes and lasers work really nicely together, producing a vibrant and dynamic fusion," said van Rooyen, who has played a key role with EventCast's streaming division since it was launched shortly after the live-event lockdowns began earlier this year.

To check out a video of this event, go to plsn.me/Jerusalem.

whirlwind

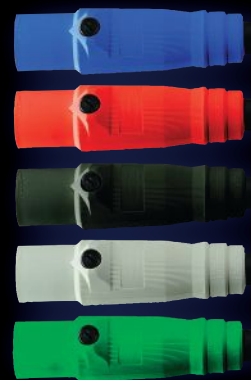


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whirlwind

Power Link®

ADJ Adds VS3IP to Vision Series

ADJ's IP-rated VS3IP joins the company's Vision Series of LED video panels. It features a 150 x 150 matrix of 3-in-1 SMD1921 LEDs, delivering a pixel pitch of 3.84mm (0.15") — ADJ's highest resolution IP-rated LED video panel to date. Along with a pixel density of 67,816 per square meter, the panels have a maximum brightness of 4500 NITS with a contrast ratio of 5000:1, making them suitable for use outdoors, even during daylight hours. Potential applications include concert tours, festivals and other events, indoors and out.



adj.com

Blackmagic Design Micro Converter 3G Units

Blackmagic Design's new Micro Converter 3G units let customers use HDMI equipment with professional SDI systems. They include an SDI to HDMI 3G unit, an HDMI to SDI 3G unit and a BiDirectional SDI/HDMI 3G model. Priced from \$45, each converter has industrial standard 3G-SDI and HDMI connections with strong, high-quality connectors along with custom hardware developed by Blackmagic Design. They also include features previously only found on high end converters, such as 3D LUTs, plus more video formats than the older models they replace.



blackmagicdesign.com

Chauvet Professional COLORado Batten Q15

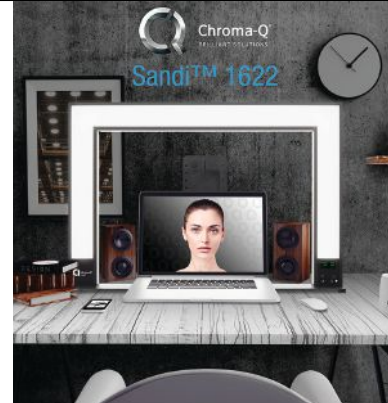


Chauvet's new IP65 rated COLORado Batten Q15, with bright output from 15 20W LEDs, boast a full array of rigging options to let designers include them in a wide range of designs. The adjustable trunnions on this one-meter long RGBW LED batten, which can be adjusted without tools on its integrated track, have been given an even greater degree of versatility with the addition of ¼ turn omega brackets. Endcaps are also designed to connect units seamlessly for perfect row alignment, whether the battens are deployed horizontally or hung "icicle-style."

chauvetprofessional.com

Chroma-Q Sandi 1622 Video Conferencing Key Light

Chroma-Q's new Sandi 1622 video conferencing key light is designed to help anyone put themselves into their best light for video conferences. The light, designed with soft lens diffusion and adjustable color temperature (2,700K to 6,500K), can fit around a monitor up to 24" (609mm), and it also provides a physical support for phones, laptops, and tablets. The LED driven light engine provides a flicker-free source for cameras. With 110° coverage from 3 different axes, there's enough output to look good, but it isn't harsh on the eyes.



aclighting.com

Environmental Lights RS232 to DMX Converter

Environmental Lights' new RS232 to DMX Converter is designed to help AV integrators who want to incorporate low voltage LED lighting into their whole-house control systems. It receives the RS232 signal from the master control system and converts it into a DMX signal, which can then be routed through DMX decoders to control low voltage lighting. It also helps users add and control tunable white and color changing low voltage LED lighting to installations with lighting control systems such as Control4, Crestron, ELAN, Lutron and Savant.



environmentallights.com

Epson Pro L30000UNL Projector

Epson's Pro L30000UNL projector offers 30,000 lumens of color and white brightness, native WUXGA resolution with 4K enhancement and features such as a mechanical shutter and sealed optical engine to help it withstand the rigors of staging and live events. The solid-state laser light engine and an electrostatic air filter promise up to 20,000 hours of virtually maintenance-free operation, and the projector is compatible with the same eight optional interchangeable lenses as Epson's Pro L25000U. Free software tools include Stacking Assist, Tiling Assist and auto-color calibration.



epson.com

ETC/High End Systems SolaFrame Studio

ETC introduced the High End Systems SolaFrame Studio, a fanless, convection-cooled fixture with a 300W High CRI Bright White engine for 10,000 lumens of output along with silent operation. Features include a 13-lens optic system with lens defogger, 5.5° to 57° zoom, CMY/CTO-Linear color mixing system, 7+ open replaceable color wheel, full-curtain framing system for beam shaping, 16-blade iris for tight beam effects, light diffusion with optional heavy diffusion, 7+ open gobo wheel and linear prism for controlled pattern replication across a stage.



etconnect.com and highend.com

Madrix Aura Lighting Controller

Madrix Aura is a compact controller that can be used for dynamic light shows and effects along with customizable scheduling. It works as a recorder and stand-alone playback unit from an SD card for fully automatic lighting control. Available in three versions, it outputs 2, 8, or 32 universes of control data over Art-Net or Streaming ACN. Larger projects can be managed by connecting several devices over Ethernet network, with the entire group automatically synchronized across all DMX universes for flawless playback.



madrix.com

Magmatic Crisp Max Snow Machine

Crisp Max, a snow machine in Magmatic's Polar series, lets users adjust snowflake size along with short or long throw distances. The 1250W high-volume snow machine can project snow up to 12 meters (40 feet). An optional 120-degree pan motor is available that increases the coverage area. The unit includes a 20-liter fluid tank hidden inside a rolling road case and a 10-meter long hose that can be rigged on a truss or tripod stand. Fluid can be extended up to 50 meters horizontally or vertically using extension tubes.



elationlighting.com

Whirlwind Rack Lightning

New from Whirlwind, Rack Lightning is an RGBW LED lighting system that can illuminate your equipment rack in eight different color settings, with an adjustable dimming control. The system includes a 1U overhead single-space unit [PLR-PS3 or PLR-PS3S] that provides powering to linear LED rail kits [PLR-PSRK] down the sides of the rack. They are available in sizes to fit 8, 10, 12, 14, 16, 18, 20 and 24 space racks. The rail kits attach easily, without having to remove any of the gear in the rack.



whirlwindusa.com



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thelightsource.com

704-504-8399

There is nothing like coming in on a cold, dark night to the vibrant, crisp white of The Light Source LED fixtures. Scintillating RGB colors and a variety of styles will warm your heart. The sturdy, convection cooled fixtures are manufactured in the USA and come with a 10 year guarantee. With a maximum of 12,641 lumens, The Light Source fixtures can certainly light up your winter.

Chauvet Professional COLORado Batten Q15

By Richard Olson

Striplights are nothing new. They have been around as cyc lights to wash large areas with color, footlights to add front key light for cameras, and since the concept of LED lamped models, eye candy and audience light. Each one of these fixtures could stand on their own two feet, or trunnions, as they are referred to in theater-speak. Or add some half couplers, and you can fix them to a truss. But one thing that has always been difficult was hanging them vertically from a truss with just one clamp. Chauvet Professional took that into consideration when they designed their latest strip, the IP65-rated COLORado Batten Q15.

» Adaptable Rigging Solutions

This one-meter-long, 15-cell strip of light has adjustable trunnions that can slide either

way on a track along the backside. This makes it great for hanging on trusses and avoiding crossbars. It also makes the fixture easier to hang on the front face of a truss vertically and symmetrically. There is also a center point to attach an Omega clamp, which is good if you wish to mount it off the axis of the chords.

Added to this model are endcaps that join two units together seamlessly with two pins, for a perfect alignment of the LED cells. What I find particularly great is their ability to hang these fixtures down from a truss on one clamp and have additional units clamp together at the weight bearing ends and be structurally sound. This proves to be an extreme labor and time saver, as techs no longer need to hang vertical pipes to a truss, then clamp the strips onto said pipes to hang in an icicle formation.



(Please note, however, that Chauvet legally does not permit more than two fixtures hanging from one clamp). The unit has specially designed truss hanging hardware as well as floor standing plates. The adaptable rigging solutions set this batten apart from others.

» Output, Color and Effects

Lighting-wise, this fixture is equipped with 15 x 20W RGBW 4-in-1 LED cells. Each cell has a native 16° beam spread that is fixed. To com-

pensate for those looking for a wider swath of light output, the fixture comes with a wall wash "filter" that gives the beam a 16° by 43° beam spread with guaranteed smoothness of intensity. There is also an anti-glare shield available to slide in place.

The colors mix as evenly as what we have come to expect from RGBW dies with solid reds, blues and greens as well as most pastel colors. Individual control of each cell is easy in an extended DMX mode. Users can choose modes that either mix using hue and saturation levels or by the four individual RGB+W channels.

Users may prefer to use the dedicated color or macro channel over mixing, which includes 10 primary colors including black and white. There are an additional 14 channels that one can use to specify a white output in a variety of color temperatures, ranging from 1800K to 8000K. The color temperatures are simulated renditions of tungsten lamps as accurately as they could be.

The dimming can be set to any of the five different curves the user may choose from. The brightness is moderately good for a batten this size, with 6,325 lumens emitted. Strobing functions include Sync, Lightning and Random modes, with multiple rates of each. I do note that, unlike most fixtures, the user can strobe individual cells at different rates instead of as a whole. In other words, one can have the 15 cells of the fixture randomly strobe within themselves. But this feature can only be accessed in the hue saturation color mixing mode (76 channels per fixture). The most DMX channels the RGBW color mixing modes take are 66. The fixture can run on a minimum of six channels. The PWM is adjustable to six rates going all the way to 25,000 Hz. **PLSN**

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With its IP65 rating, the fixture can easily be used on any outdoor show or installation. It's built ruggedly with aluminum alloys and could easily tour or enjoy a long life in a theater or nightclub. There are built-in auto programs for dimmer and color chases, etc., plus excellent (and numerous) rigging options.

COLORado Batten Q15

STATS

Light Source	15 x 20W RGBW LEDs
Output	6,324 lumens
Lamp Life	50,000 hours
Native Beam	16°
Size	41.22" x 7.28" x 6.55"
Weight	28.8 lbs.
Power Cord	Seetronic PowerCon
Data In	5-pin IP65 XLR
MSRP	\$1,599.99
Manufacturer	Chauvet Professional
More Info	chauvetprofessional.com

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Billboard Latin Music Awards



Maluma and others performed at the Oct. 21 ceremony.

Lighting Co

PRG

» Venue

BB&T Center, Sunrise, FL

» Crew

Producer: MBS Special Events
Production Design/Content: Darmah, LLC
Lighting Designer: John Daniels
LD/Programmers: Felix Peralta, Kevin Lawson
Lighting Director: Chris Delorenzo
Gaffer: Chris Szabo
Networking/Ground Control Tech: Ronald Beal
Lighting Techs: Dan Antolick, Leslie Holm, Michael Pagan

» Gear

3 grandMA2 consoles (2 Full, 1 Light) w/10 NPU's
78 Robe MegaPointes
56 Robe Pointes
36 Robe BMFL Blades
26 Robe BMFL WashBeams
87 Robe Robin LEDWash 1200's
18 Vari-Lite VL3500 Spot+
114 GLP Impression X4 Bar20
80 GLP Impression X4's
13 GLP JDC1 Strobes
18 Chroma-Q Color Force II 48"
44 Chroma-Q Color Force 12" 100-240V
5 Litepanel ASTRA Soft Bi-Color LED Panels
12 PRG Best Boy Spot HP w/Cameras (GroundControl)
12 PRG GroundControl Follow Spot System Controllers
2 MDG theONE Atmospheric Generators
3 ProPlex GBS 8-port w/ Optical Con Tac4 OM3
1 Tour Lighting Snake v3 150m

"Illuminance" on Bannerman Island



Daisy Jopling Band, Michael Feigenbaum, Sal Lagonia and local youth musicians performed from Sept. 30 to Oct. 4.

Lighting Co

BML-Blackbird

» Venue

Bannerman Island, Dutchess County, NY

» Crew

Producer: Bannerman Island Trust
Lighting Designer: Deke Hazirjian/NYC Lites
Associate LD: Jimmy Lawlor/NYC Lites
Assistant LD: Christopher Annas-Lee
Production Electrician/Gaffer: Brad Kaplan
Moving Light Programmer: Ryan Phillips

» Gear

Lighting:

1 ETC Gio @5 console
12 Elation Proteus Hybrid IP65
7 Proteus Rayzor 760 (Elation-supplied)
6 Elation Proteus Beam IP65
8 Elation Fuze Par 120 IP65
12 Generico Monsoon Strobe IP65
13 Generico X1012 IP65 LED pars
24 Chauvet COLORado 2 Quad Zoom IP65
10 Chauvet Rogue R2 Washes
16 ADJ Wifly EXR par IP65
2 Antari M-8 foggers

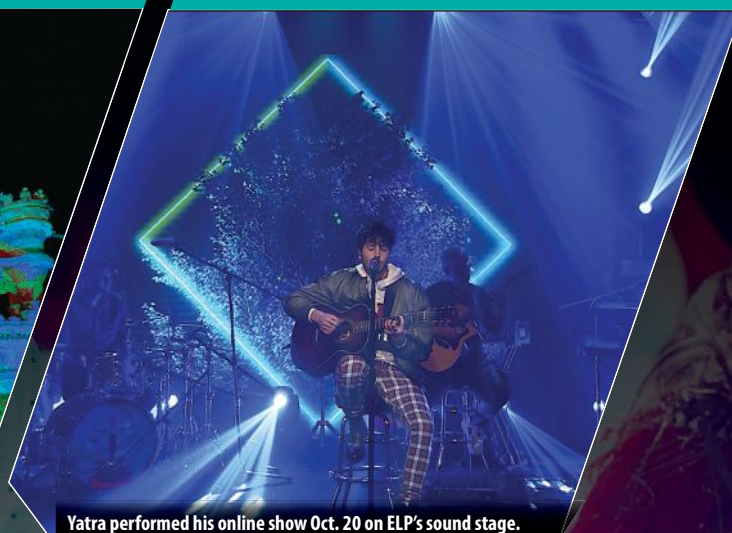
Video:

1 Camera package w/9 cameras, 2 on drones

» Event Details

The five-day concert series featured two shows per day and 20 lucky guests per show. The crew provided lighting for separate areas on Bannerman Castle, a ruin that once served as a military surplus warehouse, transporting everything via barge to the rocky, wooded seven-acre island in the Hudson River 50 miles north of NYC.

Tommy Hilfiger Impact with Sebastian Yatra



Yatra performed his online show Oct. 20 on ELP's sound stage.

Lighting Co

Everlast Productions (ELP)

» Venue

ELP Sound Stage, Dania Beach, FL

» Crew

Promoter/Producer: Tommy Hilfiger
Production Manager: Andrés Albornoz
Lighting Director: Christopher Penso
Lighting Tech: Tyler Frank
Set Design: Joe Rawda
Rigger: Rich Ruz
Video Director: Williams "Piloto" Hincapié

» Gear

Lighting:

1 grandMA2 Light console
14 Martin MAC Auras
14 Elation Platinum FLX Hybrids
16 Elation Platinum Beam 5R Extremes
10 SGM Q-7 LED strobes
4 ETC Source Four LED Series 2 Lustr
1 Antari F5 hazer

Video:

3 Sony HSC-100R HD cameras
2 PTZ 4K cameras
1 Barco E2 switcher
1 Blackmagic Design Studio Pro HD switcher
1 AJA Ki Pro dual digital recorder
70 Eve 3mm LED panels

Rigging:

56' 12" box truss
170' 12" triangle truss
4 1-ton ChainMaster motors
8 ¼-ton double reeved ChainMaster motors

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PRODUCTIONPROFILE
A RE-ENVISIONED

Lake of Dreams

ERIC JAMISON/WYNN ENTERTAINMENT

WBD Returns to Morph \$14 Million Technology Upgrade into Magic

By Debi Moen

During the day, it's a serene three-acre oasis with a 90-foot waterfall cascading into a pool of water, an 11-story high mountain and 1,500 pine trees. But like everything else in Las Vegas, it is not as it seems. Come sundown, the lights turn on and technology transforms this setting into a multimedia spectacle, *The Lake of Dreams*.

The Wynn Hotel's attraction has enchanted its lakeside spectators since its opening in 2005. In 2018, Wynn general manager/producer Rick Gray spearheaded a new \$14 million technology upgrade to launch in 2020. He brought together the original creative team of Emmy-winning director Kenny Ortega, production/puppet designer Michael Curry (known for his role in Broadway's *The Lion King*) and lighting designer Patrick Woodroffe (Rolling Stones, Adele) along with video design director Gary Jaeger (CORE Studios) and sound designer Peter Hylenski (PH Sound Design) to reimagine the technology and the music for a new invigorated show. But as the production prepared for installation, the pandemic hit. The world shut down.

What happened next was off the charts. The attraction opened in October 2020 — coincidentally, outdoors and perfectly suited for socially distanced pandemic conditions. But what it took to get there was unprecedented in the live event industry. Now, the process is already serving as a procedural guidebook for future shows in this era of Covid-19.

PLSN checked in with lighting designers Patrick Woodroffe and Terry Cook of Woodroffe Bassett Design (WBD, www.woodroffebassett.com), lighting programmer Chris Lose, video programmer Evan Bloom and laser designer/programmer Lawrence Wright (from ER Productions) for the story-within-the-story about programming a production during the pandemic. And forget about the six feet of social distancing. This was 6,000-plus miles.

» Animatronics, Orbs, Laser Animations and 5,500 LEDs

The show — held every half hour each night — is designed to blur the lines between technology and magic. The real magic is the fact that it opened at all during the pandemic.

Woodroffe explained his team's role. "For our part, we planned to upgrade all the fixtures and then add two or three other layers of light in the form of extra color-changing LED PARs buried within the planting, a set of hand-sized LED pucks that were scattered randomly throughout the trees, and a full laser system. WBD partner Adam Bassett was responsible for the initial technical design, and he and Terry Cook made various visits to the site to initialize and then commission the new systems."

The new systems tell a story through a series of segments with updated music.

Michael Curry's animatronics play a significant role. While the 30-foot *Singing Frog* returns with a makeover and advanced robotics singing Frank Sinatra's "New York, New York," the Lady Birds are new — a trio of 28-foot tall, 17,000-pound animated toucans who dance using dozens of computer-controlled servo motors during "Lady Marmalade."

Astronaut is another new act, an animatronic puppet/space explorer who moves to a cover version of David Bowie's "Space Oddity." The spaceman is guided by Flying By Foy's Invisible 3D flying system, whose wires are attached to the Wynn roof and mountain.

Another new Curry character is *Electra*, a shining star sculpture made up of hundreds of individually controlled RGBW LED pixels. As the show's celestial emcee, the wireless star soars through the night addressing the audience at the opening and closing of the show.

The three color-changing Orbs, balls which glide on top of the water, are bigger and digitally updated as the *Emoji Orbs*. A Watchout media server inside each orb projects emoji faces to give the balls character

for its whimsical love-on-the-lake segment during the song, "I Got You Babe." Each orb is battery powered with a wireless signal, so there are no cables except guidelines that move it through the water. Now there's a "shark" — a remote-controlled boat topped with a fin with a tracker tag to the Tait Navigator automation platform, then to the Green Hippo Hippotizer media server.

Even the waterfall is a performer. "It's variable controlled," Cook explained. "Behind the waterfall is a white travertine marble stone wall with pumps that reverse the flow of water, so it can be shut off instantly. We turn water off to help with the clarity of the video and use the wall as a projection surface."

The pine forest also serves as a set for fireflies and blinking effects using 400-plus egg strobes, Claypaky B-Eyes, Color Kinetic LED Puck lights and GLP KNV Dots. The flashy LEDs "make it more fun and interactive and allowed for more inventive time code," Cook noted. Some pucks dangle from branches while others are fixed onto fiberglass poles. Arborists were brought in to ensure no tree damage would occur from any of the light fixture installations.

One element remaining from the original design is the network of Color Kinetics LEDs. There are 4,000 individually controlled C-Splash 2 units attached on 700 panels on the bottom of the 4-foot deep lake to paint the water with color and effects. "It becomes a low-res video screen," Cook explained. "There are newer products available, but it still works because the lights are balanced to the video, so we didn't change it."

They also swapped the Altman Lighting fixtures to a mix of Lumenpulse 2700K and RGBW LED units to lower the power cost, maintenance and fire risk. In total, more than 5,500 LED lights brighten up the night, all installed by PRG Las Vegas and Wynn Engineering.

» Lasers Add Sparkle to the Story

This isn't a typical laser show, as ER Productions general manager Lawrence Wright explained: "Using the lasers for animations and graphics rather than a beam show was a unique use of the lasers, bringing the whole mountain to life instantly."

The lasers project lyrics and animations onto the waterfall and mountain, such as during Lady Gaga's song, "Born This Way." Lasers also track and overlay video content to add sparkle to characters during *The Swimmer*, an underwater film sequence that follows a mythical mermaid.

ER installed a complete laser package of six Phaenon Pro X 30000, ER's custom safety system and a Pangolin Beyond control package. As the lasers run in up to nine shows nightly, Wright chose the lasers for their reliability, beam quality, integrated effects wheel and remote management. Wynn's grandMA2 console triggers the Pangolin Beyond laser software, either triggering cues or activating timelines to pick up timecode from their show controller system.

Wright's team designed and tested the system for two years, with techs Katy Kruzic and Becky Prough helping with installation. Wright himself did not expect to program the show, but being based there in Las Vegas made it convenient. "Previous to taking this position, almost all my work was programming and touring," he said. "It was nice to get back to that for a few weeks."

» "Meticulous" Lighting Programming

Answering the call from WBD's Terry Cook to travel from Lakeshore, Ontario, Canada to Las Vegas for programming, an "ecstatic" Chris Lose said, "For the first time, I was willing to reasonably risk my health for the sake of putting on a show."

His first step was to update the Wynn's console for a show that's been running every



The 30-foot tall animatronic frog sings "New York, New York" above the waterfall's wall, whose white marble stones serve as a projection screen.

“We needed to look at accurate live images in London from the Lake of Dreams in real time, and it was essential there should be little to no latency as these traveled 6,000-plus miles to London.”

—Patrick Woodroffe

night on older software for 15 years. While updating the grandMA2 and the NPU's from version 3.2.2.16 to the latest 3.9.0.3, “we had to hold our breath through each subsequent version,” Lose said. In doing so, he recognized many user profiles in the desk. “Some legends of the industry had a hand in making this show so magical. I was able to stand on their shoulders and reach for even greater heights.”

Programming was meticulous, as is expected of a time-synched show. Lose controlled Martin's MAC Viper profile and wash units lighting from the front and ground areas and Claypaky B-Eyes in the trees. He also programmed the console running the Hippotizer media server.

Sometimes the unexpected got caught up in the signals. Lose explained, “We would get reports from the other side of the resort that lights were flashing with the music in the restaurant. It may have been a cool effect, but it was not intended. We had to hunt down obscure architectural channels and clone them to something more appropriate, or park them at a desirable level.”

In the end, he was satisfied with the result. “The most fulfilling part is knowing that it will delight so many people for years to come,” Lose said.

» Media Server Magic

The inability for the spectators to discern what is real and what is technology is the magic of the show. Video programmer Evan Bloom used two media servers: a Green Hippo Hippotizer v4.5 using media clips to control all the LEDs in the trees and under the water; and Watchout in the orbs and on the waterfall to blur those lines of reality, using video content designed by Core Studios.

Many moments blur the lines, but one example can be seen during The Chainsmokers' song, “Side Effects,” where video clips of people's heads pop up from the lake and into the

“waterfall,” which, because it was turned off, is not real water but a series of front projections of water controlled by Watchout.

Based in Las Vegas, Bloom didn't have to travel far for the gig. Having worked on the Wynn project in previous years with PRG, he brought helpful experience to the production. While Wynn has an in-house staff to handle the nightly show, Bloom trained one to monitor the servers. “It was interesting to turn on the work engine again after six months of mostly sitting around,” Bloom said. “Getting back to doing a 10 to 12 hour day, you realized you hadn't missed a beat. The Woodroffe Bassett team were fun to work with and had a creative eye. It was a good time.”

» Pandemic Programming: London to Las Vegas

As the installation began, so did the outbreak of coronavirus. With the decision to continue on with the project, Woodroffe soon realized that travel restrictions would keep him and Cook in the U.K. during the important six-week period of programming in Las Vegas from August through September 2020.

“We needed to look at accurate live images in London from the Lake of Dreams in real time, and it was essential there should be little to no latency as these travelled 6,000-plus miles to London,” Woodroffe explained. “Any lag wouldn't allow us to judge the timing of our cues, something that was so important as we worked to give the impression that the music and the visuals were working in perfect synchronization. But almost more importantly, we had to feel directly connected with the team in Las Vegas and feel able to communicate with them in exactly the same way that we would have if we had been sitting there at the edge of the lake. We knew that the project would live or die on getting this right.”

Lighting company Neg Earth created a safe space in their London studio for video con-

ferencing. In the final setup, Woodroffe had a Microsoft Teams call monitor on his side of the desk — socially distanced from Cook — that linked to a camera providing a view of director Kenny Ortega, Michael Curry and Rick Gray. Video producer Gary Jaeger would sometimes join in from Northern California, as did sound designer Peter Hylenski from his upstate New York studio.

Cook's similar setup was linked with lighting programmer Chris Lose, laser programmer Lawrence Wright and video programmer Evan Bloom. He could see the layout of Chris' grandMA on a separate screen.

Back at the Wynn, the three programmers were set up on top of the Wynn's lakeside restaurants in three FOH booths spaced apart for lighting, media servers and 4K projectors and lasers.

Right from the start, Cook said, “When building Cue 1, I realized I utterly relied on Chris to be my eyes. ‘How does the blue look’ or, ‘Is the tempo right?’ Chris was a vital part; he was our eyes and ears on the ground.”

Bloom noted, “I sat at a station at the FOH with the servers and MA that would go to Terry and Patrick, and when they got to the programming portions of the songs involving LEDs, I would advise them on how to manipulate them to get the effect they were looking for.”

Lasers were also tricky through the distance. Said Wright, “It's probably the hardest way to program lasers and visually communicate with the designers, as lasers can flicker on camera. Bringing their vision to life and showing them became an exciting challenge, as some effects were strobing rather than being smooth. Terry and Patrick did a fantastic job in working with us remotely.”

Cook would then have the running cue sheet linked together on their laptops to keep track of overall progress. A final screen linked through to a HD recording system allowed

“Using the lasers for animations and graphics rather than a beam show was a unique use of the lasers, bringing the whole mountain to life instantly.”

—Lawrence Wright



The astronaut moves using Flying By Foy's 3D flying system during the song “Space Oddity.”

them to work offline after they had closed down from Las Vegas. This system recorded four cameras and the grandMA cue list in to one record with imbedded audio so they could look back and see what was happening when.

“Our sessions would begin between 3 and 6 in the morning, depending on that night's schedule in Las Vegas,” Woodroffe said. “Terry and I would greet each other with a cup of tea, say ‘Good morning’ or ‘Good evening’ to the team in Las Vegas, and then start to work!”

Cook added, “I would go to bed at 6 p.m. London time and get up at 2 a.m. I was living on Vegas time! A friend asked me jokingly how my jet lag was. I liked the structure of the day. My body got used to it, and I enjoyed it. The awkward part was the ‘hang up’ at the end of the day. You miss walking to the bar for a beer; there were no end-of-day experiences, which are so vital. It was more formal, no loose chat, and we missed that.”

After eight weeks of successful programming, the teams realized there is a future for using technology in this way to actually create shows. Woodroffe said, “We have just taken on another project using the same technique, this time in Macao. The only change we are making is to have a non-active lighting console and an example of each of the fixtures we are using with us at Neg Earth along with a programmer who can copy and mimic the work done by the local programmer in China. This gives us more control when working with an unknown team and allows us to better understand the color or feel of the cue we are creating.”

The ultimate irony, Cook pointed out, came down to this: “Who would have known we created a show 15 years ago that would be perfect for our socially distanced time right now?”

PLSN

For a behind the scenes video of Wynn's Lake of Dreams, scroll to “Behind the Waterfall: Creating the New Lake of Dreams” at plsn.me/WynnLake

2021

INNOVATE to ELEVATE





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BACK in the ARENA

Show/Production Designer Ben Dalglish on Designing Bennee's New Zealand Tour

By Michael S. Eddy

In October of 2020, indie-pop phenom Bennee wrapped up the first major tour to happen in New Zealand since the Covid-19 pandemic broke out in March. Since New Zealand had really clamped down and created a country-wide bubble early in the pandemic, they were able by October to return to things like live in-person concerts with no restrictions for acts based in the country. The sold-out tour consisted of eight shows in four cities across New Zealand including Dunedin, Wellington, Christchurch, and ending in the singer's hometown of Auckland. Bennee's final night at Auckland's Spark Arena, became the first livestreamed sold-out concert to a global audience since the start of the pandemic.

The 20-year-old Bennee [Stella Rose Bennett] is a singer/songwriter who in both 2019 and 2020, consecutively won Single of the Year, Best Solo Artist, and Best Pop Artist at the New Zealand Music Awards. With her current single, "Supalonely," an international hit, including in the USA, her management team felt it was time to step up the production values for the live performances and they brought in Show/Production Designer Ben Dalglish and his firm Human Person.

When the tour wrapped, *PLSN* was able to speak with Dalglish about his design on the one of the few live music productions with a live audience. "It is crazy to say, it's a real tour with a normal audience, with no social distancing. We all feel very lucky, and to be honest a little sad, to be working in this environment while so many of our peers are unable to," he notes. "The opportunity to do this show was something that Human Person was very fortunate to have, and we were really cognizant of that fact." To that point, Human Person made a real effort to bring in as many of their collaborators from around the world as possible for the Bennee tour. "We had people in Toronto, Canada, helping with the lighting programming as well doing video editing and Notch. Our team created some of the content in Los Angeles, along with a company called The Valdez, out of New York, that created a large part of the video content."

Dalglish, known for his award winning work for Post Malone, knew that this tour would be a real statement as Bennee moved

to the next level from festival gigs to sold-out arenas. "She'd never really done a show of this size before," he explains. "This was going to be her first arena tour so a lot of care and effort was put into how we wanted to present Bennee for the first time to not only a large in-person crowd, but also a worldwide audience, as the last show of the tour would be live-streamed. We wanted to get across the unique feel and mood a Bennee performance has, hopefully getting people excited for the future, when she plays around the world."

The production was also aware that even though New Zealand is back up and running in terms of holding concerts many of the lighting and sound vendors are still in choppy economic waters. They had been closed down for a long period and international acts still can't come into the country so concert touring, while open, is greatly reduced in the country. To help ease the burden a bit, Dalglish and production manager Daniel Warwick chose to break the video and lighting package up and source much of it locally over the four cities they were playing. "There's been a lot of great vendors in New Zealand who've had some tough times. So, we made the conscious decision to spread the love as much as we could. That, of course, led to a few challenges trying to, every day, have the best lighting show as possible with cloning and such. We did tour a floor package throughout the whole run, but the overhead lighting package and LED package was local to each region."

Two large trees occupy the space between the band and the rear video wall. Ben expands on them. "Some of Bennee's songs take place in a world where large, dead trees made sense. We wanted to more just create her own world/environment for her to perform in. A lot of the visual content centers around natural elements also. For example, for 'Night Garden,' we positioned leaves and other foliage on the LED walls to make it look as though it was attached to the real trees. The trees were built by a family friend. In true New Zealand fashion where everyone knows everyone, Stella herself has a close family friend who is a scenic builder. So I found some tree models and customized them and modified them to

be our own. From there a scale was decided and they were built. The whole process was really smooth and they have become a staple to our visuals, often used in silhouette form."

» Spotlight on the Artist

Trying to make the lighting design feel inclusive and organic, to create a sense of being immersive Dalglish designed a semi-circular layout that encompassed the stage. "We had a full stage of strobe and LED beam type fixtures," he describes. "That was the main design choice on the floor. Outside of that, we just tried to get as many good premium fixtures as we could. The [Robe] MegaPointe was the featured fixture on the floor, which allowed us to do many intricate beam and gobo looks. As New Zealand is limited on fixture selection, the focus for better or worse needs to be less about the equipment and more how it's programmed. As we had the live stream to contend with, as well as filming for late night TV shows including *The Late Show with Stephen Colbert*, we were programming up until doors on just about every show just to make it that much better."

To capture the organic feel, Dalglish knew that having traditional followspots would "definitely have killed the mood." He opted for the use of a remote followspot control for a much more integrated look for Bennee's shows. "The other major choice of gear for the tour was the Follow-Me system," he says. "That was a big push for us to get that across the line, and we were really happy that we did — knowing on one side, Bennee is essentially a pop artist and her fans want to see her, and on the other side that we wanted to create this organic framing of the music. The Follow-Me system was key. Balancing those two worlds was one of the biggest priorities going into the design. I thought Follow-Me, was the best solution — being able to choose different lights to key light her at different moments. Having full control of the color, iris and even strobe became very important throughout the show."

The Follow-Me system help solve another challenge for Dalglish and the Human Person team. "A large part of the show featured Notch-affected I-Mag," he says. "Previously on

shows that I've done, especially Post Malone, having the remote-controlled and desk-operated followspots, has been the essential puzzle piece to making Notch work to its full potential. People may not realize that having perfect key lighting for Notch makes Notch work. To change the look of the Notch effect, I was adjusting the followspots."

As previously mentioned, they spread the work out globally, employing a variety of people around the world to create and program for the tour, including out of Toronto programmer Nick van Nostrand. "Nick's a great programmer who I've worked with on Janet Jackson and other shows," comments Dalglish. "For this one he did a lot of the initial programming, getting all the timecode in, building the file, and getting the initial building blocks done."

» Building the Visuals

"We were really happy with how it all turned out on the video front," Dalglish adds. "The video was a team effort between Human Person as the show designers, and The Valdez, who are a husband and wife team out of New York, and an amazing company. They make all their content in really unique ways, including shooting on old '80s VHS cameras, Super 8 cameras, and other kind of almost forgotten techniques of making video content. The Bennee shows in the past used almost like a moving background of video. There was no timecode; visuals weren't assigned to any song; it was like a looping, hour-long piece of content."

"Human Person's job was to direct where all the content was going to fit for every song and build it out to be a fully-fledged show plus incorporating Notch to each of the songs, which was a really great challenge for us," Dalglish continues. "We were able to take this amazing work that The Valdez created and place it where it needed to go. We mood boarded out the whole show in terms of color and progression throughout the video clips and how the lighting and other elements would be a part of that. Then, all the content was edited by Matthew Clode and Matthew Cummer in Auckland and Hamilton, Ontario, respectfully."



A Follow-Me system was used to spot the artist.



A sexily lit parachute cloth hides the band.

Notch FX play a huge role in the video playback.

For the media server, they selected a disguise GX 2 with Notch. "With the use of disguise and Notch, we worked with Ryan Sheppard of Dark Matter Technologies," explains Dalglish. "I have been working with Ryan on most of our projects, notably Travis Scott; he's a great friend and an even better Notch designer. He was instrumental in making this project a success. For about 10 days, Ryan [based in Toronto] put himself on New Zealand time, going to sleep at 4 a.m. local time, if not later! We essentially designed the Notch portion of the show over Team Viewer, believe it or not. With zero ability to get anyone into New Zealand that isn't a resident at the moment, we had to rely on technology in a way I never thought would be necessary in my lifetime. Every rehearsal, Ryan was watching, via FaceTime, through a camera feed we set up. He was making changes in real time and programming a completely world-class Notch show, remotely, at times dealing with a whopping five frames per second of connection." Sheppard worked on a completely matched hardware setup in Toronto to the one in New Zealand. "Ryan relied heavily on previz," Dalglish continues. "He was able to build a file and make major changes on his set up with some test footage that we had and then pass it over to me in New Zealand and make changes as necessary."

Almost every song in the show has real-time, generative effected content. Dalglish estimates that there's a 70/30 split between pre-recorded content and real-time. "As the set develops, we get into quite trippy and abstract Notch content," he comments. "In fact, the final two songs only have Notch effects and no pre-recorded content at all, which I think was a showstopping moment. These camera effects really just highlight her personality and where she is going with these new songs."

Human Person and Dalglish worked closely with Bennee on the aesthetic look and feel of the show. "She was amazing to work with," says the designer. "She knows what she likes, which is the best thing in the world. She's a collaborator. We had a lot of initial meetings, just to make sure we were all like 100 percent in agreement on the feel of the show. Once we got rolling, it was very much smooth sailing from there. We treated this as almost a showcase of what a great live show hopefully could be for emerging artists. We're really proud of what we created." **PLSN**



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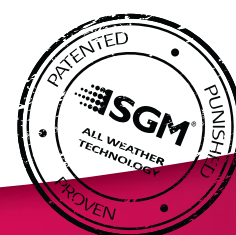


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Dec. 4-31, 2020

Nashville Fairgrounds Speedway

Production Credits:**Production Design:** Erik Anderson (Eamotion), Bobby Grey (Notan Creative), Darien Koop (Darko Designs)**Executive Producer and Animal Trainer:** Tye Trussell**Creative Direction:** Erik Anderson, Emily Pierce (Eamotion)**Music Direction:** Tyler Walker (Eamotion)**Lighting Programming:** Bobby Grey, Darien Koop**Video Content:** Gordon Droitcour, Mike Kluge, Jonny Kingsbury, Mollie Tarlow (Cour Content)**Laser Programming:** Tony Caporale**Production Manager:** Nate Smith**Operations Director:** David Supica (Eamotion)**Site Operations:** Joey Cicak (Eamotion)**Lead Construction Draftsman:** Bryan Stubblefield**Vendors:****Staging & Site Build:** Gallagher Staging Nashville**Lighting:** 4Wall, PGP, LMG**Video & Networking:** PRG**Media Servers:** Rogue Servers**Special FX:** ImageSFX

Jingle Beat

Eamotion, Gallagher Staging and Others Create Holiday-Themed Drive-Through Experience

By Nook Schoenfeld

For the last four weeks of 2020, entertainment-starved patrons are flocking to the Nashville Fairgrounds Speedway to experience a holiday season spectacular, far from the usual Christmas Lights drive-through experience. A two-mile long course of lighting, laser, video, scenic and audio overwhelms attendee senses as cars slowly drive through a range of exciting areas, immersed in different visual elements at every curve.

The idea for this unique event came from the two designers behind Cour Design, a Nashville production and lighting design firm that started up in 2015. When the industry shut down last March, partners Erik Anderson and Gordon Droitcour started brainstorming about what they could do creatively to keep the masses entertained and themselves busy. "Joining the drive-in concert scene or the livestream concert field felt like the old world. We wanted to come up with something fresh," Anderson says. "We bounced ideas around, and this one came up."

Cour Design has diversified themselves as they have grown. They went from creating design solutions triggered by MIDI to creating media content for their shows. With this idea, they chose to expand their operations with a new branch that is dedicated to novel live experiences. Hence the emergence of Eamotion (eamotion.com). "Our goal was to change the visual theme one may expect from a drive through experience. We strived to create an experience with seamless audio and visuals that was different from anything done before," Anderson adds.

» The Production

The production takes up the entire field of the speedway, with visual elements spilling off of the track. With a starting area performance and a lead car to follow, the show lasts 45 minutes as the three m.p.h. ride safely evades all obstacles. The event practices safe distancing along with touch-free ticketing and masked employees at the entrance. At each turn, the

procession enters a new area, whether it be trusses with LED balls dancing down or a video pyramid that's as high as a four-story building. An hour-long audio loop combining well-known holiday tunes spruced up with some "modern beats" can be heard via each car's FM radio as well as Clair-supplied speakers that rock the entire venue. "The idea is, we wanted to put on a concert type show with all the spectacular visuals one might expect at an over-the-top stadium show, but without the musical talent. Imagine *The Great Christmas Light Fight* TV show meets the Super Bowl Halftime show. This allowed our design team to pull out all the stops and do whatever they thought was visually spectacular, without the threat of any artist saying, 'Looks amazing, but it's not for me.'"

Anderson adds his theory behind the drive. "Everything is synced up to the same music, but everywhere your head turns, something else cool is happening. One can drive through the event multiple times and never see the same show twice. All of the visual elements are cued to the same music, so it doesn't matter where you are on the track; everything is in time to the same beat." Tickets were pre-issued in timed segments on the hour. Prices range from \$45 off peak to \$60 at prime time, per vehicle. Visitors are also encouraged to donate to MusiCares' relief initiatives for roadies.

» An Old Friend Steps In

As fate would have it, while the designers were contemplating how to pull off this idea, an old friend, Tye Trussell, called just to check in, offering kinship from his perch as head honcho of Gallagher Staging's Nashville location (gallagherstaging.com). This led to more brainstorming and some out-of-this-world ideas trying to conceptualize a truly immersive experience. Eamotion and Gallagher ended up partnering on the whole event, one that led to utilizing every piece of truss in Nashville, it seemed.

"This isn't a project that we could put together by ourselves," Trussell says. "It literally

took a team at the top and a village to back it. Some 200 workers and help from every big company in town were involved to bring this vision to reality." 4Wall, LMG and PGP provided lights and Image SFX provided the lasers and special effects. On the video side, PRG provided the video elements while Rogue Servers looked after the media servers. When asked about power and signal distribution for the site, Anderson describes the setup as "a whole lot of generators," adding that "PRG supplied all the networking on site, utilizing some 11,000 feet of fiber."

An army indeed. When asked about where he found all the labor for this project, Tye says, "We just picked up the phone and started calling friends — out of work road crew — and I'll tell you what. Every person we called said 'I'm in. Tell me what you need. We can talk money later.' The camaraderie and sheer joy everyone on site had, to be outside and gigging again, was just unbelievable. I'm not sure we could've pulled this show off anywhere other than Nashville. All the vendors, the city behind us, the folks at Bridgestone — all showed up in a big way."

Anderson found himself in a whole new world with this venture. "For the first month, it was so exciting. Figuring out the layout and all the visuals that would accompany it. We soon realized that was the easy part. It was the next six months leading up to the event that needed our undivided attention. Unlike concerts, we didn't have an in-house staff to use for the event. Security, ticket sales, marketing, accountants, structural engineers, all had to be incorporated. Medical staff, a lead car, auto mechanics to deal with any car that broke down, power, signal and this is all outside of programming. I guess one could say we had to build our own venue. It took a lot of integral people to figure out how to get 400 cars through the course every hour."

This led to hiring a production team to handle all the details. Eamotion brought in local production manager Nate Smith to run the

weeklong load-in and load-out and look after all aspects of the production. To program all the lighting and tie the show together, LDs Bobby Grey and Darien Koop were brought in along with video programmers, laser operators, audio engineers and more. The two LD's also took care of all the lighting plots and could be seen on-site driving around in golf carts with grandMA consoles on board. Tony Caporale joined the team, handling the laser programming. Cour Content created all the media content played back through countless video tiles. With most of the 200 crew members available in Nashville, the budget for flights and hotels was minimal.

» The Future

The concept for the show is one that has been worked on for months, with the plan that this type of event can be modified and reused in many locations, with different themes. Wash, rinse, and repeat. Whether it be a Beatles Night or a Classic Car theme, the seed has been planted where an event like this could be put on anywhere from an empty field to an unused race track or added to an existing concert festival.

To ensure the success of the large holiday event, a trial run was done last September at the same venue with "Tempo," a first-of-its-kind pandemic-proof, drive-through entertainment experience. Erik explains, "We needed a test to make sure we could sync up the audio and visuals. We did a five-day run in which we tried to build something friendly for all demographics. It was successful, and of course we learned a lot that benefitted Jingle Beat."

In conclusion, Anderson notes, "We didn't just want to do something that was temporary. We think this type of project can exist even after live music comes back." Trussell chimes in, "As far as I see this concept developing, we're only in the fifth inning right now. There's so much more we can produce. We have a lot of ball left to play." Stay tuned. We're told Eamotion has even grander ideas for this concept under their hats for the near future. **PLSN**

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CANADIAN BROADCASTING CORPORATION/CBC

Canada's Géméaux Awards Augmented and Virtual Reality Meet in Real Time

By Mike Wharton

Montreal-based Luz Studios provides lighting, set design and video content services worldwide across the broad spectrum of performing arts. For the past eight years, they have provided the visual design for the Géméaux awards gala honoring Canadian TV shows and digital media broadcast in French. The gala is sponsored by the Academy of Canadian Cinema & Television, which had also sponsored the Gemini Awards for English-language productions. (While the Gemini and Genie awards galas were combined into the Canadian Screen Awards in 2012, the *Prix Géméaux* continues on as the Canadian Francophone equivalent of the Emmy Awards in the U.S.)

In the past, the awards show has typically been broadcast from a variety of public theatrical locations such as Montreal's Théâtre St-Denis and Place Des Arts. The 2020 edition was different, necessitating a move into a TV studio to allow for augmented reality hardware and to have an open place to redefine the audience space. A regular theater, with seats and proper social distancing, would look empty. "Due to the global pandemic, we had to rethink the way we approach the gala, from the choice of venue, set design and the way we reveal winners," says Luz Studios' AR video director David Pawsey.

The process involved creating augmented reality graphics that united nominees on stage. A grandMA lighting console was used to control both the virtual lights lighting the AR graphics while also controlling the physical lights in the studio in real time. The design team also "gathered" multiple artists virtually on the stage with the live nominees, again lit with the combination of real and virtual lighting.

The driving factor behind this approach was two-fold in that it provided a virtual dynamic scenography. Instead of making all the graphic elements actual physical set pieces, Luz Studios created virtual set pieces that were moving and dynamic and key to the production. Beyond that, they had to a requirement of keeping all the nominees at a safe social distance.

"We chose this innovative approach because it required no rendering time," notes Pawsey. "This way, the additional virtual elements and people were always coherent with the physical set we designed. Additionally, we wanted to stay away from the zoom-like presentations and generate a feeling of closeness."

Real-world reflections were added to both real people and virtual graphics to create a homogenous look and feel for the viewing audience. The actual studio lights and the reflections on the virtual pieces matched, and that was one of the keys to making the magic happen. "We also gathered (virtually) multiple artists together to create a unique moment for the opening number," says Pawsey.

» Lighting

Luz Studios' production and lighting designer Matthieu Larivée points out that the creative team used Unreal Engine software architecture in their workflow. "In the Unreal software, we were able to customize a lighting fixture based on the real fixture we had on site. We created a virtual light with RGB, a zoom, a pattern, and then patched it via Art-Net through the lighting console. It was assigned a unit number, regrouped, and patched with the actual fixture."

Before Luz encapsulated this innovative approach, usually, the AR format followed was that of content people creating their images separately for the lighting designer to create looks after the fact. The obvious layering is evident and has somewhat of a Photoshop feel to it, Larivée believes. "This unnecessarily creates two different camps. We have integrated these two disciplines and formed a new level of visual cohesion."

For the union operators on the grandMA console, it was a walk in the park. They merely had to patch 24 fixtures, and the Unreal software took care of the rest of the math. When the operator grabs a fixture or creates a cue, both the real and the virtual light simultaneously appear. This way, the entire scene is very cohesive and, for the sake of broadcast, the light levels were all consistent. "The depth of perception achieved, because one cannot discern what is real and what is not, was truly a mind-blowing revelation once the final visual was viewed," says Larivée. "That is the real magic of what we have accomplished here."

A combination of virtual artists and live nominees appear on the stage for the opening number of the ceremony. The combined palette of real and 3D lighting was used on the actual nominees and holograms of the artists that appeared virtually on the stage. Previously, in an isolated studio, each of the virtual artists introduced to the award ceremony were captured via a flatly-lit, no-color frame.

"Even, flat lighting gave us the latitude to apply virtual light to the virtual subjects," says Larivée. "If we were to get too artsy with lighting the original subjects remotely, then we would be stuck with those specifics. It would create complications further down the line when we relight them in 3D. Not all the original parameters may translate. To the audience's eye, something just doesn't look quite right. By lighting them originally this way, we have greater range in tweaking the 3D light in the broadcast scene."

"To do that in real time is what really is the impressive part," adds Pawsey. "That is really a huge breakthrough. We integrated that footage and treated it in such a way the image could be read in the Unreal engine." As each nominee was introduced, one by one, "the virtual light worked so seamlessly with the actual light that any sense of layering or separation is eliminated."

» The Set, with Virtual Extensions

A combination of an actual stage and virtual set pieces helped heighten the emotional anticipation of the show and gave rhythm to the multiple sequences occurring throughout the night. The main stage was a circular disc capped with reflective material similar to the Harlequin Hi-Shine flooring utilized in television studios. Hidden behind the stage was an actual riser that rose up to reveal the virtual artists appearing. The actual upstage wall was a 50-foot curved LED wall. Downstage, separating the audience from the performance area, there were two smaller discs that mimicked the main stage, serving as an area for guest host introductions. Thirteen Solotech SLPro8 LED tiles created the façade for the two-foot-high main stage.

A subtle yet impressive touch was the ability to present the reflections on each of the glossy stage floors with both the physically present participants and the virtual attendees. "Within the software, we were able to do a pixel count of what was happening with the live feed," says Pawsey. With that input, they were then able to calculate within the tracked camera how a virtual object reacts to a live environment, thereby creating 3D objects that mirror the pixel track of the background image.

"It's pretty straightforward actually," continues Pawsey. "Even though it sounds complicated, the math all is done within the software. Because we were able to track cameras and analyze the reflections of the host on the stage material, we could imitate that surface in 3D and composite in real time all of the virtual actors. The software gave us the tool to isolate their reflections and input that information onto the stage floor."

» Other Virtual Set Elements

A virtual trophy symbol, representing the award given, added grandeur to the evening, and it served as a set extension piece. The large element fades in, dominating the screen at the top of the show. Continuing the innovative use of virtual reflection, the 3D wide shot replicates that standard awards show "long shot, over the shoulder, pulling away from the stage kind of look," says Pawsey.

Appearing throughout the show, it facilitated lead-ins and lead outs, segment breaks and transitions. "We magnified the trophy with its metallic texture," adds Pawsey. Here again, the set lights were coherent with the reflections on the virtual set piece. The trophy would appear and disappear from the stage floor, which enhanced the minimal stage design. "We accomplished the image by engineering a jib camera," Pawsey notes. "Created to bring production value, the golden symbol makes a bold emotional statement without being too 'over the top.'"



The virtual "fence" adds rhythm and flow to nominee intros.



Virtual and real lighting reflections appear on the virtual trophy set extension.

"Being able to pipe all these 3D animations into show control software gave our show caller the ability to run the show with a cue list, much as she would call lighting cues."

—Dave Pawsey

A virtual "fence," as the Luz team refers to it, served as an essential set extension piece. As they would in a normal gala setting, the host named the category, and the nominees walked on stage. Being six feet apart, a virtual metallic fence covered them. Cameras traveled on nominees as they were named, and the virtual fence opened to reveal the nominee with a presentation video insertion next to them. Here again, the reflections on the metallic elements worked with the actual lighting design.

This element helped create a rhythm to the introductions of the five nominees for each awards category. By highlighting them separately, it created an individual moment for each of them. It also masked the fact that the five nominees were standing on an empty stage while creating a reveal that kept them safely six feet apart.

These virtual stage elements were created by Luz Studios art designer Emily Fortier who came up with the 3D elements in a way that complemented the show and was consistent with the set design and overall branding of the event. "It was a standard design approach, just done in a completely different medium," says Pawsey.

» The Show Goes Live

The broadcast event was cue-called and ran live, without any timecode whatsoever. Upstage, a 50-by-10-foot (WxH) semi-circular LED screen served as both a backdrop and surface on which to display the prerecorded nominee scenes, using 300 Absen 2.9mm tiles. These visuals were inserted into a video window in AR from the live input of the VTR.

"Being able to pipe all these 3D animations into show control software gave our show caller (TD) the ability to run the show with a cue list much as she would call lighting cues," says Pawsey. "That was the cool part of how we integrated the workflow we had into the 3D environment."

There was a live, socially distanced audience of about 50 people in the studio. Their tables were pin spotted from above. This way, viewers at home had enough ambient light to realize there was an audience, without clearly seeing how sparse it had to be. "You feel the people but don't actually see them, adding to the architecture of the overall look," says Larivée.

Additionally, the Luz team came up with a way to do a live broadcast feed in the studio, but just off camera and out

35th Géméaux Awards

Broadcast on CBC-Radio-Canada Sept. 20, 2020

Crew

Show Director: Daniel Vigneault, Dominic Ancil
Production Design: Matthieu Larivée/Luz Studio
Set Design: Matthieu Larivée, Nicolas Ricard/Luz Studio
Lighting Design: Luz Studio/CBC Radio-Canada
Director of Photography: Luc Drolet
Assistant LD/Board Operator: Brigitte Couture
Board Operator: Miguel Asselin
Video Content Director: Emilie Fortier/Luz Studio
Video Programmer: David Rondeau, Luz Studio
Lighting/Video Supplier: Solotech
Video Lead: Jonathan Couillard/Solotech
AR Video Director: David Pawsey/Luz Studio
Unreal Artist: Maxime Rouleau/Luz Studio
AR Supplier: Rec4Box
AR Project Manager: Jonathan Fortin/Rec4Box
AR Operator/Programmer: Milane Russo/Rec4Box
AR Support/Programmer: Yannick Sirois/Rec4Box
AR Support/Programmer: Joe Finlayson/Ross Video

Gear

From Solotech:

- 2 grandMA2 consoles
- 14 Portman P2 Hexalines
- 33 Chauvet Legend 230SR Beams
- 31 Robe MegaPointes
- 19 GLP Impression X4 Bar 20's
- 94 High End SolaSpot Pro 1500's
- 3 Christie Pandoras Box Player Dual
- 2 Christie Pandoras Box Manager
- 1 Barco E2
- 1 Wide LED screen w/300 Absen 2.9mm tiles
- 1 Stage skirt w/13 Solotech SLPro8 tiles

From Rec4Box

- 3 Ross Voyager servers
- 1 Ross UX servers
- 1 Stype jib
- 1 Cartoni AR tripod
- 1 Junior C on curved railing
- 1 Riedel Micron optical fiber kit

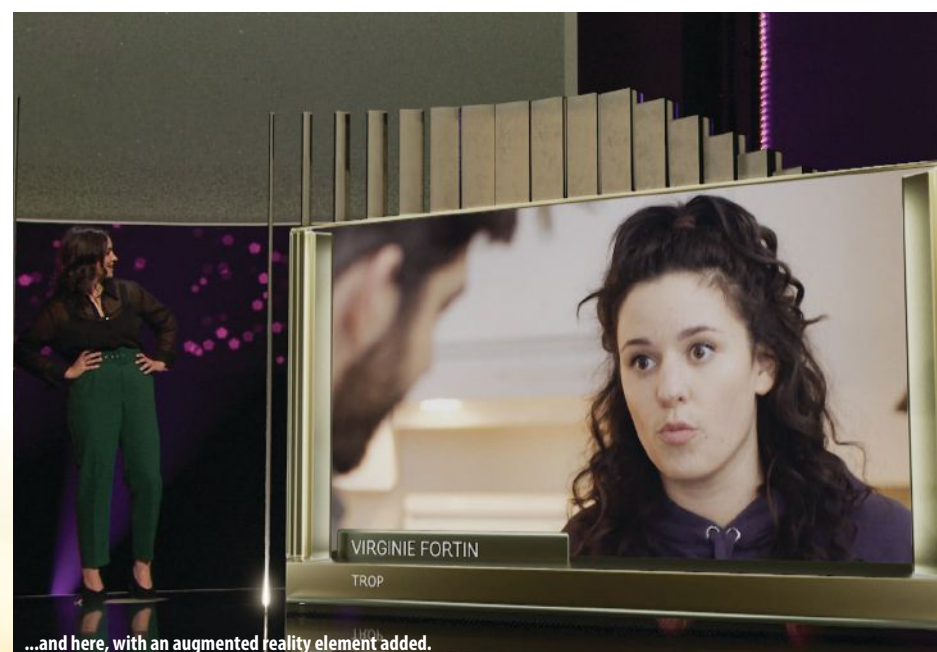
of sight. This way, the attendees in the room were able to get an idea of the virtual visual effects that were happening on stage and enjoy the experience even more. The nominees were able to view the feed as well, which helped them better understand their role in the live show.

Says Pawsey, "This is an exciting time to stay with our identity — integrating our shows, keep creating lighting, creating moments. Now we have an extra layer to work with. I think we are looking forward to all the opportunities that are coming our way."

Adds Larivée, "This is a technology that kind of takes reality and extends it. I believe this will continue to grow and be used for the future, not because of the pandemic, but because of the real emotion that happens and the way it brings people together. This is not only for the moment we are in but will provide a better way to analyze and extend shows." **PLSN**



An actress is shown here without without augmented reality...



...and here, with an augmented reality element added.

MONUMENT CIRCLE IN INDIANAPOLIS DRAWS CROWDS WITH NEW VISUALS



Beams cross the sky while projectors supply the movement.

Dodd Technologies designed and executed the visuals.



Dodd Technologies and SGM Bring Light to a Community Icon

By Nook Schoenfeld

Indianapolis is said to be home to second largest collection of war memorials in the U.S., next to Richmond, VA. Located downtown is a circular park of statues anchored around the renowned Soldiers and Sailors monument that finished construction in 1902. The Monument Circle has come to symbolize the city and the state of Indiana.

The Eli Lilly Endowment Foundation Grants support efforts to beautify public places, revitalize historic landmarks, increase access to the arts, and infuse new arts experiences in neighborhoods throughout the city. When the foundation put out a request for new project ideas last year, some 250 projects were submitted.

» Enter Dodd Technologies

Mark Dodd, president of Dodd Technologies — a full service live events production company, spoke with us about how they got involved. “We were talking to some folks from Indianapolis Downtown, an organization that manages much of what goes on in downtown Indy from festivals to events. We spoke about what we could do to create a destination, a site that would draw more people into the downtown area where the circle is located. How can we give the people who are coming into the city for dinner something to do, especially with theaters, sports and concerts currently shut down? We needed something to draw them to the circle and that area. So we concepted and delivered an entire package, while they helped manage it all.

“We always do a Circle of Light celebration at Christmas, but this was to be a permanent install. The circle itself is a national historical site like the White House, so we had to be careful about how we lit this treasure and make sure it was artfully done. We had to come up with a design that was very

particular about where equipment went, how it was seen. We couldn’t just hang lights or place speakers where we wanted. All the design had to be approved by the Historical society, so we designed this project in a way to hide all the technology.”

The competitive bid for the grant money was very secretive. Dodd Technologies had to design this without the benefit of doing any extensive research, they couldn’t even talk to any of the adjacent building owners, whose rooftops were part of the plan to illuminate the circle. That would let the cat out of the bag of what they wanted to propose. Dodd declares, “Concepts, designs, labor, power, we had to figure out how to do that from a budget side. We knew there wouldn’t be sufficient power and the entire electrical system for the tower would have to be rebuilt for what we wanted to do and beyond. That had to be included as well as construction work that may be needed. Line items I wouldn’t normally think of, such as budgeting for high speed data downtown.

“To get cabling for power and data distribution to locations around the street from the center monument meant I had to bore underneath the monument and come up under all these holes that were 18 inches in diameter, going under city streets with lousy drawings and no infrastructure. There were times we didn’t know if we were working on a construction site or an archeological dig.”

» The Visuals

With the lighting installation, SGM has been firmly planted in the Crossroads of America. The lighting system perfectly combines SGM’s IP66-rated wash fixtures and moving lights to perform this nightly show which has been dubbed, “Indy’s Signature Salute.” The spectacle activates the entire circle



A crane lifts the lighting pods on rooftops.

Monument Circle in Indianapolis

Project Type: Civic + Façade

Client: Downtown Indy, Inc. & Indiana War Memorials Commission

Lighting Design/Installation: Dodd Technologies, Inc.

SGM Fixtures: (17) G-Profile Turbo POI, (53) P-10 10° POI, (6) Q-10 110° POI

For more information, visit doddtechnologies.com and sgmlight.com

with sweeping intense color from P-10 and Q-10 wash fixtures. Moving gobo projections and aerial effects from G-Profile Turbo fixtures create additional impact. With the American flag as the default, gobos change to match the season. Basketball and football gobos add excitement on game days, while the winter season is emphasized with snowflakes.

Ultimately, the team chose the rooftops of four surrounding buildings and pre-fabricated lighting pods that could be craned into position and quickly connected to power and data. SGM’s high output in relation to fixture size meant the installation could produce amazing intensity with minimal infrastructure. “Getting power and permission from the buildings was just one more obstacle to overcome and figure into the budget,” Dodd states. “Being outside, we had to figure out wind loads and every safety factor you might imagine. On one of the rooftops, we had to have a construction team peel back part of the roof so we could add additional support beams before we could crane our lighting pod up on to it.”

“We chose the P-10 and Q-10 LED wash fixtures from SGM for their high output, color saturation, form factor, and warranty,” states Dodd Technologies’ Andy Meggenhofen. The P-10 and Q-10 provide 40,000lm and 60,000lm of RGBW light at 10° and 110° respectively in impressively compact frame sizes. The G-Profile Turbo produces incredibly clear gobo projection and can achieve intense colors using the 20,000lm RLB LED engine and can be permanently installed outside without a dome thanks to the features provided in the POI (Permanent Outdoor Installation) package. “This is incredible technology that we see in some of the greatest cities in our world,” Meggenhofen adds. “We’re now going to be able to have that capability right here in our downtown. We’re going to be very proud to share that with those who’ve come to visit and our friends and relatives.”

The surrounding buildings were bathed in color and took projection from six Christie Digital 40k laser projectors. Dodd states, “We light the buildings, throw gobo patterns on them, but we depend on the projectors to supply the motion. We use a Dataton Watchout system to control everything — the timecode drives the audio as well as the grandMA control used to program. We have MA nodes all over the place. To get data to the rooftops, we send it wirelessly from the top of the monument.”

Bob Schultz of Downtown Indy, Inc. adds, “The project meant a great deal to everyone involved as it is the first of its kind in Indianapolis. The Circle is an essential gathering place that has historically been underutilized after sunset. The SGM lighting installation designed by Dodd has activated the beautiful architecture and highlighted the craftsmanship of the Monument and the surrounding civic structures enabling their discovery and enjoyment even at night. The enduring reliability provided by SGM’s unique on-board technologies ensures that the project will continue its celebration of Indiana for years to come.” **PLSN**

Toronto's CityView Drive-in

A Massive Portable Stage (and Sturdy Video Wall) Bring Music and Live Events Back to Toronto

By Jesse Staniforth



Apex Sound & Light's Doug Cragg will always remember where he was when live music came back to Toronto. The band playing was riff-rock powerhouse Monster Truck. It was July 16, the day after the province of Ontario ended its Covid-19 lockdown. And the venue was Toronto's brand-new CityView Drive-in, which Cragg and his company helped make possible.

"After the month in lockdown, all the months preceding that in the planning phase — it was definitely a special experience to be there," Cragg recalls. "There were months of planning, where we weren't even sure it was going to happen. When we were finally able to do it after getting the go-ahead from the city and the province, hearing that first note of music on the 16th was something special."

It was also an enormous shift from the direction things had been going. Though Toronto-based Apex Sound & Light has continued more than three decades strong and is normally booked so solid they hire new personnel and add new inventory year-round, Cragg spent the late winter watching a wave of cancellations wipe out the company's entire summer.

"All the U.S. conferences we had were the first ones to pull out," Cragg remembers. "That's when I knew this was going to be a problem." Soon, of course, the summer's whole slate of live events was obliterated industry-wide, and live-event professionals searched desperately for a formula that would allow them to continue to function in the absence of everything they had originally planned.

» Solid Bookings

In the thick of the pandemic summer, the CityView Drive-in was an extraordinary success. The venue booked, on average, four to five events per week, running to seven-day weeks, such as when CityView became a venue for the Toronto International Film Festival. All through the summer, musical acts like deadmau5, a Tribe Called Red, Dvsn and Allan Rayman played to lots full of fans in their cars — and the venue booked major events all the way to the end of its season, with '80s rockers Platinum Blonde booked to play CityView up to the end of the season at Halloween.

As account manager for Apex Sound & Light Corporation, Cragg put months of effort into a plan to bring live music back to a

socially distanced society. The Toronto-based company, in its longtime partnership with Toronto hospitality-promotions powerhouse INK Entertainment, spent the spring developing the idea for the CityView Drive-in, a full-time outdoor venue where Toronto residents could enjoy nightly live music and comedy, movies and corporate events from the comfort (and distanced safety) of their cars.

"From the onset, during the lockdown, drive-in events were part of our brainstorm of things we could do," Cragg recalls. "At that point, we didn't even know if they'd be allowed. We were months ahead of that 'okay' from the government, and as soon as we were able to, we went for it. INK Entertainment was the perfect partner to work with on that. They already had a very robust booking mechanism."

For Cragg, what made CityView stand apart was the gigantic video wall, installed to span the full 50 feet of a Stageline SAM550 mobile stage. The panels used were ROE Visual MC7, with Brompton Technologies processing, supplied by Apex Sound & Light.

"We were the first to market with a drive-in venue," he notes, adding that "the new element would be the movie screen. On a Stageline stage, traditionally we do all kinds of different video — funky little strips and things like that. But this was a full video wall that had to be the size of the SAM550. It was an engineering marvel."

A giant video wall brought CityView a superpower that set it apart from traditional drive-in projections — it offered the ability to display bright, visible video outdoors in the

middle of the day.

"There was no other drive-in in the city that had that," Cragg notes. "From the beginning, it was really about multi-use. With projection, you can't do [early] evening shows. But we were able to operate whenever, and for corporate events, that was a huge plus — during the day is when those events usually happen."

Of course, a video wall like no one had ever seen before brought entirely new challenges. The stage was set up on a pier on Toronto's waterfront, with the vast expanse of Lake Ontario immediately behind it. And along with a Great Lake come great winds.

"That video wall became a sail," Cragg recalls, "and we needed a support structure that could withstand those types of winds. Half of the stage, the back of it, is all ballast and truss-structures. Normally you put a Stageline in for a weekend, but we put ours in for a season. We spent a great deal of time before the project took off to work with an engineering firm and Stageline's team to make sure everything would be safe and that giant video wall would be structurally sound."

This would normally be far too great an expense for a weekend-long festival, Cragg says, but a whole summer-fall season merited the investment. He also notes that, in normal circumstances, they'd never have attempted to mount an entire video wall, but rather many smaller screens.

"Or maybe you'd have a single video wall a third the size of that, but this was a very large video wall for that stage," says Cragg. "There were a lot of processes to go through to make absolutely sure it would be safe to have a stage

STAGINGSOLUTIONS

that big installed at that location for that long just by the water."

» Concerts, and More

One of the keys to CityView's success was the venue's openness to all kinds of events. Unlike many companies in the live-event business, Cragg says his company was able to avert some of the worst impacts of the pandemic because they work across live music, corporate events and film.

"We weren't just relying on concerts to keep us busy," he explains. "Part of what we were doing is just keeping people working. It was a factor for sure in our decision making, getting our people back to work. But a greater goal is keeping the industry alive — we don't want people to forget these things exist. A lot of our motivation was just to keep it going."

CityView's willingness to work with trade shows and reimagine those events in a drive-in space helped make certain the venue was booked solid. Cragg argues drive-in conventions really aren't that different from a trade show where attendees sit at tables or in lines of chairs to listen to speeches from a stage.

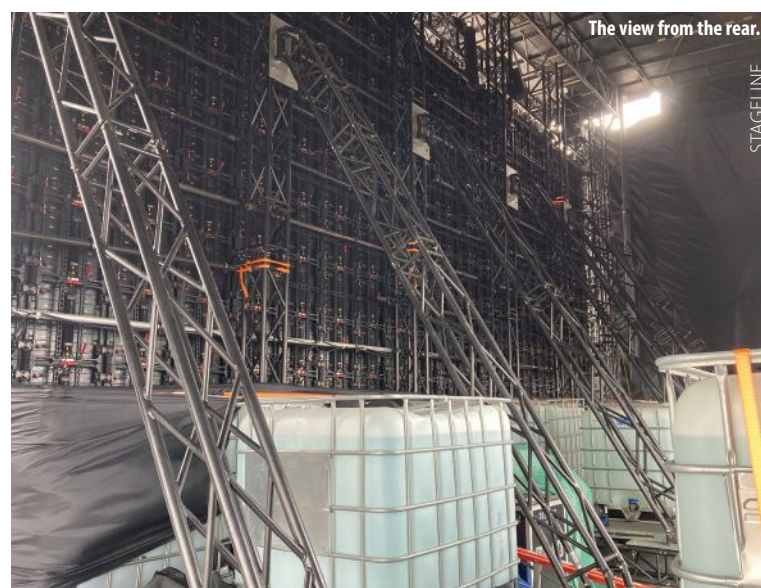
"Think of a corporate event simply where you're sitting in your car rather than sitting at a table," he says. "The executive teams can present from the stage, they can do Power-Point presentations, and over FM and the P.A. system, attendees can hear the address clearly. Really, any message they need to deliver, they can do."

CityView's Monster Truck show on July 16 was the official start of a whole summer of new approaches to gathering people together. And while drive-in venues are taking off around the world, Cragg is already looking ahead to what the technology augurs for the future.

Few people have worked as closely as Cragg to balance revived live events against public concerns and worries, and Cragg believes the post-pandemic "normal" will come back to the entertainment and events industry bit-by-bit. In order to accommodate members of the public still uneasy about gatherings, Cragg expects there will be an overall rise in event-streaming once the pandemic is through.

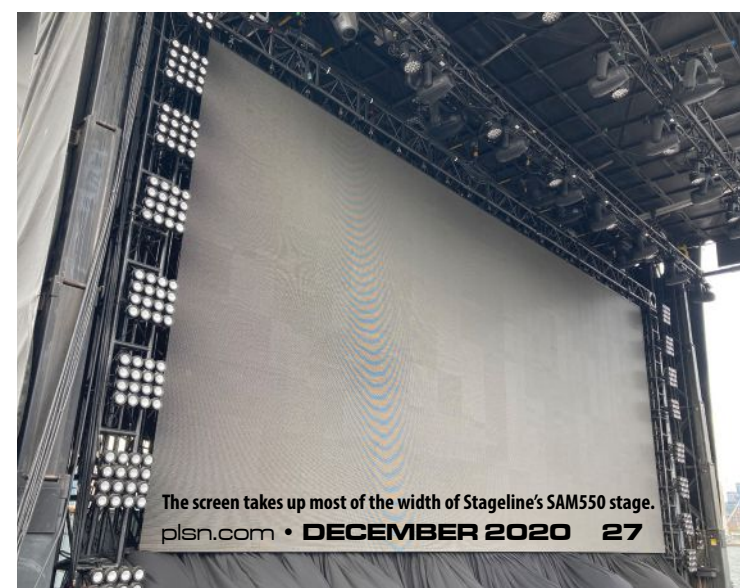
"I think what we're going to see as we begin to come out the other side of the pandemic will be more hybrid events, partially live-streamed and partially in-attendance, based on guidance," Cragg says. "There'll still be people who aren't comfortable, and since we've built this streaming infrastructure, there will definitely be some people who'll prefer to attend from home. So events in the future may carry on that hybrid." **PLSN**

Related links: www.apexsoundandlight.ca, cityviewdrivein.com, inkentertainment.com, stageline.com



The view from the rear.

STAGELINE



The screen takes up most of the width of Stageline's SAM550 stage.

plsn.com • DECEMBER 2020 27

ADJ PAR Z100 3K

Fixture Type: Par Can
LED Source: 100W COB Warm White LED (3000K)
Field Angle: Variable
Lens Options: 9°, 15°, 20°, 25° or 30° (manual)
Illuminance: LUX: 7135 (9°);
CRI: 90
Color Temp: 3000K
IP Certification: None
Tungsten Emulation: Yes
Size: 19.5" x 10.75" x 10.75"
Weight: 7.5 lbs.
More Details: PAR Z100 5K also available (with 100W COB 5700K cool white LED)



adj.com

Altman Gallery LED Luminaires

Fixture Type: Profile and Wash luminaires (depending on lens options in use)
LED Source: 50W LED engine; 50,000-hour life expectancy
Field Angle: 15°-85°, depending on fixture
Lens Options: Available in 25°-50° or 15°-35° Profile zooms
Illuminance: >4,000 Lumens (color temp and driver dependent)
CRI: 92+ CRI
Color Temp Range: 2700K, 3000K, 4000K and 5000K



options
IP Rating: N/A
Tungsten Emulation: No
Size: 7.9" x 4.0" (HxW), length varies with lens
Weight: 3 to 5.8 lbs.

altmanlighting.com

Ayrton MiniBurst

Fixture Type: Strobe with continuous pan and tilt
LED Source: 16 x 60 (960) monochromatic daylight LEDs
Field Angle: Flicker free source management, suitable for TV
Lens Options: 4x4 Pixel Resolution
Illuminance: Up to 60,000 lumens
CRI: > 85
Color Temp: 5600K
IP Rating: IP20
Tungsten Emulation: No
Size: 11.22 x 15.71 x 8.67"



Weight: 18.74 lbs.
More Details: Powerful graphic strobe with continuous pan and tilt. Square face contains 960 LED sources grouped into 16 pixels in a 4 x 4 matrix.

ayrton.eu

Blizzard Aria Profile WW

Fixture Type: Ellipsoidal
LED Source: 200W Warm White 3200K COB LED
Field Angle: Variable
Lens Options: 19°, 26°, 36° and 50° lens tubes are available
Illuminance: 2,672 lux @ 5-meters (19° lens)
CRI: 98
Color Temp Range: 3200K
IP Rating: IP20
Tungsten Emulation: No
Size: 10.2 x 25.5 x 9.7"
Weight: 16.5 lbs.
More Details: 200W white (3200K) COB LED profile



spot fixture with a choice of either a 19°, 26°, 36° or 50° lens.

blizzardpro.com

Chauvet Ovation E-260WW IP

Fixture Type: IP65 Rated ERS-Style Spot
LED Source: 230W, 3200K
Field Angle: Varies based on lens tube
Lens Options: 5°, 10°, 14°, 19°, 26°, 36°, 50° and 19°-36° zoom, 25°-50° zoom
Illuminance: 6,910 lux @ 5m w/26° Lens
CRI: 96+
Color Temp Range: 3200K
IP Rating: IP65
Tungsten Emulation: No
Size: 19.49 x 11.14 x 18.42" (engine only)
Weight: 20.2 lbs. (engine



only)
More Details: IP65-rated ERS-style fixture with an output surpassing 750W HPL.

chauvetprofessional.com

Chroma-Q Space Force twobyfour

Fixture Type: LED soft light panel
LED Source: Warm and cool LED (2800K to 6000K)
Field Angle: 160
Lens Options: Various beam control options like egg crates
Illuminance: 55,000 lumens
CRI: Up to 97
Color Temp Range: 2800K to 6000K
IP Rating: IP20
Tungsten Emulation: Yes
Size: 48.5" x 24.6" x 8.5"
Weight: 47 lbs.



More Details: A cost-effective, bright, quality variable white LED soft light panel for TV studios, live broadcast, film, green screen, backdrop and photographic applications.

chroma-q.com

Elation KL Fresnel

Fixture Type: Fresnel
LED Source: 50W, 150W or 350W white LED Engine
Field Angle: 11° to 57° zoom (KL Fresnel 8)
Lens Options: N/A
Illuminance: Up to 14,000 lumens (KL Fresnel 8)
CRI: >97
Color Temp Range: 3,000K or 5,600K
IP Rating: IP30
Tungsten Emulation: Yes
Size: 17.5" x 12.89" x 17.95" (LxWxH) (KL Fresnel 8)
Weight: 28.0 lbs. (KL Fresnel 8)



More Details: Warm-white (3000K) or cold white (5600K) LED Fresnel lights. Available in 50W, 150W and 350W models. Gel frame and rotating barn doors included.

elationlighting.com

ETC Source 4WRD II

Fixture Type: Ellipsoidal retrofit
LED Source: 48 Cree LEDs
Field Angle: 5°-90° with lens tube
Lens Options: 5°-90° lens tubes, 19°-50° available with enhanced definition (EDLT)
Illuminance: 3200K/11,430 lumens
CRI: 90+ CRI
Color Temp Range: 3200K - 5900K
IP Rating: IP20
Tungsten Emulation: Yes
Size: Fixture w/ lens tube



(no C-clamp): 16.5" x 13.36" x 23.76" (HxWxL)
Weight: 13.2 lbs.
More Details: Advance any full-size tungsten Source Four fixture to LED efficiency with Source 4WRD II.

etconnect.com

GLP Fusion MBL 20

Fixture Type: Panel Light
LED Source: Variable white light LED
Field Angle: 100°
Lens Options: None
Illuminance: 1885 lux
CRI: 87+
Color Temp Range: 2700K-6500K
IP Rating: IP65
Tungsten Emulation: No
Size: 10.63 x 14.57 x 6.69"
Weight: 11 lbs.
More Details: Portable, convection cooled IP65 unit with DMX control or onboard intensity and col-



or temperature switches, accessory barn doors and gel holders.

germanlightproducts.com

Lightronics FXLE3030W

Fixture Type: Ellipsoidal spotlight
LED Source: Proprietary
Field Angle: 14°, 26.4°, 35.2° and 50°
Lens Options: 19°, 26°, 36° and 50°
Illuminance: 19° at 1 meter (138,227 lux)
CRI: 95
Color Temp: 3000K
IP Rating: IP20
Tungsten Emulation: No
Size: 28" x 13.5" x 20" (LxWxH, with yoke)
Weight: 23 lbs.
More Details: Brighter



than our 750W incandescent version using less than half the energy.

lightronics.com

Luxium PRIMO PR75

Fixture Type: PAR Can Module
LED Source: 40 LED Array
Field Angle: 20° beam
Lens Options: Micro-lens diffuser sheets up to 80°
Illuminance: 10,000 lumens, 12,000 lux at 2 meters
CRI: >90
Color Temp Range: 2700K-6500K
IP Rating: IP20
Tungsten Emulation: Yes
Size: 7.0" diameter, 3.0" high
Weight: 2.9 lbs.



More Details: Retrofit LED module for PAR64/56 cans or ceiling fixtures with wired or wireless DMX control, PFC>.90, UL, no-flicker, dimming to 0.1%

luxiumlighting.com

Martin ELP WW

Fixture Type: LED Ellipsoidal
LED Source: 91 3W warm white LEDs
Field Angle: Depends on Lens
Lens Options: 19°, 26°, 36°, 50°
Illuminance: 7000 Lumens
CRI: >97
Color Temp: 3000K
IP Rating: Available in IP20 and IP65 models
Tungsten Emulation: Yes
Size: 25.5 x 10.2 x 10"
Weight: 17 lbs.
More Details: The ELP in-



cludes the highly efficient gear-based Fine Focus — an industry first — and Fast Focus, which allows focusing of the fixture without data attached.

martin.com

Mega Lite Piccolo Blinder 120



Fixture Type: Blinder
LED Source: 120W LED
Field Angle: LED Angle: 60.25°
Lens Options: N/A
Illuminance: 1,727.3 @10'
CRI: N/A
Color Temp: 3000K
IP Rating: IP65
Tungsten Emulation: No
Size: 7.37" x 5.12" x 9.5"
Weight: 8.25 lbs.
More Details: IP65 unit w/ 120W LED engine that produces a bright blinder effect.

mega.lighting

SGM Q-7 W



Fixture Type: White LED flood blind strobe
LED Source: 1,000 cool white LEDs
Field Angle: 110°
Lens Options: N/A
Illuminance: 47,800lm
CRI: N/A
Color Temp Range: N/A
IP Rating: IP65
Tungsten Emulation: No
Size: 19.6 x 10.6 x 4.8"
Weight: 17.9 lbs.
More Details: The Q-7 W is a low profile cool white flood light ideal for putting outdoor architectural buildings and monuments in focus.

sgmlight.com

The Light Source HL Series



Fixture Type: Downlight house light
LED Source: 60 Cree XBH
Field Angle: 82°
Lens Options: 65°, 52°, 44°, 36°, 30°, 25°, 20°
Illuminance: 12,750 Lumens at 150 watts
CRI: 80+
Color Temp Range: Available in 2700, 3000, 3500, 4000, 5600K
IP Rating: N/A, for indoor use
Tungsten Emulation: No
Size: 16.25" x 10"
Weight: 14 lbs.
More Details: Efficient light engine thermally managed to increase brightness and life. Even light beam that dims with DMX smoothly all the way to zero intensity.

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ONE NIGHT IN MIAMI

A single hotel room sets the tone for much of the movie.

COURTESY AMAZON STUDIOS

Tami Reiker Captures the Drama's Larger-than-Life Characters in Confined Spaces By Mike Wharton

Regina King's powerful movie, *One Night in Miami*, is based on the award-winning play of the same name. It is centered around four Black icons — Muhammad Ali (Cassius Clay) and three friends — Malcolm X, Jim Brown and Sam Cook — who get together after Ali's historic defeat of heavyweight champion Sonny Liston in 1964. The film takes place mainly in a small hotel room, though the epic boxing match starts the film.

It is a fictional account inspired by the historic night these four formidable figures spent together. It looks at the struggles these men faced and the vital role they each played in the civil rights movement and cultural upheaval of the 1960s. More than 55 years later, their conversations on racial injustice, religion, and personal responsibility still resonate.

» From Stage to Screen

Heavy on dialogue, King handpicked cinematographer Tami Reiker to help the drama move from the live stage to a motion picture. Reiker, a working cinematographer for 30 years, started in NYC after graduating from NYU before moving to L.A. 15 years ago. Her many credits include *High Art* (1998), *Pieces of April* (2003), *Beyond the Lights* (2014), and, most recently, *The Old Guard* and *One Night in Miami* (2020). Reiker is the only woman to have won an American Society of Cinematographers Award for Outstanding Achievement (for HBO's *Carnivàle* in 2003).

"I received the script from the producers of the show through my agent and absolutely loved it," says Reiker. "I put together a 'look book,' met with Regina, and we really hit it off. Next thing I knew we were off to New Orleans!"

(A "look book" is a visual presentation of how the cinematographer sees a film they are being interviewed for.)

In this case, Reiker selected images by photographers of the period the events occurred, notably Howard Bingham and Neil Leifer. Both were Mohamed Ali photographers. Bingham followed Ali his whole life. She also studied the street photographers of the time, in particular Saul Leiter and Garry Winogrand.

Because the film is set in Miami but was filmed near New Orleans, King and Reiker did intensive in-depth research to ensure they captured an authentic look for the real life locations. "Regina wanted to stay true to the actual locations depicted in the film," says Reiker. Both she and King wanted to keep the film's colors saturated and vibrant.

» Colors and Light

A combination of what Regina wanted to see and Tami's visual presentation brought about a collaboration which soon included working with production designer Barry Robinson and costume designer Francine Jason. They created a color palette of vibrant blues, greens and glowing warm tones, which touched on every aspect in every frame, including the lighting, the lampshades in the corners of the room and the texture of the actor's clothes.

"Barry found this really interesting hotel an hour outside of New Orleans that was a good match for the Hampton House in Miami. The hotel provided an outside hallway, including the diner space and the phone booth in the parking lot and a pool." The production brought in all the lighting for this location

because it was just a dark empty parking lot. "All the streetlights were the wrong color temperature for the time period," adds Reiker. "So, we turned them off, then brought in 120-foot Condors to hang tungstens for backlight and plenty of our favorite blue gel to give that contrasting glow to the ceiling from the diner."

The Hampton House hotel room itself was actually a set built on a soundstage, but true to form, a very small set. The director and cinematographer also had to overcome the restrictions of shooting in the limited space of the room at the hotel set. "We wanted to keep the camera moving in the Hampton House hotel room," adds Reiker. "I decided to keep both cameras on jib arms. That allowed the operators to keep the cameras floating and to better follow the actors around the room."

In designing the set, it was deemed necessary to have windows on both sides of the room to give it larger, less enclosed feel. While somewhat isolated in feel, the windows helped show a world going on outside, and the production team wanted film goers to always feel the life outside the windows. After all, the discussions by the men in the room center on that life. One window lets in lighting effects from the parking lot, with cars and headlight imagery passing by. Through the window on the other side of the room, the pool's water effects could be seen.

For the pool lighting, there were many discussions. The old way of doing it was to have a baby pool with mirrors in it and the lights shooting at the mirrors. For color, Reiker chose a specific blue gel, Lee Cyan 30, but she never felt the blue she chose totally matched her gel choices available by just punching through

the numbers into an intelligent fixture.

Her gaffer, Allen Parks, solved her dilemma. "The lights that we used for the 'pool light' water effect on our hotel stage set were Rosco X24 Effects with two rotating Rosco water effects gobos, with Lee Cyan 30 gel added. I found that the optimal effect was achieved with opposing rotation of the gobos, with a sharp focal bias to one of the gobos and only allowing a portion of the unfocused gobo to contribute a variable wash.

"Thus, the fixture focus was always off-center and on the edge of the two gobos' projected convergence," Parks continues. "It took me a little bit of fishing with the fixture focus to find what worked, and that's the fun with this type of effect. Additionally, we were changing up speeds of the gobo rotation to match screen times — busier effects when people might have been in the pool, and slower in the afterhours. The X24 easily handled that, and we changed both lens and fixture focus to accommodate.

"I had tested these lights in the past for water effects, but they always came off as too hokey and theatrical for direct projection on a subject for a motion picture use," Parks adds. "Projected as a backlighting effect on the sheers of our hotel room and given some time to find the practical settings and focus, the X24's provided a believable effect and practical solution."

» Small Room, Big Lens

Early on in the process King and Reiker decided they wanted to shoot large format, using the Alexa 65(6K). Reiker had used the Alexa 65 on her last film, *The Old Guard*, starring Charl-

ize Theron. King used the Alexa 65 on *If Beale Street Could Talk*, for which she won an Academy Award for best supporting actress (2019). “We both felt that camera with the prime DNA lens was really going to give us the look and texture we sought, and the focus fall off is so beautiful with a large format,” says Reiker.

Both women were acutely aware that the budget for this film pretty much prohibited such an expensive camera, however. The single most expensive part in any video camera is usually the sensor, and there are very big differences in image quality when using different sensors, which come at very different price points.

The amount of media the Alexa 65 sensor is recording when shooting large format is quadrupled compared to smaller format cameras. Everything is quadrupled, particularly in the color grading, which is processed digitally through the sensor. Reiker approached Arri Rental (arrirental.com) in Los Angeles with the script and gave them an impassioned pitch, ultimately a simple plea for help. “They were fantastic and came through for us.”

The use of the jib arms came about from the daunting amount of wall-to-wall dialogue. There were 10- to 15-page scenes, and Reiker looked at how to break that down, cover the scenes and keep the camera moving — floating, not just static. “I presented her with the idea of using two jib arms, not on hotheads, but manually operated by the camera operator. Even though it was a small space, we had these giant 12-foot jib arms built on dollies so the operators could float the camera while following the actors.

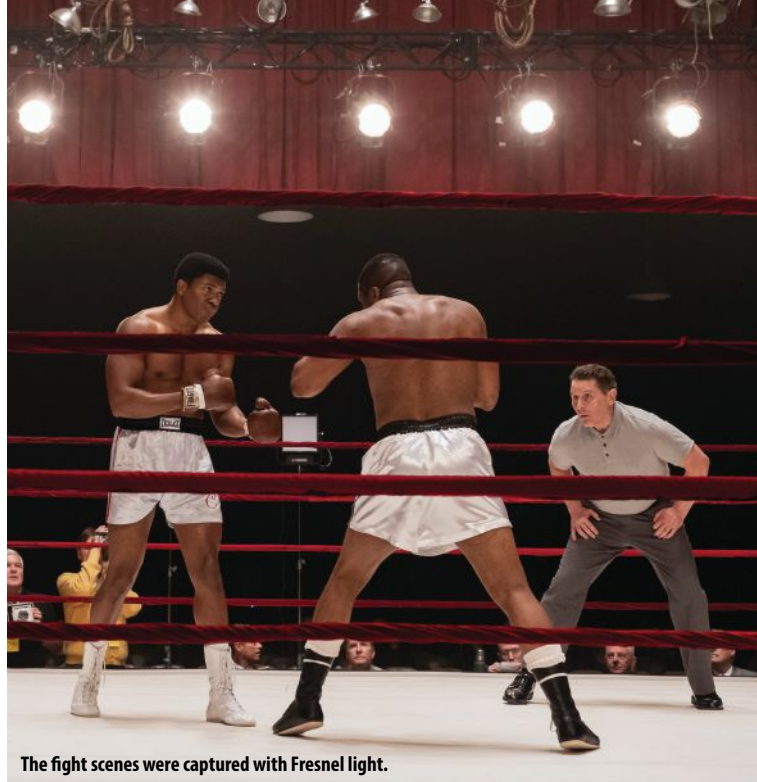
“We shot 10-15 minute masters and then broke down the coverage from what we learned in the masters, as we went in for tighter coverage, we would float the camera between characters,” Reiker adds. To augment this approach, the camera department crew members were all on headsets so Reiker could be talking to them while they were shooting.

During the initial takes, as Reiker recalls, she and King looked at each other and questioned themselves, saying, “Are we really gonna do this?” And then it just seemed like the only way to shoot these scenes. It gave the actors the freedom to move and met our goal of capturing a lot of beautiful movement in the room. Later in the film, when they bust out on the roof, we used handheld. We wanted to capture that moment of freedom. They need air, they need to get out of that room, so handheld cameras made that freedom felt.”

» Lighting the Boxing Ring

The lighting for the boxing scenes is exactly the lighting that was used for the real event. Reiker, King and gaffer Parks studied archival footage of the fight film. They discovered that a lot of the fixtures in the grid above the ring in the Miami Convention Center for the Clay/Liston fight were not used. “They were just up, there; never got turned on,” says Reiker. Regardless, to keep the authenticity of the scenes, King and Reiker agreed that the entire lighting grid should be recreated. In the process, gaffer Parks found period-correct 2K scoops to hang on the grid above the ring. They approached the Wembley fight in the same manner.

Reiker acknowledges the immense impact of having so many historic images to reference for this film to inform her work on it. The real impact she feels the film brings, though, is that “the conversation that takes place between these great men in this movie is as important now as it’s ever been.” **PLSN**



The fight scenes were captured with Fresnel light.



The cinematographer and crew, working inside the ring.



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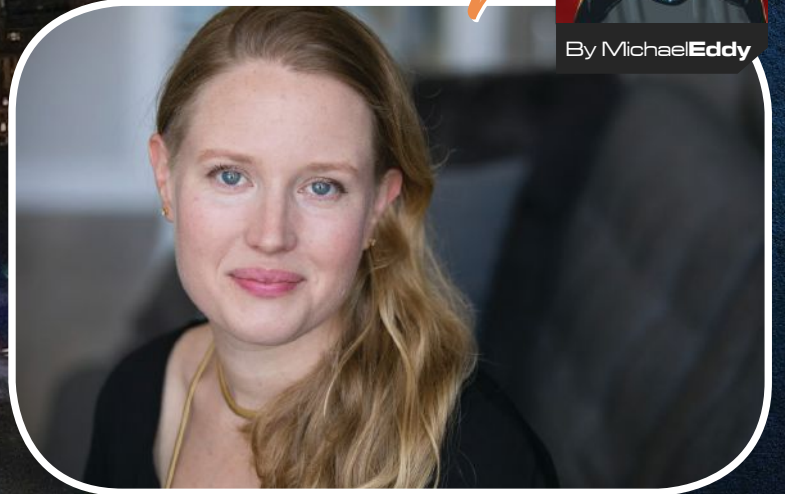
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Angrette McCloskey



By Michael Eddy

Production Manager
and Scenic Designer

Angrette McCloskey, PhD is a multidisciplinary scenic designer and production manager who creates dynamic spatial experiences for live events in theatre, opera, fashion shows, and public spaces. She's worked over 20 seasons of New York Fashion Week as a lead production manager and scenic design coordinator (Ralph Lauren, Theory, Rag & Bone) and now specializes in large-scale luxury events (the Dolce & Gabbana take-over of the Metropolitan Opera and Cartier High Jewelry). Recent design credits include *Into The Woods* at American Conservatory's Strand Theatre and *Weightless* at the Public Theatre's Under the Radar Festival. McCloskey has worked as an assistant scenic designer on Broadway (*Jesus Christ Superstar*, *Guys & Dolls*), at the Metropolitan Opera (*Faust*), and on dozens of U.S. and international productions. She remodeled the 7,000 square foot Palace of Fine Arts Theatre lobby into a multi-use event space, and designed the spatial experience for public visitors to Brian Tolle's monumental sculpture, *Eureka!* in the rotunda of NYC's Federal Hall. Since the pandemic, she worked her second season as production manager on the *Savage X Fenty* show which aired in September. McCloskey received her PhD from Stanford's Theatre & Performance Studies Department.

PLSN: How did you get into the industry?

Angrette McCloskey: I went to NYU for my undergraduate training, where I focused in scenic design and stage management. Right out of college, I started working as a scenic painter, designing for off-off-Broadway shows and teaching stagecraft for five years. At the same time, I was taking any call I could get as a painter, carpenter, even electrician, but painting got me in doing freelance work with KadaN Productions, a scenic supplier for fashion shows and corporate events.

In 2011, when I was trying to get out of events, I moved to California to go to Stanford to get my PhD in theater & performance studies. But as a grad student, who again, needed to make some money, I called up a friend in New York who worked in events and fashion shows to see what was available. My first summer as a PhD student at Stanford, I found myself back in events, working as a production manager for fashion shows through PROJECT. At the time, they were small 12-minute shows; some of the first shows at Moynihan Station [in NYC] when it was definitely nothing more than a loading dock for the USPS. I recall having to run the subs as loud as possible before we hung the drapes, in order to shake all the paint chips and pigeon feathers out of the ceiling. As the company ramped up its productions, I continued to work for them; spending anywhere from 30 to 60% of my time split between New York and California studying and working.

Is there a project that stands out for you in the course of your career so far?

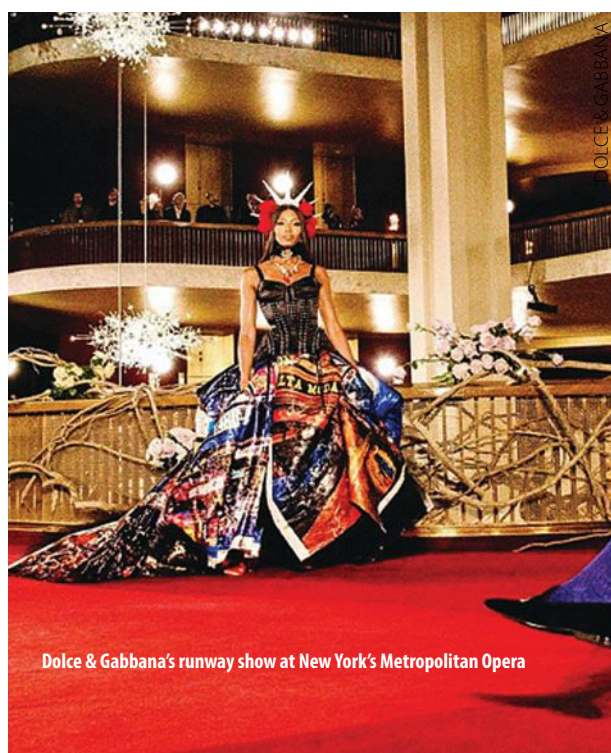
There've been a range of interesting events that I've worked on. In 2014, I was the lead project manager for a fashion show in NYC's Central Park where virtual models were rear projected onto a water screen on a lake. The event was Polo 4D for Ralph Lauren and celebrated the opening of their new flagship store as part of NYFW. The idea was that out of nowhere, this magical,

ethereal water screen shows up, and you see a fashion show. The audience stood on Cherry Hill looking out at the lake in Central Park watching the show with the video of the models projected onto a 150-foot-wide by 60-foot tall, fan-shaped water screen.

The craziest thing about it was that we weren't allowed to use the water in the lake to feed the pump for the projection screen. We are in the middle of a body of water, but not allowed to use that water. Instead, we had to create a 40-by-40-by-10-foot deep, thick, heavy vinyl pool, with inflated one-foot diameter berms in the middle of the lake. We fed water into this isolated pool from a fire hose located about 600 feet away. So, I had to calculate things like hose drag and how much water pressure we'd get from this fire hydrant. The numbers on it are pretty crazy. The pump for the water curtain required 80 gallons per second, which means 6,000 cubic feet and 45,600 gallons of water for a 9.5 minute show; a huge amount of water. This problem was something that I had never encountered before. I was used to dealing with flats and drapes, truss and lighting rigs. Now I'm learning about how water operates. I did very much enjoy being able to get into my swimsuit and check on the pump in the pool — inside of the Central Park lake — because who gets to do that?

That was a unique and fun event that really accentuated the degree to which our work, especially when you're going from site to site to site, has completely different sets of requirements for each project. You need to learn different things in order to accomplish each new job. I like the new challenge each time.

Another production management job that changed things for me in terms of events was the week-long series of events done by Dolce and Gabbana in New York in 2018, also produced by PROJECT. Their Alta Moda women's couture night was at the Metropolitan Opera House. We were using the whole space — from the Grand Tier, into the house, all the way to the rear loading dock. Dinner was being held on the stage of the



Dolce & Gabbana's runway show at New York's Metropolitan Opera

Met on the Zeffirelli set for Puccini's *Turandot*. We also had a display and pyrotechnic show on the Lincoln Center Plaza. My dissertation — about the relationship between architecture and performance — was officially filed at Stanford the day the event loaded in. And there I was, up to my elbows, in one of the most symbolic buildings in performance's institutional history.

Is there a piece of advice you would give to somebody who's just starting out?

To listen; actively listen. Pay attention to each element of the production around you. There is nothing actually too small for you to know about or care about. Also, as a production manager interacting with crews, I try to be vigilant about not separating "I" from "we." We are doing this together. Remembering my choices are absolutely going to affect many, many more people, and that the accomplishments taken from the work are the accomplishments of many, many others as well.

What do you enjoy most about your career?

The problem-solving and the people. Each job has a whole new set of requirements, an entirely new context, and that means that it's different every time. But, when you do get to work with the same team or the same crew of people from job to job to job, that also makes such a huge difference. So, something between the newness of each project, and then consistency of being able to develop special, collaborative relationships over time.

I am working on finding the right integration of my different types of projects. In addition to events, I still do theater and am an active researcher and educator. I enjoy all of that work, so it's more about finding a balance. Theater, live events, as well as writing and teaching, those for me, make up a good balance in personal craft. **PLSN**

To see more of Angrette McCloskey's work, go to angrette.com.

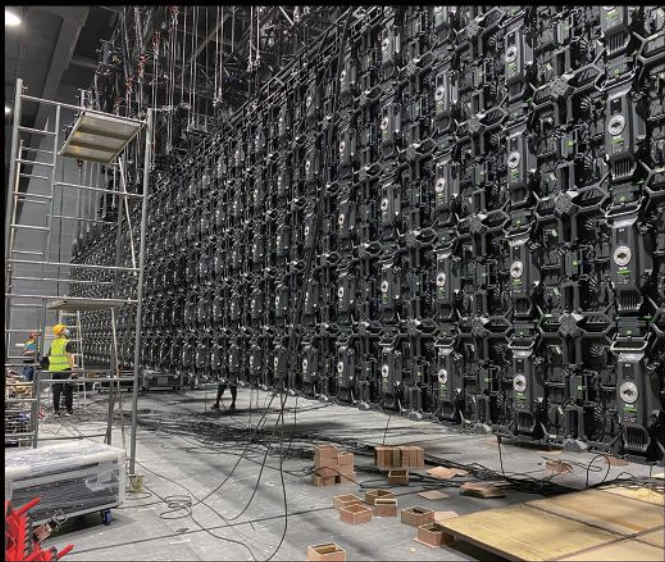
POLO 4D virtual runway on a water screen in New York's Central Park.



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DESIGNERWATCH

ACL Live Resumes In-Person Shows; Sooner Pivots to Staging Homes; Safe Holidays



Austin City Limits Live at The Moody Theater has a socially distanced cabaret-style setup for live shows.

ALISON NARRO



Production designer/LD Bryan Hartley continues the Trans-Siberian Orchestra Christmas tradition with a livestreaming concert on Dec. 18, 2020.

TSO

Covid-19 cases are surging as we run the marathon toward the end of this crazy pandemic year. While some cities are locking down activity and limiting gatherings again, others are gingerly opening up for more in-person business. It's a mixed bag across the country.

In Texas, live indoor shows are safely returning to Austin City Limits Live at The Moody Theater. In-house LD **Bryan Schrupf**, who schedules LDs to operate or assist touring LDs with each show, says, "We're trying to do as much as we can, even though every time something is booked it's sort of hit or miss with reschedulings and cancellations. We have a socially distanced layout on the concert floor and new safety protocols. We still have a long way to go to get back to normal, but we're doing our best to stay in the game."

A cabaret-style layout serves as the basic template, with stage configuration and floor seating modified for each show. Seating in the mezzanine is done in distanced groups with specific seat assignments, and the balcony is closed. Masks are a must, and other usual Covid-19 precautions are taken seriously.

The venue is also home to a full broadcast studio and a separate production staff for the legendary *Austin City Limits* PBS show. The team began taping again, with some shows without audiences or with limited attendees. Long-time ACL LD **Walter Olden** said he's moved his console to the main floor, which now allows only crew and cameras. There are no bleachers set up, and the mezzanine and balcony are closed. While it felt a bit strange, Olden was happy that the show kept up its musical tradition even in the pandemic.

» Sooner Pivots to Home Staging

Production/lighting designer **Sooner Routhier**, responsible for the look of The Lumineers, Coldplay, KISS and other tours, is pivoting her stage design skills into a new side hustle: staging home interiors. She and a dear friend **Kristy Reuter** teamed up to form Fourth Wall Home Design (fourthwallhomedesign.com) to rock the house.

"We're starting out as a home staging company with the hopes that it will build into interior design clients," Routhier said. "We'll be helping homeowners, builders and real estate agents sell homes in the booming Nashville real estate market. Staging a home feels a bit like set dressing an artists' stage for a TV performance. So, it was a no-brainer pivot."

Their services include staging for a vacation rental or home sell, as well as refreshing one's own home to boost



BILLY REED

Production designer/LD Sooner Routhier is incorporating her stage design skills into her new company, Fourth Wall Home Design.

its personal appeal. "I was looking to start a business in Nashville that could be profitable quickly and still allow me to flex my creative muscles," the designer says. "Turns out, my business partner wanted to start one last summer! So it made sense to start one together. The hope is that we can continue to run the new business through this hiatus from the pandemic and keep it going when the industry gets back up again."

» TSO Goes Virtual

It wouldn't be the holidays without Trans-Siberian Orchestra (trans-siberian.com). This summer, the group announced "no tour." But later, they announced they would perform. And they are, with a special, *Christmas Eve and Other Stories Live in Concert*, to be streamed on Dec. 18 at 8 pm EST. Their ticketed 90-minute show will combine both the identical East and West bands into one production from an undisclosed venue in Nashville.

Production designer/LD **Bryan Hartley** again promises a

spectacle for the at-home audience. "It should be an amazing show," Hartley says. Although the twin troupes toured with a production for this same Christmas album some years ago, this production will present an all-new design. "It's an awesome feeling to be doing the TSO pay-per-view, since no tour is happening," Hartley adds. "It still fills a void for us."

» Oak Ridge Boys Christmas Residency

Celebrating his 27th year with The Oak Ridge Boys, LD **Dave Boots** continues lighting their traditional Christmas concerts, but off the road in residence at the Gaylord Opryland in Nashville. Their *Christmas in Tennessee* dinner show runs 29 nights from Nov. 20 to Dec. 25.

"The Oak Ridge Boys are a great bunch of guys to work for," says Boots. "We had 150 dates in the books for this year, but of course, like everybody else, we lost the majority of them. Opryland has taken a ballroom that generally seats 3,000 people at tables, and due to social distancing rules it now seats 440. They're putting just four people to a table, or up to six people from one family. Thank God for Gaylord Opryland for doing this residency, or else I would probably be driving a dump truck by now!"

» Super Bowl Weeknd in the Works

Another familiar tradition comes with the news that **Bruce Rodgers** and his team at Tribe are back to work on the upcoming Super Bowl Halftime Show slated for Feb. 7, 2021 at the Raymond James Stadium in Tampa, FL. Tribe goes into their 15th consecutive year with the event, Super Bowl LV (55), featuring headliner The Weeknd.

"We are looking forward to presenting something special for the world to see," Rodgers said. "I can tell you the creative development underway for The Weeknd's performance promises to be a live 12-minute show designed to rival any of the previous 54 years of half time shows. We here in my studio are dedicating this design to all the people in the entertainment industry and looking forward to getting us all back to work soon!"

There are conflicting reports on whether the stadium seating will be full at 65,000 or scaled for social distancing, and Rodgers couldn't comment on that. A lot can happen between now and then... **PLSN**

Got some good news on the horizon? Contact Debi to share your projects with readers at dmoen@plsn.com

"Thank God for Gaylord Opryland for doing this [Oak Ridge Boys] residency, or else I would probably be driving a dump truck by now!" —Dave Boots



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- Design, calculations, drawings and modeling
- Construction of standard & custom large and small scale projects
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LD-AT-LARGE

This Long and Lonesome Period....

By ChrisLose

Rodney Crowell warned us that we would experience “Many a Long and Lonesome Highway.” We knew that when we signed up to be a roadie, we would be spending lonely days away from home and in isolation. We knew that we had to sleep in our serving size bunks all by ourselves. We guaranteed ourselves that we would begrudgingly sit by a space heater in the back hall of concrete convention centers for 16 hours at a time. We agreed to be staring at a monitor screen in the dark, night after night, creating ever more complex looks. We knew what we were in for, and we rushed in headlong. No matter how long I stared at those screens, huddled up to a space heater or tried to remove the DVD player in my bunk, I always knew that I was in this industry because I loved the people. I could rest assured that there would be a cast party, a post-show drink with backline, or a wrap party with the whole crew. We are birds of a feather, and we stick together. We work hard so that we can play hard. We know the power of emotional connection, and we respect the potential of human gatherings. That has all been taken from us. Let’s talk about how lonely the current working conditions are, and what we can do about them.

» Lake of Sorrows

I recently finished an outdoor show in Las Vegas. The outcome was wildly successful. We were able to impress many, if not all, of our discerning clients. Production required Epicurean results in the midst of a global pandemic. We were able to pull out all the stops and meet their five-star standards. In order to pull it off, we had designers in the U.K., creatives in California and programmers in Nevada. We had to meet up through the 1920 x 1200 window that we were afforded. There was no capacity for post programming drinks, smoke breaks or joint outings on days off. There were no hugs, no handshakes and no celebratory gatherings. After the grand opening gala, we should have been able to go for a few beers to pat ourselves on the back and commiserate over every tough decision with a shot. That never happened. I just put my mask on, checked out of my hotel and went home. It was anti-climactic, to say the least. It should have been a celebration. I was left with a sense of



poignancy. I had to reach out to some fellow designers and programmers to see if I was alone in my loneliness.

» Penalty Bubble

The first person I reached out to was Brent Clark, a lighting designer out of Canada. He just finished up his gig as lighting programmer and second set of eyes for Kurt Wagner for the NHL season in Edmonton, Alberta. He shared my sentiments of loneliness. He shared some of his experiences with me. “We had to have three negative Covid tests before we even got on the plane,” he said. He had to take a moment to explain just how diligent the organizers were. “The rules were extremely strict. If you broke the bubble, you were sent home — no questions asked, and no excuses.” They had to have a daily Covid check and had a version of the clear app on their phones that took their temperature every 12 hours. One missed step could result in more extensive precautions. Brent expanded, “We interacted by keeping two meters apart, but really, after you have been tested every day and strict temperature tests, it was a lot like normal, just with a mask on. The local venue staff had a different color pass, so you kept

two meters away from them, but they were all tested every day as well.” Working at such lengths cultivates physical and emotional distance between a crew. When Brent was not at the console, he was in his room. If he was not in his room, he was afforded a single concrete yard that had a few food options, and eventually a few fire pits. These were the few glimpses of real-life luxuries that Brent was able to enjoy for the duration of the season.

» Basket Bubble

It only seemed right to see if there was much difference in the USA format. I reached out to Kerstin Hovland, creative director and co-founder at Electronic Countermeasures. She had also finished a stint as media manager for the NBA season in Florida. She was responsible for organizing and distributing the flood of video content coming in for 22 teams, three venues, 12 servers and helping maintain a viable workflow for four programmers. “I’ve never had a job that came close to the sheer volume of content that the NBA generated,” she reported. To fully enter the Green Zone, the most stringent level of the NBA bubble, they were tested daily for a

week during load-in while self-isolating and social distancing. After load-in, all of the people entering the bubble were required to complete seven days of quarantine in their hotel rooms while also being tested daily. After they were released from quarantine, they were required to follow the rules of the Green Zone protocol, including daily testing, symptom monitoring, contact tracing, and not leaving the designated property boundaries for the NBA campus and having no contact with people who were not part of the Green Zone. They were all together, but isolated. Kerstin reported similar feelings of sadness. “Quarantine was sitting in our hotel rooms. Food was brought to us, and we were only allowed to leave to walk to the testing facility on campus. We had wristbands that labeled us as having not completed quarantine yet, so no one would come close to us during those 15-minute excursions. The food was pretty miserable. The logistics of bringing hundreds of Covid-compliant pre-packaged meals to each room by necessarily limited staff made the situation understandable, but it was pretty depressing to sit in one room and eat very sad food.”

» What Can We Do?

In case you find yourself in this lonely situation, here are some key tips from three professionals who went through this. Brent said, “Ask loads of questions! How are we doing laundry? How do we get things like vitamins? What is the food choice going to be?” Kerstin said, “Be patient with yourself and your colleagues. Imagine what it’s like for a submarine crew, and think, ‘Well, at least we aren’t sharing the same recycled air,’ and it is really all uphill from there.” Kerstin and I agreed that “Nothing is going to go quite like you expect it to. Things will take longer. You’re not getting the usual experience of work and then social time with them. The things that we love doing in this job after a grueling gig — a nice dinner with your crew, a drink at the hotel bar — these little rituals aren’t available in the same easy way. The pressure release valve is screwed on a little tighter.” We can acknowledge this truth, wear a mask, wash our hands, and carry on. We have to get through this together...but separate. **PLSN**

Pierce the bubble safely and connect with Chris via email. Reach him at close@plsn.com.



LD-AT-LARGE THE PODCAST

With ChrisLose

PLSN’s LD@Large Chris Lose has been interviewing top live production professionals discussing their careers, telling war stories and giving out advice on their craft. This month, listen in on Chris’ chat with Jim Digby, co-founder of the Event Safety Alliance. Jim recalls the fatal accident that happened on his first gig in live entertainment as a 19-year-old in 1983, and the founding of ESA after the Indiana State Fair tragedy in 2011.

To listen to their discussion, go to plsn.me/podcastJD.

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