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TECH TALISMAN - AN INSIGHT INTO THE WORLD OF EVENT TECHNICAL DIRECTORS

MARCH 2023

NEWS:

Legendary Live Venue Installs
Martin Audio TORUS

ENNOVATION:

HK Audio Revises LINEAR 5 Series
with MK II Series

LIVE:

L-Acoustics Brings EDM Music
Fans Together for Blowout
Blockbuster Festival

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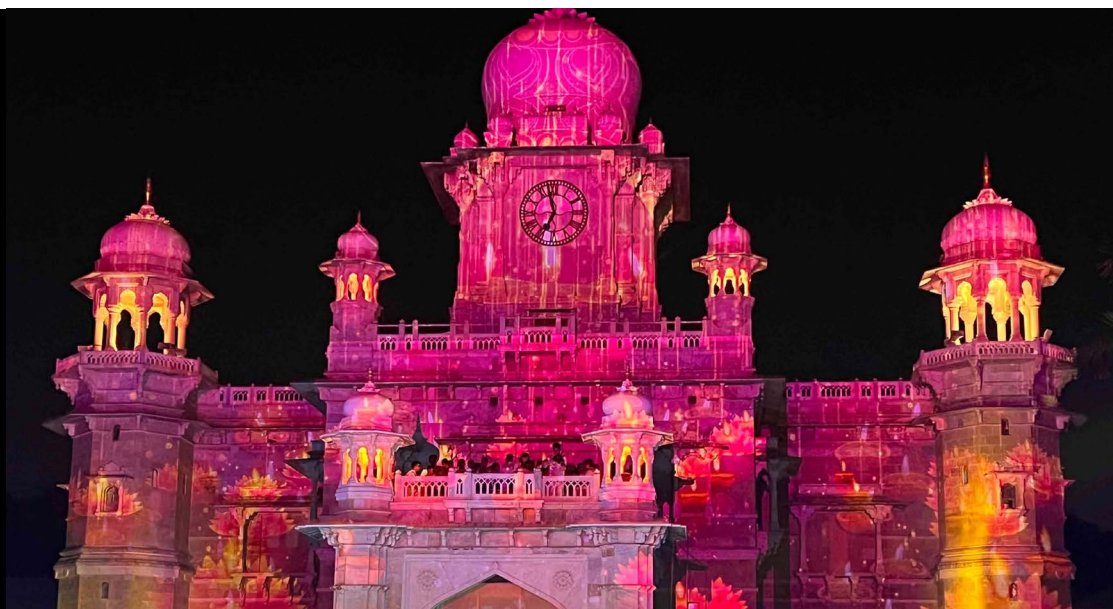
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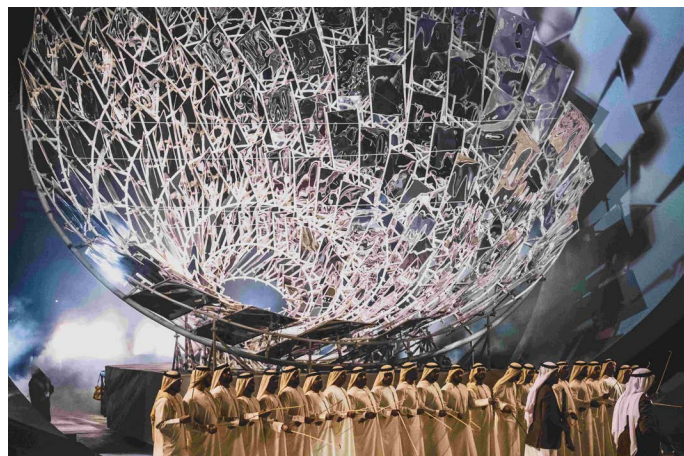
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In this issue our Feature column gives an insight into the world of Event Technical Directors – the virtuosos that bring enchanting live event experiences to life. A Technical Director would need to be nothing short of an engineering genius to effectively establish order out of chaos, conjure solutions

to wildly complex technical challenges, and eventually deliver a truly seamless event experience for all stakeholders involved. Our Live column features a zacktrack real-time tracking system that was specified and used to control over 400 moving lights for the 51st United Arab Emirates National Day Ceremony which featured creative direction and design by Es Devlin and was produced by People Creative.

Thomas Richard Prakasam

Publisher / Editorial Director
thomas@spinworkz.com

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71, Bukit Batok Crescent, #06-13 Prestige Centre,
Singapore 658071. Tel: (65) 6316 2716
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Ram Bhavanashi

Editor, India And Middle East
ram@spinworkz.com



Julie Tan

Admin & Circulation
admin@spinworkz.com



David Lim

Advisor
Tel: +65 96835275
davidlim@spinworkz.com



Elton Noronha

Features Editor
elton.s.noronha@hotmail.com



Hazel Gundaya

Design / Layout

OUR COLLABORATORS

Rosalind Tan

Website Management Wizard

PV Anthony

Server and IT Security Guru

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Chauvet Continues Expansion in Middle East Market with NMK as Distributor



MIDDLE EAST: To continue providing the highest level of sales and support service in its rapidly expanding Middle Eastern market, Chauvet has entered into an agreement with Dubai-based AV distributor NMK Electronics.

NMK will now distribute CHAUVET Professional, CHAUVET DJ and Illuminarc products in the UAE, Oman, Kuwait, Bahrain, Saudi Arabia and Qatar. A company with a strong tradition of customer service, NMK, enjoys excellent relationships with leading consultants, system integrators, and end-users, and has been involved in prominent local projects across its markets. Building on this background, the company will be able to develop Chauvet's connection to customers in the Gulf States.

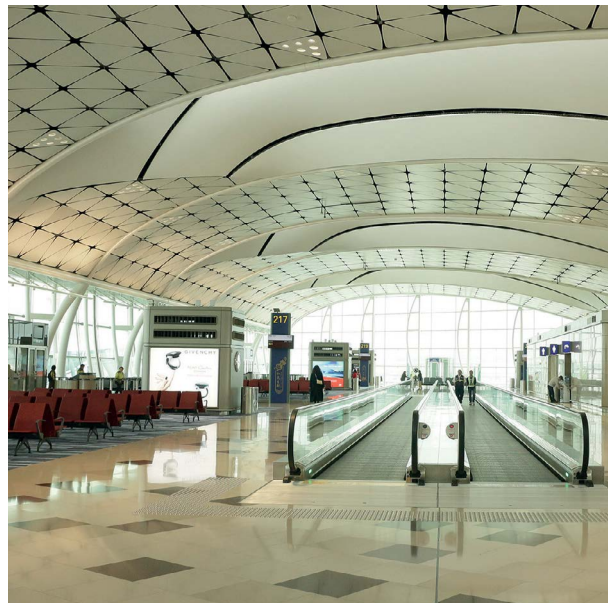
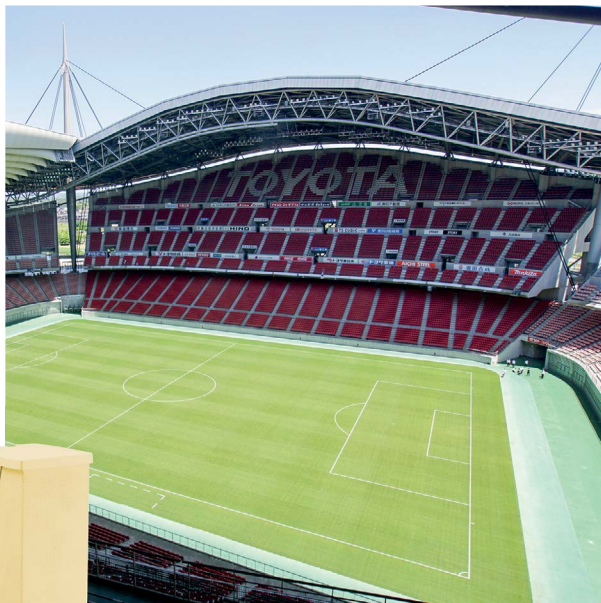
"We're very excited about our relationship with NMK," said Stéphane Gressier, international sales director of Chauvet. "I joined our product specialist Eusebio 'Sebi' Romero, and our senior BDM for this region, Goran Doncic, at NMK's Dubai training session. NMK's commitment to excellence and passion for service

reminded all three of us of the philosophy that has guided the growth of Chauvet. We're looking forward to building an extraordinarily strong relationship with NMK as we grow together."

Schalk Botha, Brand Manager at NMK, shared the passionate optimism. "Chauvet carries 33 years' worth of heritage and experience," he said. "We are thrilled to add their products to our portfolio and are excited to show our customers how they can provide solutions for any application. Our goal is to promote this brand across all verticals from retail and house of worship, to small and large venues, entertainment, education, and the rental market. We have tremendous respect for Chauvet and appreciate the well-deserved reputation the company has established across the globe – and now we're honoured to be part of this success story."

[Chauvet Lighting](#)

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GSL Pro (Gautam Sound & Light) Pune and NJSM Pro Gear Up with AVID VENUE S6L



INDIA: GSL Pro (Gautam Sound & Light) – one of Pune's fastest growing rental services company – has recently made a sizable investment into growing its existing hire stock with the addition of a brand-new VENUE S6L-24C control surface from AVID, complete with the newly released Stage 48 Rack. The decision to add the Stage 48 Rack makes GSL Pro (Gautam Sound & Light) the first rental company in India to do so.

Speaking about the company's latest acquisitions, Kunal Kamble – director and head-engineer of GSL Pro (Gautam Sound & Light) informs, "I made myself a promise a year ago, and that's now come true. We've welcomed in the new year with our brand new AVID VENUE S6L-24C with the first ever Stage 48 rack in India. The console provides excellent portability and easy hands-on control with unmatched power and performance value; and allows to mix and record high-quality live productions of any size with absolute ease. And the Stage 48 just takes the I/O game to a whole new level!"

Kunal is convinced that the Stage 48 holds the capacity to be a 'game-changer', citing that the Stage 48 uses

the same preamps and converters as the larger format Stage 64, which allows users to achieve the same kind of sound and control, but in a more affordable package and smaller footprint of 8U, without having to compromise on redundant power supply, redundant network connectivity over Ethernet or fiber AVB, and head amp MADI split.

On the other hand, reputed Mumbai based rental outfit NJSM Pro have further consolidated its existing inventory of mixing consoles with the addition of yet another unit of the VENUE S6L-24C console; bringing its grand total of VENUE S6L-24C control surfaces to three.

NJSM Pro's director Nixon Johnny explains the purchase decision saying, "From the outset it was obvious that the S6L-24C would be popular with our customers; and the case hasn't been any different. As a house console in live music venues, its workflow and ease of operation appeals to a lot of guest engineers; whereas for rental operations it is certainly a low-risk investment, as the natural progression from previous Avid consoles coupled with the compact footprint and the price-point, make it rider friendly for any scale of touring applications. Its compatibility with existing Profile show files, particularly when Waves Plugins have been used, is excellent. This along with the compact footprint makes it a go-to console for many of the control packages we send out." Ansata Professional Audio – the official distribution partners for AVID professional audio products in India – facilitated the purchase and procurement of the respective systems for both GSL Pro (Gautam Sound & Light) as well as NJSM Pro.

[GSL Pro](#)

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DiGiCo Boosts International Sales Team with New Hire and Internal Promotions



**DIGICO'S NEWLY APPOINTED SENIOR
INTERNATIONAL SALES MANAGER JAMES BAKER**

GLOBAL: DiGiCo has appointed James Baker to the role of senior international sales manager. Having previously served as a business development manager and international sales manager, Baker's skill set is ideally suited to his new role. He is set to bring the considerable knowledge gained from these past positions to his new role at DiGiCo and has a keen focus on continuing the consolidation of DiGiCo's enviable position in the console market and exploring new opportunities for further growth.

"I wanted a new challenge where I could leverage everything I've learned over the years," he explained. "I'm looking forward to making a longstanding contribution to DiGiCo, bringing my flair for communication and relationship building to my new position and to being part of the amazing pool of talent the company already embodies."

Alongside Baker, long-standing DiGiCo team members Jaap Pronk and Tom Williams have been promoted to international sales managers. Pronk and Williams are familiar DiGiCo faces and have been part of the DiGiCo family for many years. Both are well known for their expertise, reliability and excellent customer-facing skills.

Pronk's association with the audio industry started when he was in high school as a touring engineer and DJ and continued at college, formally launching his career as a touring engineer and then in sales.

"My DiGiCo adventure started after a 13-year stint at their Dutch distributor when DiGiCo gave me the opportunity to work for the brand itself and join the heart of the DiGiCo family as a Sales and Product Specialist," he enthused. "After six years at the company, I'm proud and happy to now help the team with my sales skills."

For more than a decade, Williams has developed an in-depth knowledge and passion for the DiGiCo brand, its products, and its people. He is well-known throughout the professional audio industry. His extensive contacts and natural flair will support DiGiCo as it focuses on delivering its next stage of growth and expansion.

"During my time with the company, I've been able to amass an in-depth DiGiCo knowledge base," Williams noted. "I'm eager to bring that and my sales track record to my new role."

"I am delighted to have the opportunity to strengthen my sales team and very pleased to be promoting both Jaap and Tom from within the company," added Ian Staddon, DiGiCo vice president of Sales. "Their product knowledge, coupled with training expertise is going to be a great sales asset to the countries they will manage in their new roles as international sales managers."

"Appointing James as a senior international sales manager is a great addition for DiGiCo, as he brings a wealth of sales experience, as well as contacts from around the globe. James is a 'console guy' through and through and a respected sound engineer in his own right. I am really excited about the new team, as we will be able to better support all our distributors and partners, as well as develop new markets."

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Creative Technology Supports FOX Sports with “Largest” Temporary Studio for FIFA World Cup



MIDDLE EAST: Creative Technology Middle East (CTME) supported the world-renowned broadcaster Fox Broadcasting Company (FOX) by delivering the “largest” temporary studio in Qatar during the live broadcast of the FIFA World Cup 2022.

FOX Sports broadcast all 64 World Cup games live across the United States from their state-of-the-art set featuring four unique stages, each having a beautiful backdrop of the West Bay illuminated skyline of Qatar’s capital. CTME were proud to have delivered their studio’s AV requirements across the impressive space which spans 148ft x 33ft within two stories.

Irum Ashraf CTME’s general manager explained, “Our journey with FOX sports started early in 2021 when we first met with top-level senior executives. With the pandemic still looming it was almost a miracle that we’re able to sit around the table with the FOX team. They had a great vision of how they wanted the studio to look and nestle itself amongst Qatar’s most renowned locations.”

“The historic relationship between NEP/ CT and FOX played an instrumental role in the award of the project as we proved that we as a company could connect and collaborate across borders and geographies. We made

sure the service that FOX received was in line with the global relationship they have across the NEP business,” he added.

The AV solutions consisted of 500sqm of LEDs controlled by multiple Novastar H9 splicers and a Barco E2 screen management system to manage over 22 million pixels. CTME further supplied a bespoke lighting package which consisted of over 700 lighting fixtures for the incredible studio that broadcasted to over 16 million viewers for the finals. CTME also managed all of the daily systems and operations, providing critical support for FOX Sports 24/7. A team of 6 engineers were working on a rota to ensure all the requirements were met.

Dhyaan Parikh, Senior Project Manager expressed, “The requirement from FOX was very specific. They had delivered multiple projects but on a smaller scale, but for the World Cup they wanted to pull all the stops out with multiple stages, LED, and exclusive lighting across the studio to really create the wow factor. Being a 360 supplier, we knew from the offset that CT would be a perfect match for this job.”

Ashraf continued, “With CT Qatar’s office having had its feet firmly on the ground for many years, we were able to offer invaluable advice and support to the client where

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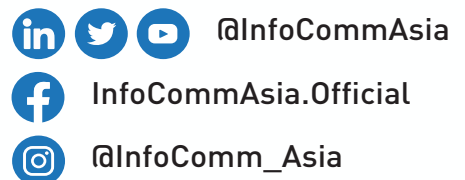


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any uncertainties occurred to them delivering their first-ever temporary studio in Doha. We had many meetings to discuss the requirements in depth. We understood the design and were able to advise FOX on solutions that would be cost-effective yet keep up with the latest technology. It was a true partnership from the very beginning.”

Parikh expressed, “The team at FOX wanted seamless corners at irregular angles throughout the studio. We worked with our supplier InfiLED to create bespoke fabricate frames for our new ART 4.6 in touring frames with a 45° chamber. We supplied panels to the set manufacturer in the USA so that they could create a test build and check how it would all fit together. The build was technically challenging as they required us to build screens in a completely enclosed area inside a pentagon, with 5 seamless corners. The structural supplier was in the USA and our screen was in the Middle East. In addition, the structural company worked in fixed mod truss sections that were manufactured in feet and inches, and our LED panels were manufactured in meters. It was integral that everything fit exactly as neither the LED panel nor the mod truss could be cut.”

“In addition, the first time this would be tested would be on site, so all the drawings had to be perfect, otherwise there was a risk that it would not fit.

With over 12 months of extensive planning, and weekly online meetings running up to the installation, a massive backend team to help with the logistics and crew on site CT ensured a seamless delivery,” explained Parikh.

Parikh went on to say, “A week before the studio went live daily testing was done to ensure perfect delivery. The LED was controlled by multiple systems due to the specific pixel pitch required by the client. The desk LED was powered by Brompton SX40, the LED floor was powered by ROE EVision and the remainder of the screen was on Novastar processing. To manage all the pixels, we required a reliable back-end system. We turned to the Novastar H9 system. They not only managed the processing of the Novastar product, but they also managed the splicing and canvases, for the floor LED on EVision and the desk LED on Brompton. In

addition to managing the multiple inputs and PiPs from the client, including VizRT, Unreal Engine and disguise VX1 and VX2. In addition, we utilised a Barco E2 screen management system.”

For the entire studio, CTME supplied a custom-made lighting package consisting of over 700 active features using their latest fleet of new Ayrton, Robe, SGM and Elation fixtures. The lighting was controlled by the latest GrandMA3 with over 23000 parameters and 55 universes. The fully customized system was a great tool to meet creative needs. With so much floor space and the enclosed studios, CTME also supplied x2 GrandMA full size and x2 GrandMA Lite.

Sam Connolly CTME's head of Lighting and Power commented, “It was a wonderful project to be a part of, we worked very closely with the team at FOX. Our team installed over 700 fixtures into the studio using the latest lights on the market. We had done extensive planning to ensure a smooth delivery. Our engineers were on site to ensure replacements could be made fast if required. We also needed to make sure we had sufficient control over the network and to do this we utilized the latest Luminex range of products and had multiple Araneo points to monitor the network. This was very crucial as FOX was broadcasting live to the US for every match. This was a great experience for us and it was a huge pleasure to work alongside Fox.”

To ensure the delivery was seamless, CT supplied engineers for video, switching, and disguise as well as lighting to manage and repair any lighting fixtures. Andy Reardon CTME's managing director concluded, “The aim for CT was to deliver the largest temporary and most unique studio for the FIFA World Cup on behalf of FOX sports. Having a large infrastructure in Qatar with the latest equipment facilitated a perfect delivery. Our teams worked incredibly hard to ensure each deadline was met and we couldn't be happier with the outcome. We are thankful to FOX for engaging us on this journey and we look forward to continuing this partnership.”

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Legendary Live Venue Installs Martin Audio TORUS Constant Curvature Array



JAPAN: Since opening in 1985, Antiknock has become a hall of fame for punk and hardcore bands, and many of today's major artists originally set down their roots there. Now the venue, situated in the burgeoning Shinjuku district of Tokyo, has become the first in Japan to install Martin Audio's new TORUS constant curvature array.

Speaking on the installation, Sekikawa, CEO of Hardaway Corporation, which manages the venue, said the renewal of the sound system was a gift to the many artists and patrons who volunteered to sell T-shirts and make donations to keep the venue alive during the COVID pandemic. "This was my first thought when trying to thank them all for their cooperation during those difficult times," he said.

The system previously installed had been huge and featured old long-throw cabinets. Their disproportionate size not only made the stage look small, but the clarity of the low end during live performances left much to be desired. When seeking a replacement system, several key criteria needed to be met: these included being suitable for multi-genres, with a reasonable size footprint, and offering good stability.

Hashimoto, CEO of Enter Sandman, who designed the new system, explained the rationale. "Having had a relationship with Antiknock for 10 years, I was able to determine several important factors. One was the theme of the venue, bearing in mind the type of bands who perform there. Another was the physical shape of the venue and the construction of the building, as well as the size of the loudspeakers. And finally, of course, there was the capability of the loudspeaker itself.

"A speaker with medium-throw capability would fulfill the demands of this venue and match the concept perfectly—and the new TORUS was the obvious solution."

As a result, he specified a pair of T1215 onto 2 x SXCF118 subwoofers per side, in a simple ground-stacked configuration. Hashimoto confirmed that the height of the system had been carefully pre-arranged so that the size issue was resolved while achieving the optimum quality of sound.

As TORUS has three compression drivers which have 35mm voice coils, he knew it would be sufficiently

powerful for loud bands performing at Antiknock, while rasping lead vocals could be reproduced in the mix with vastly improved intelligibility.

One challenge was the sighting of the PA itself. Since sight lines on the audience floor are obscured by columns and joists, and the floor level increases at the rear, the loudspeakers needed to be set inside the stage area.

But TORUS is nothing but versatile and can be flown from the T12GRID inverted, to allow stereo arrays to be mirrored with the high-frequency horn either to the left or the right. This would maintain both the intelligibility and the wide Left/Right separation.

During the initial simulations, Martin Audio's DISPLAY3—its proprietary 3D prediction software—was used to great extent by Hashimoto. He explained, "TORUS has a unique feature in that we could easily change the waveguide's dispersion between 30-45°. We could also change the dispersion, setting the horn asymmetrically to avoid unnecessary reflections from the wall."

Due to Antiknock's unique shape, this solution worked well, as DISPLAY3 can simulate different settings of the horn graphically," said Takahisa Ota from Martin Audio Japan. The multi-genre mode could be achieved by using the Lake controller to tune the system, and by engaging the relevant saved presets to easily change the tuning.

"Antiknock is the venue where loud rock bands choose to perform, and this is reflected in the high SPL," added Kunii, the venue's operator. "However, the sound from the new system is always clear and transparent, and I have never felt tired. The audience also tell me that despite the volume, they feel comfortable and excited." He emphasised that 'excitement' and 'clarity' were two features that don't coincide normally.

The final word came from venue manager Yanagisawa, "A live venue such as this cannot survive on reputation or culture alone. The sound system is a good additional solution and we believe TORUS can adapt to the many demands placed on it. Consequently, we believe it will help us rebuild the live scene."

Martin Audio

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Kolkata's KG Movie Brings Home MA Lighting's GrandMA 3 Full-format



INDIA: Considered by many as the industry standard in lighting control for large scale events, MA Lighting's grandMA3 full format console has gained popularity world-wide one of the most preferred control console among lighting designers world-wide. The trend seems to be no different in India, as the grandMA 3 has quickly asserted itself as a purchase favourite, with many rental companies across the country keenly adding these feature rich control consoles to their existing inventory.

And the most recent name added to the list of ever-growing grandMA 3 full-format users in India is the Kolkata based rental services company KG Movie – one of the largest, most tenured and well-respected event equipment service providers in the region.

With the purchase being facilitated by Hi-Tech Audio & Image – the official distribution partners of MA Lighting in India; Manoj Singh – director of KG Movie explains about the motivations behind the purchase as he primarily cites the console's ability to access Wide Area Networks and

the advanced MA-Net3 protocol that allows for output up to 250000 parameters – thereby extending unparalleled dexterity and control.

Furthermore, Manoj affirms he was impressed with the system's capability to support the GDTF (General Device Type Format) protocol natively (thereby allowing fixture manufactures to ensure their own fixtures are controlled as intended) is another key feature that positively impressed the purchase decision, as it forms the basis of file formats like MVR (My Virtual Rig) which is used to share data for a scene between a lighting console, a visualizer, a CAD program or similar tools. Manoj excitedly notes that soon after purchase of the console, team KG Movie were provided a special product training by a certified MA Lighting Trainer; after which the rental company immediately deployed the grandMA3 full-format for a series of live events that took place in the region.

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TiMax Spatial Audio Engine Transforms Dynamic Audioscapes for National Day Celebrations



The transparent dynamic delay-matrix strengths of TiMax enabled the roving spatialisation to work seamlessly, within its magnificent scale and size, for the whole audience and with tightly synchronised timings with the various musical and visual elements.

To program movement against the music playback's audio timeline, individual stem tracks were temporarily imported into TiMax so that movement and spatialisation

UAE: The UAE's National Day celebrations are always delivered on an impressively large scale and 2022 did not disappoint. The high-profile event was held in a purpose-built 100m long enclosed arena with seating along both sides and took the audience on a generational journey of the UAE's inspiring pioneers. Audience members were transported from sea to space through the media of stunning projection-mapped visuals, supported by transformational spatial audio effects delivered by TiMax SoundHub, a spatial audio engine designed for the precision-positioning of complex and dynamic audioscapes.

TiMax SoundHub spatial processing was specified by event sound designer Scott Willsallen for its ability to control and place the show's many diverse audio sources, which included live orchestra, music playback as well as spatialised sound field effect elements, to support the action provided by projection mapping, lighting, actors, processions and floats. The unique capabilities of TiMax were essential to link the sounds associated with the moving performance to the scenic media elements as the procession travelled through, including parts of the musical score from a playback server, as well as spot sound effects from TiMax.

of external server content could be programmed directly against the audio waveforms. For the sound field effects elements of the show, individual effects stems were imported to and played back from the TiMax SoundHub's own onboard 64-channel playback engine for spatialisation within the show.

A distributed system of 26 x ground-stacked and 26 x flown L'Acoustics speakers, supported by 4 end arrays and distributed sub-bass units, was loaded into the geometrically aware TiMax PanSpace. One of TiMax's most revered features, PanSpace automatically and selectively calculated the levels and delays for the different layers of TiMax Image Definition objects, defined to suit various combinations of spatial scenarios required for the show.

A set of spatial pans, programmed in the PanSpace environment were collected into templates to be copied and pasted over the audio waveforms in the TimeLine environment. This action allowed synchronisation to be applied quickly within specific Cues as they arose during technical rehearsals. This flexible workflow approach was vital to allow for content changes and creative production variances to be accommodated at short notice.

The sound control room was located remotely from the arena space, so to accommodate this, dedicated TiMax outputs were allocated to provide control room spatial monitoring that matched the spatial placements and movements of content in the actual arena.

A separate networked TiMax client control computer was located in the arena space during rehearsals. Using this computer, Scott Wilsallen and OutBoard's Robin Whittaker, on-site in Abu Dhabi to assist with TiMax setup and spatial programming, audited and selected the most effective spatial events for hard programming into the

show. The consequent TiMax cues were assigned OSC commands to be triggered from the main show playback server.

Robin Whittaker observed: "It was great to be involved with a production of such magnitude and significance, and with the invaluable support of the Agora and Auditoria audio teams. And thankfully the flexible TiMax workflow made it easy to rapidly program and audition highly-effective spatial events to meet the show's fluid and diverse creative challenges as they arose."

[TiMax](#)

Panchhi Events Welcomes Home Uttarakhand's First World-class Loudspeaker System from d&b Audiotechnik



INDIA: Dehradun based event technical solutions provider Panchhi Events Pvt Ltd have recently expanded their inventory with the inclusion of world-class gear from industry leaders d&b Audiotechnik; thereby making them the first company in the state of Uttarakhand to do so. With the purchase being facilitated by Ansata

Professional Audio – the official distribution partners of d&b Audiotechnik in India; Panchhi Events added a whole new line-up of the V Series line array modules comprising an assortment of V8 modules and V12 modules respectively, along with the B22 high-performance subwoofers and the ultra-powerful and efficient D-40 power amplifiers. Rishabh Panchhi, director of Panchhi Events informs that the decision to purchase this system was primarily driven by the company's will to ensure that it could meet the ever-evolving demand of the various clients within the region's burgeoning events market.

Alongside, Rishabh also notes certain technical capabilities and features of the d&b V series and B22 subwoofers that further reinforced the company's purchase decision, as he affirms the sophisticated design of the system coupled with its impressive power optimization and loudspeaker management capabilities proved to be the key deciding factors. The system's capacity to offer extraordinary dynamic range and sonic performance; impressive power capability; the ability to leverage its constant directivity control down to low frequencies, coupled with cardioid subwoofer technology; the freedom to shape headroom exclusively to where it is targeted; and ability to maximize all the benefits of the d&b suite of applied software technologies; were all cited as key performance metrics that had a positive influence on the purchase decision.

[Panchhi Events](#)

[Ansata](#)

Robe Travels with George Ezra for Multiple Country Tour



© Louise Stickland.

AUS/NZ: George Ezra's lighting director Chris Taylor and production manager Jake Venum were very happy to see Robe on the lighting specs for the recent Australia and New Zealand legs of the popular UK singer/songwriter's "Gold Rush Kid" tour.

11 x Robe MegaPointes on the upstage truss have been present throughout the whole tour which kicked off in spring in the UK and Ireland and then extended into a lengthy festival section as Ezra and his highly-talented band delighted audiences across Europe.

The original show and lighting/set design by Cate Carter is being overseen and coordinated on the road by Chris Taylor, and the earlier sections of the tour also featured 2 x Robe RoboSpot systems running with 2 x FORTE moving lights which everyone loved.

The Auckland show, staged at the Spark arena, was an all-Robe rig – apart from the strobes and 10 x 2K fresnel 'specials' on stands – with all kit supplied by leading NZ rental specialist, Spot-Light Systems. This was the only New Zealand date, preceded by a show in Dubai on

the way there and followed up by the four gigs across Australia.

A total of 38 x BMFL WashBeams on the rig in Auckland were distributed on two sides with the balance of fixtures along the floor at the back and on the front truss. They were used for front and cross-stage washes and specials, and the ones on the deck for high-impact effects, both integrating and contrasting to the high-level MegaPointes on the upstage truss.

5 x Robe LEDWash 600s a side were positioned on the downstage corners of the stage for front kickers, and all the lights worked hard throughout the show which was a lively and dynamic mix of new material and some of the chart-topping bangers that helped rocket George Ezra to prominence.

One of the practical design modifications to the full show for this segment was running without a large upstage LED screen and a scenic LED-lined frame, two major aesthetic elements that were replaced with a printed backdrop from Showtex covered by a gauze to allow it to be front and backlit, appearing and disappearing through the set.

This meant a lot more work to ramp up the drama and excitement was down to lighting as the bespoke video content had been directly related to the show narrative, and Chris Taylor created plenty of presence and atmosphere. Ezra is also renowned for his connection to his fans, especially when playing live, and the energy of the performance was ideally suited to this more utilitarian setting.

Chris considers MegaPointe “the best beam fixture” on the market currently, and it is a favourite of his for “flexibility, versatility and the sheer amount of air effects and different looks you can get from them”. He and Jake both mention that MegaPointes are also readily available almost everywhere in the world.

Chris noted that the colour matching between the different ranges of Robe fixtures – even from different eras – is “excellent,” giving great continuity. Chris was also super impressed with the Robe FORTES as follow spots on the earlier part of the tour, and while they didn’t have these in New Zealand – the Spark Arena’s in-house conventional spots were used – he was pleased they

were back on the rider for Australia, albeit with BMFL WashBeams rather than FORTES,

Kit for the Australian shows was supplied by MPH Productions for Melbourne, Sydney & Brisbane, and Showscreens for Perth. Chris programmed and operated lighting using a grandMA2 console.

Jake ensured that the touring machine was slick and well organised for everyone involved, both from their touring party and all the local representatives and crew’s perspectives, and they were all excited about being properly able to travel again after two years of Covid.

Everyone involved was relishing the chance to work in Australia and New Zealand again. “The people are friendly and efficient,” stated Jake, “the suppliers are very competent, the kit is good and well maintained, production values are high, the food is delicious, and the weather is – usually – fantastic. It’s good to be back after three years!”

[Robe](#)

Nader Fawaz Enhances LED Studio Middle East



MIDDLE EAST: As the LED Studio continues to build its international staff, Nader Fawaz has joined the company as its sales director ME to oversee the sales and operational processes. Fawaz is a seasoned company manager with more than 13

years of experience in the AV sector. He has extensive expertise in dealing with top LED display manufacturers in the area.

Fawaz joins LED Studio’s growing EMEA team. The addition of Nader to the team will hasten the expansion, accessibility, and support of the LED Studio products in the area where the company has been expanding its presence.

Fawaz is proud to be representing and further establishing LED Studio in the Middle East. “The company produces products to a European standard, with design and assembly coming from the UK. The products represent the higher end of the LED spectrum and are ideal for digital signage, corporate and control room solutions,” he explained.

Adding, “The way LED Studio products are designed is perfect for the Middle East market. From both an environmental and a sustainability perspective, the focus on reducing heat emissions from the display, enhancing performance whilst reducing power consumption brings a significant competitive advantage. The Edge range of displays are perfectly placed to replace LCD video walls that are coming to the end of their lifespan with a brighter and more sustainable display, without needing to change the existing bracketry and infrastructure.”

[Led Studio](#)

PXL Media Is India's First Company to Invest in Martin Audio WPL System



INDIA: One of South India's largest service provider of LED technologies for live events - PXL Media - have asserted their foray into the professional touring audio domain through the launch of their SXL—a division centered around providing exceptional touring audio systems to audiences. And this decision was consolidated through the addition Martin Audio's Wavefront Precision (WPL) line array to its inventory; thereby making PXL Media the first WPL users in the country.

"Together with VXL (Video) and LXL (Lights) we can provide a complete solution to our customers. This purchase also helps Pixel Media make its mark as a significant player in the touring industry in Kerala, one of the fastest growing events and touring markets in India. And we will quickly expand into all of South India soon," states Pratheesh Michael, CEO, PXL Media.

The system purchase made by Pixel Media includes the WPL 3-way bi-amp, 2 x 12" large format line-array elements, with the globally renowned dual 18" horn-loaded SXH 218 subwoofers. The system is powered by two racks consisting of Martin Audio's iKON iK42 amplifiers, network switches, signal and power distros. The purchase was facilitated by Vardhaman Mega Tech (VMT) – the official distribution partners of Martin Audio in India; supported by Generation AV – Martin Audio's APAC sales representative.

Explaining about the purchase, Sachin Babu, Sound Engineer, PXL Media informs "PXL Media believes in

investing in top-level gear to match international standards. Martin Audio's reputation in the market is exemplary. We are proud to be associated as their first WPL users. We wanted to invest in a system that delivers top-notch performance, is rider friendly, ensures efficiency and functionality, while being flexible and scalable. Martin Audio was perfect for this."

Tony Sawyer, Applications Manager at Generation AV, conducted the initial

software and rigging training at the PXL warehouse in Kochi; with Sawyer stating, "Martin Audio has always prioritized training and support. We ensure that our touring partners are taken care of and that their purchase is protected. The team at PXL are exceptional learners and will soon be a force to reckon with".

Prashant Govindan, Director, Generation AV India, agrees. "Pixel Media has big plans and has taken a bold first step by launching with the WPL. We are excited by the possibilities that this opens up for them, and all at Martin Audio and Generation AV are here to support and help them with their growth."

"It was great working with the PXL team throughout the sale, and we continue to back them with all the support. Pratheesh, Biju, Sachin, Kiran and team have a long way to go and team VMT wishes them all the luck with their current system and the many more systems to come," says Jeff Mandot, National Sales Manager, VMT.

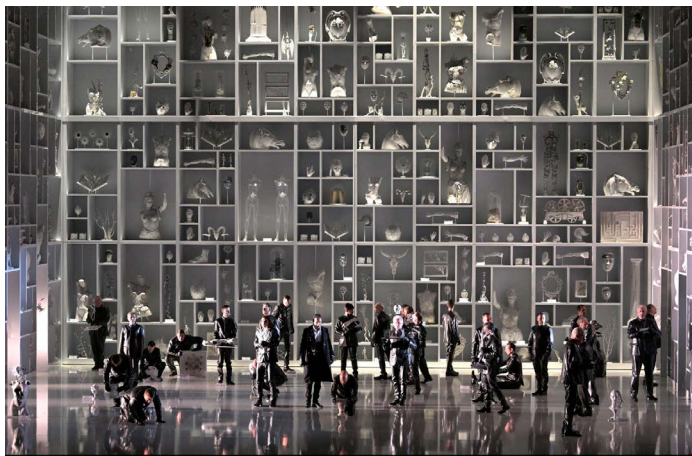
"We are very happy to have team PXL onboard with us. With VMT, we are building a strong sales and support network for Martin Audio in India, that will offer the best in the touring and installation sound markets," says David McKinney, Managing Director, Generation AV.

PXL Media

Generation AV

VMT

Opera House Head of Lighting Delights in Silent Operation of Robe ESPRITES



© Yossi Zwecker.

ISRAEL: The world-renowned Israeli Opera House in Tel Aviv has invested in 27 x Robe ESPRITE moving lights – the first Robe products in the house – as part of a drive to invest in more LED lighting fixtures and future-based technologies, explained head of lighting Eyal Levi.

The Opera House runs an average of 6 or 7 major productions per season, a mix of new and revivals, working with a series of leading international lighting designers and lighting directors, all known for their intricate work, critical eyes, and diligence. Opera is one of the most demanding performance genres to light.

The new investment had been on the cards for some time, and Eyal arranged various tests and shootouts with a range of different products, from which ESPRITE was chosen as “the best-performing fixture to meet all our needs.” Assisting in making this choice was the venue’s lighting department, comprising three programmers, two chief LX and 10 technicians, plus some key consultant LDs.

There were four main criteria on which the luminaires were judged, the first being a good dimming system and the second being accurate shutters which were equally as important. Colour mixing was also critical. Eyal elucidated that this was a subjective category with different LDs having different preferences and opinions, however, the ESPRITE scored consistently well with all

their LD consultants who were additionally impressed with the range of tunable whites and the excellent flesh tones produced by the high-quality, high CRI output.

Eyal added that the older and original discharge light source moving lights in the house which the ESPRITES were replacing, sounded “like a bunch of tractors” by comparison. This was no disrespect to the manufacturer (not Robe), but it illustrated very clearly and audibly just how far moving light and LED technology had advanced the goalposts in 10 years. Although they had been using those previous lights for many years, it wasn’t until they switched to the new LED fixtures that they appreciated the full impact of reducing ambient noise emissions.

Technical support was another crucial consideration when picking the brand, and Robe’s distributor, Danor Group Ltd, has built an excellent reputation generally and already enjoyed a good working relationship with the Opera House.

Speaking generally, Eyal now considers Robe “among the leading” moving light manufacturers globally, adding that at the opera they prefer to work with a smaller and more streamlined number of brands for operational efficiency. Apart from all of that, Eyal also reckoned that the price provided “great value.”

Danor’s Erez Hadar commented, “It’s really a great honour for us to get the ESPRITES into the Opera House and to see them work so well for such a variety of different lighting designers. Robe has focussed on optimising fixtures like ESPRITE for this exacting and challenging environment, and now all that hard work is paying off.”

The lights are rigged in the overhead rig, mainly above the stage of the 1600-capacity venue, and are controlled via a grandMA3 console which is also new. 80% of their incoming productions will have their LD as part of the director’s creative team, and the other 20% are either lit by themselves in-house, or an LD is hired by the Opera for the project.

Robe

ADJ Appoints New Distributor in Preparation for Middle East Expansion



MIDDLE EAST: Global entertainment lighting, LED video, and atmospheric effects equipment manufacturer **ADJ** has announced a new distribution partnership with Dubai-based **GSL Professional LLC**. Effective immediately, **GSL** will become **ADJ**'s exclusive distributor for the UAE, Oman, Qatar, Bahrain, and Kuwait.

The entertainment industry in the GCC (Cooperation Council for the Arab States of the Gulf) region is rapidly growing and this is reflected by a corresponding growth in sales of **ADJ** products. The company's fixtures have been installed in multiple venues over the years and are stocked by many production companies in GCC countries. **GSL Professional** is ideally placed to help facilitate the continued growth of **ADJ**'s market share in the region as well as to provide the logistical infrastructure that will ensure both new and existing customers will have quick and easy access to the latest **ADJ** fixtures.

"We are always eager to expand our business and are confident that it will be a game-changing decision to take on exclusive **ADJ** Lighting distribution in our region," commented Fouad Fowzi, **GSL Professional**'s CEO. "**ADJ** is a reputable brand in the professional lighting industry that has been in business for many years and has built a strong reputation for producing high-quality, reliable equipment. **ADJ** offers a wide range of products that are designed to meet the needs of our valuable clients."

Adding, "The lighting industry in the GCC countries is expected to continue growing as population and urbanization increase, therefore we expect to see an

increase in demand for **ADJ** products over the coming months and years. **GSL** will collaborate with **ADJ** to provide training and support to our customers, helping them to understand and use **ADJ** products effectively. This will help increase customer satisfaction and build long-term relationships. Therefore, we are confident that **ADJ** will increase its presence and business in the Middle East through partnership with **GSL Professional LLC**."

Established in 2003, **GSL Professional** already holds exclusive distribution agreements with a wide variety of internationally recognized manufacturers, particularly focused on the pro audio segment. Taking on the distribution of the **ADJ** range will round out the company's portfolio and provide its extensive network of customers access to **ADJ**'s range of entertainment lighting, LED video, and atmospheric effect solutions. **GSL Professional** will support **ADJ** customers by holding stock in its extensive warehouse, providing demonstrations of the latest fixtures around the GCC region, and providing after-sales support and training from its dedicated service centre.

"**ADJ** is already well-established in the Middle East with business growing year-on-year," stated Jos Reulen, export manager for **ADJ** Europe. "With this growth set to continue exponentially, now is the right time for us to establish local distribution. **GSL Professional** is a solid company that is well known and well respected in the region, with a big network of local customers spanning all the markets served by **ADJ**'s product line. The company has an extensive local infrastructure, including a big warehouse facility for holding stock, as well as a great and experienced team."

Adding, "I am confident that partnering with **GSL** will not only help the growth of **ADJ** in the Middle East but also allow us to better serve our existing customer base with improved stock availability and quicker order fulfilment, as well as local technical support and after-sales service."

GSL Professional

Stagemix Technologies Appointed as Exclusive Distribution Partner for DAS Audio in India



INDIA: Stagemix Technologies LLP has been appointed as the sole distribution partner for DAS Audio in India, as Karan Nagpal, Director, Stagemix Technologies confirmed the news saying "Securing such a well-reputed manufacturer such as DAS Audio to the list of brands we represent will allow us to anchor ourselves in the Indian market, I strongly believe that the pro audio business will grow at an unprecedented rate, and at Stagemix, our aim is to stay a step ahead, at all time. With DAS Audio, we intend to deliver phenomenal technical expertise while providing ingenious products and technologies that can be a game-changer for the Indian audio industry."

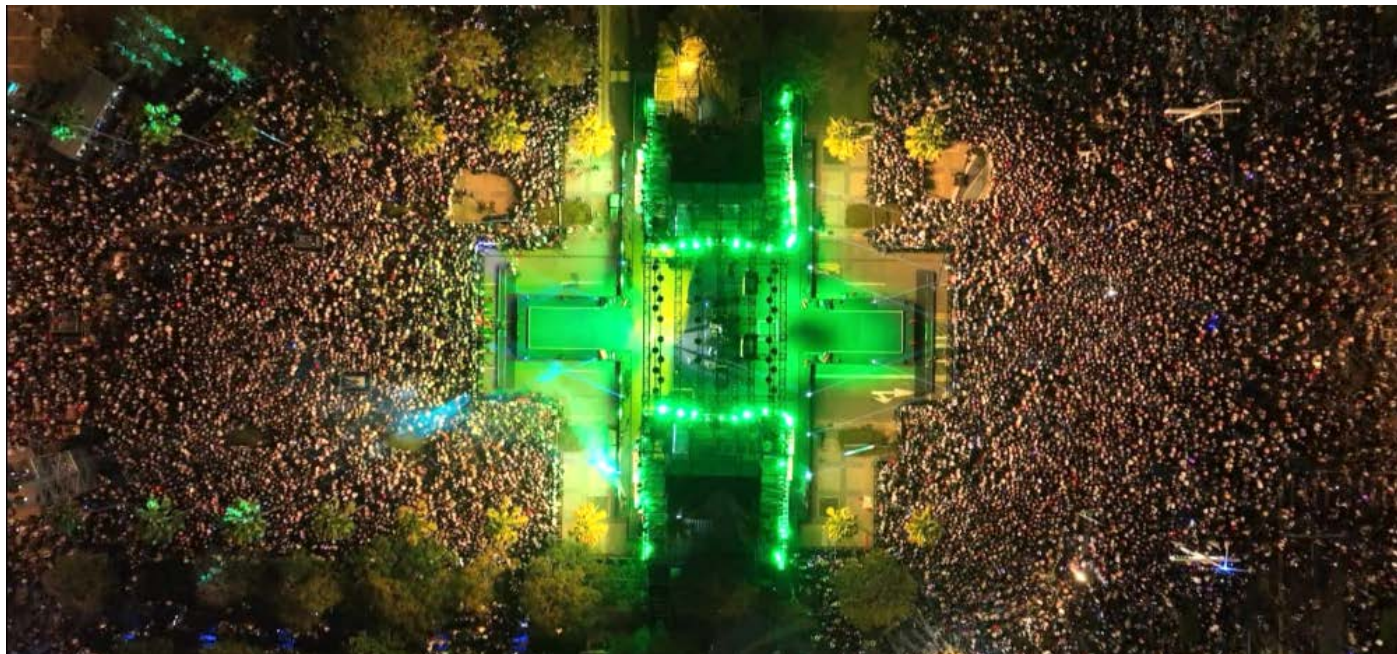
With Stagemix Technologies covering several vertical markets, this strategic alliance looks poised to propel DAS Audio's presence across the country; as DAS Audio's Head of Sales for Southeast Asia and Oceania – Juan Luis Garcia – elaborates on brand's decision to partner with Stagemix Technologies, commenting, "As India's audio industry has experienced a tremendous technological change over the past 10 years, we

decided to make a fresh start here. We are delighted to welcome Stagemix Technologies into the DAS Audio family as our exclusive distribution partner in India. The company's expertise and resources will help DAS Audio grow its presence in what has historically been a very important market for our brand. We consider Stagemix Technologies to be one of the best pro sound distributors in India and a great partner with an incredible customer-focused attitude, which fits perfectly with the DAS Audio philosophy. We look forward to a long-term relationship with Stagemix Technologies."

[StageMix Technologies](#)

[DAS Audio](#)

Analog Way's Aquilon RS4 Ushers in the New Year at Gala Kaohsiung Concert



TAIWAN: Formosa Television covered the spectacular New Year's Eve 2022 concert and celebration in Kaohsiung, Taiwan with support from Analog Way's Aquilon RS4 4K/8K multi-screen presentation system and the RC400T event controller.

Kaohsiung City Government sponsored the event at Dream Mall. The venue featured a double-sided performance stage, each side with a different theme, which hosted an array of artists plus a gala midnight fireworks display.

"This New Year's Eve concert was the first time the organizer designed and built a double-sided stage with a field of view of up to 260°, which was able to accommodate a larger live audience," explained Yee Tat Nam, business development & technical services manager at Analog Way Asia. "One side of the stage had a 'Present' theme and the other side a 'Future' theme."

The stage's approximately 600 sqm LED backdrop featured 3.9 and 4.8-pixel pitch tiles requiring a minimum of nine 4K60 outputs to drive the full LED screen. When

the main contractor for the concert, Sing Tai Yang Stage Co. Ltd., had an equipment discussion with the VJ, he recommended using Analog Way's Aquilon RS4, which was capable of providing up to 16 4K outputs and offered enough 4K layers to display the VJ's 4K content.

"Other brands needed multiple processors to cover the entire LED screen, but the Aquilon RS4 has 16 4K outputs in a single unit," said Yee. "In addition to furnishing all that power in just one unit, the RS4's Web RCS was easy to use and the 24 4K layers were really helpful for this setup."

Analog Way provided an on-site technician to support the event for Formosa Television's contractor.

[Analog Way](#)

Pliant Technologies Provides Clear Communications for Premier Rental House



65Thirty Events and Entertainment Staff Using Pliant MicroCom 900XR

AUSTRALIA: When Lane and Candice Place, owners of Pro AV rental house 65Thirty Events & Entertainment in Western Australia were looking to upgrade the company's wireless intercom inventory, they reached out to industry expert Steve Parkins from National Audio Systems (NAS), a respected Australian distributor of world-class professional audio and video brands. Steve recommended Pliant Technologies MicroCom 900XR wireless intercom for its ease of use and reliability.

As a premier Pro AV rental house, 65Thirty's clients include local and touring bands, concerts, conferences, and festivals that take place in and around the picturesque coastal area. Having reliable, high-quality equipment is essential to the success of their business, as the nearest large city (Perth) is over 250 miles away.

"We had been considering upgrading our intercoms for some time and when Steve (Parkins) came out and demonstrated Pliant's MicroCom 900 XR, we were immediately impressed," said Lane. "The belt packs are extremely well built and being so far from the city of Perth, reliability was vital. The design is simple, yet innovative, and we purchased the system."

In addition to its rock-solid reliability, the team is also impressed with the 900XR's excellent range. "At 500 feet, the system still delivers crystal clear sound, which

is very impressive," added Lane. "At that distance, many of our older systems are unable to operate or pick up interference. The MicroCom 900XR has none of that. It is a real game changer for us."

The MicroCom 900XR is a robust two-channel full-duplex multi-user wireless intercom system that operates in the 900MHz or 2.4GHz frequency bands to provide superior range and performance. The system features lightweight belt packs and provides exceptional sound quality and long-life battery operation. In addition, MicroCom's IP67-rated belt pack is built to endure the wear and tear of everyday use, as well as the extremes in outdoor environments. For those applications where budget and user density are critical, MicroCom 900XR delivers affordability and solid wireless performance.

Another important feature of the MicroCom 900XR is its ability to handle wind noise. According to Lane, "Geraldton is notorious for wind, which is extremely disruptive at outdoor events. The MicroCom 900XR performed so far above our expectations in the windy conditions that I was speechless. What Pliant has created with the 900XR is a product that is robust, reliable, and allows outdoor communications to not be compromised by relentless, heavy winds. The noise-cancelling technology is simply unrivalled."

Rugged and durable, the MicroCom 900XR provides full-duplex, hands-free communication to crews and teams for critical workplace communication. In addition to 10 full-duplex users and two separate talk channels, the 900XR also provides unlimited listeners and unlimited shared talk user modes, all without the need for a base station.

"In addition, I would like to point out how incredible the MicroCom 900XR's battery life is," concluded Lane. "Our units operate all day on a single charge. Everything about MicroCom is first class. We couldn't be any happier with our MicroCom 900XRs and are already looking to add more to our inventory."

[Pliant Technologies](#)

The P.A. People Deliver Multiple Solutions at Home and Overseas



Hotel venue opening, Riyadh @Dominic Jones.

GLOBAL: The P.A. People's Event Comms team's summer season started in November with a return trip to Philip Island, to deliver two-way radio capability for the delayed 2022 SuperBikes championship. Following the successful delivery of both radios and CCTV systems for MotoGP in October, the Island is becoming a second home for the team.

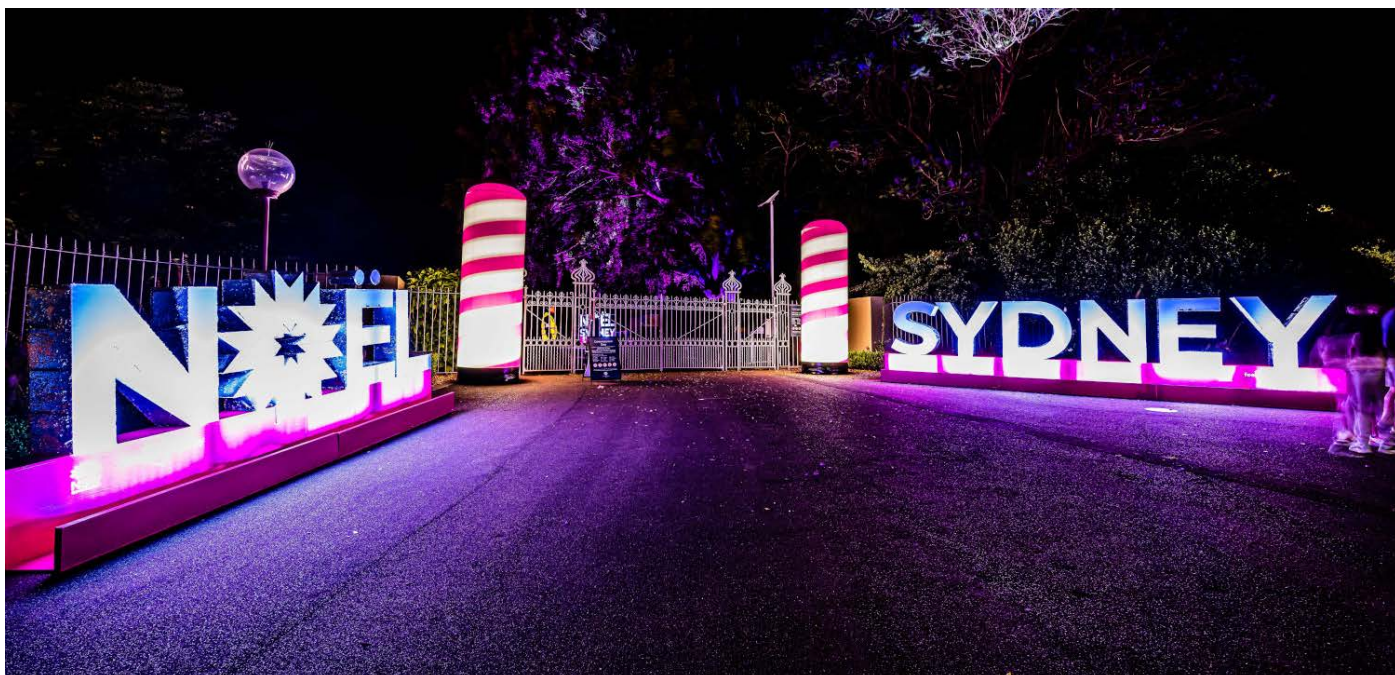
The P.A. People are proud sponsors of both the Sydney Kings and the Sydney Flames, providing their Bose ShowMatch system and Communications package for every game at Qudos Bank Arena for the past four seasons. While the Flames did not make the finals this year, the Kings have finished on top of the home and away season, and are looking to defend their 2022 Championship over the coming weeks.

December saw the inaugural Noel Sydney Christmas Festival in the Botanic Gardens and surrounds managed by AGB Events. The company's Event Comms team

provided the complete entertainment stage audio solution for the 16-day event for a wide range of artists including the John Field house band, alongside David Campbell, Monica Trapaga, and Emma Pask. The stage system was augmented with systems for pre-show entertainment, soundscaping in the Botanic Gardens and many activations along Macquarie St.



SuperBikes 2022 @Adam Blazeovic.



Noel Sydney Festival ©Keith McInne.

Hot on the heels of Noel Sydney was the first year of a renewed five-year Contract for the City of Sydney New Year's Eve Fireworks Communications and Data Services. Now in their eleventh year, the P.A. People provided a comprehensive radio and communications package that supported the fireworks, projection, lighting and broadcast systems for the event. In 2023, after a five-year hiatus, the company also delivered centrally managed crowd control PA Systems throughout the City Centre.

Over the top of New Year's Eve, the team also provided audio and LED screen support for the United Cup at Ken Rosewall Arena at Olympic Park for Tennis Australia, as well as a comms and data package for the Elevate Sydney Festival on the Cahill Expressway at Circular Quay, also for AGB Events. January ended with a small comms package and a couple of the crew jetting off to Riyadh, Saudi Arabia for a venue opening ceremony in support of event producer Five Currents.

It has been a busy few months for the team, and amid the event activity, they also continued their support of Parramatta Council as they moved into their new home. The Event Comms team have provided the Council with AV support for every Council meeting since the demolition of their old Chambers in 2016, including a comprehensive remote access solution throughout the



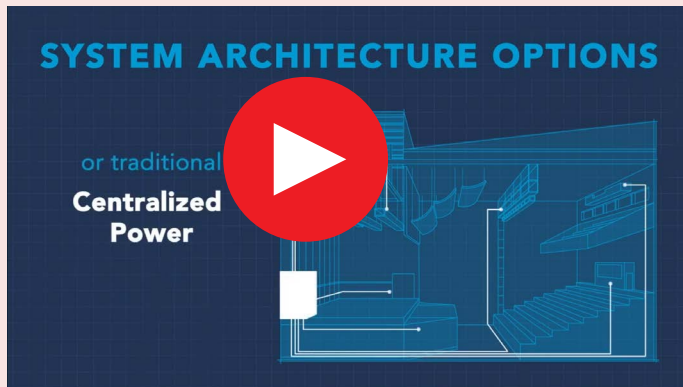
ElevateSydney ©Keith McInnes.

COVID-19 pandemic. The P.A. People wish the Council well in their new facility and thank them for their support over the past seven years.

The P.A. People continues to provide a comprehensive range of support services to the events industry, the venue engineering sector, installations for audio, AV and performance lighting, theatre systems and service & maintenance operations for a broad range of venues.

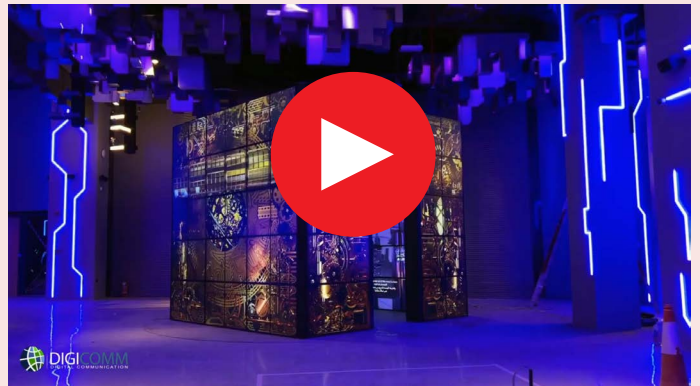
[The P.A. People](#)

Innovate with Stagelink Power Solution



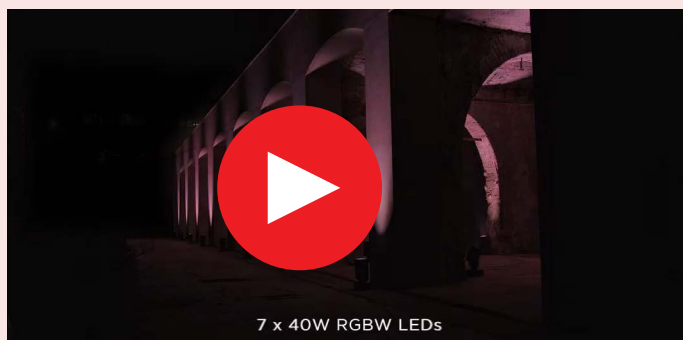
The new Stagelink Power Management System for performance venues from Wenger Corporation now includes motorised breaker panels and columns from LynTec. Even more, the Stagelink System can combine DSA and CSA to best meet your venue's needs and budget.

Futuristic Rotating Cube Welcomes Gamers to Abu Dhabi's Latest VR Venue



Due to its size, weight, and dynamics, the amazing structure—built by Dubai-based digital media studio and systems integrator DigiComm—is thought to be a first of its kind. It has 123 55" and 49" LG display units with synchronised content powered by 38 x BrightSign XD234 media players.

Ignite Your Show with Claypaky Mini-B Aqua



Moisture, humidity, dust or salt? Put on your performance without worrying about the weather with the new Claypaky Mini-B Aqua, a lightweight and manoeuvrable mini-washlight. With its IP66-rating, the luminaire is versatile enough for outdoor and indoor use.

HK Audio's Popular LINEAR 5 Series Receives a Makeover



Learn why the updated series is perfect for professional performers and rental companies who demand more than just a basic everyday instrument from Andreas Mayerl (Head of Product Management) and Karel Noon (App Support Engineer).

New Year. New Luck.



Welcome all to the year of the rabbit. I know I am a bit late with this, but I still wish you all a great start into this year and that you will stay healthy and prosperous throughout 2023. In the start of this fresh new year I want to afford a few thoughts about the recent ISE

tradeshow in Barcelona and

also some general thoughts about our industry.

First things first, Barcelona was a success, even if I was not convinced until I did get to the fairground. This show is quite a progress from the Amsterdam version of ISE - there is plenty of space, it is quite well organized and if the organizers get the morning access resolved, then this will be the go to show for anyone in System Integration, AV Installation and similar related spaces. The other main shows, that many of us had in our calendars over the years, will likely be replaced by a local version domestically or fade completely. Let's be honest, we do not need ten big tradeshowes per year, even if the industry as a whole is doing well. For myself ISE was a chance to reconnect with many people from across the globe and to get an insight about the vibe and where everybody is at. The vibe at the show was very positive, people feel that even in Asia Pacific, we have now left the pandemic behind us and people are looking forward to a successful 2023. Of course "Immersive" was all over the place and I won't bore you with my opinion on this, but I fear that this topic has been so hyped, that it will be difficult to ignore it in the future. Whether all this is in the best interest of a great audience experience or whether this is all mainly to sell more loudspeakers, remains to be seen. Marketing and Sales have done their work at least and they did this well.

What I have found both at ISE and also in the active discussions with friends and partners across the region, is the value of inter-human relationships. No product alone will do well if not supported properly by a good structure and good people, who know and love the

product and who can share their enthusiasm with prospective buyers. I have always believed that the buying decision in pro audio, especially when you are parting with substantial amounts of money, is at least 50 % based on the people, after sales support and if I trust in the brands and it's people. In pro audio you are never just buying any product, but it always comes in a bigger package of support, explanation, training and your trust in the vendor being around for a while still.

Companies which are around for a while, with thirty or forty years on their back, or more, are not seen in any bad way as old school, but as truly reliable vendors and the age of the company becomes an asset and a respected feature. The same is true for the support people and the sales network. Early on in my career, someone in the USA told me "change is good" and me being a typical German, had substantial trouble embracing this credo. In support of a product, technical support and other matters I don't want to be talking to a different person each time I am reaching out to a vendor. In that regard this is very similar to your dentist relationship, once trusted, don't change and why would you?

What I have seen at ISE and also beyond is that good companies understand this and also want to harvest this and hence nurture their customer relationships, because they know and understand that we need each other. The vendor needs the client who buys their product and the customer needs a reliable vendor whom they can trust to be by their side, when they take the gear on prestigious gigs with critical performance watch. Some people have tried to teach us that all humans are replaceable and the corporate world in particular is scared of depending on the human factor. I foresee that those will fare poorly in our industry in the long run, who are just marketing smoke and mirrors. All in all, I took away an uplifted spirit from both the ISE show and also the start into this new year and even if I am not sure that it is the rabbit's charm, I will embrace this now. Cheers all.

Join the conversation and share your thoughts with Alex. Alex can be reached at alex@asaudio.de

Claypaky Expands Aqua and MINI-B Families



The **MINI-B AQUA** was created to meet the huge demand from lighting professionals for a weather-resistant, lightweight, compact, agile mini-washlight. It is IP66 protection rated, making it suitable for all kinds of outdoor use. However, it is also ideal for indoor installation since it does not require the same levels of maintenance as ordinary IP20 fixtures thanks to the total protection of its internal components against dust.

The new fixtures of the Aqua Series meet the needs for outdoor installations and also for rental companies with outdoor productions. They offer an IP66° of protection which is greater than the average protection offered by products currently on the market. Some fixtures even offer a Marine-grade C5-M protection, which further expands the field of application to the cruise ship sector. No more need to worry about water, humidity, dust – or even salt: put your show on without concern for the elements.

The **MINI-B SPOT** is not only the perfect complement to the Claypaky Mini-B and Mini-B Aqua, but it also has exclusive features. The light source is based on a 70W white LED engine, capable of delivering 4300 Lumen, but with a power consumption of only 150W. Claypaky has also developed a proprietary optical unit that optimizes light intensity and light output. Mini-B Spot is aimed at the installation and cruise ship markets, where versatile, small fixtures with a big punch are sought after.

[Claypaky/MINI-B SPOT](#)

NEXT-proaudio Active 3-Way Compact Line Array



The LA210x, a medium format three-way, coaxial, active line array element from NEXT-proaudio, is intended to serve a variety of mid to large-sized touring applications and installations where ease of use is essential for transportation, installation, and rigging.

Custom-made European transducers and a maximally optimized acoustic design provide excellent sound fidelity at very high SPL levels. The LA210x features dual 10" (3" voice coil) neodymium woofers and a groundbreaking coaxial ring radiator loaded by an exclusively developed OSWG waveguide. This acoustic design delivers exceptional phase coherence and consistent coverage down to 300Hz and the most accurate transient reproduction.

Onboard, advanced, powerful 96kHz/40bit SHARC DSP engine, monitored by a built-in LCD screen with a preset loading encoder, can be remotely monitored and controlled through ethernet by a PC. The full-featured PC software automatically identifies each device and allows simultaneous control of multiple devices through a grouping facility. Everything you need to fine-tune the sound of your system is right there. The system is driven by a passively cooled 2000W 3-way ultra-efficient Class-D amplifier module releasing 1000W for LF section, 500W for MF section and 500W for the HF section. Integrated universal mains power supply with PFC provides consistency and optimum performance anywhere in the world.

[NEXT-proaudio/ LA210x](#)

ADJ Adds Touring Grade Audio Cables To Accu-Cable Range



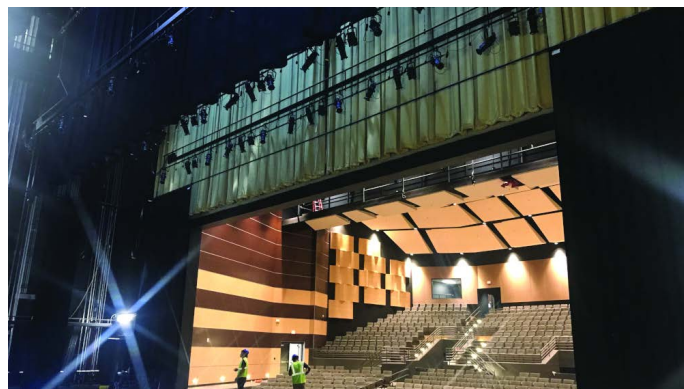
ADJ has expanded its Accu-Cable range to include the new XLPRO Series of high-quality audio XLR cables. Each touring grade Accu-Cable XLPRO Series audio cable features one male and one female high-quality XLR connection with gold-plated contacts. These are linked by heavy-duty cable with an 8mm jacket, low loss 20g copper conductors and a fully braided shield to deliver audio signal transmission with very low noise. The cable is also very flexible and easy to coil. Each cord is supplied with a reusable tie wrap and a colour-coded ring on each XLR connection which identifies its length. The series features eight length options ranging from 1ft (0.3m) up to 100ft (30m).

All XLPRO Series cables are extremely rugged and designed for professional event production and touring applications, backed by a Limited Lifetime Warranty. This covers the cable and component parts for the lifetime of the original owner's use of the product. However, the warranty does not cover defects that are caused by mishandling, negligence, or damage from the user.

From connecting microphones and instruments to the mixer through to patching in external effects and processors to connecting the mixer to amplifiers, a low noise signal path is essential to ensure the best possible sound out of the speakers. The new XLPRO Series of audio cables from Accu-Cable combine "premium components with precision manufacturing techniques to ensure maximum audio quality and reliability".

[ADJ/Accu-Cable XLPRO Series](#)

LynTec Technology Available in Wenger Corporation's New Stagelink Power Management System



LynTec's motorized breaker panels and columns are now a part of Wenger Corporation's new Stagelink Power Management System for performance venues. Stagelink includes a 19" EIA control module with full-sized and narrow-profile motorized breaker panels.

Wenger's cost-effective Stagelink power management system is built with LynTec's motorized breaker panels and features the Square D Powerlink hardware platform that's found in the company's flagship RPC Series panels.

Stagelink power distribution options include Distributed System Architecture (DSA) and Centralized System Architecture (CSA) options. Powerlink and DSA are both common in large industrial applications. DSA positions the power management hardware near lights, hoists, and audio. It means less conduit, load wire, and terminations. DSA also eliminates concerns related to harmonics and voltage drop, so acoustic isolation and oversized conductors disappear. Finally, DSA has no impact on venue performance and maintenance.

Savings come from a cleaner design that minimizes electrical installation and general construction costs. CSA integrates larger panels for a traditional distribution system. The Stagelink system can combine DSA and CSA to best meet the venue's needs and budget.

[Wenger Corporation/Stagelink Power Management System](#)

KLANG KOS 5.3 Software Update Delivers New Features to Existing KLANG In-Ear Mixing Systems



KLANG's latest software version 5.3 introduces a flexible offline editor and simulator. This enables users to prepare a show remotely without requiring access to KLANG processor hardware. Built into the KLANG:app, the offline editor emulates any existing KLANG processor from the smallest :vier to the flagship :konductor including network communication for DiGiCo SD and Quantum console integration, as well as to connect other KLANG:apps or the personal mixer :kontroller on a local network.

The Offline Editor also offers full compatibility with DiGiCo consoles' offline editor, making it possible to set up the console remotely without having a console and KLANG processor on hand.

With the new update, you just need your laptop to open an existing show file and adapt it for a different KLANG processor, or changes in the band or equipment available. With the press of a button, users can preview the mix settings with KLANG:app's built-in :kontroller emulator.

KOS 5.3 also offers greatly improved Remote Management, adding an extra layer of security to the KLANG system. Administrators are now able to fully restrict access to the system with password protection, and help musicians connect and configure their :apps remotely. In addition, musicians can be locked to their mix to prevent them from changing another mix.

This goes hand in hand with the possibility to hide and protect certain channels, e.g., a talkback channel, that should be audible in the musician's mix, but only be controlled by an engineer. Hiding channels also helps to maintain a super clean channel list for all musicians, for example when working with the tactile :kontroller interface.

When managing a monitoring system with many devices and users, it is crucial to find and access devices quickly. A new feature allows you to sort and search through all KLANG devices found on the network and indicates which devices need attention.

With KOS 5.3, the workflow to collect Logs has also been greatly improved. The KLANG:app now collects all Logs of all devices, and even other :apps on the network, to get a detailed overview of the system with just one push of a button.

Released in 2021, :konductor is KLANG's flagship product with 128 input channels and 16 mixes, with flexible IO via DiGiCo DMI expansion cards. Now it supports the 16-channel analogue line-level output card DMI-DAC to directly connect analogue wireless IEM transmitters, amongst others. As a powerful and lightweight immersive IEM processor, DMI-KLANG can be connected to consoles with a DMI Slot as well as an Orange Box. With the recent update, DMI-KLANG can also be cascaded with other processors to offer a simplified workflow for more immersive mixes.

The new software version 5.3 is now available for download for all existing KLANG processors, :kontrollers and :apps.

[KLING/KOS 5.3](#)

ADJ Pixie Driver 8000 Increases Flexibility of Pixie Strip Series



The ADJ Pixie Strip Series is a collection of LED pixel battens which combine vibrant LEDs with intelligently-designed housings. Four times more powerful than the existing Pixie Driver 2000, the new Pixie Driver 8000 model features eight independent output ports for connecting Pixie Strip fixtures using the system's proprietary 4-pin combined power and data connections. Each port is capable of driving up to 1,020 pixels of Pixie Strip fixtures using the KlingNet, Art-Net or sACN protocols. This means that up to 34 Pixie Strip 30s, 17 Pixie Strip 60s, or 8 Pixie Strip 120s can be connected to each port.

Power is supplied to the Pixie Driver 8000 via a standard PowerLock input socket and the unit features two Ethernet ports for connection into a KlingNet, Art-Net, or sACN control system. All input/output sockets are located on the rear panel where there are also separate fuses for each output port and a safety eye, should the unit need to be flown within a lighting rig. For this purpose, the device is also supplied with a bolt hole and matching bolt to allow connection to a truss clamp (not included).

On the front panel is an OLED display screen which provides a menu interface, navigated using the four push buttons below. This provides easy configuration of the connected fixtures and chosen control protocol as well as providing access to manual RGB mode, which is ideal for testing, and internal programs that allow for standalone operation without the need for an external

control system. The front panel is also home to a power switch and USB port, which can be used to quickly and easily load future firmware updates.

The Pixie Driver 8000 weighs 13.4 lbs. (6.1 kg.) and has measurements of 11.6" x 18.9" x 4.8" / 294mm x 480mm x 120mm [L x W x H]. The unit is fitted with rubber feet and is also supplied with rack ears, which allow it to mount in a standard 19" equipment rack utilizing 2U of space. Along with a standard power input cable it is supplied with a 10' 4-pin cable for connecting between the device and a Pixie Strip fixture – further fixtures can then be either daisy-chained from the first or connected to another port. For this purpose, a range of cables are available (sold separately) ranging in length from 1 to 50 ft (approximately 30cm to 15m).

The Pixie Strip Series can be used to create dazzling pixel-mapped displays for a wide variety of permanent and temporary projects. In addition to the new Pixie Driver 8000 and the smaller Pixie Driver 2000, it comprises three LED pixel batten models, which can be linked together in any combination to fit with the dimensions and design of a stage's set or venue's interior design.

The largest model, the Pixie Strip 120 measures 2 m (78.8") in length and features 120 tri-colour RGB SMD LEDs. The mid-size bar in the series is the Pixie Strip 60, which is 1 m (39.4") long and is fitted with 60 LEDs. Finally, the smallest model in the series is the Pixie Strip 30, a 0.5 m bar that features 30 LEDs.

The Pixie Driver 8000 is shipping now from ADJ distributors and dealers worldwide.

[ADJ/Pixie Driver 8000](#)

HK Audio Revises LINEAR 5 Series with MK II Series



HK Audio has completely revised the successful LINEAR 5 series, equipped it with new speakers and upgraded it to the very latest technology. The new LINEAR 5 MK II series is ideal for professional performers and rental companies who need more than just a reliable and high-performance everyday tool. The LINEAR 5 series has been expanded to include the following models:

- LINEAR 5 MK II 110 XA
- LINEAR 5 MK II 115 XA
- LINEAR 5 MK II 115 SUB A
- LINEAR 5 MK II 118 SUB A

LINEAR 5 MK II mid/high units feature:

- 1200 W peak power bi-amped Class-D power amplifiers
- Rotatable horns to change the dispersion pattern for optimum sound dispersion in different configurations
- High impulse fidelity and detailed sound resolution
- More “Gain before Feedback” – less sensitive to feedback
- More usable sound pressure level thanks to digital limiters
- More compact, up to 3 kg lighter and has more power than LINEAR 5

- Lockable, balanced XLR/TRS Combo input, balanced XLR output for analogue looping to an additional speaker
- Remote-controllable high-performance DSP with directly selectable, integrated presets for the most common applications
- Professional, lockable EtherCon connector for connection to a Mac or PC to control the system via DSP CONTROL software
- DSP Out: balanced XLR output that transmits the processed signal from the speaker to a non-network-compatible speaker. The audio signal applied here can be extensively modified using the DSP CONTROL software
- HK Audio DuoTilt with 3° or 7° tilt for flexible use on mounting poles
- Three reinforced M8 (AP-8) mounting points, two HK Audio MultiGrips for the TB-45N and TB-45NQ rigging frames (115 XA, 112 FA and 115 FA)
- Birch multiplex hybrid enclosure

The LINEAR 5 MK II **XA models** are compact, flexible, multifunctional mid/high units with impressive range and crystal clear, assertive sound. The multifunctional enclosure shape with slanted monitor edge allows for

use as low-feedback stage monitors or as powerful mid/high system units in conjunction with the subwoofers. Rotatable horns ensure optimal dispersion even in transverse operation and on small stages. The LINEAR 5 MK II 110 XA is a compact and lightweight multifunctional mid/high unit equipped with a 10" bass/midrange speaker, 1" tweeter with 1.4" voice coil, and rotatable 80° x 60° CD horn. The LINEAR 5 MK II 112 XA is the most compact 12"- multifunctional mid/high unit in its speaker class with a 12" bass/midrange speaker, 1" tweeter with 1.7" voice coil, rotatable 80° x 60° CD horn. Finally the LINEAR 5 MK II 115 XA possesses a high volume output and noticeable structure-borne sound. It features a 15" bass/midrange speaker, 1" tweeter with 1.7" voice coil, and rotatable 70° x 50° CD horn

The LINEAR 5 MK II **FA models** offer powerful full-range mid/high units with transparent, voluminous sound, high usable output and impressive throw distances. As a stereo system, they provide the necessary extra low-end and punch. A special filter adapted to the characteristics of the LINEAR 5 MK II subwoofers, which can be selected via a preset, makes it possible to use the FA models as system mid/high units in various systems in no time at all. The horn dispersion facilitates horizontal and vertical clustering. Optional tilt brackets attached to the MultiGrips allow for rigging applications.

The LINEAR 5 MK II 112 FA is a powerful full-range mid/high unit for setups with and without a subwoofer. It features a 12" bass/midrange speaker, 1" tweeter with 1.7" voice coil, and rotatable 60° x 40° CD horn. The LINEAR 5 MK II 115 FA is a full-range mid/high unit with the most powerful bass response of the series thanks to its 15" bass/midrange speaker, 1" tweeter with 1.7" voice coil, and rotatable 60° x 40° CD horn.

LINEAR 5 MK II subwoofers feature:

- Powerful Class-D power amps
- Remote-controlled high-performance DSP with directly selectable, integrated Remote and Cardioid presets (Front, 1:1 vertical, 1:1 horizontal, Remote)
- DSP Out: balanced XLR output that transmits the processed signal from the speaker to a non-network-compatible speaker. The audio signal applied here can be extensively modified using the DSP CONTROL software

- Two lockable, balanced XLR/TRS Combo inputs, and balanced XLR outputs for analogue loop-through to an additional speaker.
- Professional, lockable EtherCon connectors for connection to a Mac or PC to control the system via a network; daisy chain connections possible
- M20 thread for the mounting pole
- Enclosure made of birch multiplex hybrid (115 Sub A) and birch multiplex (118 Sub A)

The standard bass-reflex subwoofers form the solid foundation of the new LINEAR 5 MK II systems with their uncompromising performance and dry, defined bass down to the lowest of the lows. Simple and directly selectable Cardioid settings give the user an enormously expanded range of options for system configuration and access to the professional class in sound reinforcement. 2.1 setups are simplified thanks to the stereo preamplifiers.

The LINEAR 5 MK II 115 Sub A is a compact bass reflex subwoofer with punchy sound and a 15" subwoofer with a 3" voice coil, 1200 W peak power Class-D power amplifier. The LINEAR 5 MK II 118 Sub A Bass reflex subwoofer is made of birch multiplex with more sound pressure, an 18" subwoofer with a 4" voice coil, 2000 W peak power Class-D power amplifier.

LINEAR 5 MK II Weather Protective Cover

Made to measure and equipped with many clever details, the Weather Protective Covers are the perfect protection against moisture and humidity, and at the same time a sturdy transport cover for all LINEAR 5 MK II mid/high units and subwoofers. Behind the front flap, a waterproof acoustic gauze protects the front of the speakers and the drivers without affecting the systems' sound. On the rear, sturdy, transparent viewing windows keep water away from the electronics. The handles can still be used thanks to sealable recesses or notches. In the 115 XA, 112 FA and 115 FA mid/high units, this allows the rigging frames to be installed even when the rain cover is on. The subwoofer covers provide sealable access to the thread for the mounting poles.

HK Audio/LINEAR 5 MK II

Elation Professional Full-Colour KL Panel XL Now Available in IP65 Design



Elation Professional's KL Panel XL full-colour-spectrum soft light is now available in an IP65 version—the KL Panel XL IP—making it an even more versatile broadcast-quality luminaire.

The fixture's IP65 design means the KL Panel XL IP can be used in a wider range of applications and locations. Suitable for use in both indoor and outdoor settings, it is a soft-light solution for on-location applications. Its weatherproof design allows it to function properly in harsh environments and adverse conditions, eliminating the need for frequent cleaning and maintenance and saving both time and cost.

As a key, fill and backlight with soft white or full-colour washes

The KL Panel XL IP offers exceptional output with precise control over colour temperature and full-spectrum colour rendering for an even wash coverage. Optimized for the tunable white light requirements of film and television, it is a versatile and reliable soft light source for a wide range of applications that demand outstanding performance and colour quality. It provides bright, highly variable lighting of exceptional quality for key, fill, and backlight.

Using a highly-efficient 570W RGBW+ Lime + Cyan LED Array, the KL Panel XL IP produces beautifully soft white or full-colour washes up to 40,000 field lumens at a 100° half-peak angle. Colour reproduction is extremely accurate both to the eye and to the camera with a CRI of 95 while the colour temperature is easily adjustable from 2,000 to 10,000K for a wide choice of variable colour or white shade projections. Additional colour tuning is possible through a green-shift adjustment and virtual gel library to match the white balance for the camera.

Multi-zone control

The KL Panel XL IP's LED array is equipped with multi-zone control, enabling dynamic colour access, visually striking effects and realistic reproductions, such as fire, lightning, emergency vehicle flashes and various strobe effects.

Besides its wide spectrum of chromatic options, this soft light luminaire includes other useful design features like smooth 16-bit dimming and selectable dimming curve modes for programming ease, as well as a high-speed electronic shutter and strobe. Measuring 33.1 in/840 mm (L) x 14.4 in/366mm (H), a 4x2-section control option provides additional creative capabilities for colour effects and visual impact. The KL Panel XL IP comes with a diffuser for even softer projections, as well as adjustable and removable 8-leaf barn doors that enable customization of the beam shape and reduction of light spill.

Optimized for broadcast

Virtually silent, the KL Panel XL IP is optimized for broadcast and film environments with 900-25000Hz LED refresh rate adjustment for flicker-free operation. Compact and portable, it can be mounted on a stand or suspended using any standard clamp or the included Junior pin adapter. A rugged housing with impact-

resistant surrounds and a base plate ensures that the fixture can handle rough handling on today's fast-paced sets.

Power and control options

The KL Panel XL IP is self-contained without the need for an external power supply and offers power pass-through for easy linking of multiple units. The fixture can be powered remotely through its integrated 4-pin XLR 24-36 VDC battery input (battery not included). Professional control options include DMX/RDM, Art-NET and sACN. It can also be controlled manually for stand-alone use using the included encoders and OLED display, providing instant control of the intensity, colour

temperature, green shift and other settings. The display and encoders are conveniently positioned on the bottom of the fixture to ensure easy access while the fixture is mounted on a stand. The integration of Elation's E-FLY wireless DMX system allows for even more flexibility of use.

The KL Panel XL IP is energy efficient, consuming 681W of max power, and offers other benefits of LED like greater reliability, a long LED life rating and less maintenance for a lower cost of ownership.

[Elation/KL Panel XL IP](#)

Christie Delivers First 22,500 lumens 4K UHD 1DLP Projector



Christie's 4K22-HS is the newest addition to its HS Series of laser projectors. With 22,500 lumens, the new Christie 4K22-HS sets a new standard for brightness in 4K UHD 1DLP projection. The Christie 4K22-HS narrows the gap between 1DLP and 3DLP projection, making it ideal for live events and venues that require high brightness, incredible colour performance, and professional features, including museums, auditoriums, and attractions, in a budget-friendly projector.

With Christie BoldColor+ technology, the 4K22-HS delivers natural and realistic colours, deeper blacks, and enhanced colour uniformity. For applications that require multiple projectors, the new model features onboard Christie Twist for warping and blending, and quick and easy set-up and alignment of multiple displays.

The Christie 4K22-HS is compatible with Christie Mystique, an automated camera-based alignment and

recalibration software tool that saves users hours of painstaking work when installing, aligning, calibrating, and maintaining multi-projector systems, as well as the new Christie Intelligent Camera. Among several time-saving features, Christie Intelligent Camera can be used to trigger projector autofocus, automatically calibrate projector colour to optimize colour uniformity, and automate colour and brightness matching across multi-projector arrays.

For added versatility, the 4K22-HS features active and passive polarized 3D functionality, and advanced electronics deliver frame rates at 60Hz in 4K UHD and 240Hz at 1080p. It is compatible with all WUXGA HS Series lenses.

The Christie 4K22-HS comes with a 5-year warranty and is now available for shipping.

[Christie/HS Series](#)

Ayrton Domino Wash All-Terrain Luminaire Aims to Create Incomparable Atmospheres



As the latest addition to Ayrton's Classical 9 Series range, the Domino Wash is the company's first IP65-rated wash fixture, developed for outdoor use.

The Domino Wash has a 210 mm Fresnel lens with a specific optical structure designed to accurately adapt the diffusion level according to requirements. This optical combination not only favours the use of framing shutter blades or geometric gobos but significantly improves colour mix and can produce 10% more light than with a classic Fresnel lens F.O.S.

To cover all types of usage, the Domino Wash is available in three flicker-free versions, S, TC and the entirely new ST or 'Stage & Theatre' version. The ST version is fitted with a new monochromatic LED source that delivers a light output of 45,000 lumens and a D65 white point that allows perfect colour reproduction with a CRI greater than 80.

In common with many other Ayrton fixtures, the 'Stage' or 'S' version provides a cooler, metallic light with a record luminous flux of 52,000 lumens, a colour temperature of 7000 K and a CRI of 70. The 'True Colour' or 'TC' version



offers a colour rendering index greater than 95 with extremely high TM30 values and a colour temperature of 6000 Kelvin to deliver perfect colour rendering.

Domino Wash's proprietary optical system delivers a 12:1 zoom ratio and a zoom range of 6.2° at half peak to 75° at one-tenth peak. It shares the same complex colour mixing system with Huracán Wash, offering a double level of CMY saturation that can obtain 281 trillion colours and a triple corrector for variable colour temperature, allowing subtle adjustment from 2700 K to 15000 K and significant CRI improvement T.C.S.

Like all Ayrton products, Domino Wash is factory-equipped with full features. These include a 4-shutter framing section for accurate shutter cuts across a 100% surface area in all positions; a wheel of seven rotating glass gobos, a 15-blade iris diaphragm, a frost and an RGB & CMY animation wheel. Domino Wash also has Ayrton's liquid cooling system fitted with six submersible fans outside its weatherproof enclosure.

Developed to resist hot or cold weather, wind, rain, hail, sand or dust, the Domino Wash also rounds out an exceptional trilogy with Domino Profile and Domino LT.

[Ayrton/Domino Wash](#)

Point Source Audio SERIES9 Designed with High Max SPL and High Sensitivity



Point Source Audio has unveiled its new SERIES9 subminiature microphone collection with a first-of-its-kind performance standard for professional users. Available in a variety of formats, the class-leading microphones deliver a unique combination of high max SPL with high sensitivity making them capable of handling the powerful vocals of a live sound event or the quietest whispers of a conversation in a studio.

Despite their tiny form factor, the mics feature 142 dB max SPL along with a -39 dB mic sensitivity. SERIES9 has the added ENDURE connectors—with accelerated life testing to 12,000 bends—as a standard option to its long list of flagship features like the 360° bendable booms, 180° reversible ear hooks, IP 57 waterproof rating, and sanitization with 70% isopropyl alcohol.

The delicate nature of subminiature microphones is an enormous challenge for production teams and that is a challenge the company continually addresses with its technological advances. The SERIES9 has been designed to offer the whole package: performance specs with reliability backed by the numbers. Weighing 0.6 oz (17 g), SERIES9 has been designed to

be a practical tool for sound engineers everywhere and comes in a variety of formats to meet day-to-day needs. Popular mic styles offered include the 3 mm headset, 4 mm lavalier and Point Source Audio's patented EMBRACE on-ear design that combines miking speed, ease and accuracy.

To add to the potential for redundancy, each option is also available with patented dual elements should you need them. The new mic collection is available in beige, brown or black colours and fixed terminations of TA4F, 3-pin Lemo-style, and 3.5 mm locking ring.

6 new microphone models will begin shipping in 2Q 2023:

- GO-9WL omnidirectional lavalier
- GO2-9WLp omnidirectional dual element Lavalier
- GO-9WD omnidirectional headset
- GO2-9WD omnidirectional dual-element headset
- EO-9WL omnidirectional earmount
- EO2-9WL omnidirectional dual element earmount

[Point Source Audio/SERIES9](#)

Tech Talisman

An insight into the world of Event Technical Directors – the virtuosos that bring enchanting live event experiences to life



44th FIDD Chess Olympiad.

The past two decades or so, has arguably been the 'golden age' of large-scale live events world-wide. From breath-taking mega music festivals and concerts to awe-inspiring corporate launches ... and grandiose political rallies to holistic spiritual gatherings that have challenged the sheer capacity of venues – the kind of large-scale events to have graced the global scene since the early 2000's have been true works of wonder. Even wedding ceremonies – which have traditionally been intimate affairs – have now entered the fray, with several high net-worth individuals choosing to book massive venues and put on a multi-day spectacle complete with performances from world-class artists. The one thing that these events share in common, however, is that they've all offered an unequivocally engaging experience for the viewer.

Having said this, it must be noted that putting together such extraordinary productions isn't a piece of cake. The lowest common denominator in such cases is

the monumental amount of planning, coordination and eventual consummation that goes into assertively delivering a superlative event experience that is not just immersive and gripping in terms of its content, but also equally flawless in terms of its technical execution.

Think about all the moving parts and technical elements involved in commissioning an event of any scale. You'd have the usual suspects in the form of audio, video, lighting, projection, automation, staging, and of course, power i.e. electrical connections etc. And more often than not, an event would appoint designated vendors to provide each of these critical technologies and services; with a very crucial point being that each individual piece of equipment would come with their own set of usage directives and deployment capacities. Added to these would be other crucial facets that include managing a mountain of logistics, assessing the individual

requirements of the selected venue and vendors, and of course, keeping all the necessary technical needs in sync.

For all of the above to fall into place, it would be imperative to precisely execute tasks such as conducting a thorough analysis of the venue site to put together a comprehensive tech system plan that meets the venue dimensions and proposed audience schemes, devising an appropriate logistics plan to ensure the highest level of efficiency, ascertain necessary permits and licenses, direct the stream of information among the different event vendors, and most importantly, ensure all safety standards are met and exceeded.

Considering the aforementioned points; and the fact that tech requirements increase manifold when putting together a mega-production as compared to commissioning a medium to small scale event – there are literally thousands of technical issues that can arise out-of-the-blue, all of which would need immediate attention and effective management and mitigation. Some such situations could involve multiple changes to the technical rider – which could take place during the course of the planning stage or even the setup stage; or perhaps last-minute trouble-shooting of various different equipment, systems and/or wiring to make sure you don't end up with serious issues – which could take place during the event run itself. Lest we forget, the innumerable possibilities of potential issues that could take place during post-event wrap-up i.e. de-rigging the individual systems and infrastructure.

Bringing together a mega-production is no laughing matter; and considering the various risks involved especially from the technical and technological point of view alone, it's safe to say that each project deserves to have a defined leader at the helm. Ideally, such a role would demand a highly-skilled and experienced individual who not only possesses a solid understanding of all the technologies that need to be deployed for the event, but also the wisdom to coalesce the various technologies into a coherent and efficient high-functioning ecosystem that's tethered to the ultimate goal and vision of the production. Such an individual would need to be nothing short of an engineering genius to effectively establish order out of chaos, conjure solutions to wildly complex technical challenges, and eventually

deliver a truly seamless event experience for all stakeholders involved.

Technical Directors – Who They Are, And What They Do

What we've just described is exactly what an Event Technical Director (TD) does; and perhaps, even more.

In its most basic form, a Technical Director's job is to make sure that all technical equipment required for the successful commissioning of a live event is functional, safe, and show ready. The Technical Director, along with the Event Producer, is responsible for the overall organization of the technical event production process; and if things go wrong at any step of the way, quick and efficient action by the Technical Director is essential.

The case of mega-productions however is quite different; wherein the TD's role entails a nearly end-to-end management of the event's life cycle – especially from the technical production point of view. Starting from the very first conversation with clients to helping vet ideas and finalize pitches that help to showcase what the event will look like when it all comes together; to organizing staffing, production planning, vendor selection, equipment setup and flawless execution – all while ensuring that technical production budgets are strictly adhered to. Often times they are the first ones onsite for the event, as they remain actively involved throughout the production process, and finally the last ones to leave the site. Additionally, they also work with the client to ensure the creative design and technical aspects of the event are produced the way the client envisioned.

Beginning in the planning stages, the TD usually has multiple interactions with the client to understand the goals and purpose of the event, while also initiating the process of conceptualization and drawing up multiple design options. Every single detail of the event needs to be meticulously planned, and therefore, it is common practice for the TD to ensure that diagrams, plots and drawings are approved and finalized well before the date of the event, which helps the TD to draw on his vast knowledge of various products and technologies and put together the perfect tech ecosystem for the event on paper. Doing so also helps to vastly simplify the process of coordinating with various vendors for



44th FIDD Chess Olympiad.

equipment delivery and ensuring that the eventual setup at the venue runs smoothly (when the event reaches the on-site production stage). In the same stride, the TD also ensures that all the crew and team leads have their own copies of the production plans, so that the respective teams can commence with setup in an organized and timely manner.

Furthermore, since the technical director is trusted as an expert on the client vision and is deeply familiar with every detail of the event, the individual is primarily remains on-site to satisfactorily solve queries and troubleshoot any unforeseen technical hurdles; all while continuing to work closely with the event producer on-site in supporting the various vendor teams and answering any questions the client may have throughout the production process.

Skills & Qualities That Make For A Successful Technical Director

In simple words, a technical director's role mainly entails delivering high-quality experiences for the audience to enjoy, all while maintaining program integrity. To ensure this, perhaps the most crucial quality that one needs to possess in order to be successful in such

a role is possessing great interpersonal skills. This encompasses the ability to effectively communicate with stakeholders across the chain – from CEOs to the on-ground technicians. Critical to achieving this, however, is first learning how to be a good listener. Primarily this entails listening to the client and understanding what the event actually means to them and their brand so that the eventual production and content that comes together is able to elevate the brand's value – just as how it was intended. That being said, the need for a TD's listening abilities doesn't merely end with the client's needs. Rather, the scope extends to paying close attention to each of the individual vendor team's needs, while also keeping a track of the views, opinions and suggestions shared by trusted personnel (operators, designers, engineers etc) during the preparation of each event. At the same time, the TD must also possess strong project management skillsets, as they're usually smack-bang in the middle of it all and are basically responsible for every aspect of the event and bringing it together smoothly. The ability to multi-task efficiently within a highly dynamic environment, and meet tight deadlines isn't a luxury; rather a necessity. And to do so, it is imperative for the TD to be a subject matter expert of sorts, especially in the niche technical details that are essential to the event's success.

The three other essential qualities that a TD must possess in order to be successful, are confidence, patience, and the ability to remain calm during high-pressure situations. A confident TD usually enjoys the support of the various tech teams who show an equal amount of faith in the plans proposed by the TD. Additionally, the client too is likely to remain at ease, as it becomes easier for them to believe in the TD's plans and ability to succeed. On the other hand, patience is important because the role requires dealing with many different personalities and skill sets; whereas the ability to stay calm during high-pressure situations would help the TD communicate in a more effective manner, thereby allowing better scope for quicker and more permanent resolutions.

But most importantly, the one single quality that would allow for a TD to assimilate all of the above points, is loving the role. When a TD actually loves what they do, and truly cares about the quality of work that they put out – that's what really helps them succeed.

A Glimpse Into the Real-World Life of an Experienced Technical Director



While all of the above discussions offer a rather generalized view of the duties and responsibilities of an event technical director; an in-depth conversation with a tenured TD is bound to reveal more than what meets the eye. The following excerpts

of a candid interview with **Vijay Sabhlok** – widely considered and respected as India's leading technical director – affords a rather candid insight into the ups-and-downs and ins-and-outs of what its like to live the life of a technical director.

ETA: In your own words, kindly describe in detail the exact role of an Event Technical Director? What are the various responsibilities that an event Technical Director fulfils? What are the various experiential traits and expertise required for one to qualify as an event Technical Director, etc?

VIJAY: As a technical director, I am often asked about my role in an event ... many clients ask about the

difference between their operations and production departments and what I do. So here goes ...

I have to say up front that it's a very knowledge and solution-based job, not a coordination-based job (like some would think), and it's not dependent on anyone. Solutions are offered that are right for the event, without any bias. A Technical Director is responsible for managing and executing all technical production services throughout the scope and design, budgeting, pre-production, on-site and post-production phases of an event. In my supervisory role, I am solely responsible for managing the technical production budget (if required by the agency), all drawings, equipment lists, and line items for the technical production, designer, and operations manpower.

And in my personal opinion, some of the other key responsibilities that lie on the shoulders of a TD include:

- * Collaborating with the Account Manager, Creative Department, Content Producer and Event Producer to determine the scope of the event and design deliverable timeline based on proposed budgets and deadlines
- * Collaborating with other related internal teams to identify all technical production requirements
- * Performing a thorough technical assessment of the venue and identifying technical needs, system flows, power plans, and rigging plans as needed. Here, a thorough analysis of the venue is initiated with detailed measurements taken, and preliminary space plans are drawn up. The CAD drawings are utilized to precisely plan truss arrangement, staging schematics, projection, audio, lighting, SFX etc. Additionally, the renderings are also used to plan seating charts, stage sets, as well as security and service areas.
- * Collaborating with creative and design teams to ensure progress, identify technical issues and provide solutions.
- * Developing technical escalation and contingency plans. And I'd personally count this is one of the most important tasks
- * Working with the Show Director, Event Producer, Creatives and Account Manager on site to resolve any technical production issues as needed.

* And finally, overseeing all technical departments, specialised manpower & vendors on site

ETA: From your experience, why according to you, is it important for large scale events to have an experienced and qualified event Technical Director on board the project? What are the notable differences in projects that work with tech directors vs those that don't?

VIJAY: Large events are usually complex in its entirety; and the larger they get, the more complex they become. The sheer amount of technology required, and also the scale to which this needs to be executed – all become critical to the event's success. A technical director's role becomes even more important in such a scenario, especially when it comes to executing the vision of the creative and show directors. The tandem of these three people ... Show Director, Creative Director and Technical Director is especially important for large and complex events. A technical director's inherent knowledge of all facets of technical production such as lighting, rigging, audio, AV, complex video and playback systems, etc., is paramount to technical execution. And this is probably one of the most important aspects of ensuring that everything works together, the way it's meant to. The technical director ensures that timelines are met and that programming and coordination between designers is done properly, as this is critical to the overall event experience, and also the smooth coordination of the event. Perhaps the most important and yet the often most discreet aspect of having an experienced technical director on your side is that such professionals usually have a separate set of solid contingency plans. They usually ensure that there's a contingency plan for every possible situation and I guess this is what keeps everything running smoothly.

On the other hand, an event that does not have a technical director on their side is often left to rely on the wisdom of the individual vendors commissioning the event, in addition to their in-house production and operations teams. Such scenarios are also known to work – but only to a particular point, because there is always a slip between the cup and the lip. This role needs to be unbiased; and when bias creeps in, there's always a problem.

ETA: From a technology perspective, what are the various facets that a tech Director looks into personally? Is there a standard workflow that you follow when laying out the technical plan and choosing the necessary products/technologies required to commission an event successfully? If so, please do share.

VIJAY: Many facets of what I am looking at have already been answered in the 1st question. Yes, I do have a standard workflow and chart that I review as a preliminary checklist. But most events are bespoke and require solutions based on the needs and wants of the event. This requires experience and knowledge, and you also need to know what equipment is available and at what cost. Planning the manpower is also very important – be it the technical crew, the operators, the engineers or the designers. Knowing how to choose the right technology to deliver an experience is based on a lot of experience; and after 34 years in this business, it has over the years become second nature to me. I consider tech planning a talent, not something you just do in a spreadsheet with lists of equipment. All technical equipment should have a need and a role, like an orchestra where everyone comes together to create a symphony. The creative direction and what the show director wants to achieve is perhaps the most important criteria to keep in mind when choosing technical solutions, equipment and manpower.

ETA: What are the likely challenges that a tech Director would come across while working on a project? Please feel free to segregate your answer based on business challenges vs on-ground Technical challenges? And how does one go about overcoming these challenges?

VIJAY: Wow, that's a tough question, because there are always challenges ... But I'll do my best to name a few of them. The first is that your client does not understand your role. And this misplaced ambiguity of the role often time leads to suspicion of your necessity, and other team members questioning everything. Then there's also an evident lack of support in the form of qualified Technical Rental service providers especially smaller companies. Many a times, the work that they commission does not meet the required standards. That being said, perhaps most glaring of all is the widespread lack of knowledge



44th FIDD Chess Olympiad.

regarding standards and safety; and failure to meet requirements and promises. As an example, I'd say that at times I've noticed that the rigging isn't done with proper safety; and this can lead to massive accidents. What's surprising is that this is often overlooked; and I strongly feel that there is a lack of training opportunities in India for the certification of riggers and truss designers.

Then of course, one would come across issues like materials and equipment not reaching the job site on time and delaying important set-up and programming times; rental service providers assigning the wrong kind of designers and task forces for the event; and yes, one of the biggest problems on site i.e. power distribution, especially the quality of power being provided, and the overall safety aspect of it all.

If you need to overcome such challenges in your role as a TD, I'd personally say the answer is quite simple: you have to believe in yourself and be honest to your work and not compromise. The bottom line is that you've been invited on board to do a very important job, and you have to do it right and offer the best possible

event experience for all stakeholders involved. I guess what helps in such scenarios is having a strong mental capacity – the success of the event is the only thing you need to think about and beyond that you just need to develop a thick skin. Have faith in yourself and that everything is going to be okay; Trust the teams and personnel that you're working with; and most importantly, understand that mistakes are a part of the process, so learn to accept them and deal with them swiftly, learn from the experience, and move on.

ETA: Please feel free to speak in detail about the most technically challenging (yet successfully executed!) Project that you have worked on in recent times...kindly describe in detail the various sound-light-projection-LED etc technologies that were deployed for the project, and any interesting anecdotes related to the project.

VIJAY: So I have done a lot of events in the recent past, but one event that was particularly challenging – both technically as well as creatively – was the opening ceremony of the **44th Chess Olympiad** that took place in Chennai. I was the Tech Director under the banner

of Creative Factory with Vibhore Khandelwal as the Creative Director. And why do I say it was challenging? Well let me break it down in a few easy one-line points:

- The execution time was extremely short
- Complex floor projections along with complex lighting designs were deployed – anyone who knows their tech knows that these two artforms often don't play nice with each other (unless skilfully dealt with).
- A complex trussing plan needed to be integrated to efficiently support much of the tech setup
- The indoor nature of the stadium resulted in high reverberation, which presented an audio nightmare of sorts
- The honourable Prime Minister along with several super VVIPs were in active attendance
- Several last-minute changes to creativity and choreography
- Several content changes

The event comprised an interactive experience between dancers and a rather elaborate floor projection scheme. The creativity was pretty much on-point where it was envisaged for the amalgamation of projections, the dance choreography and the lighting would be in sync and work together in harmony to create a true visual spectacle. Bring this together though, presented quite a few challenges. First up, we were informed that we could hang trusses from the roof girders if needed. However, that was not the case at all, and in reality, we were informed just a few days before the event that we weren't allowed to touch the roof in any way ... Therefore, we had to build a massive floor support that was sturdy enough to hang the various projectors and lighting equipment; all while ensuring that the movements of the lighting fixtures did not disturb or shake the projectors in any way. And since it was extremely essential to take several critical loading factors into account, we also found ourselves having to accommodate a few last-minute changes to the lighting plans.

To be honest, there were several other challenges in addition to the ones I've mentioned here; but in the end, with the support of all the vendors and the entire crew on site, we managed to put on a great event that was flawless in every sense of the word. We used 20 projectors with 20K lumens WUXGA and about 400 moving lights of different types with many static LED

fixtures. And perhaps most crucial of all is the fact that the content and choreography worked together in sublime and synchronous harmony to create an unparalleled visual delight.

ETA: From a personal point of view, are there any particular products/technologies that you prefer working with? If so, please feel free to name them, and elaborate why?

VIJAY: So, as a technical director, I like to work with brands that are standard and deliver flawless results. I prefer not to name brands, as this could cause a conflict of association. All technologies have a purpose, and when you combine them to create a beautiful symphony and deliver an immersive experience, it's a high like no other. I love new-age tech like automation and reveal systems which can create some seriously beautiful and wow moments during an event. Special effects (SFX) technologies have also recently begun to intrigue me, and it's something I'd like to explore of some more. Great content and complex delivery systems are a constant fascination; and there's nothing I'd love more than to keep working on projects that amalgamate complexities of scale with great content. Having said all of that though, I believe the most fascinating thing to experience in life is when you combine all the technologies - conventional, new age, IT and automation - to create an experience that is incomparably satisfying.

ETA: With respect to your role as a Technical Director, What are the changes that you would like to see within the event industry in your respective region / country? Please feel free to share your suggestions on how these changes can be achieved?

VIJAY: Being from India, I would love to see a meteoric rise of the events and the tech industry. I'd also love to see the government recognise the event industry as a crucial contributor to the nation's economy, as events presents a lot of opportunities for employment generation thanks to the various services that come together into bringing an event to life. I would really be appreciative if the latest tech is available asap in our country. When I see an Indian company making drones with "Made in India" technology, it makes me very proud; and I can't help but think how fantastic it would be if an Indian brand made waves worldwide with its technology.

INDIA

Synergy Technologies Puts Together a Visual Spectacle at the Daly College Indore and Mumbai Light Festival

Creating experiences that resonate with the audience



“As a comprehensive visual solutions company, our team has always been ready to push the envelope when it comes to in bringing new and exciting concepts to life!” exclaims **Chirag Patel – founder and director of Synergy Technologies**, as he noted that most of the projects commissioned by his company emphasize the creative use of technology and art to bring together an experience that leaves an indelible mark on the audience.

And Chirag’s observations stand to be true when reviewing two of the most recent novel live performance endeavors that the company was engaged for.

152nd Annual Ceremony at Daly College Indore

Indore’s iconic Daly College is a centenarian co-educational residential and day boarding institution with a glorious history of promoting excellence in academics and co-curricular virtues. Established during the ‘British Raj’; the sprawling campus is a striking sight given its



stately architecture; and the institute building itself is considered an architectural marvel that has managed to stand the test of time. And every year in the month of December, the institute commissions a grand week-long celebration in honour of its founding; which is followed by the annual prize distribution ceremony and a cultural programme.

2022 marked 152 glorious years of the institute's continuation; and to make the celebrations truly memorable; the institute's management invited the imminent Mr Jyotiraditya Scindia, Union Minister of Civil Aviation, to grace the annual prize distribution function as chief guest. The grand event witnessed students being awarded medals and trophies for their achievement in academics and co-curricular activities throughout the year. At the same time, the cultural program saw students presenting various dance styles including folk and western, in addition to various skits and musical performances – all of which was appreciated whole-heartedly by the guests and attendees.

The showstopper of the event, however, was a special conceptual performance that witnessed the Daly College

structure being engulfed in stunning visuals and moving art content – all of which was curated and commissioned by Synergy Technologies – wherein Chirag and his team invested several hours in working closely with the chief conceptualizer and choreographer of the cultural event – Sumeet Nagdev – in understanding the overall vision for the spectacle.

With the performance themed as a live theatrical on the life of Buddha – a team of live musicians (students) were chalked out to perform on the terrace section of the first-floor of the building structure, while the story content would be narrated live by a student located a level above the terrace. The entire performance had to be synced in perfection to the visual content mapped onto the building – which together was expected to be a harmonious and consistent high-quality viewing experience for the audience. In addition to putting together all of the technological systems to bring this vision to life, team Synergy Tech were also entrusted with the responsibility of creating all of the 3D projection mapping content in 8k resolution to offer the best possible 'big-picture' viewing experience.



Team Synergy Tech adopted a meticulous approach in giving shape to this vision; as Chirag informs, “We started off by first commissioning a thorough analysis of the Daly College building structure – spending several hours precisely measuring every single architectural nuance of the building façade. Once this data was secured, the team ran several virtual simulations to understand the precise system configuration and projector deployment points that would ensure the entire building façade being covered seamlessly to offer a stable and continuous viewing experience. Finally, we reviewed every minute detail of the script and music cues of the performance and stitched together the impeccable visual content that would resonate perfectly with the performance”.

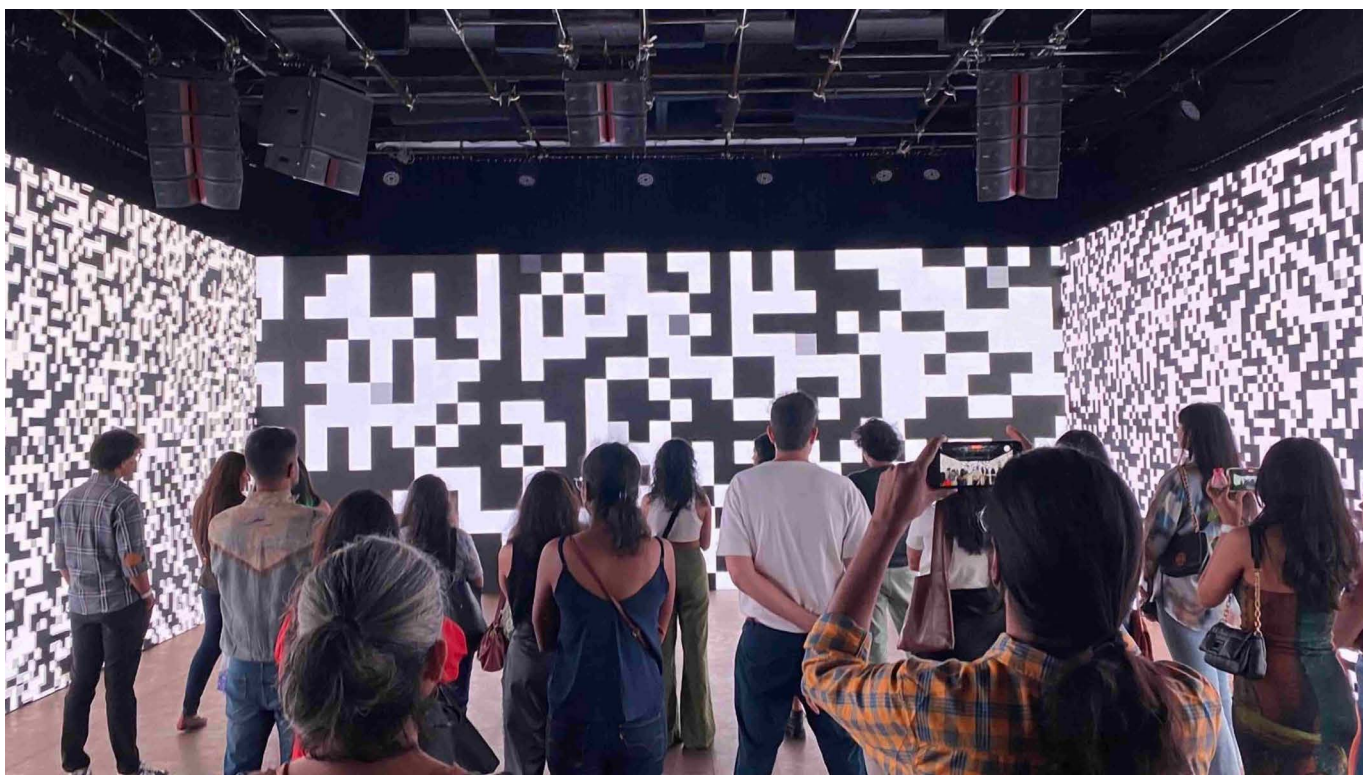
For the event itself, team Synergy Tech deployed a total of 8 units of the D20WU-HS high-performance projectors from **Christie** double-stack mounted (4 on 4) at specific points relative to the structure to comprehensively cover the entire façade, without any image overlaps or drop spots. A total of 8 units of the HDMI20-OPTJ-TX/RX90 optical extenders from **Lightware** were deployed in conjunction with the projectors to ensure relay of uncompressed ultra-high quality content; with end-to-end management of the projected content achieved through **Dataton Watchout**.

Sumeet Nagdev shares due credit to Synergy Tech for the event turning out to be a grand success, as he comments, “We shared a deep level of trust in Chirag and his team since day one. We chose Synergy Tech as our partner, mainly because of their level of passion and commitment when it comes to the quality of the projects they commission, and of course, their stellar work ethic. Team Synergy Tech were absolutely brilliant to work with; and together we ensured that we pulled off a truly flawless visual spectacle that was enjoyed and appreciated by one and all”.

The Mumbai Light Festival

An intellectual property of the Floating Canvas Company, and supported by the Ministry of Culture (Govt. Of India); the Mumbai Light Festival (MLF) has been envisioned as a one-of-its-kind celebration of lights that becomes a fixture in Mumbai’s cultural calendar. The project kickstarted with the ‘MLF Satellite’ – a sort of intimate prelude to build excitement for the much grander full-fledged MLF which is scheduled for March, 2023. And in December of 2022, the Mumbai Light Festival commissioned its third Satellite edition, which took place from the 13th to the 22nd of the month at Mumbai’s renowned G5A Warehouse.

Titled IMMERSE, the event showcased two audio-visual acts that brought together diverse artists, genres and



influences; crafting uniquely immersive experiences for the audience. The first audiovisual act titled 'Once upon a time...' depicted the reimagining of a Gond folktale through the art of Padma Shri-awardee Durgabai Vyam, one of the leading names in the Pardhan Gond tradition of tribal art. Brought to life by ace animator Vishwesh Menon and set to the hypnotic tunes of Bana, a three-string fiddle played by Pardhan Gonds, the act attempted to push the boundaries of representing India's vast wealth of traditional lore and art forms. On the other hand, the second act, titled 'Overture', was a collaborative effort between visual artist Aniruddh Mehta (BigFat) and music tech expert Aaron Pereira (Myles), who designed and put together an unforgettable sonic and visual odyssey by combining plush gradients, complex geometries, polyrhythmic sounds and ambient textures, this act was designed and put-together to be an unforgettable sonic and visual odyssey.

Arguably the most ambitious satellite event from the MLF, the organizers decided to partner with Synergy Technologies to commission all of the visual technology solutions for the event; with the ultimate intent of doing thorough justice to the quality and scale of the content being presented by the respective artists. And the Synergy Technologies team, lead by Chirag, wasted

no time in putting together a plan of action to bring the organizers' and artists' vision to life.

"This would be the first time ever that heritage GOND artwork would be presented through the use of digital technologies; and therefore, attention to detail reigned as a priority. We knew from the onset that we had to be extra careful with the colours, brightness, contrast and viewing distance to ensure that the artwork presented by the fantastic artists create the desired visual impact. And for this, we had several discussions and meetings to mutually decide on what to choose for showcasing the art. And with the G5A warehouse space being specifically designed to host art exhibitions and installations; we realized that the intimate space would eventually offer a very short viewing distance for the audience; especially considering that the artworks sported a very high pixel resolution of 12672 (W) x 1920 (H). Also, due to height restrictions at the venue, we realized that comprehensive immersive projection would lead to multiple shadows being cast on the artwork itself, thereby compromising the viewing experience for the audience." explains Chirag.

Chirag shares that his team presented the findings of our analysis to the organizers as he explained that the



key to success involved deploying a set of technologies and systems that would optimize the room dimensions in a way that audiences would be engulfed in a truly immersive environment as soon as they set foot within the space where the art was being presented. To deliver a better understanding of this, Chirag offered to conduct a simulation at Synergy Tech's warehouse; where after a bit of back and forth, it was collaboratively decided to deploy Synergy Tech's newly acquired 2.6mm LED screens from ATENTI that would act as the main canvas for the artwork; while also deploying multiple 20k laser projectors from Christie that would map the floor.

Considering the rather limited period of time allotted for setup and system check, team Synergy Tech swiftly deployed over 1200sq.ft of the 2.6mm LED screens perfectly aligned and arranged to offer seamless panoramic viewing; with multiple units of the powerful and virtuous **Novastar MX40 Pro** deployed to offer comprehensive image processing, image adjustment and overall display control. Additionally, multiple units of 20k laser projectors from Christie were deployed to encapsulate the floor space in visually stunning artwork that offered a truly immersive experience; with matrix switching achieved through multiple units of 4k HDMI matrix routers from **Lightware, and Dataton's**

Watchout providing unparalleled creative control over the projection material.

Team Synergy Tech's quick and precision driven system setup and control not only allowed the artists enough time and dexterity to render their respective content accurately, but also ensured a flawless and rather hypnotic viewing experience of the mesmerizing artwork on display throughout the 10 scheduled days of the event.

Aagam Mehta, co-founder of the Floating Canvas Company

elatedly shares his feedback about working with team Synergy Tech as he comments, "For us, working with Synergy Technologies was key to pulling off this immersive art experience successfully. Not only was Chirag involved in the project from the very beginning, but his crucial inputs and advice regarding the kind of hardware to go with, ensured that our vision for the event came to life in the best way possible!"

Synergy Technologies

THAILAND

L-Acoustics Brings EDM Music Fans Together for Blowout Blockbuster Festival

One Systems Global Production designed and deployed a powerful L-Acoustics K Series system in a massive exhibition hall for 10,000 excited fans



One Systems Global Production designed and deployed a powerful L-Acoustics K Series system in a massive exhibition hall for 10,000 excited fans

Ten thousand Electronic Dance Music (EDM) fans got reacquainted with the boundless energy of a live show as Bangkok's Together Festival returned after a two-edition hiatus to deliver a programme filled with the genre's A-listers. Headliners like Blasterjaxx, W&W, Will Sparks and AXMO alongside local talents Roxy June, Riviere and Ayrton.

Staged over two days in a massive 3,267 sqm exhibition hall at the Bangkok International Trade & Exhibition Centre (BITEC), the festival showcased various EDM styles. With a dynamic range of sub-genres from big room house and hardstyle, to euphoric, vocal-led tracks, an equally dynamic PA was needed to support the various musical content.

Festival organisers looked to Bangkok-based L-Acoustics Rental Partner, [One Systems Global Production](#) to supply a full-range, powerful PA that would fit the musi-



cal styles and fill the exhibition hall with powerful, clear sound. A production partner since the first-ever edition of Together Festival in 2016, the technical and system engineering team at One System had a good grasp of the festival's programme and they specified a system based on L-Acoustics K Series to achieve the festival's goals.

Anusorn Peetiwananaphan, systems and FOH engineer for the event, has worked on renowned EDM festivals such as the S20 Songkran Music Festival, Waterzonic and 808 Festival over the past decade. Knowing that an L-Acoustics system is always a first choice for world-class EDM artists, Anusorn set to work designing his K Series-based system using Soundvision 3D modelling software.

"Soundvision improves my efficiency as it allows me to plot all elements according to the space, no matter the shape and size," he explained. "On the hardware side of things, installation and cabling are accomplished swiftly with detailed reports for my deployment team."

Anusorn also needed to manage a vast exhibition hall made of concrete. "My team and I minimised reflections

using K Series' Panflex variable directivity," he revealed. "With careful planning in Soundvision, I was able to focus sound to the audience, avoiding the reflective walls."

The main system included 10 x L-Acoustics K1 with 6 x K2 down per side. Front-fill consisted of 6 x stacks of 2 x Kara II boxes each while out-fill was accomplished using 10 x K2 per side. 36 x SB28 subwoofers produced low-end rumble. DJs were served with 6 x L-Acoustics Kara II for monitoring and the entire system was driven by 48 LA8 amplified controllers, running through an L-Acoustics P1 processor.

One Systems Global Production and Anusorn were thrilled with the sound quality. "The system I designed yielded the results I was expecting. The L-Acoustics range of premium hardware allowed for smooth operation with minimal fuss, despite the acoustic challenges," concluded Anusorn. "It was wonderful to be back to creating exciting sound for festival-goers in Thailand."

L-Acoustics

AUSTRALIA

Robe Dreams On with Crowded House

80s musical group Crowded House staged a comeback tour with lighting designer Dan Black using a combination of Robe luminaires to create a stunningly gorgeous light show



Crowded House are among Australia and New Zealand's most iconic, popular, and successful bands, with a string of melodic hits like "Better Be Home Soon", "Don't Dream It's Over", "Something So Strong" and others. With some hits stretching back to the 1980s, the band's infectious foot-tapping music was more than welcomed by fans during their latest tour.

A recent show at Stage 88 in the lush green environs of Commonwealth Park, Canberra, ACT, was one of a week of rescheduled Australian shows, postponed when the tour was interrupted by the Covid lockdowns. Locally based technical production company, Elite Event Technology (EET), supplied an all Robe moving light rig. The band's lighting designer Dan Black used a mix of Robe BMFL Blades and WashBeams, MegaPointes, LEDWash 300+s and 600s to great effect, crafting a

beautifully elegant light show that perfectly matched the mood and style of a crisp springtime evening outdoors.





Crowded House played a splattering of concerts as and when pandemic restrictions allowed, with lighting and video designed by Ben Dalgleish from Human Person. However, in April 2022, Ben had other commitments, so Brisbane-based Dan – part of the Colourblind visual collective – came aboard. He had first encountered Robe products early on in his career whilst working at various theatres in Brisbane – LEDWash 300s have been a popular choice there. He worked at Brisbane Powerhouse – a former power station transformed into a charismatic, vibrant post-industrial arts and performance venue – for 10 years before launching his freelance career.

The first part of the tour retained the video elements from those original shows and a set designed by Ben but involved a completely new lighting design by Dan which included Robe Spiiders as the main wash lights and RoboSpots providing key light on the artists. Day says that he chose Spiiders for the touring rig because they are “bright with a great colour range” and are one of his go-to’s for a reliable and dynamic wash light. He also likes the flower effects, though they were not used for Crowded House.

Due to the scheduling of the Australian leg, some shows used the touring system, again being supplied by

Chameleon Touring Productions of Sydney, and some, like the Canberra show, had production supplied locally. Dan sent his lighting plot to EET, ACT’s major production and rental company headed by Darren Russell, who





matched it as closely as possible with what he had available, which was all the Robes.

The Spiiders on Dan's touring spec were swapped out for the even lighter Robe LEDWash300+s due to the weight loadings of Stage 88's permanent tensile roof structure, and his standard hard-edged fixtures substituted for the BMFLs and MegaPointes.

Dan also used three RoboSpot systems for the first time, supplied by Chameleon. Running on these were 3 x BMFL WashBeams rigged on the front truss allowing very efficient following of the front-line artists – guitarist Liam Finn, lead singer/guitarist and co-founder Neil Finn and bassist Nick Seymour – all of whom move constantly during the average set.

Dan loved the RoboSpot system. "You can utilize lights anywhere on the rig and get the right angles without significant spillage," he noted.

In Canberra, the 7 x BMFL Spots on the front truss were used for key lighting and specials, with the 19 x LEDWash 300+s in the overhead trusses providing the wash coverage. The 13 x MegaPointes were also on the upstage trusses and used for effects, gobo looks and other scenic lighting looks, while another 6 x BMFL Spots were deployed upstage on the floor, utilized for powerful beam-work and backlighting. Also gracing the upstage

deck were 7 x LEDWash 600s for additional blow-through effects and to contrast the BMFLs Spots.

The lighting helped create the drama and atmosphere for the set, with integrated but organically executed cuing, spot-on timing, and tight key lighting, ensuring the focus stayed on the music, and the artists while enhancing the incredible connection they have with their audience.

Following their moods requires a certain amount of improvisation and great empathy to make this a genuinely organic live visual experience, something that Dan enjoys delivering. He programmed and ran the Crowded House show on a grandMA2 full size supplied by EET in Canberra, and used a GM2 light console on the tour.

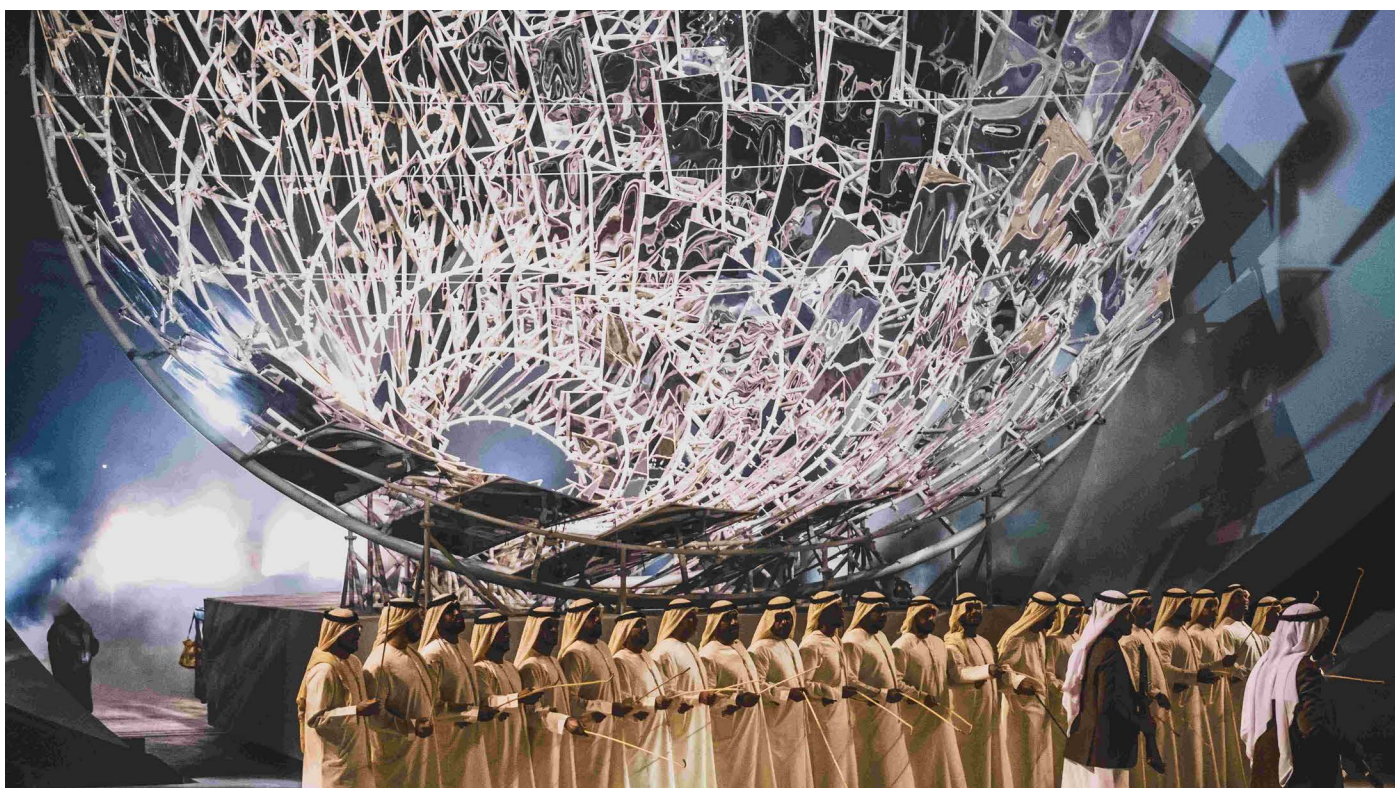
Dan was happy to work with the Robe fixtures on this show, commenting that whenever he sees Robe on the rider he knows he will get plenty of "flexible and reliable" options.

Robe

UAE

zactrack Control Leads Great Storytelling for UAE National Day

zactrack empowers the creation of some very subtle and tasteful yet highly impactful effects



© People Creative.

A zactrack real-time tracking system was specified and used to control over 400 moving lights for the 51st United Arab Emirates National Day Ceremony which featured creative direction and design by Es Devlin and was produced by People Creative.

The show was directed by Francisco Negrin, Gavin Robins and Bryn Walters, with lighting for this spectacular high-profile production designed by Bruno Poet, with associate designers Max Narula & Johanne Jensen.

A special tunnel-shaped auditorium was designed by Es Devlin and specially curated for the location at ADNEC

in Abu Dhabi. The epic 45-minute show featured a full-scale parade and a stylishly choreographed cast of over 3000, including 1000 military personnel and 1000 children, which highlighted the history, values, achievements, and future visions of the UAE. This skilled fusion of colour, movement and drama was broadcast and streamed live on the first day of the 2022 UAE National Day holiday weekend.

Bruno's starting point for the lighting design was the detailed scenic environment and Francisco's carefully storyboarded narrative. Bruno specified a lighting rig that was versatile enough to cover the show dynamics and the impressive 100m long by 20m wide performance area. It featured giant curved portals at both ends with



© People Creative.

opening/closing doors for entrances/exits. The entire space including the floor was also used as a projection surface.

Ground-supported lighting positions surrounded the entire venue, matched to the gentle curves of the outdoor setting, with seating stands on either side and a 'ceiling' made up of 14 x 100m long ROE Strip video products attached to a catenary.

Around 3,800 lighting fixtures were patched in total, 436 of which were calibrated and linked to the fully redundant zactrack PRO tracking system chosen by Bruno and Max, with 22 x Anchors (antennas) mapping the designated area and 75 x Tags (trackers).

Lighting being zactracked included powerful Elation Maximus and Robe FORTE luminaires follow-spotting principal artists throughout the show. The FORTEs were run manually by human operators working with the zactrack system which was controlling the intensities and other parameters, unlocking an impressive combination for superlative key lighting.

"We needed a highly accurate and reliable option to really tightly control key lighting, not just to highlight

performers but to ensure minimal light spillage onto the projection surfaces, so they had maximum impact," explained Bruno.

The zactrack system was also utilised to intensity track the location of objects without the lights moving, using a mix of Ayrton and Elation fixtures that captured the numerous parade floats as they passed along the 2km route. This was possible via zactrack's MSC zoning feature, programmed to automatically trigger the appropriate lights and control the intensities of these fixtures as the floats (or objects) passed by one of 54 zones, which was a clean and streamlined process.

"The system worked brilliantly for this job, and it was extremely quick to set up and finesse," commented Max.

With the Trackers (tags) so easy to conceal, the video crew from vYv UK additionally asked for assistance with tracking some of the cyclists during rehearsals, allowing their engineers to execute real-time rendering effects during the broadcast. Zactrack signal was sent into the video control system directly via OSC.

Bruno and Max had both used zactrack before on Andrew Lloyd Webber's acclaimed Cinderella production in London's west end, which ran for a

year, with both lighting and sound zactracked via 28 performers throughout the show. "Cinderella was our first time using the technology, so it was a big test, and everyone was very impressed with the results," declared Max, with Bruno adding that based on that experience, they were "fully confident" of integrating it into delivering the bold, dramatic, and slick light show needed for UAE National Day.

Bruno also explained how their increased knowledge of zactrack empowered the creation of some very subtle and tasteful yet highly impactful effects like the triggering of fixture intensities and using the lights statically as opposed to following the tags with movement. For part of the military parade segment, a soldier was tracked so projected grid lines on the show floor would disappear as he approached in perfect harmony with his steps keeping the 1000 military behind him in perfect alignment.

The National Day event's technical integrator was Encore Dubai who sourced and supplied the zactrack system together with all the lighting equipment.

zactrack's own Alistair Smyth and Paul Roch were also "extremely helpful from the outset," noted Bruno and Max, in terms of assisting in the zactrack system design to meet all their creative and technical needs and tweaking the system specifically for this show, arguably the largest zactrack system to date.

zactrack brand manager Alistair Smyth noted, "It's always amazing to see the creativity of Bruce and Max in their inventive designs. Using zactrack with lighting, audio and video simultaneously from one system really illustrates getting the most from zactrack and embracing its many capabilities."

Lighting was run via 4 x grandMA3s with 3 x grandMA3 lights as backup/tech. The three main ones with their requisite backups ran the show lighting; Jon Barker was programming and tech'ing the zactrack Trackers on one console, while Max looked after the main lighting fixtures on the second, with the third run by Dan Bond programming the vast amounts of LED strip in the venue in conjunction with a d3 server, which also received zactrack data via OSC.

Encore supplied two 'onstage' Tracker techs who were trained on-site by Max in the weeks ahead of the event. They laid them all out on the 20 parade floats, checked thoroughly and then assigned them to the relevant performers. The whole process of integrating the Trackers with the cast involved close collaboration with costume designers Jack Galloway and Oxana Rausch and their team who sewed special pouches into the shoulders and other strategic places.

The lighting crew worked onsite for seven weeks ahead of the show. One of the major challenges was balancing the lighting with the video projections, created by Charli Davies for Luke Halls Studio, which is always a galvanising task, so the more control the lighting team could have over the potential spill factors of light, the better.

The show's audio was designed by Scott Willsallen of Auditoria and the music was composed by Mohammed Al Ahmad of Al Watan Studio with choreography by Leigh-Ann Vizer. Stage management was coordinated by Orange Jackets' stage manager Sam Hunter working closely with show caller Julia Whittle. Done+Dusted produced and directed the broadcast elements.

The Organising Committee of the 51 National Day Celebrations was headed by creative executive producer Rawdha Al Qubasi, artistic director Ayesha Hahir, and in addition to Encore, other production suppliers and consultants were Wonder Works, Stage One, Cundall Engineering, Al Laith, Creative Technology, Maestra, VK Scenic, Agora and Clair.

The event was a massive success with great storytelling once again pushing the boundaries of what is possible to achieve and deliver technically and creatively in an ambitious event framework, an entertainment discipline at which the UAE excels.

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