

# ETA ENTERTAINMENT TECHNOLOGY ASIA

For The Technical And Production Professionals in Asia



**SEPTEMBER 2022**

## **Robe BMFLs Emulate the Grandeur and Ambiance of a Classic Big-Top for Cirque du Soleil**

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Jay Productions Delights with  
NEXO's ID24 Speakers for Dior

### **LIVE:**

ED SHEERAN TAKES SENNHEISER  
DIGITAL 6000 ON THE ROAD

### **SPOTLIGHT:**

FARHAD DARUWALLA

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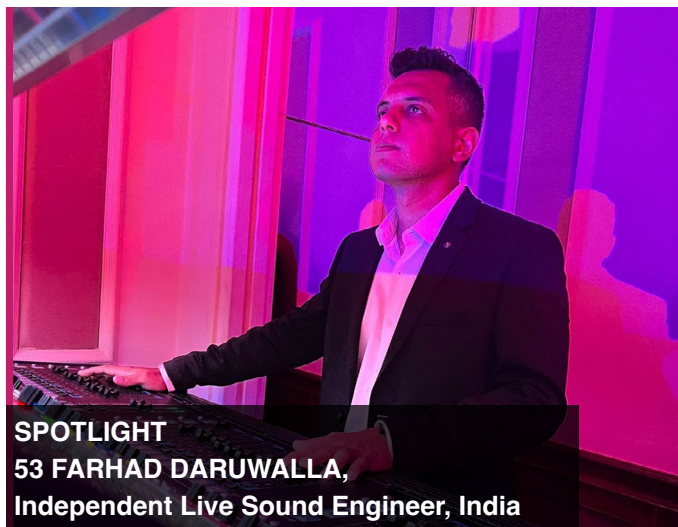
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According to a Singapore [Straits Times](#) report, the meetings, incentives, conventions and exhibitions industry is bouncing back strongly. There are around 25 events timed around the Singapore Formula One race that will be held from Sept 30 to Oct 2. This positive situation has trickled down to the

industry and many are busy. This is certainly a relief for the rental&staging companies that had endured tough times over the past couple of years. We are also seeing similar positivity being reflected across the region which is definitely good news for all.

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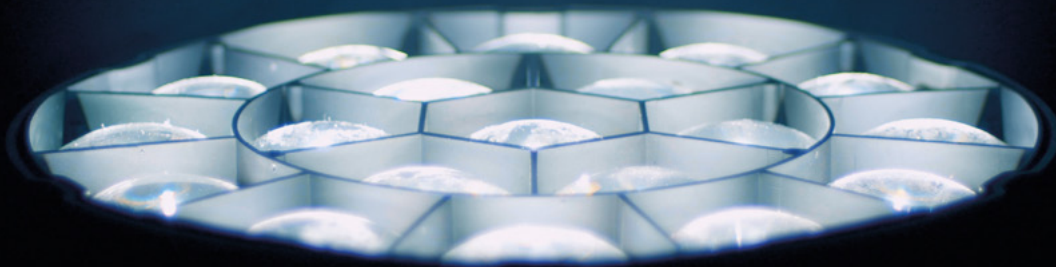
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## CTME Upgrades the Live Events Division with Two New Hires



**MIDDLE EAST:** Creative Technology Middle East (CTME), part of the NEP Worldwide Network, has strengthened its live team with 2 new hires.

Joshua Spencer is an expert in leading international teams and has a great passion for live events. His philosophy of encouraging innovation and strategic planning is unmatched. As the new Crew Operations Manager, Spencer will oversee the crew bookings and use his extensive knowledge of human resource management to ensure that every event has the right calibre of personnel. Spencer also recently received a nomination for the TPMEA stage manager of the year award in 2022.

Spencer commented on his new designation, "I feel very privileged and proud to be able to call CTME my new home. It's so evident to see that everyone here shares the same vision and dedication to maintaining the highest level of service. I am excited to develop this team and be part of CT's growing vision."

Spencer looks forward to being instrumental in developing the live events division alongside Samantha Peltret who has joined as a Projects Co-ordinator. Peltret, a fellow aficionado of live events, brings a wealth of knowledge and has extensive experience in the Middle East and South Africa. CT noted that she is already demonstrating a high level of commitment to her position and is a valuable asset to the Live Events CT team.

Peltret, who has unmatched attention to detail and is highly motivated, intends to employ her creativity and excitement for learning in her new position: "It's so great to be a part of such a huge family here at CT. There's a genuine spirit of cooperation, collaboration, and shared goals. I love being part of this incredible talented team, each day is so different, it's a constant adventure and such an exciting opportunity."

[Creative Technology Middle East](#)



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## Phoenix Audio Named as Distribution Partner for TiMax in Taiwan, Hong Kong, and China



**CHINA:** Phoenix Audio Distribution has been named the new TiMax distributor for mainland China, Hong Kong, Macau, and Taiwan by TiMax SoundHub's UK developer, Out Board. Phoenix Audio has close ties to the Out Board team and the TiMax product line, and it already has stock in its offices in Guangzhou and Hong Kong. The distributor also expects to purchase inventory right away for use in demonstrations and support at its offices in Beijing and Shanghai.

Out Board Director Dave Haydon views Phoenix Audio as a "friend" of the company and is grateful for the opportunity to continue working with them in China and Hong Kong. He said, "We look forward to working with them to increase our already significant market penetration in the Hong Kong and PRC territories, and working more closely with customers in Taiwan."

The Phoenix Audio team, led by Chris Zhang and Mac Lo, has extensive experience in the professional live performance and AV installation markets and is well-

versed in the requirements of the pro audio market in its region. The team also services a wide range of premium specifiers, integrators, and operator contacts.

Chris Zhang considers it a great honour to take on the distribution of the TiMax range of products. He concluded, "At Phoenix, we understand TiMax SoundHub and TiMax Tracker, and how they will bring the best sound arrangements for our customers across the Grand China area. This is a very exciting time for our customers and us."

**TiMax**





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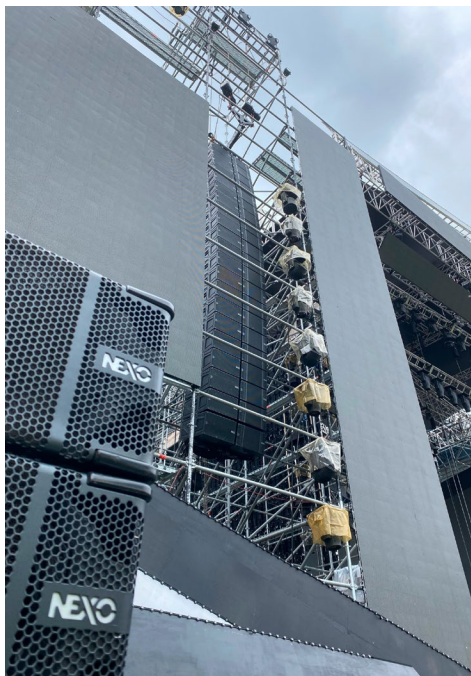
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**SENNHEISER**



## NEXO Systems Deployed by Way Audio Create Impressive HF Clarity for Largest K-POP Festival



**SOUTH KOREA:** The largest and oldest K-POP festival in South Korea, Dream Concert is now in its 28th year. 60,000 tickets for this year's event, which took place at the Jamsil Olympic Main Stadium in Seoul with a **NEXO STM** sound system provided by local rental partners Way Audio, were sold in just 20 minutes and featured performances by more than 20 K-POP idols.

The Jamsil Olympic Main Stadium, which was initially constructed for the Summer Olympics in 1988, has a field size of 110 m by 75 m, a seating capacity of over 70,000 people in two decks, and has played host to performances by Coldplay, Paul McCartney, Lady Gaga, and Metallica.

Way Audio built and installed a system using side-by-side hangs of 21 each STM M46 Main and B112 Bass Extension modules on either side of the stage, creating a throw distance of 180 m while simultaneously achieving even SPL and frequency coverage throughout the stadium. 12 x STM M28 Omni Module hangs were employed separately as delay towers, while 12 x NEXO GEO M12 arrays served as outfills throwing a distance of 140 m. In omni mode, 20 x S118 subs per side were used, with additional M28 modules serving as front fills.

"Even over such long distances, the HF clarity from the NEXO STM and GEO M systems was very impressive" commented Jordan Lee, chief system engineer at Way Audio.

Speaking on behalf of SBS Broadcasting, the production company responsible for organising the event, Ki-Hong Jeong, Main PD, said "We have held many K-Pop events with Way Audio for a very long time. Among them, Dream Concert is the largest K-Pop event. I think that NEXO STM, Way Audio's main speaker, is a great sound system because it can deliver clear music and songs even to a distant audience, thanks to the sound that always fills the venue and clear HF sound."

[Way Audio](#)

[NEXO](#)





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## TDC Preserves the Wit of Oscar Wilde



© Sydney Theatre Company / Daniel Boud.

**AUSTRALIA:** The Picture of Dorian Gray, the only book written by Irish playwright, poet, and author Oscar Wilde, is a provocative and surreal tale of a young man in Victorian-era England who trades his soul for everlasting youth and beauty.

In a two-hour performance, actor Eryn Jean "EJ" Norvill commands the audience's attention in no less than 26 different characters under the direction of Kip Williams, artistic director of Sydney Theatre Company (STC).

To bring each role to life, TDC – Technical Direction Company worked with the team at STC to develop an on-stage technical solution for five moving LED screens and media server technology.

"The Picture of Dorian Gray uniquely uses live camera, pre-recorded and display technology as part of the stage design. The amazing stagecraft was developed by Sydney Theatre Company over a period of ten years," explained Ben Lightowlers, sound and video manager at STC.

With sizes ranging from 1.5 sqm to 5 x 3 meters, the high-resolution and brilliant LED screens fly in and out of

the stage utilizing a track system. To deftly show the next figure, the screens swoop low to the stage, in front of, and behind the performer. When Norvill is on stage, the screens do an aerial dance while displaying recorded and live footage from up to six cameras pointed in different directions.

"Our relationship with TDC is an essential one. Three out of twelve shows we do will have some kind of video element and we rely on an essential relationship with TDC. We may work on a show just three months out often with very ambitious designs from the creative design team. Alex Rendell at TDC is always helpful with any of our design variations," added Lightowlers.

Alex Rendell, technical project manager at TDC concluded: "We loved working with Sydney Theatre Company from concept through to delivery. It was a fantastic project to work on and the integration of video screens is very exciting. Every single night The Picture of Dorian Gray receives a standing ovation."

**TDC – Technical Direction Company**



## New Distributor Announcement by Analog Way



**SINGAPORE:** Electro-Acoustics Systems (EAS) has signed an exclusive distribution agreement with Analog Way. In the Asia Pacific Region, **EAS** is a leading provider of cutting-edge solutions for high-end audio and video systems. Since its incorporation in 1982, EAS has installed systems for a range of industries, including broadcast, big-venue sports, digital signs, theatrical lighting, and amusement parks.

The manufacturer's belief in the company's substantial presence in Singapore led to the formation of the collaboration. Regional channel manager for Asia for Analog Way, Jez Lim, outlined the partnership's next step: "As part of our plan to develop the Singapore market, EAS and Analog Way will host a product roadshow in the months to come."

Through their established service centre, EAS will handle any local servicing needs for Analog Way's array of audiovisual devices in Singapore in addition to handling sales and marketing for Analog Way.

Lam Tze Tze, executive director of EAS, is looking forward to the partnership: "...Our clients [require] advanced image processing products to power increasingly demanding multimedia applications. We are confident the new range of products will generate wide interest from the market."

[Analog Way](#)

## Encouraged by S10's success, Royal Entertainer Significantly Increases its Adamson Inventory

**INDIA:** In March 2019, Delhi-based Royal Entertainer made its first investment in Adamson by purchasing an S-Series line array kit that included S10 two-way, full-range enclosures and complementary S119 subwoofers. Impressed with the systems' capabilities, the company has added 8 x S10 line array cabinets and 4 x E219 subwoofers to their current inventory.

When asked why they decided to add more S10 boxes to their inventory, Sunny Singh, owner of Royal Entertainer explained, "Our early investment in the Adamson S10 has been a great success - it has exceeded our expectations and become the most requested PA. We are proud to be early adopters of the Adamson S-Series in India. The service and training received from StageMix and Adamson has strengthened our bond further."



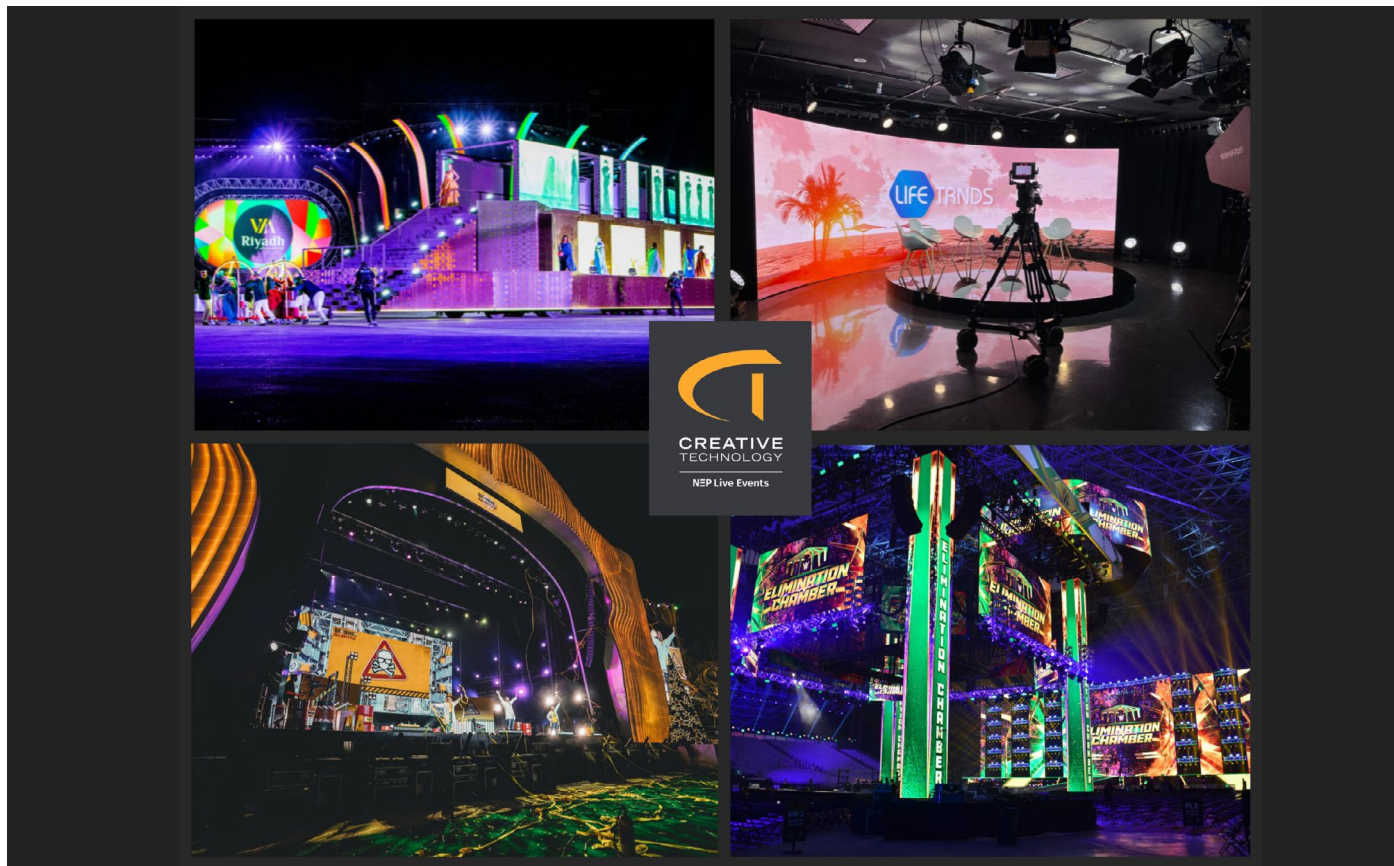
Adding, "Our Adamson system offers more power than any other cabinet, in a compact and lightweight package. It delivers extraordinary sound even at high levels, with a very homogeneous coverage."

Eshdeep Bhasin of StageMix,

distributors of Adamson systems in India, is encouraged by the rising demand for these systems: "...the addition of 8 S10s is another example of Adamson's increasing popularity in India. We are thrilled to have bolstered our Sales Network with some great new partners, and the expansion in inventory of our present partners, with Royal Entertainer continuing that trend."

[Adamson](#)

## Creative Technology Expands Live Event Options with Updates to Inventory



**MIDDLE EAST:** To meet the varied variety of spectacular events that their clients host throughout the Middle East, Creative Technology (CTME) has added an arsenal of new indoor, outdoor, and LED floor solutions.

To address the demand for outdoor events, CTME has increased its investment in InfiLED ART 4.6mm. The LED is built with lightweight carbon fibre touring frames and die-cast wind bracing ladders, which speed up setup time on site and make it resistant to inclement weather. The Absen PL3.9W Lite has also been added to CTME's inventory; it has a greater pixel density while still maintaining an IP65 outdoor classification.

For indoor events and the corporate sector, CTME has invested in Unilumin Uslim2, a 1000nit 2.6mm LED solution.

The ROE BM5i floor widens CTME's range of creative LED solutions. Each IP65-rated panel has 100 optical sensors that provide tracking information to media servers so that generative content may be activated in real-time.

Lastly, CTME has expanded their fleet of SES 400A Smart Power Distribution Units and TSL Intelligent rackmount PDUs to ensure they have complete control and monitoring of power systems on-site as they continue their strategy of supporting products with the most recent infrastructure investments. With the addition of Novastar H9 series processors and Bright Logic touch controllers for interactive LED floors, they have increased their LED processing capabilities by 120 million pixels

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## Christie HS Series Illuminates Masked Singers with Astounding Visuals



*Courtesy of Vie Channel – HTV2.*

**Vietnam:** The Masked Singer Vietnam, a reality music show that disguises the identities of its vocalists, has made its début using Christie's HS Series 1DLP laser projectors to illuminate the stage with stunning graphics.

The highly-anticipated television program features celebrities in outlandish costumes competing against each other to win the coveted Masked Singer trophy. It recently premiered on the platforms of two DatVietVAC Group Holdings subsidiary companies: the streaming service VieON and Vie Channel – HTV2, which owns and broadcasts entertainment programmes on multiple platforms in Vietnam. To impress viewers and increase ratings, the producer has spared no expense in programming, costumes, stage design, and cutting-edge AV technology.

Two enormous, face-like sculptures that have come to symbolise The Masked Singer Vietnam's round stage serve as tunnel entrances for the participants from

backstage. They are cleverly lit by four Christie D20WU-HS laser projectors that Alta Media, a trusted partner of Christie and a leader in systems integration, digital content, and show entertainment technologies, installed.

"The gigantic faces of The Masked Singer Vietnam are the show's biggest scenic elements on-stage and we needed to ensure that both live and TV audiences are able to appreciate the eye-catching visuals projected onto the polygonal surfaces of these iconic structures," said Tai Hoang, co-founder and CEO, Alta Media. "Having used the Christie D20WU-HS on several occasions... we decided that it is the perfect projection system for this project due to its high brightness, accurate colour reproduction, compact footprint, quiet operation, and omnidirectional capabilities."

Hoang noted that the 4 x D20WU-HS projectors are double-stacked, fitted on a truss and cross-installed with a throw distance of 24 m. "This specific configuration enables us to achieve optimal visuals on both face-like



structures each measuring five meters high," he said. "The projected contents comprising an array of dynamic visual effects are then altered according to the visual script that matches the performance of each vocalist."

The HS Series projectors are ideal for challenging, space-constrained installations because of their small, lightweight form factor. They are equipped with Christie BoldColor Technology to ensure that colours look natural and true-to-life. Additionally, the on-board Christie Twist warping and blending software and the optional Christie Mystique automated camera-based alignment tools make set-up, alignment, recalibration, and maintenance of multi-projector systems quick and simple.

Jason Yeo, senior sales manager for Southeast Asia, Enterprise, Christie, commented, "The Masked Singer Vietnam is a highly entertaining reality singing TV series that has enthralled audiences and we are thrilled that the D20WU-HS laser projectors have been used to deliver fascinating visuals on the iconic faces onstage to heighten the audience experience. Alta Media has accomplished an amazing job and we look forward to more exciting applications involving our projection and integrated solutions for television and entertainment industries in Vietnam."

Ranging in brightness levels from 7,000-20,600 lumens and resolutions including WUXGA, HD and 4K UHD, Christie HS Series offers a powerful, reliable and cost-effective option for almost any high-use application. Setting benchmarks in brightness, colour accuracy, power requirements, and form factor, the HS Series pushes the envelope of what's possible with 1DLP technology.

Since its launch, The Masked Singer Vietnam has captivated audiences nationwide with glitzy performances and impressive stage visuals infused with fun and humour. Hoang concluded that Vie Channel is very satisfied with the results.

[Christie/D20WU-HS](#)

# RIG IT EASY

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## L-Acoustics K2 with Panflex Horizontal Directivity Makes an Impact on Arena's Audience



**THAILAND:** As massive live performances start to return to the Asia Pacific region, one of its biggest stars just wrapped up two sold-out concerts and fan meetings at Bangkok's Impact Arena.

Mark Tuan, a native of California, made his mark on the K-Pop scene with the legendary boyband Got7 and has since established himself as a multifaceted figure known worldwide as a rapper, singer, composer, and model. The Impact Arena, which can be used for athletic events, conferences, and concerts, was selected as the ideal location for Mark Tuan to play and interact with more than 10,000 fans.

The event was marketed by Bangkok-based 4NOLOGUE, an event organizer, talent management firm, and television and music producer. To deploy flawless tour-level sound at the biggest concert venue in Thailand, they relied on the experienced team of audio specialists from local audio-visual supplier PM Center Co. Ltd.

"Our first choice for concerts of this size is always an L-Acoustics system," said Thanakorn Tangsereewongsa, head of Business Development at **PM Center** which boasts an inventory of L-Acoustics products from Certified Provider Distributor Vision One. "Most artists' concert riders specifically list L-Acoustics above others.

In our experience, a comprehensive L-Acoustics system provides our engineers with dedicated tools for system optimisation and calibration."

The Impact Arena is a challenge for sound designers due to its 24-foot-high ceilings and smooth, hard walls. "Our team knew that reflections would be their main challenge," explained Thanakorn. "The team relied on L-Acoustics K2 with Panflex horizontal directivity to reduce reflections and keep the powerful sound on the audience area only."

Using Soundvision 3D modelling software, a system consisting of main arrays of 20 L-Acoustics K2 was deployed with two arrays of eight K1-SB subwoofers flown behind. Out-fill arrays consisting of nine K2 over three Kara II down per side were added, as well as two arrays of six K2 per side for delay. To add more power to the low end, the team deployed 24 L-Acoustics SB28 ground-stacked subwoofers across the front of the stage. The entire system was powered by 32 LA8 and six LA12X amplified controllers.

"Soundvision ensured PM Center's design would be the perfect configuration for the venue space," said FOH engineer and system designer Chayut Boonchuayjaroen. "Then, when we were on-site, tuning the system via LA Network Manager was swift and decisive, thanks to our pre-calculations: This assured me that I would be able to mix intuitively on a clear, pristine-sounding system."

The PM Center team was confident that the L-Acoustics system's reliability would make it easier for them to resume supporting high-profile live performances while providing uniform coverage and the optimal SPL for each fan. "As our first choice system for the PULL-UP concerts, it did not disappoint. The complete control and optimisation our team applied to the project yielded fantastic results that were felt and heard by all of Mark Tuan's die-hard fans in the arena," concluded Thanakorn.

[L-Acoustics K2](#)



## Dataton Delights Temple of Light Visitors with Multi-Sensory Experience



**CHINA:** Temple of Light is a digital art exhibition pioneer on a mission to change perceptions and captivate audiences. Using the latest multi-display and projection technology, they recreate paintings on a gigantic scale, challenging the traditional way of viewing art in museums and creating a multi-sensory, immersive experience.

INSIDE by Temple of Light and Danny Rose Studio opened its doors in December 2021 in a huge metal-clad box on the North Bund in Shanghai. The initial idea was a "pop-up" exhibition with a planned seven-week run, but that was quickly extended by popular demand to September 30, 2022, with a new exhibition scheduled to follow.

Based in Shanghai, Temple of Light is both an immersive exhibition concept and a multi-cultural company. The content for the Shanghai exhibition was created by the internationally acclaimed, award-winning Danny Rose creative studio.

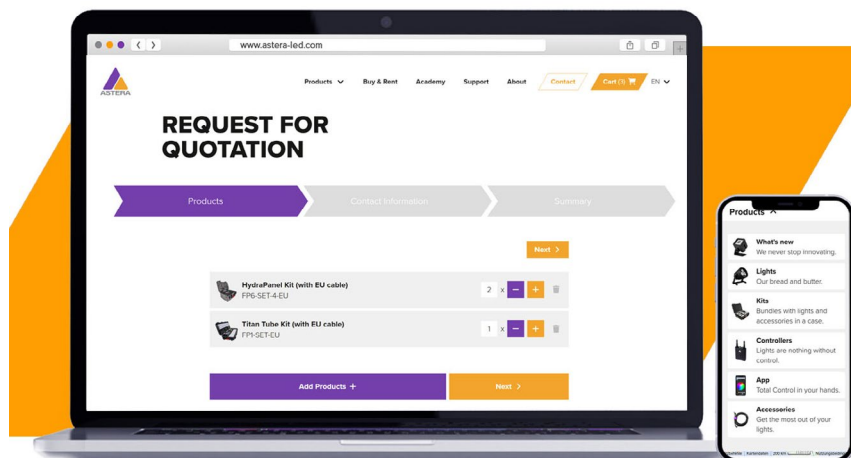
Audiences experienced two narratives at the Shanghai venue: "UKIYO-E VISIONS" and "MUTATION". UKIYO-E VISIONS took the viewer on a contemplative journey into the masterpieces of Ukiyo-e Japanese prints from the 17th to 19th century, providing a glimpse of the

great diversity, richness, and modernity of these works. MUTATION was a sensorial dive into the plastic and harmonious structures of matter – "a head-spinning visual overload" according to Time-Out Shanghai. It's easy to see why the attraction has been so widely appreciated. INSIDE by Temple of Light and Danny Rose Studio delivers a fully immersive experience using Dataton WATCHOUT for show composition and synchronized playback across an array of 32 x Epson 3LCD projectors, and a Meyer Sound spatialized audio system. Within the image-filled, 600 sqm space in Shanghai, visitors can wander with lifelike visuals across the venue with dynamic sound.

Dataton's partner in China, Shanghai Lefedv Showtech cooperated with the exhibition creators during the installation, supplying both WATCHOUT multi-display software and media servers. "It is always exciting to see a project develop from idea to reality," commented Ashok Sharma, Dataton's regional sales manager, APAC. "Even at the initial meeting during InfoComm China where we brought all partners together, we knew that the project would be a success. All the key components lined up – outstanding concept and content, great teamwork and strong local support! Congratulations to all involved."

[Dataton](#)

## Astera Tells You Everything You Need to Know in One Fast and Easily Navigable Portal



**GLOBAL:** Wireless LED lighting manufacturer Astera has launched a new multi-lingual website that is optimised for all devices, action-packed with product information, full of technical specs, news, useful tips and tricks, invaluable troubleshooting advice, plus a wealth of information about the company, its people, products, and ethos.

Astera sales director Sebastian Bückle explained that when the previous website was launched, they had three lighting fixtures and 10 accessories available. There are currently 11 unique and innovative Astera luminaires and an impressive 150 handy accessories ... all of which deserve their pages complete with videos and downloads.

He explained, "Our objective was to empower our users by creating the smartest web page in the industry containing a mine of relevant information explaining products and answering all questions."

Each Astera Accessory now has its own page with text, specs, videos, pictures, downloads etc. which helps showcase the accessory and its capabilities and applications. A new Support section has a smart FAQ area with links to all the key places holding related information. With the live show and event industry back to full speed and more, "we fully appreciate that technicians, gaffers, crew, designers, etc., need to get good and accurate info in seconds, so we focused on embracing this with practical design and the streamlining of basic

elements like the menu systems which are logical and intuitive," noted Sebastian.

Having good and comprehensive technical support is vital for Astera as the lights become increasingly complex with more features, so the website is designed for all users to find answers to their questions – at any time and from any place in the world!

Some excellent resources are online to help people with their needs, including the Astera Academy which offers great tutorials with chapters comprehensively covering most features of all the products. The Astera User's Group – currently 5000+ and growing – is replete with friendly and knowledgeable members who share expertise and assist each other daily.

The Interactive FAQ is brand new and functions almost like an intelligent chatbot. It responds with a predefined answer to typed-in questions. Aware of how some chatbots can be slow and frustrating, this tool will be under constant development and able to answer more and more questions over time. Instead of offering just a simple answer, it can cross-reference to a particular chapter of a tutorial or offer links to a relevant download.

Also new is a Shopping Cart with "get a quote" functionality that will be forwarded to the respective regional dealer/distributor. With online shopping well established, while Astera sells via a global dealership network, this feature makes it super easy to connect with the relevant local distributor. Demos can also be arranged via the distributor.

A new Buy and Rent page shows distributors, service centres and rental companies on a world map, also making it quick and straightforward to source Astera products locally. The News section features a diverse array of Astera projects in action around the world. From music tours and festivals to industrial events and art



exhibitions – this trove of info includes lively articles and stunning picture galleries, videos, and other illustrations, all with valuable insights into how the products are being used creatively and imaginatively by designers working in different disciplines.

Available in several key languages, Astera wanted to ensure this resource was accessible to everyone, from big rental companies to the numerous smaller customers internationally who might buy a handful of lights or rent lights for one gig.

“We want to make sure everyone can fully understand and appreciate the scope of the products and their features, and while translating the website is a vast amount

of work, we have a great team who come from our industry and know all the right terms, lingo and colloquialisms in each language,” stated Sebastian.

Building a big website like this from scratch has involved a lot of energy, commitment, and resources, but “it will save time for the whole Astera community in the long run,” stated Sebastian.

In the pacey world of digital communication, the website conveniently answers so many questions or refers people to the correct locations to get support, and is available 24/7, so rather than having to potentially wait to get through to Astera HQ or the distributor, solutions can be found with a few clicks.

[Astera](#)

## QSC Pro Audio Division to be Headed by David Angress



**GLOBAL:** David Angress has joined QSC as its senior vice president and general manager of the company's new Pro Audio division.

“Throughout the years, I have always had the greatest respect and admiration for QSC – its people, its culture and its portfolio of innovative, market-leading products,” said Angress. “The pro audio division is gearing up for an incredible phase of transformative growth and I couldn't be more excited about the opportunity to serve as its leader going forward.”

Angress, a seasoned veteran of the music and pro audio products industry, brings a wealth of experience

in senior executive leadership with roles at preeminent brands including ADAM Audio GmbH, Guitar Center, Harman, and AKG. As principal at Angress Consulting for the last 12 years, he has utilized his extensive international experience in marketing, product management, and international distribution to develop business relationships for its clients throughout the US, Europe, and Asia.

“We are thrilled to have David Angress take the leadership of our Pro Audio division,” stated Jatan Shah, President and Chief Operating Officer, QSC, LLC. “David's decades of experience in the MI and pro audio industries - in retail, manufacturing and as a trusted and accomplished advisor to a number of organizations - makes him the ideal individual to take the helm of our Pro Audio business. Our leadership team of Perry Celia, David Fuller, Ray van Straten, Linda Lee, and now David Angress, will most certainly guide our business to great success in this next, exciting period of growth and innovation.”

[QSC](#)

## Jay Productions Delights with NEXO's ID24 Speakers for Dior



**AUSTRALIA:** Employing the latest in audio, visual and lighting technology, Sydney-based Jay Productions & Events consistently crafts electrifying experiences for its corporate, outdoor and large-scale event offerings. Delivering dazzling production quality and no stranger to working with industry-leading audio brands, Jay Productions chose to utilise NEXO's ID24 loudspeakers for the House of Dior's garden pop-up event.

Luxuriating in its setting, the event celebrated Dior's Miss Dior Eau de Parfum and enjoyed a breathtaking backdrop by the iconic Sydney Opera House and Harbour Bridge. Bursting with abundant blooms, the pop-up included a delightful melding of sights, scents, and soundscapes to form an immersive sensorial experience for its visitors.

Described by Dior as a "digital journey through a multi-coloured field alive with thousands of flowers," guests were invited to explore the space and, in doing so, uncover several unique zones. Each area offered its own distinct aura, with the shift in mood afforded by various peaceful sounds played through NEXO's ID24 speakers across each space.

With refinement and sophistication underlying the event's design, it was imperative to select a speaker that would blend seamlessly into its surrounds – imparting ambience without eclipsing the showstopping visual aspects. Tasked with creating an atmosphere of calming luxury, Jason Ghazal, managing director of Jay Productions explained why NEXO's ID24 speakers stood out as the right choice, "It was exactly what we

needed for the space. Having white suited the launch and we were looking for a punchy speaker that would be discreet but still have power."

The decision proved a perfect fit, with Jason reflecting on the "easy install" and performance, "This was the first time using the ID24 speaker. We assessed its performance during demos in Melbourne and were really impressed. When in use at Dior, we found the ID24 really fit the application and exceeded expectations." Entirely pleased with the outcome, Jason proudly announced that he has "ordered more of the ID24 speakers for another luxury brand activation coming up!"

Renowned for its flexible functionality, the ID24 delivers a range of horn positions and settings that can be used without removing the grille or opening the cabinet. Easy HF configuration can be achieved via a 'screw head' system featured on the rear panel.

"For the mood of this walk-through activation, we ensured every area had a different style of music," explained Jason, his team capitalising on the ID24's directivity options to ensure superior coverage for visitors as they moved through each area. The ID24s enabled Jason and the team to fine-tune the unique nature of each space, creating distinct moments of harmony across "different zones with backing tracks."

Ever championing the collision of practical solutions with solid engineering, NEXO's dedication to producing quality sonic solutions is unmistakable in the ID24. Boasting a compact cabinet that offers an extremely high power-to-weight ratio, the ID24's precision performance and unobtrusive design makes it an ideal asset for high-end professional installations and touring. Exuding prestige and infusing aural excellence, the Miss Dior event transported its guests to a flourishing escape amongst a field of flowers. Sensationally sensory at its core, the garden pop-up was a stunning exhibit of the Dior brand, Jay Productions' meticulous expertise and another flawlessly fitting application of NEXO's ID24 speakers.

**NEXO**



## DiGiCo Quantum 338 Enters Indian Market with PP Sound Light Production



Prem Bhoir (L) and Prasad Parkar (R)

**INDIA:** While many companies were forced to downsize due to the pandemic, Mumbai-based PP Sound Light Production displayed a great deal of growth in terms of the volume of gigs that the company commissioned post-lockdown, as well as its ever-evolving inventory thanks to a steady stream of investment into multiple industries leading state-of-the-art technologies and systems.

The company's latest acquisition of DiGiCo's Quantum 338 system has now earned PP Sound Light Production the distinction of being the first equipment rental service company in India to do so.

Making sense of the purchase from a business perspective, Prasad Parkar, director of PP Sound Lights Production noted, "Almost every musical and large show that comes in for inquiry, specifies DiGiCo; and we've noticed over the past few years that most performers, artists and event producers alike have favoured DiGiCo consoles because of the host of capabilities that they're known to offer. So, we've been pondering the decision to invest in a DiGiCo console system for quite a while now."

Adding, "Fortunately, the availability of the Quantum 338 in India came in at an opportune moment – and this pretty much made it a default option for our purchase

consideration, owing to the fact that the console sports an undoubtedly advanced set of features and capabilities. We knew that being the first in India to acquire the Quantum 338 would not only assure us maximum ROI, but would also allow us the capacity to offer the very best in sound, features, performance, and reliability to our clients and the performing artists that we work with."

Business acumen in tow – the PP Sound Light Production team did invest a sizeable amount of time and effort in researching all about the comprehensive list of technical capabilities offered by the Quantum 338 system; all of which further strengthened the investment decision in favour of DiGiCo.

Prem Bhoir, CEO of PP Sound Light Production, elaborated, "The Quantum 338 scores really high points when it comes to being ergonomically stylish, functional and powerful. The interface is smooth, friendly, familiar, and adaptive; while also sporting certain functions that are specific to the Quantum range, such as the True Solo function, Spice Rack plugin style native FPGA processing options, and of course, the Mustard and Nodal processing options. The important thing with the Quantum 338 is that it supports DMI Cards and therefore Dante, which enables us with the capacity to provide a network-enabled solution for intricately complex events and all types of major productions – from tours to festivals to high-end corporate events. Complete control is made possible through the console and Dante-enabled DQ-Racks."

Adding, "Having said this though, perhaps the most important factor impacting our purchase decision was DiGiCo's ongoing support for its entire product line coupled with the cross-compatibility between older and newer consoles. Therefore, with the DiGiCo Quantum board, we knew that every engineer who comes in to work with us for an event would be comfortable. The operating system is very similar across DiGiCo's entire platform – plus or minus a few features here and there, which means that an engineer can easily adapt to the Quantum 338 console in a matter of minutes, even if they have had little or no experience on the Quantum

specifically. So basically, if you know one of their consoles, you pretty much know them all. A cumulate sum of these features means that we're afforded with the unparalleled level of flexibility to deploy the Q338 at FOH or Monitors while assuring a consistent world-class sonic experience all-through."

For the actual investment, PP Sound Light Production purchased a comprehensive Quantum 338 system set which included a pair of DiGiCo's DMI-Dante 64@96 cards, two compact DQ-Racks, and a host of other I/O cards in addition to the console itself; with the entire purchase process facilitated through Delhi-based Hi-Tech Audio Systems who are the official distribution partners for DiGiCo in India.

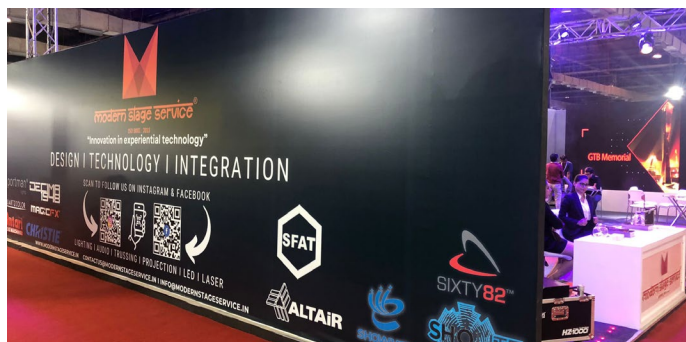
It comes as no surprise that the PP Sound Light Production team wasted no time in deploying their newly acquired DiGiCo Quantum 338 system on-field for an event, as Prem detailed, "To be honest, our entire team of engineers is really impressed and happy with the purchase, and we couldn't wait for the opportunity to get to use it on the field – which we did in a matter of just 2 days after the system was delivered to our office premise." The Q338 was deployed as the main FOH console for a high-end corporate conference and

award ceremony with Hi-Tech Audio providing on-site technical assistance and support for the event, as the console garnered a lot of praise from the performing artists as well as the guest sound engineer – Rupjit Das – who mixed on the console during the gig.

Sharing his experiential feedback on the performance of the DiGiCo Quantum 338, Rupjit affirmed, "I've been doing live sound for nearly five years now and have always preferred using Digico SD series. I like the preamp, there is a good level of warmth in the tone and compression, reverb, etc and the effects are spot on. The end product is always crystal-clear sound. The corporate event in Goa at the Taj Convention Centre was my first time using DiGiCo Quantum 338. Satyam Rajvanshi from the Hi-Tech Audio team was constantly with me and introduced me to the new features on this console, and I thoroughly enjoyed it. I can easily say that this is the most effective, stylish and high on quality console that I have ever used. The nodal processing was very good. I used spice rack (Chilli6) on the master and mustard processing optical compressor, which ensured that the vocals were very smooth and clear. Overall, I'm super impressed."

[DiGiCo/Quantum 338](#)

## Sixty82 Returns to PALM Expo India with Game Changers for the Entertainment Industry



**INDIA:** After more than a 3-year wait, the Goregaon exhibition centre in Mumbai welcomed India's premium and largest exhibition for the entertainment industry, the PALM EXPO. Although this was a smaller expo in terms of the occupied number of halls and exhibitors, the crowd came out in full force.

Sixty82, Doughty Asia (SDA) was, as before the pandemic, supporting Delhi-based Modern Stage Service. One of India's leading distribution companies, Modern Stage Service showcased product videos of the all-new Sixty82 ARENA FRAME on large LED screens in their elegantly-designed booth. The product videos highlighted the ARENA FRAME's ability to be built extremely fast (200m2 in less than 90 minutes) without the use of any tools.

Additionally, the game-changing ALPHA truss was also on display and attracted the attention of a large number of booth visitors.

[Sixty82 Asia](#)



## Creative Technology Middle East Expands ME Teams



**MIDDLE EAST:** Creative Technology Middle East has welcomed Jemma Joy to the organisation as the Head of Operations. She is an accomplished Production and Operations Manager with over 20 years of experience in the events industry. She has successfully developed long-term operational strategies to ensure effectual and coherent workflows are in place to help increase productivity and performance. Her organisational, leadership and communication skills are unparalleled, and she enjoys developing solutions that push innovation across all teams. Over the years, Jemma has been involved in some fantastic projects, from EXPO2020 Dubai, Qasr Al Hosn, Laureus World Sports Awards, Dubai World Cup, and Volvo Ocean Race to name a few. She has comprehensive experience in the management of the industry which arms her with the skills to develop fully operational processes that maximise output and minimise costs.

Jemma commented, "I have worked alongside CT on some of the region's biggest and technically advanced shows in the past and I am delighted to now be part of the CTME team. The talent here is professional, dedicated and highly trained. The equipment's selection, quality and management are second to none, with new technology arriving daily. Now as a full-service supplier, I think CT is perfectly positioned to bring something special to the Middle East market with the support from the entire CT and NEP network."

The company has also proudly welcomed two new project managers Croft Clinton and Bhans Sheomangal. Croft is a highly skilled Project Manager and events specialist with over 10 years of experience within the live events industry. He has worked alongside top event and production companies in the UAE as well as has a strong passion to deliver high-quality events that exceed a client's expectations. Alongside managing a team of engineers, Croft has built strong relationships with worldwide clients, providing support, communication, and problem-solving solutions.

He has successfully planned and executed technical management across multiple high-profile projects such as Jubilee Stage Expo2020 Dubai and UFC 242 / Red Hot Chilli Peppers concert, IDEX 2021 to name a few. Croft has a wealth of valuable experience across the gamut of technical disciplines with an extensive history in Production Management across large-scale events, corporate, exhibitions and live concerts. Drawing on his diverse experience, he leads a team of engineers, providing technical guidance and direction across a wide range of events.

Clinton is proud to be part of such a talented, fun, and motivated team that is dedicated to making an impact on the business, noting "I am looking forward to working on the incredible projects we have lined up over the coming season."

Bhans is an exceptional Project Manager with over 14 years of experience throughout the Middle East and Africa. He has extensive knowledge in production and is responsible for providing AV technical management across various events. He has a diverse portfolio across corporate, sports, weddings, live entertainment, festivals, and large-scale event spectaculars. He has worked on some of the most technically complex projects such as David Guetta NYE at the Louvre, FIFA World Cup, McDonalds Coop France, Cirque du Soleil, and F1 Jeddah to name a few. Bhanparkash prides himself on delivering the right solution for his clients while ensuring exceptional events are delivered.

Sheomangal said, "I am really excited about starting at CT and I am hoping to add value to the team and look forward to opportunities to grow while delivering first-class projects across the Middle East."

On the new team members, Andy Reardon, managing director ME, concluded "We are excited to be building the team with highly skilled and well-respected industry professionals who will further strengthen our core areas across the business. It's a great time to have them on board as we approach our busy season. A warm welcome to you all from the management team at CTME!"

[Creative Technology Middle East](#)

## Technical Support for Optocore and BroaMan Strengthened by RadhaMohan Rajani



**GLOBAL:** RadhaMohan Rajani has joined Optocore as part of its Technical Sales Support team—working across both Optocore and sister company, [BroaMan](#). Born and brought up in India, he is a long-established user of Optocore solutions. After studying Visual Communications, he joined

Warren Dsouza's highly experienced Mumbai-based rental company, Sound.com in 2014, where he first started using Optocore devices. This was specifically on the large stadium events and Opening/Closing Games ceremonies in which Sound.com specialises.

In 2016 he relocated to Poland to work for Fotis Sound (another Optocore client)—working on festivals, tours and concert set-up before the pandemic. In 2019 he underwent his full Optocore Certification Training (OCT) at the company HQ in Munich.

As a member of the Tech Support team, he will focus on client communications and relations with a particular emphasis on building BroaMan's presence in the market.

Speaking on his appointment, RadhaMohan Rajani said he was attracted to the position not only because of his familiarity with the products and the Optocore/BroaMan team members "but also the prestige of both brands". He explained, "I am looking forward to increasing BroaMan's market presence and reputation by ensuring our clients' needs are well taken care of."

Welcoming him to the company, BroaMan MD Tine Helmle, to whom he will report, said, "It is good to have someone with Mohan's experience who can hit the ground running. He will prove to be a valuable asset, in particular for BroaMan as we continue to build a market profile."

RadhaMohan can be contacted at: [m.rajani@optocore.com](mailto:m.rajani@optocore.com), or [m.rajani@broaman.com](mailto:m.rajani@broaman.com).

[Optocore](#)



## Thousands Flock to Albury Botanic Gardens for LASERVISION's AURORA Light Show



**AUSTRALIA:** AURORA, an outdoor, journey-style light show, transformed the Albury Botanic Gardens and revealed nature's vibrant spirit in a kaleidoscope of colours with the use of lasers, holograms, vivid lighting, digital artistry, immersive soundscapes, and many other sensory mediums.

Over 60,000 patrons from the community and around the region attended the nightly light show and attracted a wide demographic of audience members. From kids and families to adults young and old, AURORA was a delight for everyone who visited the gardens.

The month-long, nightly light show was even extended due to the popular demand and community response to keep the show going, especially for those that may have missed out while travelling during the school holidays.

"Together with Albury City Council, we were very happy to extend the show for an additional week," said Matthew Tuey, director of Marketing at LASERVISION. "The overwhelming response from the community, social media, local F&B and hospitality providers made it clear there was significant demand for this show. It was the talk of the town and region and we had many patrons driving up to 5 hours away to see AURORA. It was humbling to hear the positive feedback and reviews of our show and we were happy to accommodate the extension"

Albury City Mayor Kylie King said she was excited to see so many in the community embrace this unique event, especially during the colder months. "We were over the moon to see so many people grabbing their winter coats and coming to see our iconic Botanic Gardens in a new light. The spectacular turnout shows us that our community is keen to see events happening across all seasons. It was also a great opportunity to bring visitors from further afield to spend time in our beautiful city."

**LASERVISION**

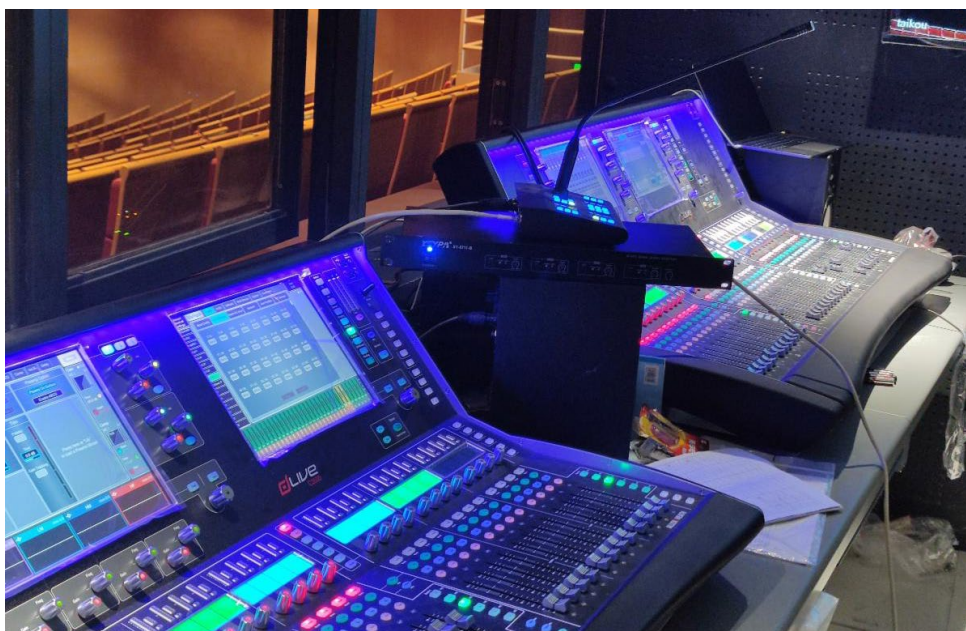
## Green-GO Digital Intercom Series Upscales Quality Communications at Performing Art Center

**CHINA:** Fujian Province's new Pingtan International Performing Arts Center recently invested in a series of Green-GO digital intercom products to provide a much-needed scalable, high-quality sound and simple-to-use solution.

The Center, which serves as the cultural hub in the Pingtan Comprehensive Experimental Area in northeast Jinjing Bay, is a vast building. It includes a 1,500-seat theatre, a 400-seat multi-function hall and a public centre for performance and art, covering almost 40,000 sqm.

Now open for business, it will be the home of a stage play directed by Chinese famous dancer YANG Liping called 'Pingtan Impression'.

Chinese AV solution provider EZPro was responsible for the audio system design and installation at the Center. "The project needed an intercom system with a good quality of sound, which is easy to use and would be scalable. Therefore, we chose the innovative Green-GO digital intercom solution," said EZPro technical engineer, FAN Gaoqing.



© EZPRO

"Green-GO IP technology allows the implementation of a full intercoms system without expensive central matrixes and complex, time-consuming programming. The system meets all the client's current needs and, importantly, offers easy and affordable upscaling in the future."

At the core of the Center's system is a Green-GO MCX multi-channel rack station, which is designed to allow direct access for up to 32 separate intercom groups or party lines. The team has installed this in the mobile stage monitoring cabinet, enabling them to clearly see the status of each channel in use across all of the venue's three performance spaces. This is matched with five Green-GO MCXD multi-channel desk stations, located in key locations across the venues for directors and production managers to use. The Ethernet-connected MCXD unit is awash with easy-to-assign multicolour push-buttons, allowing the operators to speak to individuals or groups as desired.

The production team is also now kitted out with six Green-GO WBPX multi-channel wireless belt packs, which are configured in the system for communication mainly among the Center's sound and lighting engineers. These connect with Green-GO's Ethernet-based system via a series of WAA wireless active antenna. The Center has also invested in wired BPX multi-channel wired

belt packs, which connect to intercom network outlets in spaces such as dressing rooms, rest rooms, corridors, and machine rooms.

EZPro also responded to the Center's need to integrate analogue intercom systems into the new Green-GO digital Ethernet network, and to connect radio devices that are often used by the Center's security guards and background staff who use walkie-talkies. To achieve this, they specified the Green-GO InterfaceX, to facilitate a connection between

the intercom system and the PA system. The director of 'Pingtan Impression' can also use this interface to transmit instructions through the PA system.

"We're thrilled that EZPro and the Pingtan International Performing Arts Center have chosen to use the Green-GO communications system," said Silvio Cibien, CEO at Green-GO. "We're very proud of our Ethernet network-based digital intercom system and the accessories now on offer, which the Center has taken full advantage of. One of the most wonderful aspects of the Green-GO system is that it has no single point of failure because there is no central unit that carries the entire system. We wish the team at the Center success for the future, and thank EZPro for their professionalism in realising this project."

In addition to the Pingtan Impression show, the Center offers a host of attractions for the public throughout its multi-purpose spaces, including a reading area with more than 10,000 books, an audio-visual room, and an electronic chess board. It is now fully open for use.

### Green-GO digital

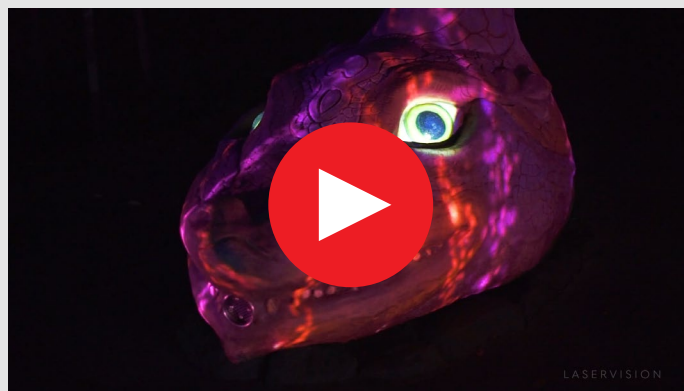


## The Making of PANTHER: From Concept to Tour



ICYMI: Learn more about the people who were instrumental in the creation of PANTHER as you get a behind-the-scenes look at Meyer Sound's newest linear line array loudspeaker. Join Meyer Sound on a trip through the year-long design, engineering, and manufacturing of PANTHER, the sound system that is now supporting Ed Sheeran's "+ - = x" ("Mathematics") stadium tour.

## LASERVISION Takes Visitors on a Luna Light Journey



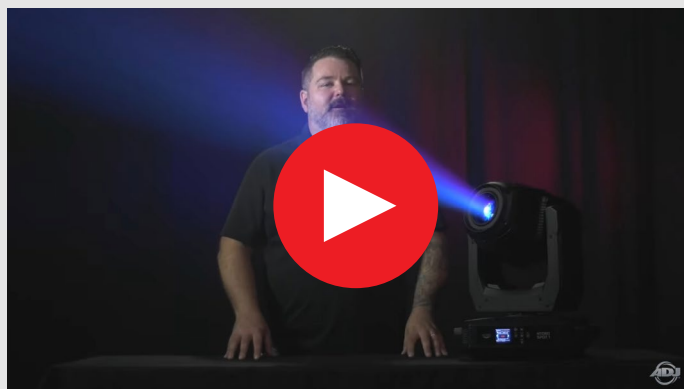
The Albury Botanic Gardens undergo a nightly transformation as part of the wintertime community event "AURORA," which uses brilliant lasers, holograms, vivid lighting, immersive acoustics, and a variety of other sensory mediums to reveal nature's lively soul and awaken mysterious creatures.

## Claypaky TAMBORA FLASH



Based on two strips of extremely potent white LEDs and a wide beam angle aperture, TAMBORA FLASH add lighting impact to any performance. Four massive centre RGBWW LED reflectors with 100W each, individually programmable in each function via Advanced Layers Management, are used to achieve the blinder and wash functionalities.

## ADJ Hydro Spot 1



The Hydro Spot 1 is a flexible, LED-powered spot fixture that is a member of ADJ's well-liked Hydro Series of reliable IP65-rated automated luminaires. It is perfect for producing transient events indoors and outdoors in any climate, from arid festivals to chilly, rainy winter attractions. Its sealed casing design shields its internal components from dirt and grime, reducing the need for routine maintenance and extending operational life.

## Life Inside a Digital Console



Allow me to start by saying, that I don't think any of the currently available digital console platforms really fully supports the engineers in their natural habits and way of working as is. We all have to learn our way around the console and the "cool guys" know how to operate these complex machines. I

don't think that this is the way it should have happened, but what can you do, when the people driving the developments, are people who count bits and bytes and know everything about zeros and ones, but not so much about audio, work flow ergonomics, audio engineering.

The reason for the column in this issue is, that even if you go digital and then theoretically there is no worry about loss of signal and gaining noise floor, this does not absolve you of thinking about what happens to your audio signal. Let's start by evaluating the critical components in the analogue signal chain. In any digital console, the Mic Preamp and the A/D converters and D/A Converters are the most critical electronic components and they solely define the max dynamic and signal to noise ratio. Of course, those two are the components to look for and check, when you are shopping.

Even if your internal dynamic range is extremely high, possibly in the 200 dB range or more, once you are in the digital domain, the overall dynamic range of the console is defined and mostly limited by the electronics component that do any amplification and then the conversion from analogue to digital and back. Of course the higher the dynamic range, the better and also the more expensive a chip becomes. Other factors in the quality assessment of the converters is the supported SAMPLE RATES and of course the LATENCY that the converters bring to your signal.

There seems to be a common believe, that once you are digital, there is nothing that can go wrong. This could not be more wrong, especially so in a digital MIXING console. A single mono signal or a simple stereo signal

will not show you any relevant information about the mixing algorithms. Adding signals is not just adding up bits and bytes and understanding this, allows console manufacturers to really make a difference in what processing they are offering inside the console.

Historically the first digital consoles have been built around digital chips that were dedicated to Audio Signal processing, the DSP (Digital Signal Processing) chips. Then immediately of course there was the question on how much money can you spend and how good would the signal processing get and what capacity would those chips have for large scale processing requirements. And you will always run into limitations very early on, so what is there to do? We have been rather reluctant to look and develop alternatives, but some smart people figured out that there are extremely fast chips out there, that can do anything that you want them to do, you just have to teach (program) them to be able to do this. Once the initial results showed promising results, this platform was wholly embraced and this is now what most larger scale consoles are based around. Those are the now famous FPGA (Field Programmable Gate Adapter) chips. An FPGA is essentially just a computing chip with extremely fast computing capabilities. This leads to rather flexible architecture and very good latency results, since it is the software that defines the layout and the speed of processing is so fast, that the added latency is mostly negligible versus the latency from the A/D and D/A converters.

This is where it gets really exciting now, since manufacturers and developers now are able to create their own algorithms for how to add, mix and process signals and you are able to create your own signature and "sound" even if you are in the digital domain. This has opened up a new and very creative field for manufacturers to get involved in and to deliver their own signatures through developing their own algorithms. This is actually a very good reason to get excited about digital audio after all. Lots to be learned and great stuff to be experienced when you listen carefully.

**Join the conversation and share your thoughts with Alex. Alex can be reached at [alex@asaudio.de](mailto:alex@asaudio.de)**



## Sound Devices Unveils its New A20-RX Wireless Receiver Featuring SpectraBand Technology



The A20-RX is a two-channel, true diversity receiver that delivers an ultra-wide tuning range, providing reliability and flexibility across a range of applications.

The A20-RX is the second product in Sound Devices' first wireless product line and is compatible with both A20-Mini and A10-TX transmitters. The A20-RX is compatible with all tuning ranges of the full-size A10-TX and is SuperSlot compatible with an SL-2 SuperSlot Wireless Module and 8-Series mixer-recorder. With exclusive SpectraBand technology, which eliminates the need for purchasing different wireless receivers dedicated to specific frequency bands, the A20-RX receiver and A20-Mini transmitter possess an unprecedented tuning range: 470 MHz - 1525 MHz.

The A20-RX also features high-discrimination front-end filtering and Frequency AutoAssign for a faster setup. While tracking filters are common in wireless receivers, the A20-RX uses superior low-loss, brick-wall SAW filters to deliver excellent performance in noisy RF environments. These built-in filters also provide excellent

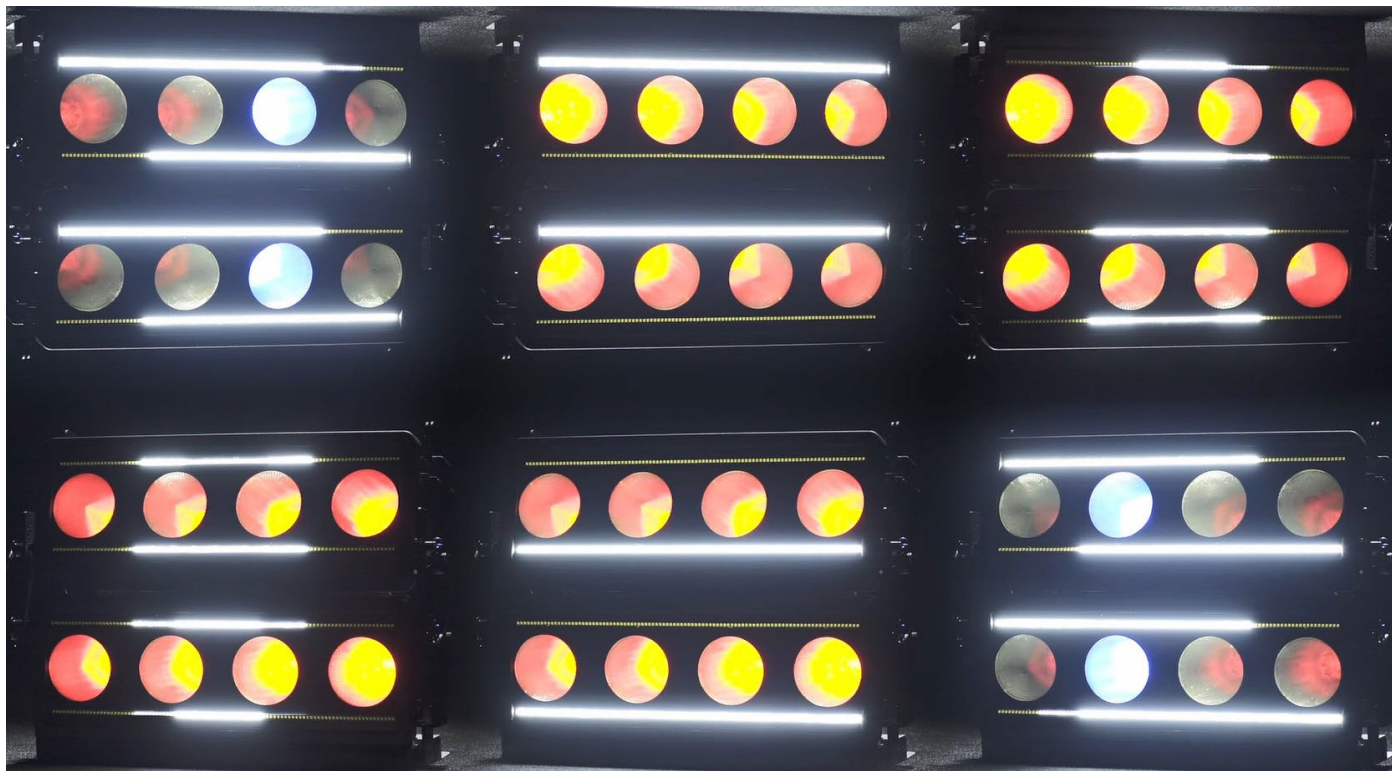
immunity from nearby IFB or camera hop transmitters without the need for external filters or extra cabling. The AutoAssign feature scans a user-designated tuning band and selects available frequencies for the A20-RX's two channels. This feature is designed to make frequency selection and setting quick and easy.

The A20-Mini transmitter is receiving a free firmware upgrade to enable SpectraBand when used with the A20-RX. Additionally, the release of the A20-RX coincides with supporting firmware for the A20-Mini, A10-TX, 8-Series, SD-Utility and A20-Remote. To download the supporting firmware, click [here](http://www.sounddevices.com/download) [www.sounddevices.com/download](http://www.sounddevices.com/download)

Sound professionals with the previous model, A10-RX, can upgrade the hardware of their receivers to the A20-RX for a reduced price if they purchased their A10-RX within the last 12 months or an A20-Mini since June 1st. The upgrade program lasts until the end of 2022.

**The A20-RX is available for purchase worldwide.**

## Make an Immediate Impression with Claypaky TAMBORA FLASH 3-in-1 Trailblazer



Following the successful launch of its range of LED bars last year, Claypaky has now added the TAMBORA FLASH to the Tambora family. The FLASH is a static hybrid strobe/blinder that may also function as a wash. It was created using a modular approach for usage in a linear array to provide lighting designers with additional creative choices.

Tambora FLASH was conceived and developed with the idea of making several product units combinable horizontally and vertically, to obtain clusters that are conceptually like the line arrays of audio systems. Its main unit, which works well in smaller settings, is included in a modular design that allows for easy connection to bigger units for usage in stadiums and other arenas.

A large beam angle aperture and two strips of extremely powerful white LEDs make up the strobe section, which can add a significant amount of light to the performance. Four large central RGBWW LED reflectors of 100W each, independently programmable in each function via the

Advanced Layers Management, are used to achieve the blinder and wash functionalities. Pixel mapping and strobe are split into 8 unique areas per line, creating 16 in total.

To accommodate every application, the FLASH includes two quick coupling modes and the ability to rotate each fixture within the cluster by 30°.

Warm White LEDs enable the customary “warm” effect found in blinders. However, for a more dramatic impact than usual, the blinder effect can also be achieved by employing coloured LEDs.

Both the strobe and blinder effects are so eye-catching that they can be seen in live performances and concerts even with bright sunlight. The luminaire comes with an IP66 degree of protection, so there’s no worry when placing it outdoors.

[Claypaky/Tambora FLASH](#)



## ADJ Focus Flex is Lightning Fast and Extremely Bright



The Focus Flex, a member of the ADJ Focus Series, provides reliable performance, superb build quality, and affordability for which the line has become renowned. Focus Flex's motorised zoom enables remote adjustment of the beam angle between a wide 35° (57° field angle) and a narrow 4° (6° field angle), enabling the creation of both broad washes and concise beams. With its lightning-fast motor movement and 16-bit fine motor control, the fixture is capable of producing breathtaking, high-impact aerial effects.

Seven potent 40W 4-in-1 RGBW colour mixing LEDs are used to power it, and they are arranged in an array behind a precisely engineered lens assembly. Red, green, blue, and white main LED colours can be combined to generate a wide range of output colours that can be tailored to any mood or desired aesthetic. The fixture may be used to create stunning pixel-mapped effects by individually controlling the seven LEDs.

The fixture includes a handy Virtual CMY mode that enables control alongside native CMY colour mixing fixtures using hardware/software CMY colour picker/palette tools. The fixture is pre-programmed with 64 colour macros to speed up programming. It also offers Virtual Foreground and Background Color Wheel control as well as white light output with variable colour temperatures ranging from 2700K to 10,000K. Either linear control or a set of 10 useful presets can be used to access this.

A large backlit LCD menu display, with six corresponding push buttons, is located on the front panel of the fixture. It facilitates easy DMX addressing as well as customization of the fixture's various operating parameters. The unit offers a choice of seven DMX Channel Modes (16 / 25 / 34 / 42 / 50 / 25 [CMY] and 28 [CMY]) and also boasts a USB service port, located on the front panel, which can be used to easily load future firmware updates.

The fixture offers a wide variety of customizable options, allowing it to be tailored to a user's personal preferences or the specific requirements of a particular application. These include:

- 5 selectable dimming modes
- 4 selectable Dimming Curves
- An adjustable Dimming Speed (between 0.1 and 10 seconds)

The LED Refresh Rate can also be adjusted using 10 presets to eliminate flicker for broadcast or video capture applications and fan speed can be limited (independently for the head and base) for applications where near silent operation is required. All these customizable parameters can be altered via DMX as well as directly from the LCD menu interface.

Locking power input and thru connections are included on the rear panel, allowing the power supply for multiple fixtures to be connected to a single outlet. The rear of the unit is also home to 5-pin DMX input and output sockets as well as a wireless transceiver compatible with ADJ's WiFLY EXR wireless DMX protocol, allowing it to receive a DMX signal wirelessly from a compatible WiFLY transmitter or another WiFLY-equipped fixture over a distance of up to 2500 ft. / 700m (line of sight). The fixture also supports the RDM protocol, which allows for remote DMX addressing and the feeding back of fixture operating status information to a compatible DMX control solution.

[ADJ/Focus Flex](#)

## JBL Delivers Big-System Clarity in Compact Form with New Additions to Flagship VTX Series



The newest members of JBL Professional's flagship VTX line array series, the VTX A6 subcompact dual 6.5-inch passive line array element and the B15 compact, arrayable 15-inch subwoofer bring JBL's top acoustic technologies to compact form factors for small- to medium-size touring and fixed installations. For anyone who requires superior sonic performance in space-critical applications, the new additions provide versatile solutions for production companies, touring acts, rental houses, theatres, and houses of worship.

The **A6 6.5" passive two-way line array element** is engineered from the ground up for stunning sonic performance and ease of integration and deployment, as a standalone system or as a supplement to larger VTX systems. It houses two custom 6.5" woofers and a 3" annular-diaphragm compression driver and features acoustic innovations pioneered in JBL's VTX line, including JBL's patented Radiation Boundary Integrator (RBI) and Differential Drive dual-voice-coil, dual-magnet woofer. It all adds up to a big-system performance in a low-profile loudspeaker, with low-frequency extension to 67 Hz and 134 dB max SPL.

Extend the low-end range of VTX full-range systems with the **VTX B15 15-inch subwoofer**. The B15 features acoustic advancements such as SlipStream double-flared exponential ports and Differential Drive dual-voice-

coil design and is based on JBL's new 2285H 15-inch woofer, which is engineered for linearity, efficiency and excursion that rival 18-inch models. Two B15 versions are available: the arrayable B15 and the B15G, which are designed without rigging hardware for ground-stacked applications.

Both the A6 and B15 are designed for versatile rigging and effortless system integration. The A6 uses the VTX A Series' patented rigging system for accurate, easy deployment. Set splay angles while components are on the ground; once the system is suspended, a locking mechanism automatically secures cabinets in designated positions. The B15 has the same cabinet width and suspension hardware as the A6, allowing the two products to be used together in flown and ground-stacked configurations; the B15 supports cardioid array configurations.

Streamline system operation and share information with teams in real time using JBL's suite of software tools, including the LAC-3 design application, the Array Link deployment tool and the Performance Manager configuration and control application. Simple, intuitive user interfaces let users design systems in minutes and manage functions from anywhere.

[JJBL Professional/VTX A6 Sub-compact Dual 6.5-inch Line Array Element](#)



## Adam Hall Hardware AIRTAG HOLDER Allows Flexible Use of Apple AirTags in Flight Cases



A lost suitcase at the airport – annoying. A lost (or even stolen) flight case with expensive professional equipment – is annoying, and also costly. To avoid this kind of thing happening, trackers such as Apple AirTags are a great way to locate and track items. For use with flight cases, Adam Hall Hardware has now developed its mount that can be attached to a flight case in a variety of ways: via screw, adhesive or Velcro tape, strap or cable tie.

Adam Hall Hardware AIRTAG HOLDERS are made of shatter-proof ABS plastic and offer optimal protection without compromising the function of a flight case. Thanks to their flat and compact design, an AIRTAG HOLDER can be placed almost anywhere on and/or inside the flight case. This allows the Apple AirTag tracker to be used in conjunction with an iOS device in a variety of ways:

- Bluetooth tracking makes it easier to keep track of flight cases with an integrated AirTag at an event or in the warehouse
- Once the AirTag is moved and away from its registered user for a certain amount of time, it makes a sound to draw attention to itself
- The Apple "Find My" app can be used to locate lost AirTags

### How do AirTags work?

To track an AirTag, an iPhone or iPad with iOS 14.5 or higher is required. In close range (Bluetooth LowEnergy), the iPhone/iPad shows the direction and distance to the AirTag via the "Exact search" Apple function. If the AirTag is outside the Bluetooth range, the exact location can be seen in the Apple "Find My" app as soon as any other Apple device receives the Bluetooth signal from the AirTag.

In this case, the location is forwarded to your iCloud. If you also set the tracker to "lost mode", the contact data can be sent to people in the vicinity of the AirTag via NFC (Near Field Communication). The battery life (1 x CR 3032 button cell) is stated to be one year on average.

Adam Hall Hardware AIRTAG HOLDERS are available now.

### [Adam Hall/AIRTAG HOLDER](#)

## Versatile and Punchy ADJ Hydro Spot 1 IP65-Rated Moving Head Now Available



With its small size and punchy output, ADJ's new Hydro Spot 1 IP65-rated moving head spot fixture is perfect for a variety of applications where space is at a premium but vibrant light output is also required. These include open-air stages with low ceilings, smaller outdoor dance areas and theme parks.

This versatile fixture is also a great choice for indoor applications where access to fixtures is limited; with its sealed casing, the unit's internal components are protected from dust and grime, allowing for a significantly reduced maintenance schedule.

Harnessing the power of a potent 200W cool white LED light engine, focused through precision-engineered optics, the Hydro Spot 1's efficient LED light source is much brighter than a traditional incandescent bulb that uses the same amount of power, while its 50,000 hours of expected operational life essentially makes lamp replacement a concern of the past.

An extensive feature set provides lighting designers using the Hydro Spot 1 with a wealth of creative potential. This starts with motorized zoom, allowing for a variable beam angle of 11° ~ 22°, which is paired with motorized focus to ensure pattern projections remain

sharp regardless of distance. This versatile fixture is equally suited to creating wide break-apart pattern projections on stage sets, dance floors and other surfaces as it is to generating razor-sharp aerial effects.

Two independent colour wheels, each loaded with 8 dichroic filters + open white, provide lighting designers with a wide selection to choose from. These include a mixture of vibrant primaries and subtle pastels, as well as useful CTO, CTB and UV filters. In addition, there is a separate GOBO wheel, which has 6 slots for replaceable, rotating glass or aluminium GOBO patterns (size: 23mm [outer] / 19mm [viewable]).

The fixture offers two rotatable prisms, which are both indexed and bi-directional, for multiplying the beam to create wider pattern projections or mid-air effects. It also offers the choice of two internal frost filters. The Medium Frost is ideal for giving a soft edge to GOBO patterns and prism effects, while the Heavy Frost can be used to generate a wash output. Finally, the LED engine provides 16-bit fine control over dimming, which allows for extremely precise intensity alteration, while variable speed strobing effects can also be created.



Three DMX channel modes are supported by the fixture (19, 22 or 26) and it is also compatible with the RDM protocol, which allows for remote DMX addressing and the feeding back of fixture operating status information to a compatible DMX control solution. DMX addressing as well as customization of the fixture's various operating parameters is facilitated via a large, colour reversible LCD menu display, with six corresponding touch buttons, located on the front panel of the unit.

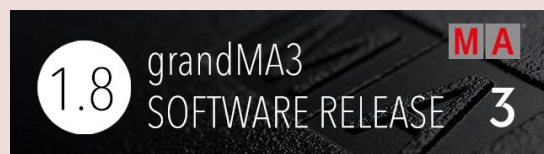
A wide variety of customizable options are offered by the fixture, allowing it to be personalized to a user's preferences or the specific requirements of a particular application. These include six selectable dimming modes (Standard, Stage, TV, Architectural, Theatre and Stage 2), four selectable Dimming Curves (Square, Linear, Inverse Square and S. Curve) and adjustable dimming speed (between 0.1 and 10 seconds).

In addition, the LED Refresh Rate can also be adjusted using a variety of presets (ranging from 900Hz to 25,000Hz) to eliminate flicker for broadcast or video capture applications and fan speed can be limited, independently for both the head and base (with options for Low, High or Auto), for applications where near silent operation is required. All these customizable parameters can be altered remotely via DMX as well as directly from the LCD menu interface.

Weighing in at 35.2lbs (16kg) and with dimensions of 9.49" x 14.57" x 19.21" (241 x 370 x 488mm) [L x W x H], the Hydro Spot 1 is very compact for an IP65-rated fixture. It is supplied with rubber feet to allow it to stand directly on a stage or riser and is also supplied with a pair of Omega brackets that can be used to attach clamps for truss mounting. On the rear panel are IP65-rated locking power input and output sockets (to allow multiple fixtures to be connected to a single outlet), 5-pin DMX input/output sockets, and a USB port (to facilitate simple future firmware updates), all of which feature rubber caps to offer added protection when not in use.

#### ADJ/Hydro Spot 1

## MA Lighting caters to lighting users of all genres with upgraded grandMA3 software



The grandMA3 software is the soul of the grandMA3 platform and is designed to meet current and future lighting control requirements. The new software version 1.8 presents massive workflow improvements and new functionalities in the following areas:

- New workflow for symmetrical movements
- Selection Grid tools
- Multipatch
- Additional Store modes
- Reworked Update menu

In addition, lots of already existing features have been taken to the next level. For example, the DMX tester is equipped with encoder bar control and the entire grandMA3 system can be set up offline with the help of device configurations.

XYZ programming is now more powerful than it ever was with the introduction of fading between Markers and even between XYZ and Pan/Tilt positions in the same sequence. The manual cue mode in the Content Sheet and the reworked LUA editor are just some more examples of a big variety of new features and functionalities.

Additionally, the MA E-Learning with the grandMA3 special course v1.8 presents detailed information about the new software release. Speak to your local MA distributor to get access to the MA E-learning platform. The upgrade can be downloaded for free and the complete list of features and enhancements as well as video tutorials can be found in the link below.

[MA Lighting/grandMA Software Upgrade](#)

## AUSTRALIASIA

# Ed Sheeran Takes Sennheiser Digital 6000 On the Road

*Sound quality, robustness and unrivalled support are guaranteed by the audio specialist for the world's favourite artist's latest tour.*



*On his Mathematics tour, Ed Sheeran performs with a Digital 6000 handheld coupled with an MM 435 capsule @Zak Walters.*

Sennheiser has been an essential part of Ed Sheeran's touring inventory since the start of his career, with his long-time production company, Major Tom, providing Sennheiser's flagship Digital 9000 system for him in recent years. Now on a tour passes through some of the biggest venues in the world, including New Zealand's Eden Park and Australia's Accor Stadium, and with a show that has expanded significantly from his one man and guitar days, a switch has been made to Sennheiser's Digital 6000.

"Digital 6000 delivers the same sonic excellence, but with added flexibility," said RF engineer Dave White. "The 9000 Series served us incredibly well, but with large

shows on multiple nights with a band and the addition of guest artists, we needed some extra flexibility. The 6000 system, coupled with the extension of Sennheiser's Wireless Systems Manager application and a wider bandwidth, provides us with that."

Digital 6000 Series transmitters are coupled with a Sennheiser MM 435 capsule for Ed's vocals, chosen for its cardioid polar pattern, and a 945 capsule, a favourite for many years because of its tight pickup pattern, for his loop vocal. "The 435 is a specific choice for this tour as we have a lot of PA and don't want any spill," says White. "Although Ed is close to the mic for a lot of the time, he's dynamic in the way he uses it and the 435 allows a little bit more range and pick up."





RF engineer Dave White monitoring the Digital 6000 receivers  
©Zak Walters.

There are a total of 16 channels of Digital 6000 for Sheeran's guitars (of which he has five in rotation), three main vocal mics (a main and two spares) and three loop vocal mics (two main and one spare). Sixteen channels of Sennheiser 2050 IEMs are used for Sheeran and his band, which comprises drums, bass, two guitarists and keys, who are positioned on 'islands' in front of the PA and also use a selection of Sennheiser dynamic mics. "We always carry spare mics for guest vocals and instruments because you never know what's going to happen on this tour," smiled White. "At the moment we have a fiddle player with us who comes on for just one track, and Gary Lightbody from Snow Patrol came in for one show."

The Sennheiser system is coupled with a Meyer Sound Panther PA, the "first in the world" to be used on a tour, and DiGiCo Quantum 7 mixing console, from which Sheeran's production manager, Chris Marsh, mixes both FOH and monitors.

Along with robustness and stability which are the reason White has trusted in Sennheiser products for many years, he finds the fact he can use Digital 6000 as a wideband RF scanner extremely useful, which negates the need to carry an external scanner.

"Sennheiser's support is also great, and what we've had from the team for this tour has been really helpful," White concluded. "To give us the best coverage throughout, we've got over-stage antennas and walkway antennas



Chris March mixes both FOH and monitors ©Ralph Larmann.



with splitters and combiners. It's a complicated system, so we really appreciated the help we got from the Sennheiser team, including Jonas Naesby, Marcus Blight and Volker Schmitt, who joined us for the start of the tour in Dublin to make sure the system was responding correctly. I learned a lot from them. Peter Craig from the relationship management team was also really helpful, and we always appreciate Pierre Morant, who's been supporting us for years.

"Sennheiser always hits the mark in every way, which is why we've used their mics and IEM for years. They have a very logical way of attacking problems, and the kit is stable and reliable with a great sound. And that is exactly what you need."

**Sennheiser**

## AUSTRALIA

# RF Venue CP Beam Antenna Ensures Announcers are Loud and Clear for Vintage Hot Rod Event

*In Phase Productions had struggled with dropouts and other wireless anomalies, but the RF Venue CP Beam Antenna assured that announcers were able to be heard clearly and completely at this large-scale hot rod run on the beach.*



The vehicles are most definitely vintage, but the event is relatively new: Rattletrap, an enthusiastic convocation of owners of classic pre-1941 hot rods and motorcycles (patterned after the classic U.S. event The Race of Gentlemen), had its first few pilot outings on the beach at Crowdy Head, New South Wales, Australia, in January 2016. They were followed by the first official Rattletrap event that May, and ever since then the now annual event, organized by the Drag-Ens Hot Rod Club, has drawn dozens of pre-World War II hot rods and motorcycles running races up the beach as thousands of spectators cheer them on.

The events include bracket sprints, grudge matches, and an Exhibition Class for unique or historic vehicles.

But with that much metal and the growing number of wireless devices that the popular event deploys each year, the event's RF microphones – used for announcers and other applications – have grown increasingly challenging to handle. Luckily, a solution was achieved in the form of RF Venue CP Beam directional antennas from the company's line of wireless audio essentials.

This year's Rattletrap saw crowds returning to the event in greater numbers. Tom Benson, general manager at Port Macquarie, NSW-based integrator In Phase Productions, said he had been struggling with his older omni antennas, having to use line amplifiers to boost their signal. He became frustrated with excessive





dropouts and interference issues plaguing his outdoor sporting events.

Many of his events, such as Rattletrap, require a large coverage area and wireless mics to be further away from antennas, which themselves had to be constantly moved around to keep the announcers' microphones from being overwhelmed by engine noise. After consulting with RF Venue's experts to find a solution, however, Benson decided to upgrade his wireless setup with a pair of CP Beam directional antennas. These enabled him to eliminate the old line amplifiers and focus the signal exactly where it needs to be at all times.

With this new antenna setup, Benson was able to deploy his wireless rig, utilizing multiple wireless mics, seamlessly and successfully for the Rattletrap 2022 at Crowdy Head. Even at distances of as much as 400 m— over 1,300 ft— all things RF went smoothly from beginning to end using the newly acquired CP Beam antennas.

"We set up early and built the perfect mix position and antenna placement in the lifeguard tower," Benson explained. "It was high tide and the beach was covered so we had to dodge the waves to set up, but by 10 a.m. the tide was out and there was enough beach to start. The event finished about 3:30 p.m. when the tide came back in, and everything worked extremely well, including — and especially — the CP Beam antennas. They made all the difference."

#### RF Venue

## SAUDI ARABIA

# Robe BMFLs Emulate the Grandeur and Ambiance of a Classic Big-Top for Cirque du Soleil

*Multi-purpose BMFL luminaires bring the narrative of two best friends to life by stunningly and safely lighting the legendary acrobats of Cirque du Soleil.*



“Fuzion” is a sumptuous specially commissioned brand-new Cirque du Soleil production that was staged at the King Abdallah Sports City (KASC) stadium in Jeddah for the 2022 Jeddah Season Festival. FUZION was 10 months in development from conception to production, with a two-week load-in and installation period at KASC. An overwhelming success, the show is a tribute to the company’s innovative creative legacy and celebrates its most iconic acrobatic and theatrical performance achievements.

Directed by Mukhtar Omar Sharif Mukhtar with creative direction by Stefan Miljevic, the lighting and set were designed by Mikki Kunttu who used 186 x Robe BMFL moving lights – making up half of the lighting rig. These

helped deliver a stunning and entertaining show that had audiences clutching seat edges while engaged with the action!

Mikki was based in Montreal Canada at Cirque du Soleil’s international HQ immediately for the two years before the pandemic when he returned home to his native Finland and relished being onboard and again working with a diverse and highly talented team. He added his creative magic to this production which ran for 32 intense action and adrenaline-packed 75-minute performances.

The lighting brief included making an “elegant, theatrical, and vivid” impact, to recreate the splendour and





IMAGES CREDIT: © Mikki Kunttu.

atmosphere of a classic big-top whilst ensuring that each guest experienced a similar sense of intimacy as experienced in a classic big-top setting.

The show narrative was based on the adventures of two best friends, Antonio & Sebastian, who, with the world in need of more creativity, friendship, and love, embarked on a quest to create magical universes in which these can flourish.

Very strong lighting visuals were at the core of the overall concept, so Mikki was “delighted” to work with 127 x BMFL Blades and 59 x BMFL WashBeams as the primary lighting fixtures, supplied by lighting vendor, PRG Middle East.

“The BMFL is a fantastic multipurpose fixture and I think it was a game-changer in so many ways. It’s still a great workhorse, widely recognized worldwide and you know what to expect in terms of quality and excellence.”

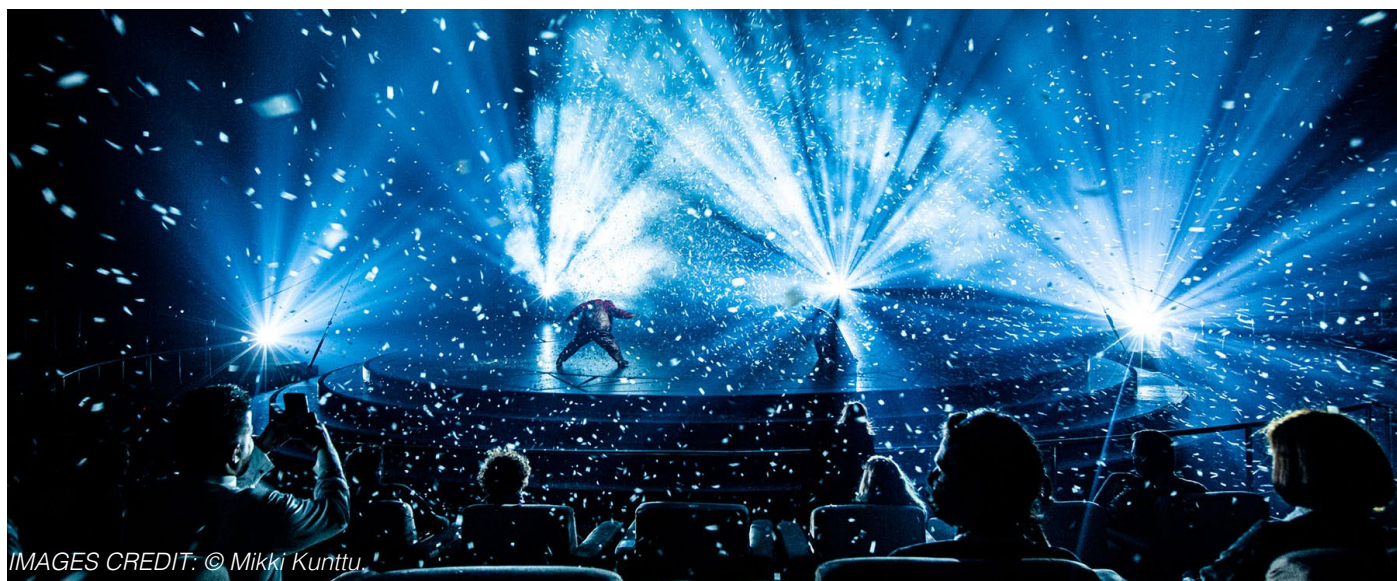
The set and lighting design took ‘big-top shows’ as a starting point, working with a similar shaped stage as classic Cirque productions with stage and lighting rigs shaped to accommodate acts like the Wheel of Death combined with the close proximity of a 270° audience. Unlike a traditional big-top venue where the rigging, flying and access are restricted by the nature of the construction, the Jeddah venue gave them maximum flexibility with all the space and production facilities you could dream of.



IMAGES CREDIT: © Mikki Kunttu.

While Mikki needed plenty of power and brightness to light the show in that ample space, there’s a definite art to lighting acrobatics which entails extreme attention to detail, total accuracy and diligent programming to ensure ultimate safety as well as drama!

There must be sufficient light for the aerial and other artists to see each other and their various grab-points and props safely, with all the simultaneous crowd-



pleasing lighting effects expected of a nail-biting, high-octane Cirque extravaganza.

“Safety and making it look awesome are both critical elements naturally and I always try to deliver both within the same solution. The safety factor is not an add-on, but an integral part of the design from the outset,” noted Mikki and attaining this successfully is a lot more complex and difficult than he ever makes it appear onstage!

FUZION was the first time he had used Robe BMFLs to light this style of show – although he’s used them on several other productions – and he was “extremely satisfied” with the results.

All the BMFLs were positioned at the back of Cirque’s custom circular trusses – commonly referred to as ‘the piste’ – and rigged above their circular stage on LX bars 1 and 2, and they were not used in any sort of conventional way!

The reason for opting for the classic front lens type fixtures instead of LED-faced ones is the simple fact that as LED-faced wash lights have multiple lenses on the front, their potential blinding effect on the artists cannot be so effectively controlled and is very difficult to predict. This detail plays an important role in lighting aerial numbers with no safety lines or nets like flying trapeze and also for the wheel of death or ‘banquine’ routines. Lighting acrobats safely and spectacularly is one of the most challenging tasks in entertainment.

Doing it successfully is “all about homework and meticulously watching the act to see the way they move, how they interact with each other and the technicians and what they need to grab at precise moments. It’s about studying both the technical and the artistic sides of each act and then putting those parameters together with your creative approach,” says Mikki.

He worked alongside two programmers Matti Leinonen on lighting and Alex Hautamäki mainly on video and some lighting, all three using grandMA2 light consoles. Video content was designed by Olivier Goulet, and Matti remained in Jeddah to run lighting and video for the Season Festival duration.

Marie-Josée Adam was the executive producer/head of creation. Props were designed by Madeleine Bernatchez and included a disappearing tent comprising 28 x 22-metre-long fabric panels that ‘evaporated’ in seconds! John Caran and Geneviève Dorion-Coupal were the acrobatic choreographers, and the acrobatic performances were designed by Germain Guillemot.

The musical director, composer and arranger was Hugo Montecristo, with music played live by a 6-piece band. One hundred and fifty people in total were involved in the creation and production, with 25 technicians running the show and 39 cast members from 13 different countries and every continent.

**Robe**



## SINGAPORE

# d&b audiotechnik KSL Ensures Singapore's Strength is Heard Throughout the Land

*The celebrations at The Float @ Marina Bay began and were beamed live on television across Asia and around the world.*



Millions of Singaporeans celebrated their National Day Parade 2022 on 9 August, with events taking place across the island. The focal point of the festivities was The Float @ Marina Bay, where marching bands, live performances and the National Day theme song 'Stronger Together' were heard via a d&b audiotechnik KSL system flown high above the stage.

The 'Strength of the Nation' segment, included a display by the Singapore Armed Forces, followed by a choir performance of the NDP 2022 theme song and a mix of live performances and films marking Singapore's history.

"This was the first time we used the d&b KSL system for the National Day Parade (NDP), having used d&b J-Series in previous years, and I was impressed by both clarity and coverage," said Peter Loh, technical director, NDP 2022, who has worked on the parade and show eleven times. "I just loved everything that came out. The character of the sound was great – I asked the sound engineer and sound designer to up the game for this show, to challenge them to get the best out of the d&b KSL system, and they did it with brilliant balance."



Commissioned to help specify and supply the d&b system for the NDP was Singapore-based Showtec Group, with Danial Rawi Bober, NDP 2022 audio project manager, Showtec Group, at the helm.

"I've listened to a lot of speakers, but the d&b KSL system offers fantastic, accurate coverage and even dispersion, which was key for this event," said Bober. "We needed a powerful system to transfer the sound to the audience over a large area and in an open-air, outside setting, and the KSL system with its maximum SPL of 145 dB was the perfect choice."

Rigged in a left-right position on crane-like truss towers on the specially constructed main stage at The Float, with beautiful views of the harbour and the famous Marina Bay, were d&b KSL8 loudspeakers in a line array formation. Further KSL12 loudspeakers joined the flown line arrays, along with d&b SL-SUB subwoofers. Showtec's existing d&b J8 were used for infills and a series of Y7P loudspeakers on delay poles.

For monitoring, the team positioned d&b M4 2-way high-performance monitors on the stage for accurately defined coverage for performers. A series of KSL8

loudspeakers and SL-SUB subwoofers were also 'hidden' as ground stacks, out of direct view of the audience or cameras, to maintain sightlines and the aesthetic of the staging and set design. The entire d&b system was powered by 63 d&b D80 amplifiers. Developed with energy efficiency in mind, the d&b KSL system can provide equivalent sound pressure output levels with reduced power requirements when paired with the d&b amplifiers.

Shah Tahir, sound designer, NDP 2022, has enjoyed an extensive career in theatre and events audio and has served as a sound designer for the NDP for ten years. He worked closely with the technical team to design speaker placement and tune the sound. "This is probably the biggest show for me and quite a challenging one every year," he noted. "If you look at a floating platform at The Float, you can understand why. There's such a big gap between the left and the right towers, but it's vital for the sound to be clear for the parade ceremony, which is the main component of the NDP."

"The entire NDP team wanted this to be a celebration – especially after the pandemic – and therefore, the sound needed to be full of dynamics and enthusiasm, to





reproduce the emotion of the performances, speeches and this year's theme song. Using the new d&b KSL system, we managed to balance out the coverage despite the restrictions and space between the towers and achieve even better tonal quality and volume than we've ever had before."

Tahir and the team utilised the d&b ArrayProcessing and ArrayCalc software to design the system for NDP, creating a solution that, as Tahir mentioned, helped to "smooth out the volume from left to right and provide consistent coverage" across the venue and fine-tune what different areas would hear.

"The system actually looked quite small when we rigged it all, but I continue to be impressed by the volume, coverage, punch and quality from cabinets with a relatively small footprint," added Tahir. "The KSL system delivered everything we wanted."

"The thing about Marina Bay and The Float is that it's situated right in the middle of quite a built-up area of hotels and skyscrapers, as well as open water, so we need a lot of control over sound dispersion and coverage," explained Daryl Michael, NDP 2022 audio system engineer, Showtec Group. "When we first fired up the system and walked on the stage to listen to the d&b KSL system, it's probably one of the most amazing

things we've heard - having all that sound control, going to one place only, and not bleed into all the hotels around us is pretty amazing."

Michael collaborated with Tahir in ArrayCalc to design the KSL line array system, explore the acoustic response of the space, and predict the performance of the loudspeakers in the outdoor, downtown environment, using the d&b R1 Remote control software to generate a simulation from which to cement a solution.

"We certainly wanted to pull this event off because it was the first big national celebration following pandemic restrictions, and it was going to be watched by

thousands at The Float as well as millions in Singapore and around Asia on TV," Michael continued. "Therefore, ArrayCalc really helped us predict the conditions and performance of the system, informing the sound tweaks and system design. The Marina Bay area can be exposed to lots of wind, affecting high frequencies, and with temperatures edging to 30 degrees Celsius, we needed to consider heat and humidity. ArrayCalc helped us remove the guesswork and save lots of time on-site.

"The NDP also required absolute clarity of sound mixed with high impact punch – it's often the case that large amounts of big loudspeakers in an outdoor environment leads to muddiness, but with the KSL system, we delivered clear sound across the entire floating stage platform and into the audience seating area."

Anand Narayanan, president and CEO of d&b audiotechnik Asia-Pacific, added: "We consider it a great honour and a privilege to be associated with the Singapore National Day Parade and in having supplied the latest high-end audio technology solutions to this special event. We would like to express our gratitude to our partner, Showtec Singapore, for having the vision to invest in the d&b KSL Series and make it available, and to the National Day Parade technical team and organising committee for collaborating with us to deliver a unique listening experience."

d&b audio

## SINGAPORE

# SIFA Appreciates L-Acoustics' Clarity for Singapore Chinese Orchestra Opening Performance

*In a vast power station, object-based live mixing from L-ISA Immersive Hyperreal Sound provides clear audio for music and vocals.*



For the first time in two years, the Singapore International Festival of Arts (SIFA) returned to the metropolitan island of Singapore in Southeast Asia. The event, titled The Anatomy of Performance - Ritual, had more than 70 acts that were produced at seven distinctive sites and venues and all of which were designed by talented designers in various performance art disciplines. A performance by the Singapore Chinese Orchestra in L-ISA Immersive Hyperreal Sound delivered by J5 Productions served as the festival's opening act.

The Tuyang Initiative, a Sarawak-based creative agency that focuses on the cultural heritage of indigenous Borneans, and the Singapore Chinese Orchestra

performed MEPAAN to kick off the festival. Mepaan, which translates to "always" in the Kayan language of Borneo, was a sound and visual journey through the spiritual and cultural intricacies of the Kayan. Backed by an orchestral score, the 75-minute production was led by SIFA Festival Director Natalie Henedige and featured performances by Adrian Jo Milang and Mathew Ngau Jau from the Tuyang Initiative.

The show brought together costume designers, photographers, filmmakers, set, lighting, and sound designers, as well as multimedia artists to transport viewers into the pristine rainforests of Southeast Asia. It was staged in the decommissioned Pasir Panjang Power Station, a vast industrial space constructed of steel and





concrete. Jeffrey Yue of Ctrl Fre@k was chosen by SIFA to develop and oversee the audio system.

Ctrl Fre@k (<https://ctrlfreak.sg/>) is no stranger to the festival, having been the sound designer for Ryuichi Sakamoto's intimate "Fragments" concert at the Esplanade Theatres and the Singapore Symphony Orchestra's performance at the Singapore Botanic Gardens.

"When designing the audio system, I knew that the space's 30 m high ceilings and floor-to-ceiling metallic pillars would generate heavy sound reflections throughout the cavernous power station," explained Yue. The skilled sound and system designer understood that it would be extremely difficult to faithfully reproduce the orchestra with a high level of intelligibility. The job was made more difficult by the space's lack of acoustical treatment and the noticeable fan noise from the air conditioner.

Yue participated in practical L-ISA sound workshops conducted by Chung Wah Khiew, L-Acoustics Application Project Engineer for APAC, at Concept Systems Technologies L-ISA Auditorium in Singapore. Yue asked Khiew for guidance on implementing L-ISA technology for the MEPAAN performance since he was aware of the benefits of object-based mixing to produce clear, natural sound.



"Jeffrey [Yue] shared details of the MEPAAN project and the difficulties presented by the venue's acoustics. We worked together to plot the architectural set design and audience seating elements of the space in Soundvision to create an L-ISA configuration that would provide pristine clarity to the show's audience of 350," explained Khiew.

"Due to the nature of the space, different frequencies respond differently in various areas. With the orchestra's wide dynamic range, and dynamic score, achieving uniform coverage was our top priority," Yue added.



“We worked with the production team to adapt set and seating design details. We were confident that our ability to localise elements of the orchestra in the mix using L-ISA technology would bring production values to the next level.”

To achieve precise horizontal and vertical coverage that would surround the audience in sound while avoiding the venue's bare concrete and steel skeleton, the duo decided on a design based on L-Acoustics A Series.

To guarantee the precise coverage of the audience sitting area exclusively, five hangs of two A Series—one A15i Focus and one A15i Wide each—were hung at the height of 6 m. Their calculation proved effective for the application, with 94.7% of the seated audience falling inside the L-ISA zone of immersive coverage.

On the stage, where a total of 56 microphones were utilized to capture the various instruments of the Chinese orchestra, two SB28 subwoofers were placed in cardioid mode to reduce low-frequency interference. For onstage monitoring, L-Acoustics X12 and X8 coaxial enclosures

were deployed. Simplified controllers LA8 and LA4X powered the entire system. The performance was mixed using the L-ISA Controller natively integrated into a DigiCo SD5, backed by an L-ISA Processor, before output via L-Acoustics amplified controllers to the main scene system.

Cindy Yeong, Production Manager of SIFA at Pasir Panjang Power Station, thought MEPAAN was one of the best-sounding concerts she had ever been a part of after a successful run of opening performances for the festival: “I believe we would not have achieved the results we did without A Series and the L-ISA technology.”

Yeong concluded, “Composers and Singapore Chinese Orchestra management commented that object-based localisation in L-ISA helped position the individual orchestral instruments for great clarity and a high level of intelligibility.”

**L-Acoustics**



## THAILAND

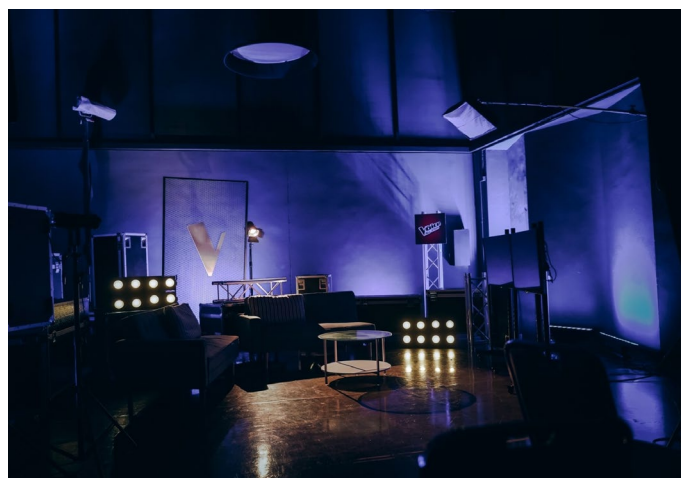
# Cameo Showcases The Voice of Performers in Beloved Music Show

*The lighting designers of The Voice of Thailand employed Cameo spotlights for the first time during the eighth season of the programme.*



The Voice is the world's most successful casting and music show. In Thailand, too, the format is enjoying enduring popularity. For the eighth season of The Voice of Thailand, the show's lighting designers used Cameo spotlights for the first time. More than 180 moving lights, spotlights and LED bars were used in the studio and live shows in Bangkok. The lighting solutions were supplied by Cameo's Thai distributor, [L&E Lighting & Equipment PCL](#)

"Cameo is a relative newcomer to the Thai event technology market," explained Arocha Kittivittayakul, product manager at L&E. "We are therefore all the





more pleased that those responsible – Pat Jareeyatana, managing director of EXIT365 Company Limited, the owner of The Voice All Stars Thailand licence, and the lighting designers Arthorn Luempetch and Junchay Baomaroeng – showed great interest in the spotlights and ultimately decided on Cameo as a brand.”

For lighting in the TV studio, the lighting designers used 48 x OPUS H5 beam spot wash hybrid moving heads to effectively set the scene on stage from the background. 9 x OPUS SP5 profile moving heads were aimed at the coaches, while 28 x F2 FC and 16 x Cameo F4 FC Fresnel spotlights were used as additional stage components for front and audience lighting. Furthermore, 18 x PixBar 500 Pros were installed on the floor to showcase the characteristic The Voice hand figures. Meanwhile, 22 x PixBar 650 C PRO LED bars at various markup points in the adjacent rooms provided atmospheric staging of interviews with the talented performers, family members and friends, and 42 x wash lights from the Cameo ZENIT Series were also positioned in the interview, backstage and green room areas.

The challenge was to illuminate the different show areas in a uniform and camera-friendly manner. As is customary with The Voice’s format, in addition to the musical performances and the jury talk in the large



studio, the events in the interview and backstage areas also contribute to the overall impression of the experience. In accordance with TV specifications, the lighting components had to deliver the highest possible CRI value, as well as a camera-friendly refresh rate with minimal noise level.

“The lighting designers have confirmed that with the Cameo spotlights, they are now able to present the artists’ performances and the scenery much more vividly than before. They are also enthusiastic about the spotlights’ functionality and flexibility, as they are now able to implement the light scenes in accordance with their creative ideas,” concluded Kittivittayakul.

**Cameo**





## **FARHAD DARUWALLA**

**Independent Live Sound Engineer  
Front of House, Monitor Mix,  
Live Recording**

***ETA SPOTLIGHT is a heart-to-heart with industry professionals from across Asia, as they discuss their foray into the business and their journey thus far, while sharing their honest opinions about key aspects like market trends, technology, upskilling and more...***

**Brief about yourself. Your Name and nickname within the industry if any, Job Appointment or Expertise, Are you working for a Company or are you a Freelancer. When did you first get involved with the industry?**

My name is Farhad Daruwalla. I'm currently an independent Live Sound Engineer. I started out in the industry working with Sound.com in 2007 where I gained a lot of experiential knowledge and amazing opportunities; for which I will always be grateful to Warren Dsouza and the entire team.

I have been an independent engineer since 2013, and I've come to specialize in Front of House, Monitor Mixing and Live Recording. I have provided sound engineering services for artists within and outside India. Some of these names include: Sachin Jigar, Sanam, Neeti Mohan, Shalmali Kholgade, Adnan Sami, Vishal Shekhar, Onempire, A Class Apart, Motherjane, Goldspot and more.

Some of the major projects I have worked on are: • Bryan Adams: Live In Hyderabad 2011 • ETH Big Band India Tour 2009 • Onempire opening for One Republic in Mumbai, India 2018 • Vishal and Shekhar North America Tour 2016 • Foreigner: Live in Hyderabad 2011 • Korn India Tour 2012 • Goldspot India Tour 2009 • Third Eye Blind India Tour 2012 • Norah Jones: Live in Delhi 2013 • Live From the Console, Goa 2012 • Artist Aloud Music Day 2012

**What got you interested in getting into the industry?**

Music has been a constant in my life since childhood and the idea of working with music, musicians, artists and helping them shape their sound is what interested me the most. The technical aspect is another factor that keeps me interested.



### **What do you feel about the industry?**

If I were to be concise, some of the key words that I'd use to describe my feelings about the industry would be: ever changing, technically evolving, challenging and fun.

What is your most memorable experience and why?

Extremely hard to mention just one. The ones at the top of my list are: • Broadcast mix for 50 Artists in 1 day as a part of Artist Aloud World Music Day 2012. • Mixing Front of House for 'Onempire' opening for 'One Republic' Live in Mumbai 2018. • Bryan Adams Live In Hyderabad 2011.

### **What was your worst experience and why?**

I'd say that most of the unpleasant experiences that I've had share one thing in common i.e. those were the ones where the safety of the crew and equipment was compromised.

### **How exactly has the evolution in technologies impacted your line of work?**

Evolution is important and it has only brought about positive changes. It has made life on the road easier, giving more features, options and control in the hands of the users.

### **What are the products / technologies that are absolutely crucial to your workflow? Do you have a personal favourite among them? If so, please let us know why.**

For me, it's all about having a good PA system with the required software, my preferred choice of consoles and a few microphones I can't do without. The one thing I am paranoid about is walking up to any desk without a show file. I will sit for hours on the offline editors of consoles and design my show files. This saves precious time during sound checks. Preferred choice of console as of now is any DiGiCo Quantum or SD series. A few favourite mics are Sennheiser E901, Shure Beta 56A, AKG C414

### **In your line of work (specialization), have you noticed any new trends in terms of workflow / technologies etc that you feel could revolutionize the future for specialists like yourself? If so, please us know.**

Every year we see the release of new and updated versions of softwares, firmwares, presets along with the launch of multiple new products from manufacturers known and unknown. • Integration of Wireless system audio monitoring within consoles is a useful feature that most manufacturers are incorporating. • Working with Plugins is one such trend that has helped artists take





their studio sound to the live stage. When used in the right way they make an engineer's life easy on tour. • Another innovation I have come to like is KLANG. It gives the musicians an immersive audio experience in their In Ear Monitors. Every artist I have used it for has loved the experience. • More features loaded into consoles has reduced the use of Hardware and Outboard gear making logistics easier while touring.

**Do you have any Hobbies outside of work and what is it?**

I love gardening and being close to nature. I like going on bike rides too. These are a few things that keep me engaged apart from audio.

**Highlights of any professional training or certificates that you may have achieved.**

• Diploma in Sound Engineering and Recording Arts from Digital Academy 2006 • Adamson Loudspeaker Training Programme: Adamson Applied Certification 2019 • Rational Acoustics: Introduction to Smaart Software Training Class 2019 • Audinate Dante

Certification Level 1 2019 • Sennheiser RF Workshop 2019 • Shure Master class: Wireless Best Practices and Techniques 2019 – 2021 • Marani Online Training Session on DSP and FIR Filters 2020 • Rational Acoustics Smaart Operator Level 1 Certification Exam 2020

**What did you do during the COVID-19 period?**

Time with family, daily chores, gardening, bike rides... As far as the audio field goes: I visited a few multitrack recordings and mixed them in my home studio setup; and attended online seminars and trainings. I also did a few mixes for a couple of musicians and eagerly waited for live gigs to start again.

**SOCIAL**