

ETA ENTERTAINMENT TECHNOLOGY ASIA

For The Technical And Production Professionals in Asia

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PRG Rocks MDLBEAST's Soundstorm with PIXERA

JUNE 2024

NEWS:

Hertz And Pixelz Raises
the Bar with Enhanced
Inventory Line-Up

SPOTLIGHT:

Penn Elcom Celebrates 50

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Good Quality Product Support

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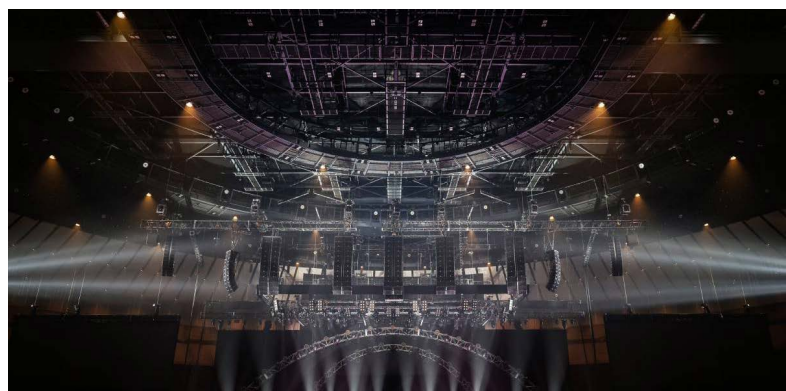
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Achieving 50 years is no ordinary feat. Penn Elcom, a legendary manufacturer of flightcase hardware, racking, speaker components, cabling, LED lighting, and related elements, celebrates half a century of vibrant and innovative contributions to the production and entertainment industry! Founded in 1974 by Roger Willems, the company produces and supplies an array of vital

entertainment industry related infrastructural elements, which are fabricated from bases in the UK, USA, Germany and China in a tightly co-ordinated operation involving over 600 full-time employees. We are excited to highlight their journey in this issue's Spotlight column. In our Live column, we explore PRG's deployment of AV Stumpfl's PIXERA video servers for the colossal 189m x 43m LED screen at Soundstorm 2023, delivering low-latency and high-quality visuals. Months before hundreds of thousands of attendees descended on Riyadh, Saudi Arabia, for Soundstorm 2023, the PRG team was meticulously planning the rigging, audio, lighting, and video networks for the largest of the eight stages on-site.

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Johnston Audio Services Standardises on NEXO P15 for Wedge Monitoring



AUSTRALIA: Bruce Johnston is one of a select group of live sound engineers to achieve legendary status. First for mixing bands including Hoodoo Gurus, Divinyls, Boom Crash Opera, Crowded House and Midnight Oil in his native Australia, followed by a 12-year stint taking care of front-of-house sound for Oasis and, later, for building one of the world's most respected sound companies.

It was in his early days with the Gallagher brothers that Bruce first came across NEXO.

"Oasis needed serious volume. At the time, line arrays had just started but they weren't giving me what I needed" said Bruce. "We mixed on a NEXO Alpha system, and it was just – wow – right in your face. And it never said no."

Alpha quickly became Bruce's PA of choice for Oasis. Then, in 2002, came NEXO's ground-breaking GEO T line array. "We took GEO T on plenty of big stadium tours – big hangs of 24 at 100,000-people events. That PA was very good. That's where my relationship with NEXO started. It was the PA for me."

Back in Australia and with an inventory of 60 Alpha systems, Bruce set about developing his company Bruce Johnston Audio into a world-class audio company, later merging with Jands Production Services to form JPJ Audio, now part of the Clair Global group.

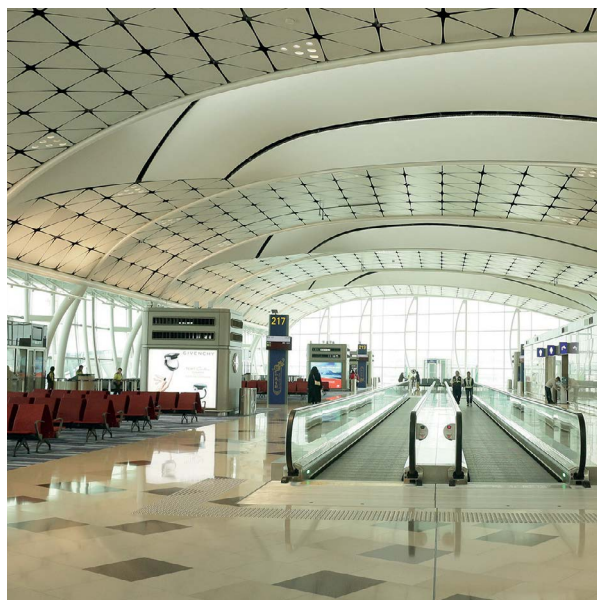
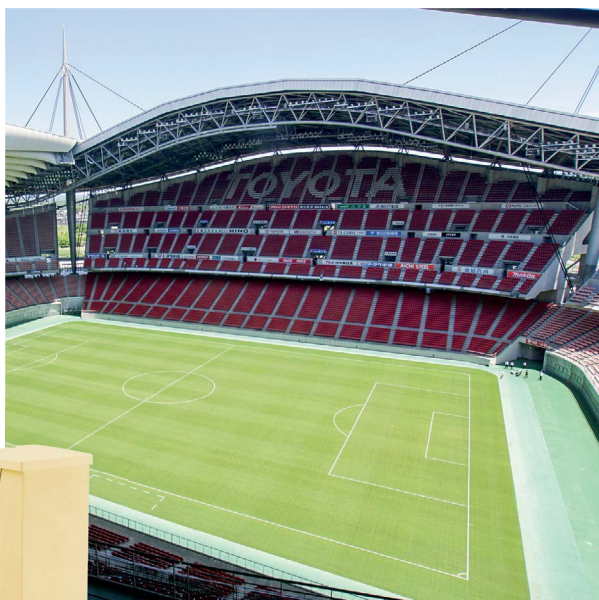
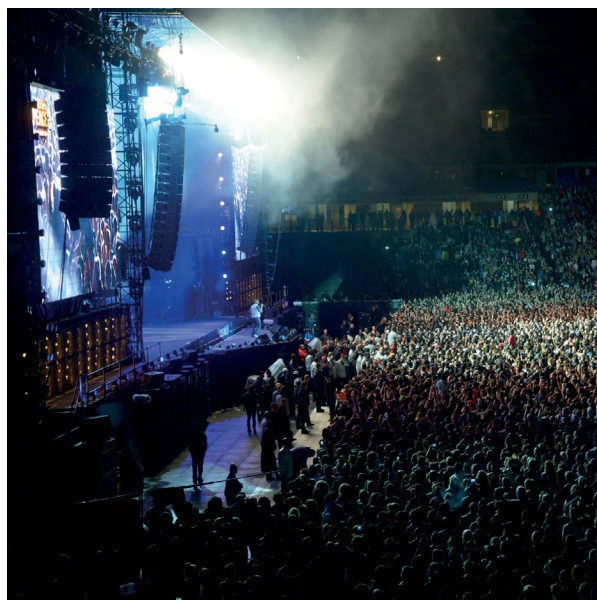
Today, part of the company's work is to look after 'permanent rental' installations in 20 leading live music venues across Australia where Bruce and the team are in the process of upgrading to NEXO P15 for wedge monitoring, standardising on a box he first heard in a demo by NEXO's Australian distributor **Group Technologies**

"When we put the P15 on the floor and it fires away - that horn - we just went 'wow, listen to that – that's great!' And the fact that it had a little more bottom end than the other wedges we tried. I thought it's much better to start from a powerful box and maybe if someone would want to remove a little bit of something they can, as opposed to trying to add something that's not there.

"It serves the purpose of giving people volume" concluded Bruce. "And that's what they want."

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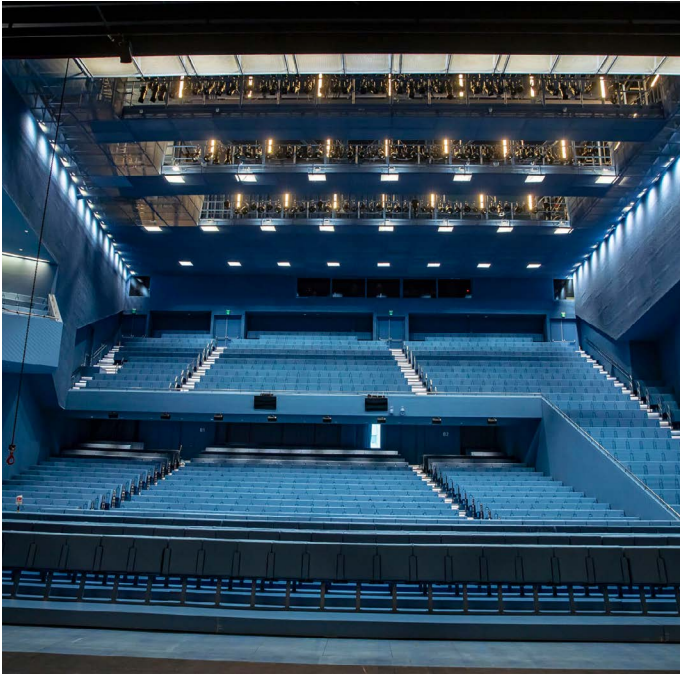


Thinking. Inside the box.

NEXO

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TPAC Invests in Robe Spiiders



©Louise Stickland.

TAIWAN: The spectacular Taipei Performing Arts Centre (TPAC), which contains three world-class performance spaces – The Grand Theatre, the Globe Playhouse, and the Blue Box, has recently invested in 40 x Robe Spiider LED wash beam luminaires, which will help light an array different of productions staged at the venue.

Production values are high on the agenda at TPAC which has around 150 full-time employees, a third of whom are designated to work across assorted technical disciplines, including TPAC senior technical officer Yi-Ming Liu (AKA “Birdie”), who explained that Robe’s Spiider was the “most powerful and efficient solution with the best range of authentic colour temperature whites and optimal energy savings for all types of production design”. He was instrumental in picking the Spiiders, together with TPAC’s head of lighting, Pang-Yan Lin Ling, and others from the lighting team.

Sustainability was a major consideration when getting these moving lights, as well as multi-functionality, and this was the basis for them seeking out the best option LED washes.

After careful deliberation, they decided that Robe’s refined LED engine offered the longevity they wanted as well as being the smallest, lightest and neatest units to service their different spaces.

The Spiiders, recently delivered via Robe’s Asia Pacific subsidiary in Singapore, arranged by local Taiwan dealer DLHG run by Jackson Yu, will be used in all three main performance spaces in this bustling producing and receiving house.

TPAC’s impressive and eye-catching contemporary building was designed by David Gianotten and Rem Koolhaas from the Office for Metropolitan Architecture (OMA) and features different geometrical shapes offering a total space of 50,000 square metres. The 800-seater Playhouse is sphere-shaped, the asymmetrical-shaped Grand Theatre has a 1500 capacity, and the Blue Box studio space can accommodate up to 840 and is fully flexible. The building is owned by the Taipei City Government’s Department of Cultural Affairs and the process of procurement is extremely rigorous.

Knowing the type of luminaire needed to add to the approximately 2000 generic luminaires in place when TPAC opened in 2022 after a 10-year build period, Birdie and the lighting team created a spec for the ideal LED wash beam. The fixture was identified as the most useful addition for fulfilling lighting designs plus saving person-power and time when facilitating productions.

Some of the crew travelled to Robe’s factory in the Czech Republic to see the production process, further in-depth demonstrations and to receive



Some of TPAC's technical department team, left to right are Yi-Ming Liu (Birdie) - senior technical officer / Achun Kao - senior technical officer / Pang-Yan Li assistant manager, head of lighting / Kim Lin - senior technical officer / Ting-Nan Chen - senior technical associate.

hands-on maintenance training. "We were all impressed with the quality control and the whole set-up at the factory," stated Birdie, noting that many of the lighting designers they are working with still need convincing about the advantages and characteristics of LED as opposed to tungsten and discharge sources. "So many of Robe's ranges have been properly designed and finessed with theatrical performance in mind," he underlined.

TPAC does not have in-house LDs but works with a range of freelancers who are commissioned to light their productions on a per-project basis and are primarily from Taiwan. International and touring productions will often bring their own designers or lighting directors. "We also needed a brand of moving light known and respected internationally," said Birdie, "and Robe also ticked that box."

TPAC is the first theatre installation in Taiwan to feature Robe Spiiders in the rig, and the technical team – all driven by their passion for performance and dedication to producing great shows – are very proud of this.

Birdie already knew Robe through his touring experiences, but his association goes back around 20 years or so when he worked at the famous Ministry of Sound superclub in London, which had Robe in the house. He's observed that Robe has become a favourite with rental companies and installations worldwide and that the brand has "an excellent reputation" for being a robust, well-engineered creative tool.

He and all the technical team enjoy the interesting mix of shows staged at TPAC, from some of the best Taiwanese dance and performance groups to drama, opera, musicals, and a range of dynamic Asian co-productions all the way through to acclaimed international works, all enjoying the same high levels of staging, perfection and expectation that has made TPAC a nationwide production powerhouse under the creative direction of CEO Austin Wang.

The performance spaces are also used for commercial, industrial, business, and special events, presenting constant technical challenges and offering the chance for creatives and technicians to learn and improve their knowledge and experience every day.

"Having Robe fixtures specified for a high-profile site like TPAC with so much potential for groundbreaking staging and presentation that reaches engaged and enthusiastic audiences, is a great honour," commented Jens Poelker from Robe's Asia Pacific office.

Taiwan's rich and diverse performance culture means its need for top-of-the-range luminaires is ideally suited for Robe's theatrical LED product ranges, and the revered National Theatre has also recently invested in a large quantity of T11 luminaires.

Robe

Fordtronic AV Adds PROLIGHTS Astra Hybrid330 to Inventory



AUSTRALIA: Fordtronic AV, a dry hire company in the audiovisual solutions industry for corporate events, has expanded its inventory with the Astra Hybrid330 and the EclProfile CT+ from PROLIGHTS.

Jonathon Ford, General Manager and Chief AV Technician at Fordtronic, relied on Show Technology, PROLIGHTS distributor in Australia, to purchase new moving head fixtures. "We weren't sure what we wanted," admitted Jonathon. "We'd been sub-hiring from other suppliers in town but knew it was time to purchase our own fixtures. Gareth thought that these hybrids were well suited to the corporate work that we do and he was right!"

The Astra Hybrid330 has been used in various contexts, enhancing event atmospheres with ballyhoo effects and accentuating venue architecture with targeted lighting. "We got a

custom-made gobo made with a company's logo so they can specifically hire the Astra Hybrid330 and get their logo put on a building, on a wall, on the floor, wherever they want to do it," he added.

The wide zoom range of the Astra Hybrid330, from 3° to 50°, was particularly noted for its versatility. "That was pretty impressive because some of the rooms we go to aren't big, so being able to zoom the Gobo out was a huge advantage," he said. "The Gobos are great and the fact that it's got an animation wheel was one of the features we very much wanted in a mover."

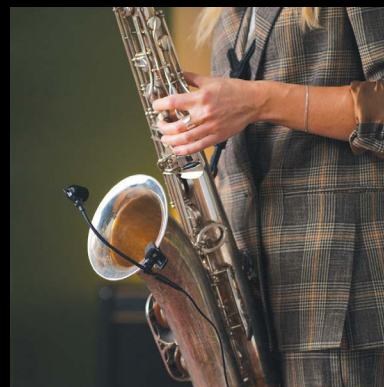
Ford also praised the EclProfile CT+ from PROLIGHTS, a long-standing part of their inventory. "These devices are crucial in our live and broadcast events, as they allow us to adjust the colour temperature to meet the needs of the cameras, offering unmatched flexibility compared to previously used solutions."

PROLIGHTS



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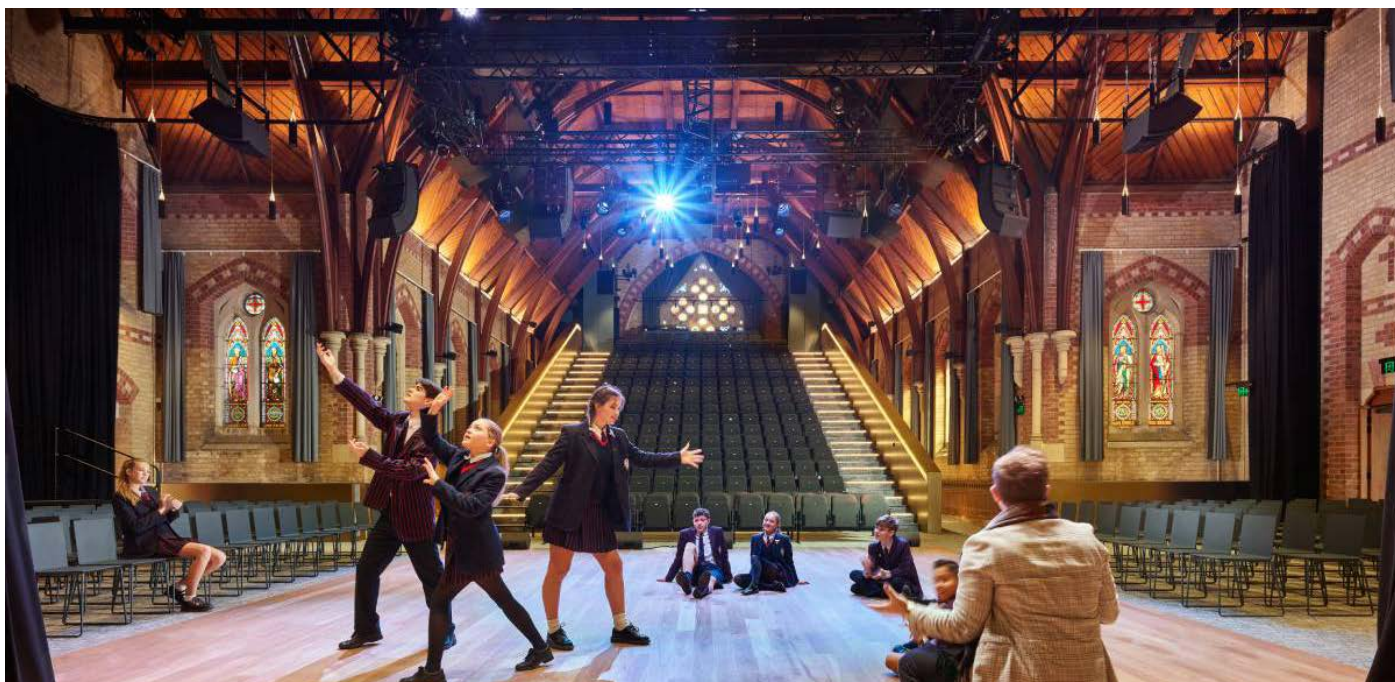
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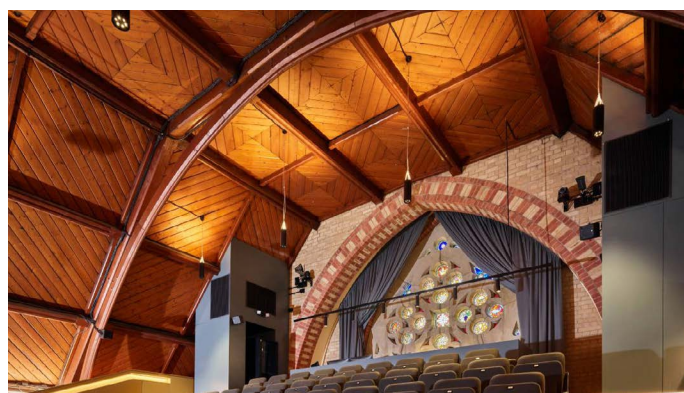
Explore the MCM sound samples recorded with the artists at neumann.com/mcm

Studio Entertech Transforms 19th-Century Church into 400-seat Theatre with L-Acoustics



AUSTRALIA: Founded in 1895, St Michael's Grammar School is an independent co-educational school in the Melbourne suburb of St Kilda. Its modern curriculum covers Australia's primary, secondary, and pre-tertiary school levels. The School emphasises a holistic approach to education through its signature evidence-based experiential learning programs where development and discovery outside the classroom are encouraged through active participation in sports and the performing arts.

St Michael's Performing Arts department has a very high level of voluntary student participation and stages many productions, concerts and performances throughout the year. Productions include contemporary dance, music, and choral ensemble performances. Senior and middle-year musicals are highly acclaimed and have won the best production award from the Victorian Musical Theatre Guild four times. Students also enthusiastically participate in a House drama festival involving students from across the senior



school. Besides participating in music, drama, and dance, the School encourages its students to take on production roles in lighting and sound operations, set construction and design, hair and make-up, and stage management.

Since 1990, St Michael's has been using the heritage-listed St George's Church for music rehearsals and school gatherings, and needed to expand the capabilities of the space to host the raft of musical, dance, and theatrical shows

that the School was producing. The transformed building reopened in May 2023 as a performing arts centre and is now the primary venue for staging productions all year round. The space's original 1877 interior features a vaulted timber ceiling, a heritage-listed organ by Lewis and Sons of London, and beautiful late 19th-century stained glass windows.

The building's interior was mindfully repurposed to keep original interior elements while creating a theatre with state-of-the-art facilities, including a custom-sprung floor for the safety of rigorous dance movements, a custom choir stand, electronically controlled blackout curtains and drapes that can create various stage configurations. The primary fixed-raked seating bank in the church's nave accommodates an audience of just over 200. Meanwhile, the floor can accommodate 200 chairs, with flexible seating arrangements in its transept section.

After studying leading theatre spaces throughout the region, St Michael's management team chose The Alexander Theatre at Monash University's Clayton campus as inspiration. Leading local theatre design consultants Studio Entertech, who had designed the Alexander Theatre's sound system, were brought on to the project to ensure the new theatre would receive future-proof technology.

St George's Church was built in 1877 and designed for choral music performances without amplification. The Director and Theatre Consultant at Studio Entertech, Kate Kelly, said, "The redevelopment needed to transform this bright church ambience into a space capable of hosting a wide range of modern music and drama productions." A nearby tram line and everyday school activities posed noise management challenges, too.

Studio Entertech proposed a 3D spatial audio mixing system using L-Acoustics L-ISA technology.

"The reverberant space meant any sound system deployed had to be highly controlled. The L-ISA technology allows us to achieve great control and enhance the space with immersive hyperreal sound. It will also provide an exceptional, future-forward learning experience for student producers and technicians," said Kate.

In collaboration with Damien Juhasz, L-Acoustics Application Engineer, Studio Entertech settled on an L-ISA configuration consisting of a main frontal Scene system of five hangs of two A10 Focus and two A10 Wide each, with two KS21 subwoofers flown behind the centre hang. Eight X8 coaxial boxes provide spatial in-fill to the first rows. A surround system of ten L-Acoustics X8 speakers serves a fixed audience area. In the transept section, a side-fill system consists of two A10 Wide flown per side. Stage performers receive monitoring from four X12 speakers.

Studio Entertech provided the theatre's technical team with a separate computer screen with the L-ISA Controller connected to the mixer console via MADI, allowing it to switch from the mixer console seamlessly. Two students can operate sound anytime via the L-ISA Controller on the console and one on the separate display. A basic left-right output mode is available for less demanding hall events.

Students at St Michael's will leave the School familiar with cutting-edge audio technology that is installed in only one other location in Australia – The Sydney Coliseum, giving them a leg up as they ease into their professional careers. "St Michael's eagerness to invest in next-generation technology has allowed the students to get hands-on experience with equipment that is relatively new in Australia and will ultimately prove to be an investment for the future of the performance industry," concluded Studio Entertech's Kate Kelly.

L-Acoustics/L-ISA

Claypaky Lighting Excites at Festivities for First Qatar-UAE Super Cup Football Tournament



QATAR: Marking a new chapter in regional sports, the inaugural Qatar-UAE Super Cup football tournament kicked off in Doha, Qatar and showcased the best talent from both nations, then continued the next day with the UAE-Qatar Super Cup Shield match in Dubai.

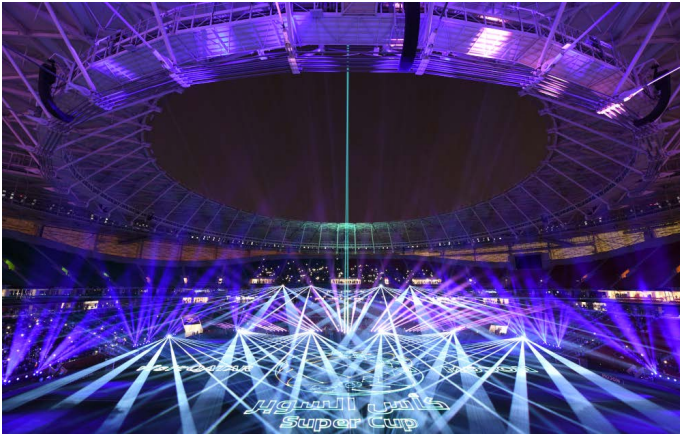
Qvision (Qatar Vision), the Doha-based event production and management company, was charged with bringing the organizing committee's vision to life in spectacular opening ceremonies featuring a large complement of Claypaky lighting fixtures.

For the opening ceremony's show, Qvision Artistic Director and Executive Producer, Sharif Hashisho, devised a mesmerizing display at Al Thumama World Cup stadium where storytelling laser animation highlighted the development of

football in the GCC region and the significance of the newly established championship. A massive array of Claypaky beams lit up the night sky, sweeping the field with fan patterns in a choreographed dance, illuminating the pitch's perimeter and shooting high into the heavens.

"The technical prowess behind the show was impressive with a massive array of lasers and lighting fixtures seamlessly synchronized to create a breathtaking spectacle," enthused Hashisho. The lighting installation included 30 units of Claypaky Skylos, 100 Xtylos, 100 Scenius Unicos, 60 Sharpy Plus and 120 K-EYE K20s, all controlled by grandMA3 full-size consoles.

The IP66-rated Skylos searchlights are the latest Claypaky additions to the Qvision lighting inventory. A custom 300W white laser source,



Skylos delivers an unrivalled parallel beam that is visible and rich in contrast even more than a mile away. The innovative fixture is safe and reliable offering top performance with minimal power usage and maintenance needs.

"From the lasers to Claypaky Skylos and Xtylos fixtures, every element was meticulously planned and executed to perfection," Hashisho noted. In addition to the opening ceremony, Qvision also played a pivotal role in the pre-match ceremony and infotainment segments plus the concluding coronation ceremony, for which Qvision designed, constructed and branded the coronation stage, drawing inspiration from the championship's brand elements to create a visually stunning centrepiece.

In the end, the first Qatar-UAE Super Cup proved to be more than just a football tournament: It was a celebration of unity, sportsmanship and the enduring power of sport to bring nations together. "This event was yet another testament to our relentless pursuit of innovation and quality, building upon our proven track record of successfully organizing major international events such as the AFC Asian Cup and World Cup," concluded Hashisho. "At Qvision, our goal is always to exceed expectations and leave behind a legacy of exceptional event management."

Claypaky

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Adamson Nears Completion of \$4M Electronics Expansion



INTERNATIONAL: Adamson is nearing completion of its exciting new electronics production facility. Their all-new Fuji high-speed PCB assembly line can place 188,000 components per hour, with extremely repeatable accuracy, backed by three levels of Automated Optical Inspection. The 1,525 sqm (16,500 sq ft) footprint has in-floor heating, leading-edge lighting and air handling.

This investment is crucial in both expanding production capacity to meet the demand for the new VGt flagship powered loudspeakers; and the aggressive pursuit of the highest-tech audio manufacturing.

Features of the Fuji line

Fuji production equipment is the essence of Industry 4.0, with complete connectivity from design and prototype, through New Product Introduction (NPI) and following with complete integration into ERP. production flexibility, predictive maintenance and automatic

changeovers are the essence of the smart factory. Having transformed from a builder of passive speakers more than 40 years ago into a manufacturer with a focus on smart manufacturing, Adamson is implementing maximum interconnectivity and a full digital transformation of manufacturing processes, including new ERP software. These steps all improve transparency and add to the customer experience.

Adamson has always focused on innovation in pursuit of unparalleled sonic performance, power, and control. While others outsourced overseas and allowed third parties access to critical technologies in their end-product, Adamson stayed close to home. This vertical integration of design and production gives the engineering team the biggest playground in pro audio.

Decades of building performance systems without compromise, combined with research into signal processing, amplification, network integration and performance optimization put Adamson squarely at the forefront of the professional audio industry.

Adamson



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Martin Audio and Generation AV Team up for APAC Distribution Summit



SINGAPORE: Martin Audio and Generation AV recently entertained all APAC distributors at their Singapore Experience Centre to celebrate growth and discuss future opportunities.

Dom Harter, Martin Audio Managing Director, was able to convey updates from across the Audio Reproduction division of the Focusrite group, which also includes Linea Research, Optimal Audio and TiMax. This was then followed up with a focus on the significant strides Martin Audio has made in its supply chain operation to help fuel the strong growth in the region.

Harter, along with Sales Director, Bradley Watson provided demonstrations of the premium point source solutions of both FlexPoint and THS as well as a showcase of immersive sound solutions from sister brand, TiMax.

Case studies were shared by distributors including Audio Brains and their work with rental partner MSI across a wealth of live sound events, while Sino Huifeng showcased their success in KTV as well as nightclubs including the

latest BEEN club in China, and finally a wealth of examples from TAG, Australia, including the Geelong Arts Centre, Australia's largest regional performance centre.

Further marketing updates were provided by Marketing Director, James King and the event was fittingly rounded off with Awards where PT Goshen Swara won for 'Outstanding Performance in Installed Sound', Vardhaman Megatech secured the 'Outstanding Performance in Touring Sound', Anthony Russo from TAG picked up the 'Most Significant Contribution' award, while the overall coveted 'Distributor of the Year' award went to Sino Huifeng, China.

David McKinney, Managing Director of Generation AV, said, "It was a fantastic week and so good to have all our partners come together to celebrate the successes, and to lay out new plans for the future. Big thanks to all our partners for making the week a major success and having Dom, Brad and James join us made for productive discussions."

Martin Audio



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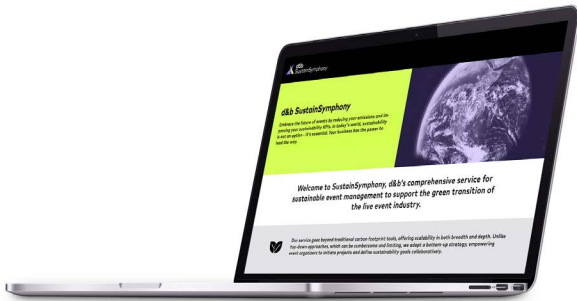
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d&b group Unveils Cloud-Based Sustainability Management Software



GLOBAL: In a bold move to transform the live event industry's approach to sustainability, d&b group has announced the launch of SustainSymphony, a cutting-edge cloud-based sustainability management software service.

This Software as a Service (SaaS) solution is uniquely tailored to the dynamic landscape of the global live event industry, setting it apart from existing sustainability software. What makes SustainSymphony truly remarkable is its commitment to accessibility: the basic version will be offered free of charge, putting sustainable event management within reach of everyone, regardless of organization size or experience.

d&b SustainSymphony is a user-friendly platform with an intuitive interface that seamlessly guides users through a variety of options. Organizers can create accounts based on their specific role - whether they are part of organizations, manage products and services, oversee venues or coordinate events. This adaptability ensures that the platform serves a wide range of stakeholders within the live event ecosystem.

At the heart of SustainSymphony is a comprehensive database designed as an event checklist. Suppliers and service providers can

store their products and services on the cloud server so that other users can find their offerings when searching for sustainable suppliers. Users can enter their Key Performance Indicators (KPIs) data for their events, services, and venues, enabling them to calculate and improve sustainability measures for future events. Venues have the option to add their annual sustainability data to the platform. Using this data, the platform calculates event-related emissions for an individual event, simplifying the data collection process and reducing workload.

One of the key features of SustainSymphony is the integration of sustainability certificates, allowing users to display credentials such as ISO14001. In addition, the software service enables users to create sustainability reports based on the information it provides. "SustainSymphony is unique for a number of reasons. This free service goes beyond traditional offerings by enabling verifiable CO2 reduction, energy savings and efficient resource management," noted Robert Trebus, Director of Sustainability d&b group. "The software acts as a catalyst for positive environmental impact within the live events industry."

"With SustainSymphony we are addressing the increasing consciousness of environmental and social matters in the live event industry. We are making a bold statement by offering our basic version free of charge," added Amnon Harman, CEO d&b group. "Our aim is to inspire and encourage event organizers, operators and suppliers to make sustainability a top priority."

Click the link below to sign up for the free basic version.

[d&b group/SustainSymphony](#)

Creative Rock Enhances Event Capabilities with Investment in New JBL Professional VTX: A-Series



SINGAPORE: Creative Rock, a leading service provider in Singapore and Malaysia for corporate conferences, live events, and exhibitions has made a significant investment in cutting-edge audio equipment.

Having had a longstanding partnership with JBL and E&E, Creative Rock has consistently demonstrated a commitment to staying at the forefront of technological advancements. Recently, the company upgraded its existing inventory of JBL products in Singapore and Malaysia, incorporating the latest VTX: A-Series, comprising 40 units of VTX A8, 20 units of VTX B18 subwoofers and Crown IT4x3500HD amplifiers.

Zaki Mustapa, Managing Director at Creative Rock Malaysia, emphasized the strategic significance of this investment in expanding the company's capacity to meet the escalating demands of its diverse portfolio of events, "We evaluated quite a

number of systems during this upgrade process and chose the JBL VTX A8 system for its versatility and performance in such a compact package."

Gary Goh, CEO of Electronics & Engineering Group of Companies added, "Our relationship with Alex and Zaki dates back to 2010 with their purchase of the JBL VT4888 and VT4887ADP systems, and so we are elated to be continuing on this journey with Creative Rock, more than a decade later, with the next generation **VTX: A-Series from JBL.**"

This strategic investment underscores Creative Rock's ongoing commitment to delivering high-quality audio experiences and further solidifies its position as a leader in the event services industry in Singapore and Malaysia.

Electronics & Engineering

Full grandMA3 Offensive at AFC Asian Cup Opening Ceremony



©Katara Studios.

QATAR: The opening ceremony of the AFC Asian Cup at the Lusail Stadium in Doha, Qatar, was not just a great football event but also a genuine feast for the eyes thanks to the impressive lighting design by Roland Greil and his team. With a breathtaking 360° stadium show, which told a fantastic story and offered visual opulence of the highest level, Greil wowed spectators around the world.

The brief was to develop an overall theatrical design that not only provided the visual spectacle of a huge stadium show but also fulfilled all the requirements of a 360° broadcast. In collaboration with Technical Director Shannon Gobell, Greil succeeded in creating a versatile rig that satisfied the complex requirements and allowed the show to be lit to perfection.

The challenge: flexibility and perfection

Greil chose a grandMA3 system to control the lighting. This consisted of four grandMA3 full-size consoles for the production and four grandMA3 light as mobile consoles in the stadium, supported by twelve grandMA3 processing units

XL. In addition, a further three grandMA3 full-size consoles were used for preparatory work at the previz studio.

“The full redundancy as well as the incorporation of the remote consoles into the network were particularly important to us as it allowed us to operate from several different locations within the stadium. And for a show of this magnitude, the multi-user capability of the lighting consoles is indispensable, as we work with several programmers in these cases so that we can manage the workload in the given time,” explained Roland Greil.

The opening ceremony of the AFC Asian Cup marked the first use of a grandMA3 system by the team around Roland Greil. “Having a high-performance platform was of enormous importance for this project, enabling us to deal with the complexity and the vast number of different requirements,” continued the designer. “Equally important were reliability as well as operating successfully within a larger network infrastructure.”

The idea was that the lighting design would mainly function as a “canvas” for the set beautifully designed by Visual Creative Director Sila Sveta as well as supporting the visual storytelling – a 21-minute, perfectly choreographed masterpiece involving imaginative costumes – with a virtual frame made from light. It was only towards the end of the show that the lighting effects expanded out into the space and became stronger to lead the spectators visually to the opening of the sports event.

Faster, more efficient programming with a greater focus on the stage

The programming for the show was performed

by Michael Kühbandner and Markus Neubauer, using grandMA3 software version 1.9.7.0, which enabled the efficient realisation of the complex tasks to be managed. While Michael Kühbandner referred to “flexibility, consistency and practicality” as the main plus points of the software, Markus Neubauer gave a more detailed description of the positive features that impressed him most during the programming:

“We were able to create complex motion sequences very quickly with the aid of phasers and it was possible to adapt them perfectly for the cameras during the rehearsals. And in a situation where time constraints forced us to work simultaneously on pre-production as well as presets in the stadium, we were able to synchronise our presets and sequences continually by means of data pools although we were programming in two different environments at the same time. Not to forget the MIB timings per cue. To avoid making some trusses ‘sway’, I used differentiated MIB fade times for different cues. That would not have been possible with a grandMA2 system. Generally, I like the fact that you can now do a lot more work on the stage and need to focus less on the console because in the case of phasers, for instance, you see immediately what you are programming.”

To ensure the greatest possible efficiency when doing the programming for such a big show, the two programmers made use of many new functions of the grandMA3 software.

Better overview for complex applications

Markus Neubauer mentioned the selection grid function first and foremost: “Thanks to the selection grid, we were able to align all the phaser and delay times in the 360° stadium show precisely and do so with a single group selection – although we had trusses with different numbers of lights.”

Michael Kühbandner agreed: “The selection grid definitely saves a lot of time as regards grouping, effects as well as the setting up of the lights. In conjunction with the new MATricks window with delay times and the Mirror Grid option, it is a very powerful tool. But what also helped speed up my work considerably were the multi-touch displays. In conjunction with the possibility of setting the screen areas to be larger than the screen resolution, you are simply much quicker, for instance when you can arrange less frequently used pools and elements at the edge and can simply move things using three fingers rather than actually changing the view.”

“And the swipecs for important functions such as Label/Copy/Move/Store etc. save no end of keystrokes and gestures – and therefore time,” he continued. “I also like the tree structure, which was introduced for the entire system, and the associated restructuring of many areas. Being able to simply expand sub-objects rather than having to search for them in other windows makes it much easier to keep an overview, which saves me further time.”

Roland Greil added: “In interaction with Vectorworks and Depence, we also made use of GDTF and MVR, making our entire workflow more efficient.”

The designer summed up: “The AFC Asian Cup Opening Ceremony in Doha was a special project for us all. In collaboration with an excellent team, we created an enchanting theatre show of stadium magnitude with sophisticated scenery on the pitch immediately prior to the opening match of a major football tournament. You don’t do that sort of thing every day, and I’m proud of our work and the result. The decision to work using a grandMA3 system for the first time for this project proved absolutely the right one.”

MA Lighting

Audio Progress Embraces Robe LED Innovation



Photo by Louise Stickland shows Audio Progress owner and founder, Malcolm McKinnon with his LEDBeam 350s.

NEW ZEALAND: Audio Progress is a busy and inventive audio, lighting and staging company based in Palmerston North tucked into the beautiful southern rural heartlands of New Zealand's North Island, about 150km from the capital city Wellington. The enterprise is run by Malcolm McKinnon, who founded it back in the 1980s, originally as an audio specialist, and since then, he and the team have built a solid reputation for delivering high-quality productions for all types of shows and events, concerts, and festivals.

A recent investment in 16 x Robe LEDBeam 350s sees the first Robe moving lights to join the Audio Progress inventory, and Robe is sure they won't be the last. The new fixtures – delivered by distributor **Jands New Zealand** – are being used highly effectively and efficiently to light an increasing array of televised and streamed events serviced by Audio Progress.

Malcolm found they needed a high-quality, multifunctional moving light with excellent optics

that was optimised for working with camera systems. As a musician with an engineering background, Malcolm has an interesting combination of nerdery and creativity. When he first started the company in the 1980s, it wasn't possible to buy modern PA systems in New Zealand!

Lateral thinking kicked in, and he built one himself primarily using JBL components initially for his band, which naturally had the best sound system in the area. Word soon ricocheted around the rolling hills of Palmerston North and as the PA sounded pretty awesome, he soon started receiving rental inquiries, and the business started to blossom and grow.

By the early 1990s, production technology distribution had finally made it to New Zealand, and manufactured systems started becoming available to purchase, by which time **Audio Progress** had a reputation for being something of a sonic excellence pioneer.

To cut a long story short, the company expanded steadily, and in 1999 Malcolm designed and built his staging system to service the evolving work, especially for music and cultural concerts. This was self-contained, stored and transported on a flat-bed truck ... and once again broke new ground in the region! The company also moved into its current warehouse in 2001, as a home was needed for the stage, which is still working regularly.

They needed lighting for the stage, so the first lighting stock – PAR cans and generic fixtures – joined the growing kit inventory, as the tech and the production values advanced with the demand for moving lights. The first purchases in this department were made with limited resources and were therefore price-driven.

For a while this worked well, then as the shows and events started getting more complex, involved, and were more frequently televised/filmed/recorded, Malcolm, a perfectionist in all technical disciplines, was becoming increasingly irritated by features like the poor colour temperature and the lack of focus of the cheaper moving lights!

“Golden Shears” – the world’s premier shearing and wool handling championship staged in Masterton, capital of New Zealand’s shearing industry – was a great example of where their other moving lights suffered from crawling reds, sketchy whites and additional aberrations which generally didn’t look great on camera. The shearers typically work on a raised platform – with an average shearing time of 90 seconds per sheep – and below this, the wool handling takes place, all of which needs good, consistent light.

“Clearly it was time for change! We needed superior optics and colour rendering to deliver our clients the best-looking shows, so I started looking around,” he explained.

He was aware of Robe as a brand already and had hired some LEDWash 600s for a Kapa Haka festival from Grouse Lighting in Wellington which worked very well. The OB unit filming the show loved them and Malcolm was impressed generally with the quality of the fixtures and the light output.

However, it was watching the LEDBeam 350 product video, that really set him on fire as he was immediately struck by the power and features of this compact and highly flexible fixture.

For due diligence, he looked at smaller fixtures from two other manufacturers as well for perspective and organised a shootout – of which the LEDBeam 350s were clear winners – before deciding to go with Robe. He had also asked clients, colleagues, and acquaintances to get a thorough assessment of their needs and which fixtures best met all of these and thought the price of the LEDBeam 350s was good. The first 8 arrived followed by another 8 giving a current system of 16, which Malcolm expects to be growing soon.

They are proving ideal for many applications including as front lighting for the stage, where the cantilevered front truss is only 2.5 metres in front of the talent. He’s delighted with the results, especially with the general adaptability due to the zoom and other Robe refinements like the manual hot spot control, plus of course, the excellent colour mixing and general output characteristics.

“LEDBeam 350s have made a massive difference to how we can light all our productions. The quality and engineering are excellent, they are easy to handle physically, and they work brilliantly on camera. Basically, they have solved all the issues at once! It’s been a great investment!” he concluded.

Robe

Hertz And Pixelz Raises the Bar with Enhanced Inventory Line-Up



INDIA: In a move to meet the ever-evolving demands of the live event industry, New Delhi based Hertz And Pixelz – one of India's most respected and accomplished premium live event technology solutions provider – has recently made substantial investments to expand its lineup of live sound and lighting inventory. The decision to do so was strongly influenced by the company's consistently growing business portfolio and the imperative to keep pace with the rising demand for top-tier audio and lighting solutions for a variety of high-profile live events.

Key within its list of significant acquisitions for Hertz And Pixelz is the addition of a new comprehensive line array system from globally renowned manufacturers **d&b Audiotechnik**; wherein the company has added a total of 16 units of the flagship KSL12 line array modules to its inventory, along with 8 units of the actively driven 2-way bass reflex design SL-GSUB cardioid subwoofers that feature three high performance long excursion 21" neodymium drivers.

Expressing his intent to further enhance this newly acquired d&b Audiotechnik system in the future, Siddhartha Malik, Proprietor of Hertz And Pixelz, cites the KSL system's technological

value, versatility and reliability as key factors that positively influenced the purchase decision. He shares, "We're thrilled to welcome the d&b Audiotechnik KSL series into our arsenal. For me there were a few key reasons to invest into this system. First, the system's capacity to deliver pristine audio quality along with truly impressive power output; both of which are key to the kind of live events that we wish to deploy our systems for; and second The advanced technological capabilities of the system as a whole. The cardioid mid-top nature of the KSL line array modules allows for all the energy to be directed precisely towards the audience with no spillage whatsoever, while ensuring that the stage environment remains amazingly quiet – something that extremely few systems are capable of! Plus, the KSL modules as able to produce a remarkable 120° constant directivity dispersion pattern, which means that we can ensure that almost every corner of the venue is filled with rich, immersive sound. And when paired with the SL-GSUB, the result is nothing short of breathtaking – as these subwoofers pack an incredibly powerful punch while offering an unbelievable level of ease in terms of logistics and setup thanks to its surprisingly compact footprint. Another key positive of the SL-GSUB is the fact that these subwoofers are designed to work seamlessly with all of the line array modules within the SL series; which means that we're now empowered with greater flexibility, especially when we look at future investments to expand our inventory. Most importantly, d&b's time-tested amplification, which is found in all of the SL series line array systems, allows us to stay assured about quality or reliability. We know for a fact that our newly acquired system will allow us to deliver world-class audio experiences every single time, irrespective of the venue or the kind

of event that we're working on. We are confident that with this new system, we are poised to revolutionize the live sound experience for our clients."

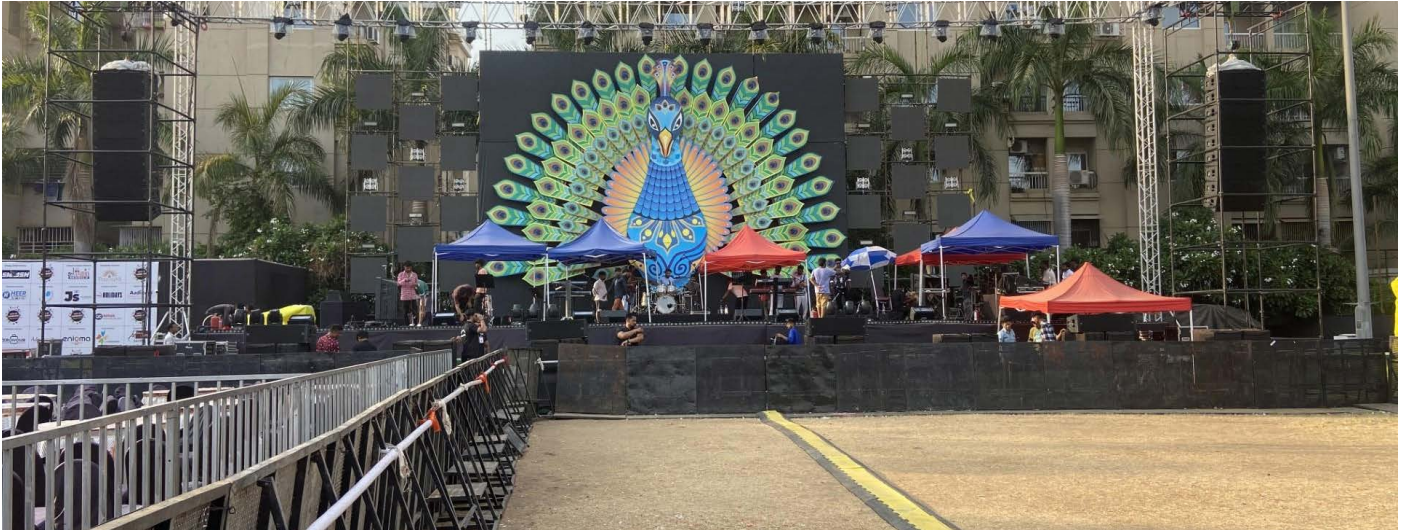
In addition to the d&b Audiotechnik system, Hertz And Pixelz has also invested in the industry-favourite **DiGiCo Quantum 338 digital mixing console**, complete with a single unit of the SD-Rack. Siddhartha notes that the sheer power and adaptability of the Quantum 338 and SD-Rack setup heavily influenced Hertz And Pixelz' investment in the system; as he explains, "We noticed that over time, the DiGiCo Quantum 338 has turned out to be a game-changer of sorts, especially within the premium live event market here. With its staggering 128 input channels, 64 busses, and a 24x24 matrix, operating at a pristine 96kHz sample rate, this console offers unmatched versatility and audio quality. Additionally, the in-built array of advanced features like Mustard Processing channel strips, Spice Rack plugin style native FPGA processing options which provides a plethora of effect options, Nodal Processing and True Solo – all make it a top choice in the industry. Plus, when paired with the SD-Rack, which incorporates the Optocore 64 +64 I/O for enhanced connectivity, the Quantum 338 system empowers us with the capacity to ensure low-latency, high-channel-count audio transmission; while also facilitating seamless integration with diverse stage configurations and accommodating a wide range of audio sources. Plus, the redundancy options embedded within the system guarantees uninterrupted reliability, and therefore the assurance of delivering an extraordinary level of audio quality for any event. Whether it's a concert, conference, or corporate event, we're equipped to handle it with precision and grace."

Rounding out their impressive list of recent investments, Hertz And Pixelz has added the globally acclaimed grandMA3 full-size lighting controller from **MA Lighting** to their inventory;

with Siddhartha explaining the significance of this addition, as he commented "Lighting plays a crucial role in creating immersive live experiences, and the grandMA3 allows us to push the boundaries of creativity. With its intuitive layout and advanced features, including access to 12,288 control parameters and so much more; the grandMA3 empowers us to craft stunning visual landscapes that captivate audiences. The controller's ability to access Wide Area Networks and the advanced MA-Net3 protocol that allows for output up to 250000 parameters affords our team of skilled lighting engineers with unparalleled dexterity and control, whereas the fact that the system also supports the GDTF (General Device Type Format) protocol natively (allowing fixture manufacturers to ensure their own fixtures are controlled as intended) is another key feature that positively impressed our 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." A confident Siddhartha asserts that Hertz & Pixelz' acquisitions of the d&b Audiotechnik KSL line array system along with the DiGiCo Quantum 338 system and the grandMA3 controller from MA Lighting have now opened up a world of possibilities for the company to further expand their already impressive portfolio of projects and service undertakings, as he concludes, "At Hertz & Pixelz, we're dedicated to delivering unforgettable live event experiences, and these investments represent our commitment to excellence. Whether it's through breathtaking soundscapes or mesmerizing lighting designs, we're shaping the future of live events in New Delhi and beyond."

Hertz and Pixelz

B-Praak's Electrifying Debut Performance at The Taste of Vadodara Reinforced by JBL VTX And Mahesh Sound



INDIA: The vibrant city of Vadodara recently came alive with the month-long festival, "The Taste of Vadodara," celebrating the region's rich history, culture, and diverse cuisines. This festival, renowned for its eclectic blend of traditional and contemporary experiences, offered an array of culinary delights, from local Gujarati dishes to international cuisines. And amidst this gastronomic extravaganza, the festival also showcased music, dance, and art; creating a truly immersive cultural experience.

One of the festival's most anticipated events was a live concert by B-Praak, one of India's most beloved music artists. This concert, which witnessed B-Praak performing for the first time in Vadodara, was not just a musical performance that enthralled the artists' die-hard fans, but an immersive experience that was enjoyed and appreciated by even those who weren't too privy with the artist's work.

The responsibility of designing and commissioning of the impressive audio production for this event was entrusted to

Ahmedabad-based Mahesh Sound, a reputed sound rental company known for its expertise and state-of-the-art technology. And with the view to deliver a pristine and immersive soundscape throughout the venue, the company relied on a comprehensive loudspeaker rig from JBL by Harman Professional to get the job done.

The main PA solution featured 18 units of the flagship VTX A12 Dual 12" line array loudspeakers, suspended in a stereo hang, effectively covering the entire audience area that spanned over 200 feet. This setup provided high-quality sound with optimum fidelity across the frequency range. To ensure deep, resonant bass enveloped the audience, 16 units of the VTX S28 subwoofers were strategically placed, making every beat and bassline felt as well as heard, creating an engaging and powerful auditory experience. Additionally, multiple units of the VTX A12 modules along with the VTX S28 subs were deployed as the front fill reinforcement solution, enhancing the experience for those directly in front of the stage. This meticulous deployment of



the main PA and the fill reinforcement ensured a homogenous and consistent sonic experience for every audience member, regardless of their position within the venue, thanks to the system's high-SPL performance and precise dispersion capabilities.

Like the audience, the artists performing on stage were also treated to a sublime audio experience; as they benefited from world-class RF infrastructure that ensured reliable and high-quality wireless performance, with Mahesh Sound deploying the highly acclaimed Axient Wireless System from Shure, along with the 6000 series and 2000 series systems from Sennheiser. The stage monitoring setup was equally impressive, with multiple units of the VRX915M stage monitors from JBL being strategically spread

across the stage to provide a pristine foldback experience for the performers. Control over the sound quality was managed through DiGiCo's renowned digital mixing consoles, with Mahesh Sound utilizing the Quantum 338 live mixing console and the industry-proven SD10 digital mixing console. These consoles offered the sound engineers world-class features to tailor the sound performance to perfection. The addition of multiple units of the SD-Rack (External I/O racks) provided unparalleled dexterity in terms of I/O support, ensuring that every nuance of the performance was captured and delivered with precision.

<https://www.instagram.com/mahesh.sound/>

Vari-Lite RigSwitch+ Series All-In-One Entertainment Lighting Power Platform



Watch the hands-on demo for this customizable rig and architectural power product family that offers 120V/277V and 230V options. Customize the cabinet with various modules to enhance features and capabilities. It's easy to order, configure, and maintain with a single order code. Ideal for theatres, education, houses of worship, corporate lobbies, and archtainment.

Aussie Music Legend Bruce Johnston Discusses NEXO P15 Point Source Loudspeakers



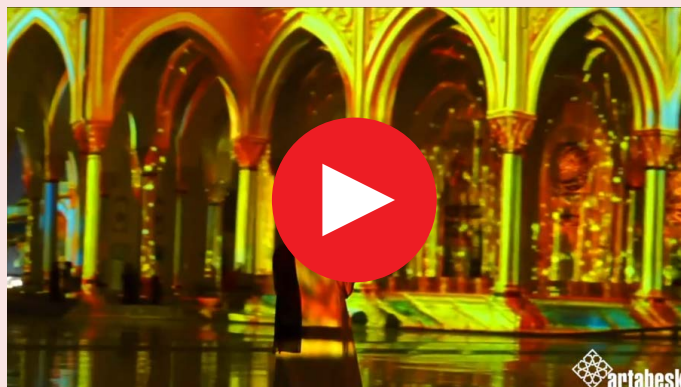
Group Technologies sat down with Bruce Johnston of JPJ Audio to discuss NEXO's new P15 loudspeaker. Bruce shared his journey with NEXO while reflecting on his experience working with top artists like Oasis and Crowded House. The P15 features a compact design, a 15" LF Neodymium driver, variable HF directivity, and delivers a peak SPL of 141dB in Active Mode.

Claypaky Releases Creativity and Precision with Rhapsodya



Rhapsodya is a groundbreaking RGBAL LED fixture that excels in touring, live events, theatre, and TV production. With a sleek design, low noise, and double the power output of Sinfonya, it enhances creativity with superior optics and colour management.

Digital Projection at the Sharjah Light Festival



Celebrating the Emirate of Sharjah's history and architecture, the 12-day Sharjah Light Festival showcased large-scale projection mapping on landmarks like the Sharjah Mosque and the Hajjar Mountains, creating a mesmerizing display of lights, colours, and music.

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Elation Redefines High-Impact Beam Lights with New Proteus Radius



Elation has launched a new era of high-impact beam lights with the Proteus Radius, a compact, high-intensity IP66 Beam FX fixture powered by a Solid-State Phosphor-Converted (SSPC) light engine. Elation garnered industry acclaim in 2017 as the first company to incorporate Phosphor source technology into a moving head and now the company has brought the revolutionary technology to the next level.

The Proteus Radius unleashes a realm of creative possibilities, projecting narrow and intensely powerful beams that reach astounding distances. Its efficient 100W SSPC light engine delivers an ultra-intense 0.9° beam that slices through with unparalleled brilliance, even across vast spans of space. Ideal for both indoor and outdoor applications, the powerful beams combine with a full complement of design features that allow designers to compose an array of stunning aerial effects with ease.

What sets the Proteus Radius apart is its SSPC engine, which produces a dense beam similar

to a laser yet without the associated risks and regulatory challenges. Certified for use worldwide and in all environments, it requires no safety inspections and can be operated without a variance (permit). Highly efficient with little heat produced, the SSPC engine boasts a long lamp life of 10,000 hours, keeping replacement and maintenance costs low.

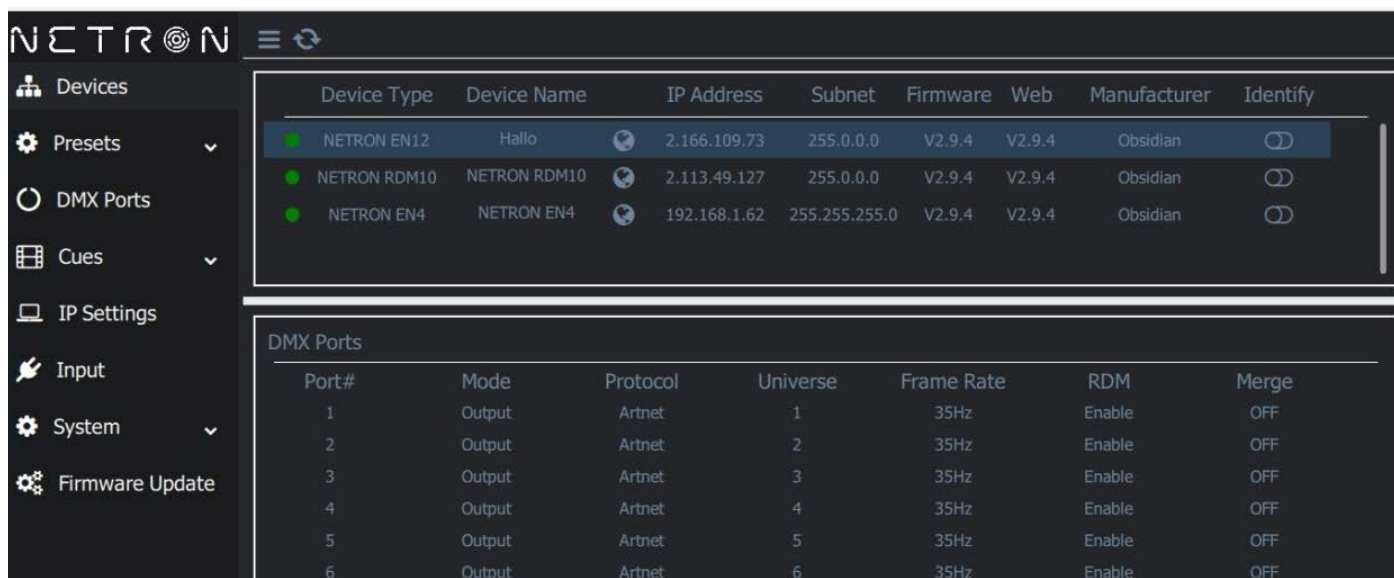
Protected by Elation's market-proven Proteus technology, its rugged aluminium shell and advanced marine-grade coating provide unparalleled durability and protection against the elements. An IP66 rating and surprisingly compact design mean the Radius can unleash its power virtually anywhere creativity calls.

Endless 360° pan and tilt movement makes for riveting animations that can fill any space while the included FX package features an array of useful effects. With two gobo wheels housing a selection of 13 interchangeable rotating/indexing metal gobos and 29 static-stamped metal gobos, designers will find an abundance of creative aerial possibilities. Furthermore, the Radius offers four prisms divided between dual overlapping planes to split beams in virtually unlimited combinations for eye-catching aerals. Prism macros are included for programming ease. Dual frosts soften light when needed while dimming is ultra-smooth without flickering.

CMY colour mixing and a 25-position colour wheel offer virtually unlimited colour options, a system that is lightning-fast for immediate colour transitions and instant colour bumps. Transitions are seamless while the motorized focus ensures pinpoint accuracy. Light can be further manipulated using the digital shutter and strobe.

Elation/Proteus Radius

Free NETRON CLU from Obsidian Makes Data Management a Breeze



The screenshot displays the NETRON CLU interface. On the left is a sidebar with navigation options: Devices, Presets, DMX Ports, Cues, IP Settings, Input, System, and Firmware Update. The main area is divided into two sections. The top section, titled 'Devices', contains a table with columns: Device Type, Device Name, IP Address, Subnet, Firmware, Web, Manufacturer, and Identify. The bottom section, titled 'DMX Ports', contains a table with columns: Port#, Mode, Protocol, Universe, Frame Rate, RDM, and Merge.

Device Type	Device Name	IP Address	Subnet	Firmware	Web	Manufacturer	Identify
NETRON EN12	Hallo	2.166.109.73	255.0.0.0	V2.9.4	V2.9.4	Obsidian	
NETRON RDM10	NETRON RDM10	2.113.49.127	255.0.0.0	V2.9.4	V2.9.4	Obsidian	
NETRON EN4	NETRON EN4	192.168.1.62	255.255.255.0	V2.9.4	V2.9.4	Obsidian	

Port#	Mode	Protocol	Universe	Frame Rate	RDM	Merge
1	Output	Artnet	1	35Hz	Enable	OFF
2	Output	Artnet	2	35Hz	Enable	OFF
3	Output	Artnet	3	35Hz	Enable	OFF
4	Output	Artnet	4	35Hz	Enable	OFF
5	Output	Artnet	5	35Hz	Enable	OFF
6	Output	Artnet	6	35Hz	Enable	OFF

NETRON is Obsidian Control Systems' comprehensive range of DMX Splitters and Ethernet to DMX gateways, supporting applications from live production and venue installations to architectural environments. Featuring outstanding build quality, advanced feature sets and smart mounting options, they excel in the management of complex networked lighting systems. Developed with the user in mind, NETRON products combine tough hardware with smart software for fast setup and solid performance.

Obsidian Control Systems is offering the **NETRON CLU**, an easy-to-navigate central utility interface useful in discovering and managing NETRON data distribution devices across a lighting network. Especially helpful when deploying networks that use multiple nodes, or when working with nodes that lack integrated screens, the NETRON CLU makes NETRON data signal devices even easier to configure, eliminating the need to physically access the devices themselves.

can be centrally configured, or reconfigured, without the need to access individual web pages or the device displays. Whether you're setting up a handful of nodes for a live event or 50 nodes for an install, remote access to all device functions straight from a computer makes device settings easy to overview and node deployment a breeze.

The Windows-based NETRON CLU app continuously monitors the network status and indicates the devices' online or offline status on the user interface. The NETRON CLU also includes integrated firmware update management, allowing users to upgrade multiple devices to the latest firmware release simultaneously and with a single click.

The NETRON CLU fully supports all NETRON devices and is free to use. Download the latest version at the link below.

Obsidian Control Systems/NETRON CLU

NETRON devices can be discovered regardless of their current IP address, and all NETRON features

ADJ Makes myDMX Quicker and Easier for Bigger and Brighter Shows



Rebuilt from the ground up with a fresh new look, myDMX 5 is designed to make it easier and quicker to program bigger and better light shows. Featuring a 20K+ fixture library, an impressive FX engine, a new Super Scene timeline interface, app control, and a sleek new hardware interface with standalone capability, myDMX 5 takes computer-based DMX lighting control to a whole new level.

Compatible with PC and Mac, myDMX 5 is both easy to learn for first-time DMX users and packed with features that will fuel the creativity of experienced professionals. It can be used to control all types of entertainment lighting fixtures compatible with the DMX protocol, including moving heads, static washes, mirror scanners and strobes as well as accessories such as smoke and haze machines.

It provides access to an online library with 20,000+ fixture profiles – including every ADJ model as well as all other leading brands – that can be easily selected and quickly patched utilizing both a grid interface and 2D position view (which can also be used to quickly and easily select individual lights or groups of fixtures). Programming can then be carried out using the

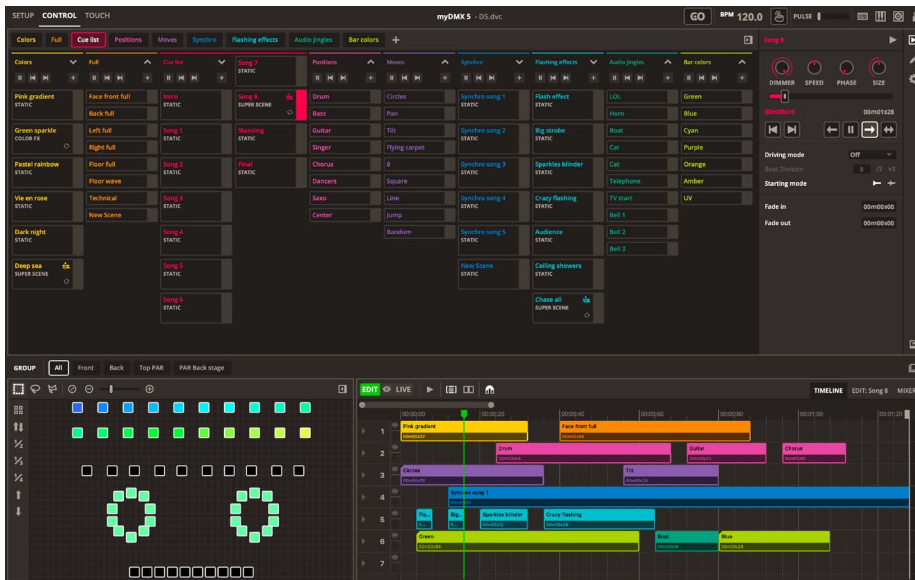
integrated 3D visualizer, which allows a show to be fully set up and programmed in advance before connecting any lights.

At the heart of the myDMX workflow is the creation of Scenes, which can either be static looks, programmed chase sequences, or dynamic effects generated by the in-built FX engine. The most significant new feature offered by myDMX 5 is the Super Scene interface, which allows multiple Scenes to be combined as building blocks on a timeline with perfect accuracy. This means that complex and precisely timed lighting sequences can be easily constructed, with changes made to source Scenes automatically updating the Super Scene.

Another significant new addition to the software is the Touch interface. This allows custom layouts to be created – using a variety of control elements such as buttons, faders, dials, and colour wheels – which can then be used with a touch screen for control in a live environment. In addition, a dedicated app for iPhone, iPad and Android devices is available that allows remote control via Wi-Fi using the Touch layout.

myDMX 5's powerful new FX engine allows impressive effects to be easily created on any type of channel. A variety of dedicated effects are provided for movement and colour, which can all be fully customized, as well as multiple generic effect types that can be applied to any attribute of a fixture (for example dimmer, zoom, iris etc.). Effects can also be mapped in 2D and an unlimited number of effects can be combined into a Super Scene.

The new Live mixer rack allows creative control of an entire lightshow from a single simple



of beats to allow perfect alignment to tricky tempos. myDMX 5 also offers advanced mapping tools that allow complete flexibility to utilize either the computer keyboard or an external MIDI or DMX controller. It is possible to switch the entire software to mapping mode, allowing any control to be linked to a keyboard shortcut or external interface control in just one click.

interface. It provides direct access to the master dimmer of each fixture group as well as shortcuts for changing the colour and triggering strobe or blinder effects. Further customization is provided by the Live playback interface, which allows Scenes to be altered on the fly with rotary encoders for dimmer, speed, phase, and size. It also allows Scenes to be played forwards, backwards, or both ways, as well as allowing them to be divided into segments which can be jumped between with a GO button or triggered by BPM.

To ensure moving head beams are always pointed in the right direction (for example out from a stage or down onto a dancefloor), myDMX 5 allows limits to be imposed on the movement range of individual fixtures or groups of fixtures. In addition, upper and lower limits can also be applied to the dimming ranges of fixtures, useful for when lights are more powerful than is appropriate for a given application.

Music synchronization has been significantly improved in myDMX 5. The software offers a suite of tools for capturing the musical BPM including tap-tempo, MIDI clock, Ableton link and auto pulse detection from a line input. It is also possible to divide Scenes into any number

Alongside the redesigned software, myDMX 5 is supplied with a flexible new hardware interface. This features four independent DMX output sockets (2 x 3-pin and 2 x 5-pin) allowing control of up to 2048 channels of lighting – four full universes (two universes come as standard, the other two are available through software upgrades). The hardware device also features a USB-C socket for direct computer connection and an RJ45 network socket. It features 10 push buttons for triggering Scenes live or in a Stand Alone mode, which allows up to 99 Scenes to be stored across 5 pages and saved to SD card storage.

myDMX is ideal for a wide variety of applications, from nightclubs, bars, performance venues and churches to event productions and mobile entertainment performances.

ADJ/myDMX 5

New UXA4416 DSP Amplifiers Offer Innovative Processing for EAW Systems



Eastern Acoustic Works (EAW) has debuted its new UXA4416 Amplifiers along with a companion update to its Resolution software. UXA4416 represents a new generation of EAW four-channel DSP amplifiers, offering high-power class D amplification, innovative processing and analogue/digital audio management. Pairing seamlessly with the brand's KF and SB Series products, these new amps ensure stability and continuity for KF passive line source systems deployed at stadiums, arenas, houses of worship, amphitheatres, outdoor festivals and more.

This next generation of amplifiers provides clean, robust power to all EAW passive loudspeaker systems. Now operating at 96Khz, the amps improve system interoperability and offer reduced latency compared to previous UX and UXA products, which can be vital for live performance applications. In addition, 4 x 4000W Class D amplification and 40-bit floating point DSP ensure powerful, high-headroom audio capabilities for systems of any scale.

UXA4416 amplifier presets unify the performance of all supported EAW professional speakers and

arrayed systems with four processed channels of audio amplification, complete with a dedicated Greybox preset library. A front panel addressable 4.3-inch display offers an easy touch screen or tactile encoder access to the EAW library and editing. EAW factory presets utilize EAW's Beamwidth Matched Crossover, Focusing and DynO technologies. The result is a highly refined system impulse response and enhanced power delivery to a chosen speaker system. Resolution software provides a path to remote management and amplifier grouping of an entire EAW speaker ecosystem.

UXA4416 amplifiers are engineered to last for years while providing high-quality performance for a wide variety of uses. Prioritizing versatility, UXA4416 offers both analogue and digital audio inputs, with configurable General-Purpose Input/Output (GPIO) and Dante connections available for digital network input options.

The Resolution 2.11 update is a companion release that provides support for UXA4416. It also contains improvements to the software's GUI and Array Assistant, a more efficient RSX/NTX firmware upgrade procedure and updated KF210 Voicing. An updated version of AC6 Firmware is also available.

EAW/UXA4416 Amplifier

Vari-Lite Updates Workhorse VL2600 SE Series with Best-In-Class Output



Vari-Lite has announced the new VL2600 SE Series, an upgraded version of the iconic VL2600 Series of fixtures that includes the recently announced **SE Upgrade Engine built-in**.

The new SE versions of the fixtures, which include both a profile and a wash, feature an upgraded 570W light engine. The **VL2600 SE Profile** offers 23,750 lumens of output, while the **VL2600 SE Wash** offers 27,500 lumens. Existing VL2600 Series fixtures can easily be upgraded to receive the same output by using the previously announced VL2600 SE Upgrade Engine, exemplifying why the VL2600 SE Series is the smart choice product with a sustainable future.

Both fixtures provide a broad choice of saturated colours thanks to the CMY colour system and variable CTO adjustment. Great for touring, studio, or stage, the VL2600 SE Series offers

full features for live events, along with a colour range and CRI suitable for theatrical and studio productions. Both fixtures also include a fixed colour wheel for snap colour changes and split colours.

The VL2600 SE Profile has a wide range of features, including a full-wipe framing shutter, wide zoom, iris, fixed and rotating/indexing gobo wheels, dual prism, and variable control frost. The workhorse VL2600 SE Wash includes the most versatile range of wash looks in its class thanks to a wide zoom range, adjustable beam edge softness, and a built-in automated barn door system as standard.

Vari-Lite/VL2600 SE Series

RCF Unveils Advanced Subwoofers with Tailored Crossover Presets



RCF has unveiled its new SUBs 15-AX and SUB 18-AX, 15-inch and 18-inch active subwoofers designed for live sound applications.

These advanced models come equipped with built-in processing, colour touchpanels, and Bluetooth remote control capabilities. They feature Class-D amplifiers that deliver sound pressure levels of up to 133 dB and 135 dB, ensuring both clarity and ample headroom.

Centralizing speaker management, the subwoofers offer stereo crossovers, eight-band EQs, routing, delays, and internal crossover presets specifically for RCF speakers.

With the RCF LiveRemote app, users can control up to eight AX devices via Bluetooth simultaneously from a smartphone or tablet.

The SUB AX series is designed for cardioid configurations, boasting 2,200 Watts of power and housed in an all-wood cabinet coated with polyurea. The cabinets feature sealed Powercon True1 Top connectors and rubber-gripped handles for ease of use.

RCF/SUB AX SERIES

Vari-Lite RigSwitch+ is a Global Family of Customizable Rig and Architectural Power Products

Vari-Lite has released the RigSwitch+ Power Platform, a family of customizable all-in-one power control solutions for entertainment lighting installations.

A single global power platform with 120V/277V and 230V power options, RigSwitch+ provides relay switching with configurable propagation delay and is available in branch-fed and mains-fed wiring variants. RigSwitch+ cabinets are available in a variety of channel counts, with onboard current monitoring on all models. All models can be easily controlled by DMX, with RDM management support built in as well.

Thanks to onboard Ethernet connectivity and a built-in user interface in most models, RigSwitch+ also provides remote power control via sACN, Art-Net, Vision.Net, OSC, or via web-based interface or API. RigSwitch+ can act as a 1 universe Ethernet-to-DMX gateway, and it includes an optional integrated timeclock as well. With support for daylight and occupancy sensors, DMX/RDM signal detection, and emergency alert response, RigSwitch+ can automatically adjust to environmental changes without user interaction.

To ease regular monitoring, the cabinets can be managed via RDM, with dedicated user interfaces available on Vari-Lite Neo X Series and FLX S



Series consoles. In addition to the cabinet itself, administrators can monitor connected Vari-Lite RigSwitch+ and architectural control devices from a web browser on your PC, Tablet, or Phone.

RigSwitch+ is available in four different cabinet sizes, with relay options ranging from 4 channels to 52 channels. To simplify ordering, an easy-to-use configurator tool is available for download from the Vari-Lite website below.

[Vari-Lite/RigSwitch+](#)

Shure Welcomes New Era of Vocal Precision with Nexadyne



Shure's Nexadyne vocal microphones achieve state-of-the-art polar pattern consistency, unparalleled noise reduction, and best-in-class professional touring performance, so sound engineers and performers can confidently provide front-row vocal clarity to every corner of the venue, every time.

To deliver these benefits, the Nexadyne platform is built on Shure's patented Revonic Dual Transducer Technology. This meticulously implemented technology minimizes the amount of time and effort required by sound engineers to make performers' live vocals sound exceptional and cut through the mix. Most dynamic microphones are designed with only one transducer, the part of the microphone that converts sound into an electrical signal. Breaking the mould, Shure's innovative Revonic Technology implements two precisely matched transducers.

These transducers work together to provide a greater range of acoustic optimization, maximizing specific frequencies and minimizing unwanted noise, especially handling noise and mechanical vibration. This built-in signal processing delivers a stronger output than traditional single transducer designs, while subsequently removing the need for a traditional pneumatic shock mount and time-consuming, corrective audio editing.



Implementing the benefits of perfectly matched transducers requires thorough attention to detail throughout the manufacturing process. By maintaining and surpassing the highest, stage-tested standards for every Nexadyne microphone, Shure has guaranteed optimum manufacturability for consistent performance.

With Nexadyne premium vocal microphones, performers and sound engineers can be confident the entire audience will hear an acoustically honest representation of their performance with vivid clarity. Vocalists using Nexadyne vocal microphones will immediately experience greater clarity and range of detail, which enables more control of vocal nuance and less time either holding back or pushing the voice too hard, no matter the size of the venue.

For engineers, Nexadyne vocal microphones achieve improved signal quality, delivering a clearer source signal to work with during the mixing process. The higher output of the microphone ensures engineers can accurately

reproduce and balance the performer's vocals in the overall mix with significantly less corrective audio processing.

Nexadyne dynamic vocal XLR microphones and wireless capsules are available now for \$299 (US) in both cardioid (NXN8/C) and supercardioid (NXN8/S) polar patterns on the Shure website and at select retailers. Nexadyne capsules will be available bundled with Shure's industry-leading

digital wireless ecosystems starting later this year, including Axiom Digital, ULX-D, QLX-D, and SLX-D.

Nexadyne wired microphones are available in black. Wireless capsules of Nexadyne are available in both black and nickel finishes.

Shure/Nexadyne 8C

PROLIGHTS Debuts Versatile Wireless CRMX Transceiver



PROLIGHTS' AetherBox LITE is a single-universe Wireless CRMX Transceiver designed to enhance lighting control in professional installations while staying within budget.

This device provides industry professionals with a practical and reliable solution in wireless lighting control technology. Its compatibility with W-DMX and LumenRadio CRMX protocols ensures steady, interference-free signal transmission, crucial for the success of any lighting setup.

The AetherBox LITE offers various power and signal transmission options, including In/Out connections via panel-mounted connectors or terminal blocks. Its innovative design supports installation on tracks equipped with data buses, facilitating seamless signal transmission adaptable to various applications.

The AetherBox LITE is a dependable and efficient

wireless control solution suitable for a wide range of applications, including events and small to medium-sized fixed installations.

PROLIGHTS/AetherBox LITE

Updated ADJ Par Z Fixtures Offer Perfect Fusion of Classic Style & Modern LED Technology



A staple of concerts, theatre productions and venue lighting systems for decades, par cans have an indisputably iconic look. ADJ's original Par Z fixtures took this classic external design and gave it a new lease of life by combining it with potent and highly efficient LED light engines. Now, ADJ has revisited this concept to create updated versions of these best-selling fixtures. The new PAR Z100 3K2, PAR Z100 5K2 and PAR Z150 RGBA, which feature several small upgrades and improvements on the original models, are the perfect modern par can for every kind of stage or entertainment lighting application.

These LED-powered fixtures look exactly the same as a regular black par can, but inside their casing is housed a powerful LED light source. Offering output comparable to a 1000W sealed beam par, but producing a fraction of the excess heat, the PAR Z100 3K2, PAR Z100 5K2 and PAR Z150 RGBA are ideal for illuminating stages while ensuring that performers won't get too hot, reducing power consumption, and removing the need for regular lamp replacements.

The PAR Z100 3K2 features a warm white 100-Watt C.O.B. (Chip On Board) LED source with a colour temperature of 3000K, which offers a good approximation to the output of a traditional warm white halogen lamp. The PAR Z100 5K2 is fitted with a cool white C.O.B LED source with a colour temperature of 5000K, which makes for a starker and more intense beam. Both models offer a CRI over 90, which ensures that skin tones appear natural when they are used to illuminate performers and colours look realistic when they are used to light stage sets.

These two fixtures each offer an adjustable beam angle of 9, 15, 20, 25 or 30°, which can be easily changed using a manual latch system. This makes them extremely versatile, and suitable for both spotlighting and stage washing duties. They are also supplied with gel frames that can be used to mount colour and diffusion filters (sold separately), which adds to the flexibility of these unique fixtures.

The **PAR Z150 RGBA** (<https://www.adj.com/par-z150-rgba>) is a colour version, which harnesses



the power of a 150-Watt RGBA C.O.B. LED engine to generate an even wash and extremely smooth colour mixing with no colour shadows. By combining varied amounts of the red, green, blue, and amber primary LED colour elements, users can achieve an almost limitless palette of colours including bold vibrant hues and subtle pastel shades. 64 macros are also supplied that allow a quick selection of popular colours to allow fast programming. The fixture also offers variable colour temperatures for white light washes, making it an ideal fixture for stage lighting, covering both key light and colour-washing duties. The colour temperature can be adjusted between 2300K (very warm) and 9900K (extremely cool) with a series of presets providing easy access to popular temperatures. Manual adjustment on this fixture also allows easy selection between five beam angle options – 7, 11.5, 16, 20.5 or 25° – and a gel frame is included which can be used to introduce a diffusion filter (sold separately) to offer further beam angle options.

With a life expectancy rated at 50,000 hours, the C.O.B. LED light sources that power these fixtures should never need to be replaced, no matter how much use they get. This removes the expense of replacement lamps and the worry that one will go partway through an important show. In addition to 0-100% flicker-free dimming, with a choice of four different dimming curves and six dimming modes, these LED-powered par fixtures also offer variable speed strobing between 0.6Hz and 7.5Hz.

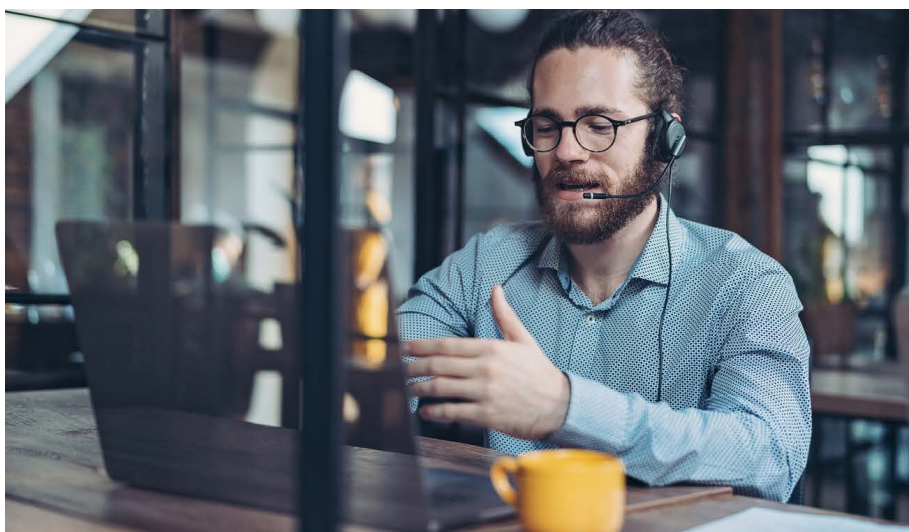
Each unit is fitted with 5-pin DMX input and output sockets and a 4-line digital LED display screen, together with four corresponding push buttons. These provide access to an intuitive menu-driven interface which allows convenient DMX addressing and mode selection. The PAR Z100 3K2 and PAR Z100 5K2 models each offer a choice of three DMX control modes (1, 3 or 4-channel), while the PAR Z150 RGBA supports nine DMX modes (4, 5, 6, 7, 8, 9, 10, 11 or 12-channel) – allow for varying levels of control complexity to suit a wide variety of different applications.

Just like a regular par, the Par Z fixtures each feature an adjustable hanging bracket that can be securely locked into place using two plastic thumb-tightening screws. The fixtures also offer locking power input and output connection sockets. And, thanks to their low power draw, multiple units can be daisy-chained together from a single power outlet (up to 25 Par Z100 3K2 fixtures @ 230V).

All three models are the same size and shape as a regular par can, measuring 19.25" x 10.94" x 10.68" / 489mm x 277.7mm x 271.1mm (LxWxH), and have the same robust metal construction. Each fixture weighs in at a very manageable 7.94 lbs. / 3.6kg. This lightweight, yet strong design makes the units ideal for use on touring productions and one-off events as well as for permanent installation in theatres and concert venues.

Black metal barn doors, PAR64-BD, are available as an optional extra, which are compatible with all three of the new Par Z fixtures. They help users to manually shape where the light shines using four leaves that can each be independently positioned. The barn door assembly is attached to the fixture through insertion into the gel frame holder clip.

ADJ/PAR Z100 5K2



Good Quality Product Support



While I am typically more interested in writing about technical stuff since this is what I have studied, learned and executed for three and half decades, I still find myself wondering about many aspects of our industry and many times; I have trouble

understanding specific approaches by companies and brands. Any investment decision of any substantial size will always mean way more than the initial purchase decision to buy a product. Historically, I was primarily involved in higher-end brands and products, so this is where most of my experience comes from. In this issue, **I want to share my ideas about good pre- and after-sales product support**, and as always, I welcome and invite your comments on this.

When I first started importing products as a distributor in 1992, the main drive was to find innovative products and provide some new technology and ideas to my colleagues and customers. During this time, it was easy in the sound reinforcement sector since this was not so far past the original Woodstock festival, with mostly experimental systems and not much large-scale concert and touring experience. Today, no

one would ever volunteer to tour and travel with the kind of systems available at back then, and that is due to weight and other complications even with available rigging, wiring mayhem, and a dozen other reasons. Overall, we have seen the quality and performance of everything in our daily lives increase exponentially, which is great to see. It just elevates your starting point at work. Historically, it was not always that easy.

Once I had identified a product that I liked and believed in, I would initially buy a set and then train and educate myself on this, up to the point where I am really confident in its use and application. Only then would I start showing and demonstrating it to friends and customers. There was always a very intense exchange between customers and the brand, and those were very lively discussions and exchanges. You had the feeling that the manufacturer's side wanted to listen and wanted input from the field, and people always wanted to use products in which they had some input and maybe even some say in its performance. As a result, this created very loyal relationships between brands and users, some of which have lasted until today.

A few things have changed, and I wonder if what had worked then no longer works today and what approaches products and brands should take to become successful. After all, once you buy any

product, whether it is a microphone, a wireless system, a mixing console or a loudspeaker system, you will be stuck with this for six to ten years, and you will need to talk to the supplier about service, warranty, updates and upgrades and systems extensions. Your experiences during those exchanges will determine if you will consider buying one of those brand's products ever again. Also, if the data sheet and preliminary product information turn out to be a set of "stretched truths", you will start to question every aspect of what the vendor and the brand tell you. There is a saying in Germany that goes, "Wer einmal luegt, dem glaubt man nicht", which translates into: "who lies to you once, does not get trusted any more".

Since I was a loudspeaker person for the longest time, I observed what is working and what is not and who is successful and why and seeing who is currently leading in this field. I do thoroughly believe that a significant portion of this success is the after-sales support. For any product and brand to be successful, it needs three critical components, and only one of them is provided solely by the brand and the product. The other two are a business partner, a distributor in our case, who has access to the market and can provide access to the product so that the distributor can execute the best possible pre- and after-sales support structure. In such a case, people who had an excellent experience will communicate that experience to their friends and customers, and thanks to the internet, the word will spread worldwide in about two hours. Oddly enough, and to the surprise of many manufacturers, bad experiences also travel like that, and they might even travel faster and wider.

Everybody who has done several events will appreciate that there is no perfect product, and this is not any manufacturer's or vendor's fault, but it is because we live in a not-perfect world. Over the years, I have found that people appreciate it more if they are being told upfront what works and what does not than trying

to evade questions or, even worse, bullshit the customer and then have them find out in possibly embarrassing ways that what you had told them does not bear true. Good pre- and after-sales support will be by your side before you buy the product, and after you have purchased the product. How you feel supported and accompanied will make all the difference. I had many times when I was on the phone with a customer late at night, while in bed, trying to solve their problems and find a viable solution to still enable them to do their show and event despite some trouble with products. Those customers will become friends for life if you have been there to help and support them in those critical moments. However, it takes this huge investment to have a product specialist with a giant database of experience who can understand and analyse a problem and then find and suggest a solution, possibly even from thousands of miles away. Some of the iconic brands in our industry have recognized this, and they have great people in place. There are too many to name here, but you know who I am talking about.

Having those people available and giving them all the necessary training and tools to help and support the customers makes the difference, and I, for one, am happy to also pay for this service and the value that is being provided to me. I have had some great experiences, and also some very bad ones with iconic and huge brands and also with smaller brands, and I can say that this is absolutely a criterion for me which would mean, will I ever buy this product again and the answer will be either "no, surely never again" or possibly "absolutely, at any time". I want to give a big shout-out to all my support and service colleagues out there, who do a great and fantastic job every day to keep us all working on the thousands of events, knowing they have our back.

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

Penn Elcom Celebrates 50



Penn Elcom Team at Hastings.

Penn Elcom – legendary flightcase hardware, racking, speaker component, cabling, LED lighting and assorted other related elements manufacturer – celebrates 50 years at the sharp end of being a vibrant and innovative production / entertainment industry engineering specialist!



Founded in 1974 by **Roger Willems**, initially focusing on metals and anodising, the company has expanded and diversified over the five decades and is now producing and supplying an array of vital entertainment industry

related infrastructural elements, which are fabricated from bases in the UK, USA, Germany and China in a tightly co-ordinated operation involving over 600 full-time employees.

Roger is the first person to acknowledge the ongoing global teamwork involved in this success, together with the commitment and passion of management and employees.

“So many fantastic people have contributed to making Penn Elcom what it is today! Their collective personalities, foresight and diligence have helped shape the strong brand identity that sees us achieve this landmark anniversary. “I want to say a huge and sincere THANK YOU to each and every one!” he stated.

Diversity

Penn Elcom’s famous logo can be found on numerous bits of kit in multiple places around the world, everywhere from concert halls to conference centres, clubs to churches and everywhere in between.

The brand is synonymous with quality, good engineering, and reliability, and acclaimed

for super-efficient service and dedication to excellence and customer satisfaction. Behind the success story there has been plenty of vision, serious hard work, a joyful willingness to embrace innovation, change and the future, and the nerve to sustain a degree of risk-taking.

Start Up

The Penn Elcom story started inconspicuously enough in Penn, Buckinghamshire, when 26-year-old Roger purchased his first metal engineering plant in 1974. The embryonic Penn Fabrications - as it was then known - focussed on steel fabrication, anodising, and associated sub-contracting services.

Roger was born to a working-class family in Glasgow, Scotland and was one of 7 siblings. His father was a Dutch merchant seaman and his mother, Dorothy, led a colourful, action-packed life.

As a youth, he was always a grafter and naturally entrepreneurial. Before the age of 10, he worked several paper rounds, and as a teenager living in then notorious Easterhouse, he worked in a bookshop, at a restaurant, as a silver service waiter, turning his hand to pretty much anything, also engaging in several local creative money-making schemes.

These fast-and-furious moments of business-and-life education sharpened Roger's street smarts, and soon after starting as the office boy for a metal merchant, he graduated to metal trading - copper, steel, aluminium - as his charisma, cheekiness and quick wit soon elevated him to a star salesman.

A few years and many adventures later, the first major moment in his own business career presented itself in 1974 when Roger and business partners David Wanstall and Ron Luzar purchased Penn Anodising. Located on the 'Penn Estate', an industrial area on the edge of the

picturesque village of Penn in Buckinghamshire. They immediately re-imagined this business as Penn Fabrications, and started sourcing, anodising and polishing metal products.

Rock 'n' Roll

The second pivotal moment in Penn's development was 1981, when Roger first met Andrew McCulloch of rock 'n' roll flightcase company, Bulldog Cases.

Andrew was seeking specific components - handles, corners, butterfly clips - when Penn came on his radar and then started producing these, a side of the business that expanded rapidly.

Roger recalled how that first meeting followed one between Andrew and the lead singer of 1960s rockers Manfred Mann, an encounter making a huge impression on Roger that prized open the world of rock 'n' roll coolness with seismic effect, especially when Andrew put his faith in Penn Fabrications to start making his case handles.

This soon expanded to other elements and to more clients involved in flightcase manufacturing.

Thinking Global



Also in the early 1980s, Roger was next looking at overseas opportunities as the first solid American venture presented itself. New Jersey-based sound mixer hardware manufacturer Audiotec was acquired by Penn from Music Productiv, and Roger's great friend **Phil Stratford** - then still a fresh-faced forklift driver on the Penn Estate

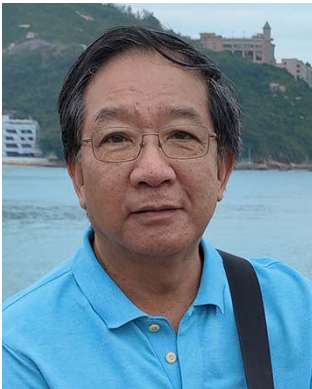
– went over to manage this together with his younger brother, Richard.

“Everyone back then had a massive sense of adventure and we all dreamed big,” recalls Roger, adding that the US was also a crazy place in the 1980s, a place of many opportunities that fuelled his appetite for new markets or possibilities. Around the same time, another friend, Frank McCourt, started up Penn Fabrication on the west coast of the USA and the overall product portfolio expanded to include cables and other installation related elements as Penn’s international reach started expanding to Canada, Australia, Latin America, and other places.

The next two decades saw steady growth and diversification. Penn in the UK focused on the core elements of manufacturing metalwork, developing core ingenious and problem-solving products that were cost effective and could be delivered fast and efficiently to its growing customer base.

In 2001, Penn Fabrications became Penn Elcom via a merger with Elcom Hardware in California which also consolidated the ever-expanding West Coast operation. Penn then bought out the minority shareholders, so the business came back to himself and Phil.

Thinking Ahead



In 2004, Roger and the team met Chinese entrepreneur **Stanley Wong** and launched a pathway to the next steps in international manufacturing, forging a strong and invigorating partnership in China via Stanley, based on “mutual respect for his

wonderful engineering skills, knowledge and intelligence,” noted Roger.

Opening in China was the fourth major business moment for Roger and Penn Elcom’s long term development, and one critical to competing on a world stage and an ever-changing market that was becoming consistently more ‘global’.

Stanely together with Jesse Chen and their dedicated team, worked hard to ensure that Penn Elcom China became an integral part of the business.

Having a locally managed and run operation in China has hugely boosted Penn’s ability to stay abreast of technology and demand. Maintaining quality products and quick service was their mantra and what customers expected.

Integration

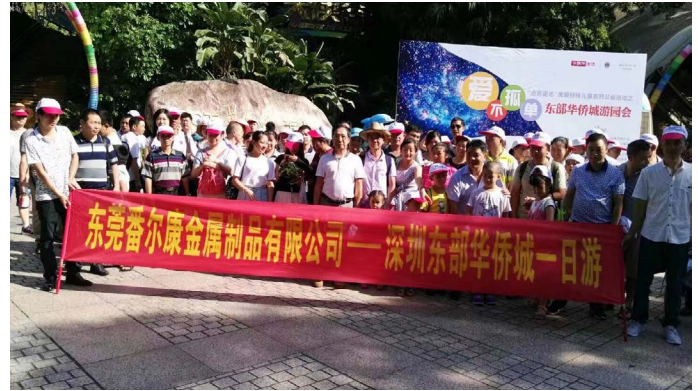
Today, two UK factories in the UK – in Washington, county Durham and Hastings, East Sussex – plus a new 180,000 square metre facility in Huizhou City, Guangdong Province, China, all make identical Penn Elcom products with the highest and most rigorously enforced quality standards. This integration has taken around 7 years to complete and is a process of which everyone is proud.

This 20-year investment in China – not just for profit but also embracing dynamics, culture, and different working practices – is part of Penn Elcom’s global success that additionally reflects the importance of the Chinese domestic market. Roger had always wanted to build an operation that is fully international so all can benefit from multiple experiences.

In 2019, Penn Elcom GmbH was taken over from Dennis Meertens - who still runs the daily operations - and Thomas Mostert who is now retired, giving a prime distribution hub on the German / Dutch border and ideally placed for access and expedition of goods across Europe.



Penn Elcom NJ USA Team.



Penn Elcom China Team.



Penn Elcom Europe Team.



Penn Elcom German Team.

People Matter

Being people-focused has always been part of the Penn Elcom energy. Developing environments where staff can excel and feel valued, included, and encouraged to speak up if they have a good idea, or spot an opportunity.

Roger is also convinced that independent ownership has also been instrumental in the journey. "It's allowed us to remain agile and able to react to various situations and take decisions quickly as needed," he confirmed, "and this MO will keep us moving forward well into the future."

Roger is still very involved in many day-to-day aspects driving Penn Elcom's business, basing himself in Hastings and Washington, he frequently visits other Penn Elcom facilities and is involved with specific product development,

exploring new business opportunities and ... still having huge fun with it all!

He is a great communicator who loves problem solving, travelling, and seeing how new technologies can be utilised and applied, he is modest, approachable, and still has the sparkle and youthful quest for success in his eyes!

An engineer at heart, "I know I drive everyone crazy at times," he comments, with a smile, but Penn Elcom remains firmly his baby, and he's every bit as fired-up about the company and the future as the day it all started 50 years ago!

Penn Elcom

AUSTRALIA

Bringing Renaissance Man Vividly to Life

"Leonardo da Vinci - 500 Years of Genius" at THE LUME Melbourne immerses visitors in Da Vinci's life and work through spatial audio by aFX Global and ENCIRCLED



In a celebration of innovation, art, and the timeless genius of Leonardo da Vinci, **THE LUME Melbourne** has opened an unparalleled showcase featuring the world's largest multisensory gallery. Created by Grande Experiences with spatial audio technology and sound design partner Des O'Neill at aFX Global, along with the expertise ENCIRCLED, 'Leonardo da Vinci – 500 Years of Genius' is also set to go on tour enabling people to experience a spectacular and vivid encounter with the life and work of the original Renaissance man.

'Leonardo da Vinci – 500 Years of Genius' at THE LUME Melbourne, located in the Melbourne Convention Center, is an immersive exhibition

created and produced by **Grande Experiences** with Biblioteca Ambrosiana, the custodians of Leonardo's original manuscripts, the Codex Atlanticus, housed in Milan. The gateway to Leonardo's life and legacy is a colossal 3,000 sqm or four-storey high multi-sensory gallery that envelops visitors in an immersive journey, engaging all the senses with sights, sounds, scents, touch and taste that recreate the ambience of the Renaissance.

Da Vinci's Codex Atlanticus Makes History

This is the first time in history that Da Vinci's Codex Atlanticus has been displayed in Australia; an unprecedented feat that comes



after over a decade of dedicated relationship-building underscoring THE LUME Melbourne's commitment to bringing this extraordinary new experience to Australia.

Craig Smith, Grande Experiences' Head of Production, Operations & Technology explained, "Several years ago, when looking for a spatial audio solution for THE LUME Melbourne, **aFX Global** and ENCIRCLED were among the first companies we spoke to. IOSONO quickly became the solution due to its workflows and easy integration into our existing audio systems. Since then, aFX Global has worked with us on content development and deployment to our IOSONO systems, all supplied by ENCIRCLED."

Rather than the fixed listening position of most galleries, THE LUME Melbourne's immersive space offers over 3,000sqm of listening area. Ensuring a spatial experience for all guests regardless of their location in the gallery while staying in context to the video was key to the project's planning.

Sound Design for Leonardo da Vinci – 500 Years of Genius

The score was curated and designed by Grande Experiences' in-house music director Ben Crook, who worked closely with Des O'Neill, co-founder aFX Global and experienced sound designer, who explained: "Our task was to create custom spatial audio for every surface."

The spatial audio system designed by Grande Experiences and Des O'Neill with support from ENCIRCLED for the venue's launch in 2021 provides the foundation for THE LUME Melbourne's sound designers and technicians to tailor bespoke experiences for each new exhibition. A key requirement was all system processing is done via IOSONO, utilising addressable filters on each of the outputs and localising the audio in the room live through SAW.

Jan Langhammer, Joint Managing Director at ENCIRCLED stated, "A 'global map' provides quick access to all the loudspeakers throughout the venue with provision for separate spaces like feature projection locations, the Mezzanine and



©Grande Experiences



©Grande Experiences

the 360 Room to each have their own immersive loudspeaker arrangements. From a content perspective, we can control the audio playback in all these areas – some share the same content; others play individual soundtracks. Since the venue's opening, we've seen three major content updates and a number of ad-hoc events with special audio needs produced at THE LUME Melbourne thanks to the flexibility of IOSONO rendering and the forward-thinking sound design of the original loudspeaker layout."

According to Smith, with each new experience at THE LUME Melbourne, Grande has worked with Des O'Neill at aFX Global on the localisation of the spatial audio "Their experience both as sound designers and IOSONO specialists made it possible for such major works to be done on a tight schedule," he said.

Max Röhrbein, Joint Managing Director at ENCIRCLED, said, "This project has taken immersive experiences to new heights, thanks to the vision of Grande Experiences, the brilliance of sound design by aFX Global and cutting-edge audio processing powered by IOSONO. 'Leonardo da Vinci—500 Years of Genius' may be the best, but it is only the latest in an important trend which elevates audio to at least on par with the visual experience to breathe new life and astonishing insights into historical artefacts."

Following the overwhelming success of the exhibition in Melbourne, Grande Experiences are now taking 'Leonardo da Vinci—500 Years of Genius' on tour with a carefully redesigned and modular set-up once again based on aFX Global spatial audio and IOSONO systems for maximum flexibility.

Craig Smith said, "Given that many of the touring venues will be smaller than THE LUME Melbourne, the exhibition design has to work within a variety of spaces and always with the visitor's enjoyment at the centre of what we do."

Craig Smith concluded, "As industry pioneers, we've consistently upheld a standard of quality and professionalism. Through our dedication to storytelling, we aim to create immersive journeys that seamlessly blend art and technology. We've had the privilege of completing this process over 250 times across six continents. With this longevity of experience, our team ensures smooth and efficient installations for all venues, including those with delicate infrastructure and heritage buildings. We deeply value collaboration with our technical and design partners, promoters, licensees, and hosts, prioritising the visitor experience above all else."

ENCIRCLED

AUSTRALIA

Adelaide Festival Debuts 'Baleen Moondjan' with the Help of Syva

Novatech Creative Event Technology takes its complement of L-Acoustics Syva to the beach to provide a low-profile PA solution for the festival's opening event



"Dramatic and haunting" is how you could best describe Baleen Moondjan, a contemporary retelling of Australian First Nations stories and culture. The production is the creative vision of choreographer and legendary indigenous dancer Stephen Page and premièred at the Adelaide Festival this year.

The staging of **Baleen Moondjan** required considerable imagination and resourcefulness, in no small part because of the setting – Adelaide's Glenelg Beach. Sand, surf, and baking hot summer weather aren't generally things to complain about, but it's not every day a full-blown audiovisual production needs to contend with the elements in this way.

"As soon as we heard about the vision for Baleen Moondjan, we knew this wasn't going

to be a standard job," explained - with some understatement - Leko Novakovic, Managing Director of **Novatech Creative Event Technology**, which has had a longstanding relationship with the Adelaide Festival. Normally, festival openers will be staged in venues such as the Adelaide Festival Centre, with all the necessary infrastructure, power, data, lifts, ramps, and access, or in the event-friendly Elder Park, where event infrastructure is commonplace. This wasn't that type of production.

Giant fibreglass 'whale bones' designed by Jacob Nash form the basis of the show's staging, which is a staggering 120 metres long, low, and open to the sky. The vision for the show was for audiences, mostly sitting on rugs and camp chairs on the beach, to be utterly absorbed by the setting and the story. In other words, there are



no huge truss towers, no conspicuous PA, and no lighting grid.

Making Shore

When the unusual production requirements of the beach event became clear, Leko immediately thought, 'Syva.' L-Acoustics loudspeakers form a large part of Novatech's inventory, and **Syva** carries the lion's share of the rental company's portable PA duties. Not only is it low profile, it's aesthetically pleasing, and its deceptively capable performance has made Syva a mainstay of Novatech's premium corporate and outdoor international sporting events. But a beach gig for thousands?

"The producers didn't want the PA to be conspicuous so that immediately led us towards Syva," continued Leko Novakovic. "We did play around with an alternative design based on an L-Acoustics line array hung high, up and behind the stage, but ultimately, we returned to a Syva-based design."

Leko handed the audio design over to his audio specialist, Matthew Ruggiero. Ruggiero worked with L-Acoustics Soundvision sound design and prediction software to arrive at the best arrangement of Syva, subs, and fill.

The Syva Solution

The solution saw a left/right arrangement of Syva Low and Syva columns on either side of the stage – set wide to ensure the performance area was as clear as possible. From there, three delay rings of Syva ensure complete coverage of the audience area out to 90-100m from the stage.

For low-frequency reinforcement, four L-Acoustics SB28 subs in an end-fire configuration were placed in a block between the Syva performing front-of-house duties. A further three L-Acoustics SB18 subs provide additional low-end energy for those further from the stage, placed behind the mix position, arranged in a cardioid configuration for the comfort of the FOH engineer.

Other fills included L-Acoustics X8 point source loudspeakers on the front edge of the stage, half buried in the sand to ensure minimal impact on sightlines.

"We bounced our Syva-based design off of L-Acoustics for a second opinion," recalled Leko Novakovic. "They were very helpful and came back with a few tweaks. We were confident we had things right, but it was an unusual application, so it was reassuring to have that backup."



Digging In

Novatech first invested in Syva when it won a bid to provide the public address for the Santos Tour Down Under professional cycling race in 2018. It was a brave and innovative move. Deploying Syva with custom-engineered winch-up stands that allowed Syva to be deployed four meters in the air along streets, the Tour Down Under never sounded so good.

For the Baleen Moondjan production, Novatech used the winch-up stands again but asked the site crew to assist by digging holes for all the Syva in the delay rings. It hid the stand legs but retained the 2-3m height required to cover the audience area.

"We buried the stands, put fence weights on the legs in the sand, and winched the Syva loudspeakers up from there," recalled Leko Novakovic. "It resulted in a very stable and low-profile solution. Running and concealing cable in the sand wasn't an issue either!"

All the Elements

The performance itself comprised a five-piece band, playback cues from Q-Lab, and narration via headset microphones. The system performed flawlessly over four nights. Completely open

to the elements, the stable Adelaide summer weather ensured almost perfect conditions for the four-night run.

Thanks to the Syva professional sound system, audiences were utterly immersed in the experience. Syva's wide horizontal coverage and even dispersion, along with the team's meticulous time alignment of the delay rings, ensured everyone was enthralled by the action, music, and storytelling on the night.

"We were pushing Syva out of its comfort zone, but it responded superbly," concluded Novakovic. "The wide 140° horizontal dispersion of Syva really came into its own, especially for the two front-of-house loudspeakers – we still managed to capture the vast bulk of the audience despite being set so wide.

"For me, it confirmed what I already knew: Syva is the most versatile loudspeaker in our inventory. It never ceases to amaze me just how capable Syva is. It's just a freakishly well-designed speaker."

L-Acoustics

AUSTRALIA

Robe Calls Back Noah Kahan

LD Alexandra Lutz-Higgins used a Robe rig, including FORTES, BMFL WashBeams, and Spiiders, to create an engaging lightshow for Noah Kahan's vibrant, sold-out concert in Perth



©Louise Stickland

Talented Grammy-nominated American singer-songwriter Noah Kahan – a rapidly rising star, master communicator and TikTok algorithmist – played a vibrant, sold-out show at Perth's Red Hill Auditorium in Western Australia, delighting 5000 lucky fans with his presence and very personal, intimate performance style.

Lighting director, programmer and operator Alexandra Lutz-Higgins utilised a largely Robe lighting rig supplied for this show by lighting and visuals rental specialist, Showscreens, also based in Perth. The company recently invested in **Robe FORTES**.

The Robe count totalled 22 units of FORTES, 21 **BMFL WashBeams** (four running on a 2-way **RoboSpot** system), plus 32 Spiider LED wash beams.

Chase Hall from US-based design studio Cour Design originated the visual design and Alexandra has been onboard and on the road with it since May 2023 when the tour kicked off once Kahan's phenomenally successful third album, *Stick Season*, dropped.

Alexandra originally programmed the show together with Will Flavin. Over the months the look has transitioned slightly, evolving into this latest touring version, with more songs added to the set which have been programmed from scratch. The Australian leg included 6 incendiary performances across the country, with Perth being the concluding show.

Alexandra was pleased to see FORTES on the rider in Perth, as these and BMFL Washes have been the regular spot/wash combination used



on the US leg for which lighting was supplied by LMG. The stage at Red Hill Auditorium is covered and relatively compact for the overall size of the space, but tucked perfectly into the natural scoop in the topography around which the auditorium is shaped, a gently curved bowl with near-perfect viewing angles from every direction, and the city lights of Perth twinkling magically in the background.

Kahan's great music and the lively and good-natured audience combined with the sultry late summer night gave the gig a distinctive festival vibe! The overhead lighting was arranged across three trusses, and this was where all the BMFL WashBeams were rigged in optimum positions for general stage coverage.

The FORTES were rigged on two ladders (roll-on frames in Perth) located on each side of the stage, 6 fixtures per side giving 12 in total with the remaining 10 x FORTES upstage on the deck just in front of the video wall, ideal for high impact backlighting and effects. In front of them on the floor was a row of strobes.

Alexandra noted that FORTES are "excellent, very powerful, they do everything I need as well as being fast and programming friendly," and she

also thinks the colour mixing is very smooth and the fixture is logical to programme.

Onstage, 6 x 4.8-metre-high towers, three per side, were each rigged with five **Spiiders** and some blinders. Normally, these would be located behind some sections of the blow-through video wall, but in the adaptive design for Perth, these video elements were absent, so the towers took on additional prominence, well placed for creating eye-catching effects and eye-candy looks.

While the show had flashes and sections of bold and vibrant colour brilliantly accenting key moments, CT0 and CTB hues were a prevalent feature of the overall lighting aesthetic, so the Spiiders were used mainly as washes and to create nice fat beams of white light rather than as pixel effects. Under the band risers extending the depth and impression of stage space were assorted blinders, LED PARs and strobes. The show comprised a mix of time-coded and manually executed lighting cues and was run by Alexandra using a grandMA3 console.

Multiple gobo looks and texturing were also essential to the lighting which was judicious and thought-through, allowing the show narrative room to breathe and keeping the artist and his stories at the centre of the action.



©Louise Stickland

Some of these were super-subtle and some were very much in-the-face, contrasts which Alexandra loved, together with the chance to be part of the production team involved with Noah Kahan's trajectory as his popularity and accomplishment soars.

"His music illustrates a world that I relate to," she explained. Incidentally, both hail from Vermont, but that aside, "he paints a full picture of the worlds he creates, and it is a massive honour for me to illustrate this with lights and engage in some of these overlapping journeys with Noah."

Whilst at art school, she was contemplating being an illustrator with her drawings, but that art form's loss is another's gain as she now sculpts to music so passionately and effortlessly with lights.

The once Colorado-based LD and programmer is enjoying the "fantastic opportunity" of working on this tour, together with the ability to become a 'citizen of the world', relishing working and staying in new places and exploring different cultures and experiences every month.

Alexandra had a good impression of Robe as a brand, having used BMFLs on several tours and

has always been happy with the reliability and creative options.

On-site at Red Hill, the project was production managed for **Showscreens** – who supplied lighting and video – by Kale Tatum, who comments that from a rental company perspective, their FORTES are proving a sound investment suitable for all weathers and all environmental conditions.

Showscreens is the largest lighting and visual rental company in Western Australia and services a wide array of shows and events from theatre, opera and ballet to music concerts, festivals, business, and corporate events.

Referring to this show, Kale said "Alexandra was a real pleasure to work with, and we all appreciated her attention to detail and the flexibility of the design". Like everyone, he and the team appreciated the good energies of Noah's production team and his Australian fans revelling in his charismatic performance.

Robe

INDIA

Cashews, Culture & Clarity Align at The Cashew Festival Goa 2024

Spectrum Audio Solutions levels up with L Acoustics to create sonic magic at Goa's premier culture and music festival

by Elton Noronha



Renowned for its vibrant culture, rich history, and scenic beauty; Goa is more than just a coastal gem of India; as the state's unique blend of Indian and Portuguese heritage shines through in its architecture, cuisine, festivals, and pretty much in every aspect of routine local life. While the state boasts a multitude of cultural treasures that have become the pride of not just the localites, but the country at large – it must be noted that cashews in particular hold a special place, both economically and traditionally, celebrated for their role in local cuisine and the production of feni, a popular Goan spirit.

The Cashew Festival Goa is a vibrant celebration that showcases the cultural and economic significance of cashews in the region. Held annually, this festival not only highlights the agricultural importance of the cashew industry but also intertwines it with Goa's rich heritage, offering a multifaceted experience that attracts locals and tourists alike. The festival takes place in Panjim, the heart of Goa, and transforms the city into a bustling hub of activities that include live music, dance performances, culinary showcases, and traditional arts and crafts.

For the 2024 edition, the organizers i.e. the Goa Forest Department and Vinsan World Events



Goa, entrusted **Spectrum Audio Solutions** to elevate the festival's audio experience, ensuring that the sounds of Goa's premier cultural event resonated with clarity and excellence. Spectrum Audio Solutions' impeccable track record and innovative approach made them the perfect choice to handle the audio production for this prestigious event. And as lady luck would have it, an opportune strategic business move ensured that Spectrum Audio Solutions were more than just well-equipped to coalesce magic at the 2024 edition of the Festival.

Strategic Timing

Spectrum Audio Solutions, a premier event equipment solutions provider based in Goa, has long been synonymous with quality and innovation in the live sound industry. With roots going back to its humble beginnings of a modest set-up of 12 units of the L Acoustics dV DOSC line array modules and 8 units of SB218 subwoofers, the company has evolved into a significant player in the market, delivering exceptional sound experiences for a wide range of events. And recently, Spectrum Audio Solutions made a substantial investment to expand its existing loudspeaker inventory, enhancing its capacity to

provide high-performance audio solutions for multiple events simultaneously.

The recent acquisition includes **24 units of KUDO line array modules**, known for their large-format, high-performance capabilities that ensure precise coverage and exceptional sound quality. Additionally, the company has added 12 more dV DOSC line array modules, complementing their existing inventory and maintaining their reputation for unmatched sound clarity. To cater to versatile event needs, Spectrum Audio Solutions has integrated **24 units of ARCS multi-purpose loudspeakers** into their arsenal. These speakers are designed to deliver powerful audio across a range of applications.

Furthermore, the company has also invested in an array of subwoofers, including 8 units of SB118, 12 units of SB28, 12 units of SB218, and 12 units of dV subs. This comprehensive subwoofer setup ensures that audiences experience rich, full-spectrum sound. On the stage monitor front, 8 additional units of the HIQ XTI 115 stage monitors have been added to offer performers a pristine foldback experience. Furthermore, Spectrum Audio Solutions has expanded its



amplification and processing capabilities by incorporating more units of the LA8 and LA48A power amplifiers from L Acoustics, along with advanced loudspeaker management processors from Dolby Lake.

Spectrum Audio Solutions' strategic inventory upgrade is attributed to the company's dynamic 22-year-old Managing Director Maria Rodrigues, whose innate understanding of the live sound business and unique leadership approach is noted to have propelled the company to new heights in recent times; while building on the solid foundation laid by her father Renzil Rodrigues who is the Founder Director of Spectrum Audio Solutions. Maria shared insights on the investment decision as she commented "Our company was founded on the principal of delivering only the best in quality and service. And though we began with a relatively modest setup, the superior sound quality and reliability of these systems quickly garnered positive feedback from clients and industry peers alike; thereby allowing our company to steadily grow and evolve into a comprehensive audio solutions company that now serves an enhanced portfolio

of clients and event. With an increase in the sheer magnitude of events and with every event organizer now demanding world-class soundscapes for their projects – the decision to grow our existing L Acoustics inventory was quite natural. Our team of in-house experts were already very familiar with L Acoustics' technical nuances and workflows; and so, we knew that acquiring and transitioning to the new system would be quite effortless and seamless. Plus, the brand stands for quality and excellence – just like Spectrum Audio Solutions!"

Frequenzy Frenzy at the Festival

Soon after upgrading their inventory, Spectrum Audio Solutions was called upon to provide their expertise and trademark brand of high-quality service for the second season of the Cashew Festival Goa. This prestigious event, organized by the Goa Forest Department and Vinsan World Events Goa and held from May 10th to 12th at the DB Bandodker Ground in Panjim; was designed to be an immersive experience that spotlighted the rich culture and legacy of Goa through a strong emphasis on world-class production quality.

Tasked with spearheading the technical design and commissioning of the audio production, Spectrum Audio Solutions went above and beyond to ensure an awe-inspiring experience for attendees. After surveying the venue and considering crucial aspects such as its physical dynamics, the festival curators' technical vision, and the performance requirements of various world-class artists – the likes of which included fan-favourites like Dhvani Bhanushali, Ash King, and Nikhil Sachdeva – team Spectrum Audio formulated a meticulous plan that involved deploying state-of-the-art technologies to create an ultra-formidable live sound architecture.

The main PA system comprised 24 units of the newly added KUDO line array modules, suspended in a stereo hang on either side of the stage; with this deployment offering high-quality sound with optimum fidelity across the frequency range, as it effortlessly covered the entire audience area that spanned over 240 feet. And to envelop the audience in deep, resonant bass, the team deployed over 12 units of the SB28 subwoofers as part of the main FOH setup, with the subwoofers being strategically placed to offer unparalleled low-frequency fidelity. Furthermore, to enhance the quality of the sound experience for the audience members located directly in front of the stage, team Spectrum Audio relied on the ARCS multi-purpose loudspeakers coupled with the SB218 subwoofers to serve as the high-performance front-fill reinforcement that ensured a truly consistent sonic experience for every attendee. It is important to note here that team Spectrum Audio Solutions were able to ensure a remarkably quick system setup and tuning, thanks to their extensive experience with these systems – which allowed them unparalleled advantage in leveraging the wide dispersion capabilities and high-SPL output of the L Acoustics system to bring together a truly magnificent soundscape for the audience.

A similar world-class audio experience was afforded to the artists performing on stage as well, as team Spectrum Audio provisioned world-class RF infrastructure with the deployment of multiple units of the highly acclaimed Axient Wireless System from Shure and the industry favourite 6000 series and G4 systems from Sennheiser. Furthermore, they also coalesced a comprehensive foldback architecture which saw multiple units of the HIQ XTI 115 stage monitors meticulously spread across the stage to offer a pristine stage-monitoring experience; while world-class side-fill reinforcement was provided by the dv DOSC modules coupled with SB118 subwoofers deployed on-stage.

Complete control over the soundscape for the event was achieved through the use of AVID's world-class S6L-24D live mixing console and the Vi3000 digital mixing console from Soundcraft; as these consoles, along with external I/O racks, offered all the necessary tools and unparalleled dexterity in terms of I/O support, thereby allowing sound engineers an unprecedented level of authority in terms of tailoring the sound quality and performance precisely.

Artists and audiences alike, attested to the fact that the Cashew Festival Goa 2024 exuded the kind of world-class soundscape that the city has seldom witnessed in the past – as Siddhesh Mahambre, a partner at Vinsan World Events Goa, provided glowing feedback on the sound system and service rendered by Spectrum Audio Solutions for the event. "We were really pleased with the setup and the level of professionalism and attention to detail displayed by team Spectrum Audio. The clarity of sound throughout the event was exceptional - from speeches to musical performances, every word and note came through with remarkable clarity, significantly enhancing the overall experience for our attendees. Plus, the fact that the team were

able to maintain precise control over the volume levels, especially in a venue of this size, was truly commendable. Everyone at the venue, especially the artists, really appreciated the responsiveness of the sound system to adjustments, and the fact that appropriate volume levels were maintained throughout the course of the event without any issues. Above it all, I believe the team's availability and willingness to address any technical issues in the most prompt and efficient manner, is what truly elevated the event experience for all of us. Team Spectrum Audio's expertise and quick response ensured an overall smooth operational experience; with this level of support being instrumental in managing the event's technical aspects seamlessly, and the eventual success of the festival. I can confidently say that the 2024 edition of the Cashew Festival Goa has been successful in creating a memorable experience for audiences and artists alike, and we look forward to the opportunity to work with team Spectrum Audio Solutions again in the

future. Their dedication to excellence is truly commendable, and it was a genuine pleasure collaborating with them!"

Optimistic Future

With their recent investment in expanding their inventory, Spectrum Audio Solutions' commitment to innovation and excellence continues to drive their growth, as Renzil Rodrigues, Founder Director of Spectrum Audio Solutions, reflects on the experience of working on the Cashew Festival Goa, and on what the future holds for the company, stating, "The technical prowess and methodical approach of our team were key factors in ensuring the smooth progression of all three days of the event. Our expertise and commitment to delivering exceptional audio experiences were evident in the flawless execution of the festival. And as we look to the future, Spectrum Audio Solutions remains dedicated to providing unparalleled sound experiences for events of all sizes and formats, solidifying our reputation as industry leaders in the region."

Spectrum Audio Solutions

"Our company was founded on the principal of delivering only the best in quality and service. With an increase in the sheer magnitude of events and with every event organizer now demanding world-class soundscapes for their projects, the decision to grow our existing L Acoustics inventory was quite natural. Our team of in-house experts were already very familiar with L Acoustics' technical nuances and workflows; and so, we knew that acquiring and transitioning to the new system would be quite effortless and seamless. Plus, the brand stands for quality and excellence – just like Spectrum Audio Solutions!"

Spectrum Audio Solutions Managing Director Maria Rodrigues

JAPAN

Superstar aiko Brings Immersive Concert Sound to Fans Using L-Acoustics L-ISA Immersive Technology

Hibino Sound deployed a K2-based L-ISA configuration in arenas across Japan

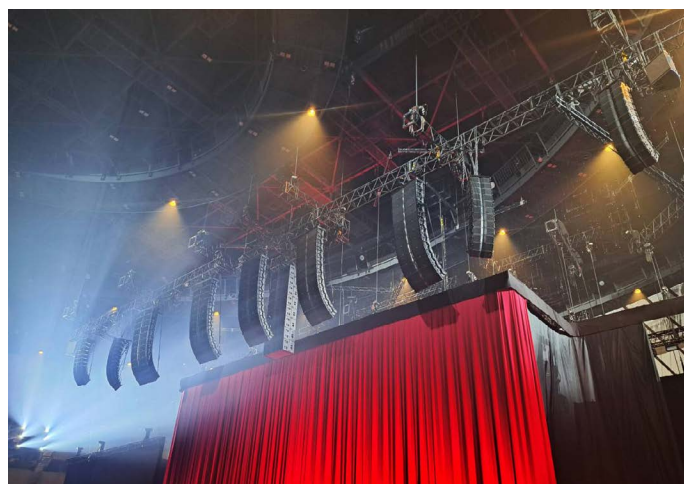
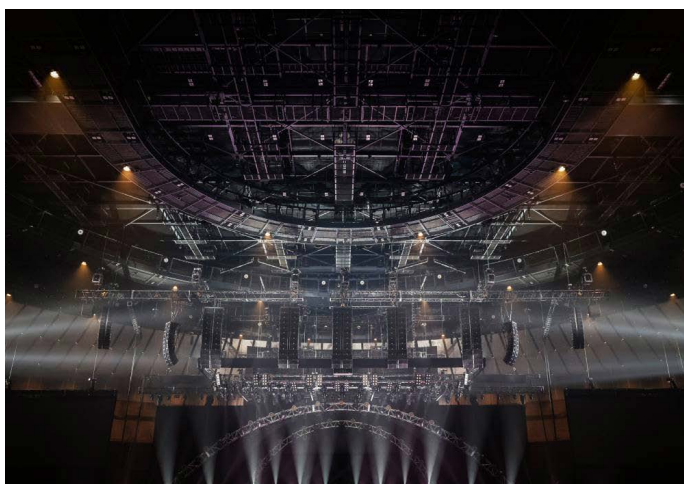


For her sold-out Love Like Pop Vol. 24 tour of Japan, superstar aiko presented her audiences with an L-ISA immersive experience from Osaka-jo Hall to Tokyo's famous Nippon Budokan, aiko was backed by a 26-piece ensemble, interacting with her fans from a runway that extended to the rear of each concert area.

"Aiko's songs are often described as having unique and complex chord progressions and lyrics that move the audience emotionally. An immersive mix with L-ISA allowed us to give the audience an even deeper emotional experience without being distracted by the concert sound

system," said Hibino Sound's Systems Engineer, Masaaki Nagayasu.

The tour's live sound engineering and mixing company, **Kentec Co., Ltd** collaborated with L-Acoustics Certified Rental Agent **Hibino Sound**), a pioneer in designing and deploying concert sound systems for over fifty years, to specify a concert sound system. "We believed that the spatial representation and resolution provided by L-ISA technology would take aiko's emotion-filled concerts to another level," explained Nagayasu, who worked with aiko's touring mix engineer Mitsuru Kotoya, designed a system that could be



adapted from venue to venue. "I had seen some shows using L-ISA, but I hadn't yet worked with it myself. I was excited and looking forward to using it," said Kotoya.

Always searching for new techniques to deliver a more profound emotional experience for concert audiences, the tour production team had no hesitation in accepting the L-ISA technology. Kotoya and Nagayasu set up a studio with an L-ISA configuration based around L-Acoustics X8 coaxial speakers to prepare mixes for the tour using files from previous aiko concerts. "In the studio, we found that subtle nuances of a song could be expressed in a live concert environment. As someone responsible for supporting and presenting an artist's creativity in the concert venue, I found this particularly compelling," revealed Kotoya. "We spent a lot of time discussing and verifying object layouts and movements, taking aiko's wishes into account."

Having prepped their files in pre-production allowed Kotoya to focus attention on mixing during the live shows. "Kotoya and I determined the artistic vision for each musical piece by evaluating the visual layout on stage. Then we set the parameters for the objects to create natural separation and a sense of unity in the music," explained Nagayasu.

Hibino Sound deployed a main scene system of five arrays of **L-Acoustics K2** with KS28 subwoofers flown behind the centre and additional **KS28 ground-stacked** in front of the stage. L-Acoustics Kara II delivered extension and out-fill, while A10 Focus boxes were deployed as spatial fill. L-Acoustics LA12X amplified controllers drove the system with **L-ISA Processor II** operating over a Milan-AVB network, using a combination of L-Acoustics LS10 and Luminex AVB switches.

Nagayasu calibrated the system using the M1 suite of measurement tools in LA Network Manager, saving valuable time. Over 100 input signals ran through a DiGiCo Quantum 7 mixing console.

The immersive sound experience engaged fans thoroughly, from intimate moments when aiko's vocals harmonised with sparse musical instrumentation to expansive and panoramic soundscapes stretching beyond the stage width.

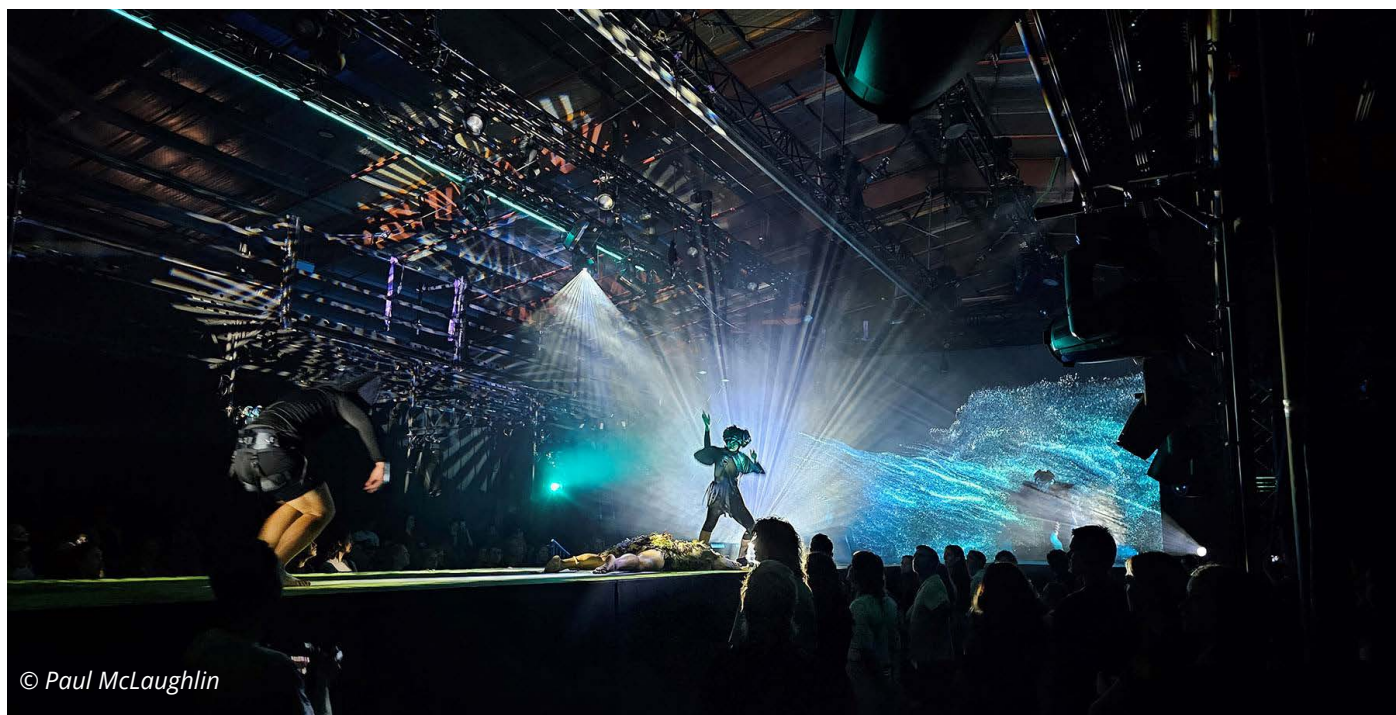
"L-ISA Controller allowed us to create object localisation. Its user-friendly interface gave us a stress-free creative process. With each concert venue, we were able to perfect the system while elevating the immersive sound experience for aiko's adoring fans," concluded Nagayasu.

L-Acoustics

New Zealand

Robe Flies with Hatupatu / Kurungaituku Production

Robe luminaires helped LD Jo Kilgour craft edgy yet graceful lighting for the Māori aerial dance production "Hatupatu/Kurungaituku: a forbidden love"



© Paul McLaughlin

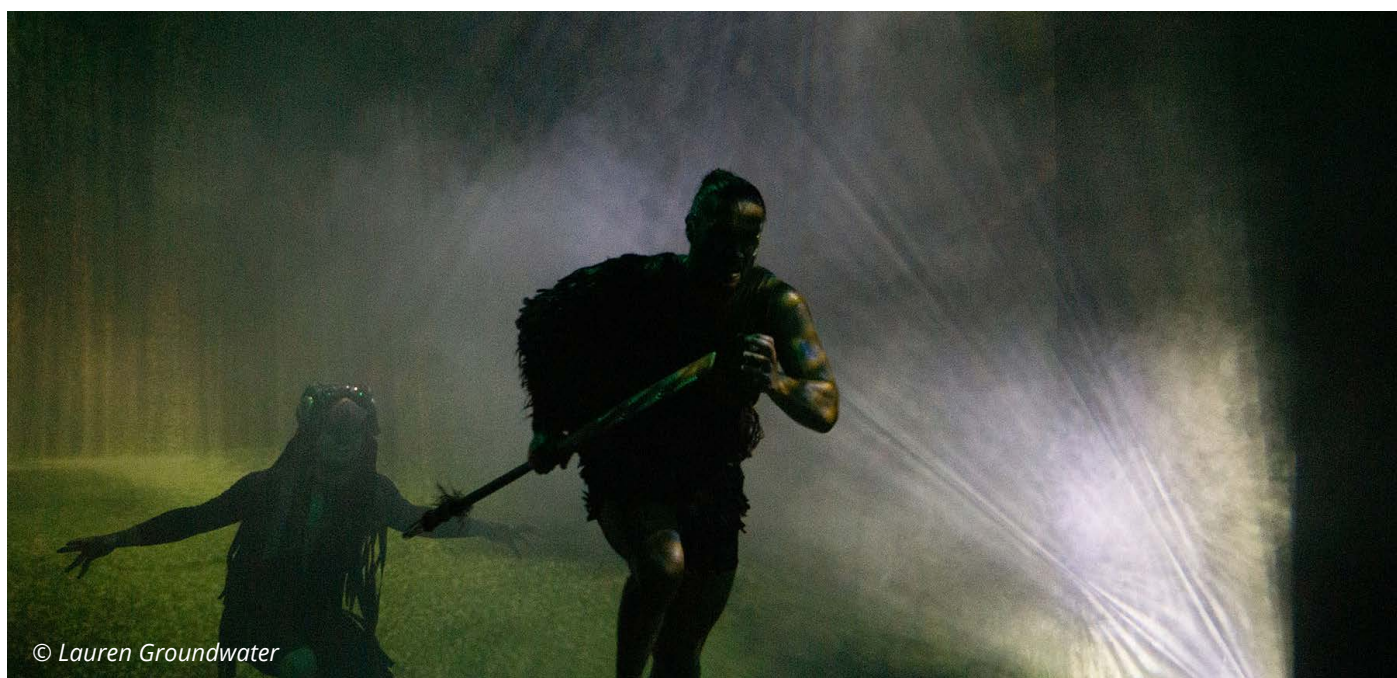
Lighting designer Jo Kilgour created edgy and graceful lighting for Hatupatu / Kurungaituku: a forbidden love, a breathtaking new aerial dance work produced by Aotearoa's boundary-pushing kaupapa Māori theatre company, Taki Rua Productions. The work, written by creative director Tānemahuta Gray and Kapa Haka by Wētini Mītai-Ngātai, premiered at the Tāwhiri Warehouse in Wellington as part of the **2024 Aotearoa New Zealand Festival of the Arts**

18 units of **Robe T1 PCs** and 10 units of the LEDWash 600 wash beams made up an integral part of Jo's lighting rig, which was supplied to this thrilling production by Wellington-based rental company, **Grouse Lighting**, and project managed

by Cameron Nicholls with the assistance of Riley Gibson.

The immersive storytelling was presented in traverse, with the audience standing on either side of a central 1.5-metre-high runway stage, relating the tale of warrior Hatupatu and bird woman Kurungaituku in a daring and dramatic anti-gravitational collage of movement, action, and visceral emotion.

A 'spine' truss running the length of the runway in the roof and scaffolding structures on either side were used to facilitate the people flying, so finding workable lighting positions was challenging. Upstage at one end was a rear projection screen, with four roof trusses flown



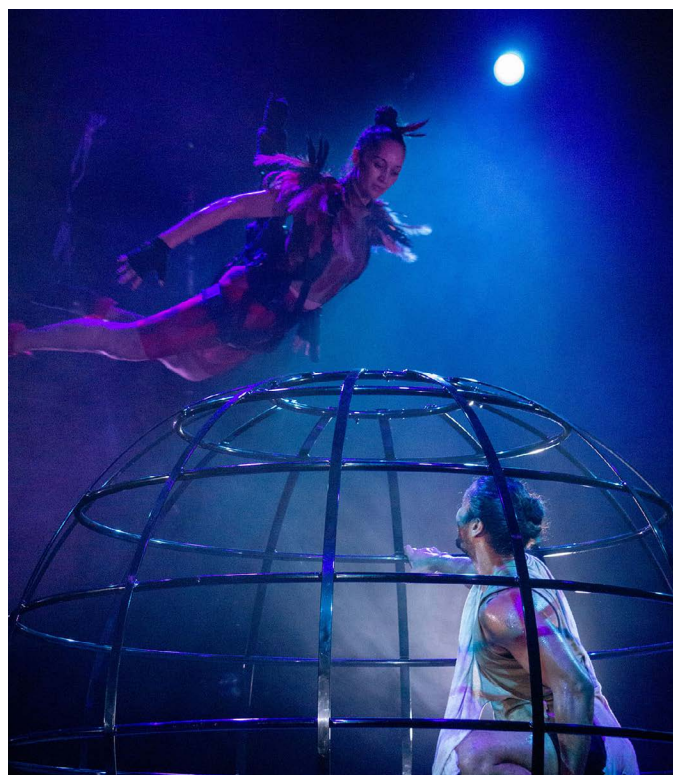
parallel to the spine (2 either side) along the length of the space to provide additional lighting positions.

A maximum trim height of 6.5 metres in the lowest venue on the tour also impacted the approach of all technical departments – lighting, rigging, audio, video, flying, etc., who had to work within these parameters. All the equipment had to be relative to the spatial dimensions and the main spine truss.

Jo worked collaboratively with set designer John Verryt. For lighting, she needed a powerful solution that offered plenty of options while being physically compact. She immediately thought of Grouse and their Robe T1 PC luminaires which she'd utilised on a couple of previous projects.

The design process included a pilot workshop staged at Tāwhiri Warehouse in November 2023 with the full set design and a quarter of the then-specified lights, so Jo could establish what worked and what was practical or not.

The pilot confirmed that any long snout fixtures overhead encroached too much on the space so



they were out, and the exercise also enabled her to identify optimal rigging positions for fixtures that would not interfere with the access needed for the flying artists and climbing technicians. It also underlined her decision to use moving lights.

Contemporary dance is Jo's favourite performance genre to light, and she takes pride in doing this in unique hi-impact, more nuanced and un-flashy ways. This has become her style as well as her "absolute passion".

The T1 PC's zoom made it a popular choice for the "boom" positions which were mounted on the scaffolding structures only 2.8m on either side of the runway stage. To ensure accurate and complete control of the output, she utilised the internal beam shaper (barn doors) to accurately shutter light off the climbers, the audience, and the projection screen.

She appreciates the T1 series' excellent colour rendering which produces perfect skin tones, and being LED, the output was uniform with no bulb changes needed. In addition to side lighting, they were used for specials on the overhead rig and for washing across the space.

The 10 units of **LEDWash 600s** were rigged overhead and used almost like house lights, for general uniform wash coverage of the space, bathing it in a pleasant light.

While was tricky containing light from the projection screen and audience with the low height and sometimes substantial overthrow distances and angles with which they were working, the performance area also needed to be opened up at times, so flooding it with light, colour and textures helped build the atmosphere for some epic aerial stunts that were vital to the energy and narrative of the piece, also helping to make it a truly 3D experience.

The action-packed 75-minute show saw moments of great beauty and serenity juxtaposed against raw and aggressive fight scenes accompanied by a brilliant soundtrack composed by Paddy Free. The captivating video images designed by Artificial Imagination included a lot of content

from Rotorua, where the story is set. A research trip there gave the creative team the idea of keeping the venue hazy and misty with lots of fog mimicking the mythical geothermal activities present in the region.

Having this many moving lights plus several other luminaires extended the possibilities for lighting, and 9 days of full production rehearsal time in the Wellington venue with the cast – ahead of the first show – was another rare luxury for the creative team.

Tānemahuta Gray's clear visions of the desired aesthetic also made this goal easier to energise for the team.

Jo pre-programmed the show before handing over to Cameron & Riley for the tour. She relished the chance of being hands-on and loved crafting shadows and developing negative spaces and illusions as well as illuminating. It was a reminder that contemporary dance is a fantastic forum for more experimental visual thinking that properly stretches the imagination and involves some risk-taking to get the language flowing.

For her, the numerous and varied technical challenges were a major part of the joy of bringing Hatupatu / Kurungaituku alive, alongside the great teamwork and cooperation that created a show of which everyone was proud while being a huge success with the public.

After Wellington, it toured to Auckland's Q Theatre, then played at the Air Force Museum of New Zealand in Christchurch before finishing up at the Energy Events Centre in Rotorua.

Robe

SAUDI ARABIA

PRG Rocks MDLBEAST's Soundstorm with PIXERA

PRG deployed AV Stumpfl's PIXERA video servers for the massive 189mx43m LED screen at Soundstorm 2023, providing low-latency and high-quality visuals



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Months before hundreds of thousands of attendees descended on Riyadh, Saudi Arabia, for **Soundstorm 2023** the team at PRG was busy planning the rigging, audio, lighting, and video networks for the biggest of the eight stages on-site.

Named "Big Beast", the stage featured one of the largest LED screens on the planet, measuring a staggering 189 metres wide by 43 metres high: over 200 million pixels broken up into 28 UHDs. James Morden, PRG's lead video engineer for the event, put it in context: "If you're in a big stadium, the pitch is about 100 metres long – imagine placing a screen on the pitch that goes

through both goals, out of the stadium and into the parking lot, and sticks through the roof. Your brain can't process it."

Featuring a roster of international headliners, Soundstorm's Big Beast stage attracted hundreds of thousands of attendees across three nights. Compared to previous years, the event's production team aimed to simplify technical infrastructure, while maintaining top-quality performance for artists on stage. Recalling previous systems, Morden said: "Between the size limitations of canvasses for scaling and playback, we knew we needed a better solution. We had layers of scalars upon scalars, just to play out



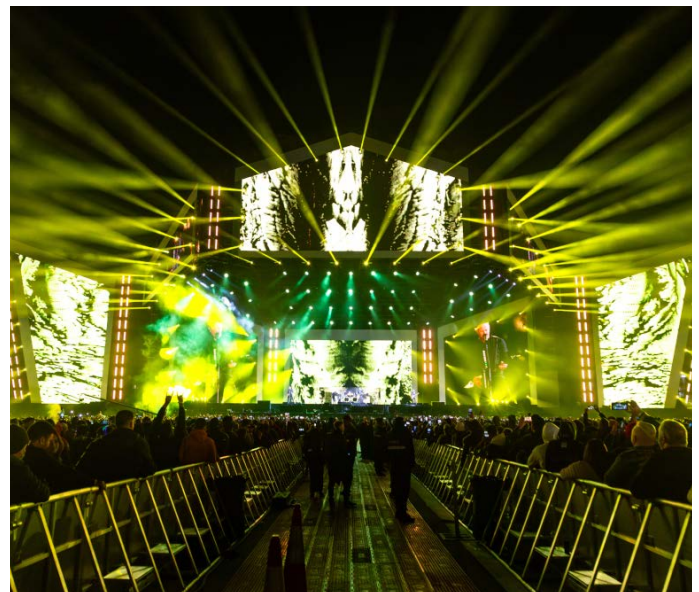
the resolution needed. Something as simple as switching a signal became such a mission."

After weeks of research, PRG sent a small team to meet with the **PIXERA** team at AV Stumpf's Austrian HQ. "We knew on paper it would work, so the purpose of the trip was to first meet the team, and secondly to test our ingest and scaling plan," Morden continued.

He noted one of the key points in their testing was latency: "It's a festival: any artist can turn up with their show running on their own hardware, and we needed to plug that into the system and get it scaled, sliced and diced." Using high-speed cameras, the team clocked three frames of latency from a signal hitting the input card on the PIXERA four to the time it rendered on the output.

Satisfied with the results of their testing, PRG endorsed a PIXERA-only solution with full redundancy for PRG's clients. "It did exactly what it said it would. It sliced and diced, it scaled – it didn't matter what we threw at it," recalled Morden.

Before PRG was able to finalise the system design for the show, the planned use of PIXERA needed to be approved by several key stakeholders: the end client, MDLBEAST, as well as its production management, Bill Leabody and Andy Head; plus the team at Production Glue, which provides overall site overview of all delivery, and Visual Noise Creative, which is responsible for control





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management and integration site-wide for all eight stages, as well as signage, emergency messaging and pre-production and visualisation for incoming acts.

"That is quite a lot of conversations and meetings to suggest a change, plus a good amount of trust or faith in both our recommendation and AV Stumpf's ability to deliver a fully working platform at this untried scale," Morden explained. "We're grateful to everyone involved for making the process so smooth."

PRG's final Soundstorm 2023 system comprised 12 **AV Stumpf** PIXERA four RS servers (including spare render servers), two PIXERA two servers, and three PIXERA Director servers. Commenting on the reliability of the PIXERA solution, Morden said: "We were live for two and a half weeks and never once switched to a backup."

Since the same server hardware handled all Notch effects, as well as compositing/scaling and playout, PRG needed less rack space and less cable complexity (both of which in turn

lowered the freight bill), required less power, had a smaller crew on site, and had a more flexible video system. This meant that despite using a video playout platform capable of more pixels (the previous year's only had 22 UHDs' worth), Soundstorm 2023's system would cost less than 2022 – yet another client-friendly feature.

Additionally, PRG furnished an offline server for creative teams to programme their content before taking the stage. "Tom Denney, who had been out with Metallica for most of 2023, reprogrammed their touring show on PIXERA and had it looking really good for the opening night. All their content was 1:1, so we didn't have to scale a thing," Morden noted, "and you were able [to] have multiple Notch blocks loaded across that entire canvas and fade between them – that was a mindset adjustment for Tom and the rest of us. Plus, because of Multi-User, we could monitor CPU and GPU stats up on another Director machine. We never once dropped a frame."



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Attendees were wowed at 28 UHDs strobing in perfect sync, reported Morden: "We got a lot of feedback from all the artists' camps. Usually, festivals have a backdrop and two IMAGs – three simple screens to plug into. Anything beyond that, you're going through scaling, which adds latency. So, all the feedback was around the speed of response: it was five frames from leaving your laptop to being on the screen, allowing for ingest, processing, and scaling. Running the Riyadh system at 50fps, that's 1/10th of a second – that's impressive, and, ultimately, helps the creative people be creative – they can press the buttons at the right time and not have to pre-empt by a fraction of a beat."

Comfortable with the pressure, PRG's Big Beast video crew saw a lot of foot traffic backstage, not just from the artists in town for the event, but also from the production companies responsible for the other seven Soundstorm stages. "They sometimes want to talk about the overall design, but they're usually more interested in how we've made it work. We've been really open about it and said, "There is no panacea, no universal



solution, but on these exa-scale, high-quality shows, you want a flexible and fully redundant system," Morden added, "and PIXERA more than delivered. I'm looking forward to building on this base for 2024."

PRG

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