ENTERTAINMENT TECHNOLOGY ASIA

RS OF II INOVATIONS

For The Technical And Production Professionals in Asia

ROBE: 30 Years at the Forefront of Lighting Innovation

SHOW HIGHLIGHTS : Round up from Prolight + Sound Frankfurt SHOW PREVIEW: Explosion in Stage Sound and Lighting Leads to Expansion of PALM Expo Exhibitors

W.E-TECHASIA.COM

APRIL 2024

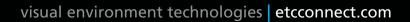
SPECIAL FEATURE:

Striking Nostalgic Chords on the Corridors of Audio Exploration at ISE

HIGH END SYSTEMS

Ministar brings exceptional performance at an affordable price point; with a compact footprint, punchy output, and a professional feature set, Ministar fits the spec and budget for small to mediumsized venues. For more information on Ministar, please visit

etcconnect.com/ministar







APRIL 2024

CONTENTS



IN THIS ISSUE VOL 25 ISSUE 04 APRIL 2024

04 FIRST WORDS

06 NEWS

32 VIDEO FILES

33 ENNOVATION

ALEX COLUMN 40 The Art of Mixing

SHOW HIGHLIGHTS

42 Round up from Prolight + Sound Frankfurt

SHOW PREVIEW

58 Explosion in Stage Sound and Lighting Leads to Expansion of PALM Expo Exhibitors



SPECIAL FEATURE 62 Striking Nostalgic Chords on the Corridors of Audio Exploration at ISE

SPOTLIGHT

68 ROBE: 30 Years at the Forefront of Lighting Innovation

LIVE

78 SOUTH KOREA: Younha Brings NEXO Immersive Sound to Younha Anniversary Concerts **80 HONG KONG:** Martin Audio MLA Rocks Clockenflap and Keeps Residents Happy



FIRST WORDS

APRIL 2024



In the electrifying realm where light orchestrates with motion, where innovation pirouettes with imagination, Robe stands tall as a radiant beacon, celebrating its illustrious 30th anniversary in the year 2024. With the honour of delving into the visionary psyche of Robe's CEO & Co-founder, Josef Valchar, ETA embarked on an odyssey through the vivid tapestry of Robe's history. We traced the trajectory of a company that not only dared to dream but also dared to



Ram Bhavanashi Editor, India And Middle East ram@spinworkz.com



Iulie Tan Admin & Circulation admin@spinworkz.com



Elton Noronha Features Editor elton.s.noronha @hotmail.com



Hazel Gundaya Design / Layout

Thomas Richard Prakasam Publisher / Editorial Director thomas@spinworkz.com





innovate, illuminating the world with its resplendence. Behold our special 10-page Spotlight column, a testament to Robe's fortitude. In our Special Feature, we transport you to the heart of Integrated Systems Europe (ISE) - an event renowned for converging the

realms of audiovisual in the most holistic manner imaginable. Yet,

this year, it unveiled a rare and delightful surprise, elevating its

holistic essence to new heights. Picture a corridor adorned with

vintage audio systems, each pulsating with the echoes of bygone eras. ETA embarked on a quest to uncover the maestro behind this mission, and what unfolded was nothing short of extraordinary. It's a symphony of nostalgia, a melodic journey through time for those

who listen with their hearts attuned to the rhythms of yesteryears.

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

OUR COLLABORATORS

Rosalind Tan Website Management Wizard

PV Anthony Server and IT Security Guru

To subscribe to Entertainment Technology Asia click here: https://www.e-techasia.com/subscribe

Disclaimer : Entertainment Technology Asia is published 12 times a year. All rights reserved. No part of this magazine is to be reproduced, whether mechanical honesty in both editorial and advertising content at press time, the publisher will not be liable for any inaccuracies.

Please be informed that products and company names mentioned in this publication may be protected with tradenames, trademarks or registered trademarks of their respective owners. Our non inclusion of such symbols is not an indication of us not recognising the copyright but rather to have a common look across our articles. Misuse of tradenames, trademarks or registered trademarks is strictly prohibited. It is the obligation of our readers to check if company names and products are protected with tradenames, trademarks or registered trademarks.

GET READY FOR THE BEST PALM AV-ICN EXPO!



30 MAY - 1 JUNE 2024, BEC, MUMBAI, INDIA



REGISTER TO ATTEND.

Have you registered for PALM AV-ICN Expo yet? If not, then login to register.palmexpo.in and claim your ticket.

PALM AV-ICN Expo is a paid event, but you can still attend for free by reaching out to your favorite brand and requesting a voucher code. Click here to view the list of participating exhibitors and brands.

REGISTER TO EXHIBIT

If you wish to exhibit and showcase your products & technologies to the rapidly growing Indian Pro Audio, AV & Lighting market, write to us at exhibit@palmexpo.in



Experience world class technologies

Witness 500+ live product demonstrations



Attend & learn from industry speakers at the conference



Explore the competitive edge for your business

Network with your existing and potential

partners



Experience live demos and immersive mapping features

This exhibition is only open to industry professionals aged 18 years old or above. The organizer reserves the right to refuse the admission to individuals at its sole discretion.



www.palmexpo.in | in f 🗙 🛎 🦻 🞯 | 🧮 Hyve



APRIL 2024

Qatar Vision Chooses Extensive Array of Claypaky Lighting Fixtures for AFC Asian Cup Qatar 2023



ENTERTAINMENT TECHNOLOGY ASIA

QATAR: Event management company Qatar Vision utilized a wide array of Claypaky lighting for the AFC Asian Cup Qatar 2023. The fixtures illuminated pre-match ceremonies, the Fan Zone and the coronation ceremony at the 18th edition of the Cup, a quadrennial international football tournament organized by the Asian Football Confederation.

Although the event bore a 2023 date, due to Qatar's high summer temperatures, it was scheduled for January and February 2024. 24 national teams participated with host Qatar the defending champion and, as it turned out, the repeat title winner. Four cities in Qatar furnished nine stadium venues for the games, including Lusail Stadium, with a capacity of nearly 89,000, hosting the opening and final matches.

Based in Doha, Qvision offers a comprehensive slate of event production, technical integration solutions, marketing, creative design, video production, information technology and largescale branding to a roster of world-class clients.

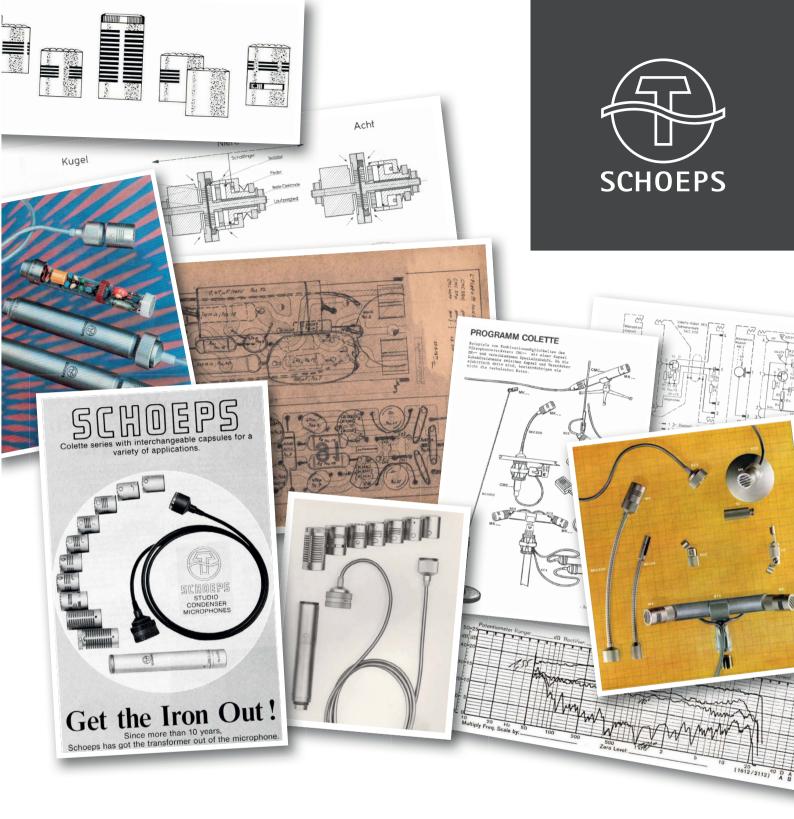
For the AFC Asian Cup Qatar 2023, Qvision played a central role in every stage of the tournament



process from inception to execution. Their seamless execution of stadium infotainment, prematch ceremonies, the coronation ceremony, and fan zone activations ensured an unforgettable experience for both spectators and participants.

Among the tasks that Qvision was charged with was the implementation of comprehensive technical AV overlays across all nine stadiums; the development, production, and delivery of stadium infotainment for all 51 matches; leading the creation of bespoke pre-match ceremonies; and orchestrating the coronation ceremony and fireworks finale. Qvision also curated engaging Fan Zone activations, fostering an immersive and enjoyable environment for all attendees.

"We are immensely honoured and proud to have played a pivotal role in delivering the best AFC Asian Cup ever. It adds another remarkable milestone to our track record of successfully orchestrating major international events, including the recent FIFA World Cup Qatar 2022," said Qvision CEO/Managing Director Sharif Hashisho, who served as Artistic Director and Executive Producer for the project.



MORE MODULAR, FLEXIBLE & VERSATILE

50 YEARS OF COLETTE SERIES

8 amplifiers for 17 capsules and countless accessories! More information: schoeps.de/colette



schloesser@schoeps.de • +65 8777 2944



"Overseeing the intricate technical aspects of the AFC Asian Cup Qatar 2023 was a monumental task," reported Technical Director Tom Ellis. "With challenges spanning all nine stadiums, the scale of this project was immense. Yet, through the dedication and expertise of our team, we navigated every hurdle and delivered a resounding success."

To ensure flawless execution of the AFC Asian Cup Qatar 2023 stadium events, Qvision meticulously designed, supplied and operated a comprehensive technical overlay in each of the nine stadiums' control rooms.

Qvision installed moving lights across six stadiums to enhance the pre-match ceremony viewing experience and allow complete control of stadium lighting, programmed to synchronize with music for infotainment (including match replays, analysis and interviews, advertising, broadcast graphics and statistics) and halftime entertainment. Qvision accomplished this mammoth task with 100 x Claypaky Scenius Unico, 150 x Sharpy Plus Aqua, 100 x Xtylos and 150 x K-EYE K20 HCR fixtures. An additional 24 x Claypaky Skylos, 50 x Mythos2 and 40 x Hepikos were also deployed.

Qvision also created a technical overlay specifically for the Lusail Stadium, which served the trophy reveal segment, pre-match ceremony, half-time entertainment and coronation ceremony. The coronation ceremony crowned the winning team and had special meaning for the crowd since the host nation's team once again took the cup. Qvision was responsible for the design, supply, installation and operation of the lighting fixtures strategically placed around the stadium to enhance the ambience and grandeur of the ceremony. They included 60 x Claypaky Scenius Unicos, 100 x Sharpy Plus Aquas, 100 x Xtylos, 150 x K-EYE K20 HCRs, 24 x Skylos, 50 x Mythos2, 40 x Hepikos and 50 x Tambora Battens.

The 51 pre-match ceremonies that Qvision developed, produced and delivered to all nine stadiums included four giant inflatable trophies, each with a unique platform hosting moving lights and special effects equipment, among them 12 x Claypaky Xtylos fixtures. The company also designed a huge four-piece inflatable trophy exclusively for the final match.

The Fan Zone, a vibrant and dynamic space designed to engage and entertain football enthusiasts from around the world, received its share of attention as well. Qvision played a key role in conceptualizing, designing and executing this immersive experience, which offered interactive activities, entertainment and engagement opportunities for fans of all ages. The Fan Zone was strategically positioned near Lusail Stadium and included, at its centre, a concert stage curated by Qvision and featuring performances by renowned Asian artists.

Moving lights illuminated both the stage and the entire area with Qvision providing 60 x Claypaky Sharpy Plus fixtures, 20 x Alpha Beam 1500s and 40 x Hepikos.

Before the start of the event, Qvision also furnished Claypaky fixtures for the AFC Asian Cup Qatar 2023 Final Draw. The company provided 100 x K-EYE K20 HCRs, 40 x K-EYE K10 HCRs, 50 x Sharpy Plus Aquas, 24 x Scenius Unicos, 40 x ADB LEXPERT Profiles and 30 x Tambora Battens.

"We count on Claypaky to help us deliver successful events time after time," concluded Hashisho. "Claypaky fixtures often dominate our lighting rigs and give us the innovative, unique and versatile performance we need for top-level projects such as the AFC Asian Cup Qatar 2023."

Claypaky



APRIL 2024

Vision One Deploys L-Acoustics A Series in Time for Acclaimed Beach Club's Party Season

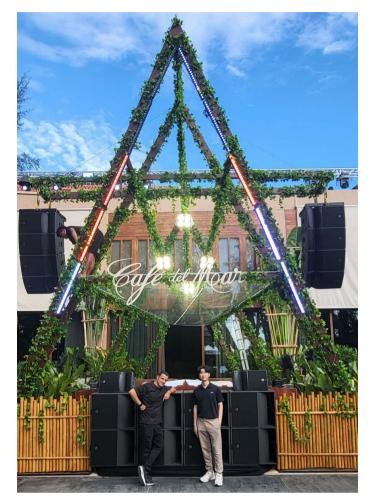


THAILAND: For a globally recognised brand built on a chill musical atmosphere, the choice of a professional sound system is key. For Café del Mar, created on the Spanish island of Ibiza, music has been at the forefront of the brand's success for over four decades.

In 2018, Café del Mar Phuket opened its doors on the Thai island's stunning Kamala beach, attracting guests from around the globe to take in the breathtaking views of the Andaman Sea, indulge in delectable food around a spacious swimming pool, and enjoy the laidback music that is so essential to the Café del Mar atmosphere it has been the inspiration for 17 compilations. Easygoing days at Café del Mar transform into dynamic nights and special festival-inspired weekend events that transform the café's outdoor space into a massive dancefloor for up to 2,500 people, driven by sets from dance music's most popular touring DJs. Facing maintenance issues from its ageing sound system, Café Del Mar Phuket's audio consultants approached **Vision One**, an L-Acoustics Certified Provider in Thailand, to discuss replacing the system with one that would fit the needs of the world's top performers. "Cafe Del Mar's management knew that they could rely on L-Acoustics for their renowned sonic signature, highly preferred by touring artistes and DJs," said Tanapat 'Tony' Mongkolkosol, Chief Operating Officer at Vision One. "As an L-Acoustics certified partner, Vision One would be able to provide swift installation services, plus superior after-care maintenance and support," explained Tony.

Tony and his team began designing a system for the indoor club area using Soundvision 3D modelling software, which allowed them to present a clear prediction of how it would provide uniform coverage and SPL levels, as well as a frequency response able to support both background electronic music, and live House and





Techno DJ sets. The design agreed upon Vision One installed a main system of one **L-Acoustics A15 Focus** on top of an **A15 Wide** per side. One X12 speaker delivers front-fill, while three KS21 subwoofers provide thumping low-end. The installation system is driven by two LA4X amplified controllers.

The new indoor system fulfilled its promise, boosting the atmosphere inside the café, and leading management to reconsider their strategy of renting in sound systems for weekend events. With a star-studded December-to-February calendar of events to coincide with peak tourism season, they calculated the cost of rental-versuspurchase and realized that an investment in a concert-grade L-Acoustics A Series system was a great way to elevate the venue's production value. Vision One once again turned to **Soundvision** to identify which areas of the outdoor dancefloor would require fill components, aiding in swift delivery and precise deployment of the system, which features two hangs of 3 x L-Acoustics A15 Focus and 1 x A15 Wide per side. Four stacks of 2 x KS21 subwoofers are placed in front of the DJ booth, with 2 x A10 Wide boxes delivering front-fill. On either side of the dance floor, an additional A10 Wide pole mounted on a KS21 subwoofer provides rear-fill. 5 x LA4X amplified controllers drive the entire system.

Commissioned in time for the opening season party featuring Grammy-nominated House music DJ FISHER, outdoor island revellers have since been energised by sets from high-profile DJs such as Nina Kraviz, Sven Vath, and Dubfire, all performed and delivered through L-Acoustics unrivalled professional sound systems.

"Considering the venue's size and diverse applications, the scalable flexibility of A Series, along with its concert-grade sound make it the perfect choice for both the indoor and outdoor areas for Café del Mar. This world-renowned venue now has a world-class audio solution to attract electronic music's top DJs and elevate the island dance party experience," reflected Tony.

Gregorio Gazzaneo, Managing Director of Café Del Mar agreed. "The decision to invest in L-Acoustics through Vision One has proven to be a wise one. The A Series system has enhanced the overall audio quality at Café Del Mar, creating an unforgettable experience for our guests," he concludes.

L-Acoustics

APRIL 2024

PP Sound Lights Productions Acquires Western India's First Meyer Sound PANTHER System



ENTERTAINMENT TECHNOLOGY ASIA

INDIA: From humble beginnings with a modest speaker system sufficient to reinforce smaller event venues to now acquiring one of the world's most sought-after large format concert systems in the form of the Meyer Sound Panther line arrays – Mumbai based PP Sound Light Productions has come a long way to now being hailed as a prominent name in India's live event equipment rental environment.

The burgeoning rental service provider has made a significant enhancement to their impressive FOH loudspeaker inventory with the acquisition of a brand-new comprehensive PANTHER line array system from Meyer Sound, complete with the powerful 2100-LFC Low-Frequency Control elements. These strategic investments have afforded the company a distinct edge; as PP Sound Light Productions stand proud as the owners of the first PANTHER line array system in all of Western India – a region that is widely hailed as the nation's hub for premium largescale events and mega-productions. Alongside, this investment has also earned PP Sound Lights Productions the distinction of being only the second rental service provider in all of India to stock the 2100-LFC subwoofers.

Prasad Parkar, Director of PP Sound Lights Productions, reveals that the decision to acquire the Meyer Sound PANTHER line array system was driven by the need to have a truly comprehensive and formidable world-class sound reinforcement ecosystem, so that the company could assure nothing less than superlative and pristine audio productions for every kind of event.

"As a company, our combined pursuit of audio perfection is what consistently drives our vision for success and growth. And the strategic decision to invest in the Meyer Sound PANTHER line array system is a clear indicator of our vision and intent. The fact that we are the first company in the western region to acquire this globally acclaimed world-class loudspeaker system, and only the second company in all of India to own the 2100-LFC subwoofers, exemplifies our commitment to delivering outstanding events by pushing the envelope of sonic excellence!" exclaims Prasad as he affirms that the acquisition not only signifies PP Sound Lights Productions' unwavering commitment to delivering unparalleled audio experiences but also underscores their position as a true trendsetter and industry leader

PP Sound Lights Productions

APRIL 2024



Rajan Amplifiers Aims to Elevate Live Experience with Cutting-Edge DAS Audio Line Array Investment

INDIA: In a strategic move to fortify its position as one of Rajasthan's premier live event equipment rental companies, Jodhpur based Rajan Amplifiers has made a significant investment in a comprehensive line array inventory from the esteemed manufacturer, DAS Audio. The acquisition comprises 24 units of the LARA Self-powered cardioid Line array modules complemented by 18 units of the LARA-Sub cardioid powered subwoofer, marking a substantial leap forward in the company's ability to deliver world-class audio solutions for a diverse range of live events.

The decision to embrace DAS Audio's state-ofthe-art LARA line array system stems from Rajan Amplifiers' commitment to meeting the escalating demand for superior audio experiences across its expanding business portfolio. "The investment in DAS Audio's cutting-edge LARA line array system aligns with Rajan Amplifiers' unwavering commitment to delivering unparalleled audio experiences for clients across a diverse spectrum of live events. Our new LARA inventory not only enhances our technical capabilities but also underscores our dedication to staying at the forefront of technological innovation in the live sound industry", commented Anil Panwar, owner of Rajan Amplifiers, while confirming that some of the system's key features and capabilities also played a vital role in impressing a positive investment outcome.

Anil explains that the LARA's impressive horizontal dispersion control and tonal balance in addition to cutting-edge FIR filter processing technology offers better capacity for uniform coverage and optimal sound quality, along with pristine audio reproduction and unparalleled



clarity. Furthermore, he asserts that he was particularly impressed with the system's builtin diagnostic function, which enables users to monitor system status through impedance and frequency response measurements without the need for external software, thereby streamlining maintenance and troubleshooting processes. Furthermore, the systems' capacity for autoarrangement once the arrays are flown thanks to the NFC technology and DAS Audio's proprietary ALMA software – proved to be another key advantage. He also asserts that the LARA's in-built DASaim digital steering technology, which allows users to precisely control vertical dispersion, utilizing AFMG FIRmaker technology to enable uniform frequency response, spectral consistency, and SPL control over distance, is another key feature that fascinated not just him but also his team of engineers. And finally, the fact that the LARA offers advanced Analog, Dante, and AES-EBU connectivity and distribution capabilities, allowed Anil and his team to rest assured of seamless integration with various audio sources and setups, empowering users with unprecedented flexibility and versatility.

Rajan Amplifiers

12



EAW Promotes James Bamlett to SR. Director of APAC and EMEA Sales



APAC/EMEA: Eastern Acoustic Works (EAW) has announced the promotion of James Bamlett to Sr. Director of APAC and EMEA Sales. In his previous role as Director of APAC Sales, Bamlett managed EAW's current distributors and helped increase sales throughout the Asia Pacific region from his base in Southeast Asia. In his new role, Bamlett is responsible for adding new distributors and managing the existing sales channel in the APAC (Asia Pacific) and EMEA (Europe, Middle East, and Africa) regions.

"James has a proven track record of managing existing distributors and expanding sales, and we are confident that he will continue to excel in this new position," said T.J. Smith, President of Eastern Acoustic Works.

Bamlett has many years of experience in the pro audio industry, including working as a technical support consultant and touring system engineer. He joined EAW almost 25 years ago, starting in a product specialist role before transitioning to sales. His technical background together with his sales skills have enabled him to expand EAW's presence in the APAC market. "I look forward to this opportunity to work more closely with our partners in EMEA and help expand EAW's footprint in both the APAC and EMEA regions," stated Bamlett. "With the

impressive growth EAW has seen in recent years and the continuous addition of innovative products to our portfolio, it's an exciting time to be part of the company's journey."

EAW



Meyer Sound INSPIRES South Korea's Largest Indoor Performance Venue



SOUTH KOREA: The Mohegan INSPIRE Entertainment Resort, located an hour from Seoul on Yeongjong Island at Incheon International Airport, is South Korea's premier entertainment destination, featuring a five-star hotel, gaming facilities, an indoor water park, conference spaces, and an immersive "digital entertainment street" offering shopping, dining, and entertainment.

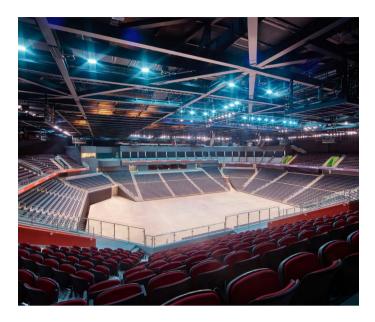
Mohegan INSPIRE aims to attract 3.5 million visitors annually, tapping into the global explosion of K-pop and K-culture. Central to this ambitious plan is the 15,000-seat INSPIRE Arena, which features a state-of-the-art Meyer Sound system.

INSPIRE Arena is built for a wide array of entertainment, from concerts to e-sports tournaments. From the outset, offering turnkey top-of-the-line AV technologies, anchored by world-class sound, was the top priority. "We have a sound system, a lighting system, and a rigging system," explained Kevin Reilly, Mohegan Gaming and Entertainment's Corporate Director of Entertainment Technical Operations. "We designed it so a Western act can show up basically with backline and I have sound and lights and video and a stage and barricade all here."

Reilly, a 27-year Mohegan veteran, said that this rider-friendly approach mirrors that at the organization's flagship Mohegan Sun resort in Connecticut, which features a Meyer Sound LYON and LEOPARD system. "For all of the shows that we've done at Mohegan Sun, we don't hear 'no, I don't want to use your **LYON** LEOPARD rig," he laughed.

INSPIRE Arena's Meyer Sound concert PA includes 50 x **PANTHER large-format linear line array loudspeakers**, 6 x LEOPARD compact linear line array loudspeakers, 32 1100-LFC low-frequency control elements, and 32 x MJF high-power stage monitors. Meyer Sound **LEOPARD compact linear line array loudspeakers** serve as front fills. The system offers MILAN capabilities and is managed by a Galileo GALAXY Network Platform.

A powerful Meyer Sound announcement PA system, featuring 109 x LINA very compact linear line array loudspeakers and 6 x 1100-LFC lowfrequency control elements, adds versatile sound reinforcement support. "We tuned the Meyer PA for the main concert PA, and they tuned the announcement PA for sports," said Reilly. "I told the Meyer team, 'I want to do comedy, and I need to tie these together. Can you help me make that happen?' So I essentially have three separate PAs: the concert PA, the sports PA, and a full concert and delay stack system. You have all the tools here to do what you came to do."



Meyer Sound systems were supplied and installed by **Ingang Audio** of Seoul, with support from Andrew Poh, Meyer Sound's Technical Sales Support, Asia; and Charlie Albin, Technical Support Specialist, UK.

"INSPIRE Entertainment Resort, as the name suggests, is a multifaceted entertainment venue where various forms of entertainment are possible," explained Ingang Audio Senior Director Ilwhan Park. "It was crucial to achieve highquality sound that customers can consistently experience from any space."

Meyer Sound systems support venues throughout the INSPIRE complex, with a LEOPARD compact linear line array loudspeaker system at the pedestrian mall's performance stage, LEOPARD and 900-LFC low-frequency control elements in the main ballroom, and LINA very compact linear line array loudspeakers and ULTRA-X40 compact loudspeakers throughout the Splash Bay water park.

"With Meyer Sound speakers installed throughout the INSPIRE Resort, clear and high-quality sound can be experienced in any space, including the arena, the ballroom for events and conferences, Splash Bay, Aurora Bar, and Aurora Street," noted Park. "Furthermore, by installing the same brand in each space, convenience in overall sound system operation and after-sales service were also anticipated."

The arena soft-opened in December with the 2023 Melon Music Awards show, which was presented in the round using supplemental speakers provided by Sound Alliance Korea.

"I had the opportunity to attend the first main event at INSPIRE Arena, the 2023 Melon Music Awards," stated Park. "The sound experienced throughout the event, utilizing Meyer Sound PANTHER, was truly impressive. This was not just my personal impression, but the innovative sound system was widely recognized by the audience and media covering the event."

Other inaugural events included shows by K-pop stars Taemin, TVXQ, and AKMU. The grand opening was on March 5, followed by performances by the INSPIRE Salute, featuring iconic K-pop artists PSY and Taeyang; a concert by K-pop star Epik High; and the WTT international table tennis championship.

"INSPIRE Arena is truly the venue of the future," enthused Scott Gledhill, Meyer Sound's Director of International Sales. "It's optimal for live entertainment, and for the K-pop market. The project's success is a testament not only to Meyer Sound's commitment to delivering unparalleled sonic experiences but to Kevin Reilly's visionary approach and the standards he sets for leading the way in entertainment venues worldwide."

Meyer Sound



Riedel Announces Strategic Partnership With Hibino Intersound Corporation



(L-R)Takashi Kozuma, Hibino Corporation; Vincent Lambert, Riedel Communications

JAPAN: Riedel Communications has partnered with Hibino Intersound Corporation, one of Japan's leading distributors in the Pro AV industry, to enhance its presence in the Japanese market. With the partnership set to commence in April 2024, Hibino Intersound Corporation will distribute Riedel's cutting-edge intercom solutions, including the Bolero wireless intercom system, the Artist digital matrix intercom platform, and the SmartPanel user interface, as well as the MediorNet real-time media network, encompassing both TDM and IP configurations. "We have always admired Riedel's commitment to innovation and their products' reputation in the market. The MediorNet line, in particular, is expected to play a pivotal role as we expand our business scope," said Hiroshi Ikegaki, Representative Director of Hibino Intersound Corporation. "Integrating Riedel's renowned intercom systems and advanced network products with our robust audio and video systems empowers us to deliver more sophisticated and complete solutions."

The collaboration with Riedel allows Hibino Intersound Corporation to enhance its product offerings, providing customers with comprehensive solutions that streamline operations and improve user convenience. Hibino Intersound Corporation's commitment to excellence aligns with Riedel's reputation for quality and ease of setup.

"The partnership with **Hibino Intersound Corporation** opens up exciting new business opportunities for both companies in the Japanese Pro AV market," said Guillaume Mauffrey, Director of Sales in Asia at Riedel Communications. "Their extensive distribution network and industry expertise, combined with our innovative product lineup, will undoubtedly lead to a new era of connectivity and workflow efficiency for our customers."

Riedel

DirectOut Technologies Welcomes Sonic Evolution as New Official Distributor



ENTERTAINMENT TECHNOLOGY ASIA

Dr. Rajesh Khade (Sonic-Evolution) with Luca Giaroli (DirectOut)

INDIA: Augmenting its distribution in India, DirectOut, a leading German manufacturer of innovative audio and networking technologies, has welcomed **Sonic Evolution** as its new official distributor for the Indian market.

"We are very excited about the partnership with Sonic Evolution," reinforced Luca Giaroli, Chief Solution Officer at DirectOut. "This collaboration will allow us to expand our reach in India and bring professional audio solutions to an even wider audience. We are confident that Sonic Evolution, with their passion for audio and commitment, will be a valuable partner."

DirectOut Technologies is known for its highquality products and innovation in the audio industry, offering a comprehensive range of solutions for professionals. This partnership with Sonic Evolution will enable DirectOut to further strengthen its commitment to quality and innovation and drive the development of digital audio networks in India.

"We at Sonic Evolution are excited about the opportunity to serve as the official distributor of DirectOut Technologies in India," said Dr. Rajesh Khade, CEO of Sonic Evolution. "Our team shares DirectOut's passion for world-class audio technology and we look forward to bringing these solutions to a wider market in India. This partnership will allow us to further strengthen our position in the professional audio technology space and provide our customers with worldclass service."

DirectOut Technologies

17

APRIL 2024





Nguyen Thanh Tuan - ProAVL Sales and Marketing.

VIETNAM: Ayrton lighting fixtures have been installed in the Vietnam Army Music Hall and Theatre. The theatre which belongs to the Vietnam People's Army, is situated in Hanoi and was established in 2010 as a professional venue for music and musical arts.

The new lighting fixtures were supplied by Ayrton's Vietnamese distributor ProAVL and include 16 x **Diablo TC** and 20 x Mistral fixtures which will be used generally both in the theatre and for touring shows.

Choosing Ayrton lights proved an easy decision for the theatre tech team. "Ayrton fixtures are now used all over the world and have proved themselves on many stages and shows," stated the technicians. "We were really amazed by their accurate positioning, colour rendering (CRI >90) and the really useful CMY mixing system. We were also impressed by the total luminaire output (up to 19,000 lumens) which is really great for our shows. It was great that ProAVL were able to show all these features at the demo before we purchased." The theatre team explained how their new Mistral and Diablo fixtures would be used. "The lights will not be set up in any permanent positions, rather they will be formatted differently for each show that is brought in, and will also be used on tour and outdoor festivals and events. However, in the theatre, they can be rigged on vertical extension tubes giving us throw distances of about 6-7 metres. We plan to use them for all of our shows, especially the All Military Gathering festival which is a very, very big festival that includes every musician and artist that works for the army all over Vietnam. It happens once every four years when they gather together to perform their regional, traditional and more modern music.

"We are so pleased to be working with Ayrton, and with ProAVL which is a trusted partner. They have provided us with such a good service, helping us with the installation and training us on everything we need to understand about using these new fixtures."

Ayrton





APRIL 2024

Performing Arts Centre Offers Spacemap Go and Constellation Acoustic System by Meyer Sound



CHINA: A resplendent new addition to the cultural life of China's largest city, Bank of **Communications NEW BUND 31 Performing** Arts Center (BOCOM NEW BUND 31 Performing Arts Center), offers state-of-the-art technical facilities for hosting events of any type, from business conferences to pop and symphonic concerts, jazz festivals, and Broadway plays. The 2,500-seat Grand Theater, the crown jewel of the new development, is the first venue of this size anywhere to offer a "high-power" Constellation acoustic system, one capable of creating a broad palette of natural-sounding aural environments and — when called on to do so — enveloping audiences in dynamic immersive sound experiences using the Spacemap Go spatial sound design and mixing tool.

ENTERTAINMENT TECHNOLOGY ASIA

The extraordinary capabilities of the system were showcased in late October with a unique opening production that combined symphonic, jazz, electronic, pop, and dramatic performances for an auditory feast with **Constellation** optimizing the hall for each genre.

The opening performances were particularly pleasing for James Chow, head of commercial real estate for principal investor Shun Tak Holdings. Chow took a supervisory role from the outset to ensure the Grand Theater would offer the ultimate experience for audiences and performers alike.

"A highlight of the opening show was a performance by Shunza, a Chinese-American singer known for her 'velvet' voice," he recalled. "The acoustic performance was accommodating and intriguing as I had expected, and her voice also was well balanced with the live jazz band, bringing an intimate and dreamy experience to the audience."

ETH ENTERTAINMENT TECHNOLOGY ASIA

NEWS



When first proposed eight years ago, the Grand Theater was designed principally for hosting musicals, Chinese opera, dance, and rock/pop concerts — all requiring amplification. The basic room geometry was designed with these uses in mind. However, at a later point, the brief was changed to also include orchestral music, and this presented a challenge to the acoustical consultant, London-based Theater Projects.

"The auditorium's geometry was fixed and impossible to change," noted Lead Acoustic Consultant Fabrizio Filippi. "Fortunately, the active acoustic system offered a crucial advantage, allowing the provision of significant early reflections at all audience seats without altering the internal structure of the auditorium."

According to Filippi, a Meyer Sound Constellation system was the preferred option when the electroacoustic solution was proposed. "It was a priority since the beginning, thanks to the quality of the components and long-standing experience in the field of active acoustics," he explained. At this point, Filippi worked to ensure that the physical and electronic elements of the room acoustic would blend harmoniously. "The room acoustic provides a blank canvas that enables Constellation to work to its full potential, minimizing any interference or sound colouration. In some instances, however, the physical acoustics provide useful support from surfaces that are sound reflective, such as elements in the ceiling."

The system installed here is unique in that the great majority of the 320 self-powered, full-range loudspeakers distributed laterally and overhead throughout the hall are higher-powered models such as the **UPM-1XP** and **ULTRA-X20XP**, each capable of carrying high-level discrete sounds throughout the auditorium. This allows sound designers to create dynamic immersive sound experiences, either with Constellation off or in conjunction with a Constellation acoustic preset. Such dual-use capability previously was offered only in auditoriums seating at most a few hundred.

The system is also unique in that it is the first to integrate loudspeakers for Constellation's active stage shell into the LED video wall. The



loudspeakers inside rotate so that the wall can be erected with either the passive wall surface or the active video screens facing the auditorium. Constellation in the Grand Theater provides multiple presets to accommodate performances with sound reinforcement or for acoustic-only performances of folk, operatic, symphonic, or choral music. If desired, users can customize parameters in each preset for intensity, warmth, and brightness.

For amplified performances, the hall has installed a permanent reinforcement system comprising Meyer Sound LYON, LEOPARD, and LINA line array loudspeakers with deep bass support from 1100-LFC low-frequency control elements.

James Chow expects that this investment in extraordinary sound will yield long-term benefits. "Constellation allows greater flexibility in the use of the venue," he stated. "During the day it can be utilized for events such as meetings and luncheons, with shows in the evening. This flexibility maximizes our return."

Since the grand opening festivities, BOCOM NEW BUND 31 Performing Arts Center has hosted a full schedule of events, most notably a concert by Placido Domingo that drew rave reviews not only for his performance but also for the rich acoustic ambience provided by Constellation. "My conversations with our VIP guests suggest that Constellation has exceeded their expectations," added Chow.

The Center also incorporates a black box performance space with retractable seating for up to 400 patrons. The sound system here utilizes Meyer Sound LINA very compact linear line array loudspeakers and ULTRA-X42 compact loudspeakers with deep bass from 750-LFC and 900-LFC low-frequency control elements.

Meyer Sound

ELECTRIC CHAIN HOIST LPL

RIG IT EASY WITH GIS







swiss lifting solutions

GIS AG | swiss lifting solutions | CH-6247 Schötz | Phone +41 41 984 11 33 tel@gis-ag.ch | www.gis-ag.ch



Comcon Takes on Distribution for Optocore and BroaMan



INDIA: German fibre network specialists, **Optocore**and **BroaMan**, have announced the appointment of Comcon Technologies Ltd as their new distributor throughout the Indian subcontinent, with immediate effect.

The origins of Comcon date back 40 years, with the company today specialising in the design, supply, commissioning and support of solutions for audio and video applications across a vast range of markets.

Based in New Delhi, the operation also distributes test and measurement products and leading connectivity brands including Neutrik and Belden. "Their specialised fibre optic product range will complement the Optocore and BroaMan products extremely well, and at the same time our existing OEMs will benefit from the unique product offering that these brands bring," stated Comcon director, Gaurav Aggarwal.

Comcon places a heavy focus on the Broadcast and pro AV segments, in particular. "And this is exactly where BroaMan and Optocore are targeted towards," he observed. "We have a strong growth in the rental and tour sound segments of the pro AV business and have been a leading supplier in the Broadcast field for more than 35 years in India."

In forming the alliance with the German manufacturer Comcon were looking very much to the future. "We pride ourselves in keeping up to date with technology trends," continued Aggarwal. "The move to fibre is already overdue in the pro AV segment in India and once initiated, it will be the fastest growth area in this industry," he predicts. "Broadcast is a step further but there is still a huge opportunity that has not been addressed."

Optocore has enjoyed high visibility in India over a number of years, thanks largely to advanced design deployments by Warren Dsouza of Sound. com at many high-profile events, such as the 2010 Commonwealth Games in Delhi. But its presence has been restricted to such high-end events only. Thus a distribution and support partner was always needed.



Having familiarised itself with the respective product portfolios and their applications, Comcon now looks forward to showcasing the products at the upcoming PALM Expo in Mumbai. "Educating the market more generally about the benefits of Optocore technology, and addressing any fears towards fibre will become key focus areas," promised Aggarwal.

Meanwhile, the German sister brands are delighted that all parties share a common philosophy. Sales Manager RadhaMohan Rajani stated, "We at Optocore always look for partners who are aligned with our ethos and are well placed in the market. With fibre technology evolving and cementing itself across the globe, we look for partners like Comcon who are leading the growth and establishment of optic fibre solutions in the industry.

"Comcon has a long-standing reputation in the market, and its portfolio matches our philosophy and the solutions we provide. They are well placed to represent our brands and we are excited to be working with them in the Indian subcontinent."

"We now look forward to offering our clients a complete solution to convert, multiplex, transport and manage signals over a fibre optic network, by demonstrating the improved workflow and added flexibility that the Optocore and BroaMan solutions offer," concluded the Comcon director.

Comcon

Still the one.

PREMIUM ACTIVE LOUDSPEAKERS



Sindo Exports Pte Ltd Authorised Service Center for QSC T: 6397 5690 E: sindo88@singnet.com.sg F: www.facebook.com/sindoexport W: www.sindoexport.com



APRIL 2024

Creative Technology Features ROE Visual for AFC Asian Cup Qatar 2023 Opening Ceremony



Katara Studios

QATAR: ROE Visual LED panels played a central role in the AFC Asian Cup Qatar 2023 Opening Ceremony. The event featured five shell-shaped screens, each with an impressive height of 12 metres. The screens, forming five giant petals, consisted of a total of 600 x ROE Visual BP2V2 panels. This magnificent centrepiece enveloped all spectators in the musical Kelileh & Demneh, enabling them to understand the story's background and follow the song lyrics.

ENTERTAINMENT TECHNOLOGY ASIA

"The show was designed to look beautiful from any viewpoint in the stadium. The five screens enabled a 360° view, corresponding to the number of regional federations that make up the AFC", said Magriga Kamiyeva, Sila Sveta's producer of the show.

Rooted in the spirit of football, the screens displayed the unique interpretations of the mascots chosen by the 24 national teams to represent their countries, uniting the Asian continent to celebrate unity and inclusivity. "We're grateful that Katara Studios https://www. katarastudios.com/ brought us on board for this production," commented Riaan Gomes, Senior Project Manager at Creative Technology. "It was an honour to work on such a spectacular and memorable event. We opted for the ROE Visual BP2V2 to deliver mesmerizing visual content. This choice was backed by the fact that the BP2V2 has excellent on-camera behaviour".

The BP2V2 has solidified its reputation by showcasing unparalleled colour accuracy in many Netflix shows, influential films, and popular broadcasting shows. The BP2V2's great on-camera behaviour and stable performance provide both DOP's and actors with a superb environment to work on.

"This is another big event we achieved in partnership with **Creative Technology** in Qatar, following the Qatar World Cup Opening Ceremony. Thanks to our partner for consistently prioritizing high-quality visuals. With this remarkable event as a beginning to 2024, we're eagerly anticipating the next projects and events in the Middle East region," concluded Grace Kuo, Sales Director of ROE Visual.

ROE Visual

APRIL 2024

MA Lighting Masterclass by Jeremy Van Delft Enlightens India's Creative Event Lighting Scene



ENTERTAINMENT TECHNOLOGY ASIA

> Attendees were treated to an immersive journey through the world of lighting programming, as Van Delft elucidated on the nuances of building and programming complex lighting sequences. From dynamic colour schemes to synchronized movements, every aspect of crafting an unforgettable visual experience was meticulously explored. Additionally, Van Delft's also shared a few firsthand accounts of the creative process behind the captivating lighting

INDIA: The pulse of Mumbai's live event industry quickened as renowned lighting programmer Jeremy Van Delft graced 'The Studio' at the Nita Mukesh Ambani Cultural Centre on March 18th 2024 for an exclusive masterclass tailored for lighting operators and designers. Hosted just days after the monumental Ed Sheeran +-=÷x (Mathematics) Concert that electrified the capacity Mumbai audience at the Mahalaxmi Race Course grounds on 16th March 2024; this masterclass proved to be an enlightening experience for all attendees.

Van Delft, internationally acclaimed for his works with several top-tier artists across the world of music, and as the official Lighting Director for Ed Sheeran's +-=÷x tour, delved into the various intricacies of MA lighting systems that form the basis of a successful lighting design for any event. From dissecting the technical aspects to exploring the creative potential, Van Delft provided attendees with a comprehensive understanding of utilizing MA Lighting systems to craft mesmerizing lighting designs for live events of all scales and sizes. design for the Ed Sheeran tour.

Organized by Hi-Tech Audio & Image, the official distribution partner of MA Lighting in India, in collaboration with MA Lighting and co-partnered by Production Brew, the masterclass attracted lighting enthusiasts and professionals eager to glean insights from one of the industry's leading experts.

"The masterclass was a rare opportunity to learn from a maestro in the field of lighting design. Jeremy's expertise and passion were palpable throughout the session, and his willingness to share experiences from his work added a unique dimension to the learning experience. Understanding the thought process behind the lighting design for a mega-concert like Ed Sheeran's was truly eye-opening" expressed a participant.

Hi-Tech Audio & Image

Production Brew

Jeremy Van Delft

25



Dave MacKinnon Joins Clear-Com as Vice President of Product Management



GLOBAL: Clear-Com has announced the appointment of Dave MacKinnon as its new Vice President of Product Management. With an impressive background spanning over two decades, Dave brings a wealth of experience in government, broadcast, and public safety, making him a valuable addition to Clear-Com's executive team.

Dave MacKinnon's career path showcases a diverse and accomplished journey. With six years dedicated to working in the US Government, including roles with the Navy and the Department of Transportation, and Maritime Administration, Dave has gained a profound understanding of mission-critical communications and public safety.

Following his government service, Dave spent twelve years at NBC Universal, further honing his expertise in the broadcast industry. His extensive tenure at one of the world's leading media companies has provided him with invaluable insights and strong relationships within the broadcast community. In the subsequent three years as a consultant, Dave expanded his reach into public safety, government, and medical sectors, solidifying his connections with mission-critical communications vendors and clients. His strategic approach to consulting has fostered great relationships within the industry.

Dave MacKinnon is well-known for his exceptional network in both the government and military sectors. His ability to build and maintain strong relationships with key stakeholders has been a hallmark of his career. This, coupled with his deep understanding of mission-critical communications, positions him as an ideal leader for Clear-Com's product development team.

Expressing his excitement about joining Clear-Com, Dave MacKinnon said, "I feel like I've been part of Clear-Com since I was first a customer, and so I'm excited to formalize that relationship now. My goal is to establish partnerships with other vendors, clients, dealers, resellers, etc. I'm looking forward to visiting customer sites and learning new and unique workflows."

Dave is particularly enthusiastic about cloud initiatives, including Gen-IC, and is committed to driving innovation in the communication solutions space. Clear-Com looks forward to leveraging Dave MacKinnon's extensive experience and industry relationships to strengthen its position as a leader in missioncritical communication solutions.

Clear-Com

Robe Acquires LSC Control Systems



ENTERTAINMENT TECHNOLOGY ASIA

Robe's Josef Valchar on the left with LSC's Gary Pritchard

AUSTRALIA: Robe Lighting s.r.o. has acquired LSC Control Systems PTY in Australia, a move that sees the Czech Republic lighting manufacturer further consolidate its portfolio of leading lighting and control brands.

Having LSC's power distribution (PD) systems as a core element of the 'Robe Business' Team made perfect sense following the purchase of console manufacturer Avolites in September last year, explained Robe's CEO Josef Valchar. "We're delighted that this opportunity arose – it is hugely exciting, and we look forward to a long and positive collaboration. It will allow us to offer the best complete lighting and control turnkey solutions to our customers and their clients and projects across all sectors." As well as diversification, it also gives Robe a manufacturing base in Australia in addition to its facilities in central Europe and the UK. LSC's founder and managing director Gary Pritchard is equally enthused, "LSC will gain access to greater investment and resources, and working through Robe's renowned worldwide distribution network we can reach more global and diverse markets in turn stimulating greater opportunities for creativity, expertise, business and action for all of our team!"

LSC's operation, which started over 40 years ago in Melbourne and has grown into a trusted and respected specialist brand well-known for inventive technology, will continue functioning exactly as it is now. Gary sees the move as an affirmation of the company's value. "An organisation of Robe's stature wanting LSC onboard is a sign of confidence that also tells the world that LSC will continue doing what we do best ... both now and well into the future!"

The plan underlines Robe's commitment to being an industry leader in all areas of lighting technology, further empowering the imagination and choice of lighting professionals and offering an exceptional set of tools to assist in the production of shows, events, and memorable performance experiences for all to enjoy.

Robe



APRIL 2024

TR Audio Finds New Home for APG's Modular Matrix Array in Booming Nightclub Market



CHINA: System integrator TR Audio System Solutions has installed APG's workhorse APG4000 Matrix Array system at two of China's hottest new nightspots, cementing the French manufacturer's continued dominance of the country's small to mid-size club market.

Super Gaga, in Maoming, and Win Party, in Yunfu (both cities in TR Audio's home province of Guangdong), are the latest additions to China's fast-moving nightlife scene, where new clubs spring up seemingly by the day.

According to Huang Zhao, General Manager of Guangzhou-based TR Audio, APG's distributor in China, the majority of APG products are well suited to nightclub installations, given their powerful SPL output and enviable evenness of coverage. For mid-sized clubs like Super Gaga and Win Party (both of which occupy an area of around 500m²), Zhao typically relies on the APG4000 – an evergreen choice for TR Audio, having been installed previously in similar nightlife venues in Guigang (Open Pie), Baise (PingGuo Boss) and Nanning (another Open Pie club).

"In this segment, most of our projects are based on the APG4000 matrix system, coupled with the TB218S subwoofer," confirmed Zhao. "At Super Gaga, for example, four 4000HI [speakers] are installed on either side of the main DJ station, providing a coverage angle of 30° (vertical) by 120° (horizontal)."

Comprising two individual speakers (4000HI and 4000LO), the APG4000's modular design offers sound designers, integrators and installers a huge choice of configurations – from a barebones setup comprising a single 4000HI cabinet to larger, medium- to long-throw configurations for both indoor and outdoor events. The APG4000





additionally benefits from APG's collinear Matrix Array technology, which provides extremely precise control of horizontal and vertical sound coverage, offering further flexibility, whether on the road or in a permanent installation.

The modular nature of the Matrix Array series is particularly beneficial when venues are undergoing renovation or still under construction when the space available for speakers and audio equipment might change from one day to the next, added Zhao.

The new nightclubs are the product of significant monetary investment – more than 15 million RMB (€2m) between them – and it is important for TR Audio that the owners are able to hear for themselves what the Matrix Array system can do, Zhao continues. "We understand what our customers need and recommend products that are right for them, and the next step is for them to experience the capabilities of the system firsthand," she explained. In the case of Super Gaga and Win Party, the APG4000 immediately impressed, its clarity, bass impact and even sound field – delicate but not dry, according to one of the clients – effortlessly met the demands of the club environment.

"Chinese clubbers, like their counterparts in Europe, deserve the high-quality, ultra-clear, floor-shaking audio only APG's Matrix Array technology can provide," Zhao concluded. "No other loudspeaker system delivers as much bang for its buck, and we are thrilled to be able to share this experience with the customers of Super Gaga and Win Party."

GLP Welcomes Well-Known LD Toto Bröcking as New Relationship Manager



ENTERTAINMENT

TECHNOLOGY

GLOBAL: Maintaining relationships with service providers, rental companies and lighting designers is a culture deeply embedded in the DNA of GLP - German Light Products. To provide lighting designers and operators with a specialist to address all questions about GLP products and their implementation in a wide variety of applications, the company has brought in another industry expert to strengthen the team. Well-known lighting designer, Toto Bröcking took up the role of Relationship Manager at the beginning of February. Toto brings 30 years of experience in professional design and programming and will continue to implement a few of his own productions. Toto, who lives and works in Berlin, works closely with GLP Key Account Director Oliver Schwendke, who continues to take care of his existing contacts.

"I am excited about my new role at GLP. I am looking forward to using my personal network to build additional relationships for GLP. I enjoy working with people, I actively seek out exchanges and have a good network within our industry. I have been a user of GLP products myself for years. I'm really looking forward to being able to support colleagues in their work with the devices and in planning projects in the future."

GLP Managing Director, Udo Künzler added: "As a lighting designer and operator with many years of experience, Toto Bröcking will be available to designers as a specialist contact for all questions about the GLP company, our product range and programming issues.

"We have always sought personal communication with the users of our devices, which often results in unique products that are tailored precisely to the needs of lighting designers. We therefore encourage Toto to work closely with GLP product management in order to be able to incorporate needs and new ideas more directly into development. Welcome aboard, Toto!"

GLP

Coral Sound UAE Invests in a Nimble Yet Powerful JBL Professional VTX A8 System



ENTERTAINMENT TECHNOLOGY ASIA

UAE: Amidst the dynamic landscape of live event production in the UAE, Coral Sound, a renowned equipment rental company, has made waves with its latest strategic move. This forward-thinking company has recently bolstered its arsenal of audio solutions by investing in cutting-edge technology from JBL Professional by Harman. This investment, comprising 20 units of the VTX A8 3-way bi-amped dual 8-inch compact line array loudspeakers and 8 units of the B28 arrayable dual-18-inch subwoofers, signifies a significant leap towards delivering unparalleled sound experiences.

According to Coral Sound's management team, the decision to invest in JBL's VTX line array systems was driven by the company's expanding business portfolio especially within the premium mid-scale event market and the growing demand for premium audio solutions in the region. And the company is confident that this investment underscores Coral Sound's dedication to providing world-class audio solutions for every live event that they commission.

The company shares that VTX A8 line array loudspeakers' impressive list of features, including a 110° dispersion pattern, optimal coverage capabilities, and ability to offer uniform sound distribution

with exceptional clarity and fidelity throughout medium size venues made these compact loudspeakers an ideal investment decision for them. Furthermore, they affirm that the B28 subwoofers, known for their robust lowfrequency performance, being arrayable in nature, further enhances the company's ability to deliver immersive audio experiences with deep, impactful bass reproduction to elevate the overall sonic landscape of any event.

Coral Sound



VIDEO FILES

APRIL 2024

grandMA3 Software Release Version 2.0



The new and potent Bitmaps engine is one of the most recent aspects of the newest grandMA3 software update. This video is a brief tutorial to help you familiarise yourself with the new technology.

DiGiCo on Site with Ed Sheeran in Melbourne



Chris Marsh, sound engineer for Ed Sheeran, reveals insights into Ed's gig at the MCG. Managing show elements and Ed's dynamic performance with a DiGiCo Q7 console is no small task. Stadium acoustics pose challenges, forcing Chris to balance clarity with low-end impact and adjust vocal levels to combat reverberation.

How Many Configurations Can the Elation SŌL I Blinder Do?



In a luminaire, how many configurations are you looking for? Elation's first in a new line of inventive LED blinder and effect products aims to address that query. Designers can utilise SŌL I Blinder as a single-cell, 2- or 4-cell blinder, and much more with ease.

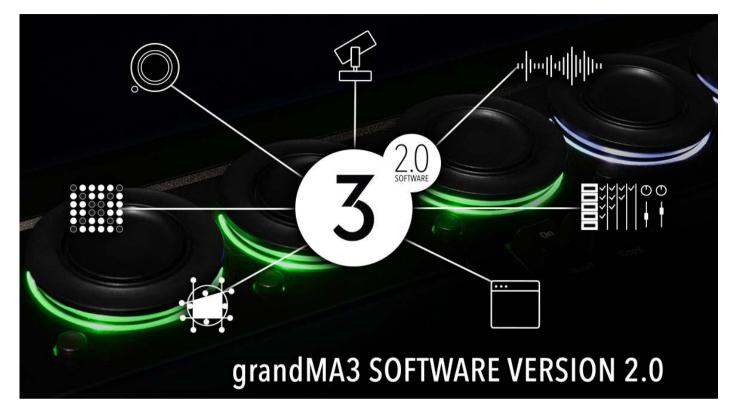
AV Stumpfl AnyShape Can Build Any Projection Screen You Desire



If you can visualise it, AnyShape can build it. Flexibility is the name of AV Stumpfl's game as the modular nature of their technology empowers you to tell the stories you want.



grandMA3 Software Version 2.0 Out Now



MA Lighting has now released grandMA3 software version 2.0.0.4. This software release presents lots of new functionalities and workflow improvements for many different applications:

- Customizable Encoder Bar
- Special Dialogs
- Bitmaps
- Soundfiles in Timecode
- Selection Grid Improvements
- New Fixture Sheet Modes

In addition, the area of data handling and organization shows lots of improvements. Sheets can be filtered and reorganized to create a personal workspace. The transfer of fixture data gets much easier with the new Clone window. Working in big sequences with a lot of data is now improved by the use of new tracking functionalities. The new Fixture Type Presets allow the user to easily transfer predefined content from show to show.

The MA University with the grandMA3 special course v2.0 presents detailed information about the new software release - online and completely for free. Additionally, there is an update to the grandMA3 User Training and a NEW grandMA3 Essentials Training available. The local MA distributor will help to get access to the MA E-learning platform.

The complete list of features and enhancements is documented in the release notes which can be found at the link below.

MA Lighting/grandMA3



ENNOVATION

APRIL 2024

ETC Announces Major Update to Hog 4 Operating System with v4.0 and Adds PAR jr to the ColourSource Fixture Family



ETC announces the release of Hog 4 version 4.0 software. Enhancements include significant improvements to colour handling and Hog4's Colour Picker, a new 'Record Defaults' function, and Fixture Builder upgrades.

For colour handling, v4.0 represents a major overhaul of the colour mixing system used in Hog 4 OS. Substantial changes have been made to the fixture library, colour picker, gels, palettes, effects, plots, pixel mapping, and the playback of colour. All colour mixing systems including native HS, xyY, CMY, and all additive colour engines are now fully integrated and supported by the colour system. Additionally, Hog 4 OS v4.0 features anew Colour Picker window with a tabbed interface that features a wide variety of controls for quickly and seamlessly mixing colour across all fixture types.

A new "ColourMix" preview column has been added to the output window and editor windows, indicating the colour being output by colour mixing fixtures.

In addition to the colour system rework, v4.0 includes a number of other improvements.

Record Defaults provides operators with a quick and simple way to establish default function values for fixtures by using modified values in the programmer. The Fixture builder has a few minor upgrades in v4.0, including additional basic mode templates for modeling additive colour modeling fixtures, automatic application of virtual intensity to fixtures with colour mixing systems, and the inclusion of more user editable fields such as mode and product.

Version 4.0 is compatible with all generations of Hog 4 hardware. This major release introduces significant improvements to the OS. This means that v.3x show files and archives will not open directly into v4.0 – there will be a pair of releases (v3.21/v4.1) that will add export/import capability to bring v3.x show files including fixture data into v4.1 and beyond. Users should update to v4.0 only when they are ready to start a fresh show file and become familiar with the new workflows.

Watch the Hog 4.0 OS introduction video **HERE**. For more information on Hog 4 and to download v4.0 software, click **HERE**.



ENNOVATION



In other solutions announcement, the ColorSource PAR jr is the newest addition to the affordable line of ETC fixtures that has become a staple in venues around the world. A perfect complement to Spot jr, PAR jr boasts a similar feature set and includes a four-colour red, green, blue and lime array.

If you're looking for a flicker-free fixture for broadcast, concert venues, worship services, or live TV, look no further than PAR jr. The fan-free, convection cooled design makes this luminaire ultra-quiet. And at nearly half the weight and half the price of a full-sized ColorSource PAR, PAR jr is ideal for venues of every size.

Offering stunning colors and precise dimming, this wash light is available in two array options. The Original array provides subtle pastels and beautiful white light to enhance skin tones. While the Deep Blue array is for anyone needing more saturated, dramatic colours. Like all ColourSource fixtures, PAR jr includes ETC's colour integrity technologies so you can be sure the colours you set in rehearsal are the same colours you see during the show. This includes thermal droop compensation and comprehensive factory colour calibration.

ETC offers an industry-leading 5-year warranty on the entire fixture, and an astonishing 10-year warranty on the LED array. Pair that with the unmatched 24/7/365 phone support and you'll be glad you chose ETC.

With almost 2300 lumens of brightness ColourSource PAR jr gives you more of what you love at a fraction of the cost AND a fraction of the size.

Download the MyETC:Photometrics app for full photometric and colour information on this, and all

other ETC fixtures.

You can learn more about PAR jr and request a demo at this **LINK**.

ETC



ENNOVATION

Martin Professional Combines Viper Performance with XIP Usability to Introduce Mac Viper XIP



HARMAN Professional Solutions has announced its Martin MAC Viper XIP, the next-generation Viper-class fixture that integrates iconic Viper performance, Martin's patent-pending XIP weatherproofing technology, and the most robust feature set Martin has ever developed.

Integrating powerful lumen output, XIP water and dust ingress protection, and whisper-silent noise levels, MAC Viper XIP is not only perfect for temporary, year-round outdoor needs but equally ideal for theatre, broadcast, and other noisesensitive applications. Featuring Martin's tailormade light engine, the fixture delivers 28,000 lumens consistent output, outperforming much larger products on the market.

Unleashing a 5° narrow, high-definition, and high-contrast beam, MAC Viper XIP ensures unprecedented lumen maintenance over the zoom range. Its superior 5,800K colour temperature naturally enhances illuminated objects and ensures a white point precisely on the black body curve.

Precision motor control results in unmatched pan & tilt speeds and nimble response times - key for followspot systems and optimal performance. MAC Viper XIP's colour mixing, zoom speeds, and the ratio between high-quality output, low-noise operation, and low weight and size make it a truly versatile workhorse. It also features highresolution, low-level dimming and gobo light recycling, enabling 25% additional output when inserting gobos for increased performance and efficiency.

Adding to its feature-rich offering, MAC Viper XIP leverages innovative onboard NFC technology to empower quick and streamlined setup via the forthcoming, dedicated Martin app. It also offers simplified connectivity among the most popular control protocols, including DMX, Wireless DMX via plug-in module, Art-Net, sACN and Martin P3 Control (with fail-safe bypass).



ENNOVATION

The newly designed optical system significantly enhances the customer experience with a high-resolution projection system that offers unmatched gobo projection sharpness. Uniquely high-contrast levels, paired with brilliant and crisp lens designs ensure incomparable, razor-sharp mid-air effects. From concert stages to TV studios and EDM festivals to opera houses, the world's top designers, specifiers, and rental companies can invest in the confidence and return on investment that only the MAC Viper lineup has proven possible.

Product Highlights:

- The MAC Viper XIP light engine's native 5,800K colour temperature ensures a white point precisely on the black body curve, with no green or magenta shifts, only crisp, vibrant white light.

- The optical system features 14 precision-coated lenses and incredible centre-to-edge clarity. Uniquely high-contrast produces razor-sharp mid-air effects and the shutter system's enhanced depth of field ensures well-defined gobo framing.

- Martin's tailor-made light engine and XIP weatherproofing allow MAC Viper XIP to deliver a consistent 28,000 lumens. Smart, efficient cooling maintains full output with colours, gobos, effects and gobo light recycling that boosts output by 25%.

- Patent-pending XIP water and dust ingress protection is ideal for temporary, year-round outdoor use overcoming size, noise, output, and weight penalties, typical of IP65 fixtures. Its low-noise and weight are also perfect for indoor events. - A combination of Viper-class output and whisper-quiet noise, similar to Martin MAC Encore. Smart heat management maintains low LED temperatures for long life/output, making it ideal for theatre, broadcast, and other noisesensitive applications.

- As Martin's most feature-rich product ever made, MAC Viper XIP has been engineered to elevate the most demanding shows and events. Every feature has been optimized to give designers maximum creative freedom while ensuring uncompromising performance.

- NFC technology enables smartphone control via the upcoming Martin app. DMX addressing, personality settings and other functions are easily accessible. And with our wireless DMX module connectivity slot, it's future-ready for control.

Martin/MAC Viper XIP



ENNOVATION

Cameo Expands OTOS Series with Three New IP65 Moving Heads



With the IP65 moving heads in the OTOS series, Cameo is catering specifically to riders of different sizes of outdoor events. After the OTOS SP6, OTOS B5 and OTOS H5 spot profile, beam and hybrid models staged the christening of the AIDAcosma, the coronation concert of King Charles III and the NATURE ONE Festival, among others, the Adam Hall Group lighting brand is expanding the OTOS series with three multifaceted eye-catchers: OTOS W12, OTOS W6 and OTOS W3.

The OTOS Wash series is based on individually controllable RGBL LEDs (RGB + Lime), which are surrounded by an LED effect ring. The number of RGBL LEDs varies depending on the model: 7 x 50W for the OTOS W3, 16 x 50W for the OTOS W6 and 32 x 50W for the largest model, the OTOS W12. The SMD LED effect ring can also be individually controlled down to the pixel level and produces white tones and colours for a wide range of eye-candy effects that impress both on concert stages and in TV productions. For more efficient use of the DMX channels, the dual input mode can also be used, in which each pixel can be assigned its own colour via pixel mapping.

A special feature of the new OTOS Wash series is the multi-zoom function. Depending on the model, up to three zoom levels can be individually controlled to adjust the zoom range (4°-60°) on several levels. The versatility of the OTOS Wash series is rounded off by the integrated W-DMX and CRMX transceiver for the wireless transmission of DMX and RDM data.

The Cameo OTOS Wash moving heads OTOS W12, OTOS W6 and OTOS W3 are now available for pre-order.

Cameo/OTOS Series

APRIL 2024

Contour Your Sound with New Long Throw Point Source from HK Audio CONCERT SOUND Family

HK Audio CONCERT SOUND stands for uncompromising road suitability, top sound quality and high performance. With the comprehensive and practice-orientated CONTOUR X point source series and the flexible COSMO line array, the CONCERT SOUND product family covers a wide range of application scenarios for professional event productions and demanding fixed installations. Thanks to optimally coordinated DSP presets, perfectly matched FIR filters with linearised phase response and IIR filters for latency-critical applications, all components of the CONTOUR X and COSMO series can be combined in almost any way and complement each other.

CX 210 LT – The new head of the CONTOUR X series

The newly developed CONTOUR X 210 LT passive point source loudspeaker fulfils the highest demands in terms of workmanship, sound quality and sound pressure. It complements the CONTOUR X series with a flexible and particularly powerful sound reinforcement tool for rough, daily use on live stages and long-lasting fixed installations.

CX 210 LT carries the sound in detail at the highest volume levels over long distances and shines not only as a powerful front PA system but also as a side, front and outfill in large CONCERT SOUND systems. It enables horizontal arrays to be set up very easily, which means that even large events can be covered cost-effectively without much effort.

The large 60° x 25° horn can be rotated for cluster operation. With the powerful 1.4" driver with 3" voice coil and the MCT (Multicell Transformer) developed by HK Audio, it offers very precise dispersion and even and defined coverage of the area to be covered. 210 stands for the two 10" mid/high drivers, which form a homogeneous and powerful foundation. With the high-quality, passive 24dB/oct. power amplifier channels can be saved. Made from



high-strength birch multiplex with a hard-wearing PU coating, the enclosure can withstand the rigours of everyday life on the road well beyond the depreciation period.

Integrated Cluster and Flyware

The Integrated Cluster and Flyware (ICF) mechanism is a new development of HK Audio and greatly simplifies the handling of the CX 210 LT. Thanks to the ICF built into the housing, no additional cluster and flyware are required. Cluster setups are created in no time at all.

For Lab.Gruppen and Powersoft amplifiers, pre-configured FIR filters with linearised phase response are available for all HK Audio CONCERT SOUND models and IIR filters for latency-critical applications. Another practical detail is the NL 4 sockets with pin selector switch. Two separate speaker groups can be connected with just one NL 4 cable.

HK Audio/CONTOUR X

ALEX COLUMN

The Art of Mixing

TECHNOLOGY

ENTERTAINMENT



This month, I want to tackle something that every decent sound engineer that I know and have met has been fighting with throughout their career: **"Is my mix good? Do people appreciate and like what I am doing?"** As you get older and

more experienced, the answer to this question becomes a little easier since you understand a lot more about what it takes for a great mix than at the beginning of your career. Throughout your job, you will develop a taste for what you like, how you go about your work, and what parameters of your work you consider more important than others. Since there is never enough time (remember the skeleton on the mixing console saying "the mix was almost perfect"?) to do everything you might want to do, you will have to compromise all the time (oh no, not another TANSTAAFL episode, please!).

When you format television shows, as I did thousands and thousands of times, you will learn what is expected, and within a very narrow tolerance, you create your signature sound. In what I did, we had a few different sound engineers mixing those same shows over time. All of them were fantastic talents with great skills and knowledge, but each one of my dear beloved colleagues would mix the shows very differently. Even the narrow tolerance window would create something that sounded very different to many ears.

I have accepted that the primary judge of my work is the audience. In Live concert situations, it is the audience in the venue who came to see and enjoy a concert of their favourite musician or band and based on the vinyl (I am dating myself here) and the CDs that they know (gosh, this guy sounds old school), they will have an expectation on what they want to hear. In the TV industry, this is created by producers, directors, and ultimately, the TV audience, which will base their decision to like or not like any format heavily on what they hear and how the show they are watching sounds. As long as they like what you are doing, even if the mix is not perfect, you are on the safe side, and people will enjoy and appreciate your work.

What this means is that there is no one set of rules since guite a lot of this is based on taste and personal preferences, and there is no objective set of evaluation tools, so essentially, your mix is as good as my mix, depending on what you like and what you prefer. This is a critically important lesson to be learned: No one, and no one, has the ultimate recipe for how you have to go about your job and how your mix has to sound. Of course, if the audience does not like what you are doing since they cannot recognize what they hear versus what they were expecting, you are in trouble, but you will need to develop this idea about how you want your mixes to sound and follow through. I hope that this does not sound too cryptic for you.

The reason for me to have been thinking about this is all this "learn how to mix like a pro..." and "learn all the great things about mixing from X or Y or Z sound engineer", will not allow you to bypass the process of developing your critical hearing and then apply the tools in your toolbox to make what you hear, come closer to what you would like it to sound like. As much as we would all like a simple recipe for success and a short list of rules to follow to get to success, we are

ALEX COLUMN



working in a highly complex environment and anyone who is telling you that they found the holy grail of mixing and is willing to share this with you against a small license fee, is just trying to scam you. It is not the expensive high-end tools that make your mix sound great, but the way you apply them or can apply them. If you can hear and appreciate a clear difference between using a 5,000-dollar tool and a 500-dollar tool, then please buy and use this tool since you will be happier with the outcome of your work. If you cannot hear a substantial difference, then it is something else that you need to look for as to why your mix does not sound as you wish it to.

Having the most extensive and most expensive toolbox does not make you a great sound engineer; it just makes you look good to all the guys who love toolboxes, and we have an entire industry willing to oblige in supplying those great tools to you. If you feel your mix still needs to be better to your ears, work on it more. If you are happy with your mix, then leave it alone. Making too many changes may not make it better. If anything, this is an excellent lesson: If it sounds good, leave it alone.

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

APRIL 2024



PROLIGHT + SOUND 2024 ROUND UP



Green-GO Stride Antenna Takes Big Step Forward in Wireless Comms

Visitors to Prolight+Sound were among the first to see a major innovation from comms system manufacturer, Green-GO. Receiving its worldwide launch at the show was the Stride Antenna – the first product to be announced in the awardwinning company's brand-new Stride wireless series.

As its name suggests, Stride is a big step forward for the comms market, bringing seamless roaming, greater DECT spectrum efficiency and increased user mobility, without affecting the range or the audio quality of devices on the network. Compatible with existing Green-GO WBPX wireless beltpacks, Stride enables higher DECT device density, allowing more WBPX beltpacks to be used simultaneously within the same area.

Green-GO's Stride Antennas synchronize automatically. DECT time slots are synchronized across multiple Stride Antennas via PTPv2 (Precision Time Protocol version 2) technology, without additional action required from the user. This effectively enhances the consistency of coverage within a given area, providing seamless roaming. Before the arrival of Stride, unavoidable 'handover gaps' between the areas covered by unsynchronised antennas were a fact of life with such systems. Now, with Stride Antennas, a Green-GO system can make full use of the available DECT spectrum, allowing a greater device density than was possible before.

The use of Stride Antennas will not compromise the range of a single antenna or cell on the network. This true seamless roaming between all antennas enables increased mobility, as each user can move around more freely within the coverage area, as well as into wider areas with the range extended by the addition of more antennas.

Green-GO has also made a significant investment in developing new tools to give intercom technicians the insights they will need in the utilisation of the DECT spectrum and RF coverage, enabling them to diagnose and understand possible issues early.

Device pools can include up to 250 Stride Antennas and 100 wireless beltpacks, while each Stride Antenna can accommodate up to five simultaneous WBPX connections. A user interface on the antenna displays configuration information and an RGB LED indicator shows device status, while extended RF monitoring information is available on both the wireless beltpack and via Green-GO's Control software. A DECT antenna analyser mode allows users to keep track of DECT spectrum utilisation. Furthermore, the Stride Antenna has an IP53rated housing for outdoor use and includes various mounting options (3/8", M10, and VESA).

Green-GO will reveal new products and functionality for the Stride series in the near future.

Green-GO



ENTERTAINMENT

TECHNOLOGY

iBOLT

A BIG One for Robe

Robe celebrated a BIG birthday at Prolight+Sound 2024 – the Czech manufacturer is now 30 – thirty years of proudly embracing the passion, joys and challenges of the entertainment and performance industry and constantly bringing new technology and ideas to the world of creative lighting and visual design!

Naturally, there were new products launched, the centrepiece of which was the iBOLT– a bright high-powered searchlight type of fixture guaranteed to blow people away with its brightness and features.

Other products being launched included the iESPRITE Fresnel, the T15 Fresnel, the T15 PC, the Footsie1 and Footsie2 Slim versions, the T32 Cyc and the T32 Cyc Slim, the iProMotion Landscape + iProMotion Portrait, the FORTE Fresnel / PC and the iSpiiderX.

Also launched was the iT12 Fresnel, a powerful outdoor fresnel wash fixture which includes an ingenious new patented F2L fresnel-lens system, comprising two lenses engineered with a smooth outer surface to eliminate the debris accumulation commonly found on outdoor fresnel lenses.

During the final show in its "Power of Imagination" live performance trilogy, Robe energised visitors with knife-edge action onstage, and a high energy lightshow designed to show off the creativity and potential of the new products in their native environment!

"Power of Imagination" is played several times a day, and in between an interactive timecoded 'Voice of God' presentation on the booth will highlight the best features of the new products.

The big booth – Robe's largest to date at any Prolight expo to emphasise the significance of the occasion – featured two dedicated demonstration areas where people could see the products in depth. The Robe information continued outside Hall 12.1 where the Robe Showtruck was parked for further specific demos.

Robe's architectural LED lighting brand Anolis also had its own space on the booth and showcased products from its new Lyrae and Agame ranges as well as its flagship Eminere, Ambiane and Calumma ranges, while lighting control solutions specialist Artistic Licence will also have its area.

The Robe PL+S Product Launch Included:

iBOLT

A unique, innovative, hugely bright fixture, the iBOLT is the first real replacement for conventional 7K xenon searchlights on the market. With the same feature set as Robe's MegaPointe, the iBOLT can be a beam, spot, wash and effects luminaire for stage and outdoor use. It has a beautiful – 300mm – large front lens and has been described as "a MegaPointe on supersteroids!" The LSW-5 white laser phosphor light source produces massively potent beams of light for optimum performance and reach, which are combined with the latest Searchlight and Skyflower technology plus extremely low power consumption, weight and compact size in this incredible fixture.

The iBOLT's 300mm front lens has precision optics for creating high-definition beams which are adjustable via a 0.4° - 8.5° zoom. SpektraBeam is a paradigm-shifting patented effects engine for producing transformative lighting experiences and a CMY + Colour wheel with DataSwatch library unlocks a vast, near unlimited array of colours.

The complete iBOLT effects package includes gobo wheels, patented MLP stackable multi-level prisms, and continuous PAN rotation.

ScanGuard is a patent-pending continuous safety monitoring feature with auto-cut to prevent direct source viewing and to deal with the most challenging exterior environmental conditions, the fixture benefits from Robe's patented POLAR+, EMS and RAINS IP protection technologies.

T15 Fresnel and T15 PC

This is a fixture for broadcast studios and theatres featuring Robe's new ZoomStat system with stationary fresnel or PC lens (patent pending) and motorised zoom range of 10° - 72° with a soft fresnel style of light output and a CRI of 95 that is perfect for natural skin tones.

With ZoomStat incorporating a stationary front Fresnel or PC lens, an impressively wide beam angle exceeding 70° is produced.

In conjunction with the motorized zoom functionality, ZoomStat enables adjustment of the beam / wash spread in three different ways – remotely from the console, via a motorized fader conveniently located on the fixture's side, or through user-friendly backlit control buttons situated on the fixture's rear panel.

The fixture offers CMY or RGB colour control with a virtual CCT range from 2.700K to 8.000K. Robe's Cpulse flicker-free management is ideal for use with all the latest camera systems. The in-house designed, developed, and manufactured MSL-TE 350W LED engine offers an excellent 11,960-lumen output, and other benefits include the AirLOC for less residue and less noise. The zero airflow-over-optics means extended cleaning intervals and low noise levels make it ideal for sound-sensitive environments.

A PC version of the T15 fixture is also available with identical features.

iT12 Fresnel

The fixture features a newly developed and patented F2L Fresnel lens, specifically designed for outdoor IP65 / IP66 requirements. It is easy to clean from the outside due to the smooth surface while boosting the homogeneity of the light output across the entire 10:1 ratio zoom range, from a tight 6° beam to an impressive 60° big wash.

For producing versatile and seamless area wash lighting across diverse environments, the iT12 Fresnel stands out, offering exceptional colour rendition and robust protection. This uniquely designed luminaire is a modular solution tailored to outdoor controlled area lighting requirements.

The iSE-MSL-TE 500W Multi-Spectral TRANSFERABLE ENGINE LED source offers selectable CMY, RGB or individual colour emitter control, factory-calibrated whites and variable CCT from 2.700 to 8.000K, a CRI of 95 plus, and an 11,000-lumen output.

Utilising Robe's TRANSFERABLE ENGINE (TE) technology, T-Series colour finesse, and

dependable replay-ability, the iT12 Fresnel is a comprehensive fresnel-style all-weather solution with cutting-edge features.

ENTERTAINMENT

TECHNOLOGY

BARS locks the motorised zoom firmly in position, even during power-cycling; RAINS - active management of internal microclimate controls humidity, temperature and pressure; POLAR+ standby mode maintains instant availability at temperatures of down to minus 50° Centigrade; parCoat is a unique hydrophobic, oleophobic particle-resistant lens coating.

It also has Cpulse flicker-free management for working with all camera and vision systems and the F2L system described above.



iESPRITE Fresnel

This is a new generation of fresnel lens luminaires for external use, powered by Robe's TE (TRANSFERABLE ENGINE technology) with the white iSE-TE 650W HP (High Power) and HCF (High Colour Fidelity) LED engines, which are easy to install, exchange and replace as needed and required.

The fixture is equipped with a newly developed and patented F2L Fresnel lens specifically designed for outdoor IP65 / IP66 requirements. It is easy to clean from the outside and boosts the homogeneity of the light output across the entire 10:1 ratio zoom range, from a tight 6° beam to an impressive 62° big wash.

The iESPRITE Fresnel has a Zoom range of 6° -62°, CMY / CTO + 2 colour wheels and patented ChromaTint – plus / minus green correction function. This technology enables adjustment of the desired delta UV to give more greenish or pinkish tones of white light output across the entire CCT range via a dedicated control channel.

Other key features are the 4Door internal barndoor module and RotaScrim - an internal Scrim module with a graduated filter for asymmetrical positional control. Both are Robe patented solutions.

Humidity temperature and pressure are monitored, managed, and controlled with Robe's active and patented RAINS IP65-rated management system.

The need for Pan and Tilt calibration movement can be removed via MAPS, Robe's patented Motionless Absolute Positioning System, with other highly useful features including POLAR+ technology, Cpulse flicker-free management and parCoat lens coating.

Footsie1 and Footsie2 Slim

Two new variants of Robe's next-generation low-profile footlights reduce the footprint even more with a single cable tray. This IP65-rated LED footlight system can be used anywhere – in theatres, on concert stages and along catwalks and set pieces of all types.

The fixtures are available with Warm White (CRI 90+), Tuneable White or RGBW light sources, and are quick and simple to connect via 60 cm and 120 cm lengths plus a selection of available corner angles. An Innovative SPREAD system helps remove side glare into the audience, and the self-contained single storage tray can conceal any loose power, audio, or data cables, removing this frequent trip hazard.

BluMark safety offers a subtle low-level blue LED indication of the stage edges without affecting any of the lighting states and the PIP – Performer Indication Point – separately controlled RGB LEDs at 10 cm spacings can provide artists with digital marks for critical moments on the show.

iSpiiderX

The IP65-rated iSpiiderX has an advanced protective minimalistic design with a low weight of 18kg and is an impressive 13,100-lumen RGBW LED WashBeam luminaire.

Dynamic visual effects can be achieved utilising its individual pixel mapping capabilities, and the popular inbuilt "Flower effect" is handy for creating some surprise additional effects, together with a variable zoom of 4° to 50°.

DataSwatch filters offer a series of preprogrammed colours and tones including the most frequently used whites – 2,700K, 3,200K, 4,200K, 5,600K and 8,000K – all with excellent tungsten emulation effect.

EasyClean is a newly designed and patented lens 'sandwich' system for straightforward cleaning and time-saving lens maintenance, and the non-reflective front lens is ideal for broadcast applications.

The fixture's RAINS IP65-rated management system means it is good for proper outdoor use and Robe's MAPS Motionless Absolute Positioning System and POLAR+ technology are also included, together with Cpulse flicker-free management.

T32 Cyc Slim

Cyc lighting has long been an art in its own

right, and this is a low profile, interconnectable, asymmetrical cyclorama fixture for covering any stage or large surface area. The DataSwatch onboard colour library provides rapid access to pre-programmed colour selection, with tungsten emulation for seamless integration with traditional existing lighting rigs.

The colours are perfectly rendered, with ratings of CR:96 and TLCI:97, and RGB or CMY colour mixing, with individual emitter control for advanced users offering faster programming.

The fixtures are exceptionally quiet so great for drama theatres or orchestral venues with L3 18-bit dimming for beautifully refined finetuned fades to black. There is Cpulse for camera environments and AirLOC for reduced residue deposits and less cleaning!

Т32 Сус

Designed in collaboration with some of the world's leading lighting designers, opera houses and theatres, Robe's T32 Cyc features all the performance, tools, subtlety, and control to assist with making designs even more exciting and visually stimulating.

Effective cyc lighting has always been challenging, but this product addresses all those past issues and attains greater reach, smoother coverage, and more visual impact than ever before from an LED luminaire.

The low-profile, easily inter-connectable T32 Cyc contains powerful RGBBAL multi-chip LEDs to generate the highest light levels and faithfully reproduce those full-spectrum colours and tints favoured by designers worldwide.

Opti-6 – a 6:1 height-to-distance ratio asymmetrical optical system produces a uniform flat field coverage even when near the cyclorama, freeing up valuable stage space for performers, sets, props, etc. From either the top or base of the cyclorama, Robe's unique, patented motorised VertiSpot feature provides vertical crossover point control, superior blending, and vertical output variance.

ENTERTAINMENT

TECHNOLOGY

Four individually controllable zones offer increased variations and effects and motorised tools facilitating split-second scene changes, giving designers substantially more scope than time-consuming, conventional, manually adjusted fixtures!

The T32 Cyc features the T-Series' colour consistency and seamlessly integrates with other lighting, thanks to a virtually controlled CCT range of 2.700K to 8.000K, plus calibrated whites, the DataSwatch onboard colour library and tungsten emulation. All the colours are perfectly rendered with exceptional ratings of CR:96 and TLCI:97, and RGB or CMY colour mixing control offers faster programming.

FORTE Fresnel / PC

This is a new variant in Robe's popular FORTE range, a high output wash luminaire for TV, theatres and concert stages and a true replacement for traditional 2.5kW HMI fresnel lights which has "been long awaited".

The FORTE Fresnel PC has an in-house designed, developed, patented, and manufactured TE 1.000W XP (Xtra Power) White 6.700K LED engine that delivers an intense light output of 40,500 lumens (fresnel) and 41,000 (PC).

There are CMY / CTO + 2 colour wheels together with CRI 80 / 90 filters and ChromaTint (patented plus / minus green correction function). This technology enables adjustment of the desired delta UV to give more greenish or more pinkish tones of white light output across the entire CCT range via a dedicated control channel.

The fixture also features Robe's 4Door internal barndoors system with individual control of the 4

leaves and +/- 90° rotation of the entire module (also patented).

APRIL 2024

RotaScrim is a patented graduated filter with positional control for asymmetrical light output and hotspot removal, and the fixture is very quiet for noise-sensitive environments. AirLOC - noairflow-over-optics reduces the required cleaning times and the Cpulse flicker-free management means it can be used with the latest camera systems.



iProMotion

The IP65-rated Robe iProMotion moving head effects and video projector is now available in both landscape and portrait configurations for indoor and outdoor use – great for advertisement, retail promotions, shops, car showrooms, clubs and bars.

The fixtures offer 1000 ANSI Lumens of output with a long-lasting LED source; (comparable to 5000 Lumens from the lamp-based unit), with RGB and CMY colour mixing capabilities; digital gobos, graphic effects, images and videos plus a dynamic range of in-built effects.

Keystone, iris and motorised focus give full control of visual creations with the ability to

upload custom artwork, photographs and videos and to live stream multimedia content over RTSP.

ETH ENTERTAINMENT TECHNOLOGY ASIA

Optional ADM (Automatic Distance Meter) keeps the projection sharp and automatically focused, and Robe's RAINS IP-rated management system enables the monitoring and control of humidity, temperature and pressure.

Reduced power consumption and POLAR+ technology maintain instant fixture availability in subzero conditions.

NEW PRODUCTS

Shown publicly for the first time since recent launches at PLASA and/or LDI 2023 were the iFORTE LTX, iESPRITE, iPAINTE, iBeam 350 and iTetra2 – all of them expanding Robe's comprehensive iSERIES range of luminaire for outdoors, indoors and all environments. Serious thought has gone into Robe's iSERIES fixtures, which all feature several very cool patented technologies keeping them ahead of the game. They are also designed to be near-identical to the standard counterpart products in each range, maximising flexibility and making it easy to mix and match IP-rated and standard fixtures.

iFORTE LTX WB

Powered by Robe's internally designed, developed, patented, and manufactured iSE-TE 1000W XP (Xtra Performance) IP65-rated White LED TRANSFERABLE ENGINE, this produces an incredible, industry-leading 335.000 Lux at 5 metres! Innovative optics attain absolute WashBeam functionality, and the FORTE LTX WB can operate in various ways. Standard Optical Mode permits the widest 3.5° - 52° coverage. Using the iris, the beam can be narrowed for 2°-52° coverage.

XR7 eXtreme Reach Follow Spot technology is a new and highly innovative technology delivering stadium-level performance with an ultra-tight 0.7 – 2° beam for crisp, incisive beams without any intensity loss due to an engaged iris over long distances. Robe's powerful data-capturing TRANSFERABLE ENGINE technology offers all the advantages of field exchange, cost-effective replacement, plus the ability to keep up with LED development to ensure an exceptionally long fixture life. With typical lumen maintenance of L70\B50 50,000 hours, the 4-year 20,000-hour warranty gives peace of mind, whatever the weather.

The luminaire features CamFit which is pre-wired and pre-balanced for the addition of a dedicated IP65-rated RoboSpot camera if required.

IFORTE LTX FS

This is a long throw, high output, all-environment LED WashBeam with an integral camera for use with the RoboSpot system, a luminaire capable of true, stadium-level reach!

The fixture redefines the boundaries of output, optical excellence, and performance while retaining the subtleties and nuances of theatrical precision, the iSERIES IP65-rated Robe iFORTE LTX FS is a truly next-generation WashBeam luminaire with an integral camera for live concert touring, indoors or out!

The iFORTE LTX FS has a full HD digital camera mounted on the head, with parCoat lens protection to ensure a clear picture even in inclement weather. The IP65-rated camera features 32 x optical and 32 x digital zoom and is suitable for low light levels down to 0.05 lux.

Powered by Robe's latest, most powerful, iSE-TE 1.000W XP (Xtra Performance) IP65-rated White LED TRANSFERABLE ENGINE, this produces an incredible, industry-leading 355,000 lx at 5 metres.

RoboSpot Full network capabilities

Full network capabilities are now available for Robe's popular RoboSpot remote follow spotting system which can now be seamlessly integrated with IP networks. Thanks to the foresight of RDMNet implemented in Robe products, the existing capabilities of remote device management are taken to the next level. This advanced protocol standardizes the behaviour and configuration over flat or routed network structures.

TECHNOLOGY

Device discovery, settings and operations, especially over long distances, can now be performed directly between the RoboSpot system and the Robe fixtures, eliminating the need to add another kit like splitters or nodes. The process of setting DMX addresses, DMX modes or personality preferences remotely on Robe luminaires are now unified whether wired. wireless or via network.

By integrating RDMNet into the products, customers have the most efficient and effective way of remotely managing their devices with the ability to see changes made by other controllers, RDMNet provides a level of flexibility and control previously unavailable.

Anolis Releases

The Anolis Lyrae range makes challenging inground installations massively easier, starting with the Lyrae XS Fix MC. The high light output from its powerful LEDs can be utilised with assorted optics, from narrow to wide and a bi-symmetrical option, and the fixtures can be fitted with anti-skid glass to the highest safety standards without any impact on its excellent colour mixing.

Anolis' new Agame luminaire is an IP-rated multifunctional solution specifically crafted to accentuate the perimeters of windows and arches. Available in 8W, it produces a strikingly uniform monochromatic or RGBW/ RGBA line of light, enhancing the aesthetic appeal of

architectural facades. A 180° beam angle ensures even light distribution across a wide area.

Artistic Licence

As part of the Robe Business group, Artistic Licence displayed a selection of its lighting control technology products and a favourite for systems integrators and installers. As the originators of Art-Net, the company produces an assortment of inventive gateways, splitters, switches, protocol converters and other related networking and test products and solutions.

Made by Artistic Licence for Robe, two new products were shown on the booth - the Robe Rack Gateway RDM and the Robe Truss Split RDM.

The synergies and vision existing between all these Robe businesses were reflected in the stand layout of this special anniversary showcase for Robe, that exhibited at its first Prolight in 1994.

Robe



Avolites Diamond 7.

Avolites Unveils Latest Diamond **Console and New Version of Popular** Technology

The main attraction for the Avolites stand at this year's show was the new Diamond 7 (D7) console, the next in the line to the flagship Diamond 9

(D9) console. This initial product launch allowed Avolites to gain valuable feedback from lighting designers and operators, as well as extensive product testing over the festival season.

ENTERTAINMENT

TECHNOLOGY

The full product launch, with all the product variants, is planned for the end of this summer. On the stand, attendees saw two variants, D7-330 and D7-215, the three and two screen variants with 30 and 15 faders respectively that were available for individual demonstration.

Key product features of the New D7 include a new clam shell screen panel and locking mechanism. The console control surface follows the Diamond 9 design language. The D9-215 fits into a standard Peli-Air case and is under European 23kg aircraft hold weight limit

Titan version 17, the latest of Avolites' popular lighting control software, was released on the 19th of March and ran on all the consoles on the Avolites stand. The main focus of v17 has been to greatly enhance the user experience and to further optimise performance, which will allow for a greater experience on larger shows as well as during longer programming sessions. This will be followed closely with a new version of the remote app, for both Android and IOS.

As part of the enhanced UX users will notice improvements with a colour picker, personality builder, cue list macro target console option, convert between hardware trigger and item trigger and much more. The full performance, feature updates and bug fixes can be found on Titan v17 Release Notes, available **here**.

Prism, Avolites' latest media software application had its first licenced version Prism One, available for demonstration on the stand. This was a landmark moment for the company's fastgrowing media software platform, designed to give Lighting Operators and Designers easy access to useful tools and powerful video features. It is complementary to their high-end AI specialist media application. In addition, this latest release further develops Synergy taking the integration of lighting and video a step further, allowing designers' creative ambitions to be realised.



Screenshot of Prism One (Alpha Version).

The Prism One (licence level) will be fully released in the Spring of 2024. The primary features of this important release include multiple layers, a preview window, live inputs (capture cards and webcams) and NDI inputs. An updated UI includes a bank table view and thumbnail view, a surface page, an output page and a cross-fade on layer.

Updated Synergy control includes adding and removing layers, and controlling layers. Secondary features include speed control on layer, added virtual returns, and hardware decode for H.264/H.265.

This year's show was Avolites' busiest and best yet, with so much new technology the company has been working hard to get to market, ensuring that every lighting and video professional has access to Avolites products and is inspired to create their greatest shows.

Avolites



ENTERTAINMENT TECHNOLOGY

LSC Adds to Product Lineup with New GEN-X and APS-X Products

Power and lighting control specialist LSC Control Systems launched many new products at the exhibition.

Visitors to Prolight+Sound were among the very first to see the new GEN-X and APS-X products – each offering important new enhancements to the manufacturer's market-leading power management systems. Also on show was the latest Mantra 4.0 software, and the new NEXEN Portable, adding further to LSC's family of dependable protocol converters.

The GEN-X is a new version of the renowned GEN-VI (pronounced 'GEN6') advanced dimming and power distribution system, this introduces an Ethernet input alongside the DMX, allowing for direct control via sACN and Art-Net. GEN-X offers all the features and advantages of the GEN-VI, including LSC's TruPower, which lets the user configure any output in any combination to be an 8-bit or 16-bit dimmer or a direct power relay channel. This enables the seamless dimming of conventional lamps, or the powering of moving lights, LED fixtures, video screens or audio power amplifiers – or any equipment needing controlled power distribution. At the same time, bringing Ethernet functionality to the inputs of the APS (Advanced Power System) will be the APS-X. Providing an elegant solution to the challenges of powering large numbers of LED screen panels, audio amplifiers or moving lights, the APS sequentially switches the outputs and controls inrush currents, earth leakages and overloads.

New to LSC's Mantra Lite lighting control system is the latest software version, Mantra 4.0. This release introduces various enhancements including improved colour mixing options for 7+ colour LED systems, full support for multiintensity fixtures, direct communication with LSC's HOUSTON-X monitoring and remote configuration tool (allowing all remote configuration and firmware updates over ethernet without the use of a third-party node) and a new underlying operating system allowing for future expansion and faster boot times.

Finally, the brand new NEXEN Portable is the latest addition to LSC's NEXEN family – the latest range of Ethernet/DMX converters designed for the most reliable conversion of entertainment industry protocols – including Art-Net, sACN, DMX512-A, RDM and ArtRdm.

At the same time, LSC announced the availability of the new UNITY 72-way cabinet. This latest addition to the UNITY product line joins the currently available 48-way and 96-way options, offering further flexibility for high-performance dimming and power-switching applications. Although this particular model was not physically present at the booth, visitors were invited to discuss its possibilities with LSC's representatives.

LSC





Astera Showcases Full Range of Powerful and Flexible Wireless LED Lighting Solutions

The slick and contemporary Astera stand design enabled Sales Director Sebastian Buckle and the team to welcome visitors and highlight numerous current Astera innovations like the HydraPanel, PixelBrick, AX9 PowerPAR and AX2 PixelBar, the smart and neat NYX Bulb and, naturally, the flagship TitanTube family – Titan, Helios, and Hyperion – which are popular and ubiquitous in show and event lighting worldwide.

It was important for Astera to have a significant presence at PL+S which is always a busy and productive show and a crucial platform for engaging with industry professionals from many sectors on multiple levels. Aside from networking, it's also seen as a key forum for staying abreast of trends and general innovations in the worlds of professional lighting and visual technology.

The Astera booth featured eye-catching 4-sided LED screens at the top. The space was expanded with more room for products, while the overall style was consistent with other Astera booth designs. The HydraPanel Flexi Series was incorporated on the back wall.

The two Astera Fresnels currently available were both launched in the last 12 months. The PlutoFresnel is for medium to small spaces and applications and the larger LeoFresnel is a cablefree LED alternative to the classic 1K fresnel, and ideal for scenarios needing more power and punch.

These are the first battery-powered fresnel lighting fixtures developed by Astera and come with a complete package of barn doors, a full yoke with a TVMP adapter for stand mounting, a removable handle and several other super-useful accessories – as you would expect with an Astera product.

Designed under the mantra 'Fresnels Made Portable', the PlutoFresnel weighs just 4.6kg and can be easily transported and installed in a range of contexts that would be more challenging for conventional tungsten fresnels. PlutoFresnel offers a 15° to 60° beam angle without any colour fringing, both wired and wireless DMX control and an inbuilt battery with up to 3 hours run time.

The full spectrum high rendition Titan LED engine provides an impressive output comparable to a traditional 300W Tungsten fresnel, with power consumption of less than 80W, and the fixture weighs a tidy 4.5kg, ideal for small and less accessible spaces. The removable handle, foldable legs and YokeBases make mounting and adjustment straightforward while enhancing creativity and productivity.

The larger LeoFresnel while comparable in light output to a standard 1K Tungsten lamp, actually has an even higher lumen value than this industry benchmark when running in 6500K daylight white!

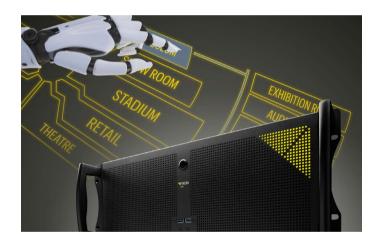
Astera had already launched a ProjectionLens for the PlutoFresnel before the show. With precision optics, 16° to 36° manual zoom, accurate shutters for highlighting specific areas, plus gobos, all add to the value and multifunctionality of the Astera Fresnel. The ProjectionLens can be quickly installed by being slid in/out of the luminaire. Zoom is simply adjusted by twisting the lens barrel – like a camera zoom lens – and two focus wheels assist in producing sharp, clear gobo projection at any distance, one for a standard focus and the other for close proximity work.

ENTERTAINMENT

TECHNOLOGY

The E-Sized gobo holder means that the projection of shapes, breakups and other effects and custom logos/gobos are seamless and eyecatching, with the projected beam or gobo image aligned and focused by rotating and tilting the lens barrel.

Astera



AV Stumpfl Presents New Screen Technology and Latest PIXERA Software

Austrian AV technology manufacturer, AV Stumpfl, captivated attendees with a display of its latest screen and media server technology. Attendees discovered the award-winning BLACKPEAK screen, which made its début in Frankfurt. A deep black projection screen, BLACKPEAK impresses with its phenomenal black levels and great contrast ratio, even in settings with ambient light and when used with low-power projectors.

In addition to BLACKPEAK, AV Stumpfl's screen team were on hand to showcase the company's AnyShape technology, which offers custom-built projection screens with a great variety of different frame shapes. Breaking away from traditional rectangular designs, AnyShape enables designers to unleash their creativity and draw attention to the shape screen, revolutionising the possibilities for projection surfaces.

The AV Stumpfl team also presented its 21:9 Monoblox and Monoclip frames, a mobile projection screen system, designed to meet the unique needs of corporate customers.

Visitors to AV Stumpfl's stand found out about the latest PIXERA software features. With its multi-user workflow capability, PIXERA 2.0 allows operators to be much more efficient and flexible when working on complex show environments or installations. Version 2.0 users can also engage more deeply with individual clips or layers using content remapping. This allows for projection mapping challenges to be mastered in a more user-friendly and creative way.

The PIXERA team demonstrated the newest addition to the PIXERA servers, the powerful GEN 2 hardware, which boasts greater performance, making configuration processes even more userfriendly.

"We are thrilled to showcase our latest innovations in screen and media server technology at Prolight + Sound in Frankfurt. Our team is looking forward to sharing AV Stumpfl's exciting developments with the industry peers and clients," said Harry Gladow, PIXERA executive director.

AV Stumpfl



ENTERTAINMENT

TECHNOLOGY

Visitors Heard the KV2 Difference

One of the highlights of this year's exhibition was the Live Sound Arena situated outside Hall 11. Taking full advantage, KV2 held four demos daily that invariably attracted a huge audience.

"We have participated in the Live Sound Arena demo area at Prolight + Sound every year for nearly 20 years (COVID years excepted of course)," noted George Krampera, jr., KV2's CEO. "In our experience, this demo area is the best demo setup of any trade show anywhere and it has always been hugely successful for us. In fact, it's the main reason we've supported the show for so long despite its reduced size because we still perceive enormous value in the live demos which are well set up and well run, offering extremely realistic outdoor conditions for all participants."

KV2 demonstrated their powerful VHD2 system, a long-throw system designed for audiences of up to 20,000 people without the need for additional delays. Part of the flagship VHD (Very High Definition) range, VHD2 – like the rest of the range – offers quality, power and coverage and thanks to its lightweight and compact form factor - significant savings for rental companies in terms of transportation and storage costs, as well as setup time.

Back inside Hall 11 on the KV2 stand A07, a range of products were showcased including the most recent addition to the EX Series of active loudspeakers, the EX28. This is a 2.5-way fullrange active loudspeaker system that builds on the success of the EX26 whilst adding further lowfrequency extension. Its compact profile makes it ideal for a multitude of FOH and infill applications in any environment that requires premium quality in a compact form factor including theatres, leisure venues, Houses of Worship and concert halls. Two individually designed 8" neodymium mid-bass woofers offer Transcoil for improved vocal performance and extended bass for the low-frequency section, along with a neodymium compression driver mounted on a 100° by 80° horn.

KV2 Audio



JDC2 IP

GLP Showcases Vast New Product Portfolio

This year's show was one of the most important expo presentations in GLP's history. The company

expected the JDC2 IP hybrid strobe to be as well received in Frankfurt as the new IP65 JDC2 IP is larger than its predecessor, significantly brighter and also offers a wealth of new features.

ENTERTAINMENT TECHNOLOGY ASIA

To underline the significance of this latest product launch, an interpretation of the world's largest JDC2 IP was displayed above the GLP stand - formed by 120 x impression X5 Compact and a powerful "strobe line" of 40 x JDC2 IP in the centre.

Also with an eye on the outdoor market, with its IP65 rating, is the impression X5 IP Maxx, a more powerful partner to the impression X5 Wash, making it suitable for projection requirements over greater distances. Boasting an extensive effects package, the impression X5 IP Maxx emits an extraordinary luminous flux of up to 24,000 lumens from 37 powerful 40W RGBL LEDs – with an expanded colour space. Like all products of the X5 Series, the X5 IP Maxx is equipped with the iQ.Gamut colour algorithm, which delivers deeply saturated and accurate colour nuances. Turning to FUSION, the FUSION X-PAR 8Z and FUSION X-PAR 18Z complete the family of weatherproof LED PARs, with motorised zoom.

The FUSION X-PAR 8Z (80W) is the most compact and lightest (4.5kg) representative in the series, suitable for a wide range of situations where space is limited. In contrast, the FUSION X-PAR 18Z has a 180W RGBL LED engine, for the highest power output, while the FUSION X-PAR 12Z outputs 120W. A new addition to the FUSION line will be the FUSION Exo Hybrid 30.

Added to this, GLP also provided advanced sneak peeks of the impression S500 Profile HQ and impression S500 Profile HO, which will go into production shortly, followed by the impression S500 Wash HQ later this year. Finally, the popular



GLP



Claypaky Leads Through Innovation and Beyond

Claypaky celebrated its participation in the 2024 edition of Prolight+Sound under the motto "Claypaky: leading through innovation. And Beyond".

This year Claypaky emphasized the showcasing of its unparalleled technologies, aiming to demonstrate its innovation and trendsetting spirit. This commitment extends beyond just products and technologies. The primary focus was on the latest addition to the "Multispectral family" – Rhapsodya, a unique fixture boasting exclusive features (ACCUFRAMETM,

APRIL 2024



APRIL 2024



TONEDOWNTM, Absolute Position control, LINEGUARD, ACCUTUNE, COLORSTRING). Claypaky hosted a pre-recorded product presentation, including a short light show lasting about 12 minutes, which run every hour. Following the demo, the Buddylight automated followspot was showcased in action during a special performance on stage, featuring the singer Nevio Passaro.

Claypaky presented some innovative lighting solutions as a world premiere:

VOLERO CUBE: A compact IP66 fixture seamlessly merging beam, wash, and strobe effects. This brand new, multi-function, multieffect moving head is a real "4-in-1 fusion fixture" boasting 4 powerful 60W RGBW LEDs and plusshaped cool white LED strips for strobe that can be pixel-to-pixel controlled.

ORKIS CYC: Orkis Cyc is the game-changing cyclorama light from ADB by Claypaky. This innovative wall-washer combines the best of both worlds: theatrical colour perfection with FLOW cutting-edge Active Liquid Cooling Technology. Built on a multispectral 6-colour HCR LED technology, Orkis Cyc offers a wide selection of colours and precise dimming capabilities.

MINI-B AQUA PX: Mini-B Aqua PX is the newest member of the Mini-B family, makes a splash across the board with its unbeatable mix of flexibility, lightweight design and lightning-fast pantilt movements. Mini-B Aqua PX inherits the core strengths of its predecessors, adding the pixel-to-pixel control of each LED.

PANIFY 2: This IP66 motorized platform redefines the possibilities of creative expression in the entertainment lighting industry. With its endless PAN operation and various speeds, it can handle fixtures up to 30 kilograms (66 pounds), giving you the freedom to set up unparalleled effects and providing precision and accuracy.

Claypaky

Robert Juliat Previews its New Tristan and Ravel Fixtures

Robert Juliat reports huge success with the response to its latest new products at Prolight+Sound, Frankfurt where it exhibited alongside its long-term German distributor, Lightpower.

Robert Juliat previewed its new LED, cool white 6000K Tristan followspot for the first time in Germany. Tristan is an 800W LED high output followspot with a 7°-14° zoom range and an output to rival the 1800W Victor MSR followspot.



APRIL 2024





Unique to Tristan is a totally new feature, a motorised iris, which enables the creation of iris presets. More features include electronic dimming, local and DMX control, integrated power supply and silent operation, along with a remote display and accessories for the operator. Tristan is compatible with DMX/RDM/Ethernet/ ArtNet and sACN protocols.

Equally at ease in front-of-hour, truss and backlight positions, Tristan is set to become the LED replacement for the ever-popular 1800W MSR RJ Victor.

Robert Juliat also previewed its exciting new LED profile spot, Ravel, which marked the introduction of a new family of Robert Juliat fixtures due to come on line later this year.

Ravel sports a unique new lamp house design with a reinforced body and enhanced, efficient cooling system. Designed to be compatible with Robert Juliat's 600SX and 700SX Series profile lens tubes, Ravel's light output is equivalent to that of 2kW tungsten profiles. Its 450W tunable white LED source guarantees the same constant brightness whatever the colour temperature, with a CRI >90. Available in three zoom options: 16-35°, 28-54° and 11-26°, Ravel has the same silent operation and protocol compatibility as Tristan, and a maximum power consumption of 500W.

Ideal for all long-throw front of house applications in medium to large venues, Ravel is the Robert Juliat LED profile spot everyone has been waiting for.

RJ's award-winning Sully 4C profile was also on show on the stand where visitors were able to have the full hands-on experience of the fixture and free rein of the controls to discover RJ Color. This innovative software platform makes the Sully 4C fixture user-friendly while offering a wide set of features and controls.

Robert Juliat

57





Explosion in Stage Sound and Lighting Leads to Expansion of PALM Expo Exhibitors

20% jump in exhibitors in pro sound and lighting halls at PALM Expo 2024



PALM Sound and Light Awards at PALM Expo 2023 felicitates BookMyShow Live for Outstanding Music Festival Event Promoter of the Year. (L to R: Anil Chopra, Founding Director, PALM Expo, Kunal Khambhati, Head - Live Events & IP, BookMyShow, Ramesh Chetwani, Project Director, PALM Expo, Gaurav Sood, General Manager, Hyve India).

PALM Expo is India's foremost tradeshow for Professional Sound, Audiovisual and Lighting Industry. For over 20 years, PALM Expo has been the principal catalyst fueling the industry, by

connecting global manufacturers and solution providers with distributors, dealers, and actual users.



SHOW PREVIEW



Visitors experience live demonstrations of advanced sound and lighting systems at the PALM Expo.

PALM Expo 2024 will witness 205 exhibitors across Hall 1, 2, and 3, a much higher paradigm of quality products sourced increasingly from European manufacturers as well as China product. The show will exhibit a wider brand spectrum, especially in rental sound reinforcement equipment.

Majority of the exhibitors offer sound reinforcement equipment across the price range with demand for even top-quality sound equipment at the higher price level. New trends witnessed in the Indian market include shift towards digital and networked audio solutions, demand for immersive audio technologies, and project studios. Many of the new exhibitors cater to this trend.

The demand for lighting exhibit space exceeded the floor space in the Hall. Thus, the lighting expo will move to a much larger hall in 2025. The product quality level across the entire spectrum of lighting fixtures is much higher in the 2024 show. Top exhibitors like Amate audio, Alto Professional, Earthpot, Trimac (DB technologies), Hercules Stand, Clarion Speakers, Stonewater, TBA Trussing, SKE Audio, Studiomaster UK, and Lexus Speakers will join PALM Expo 2024. Other exhibitors include Araldo Audio, Cambium, Damei, Dev lites, Digimore, Flexipol Acoustics, Harphonix, Jaisons, JD Lights, Lab Audio, M-Protech, Musictone, Penza Audio, Power X, PROEL, Real Audio, Roccer lights, Rontek Systems, SAE, Saffron Audio, Standard Radio, Sonic Evolution, Sound Master, Sousys, Star Electronics, and Welltone Audio.

The previous PALM & AV-ICN Expo edition boasted of 25,000 attendees. The Expo this year is expected to receive a voluminous attendance from across India. The Demo Qube feature, and the Live Arena sponsored by HARMAN as well as the Lighting and Design Showcase have become very popular with the professional sound system engineers and lighting designers.



SHOW PREVIEW

APRIL 2024



In the PALM Expo 2023, Demo Qube demonstrates innovative stage and sound solutions from Coda Audio and Pequod.

Experience Audio in Action at The Demo Qube The Qube is 100 sqm square enclosure for full sound playback, for high end sound reinforcement solutions by major brands. HARMAN Live Arena is a live performance stage, exhibiting turnkey sound and lighting solutions by various HARMAN brands.

Participate in a Symposium of Intelligentsia at the PALM Conference 2024

PALM 2024 will again boast of a three-day conference of marquee speakers like Sreejesh Nair, AVID Dolby Certified Audio Application Specialist; Donal Whelan, Chief Engineer at Hafod Mastering; Bhaskar Pal, Content Lead – India, ME, Africa at Dolby India, and sessions on FOH Engineering, Mixing and Mastering, Music Recording Studio Design, Gaming Soundtrack Studio Design. "PALM 2024, in its 22nd year, is at an inflection point for the Indian pro audio, pro sound, and the lighting industry. India, as such, is a powerhouse of talent in engineering. Today, we see major international brands conforming their products to the Indian market. The rate of growth in consumption of professional equipment is such that I predict international brands will manufacture in India, not only for Indian consumption, but equally for global markets as Indian manufacturing has proved itself for quality. Investible resources will not necessarily come from abroad. India will invest equally in the new manufacturing space", shares **Anil Chopra**, Founding Director, PALM Expo.

"As the Indian market matures and the government imposes stricter regulations on lowquality imports, we anticipate a significant shift towards higher-quality products. This evolution presents a compelling opportunity for mid-range products to thrive and local manufacturers to step up their game. By embracing this shift



SHOW PREVIEW



Aditya Modi, Designer and Head Firdaus Studio by A.R. Rahman, elaborating on Studio Recording at PALM Conference 2023.

towards quality, we can elevate standards across the industry and better serve the evolving needs of our customers. The manifestation of this market shift is evident at this year's expo, with a record number of exhibitors and a 20% increase in exhibition space. Our commitment to delivering a world-class international show of exceptional quality is unwavering. Anticipating a substantial turnout of trade visitors, we are confident to provide an unparalleled experience, offering invaluable opportunities for business growth. With over 200 booths showcasing a multitude of products, this year's expo promises to feature the widest array of brands and offerings yet," concurs Ramesh Chetwani, Project Director, PALM AV-ICN Expo.

Celebrating the Powerhouse of Talent at PALM Sound & Light Awards 2024

The PALM Sound & Light Awards honours individuals and organizations for their unmatched contribution to the events entertainment industry by rendering outstanding services in the field of stage, sound, and light. Over the past years, the awards have generated much expectation from the body of live event organizers, rental companies, and industry professionals like sound engineers, set designers, stage production companies, and light designers. This year will be no exception.

PALM Expo, in its 22nd year, promises to introduce attendees to high quality, latest innovation products in pro audio, lighting, and rigging. The 2024 Expo is from **30 May – 1 June 2024 at Bombay Exhibition Centre (BEC), Mumba**i. Attendees will discover a plethora of product categories in pro audio, lighting, rigging, and trussing.



Striking Nostalgic Chords on the Corridors of Audio Exploration

A vintage audio story of a Man and a Mission

By Ram Bhavanashi



Integrated Systems Europe (ISE) – while the event is known to bring the world of AV together, in the most holistic fashion – it did bring to place this year something that added a rare but very pleasant attraction, perhaps to make it truly holistic. A corridor of vintage audio systems that pulsated the generations decades ago, and a museum of vintage audio systems to augment the understanding of it all. I delved to some depths of it to find the man behind the mission, and a great story unravelled.

It's a pure vintage music to those who can hear with heart.

The punchline of ISE 2024 – Your Destination for Innovation – perhaps, had one its finest expressions on the walkway to Hall No. 8. For, the walkway took the visitors, even if one were to call them by-passers, through a showcasing of vintage audio journey; a journey that recalled the fond memories of those classic rock and pop music times pulsated by Jimi Hendrix, David Bowie, Led Zepplin, and Pink Floyd, plus the playback of his famous Live in Pompeii concert. Even as ISE celebrated its 20 years of AV industry showcasing excellence, it sought to relive the 50-year-old musical sensations by showcasing some of those precious vintage audio systems used by the legends of the time.

The walkway to Hall No. 8, therefore had on either side a long display of rare collection of vintage audio systems that comprised:

- * Pink Floyd's PA system from the Dark Side of The Moon tour of 1973-74
- * Four monitors and an amplifier used to mix The Beatles in Abbey Road Studio 2
- * David Bowie's PA system from the Ziggy Stardust tour of 1973
- * The Midas monitor desk for Mike Oldfield's Tubular Bells
- * Led Zeppelin's WEM PA system
- * The Who's bass set-up and flight cases
- * Amplifier cabinets and effects pedals used by Jimi Hendrix

* A playback of Pink Floyd's classic 1971 concert in Pompeii through the original PA system... And, that's not all...

Downwards, in the cellar of the hall, I was practically wowed to see a museum of a vintage sort – practically called Vintage Audio Museum by the ISE itself. In fact, it teamed up for the purpose



APRIL 2024



with the man who personified a whole big vintage audio mission, and...

I met the person behind this mission, passion, and vision- **Chris Hewitt, the Executive Director of CH Vintage Audio Systems**, only to realise he is much, much more than what his title reads!

A 'Musical Archaeologist' – as a BBC 6 Music programme called him – the nearlyseptuagenarian archivist of antique audio systems not just prides collection of audio systems of yore but also a lore galore. For, the incredibly massive collection boasts as many as 500-plus vintage brands, and almost every piece of audio there is a piece of story to tell.

The earliest of them all began with a Western Electric carbon microphone of 1920s, and, probably, the pride and joy come from the Abbey Road Studio 2 1960s Beatles Altec monitors.

"I started working in the music/Pro Audio industry at age 16 years in 1971," Chris begins to retell the story, he, perhaps, told many curious media mics earlier. "I was involved in promoting concerts by local bands in Rochdale North of Manchester, and hiring in PA systems for the bands to perform," he recalls those early (st)ages. "I also worked on the *Bickershaw Festival* near Manchester in May 1972 which was a large outdoor festival for 40,000 people and featured The Grateful Dead, Captain *Beefheart, Country Joe, and Flamin Groovies* flown in from the USA- plus *The Kinks, Donovan, Family, Incredible String Band* and others from the UK.

"The PA system was a combination of the Grateful Dead's USA 110 volt wall of sound JBL system powered by McIntosh amplifiers and the UKmade WEM PA system which powered most late 60s and early 70s festivals."

One could sense an unmissable precision in his detailing through his memory lane.

In pursuit of career in the line, he moved in 1974 to London, and worked for a hire company that provided sound for upcoming bands on the London pub rock circuit; he worked for about a year doing sound for lan Dury at London rock pubs and colleges in the London area. Having realized that there were no hire companies in the

APRIL 2024



ENTERTAINMENT

TECHNOLOGY

Manchester area hiring out pa systems like the ones exploding into use all over London, Chris set up a Pro Audio shop – in 1976 – and hire company back-up in Rochdale.

"I immediately got work from touring Punk bands and Motorhead when they came North from London to do gigs around the North West," he recalls the times.

It was a routine sort of journey though at that point of time, selling/renting out recording equipment to stages, large festivals, night clubs, theatres, schools, and factories. It also included building recording studios and installed sound. It went from strength to strength, for almost 50 years which is like passing a dozen generations in line.

That gave him quite a depth of knowledge and acumen on what equipment has become iconic in the world of microphones, amplifiers, loudspeakers and signal processors/effects units.

"There were pioneers in the audio industry and I wanted to collect them as a museum collection," comes out the first revelation of the seeding for



(a vintage) story. "The iconic pieces of equipment that helped develop the industry; and those iconic pieces of equipment that belonged to famous artists too," Chris gives the first account. Having a passion is one, and putting that piecing it together is the other- bigger than the first. How did he put his passion into action? "I sold a classic car, a Porsche 911 and put the money into the first pieces of audio equipment," Chris told in one of his earlier media interviews. "The thinking was that if I ever needed any money it would be far easier selling the odd piece rather than trying to quickly shift a 911!"

And so began audio artefact collection. Almost uninterrupted- till date.

"So far, around the last eight years, I have been amassing an archive of vintage equipment known as CH vintage Audio," Chris unfolds it all- showing up those iconic models of music – in the vintage audio museum – that stood the test of time, and still springs the same tone and tune.

Chris invested his sweat and blood into building his prideful collection, and sometimes in the hardest fashion. For, his collection doesn't include





mere collection and archiving; it often meant recreation of the original settings of the items collected, as well as some of the popular tracks that pulsated the pop and rock world.

"The 1929 Western Electric Carbon Microphone (popularly known as WEM) arrived with no back plate on it so we had to get our metal worker to fabricate the back plate by taking the dimensions of the front plate and re-creating the circular plate with large holes in," he reminisces. "Then, I had to find an identical fine mesh for behind the holes, and this was done by buying a large kitchen sieve from Amazon and cutting a sheet of fine mesh out of the kitchen sieve."

The other notable one reliving the Vintage verve was the Allen & Heath's 1971 Pink Floyd quad mixing desk re-creation. "It was done entirely from just photographs shared between myself and the original designer Andy Bereza by text message," explains Chris. "He had one original input channel from which we could then scale up all the channel metalwork and mainframe metalwork for the mixer- from start of drawing up the project to having two input channels that could playback Pink Floyd," he maps the mettle put into the manoeuvre. "It took only seven weeks."



The models displayed at the ISE – both on the walkway to Hall-8, and the museum downstairs – do not show the entire lot; but it does play a crème-de-la-crème ensemble of his vast vintage collection.

The re-creation of 1971 Pink Floyd Pompeii Allen & Heath quadraphonic mixing desk was one big attraction though; however, along with it, there was the Pink Floyd Pompeii WEM Sound system which was running and playing audio from Pink Floyd at Pompeii. Also on display was the Pink Floyd Dark Side of The Moon of 1973; Martin Audio and EV/Vitavox system, and the David Bowie of 1973 Hammersmith Ziggy Stardust Turner Amplification Ground Control PA system. Making it all more nostalgic was the Abbey Road Altec Studio 2 Beatles monitors running along in Hall 8.

The Walkway to Hall-8 contained as many as 50 display cases of iconic items from Rock and Roll history including Jimi Hendrix effects pedals and amplifiers. The bass stack from Jon Entwistle of The Who; a pair of DBX compressors used by John Lennon on Imagine; an Altec mixer used on stage by Neil Young, Crazy Horse, Crosby Stills Nash and Young.





Prashant Govindan with Chris Hewitt.

Further, a Vox UL730 amplifier – the fancied unit from the mid-60s – used by George Harrison on the Beatles Revolver and Sergeant Pepper albums was another one not to miss attention to.

Various display cases contained a large collection of microphones of the 1960s and 1970s from Shure and AKG, including AKG D25's used on the Get Back sessions; Queen Shure drum kit microphones from Live Aid and Sennheiser MD409N microphones used by Pink Floyd at Pompeii.

Watching them today on display is a rare privilege for many, while finding them still in functional mode is a sheer nostalgia for most. "This is just incredible," say Jeremy Bosselli and Andrew Gaultier, the two music enthusiasts from the French town of Metz. "Finding so many audio systems that were used by legends decades ago is simply exciting," they say. "We only find an odd piece of analog here and there, but this is sheer pleasure to see them all organized."

Understandably, while it is not an easy job to do, it's the passion, and vision that built it, of course, with its own lows and highs.

"In 1986, I had a £30,000-worth, almost new aluminium box truss stage roof stolen after a festival, and had recently moved a new insurance company who refused to pay out on the claim," Chris recalls one big hiccup in what was otherwise turning out to be a passionate rendition. "I spent £10,000 trying to sue the insurance company but realised it was going to cost too much to win the case, so shrugged it off and carried on."

However, he did have many a high to pride on.

* Getting the job to re-create David Bowie's Ziggy Stardust 1973 Hammersmith Odeon PA System

APRIL 2024



at Hammersmith Odeon in 2021 for the Disney Sex Pistols TV Series along with all the other PA systems for the Sex Pistols concerts in the movie * Re-creating some tracks from Pink Floyd at Pompeii using the1971 Pink Floyd Pompeii WEM sound system

* Re-creating the equipment for Elton John's first US appearance at the Troubadour Club in Los Angeles for the film Rocket Man

* Providing vintage stage equipment for the Queen film Bohemian Rhapsody

There is another prideful thing for Chris which also worth getting into libraries for posterity, besides being the collector's possessions: documenting all that nostalgic music industry evolution in the form of books. He so far has released three volumes on the history of large PA systems that were received with rave reviews from musical discerners.

"It's a great pleasure having the books so well received from people in the industry all over the world."

A great sense of achievement for the man who built a 'case' of a grand musical tradition- to watch, travel and revel! Having done all that- what's the ultimate objective now?

Says Chris, with an aged, but untiring tone: "To try and preserve as many important and iconic items from the history of live and recorded sound so that there is a CH Vintage Audio archive that can be exhibited around the world; so future people who come into the industry can see how the industry has developed and will continue to develop."

A commendable ambition of a grand mission in motion.

So commends **Prashant Govindan**, an avid music enthusiast, industry expert, and Founder-Director of Generation AV India: "Chris is probably one of the few left who have mixed for legends like Pink Floyd. These professionals used pure analog electronics and experimented with new loudspeaker concepts before the advent of modern line array systems."

Setting up a venue back in the day meant hauling and rigging multi-ton loudspeaker cabinets, ensuring that they were all connected properly and they provided adequate coverage for the massive stadium sized venues.

"They worked closely with the bands to ensure that the systems were an extension to the music and often an iconic feature in many a concert," says Prahant. "Chris, in his current role, is helping resurrect some old and vintage sound systems so that the current generation of audio enthusiasts and engineers can experience some of the greatest sound systems ever built."

A pure vintage music to those who can hear with heart.

CH Vintage Audio



ROBE: 30 Years at the Forefront of Lighting Innovation



In the fantastical realm of lighting and movement, where innovation dances with imagination, Robe emerges as a luminary celebrating its 30th anniversary in 2024. Amidst the vibrant tapestry of the Prolight+Sound expo in Frankfurt, the Robe booth stood as a pulsating beacon, captivating packed audiences with five daily performances that ignited the senses and left jaws agape. Within this mesmerizing spectacle, a constellation of groundbreaking lighting marvels took flight, each a testament to Robe's unwavering commitment to pushing the boundaries of possibility.

But the saga didn't end there. As the eve of the expo descended, Robe unveiled a monumental announcement: the acquisition of LSC Control Systems, a beloved Australian powerhouse renowned for its mastery over power distribution and control.



In the midst of this whirlwind of excitement and accomplishment, ETA had the privilege of delving into the visionary mind of **Robe's CEO & Co-founder, Josef Valchar**. Through his words,

we embarked on a journey through

the annals of Robe's history, tracing the trajectory of a company that dared to dream, dared to innovate, and dared to illuminate the world with its brilliance.



Founding and Early Years

Please share with us what instigated the founding of Robe.

It was a mix of music, business and opportune timing.

Ladislav Petrek and myself first met in 1992 – via another company – and there was an immediate synergy.

Ladislav was a DJ who had started importing lighting effects from other European countries, which had only recently become possible. Until 1989, the Czech Republic had been a part of the Eastern European block of countries and strongly influenced by the then USSR. Only after the communist regime collapsed was a modern 'market economy' introduced.

Looking closer inside some of the lighting units that were available back in the early nineties, we knew that they could be designed and produced to far higher standards locally! The Czech Republic has always had a reputation for good engineering skills.

I was fresh out of studying engineering at university ... I really enjoyed being a communicator, had a special interest in sales, technology, and marketing ... and was keen for a challenge!

What were the initial goals and challenges faced during the early years?

Ladislav and I thought about the idea of designing and producing high quality effects and lighting products that would be practical, robust, wellengineered and proudly 'Made in the Czech Republic'.

Everyone was dreaming big back then. We had a clear vision, lots of energy and the talent to make

all this happen was right on our doorstep! One of the main early challenges was getting our name out there and proving ourselves – as is often the case with start-ups.

How has the company evolved since its inception?

Robe was initially set up and gained some OEM manufacturing contracts for some very well-known and respected brands of the day – Steinigke in Germany, Coemar, TAS and Sagitter in Italy, Movitec in Holland, Starway in France, Elation in the USA.

'Mr Scan' was the first ever product sold ... as a SCAN 250 via a German OEM customer in 1994.



Robe's manufacturing facility in the Czech Republic.

By 2002 we had the experience and the knowledge, the manufacturing facilities and processes were all in place and running smoothly and efficiently ... we also saw the success of our products being sold under other names and getting popular for their reliability and good engineering.

We felt it was the right moment to move the operation – and the dream – forward. It was the next logical step to establish ourselves as a brand in our own right.



Even at this stage, several of our OEM customers were already eyeing up cheaper alternatives, mainly from China, and our biggest concern was that we could lose our business.

The first truly 'Robe' product was the Spot 250 XT launched in 2002, followed in 2003 by a new AT series of products – ColorSpot 1200AT, then in 2004 ColorSpot 250 and ColorWash 1200AT, then in 2005 ColorSpot 575, etc... The AT series became our first 'flagship' range, and the lights were really advanced for their time.

In some corners of the world you do sometimes still find them ... and still working!

We now have over 900 employees, six subsidiaries in key regional markets and our HQ is a 75,000 square metre production facility in Valašské Meziříčí in the northeast of the Czech Republic. We also own and operate another factory 50 kilometres away in Karvina with more production lines.

All the major components of the fixtures are produced locally. We also have our own PCB company, Dioflex, and our sister architectural LED brand, Anolis, also has its own production facilities.

Please share with us some of the key product achievements for Robe.

In **1999** we introduced the Spot 250 XT, the **following year** the Spot 575 XT was released. In **2003**, the ColoSpot 1200E AT, **2007** the ColorSpot 700E AT and in **2010** the LEDWash 600.

The launch of the LEDWash 600 in 2010 was a 'watershed'. It wasn't the first LED wash light, BUT hand on heart, I can say it was the best! That really was a transitional moment for Robe. We corrected many of the issues that had been present in the first generation of moving LED wash lights released by others ... we waited and were patient!

2013: Pointe was released – This was also a big landmark – it was the first truly multifunction moving light which performed all the different functions / modes really well. It kicked open numerous doors and still does today!

2014: The BMFL series was launched – This was a real defining and game-changing moment for Robe .



The BMFL Series.

BMFL became our signature 'bright multifunctional luminaire' and most powerful light source. We had been thinking about the design and development of this luminaire for three years, we had listened exhaustively to what end-users said they wanted and endeavoured to incorporate all of this into one incredible light!

Launching a range of products like BMFL definitely put us further on the map as a global brand, and fundamentally assisted in 'cracking' the North American Market.

2015: The DL7 Series was launched, and this started the development of theatre and performance dedicated LED luminaires with incredible colour mixing, super smooth dimming and quiet operation – all critical factors for this discipline.

2016: Spiider – Next generation of LED wash / wash beam.





MegaPointe.

2017: MegaPointe – This has become our single best-selling product ever to date - so much so, we had to purchase, kit-out and open a whole new factory and production facility to keep up with the demand! It was - and still is - THE light that everyone wants, and even though the discharge lamp tech is rapidly becoming obsolete, you'll find people worldwide who absolutely LOVE MegaPointes and could not contemplate drawing up a design without them!

RoboSpot remote follow spot system was also launched in 2017 ... and this is proving a seismic shift in the substance and essence of follow spotting, allowing all involved in the production process - from the designer to the director, the production manager to the prompter massive benefits and more flexibility to the core tasks of follow spotting and key lighting in all environments.

2018: T1 was the first luminaire in the current T-series of fixtures – available in Profile, Fresnel and PC versions - and perfect for theatre,

performance, television, broadcast, and events, but specifically developed for theatre and the arts. With ALL the features designers working in these sectors have been requesting.

2019: TE TRANSFERRABLE ENGINE technology this has been another complete game-changer in the world of LEDs. The hardware will outlast the lightsource as we already know, and now we have developed a 'transferable' or replaceable LED engine.

Not only can this be used to replace LED lightsources at the end of their lifespan, and therefore boost the investment value of the fixture hardware ... BUT different light engines with different characteristics can be swapped in and out - simply and straightforwardly - for lightsources with different characteristics, e.g. high CRI, HCF, etc.

Making this an interchangeable element of our ranges - FORTE, ESPRITE, PAINTE - is groundbreaking.

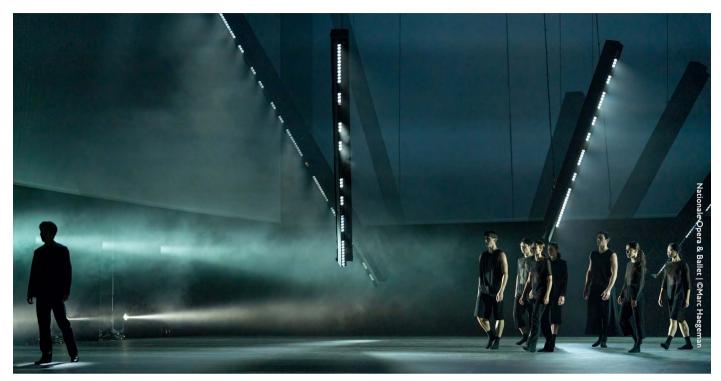
2021: The first of Robe's brand new FORTE series was launched for mid to large scale applications, touring, stadium shows, etc. As Robe's brightest LED moving head, it is also a contemporary equivalent of the flagship BMFL, hugely powerful, environmentally friendly - now available in iSeries (see below) versions and with different TEs -FORTE has a beautiful, flat field fat beam coming out the front.



iFORTE LTX.

71





Tetra2s used so dramatically for dance / contemporary ballet show FULL FRONTAL designed by Yaron Abulafia.

2022: iSeries – All the major / popular Robe product ranges are now available in fully IP rated versions for all environments and weathers. The fixtures are identical in features and nearidentical in physical size and weight, so rigs of the standard luminaires and the iSeries ones can easily be matched together.

2023: iFORTE LTX was launched, which is the brightest LED moving head luminaire on the market right now and is rapidly becoming a new industry standard fixture for concert touring, rental, and staging sectors as well as popular for larger theatres and concert halls.

Are there any particular projects or milestones that stand out in your memory?

In terms of projects ... really – there have been so many thousands over the years, all of them memorable for different reasons, so it's hard to recall.

There was an amazing show with Robbie Williams in Dubai in 2006 with Robe kit flown in from the UK – at the time that was such a big moment for us; our kit was used on three unique Israeli Opera productions in the middle of the Masada Desert at the Dead Sea; the first fully inaugural show for BMFLs in 2014 was the Opening Ceremony of the Commonwealth Games in Glasgow, where LD Tim Routledge had the faith to use our brand new luminaire on such a high profile event.

Our equipment is and has been on tour with some of the highest profile artists recently like Taylor Swift and P!nk or on U2s shows at The Sphere, classics like AC/DC, The Rolling Stones, Metallica, and other huge music starts and influencers like Lady Gaga and Bruno Mars.

There have been some amazing Armin Van Buren shows plus other major EDM movers-andshakers like David Guetta, Martin Garrix, global dance events like Tomorrowland and ULTRA, iconic festivals Like Glastonbury, Leeds-Reading, Coachella, EDC – there's far too many to mention, but you name them, and pretty much all over Europe and further worldwide our products can





Robe fixtures at the Black Pumas concert at The Salt Shed in Chicago in 2024. Photo copyright Derek Smith.

be found lighting up stages on these events and appearing on the lighting rigs of so many artists.

On the more 'alternative' performance front, we've seen Tetra2s used so dramatically for dance / contemporary ballet shows like FULL FRONTAL designed by Yaron Abulafia, and ubercool installations created by light artists like Christopher Bauder. ...

Not to mention the numerous major broadcast events including successive Eurovision Song Contests which will usually feature Robe fixtures and RoboSpot systems. Music TV shows like The Voice, Idol, Strictly and their international rollouts and versions, plus star-spangled awards shows like MTV's VMAs, iHeartRadio's Fiesta Latina ... again too many to mention!

And let's not forget Opening & Closing ceremonies for major sporting events – where often Robe will have a significant presence! Our T-Series continues to gain traction and some notable installations include The Paris Opera, The Vienna State Opera, The Hungarian State Opera, the Czech National Theatre and many more. All of these – and so many more – are all special in their own way!

How has the company contributed to the industry or community during this time?

We are proud of helping to build and being part of a community.

Robe is one of the most important employers in our region of the Czech Republic, with a reputation for offering good, sought-after jobs and being a desirable company to work for which can offer career paths and opportunities. And that's quite a challenge in CZ right now as there's almost full employment!



APRIL 2024



Lado Bizovicar illuminated by Robe fixtures at the Solvenska Muska, Photo copyright Jani Ugrin.

In terms of the industry, we are perceived, and I believe respected as an innovator, and think some of our technologies have become standardbearing.

We are also in the process of developing an international educational programme that will support infrastructure and systems training the next generations of production and lighting industry professionals.

Innovation and Technology

Can you highlight any innovative approaches or technologies that have been implemented in the manufacturing processes?

We have currently over 120 patents pending or issued, they cover the USA, EU, and Chinese territories. We have become a true leader in the innovation and development of new technical solutions which are used smartly in our products.

The iSeries, T-Series and all the TE fixtures are all replete with these original new technologies, which are changing the way we design products, enhancing their flexibility and how they can be used to benefit everyone's creative results.

What changes in technology have had the most impact on the industry over the years?

This has all been about LEDs and LED engines.

We have designed, developed, and patented our own LED engine technology in the "TE" concept which is now massively implemented across our product ranges.

The upcoming new laser light technology is on our radar, and we have already applied for more than 6 patents related to this covering our newly developed technology used in the iBOLT fixture which was launched at Prolight+Sound 2024.

Team and Culture

What values and principles have been crucial to the company's culture?

Many, many people, decisions, and circumstances have played a part in and influenced our trajectory over the years.



Our sales forces, the distribution network, the subsidiaries, the R 'n' D and technical teams, everyone working in production and administration at the HQ, etc. all of them are involved.

Robe is a people business. People have always mattered, and they always will. People are right at the base of our industry.

Right from the start we have realised the importance of people, personalities and of valuing individuals and giving them the space to grow and develop as this tends to encourage creativity and confidence.

We also try to offer flexible career paths and ways to move vertically and horizontally within the company.

We aim to inspire and to be inspired by others.

We all want Robe to work for our people and community, and to be so much more than simply 'a business'. We want to have a meaningful legacy and to have played a role in making a very special industry even more attractive to those with talent and passion.

Inclusion and teamwork are also vital of course – it's important to have differences of opinion and alternative suggestions and approaches to keep a balance. It's not about egos, but we have always looked for strong individuals who are also dedicated and good team players to be at our core.

All the ideas and creativity brought to the table have not just come from those working directly for us and the brand ... there have been numerous contributors and sources of inspiration – a diverse cross section of end users, advocates, fans, experts ... those who have been dedicated, trusted our technology, and believed in us and the products. There are actually no limits to the 'dynamics' involved in entertainment as a whole and what people will want or try to do imaginatively, and it is one of our missions to enable these journeys to happen.

Market and Global Presence

How has the company adapted to changes in the market over the past three decades?

I'd say very smoothly overall.

We've made a point of listening carefully and in detail and depth to market needs and demands. We have the ability and willingness to react and make changes, as well as being proactive in suggestions and ideas to help creatives achieve optimum results.

I think if you have good communication at all levels and particularly with end users, then you can avoid any big mistakes ...

Have there been challenges or successes in expanding the company's presence globally?

There are always challenges – they can be cultural, political, economic, multi-faceted – and each 'challenge' can be specific to a region and a set of unique circumstances.

We love taking these on and finding effective, canny, and sometimes lateral-thinking solutions that empower the colleagues / partners we are working with in any given situation, enabling them to keep moving forward.

What strategies have contributed to the company's competitiveness in the market?Constant innovations and new products!



APRIL 2024

How has the company built and maintained strong relationships with customers over the years?

As mentioned above, the people-focused approach has been encouraged throughout the company and through our distribution network. It's also been important for me to stay hands on with the product development, and to do this properly and effectively, it's also essential to stay in touch with people and be out there visiting them and their shows and events, seeing and appreciating their craft and business, and listening to needs, requirements and expectations.

That way we can shape our decisions and product development and respond nimbly and quickly when needed and this knowledge and information also directly assists our planning and development strategies.

There is absolutely nothing to beat good communication when forging lasting relationships and trust.

Are there any memorable customer interactions or feedback that have left a lasting impact?

There are too many to mention over the years. Listening to LDs, rental companies and other customers has really been a key factor to us – the more the better and from as diverse a range of regions and sectors as possible.

How does the company prioritize customer satisfaction and feedback?

Customer satisfaction is always the ultimate end goal, so that's a huge priority across the whole Robe operation – if we could not attain this, we would not really progress and grow at all.



The Swedish play "Så som i himmelen" featured Robe lighting for dramatic effect. Photo copyright Camilla Winther.

All the various feedback gets taken onboard seriously and is engaged with at some level depending on the topic. Where relevant to products, often it will be discussed with the R 'n' D teams and sometimes implemented in specific product developments.

Sustainability and Corporate Social Responsibility

How has the company addressed environmental sustainability and social responsibility in its operations?

We believe in sustainability – and have done since the start of the company, it's not just something we've adopted because it has become trendy or obligatory!

We are based in one of the most beautiful and unspoiled parts of Europe, so ensuring it stays that way has always been fundamental to our philosophy.

We also invested in making the products and the processes by which they are manufactured genuinely greener and cleaner a long time ago – way before it became a requirement!



One major way we are doing this is that all elements of manufacturing – plastic moulding, metalwork, PCB production, optical testing, etc., are completed in-house, and 85% of all the components used are sourced from within the EU, and building and maintaining our manufacturing base in the Czech Republic was a very conscious decision to initiate shorter supply chains with less transportation required to assemble the finished products.

Are there any initiatives or projects that showcase the company's commitment to sustainability?

Soil protection is one. From the start we have repurposed old industrial premises rather than building on a greenfield site, and all the processes involved in manufacturing the luminaires are undertaken locally at our factory, which is a reclaimed brownfield site.

Planned co-generation units will allow us to generate electricity and use the excess heat for the various production spaces and also to heat the offices.

Sustainable waste management is another area that we're constantly monitoring to ensure that the materials and techniques used minimise waste, and that all processes are as clean and as efficient as possible with water and electricity consumption. Recycling is actively promoted in all departments.

How does the company plan to further integrate sustainability into its future plans?

Currently we have a full-time ecological team working with us on this, looking at – and constantly reviewing – all aspects mentioned in the previous two questions, and how they all relate to our daily operation. We are always looking at how we can keep improving and moving forward.

Looking to the Future

What are the company's goals and aspirations for the next 30 years?

To continue working smartly and sustainably, innovating, and bringing excellent and relevant new products and technologies to the market, and developing complementary and industryrelated educational and community-based projects.

We are also diversifying. In the last two years, we have purchased two key brands also acclaimed in their own right – Artistic Licence in September 2022 and Avolites in June 2023. And of course, there is our 'sister' brand, Anolis, the architectural and architainment LED lighting manufacturer.

Both are involved in control technologies and that's really interesting for us. I can't say too much right now about our medium-term plans, but a lot will unfold throughout 2024 so "watch this space".

Now is an extremely exciting time for Robe!

We intend to continue growing and pushing all boundaries whilst staying focused on our core business as a lighting and LED manufacturer.

Parting Note

On a final note, I would like to add that numerous individuals have been involved in and as part of Robe's success. It's a big team and everyone matters. We will not be where we are today without the dedicated commitment of our team, our distributors, stakeholders and of course our clients.

Robe



SOUTH KOREA

Younha Brings NEXO Immersive Sound to Younha Anniversary Concerts

210 NEXO STM line array elements were used by Yamaha AFC Image to create an exhilarating, threedimensional soundtrack foro Korean singer-songwriter Younha's 20th anniversary concerts



Korean singer-songwriter Younha celebrated 20 years since her stage début with concerts at the 15,000 capacity KSPO Dome in Seoul, formerly the Gymnastics Arena for the 1988 Summer Olympics.

Titled 'Twenty', the concerts were among the first large-format popular music events to feature immersive sound, with Yamaha AFC Image creating a thrilling, 3-dimensional soundscape delivered by a total of 210 x **NEXO STM line** **array elements** comprising 9 x clusters of STM M48/B112 with **M28 down fills** hung across the front of the stage, supplemented by 3 x central clusters of 12 each **STM S118 subs** in an end fire configuration. Power and processing came from multiple Dante-equipped **NEXO NUAR Universal Amp Racks**

The system was designed and deployed by local event sound specialists and STM rental partner **Way Audio** , where they used AFC-compatible





NEXO NS-1 design and simulation software to configure the system which was tested and tuned at the warehouse for a period of a month leading up to the concerts.

Drawing on songs written throughout her career so far, Younha recalled her debut performance at a small café in Shibuya, Tokyo. Twenty years later at the KSPO Dome, a venue known for its challenging acoustics, each audience member enjoyed thrilling immersive sound with sources dynamically mixed on 72 channels and localised within the space.

When Younha greeted the audience, her voice surged around the arena like a wave, and fans knew they were in for something special. "When the performance began and the band began to play, a sound that no one expected burst out" commented Way-Audio Senior Engineer A-ram Nam. "The sense of positioning of the instrument properly arranged around the stage improved the separation of each instrument within the mix.

"After the performance, hundreds of reviews from general audience members commented





on how they were impressed by the high level of sound quality."

NEXO

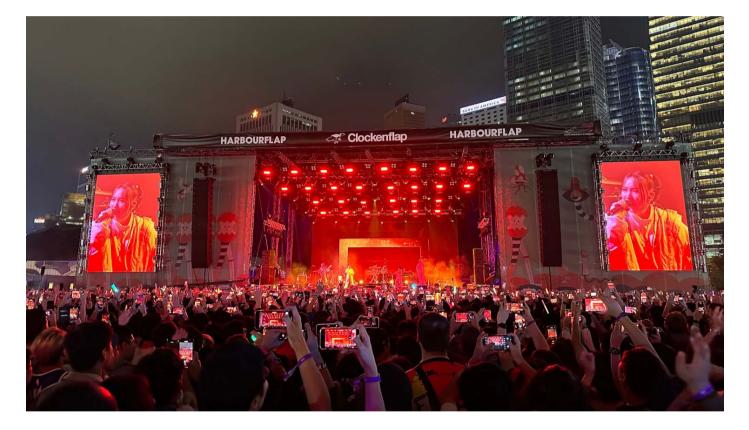
APRIL 2024



HONG KONG

Martin Audio MLA Rocks Clockenflap and Keeps Residents Happy

Despite residents around the Clockenflap festival adapting to its noise, the sound team decided to completely remove the noise at the rear of the stage area with Martin Audio's multi-award-winning MLA



As Hong Kong's biggest and longest-running outdoor music and arts festival, Clockenflap was again held over three days at the Central Harbourfront, overlooking Kowloon. Operating over six stages, it featured an all-star line-up including Pulp, Joji, Yoasobi, Caroline Polachek, IDLES and many others.

MSI Japan was appointed as the production partner for the event's largest Harbourflap stage, where they deployed a **Martin Audio MLA array** Responsible for the sound system design were MSI's Bunshiro 'Bun' Hote, Yasuhiko 'Yasu' Watanabe and Yukio 'Eddie' Tanada, who explained that one of the biggest challenges faced at the event was noise control. It was not so much about controlling the noise out the front of the stage as much as limiting the audio coming out the back of the stage. Behind the stage were several government buildings, residential properties and hotels. In past years, there had been complaints from residents so MSI needed to focus on rear rejection.







It immediately became apparent that, to control the sound across the entire frequency waveband, their only choice was to deploy Martin Audio MLA, with its advanced DISPLAY control and optimisation software.

By further adding a full cardioid subwoofer array, using 30 x MLX, they could achieve close to 30dB rejection at the rear of the stage.

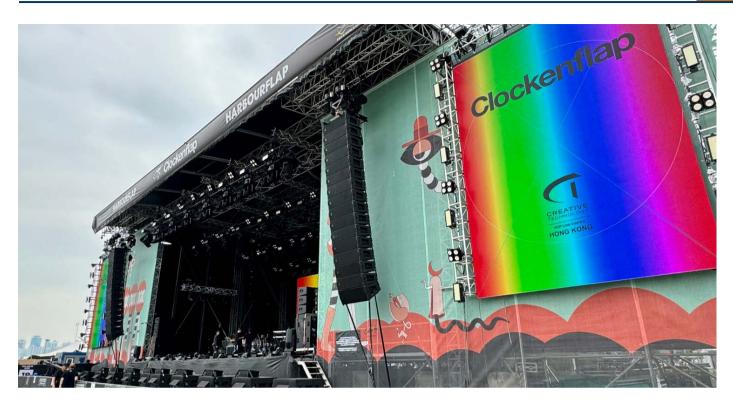
The two hangs of 15 x Martin Audio MLA and a single MLD downfill box were addressed by **DISPLAY**, the software enabling MSI to control the coverage for the audience. At the same time, by utilising the 'Hard Avoid' feature at the rear they could eliminate audio from the stage, and therefore also from the residents behind the stage. Limits were also placed at the edges of the audience areas to ensure maximum focus on the audio where it needed to be, without escaping across the water to the Kowloon side.

Clockenflap sound director, Sem Cigna, has been working on the event since 2016 and has seen several sound systems on the main stage over this time. Sem used MLA for the Gwen Stefani concert in Hong Kong in 2019 as well as the Rugby Sevens, and familiarised himself with MLA in a similar configuration to this show (although with slightly fewer subs). There were similar demands back then and after that show, Sem commented, "I was able to experience just how MLA could reduce the audio outside the audience area without losing any impact for the audience itself." They experienced the same thing at Clockenflap this year.

Sem has worked alongside the event's production manager, Peter Gorton, since 2019—and it is the latter who is ultimately responsible for managing the noise thresholds, which all six stages have to conform to.

He explained, "When the venue moved from Kowloon to Central [Hong Kong] several years ago, one of the biggest requests from the Government was to manage the noise for the residents. They subsequently endured several years of trial and error, testing different options, from hiring cranes to fly and evaluate different ENTERTAINMENT TECHNOLOGY ASIA

LIVE





line arrays on-site, to craning in large sandbags to sit behind the subwoofers to block sound from the rear of the stage.

Over the years various solutions were evolved without using sandbags, and this year they selected Martin Audio's award-winning MLA to eliminate the noise at the back of the stage area.

Noise levels were monitored at four points around the city, three in Central and one across

the water in Kowloon. Residents may have adapted to having the Clockenflap Festival in the city; however, Peter and the team never took this for granted, particularly as Clockenflap continues to expand. "In 2024, there will be a festival in Singapore, in addition to the original one in Hong Kong," he explained. "We also have plans for other shows and festivals in HK."

Having worked with MSI over the years they were delighted with the deployment and performance of MLA, which delivered the punch and impact they were hoping for, especially for bands like Yoasobi, the Japanese J-Pop band who were playing for the first time in Hong Kong. They sold out the Friday night and blew away the excited audience with their energy.

The final word came from Fujita Kengi, Yoasobi's FOH engineer, who has mixed on MLA many times. He described the resolution of MLA as being a "standout feature" making it easier for him to focus on the mix, and thereby create maximum impact for the audience.

Martin Audio

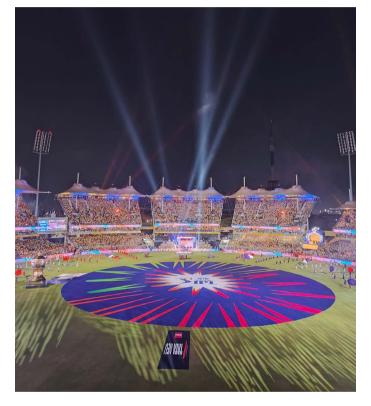


INDIA

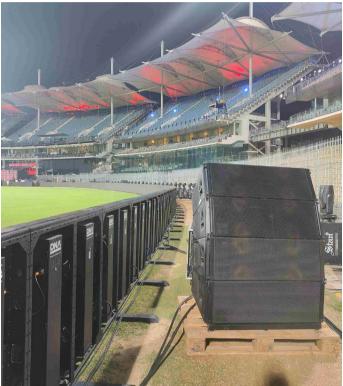
Echoes of Excellence

Reynolds Sound & Lighting Services crafts technical brilliance to kick off another exciting season of cricketing magic with the Indian Premier League (IPL)

by Elton Noronha



Cricket, deeply ingrained in the fabric of modernday India, transcends the status of mere sport to become a national fervour and a unifying force that binds together millions of hearts and souls. At the forefront of this cricketing frenzy stands the Indian Premier League (IPL), a spectacle that not only epitomises the spirit of the game but also redefines entertainment on a grand scale. And as the curtains rose on the 2024 season, the stage was set for an unparalleled extravaganza, with the iconic MA Chidambaram Stadium in Chennai serving as the epicentre of this grand celebration.



The IPL, with its unique blend of cricketing prowess and star-studded entertainment, has consistently captivated audiences worldwide. And the 2024 season promised to be the grandest yet; as fan-favourite celebrities like actors Akshay Kumar and Tiger Shroff, music maestros like Sonu Nigam and the award-winning composer AR Rahman, and renowned Swedish DJ / record producer Axwell were confirmed to perform at the event. And on the 22nd of March 2024, the cricketing universe converged at the historic MA Chidambaram Stadium for a spectacle of unprecedented proportions.



LIVE

A prelude to the exhilarating cricketing battles that lay ahead, the grand opening ceremony unfolded amidst a symphony of lights, sound, and electrifying performances; with over 370 million viewers tuning in from across the globe and a live audience of more than 40,000 spectators – as the 2024 season of the IPL lived up to all the hype of a spectacle that has seldom been witnessed on a cricketing ground. And central to the mesmerising experience that enchanted the audience, was the emphasis on production quality – as organisers spared no expense in crafting a visual and auditory feast for the senses.

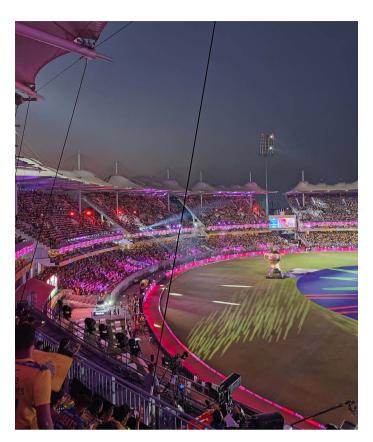
Spearheading the technical wizardry behind this extravaganza was Reynolds Sound & Lighting Services – one of India's most reputed solution providers – who were entrusted with the task of orchestrating a seamless fusion of sound and light; with the Reynolds Sound & Lighting Services team recounting, "The MA Chidambaram Stadium stands as both an iconic and imposing venue; and with the 2024 IPL season set to be the grandest yet, our team at Reynolds was fully engaged. We're no strangers to mega-productions, and our team's wealth of experience and innate knowledge in audio and lighting was on fulldisplay for this project, as we came together to craft a technical plan that not only met the monumental scale of the event but also left the audience in awe with its exceptional performance and unparalleled experience. The countless hours of meticulous planning and execution proved worthwhile as we witnessed the breathtaking experience enjoyed by both the audience and spectators!"

With the heartbeat of any grand production lying in its sonic experience; team Reynolds rose to the occasion as they meticulously crafted a thorough audio architecture that was designed to envelop every corner of the stadium in a pristine soundscape. Following an extensive analysis of the entire expanse of the stadium to determine the desirable throw and coverage, in addition to accounting for the open-air setting of the venue; team Reynolds deployed state-of-the-art technologies to unveil a formidable and cohesive deployment of sound systems that were expertly

APRIL 2024



LIVE



tailored to deliver an immersive experience for those in attendance at the venue.

At the heart of the magnanimous audio setup were 36 units of the KSL line array modules from **d&b Audiotechnik**, deployed in stacks of 4 units each, strategically positioned to cover the entire seated audience area and galleries. Complementing this was a strategic deployment of 16 units of the XSL line array modules to ensure superlative sound quality in crucial areas such as VIP sections and team dugouts. Furthermore, Reynolds employed an astutely crafted fill reinforcement solution that featured 16 units of the MSL4 long throw powered loudspeakers strategically placed around the stage and backstage areas to guarantee a thoroughly consistent sonic experience.

Adding depth and resonance to the overall soundscape that enveloped the MA Chidambaram Stadium was a masterfully orchestrated subwoofer deployment by team Reynolds, wherein they leveraged 16 units of the cardioid-patterned SL-SUB subwoofers from d&b Audiotechnik and 24 units of the endfire 700HP subwoofers from **Meyer Sound**. Through careful and meticulous beam-steering, Reynold's employed a combination of these highperformance subwoofers to make sure that the audience was engulfed in deep bass resonance while ensuring the least possible disturbance to the players on the pitch.

Not content with just delivering an exceptional auditory experience to the audience, team Reynolds also made it a point to ensure that stellar line-up of artists and performers on stage were treated to world-class sound quality as well. With 6 units of the MJF 212A loudspeakers serving as the primary stage foldback solution, along with cutting-edge inear monitoring systems from Sennheiser and Shure, artists and performers were afforded with the opportunity to be immersed in a sonic environment conducive to stellar performances. Further enhancing the performance experience was the thoughtful provision of the world-class Axient Digital Wireless Microphones from Shure to serve as the wireless microphone solution; whereas a multitude of Hollyland solid comms formed the backbone of uninterrupted and clear coordination between critical event crew members.

Central to the seamless control and distribution of audio signals was the deployment of the acclaimed SD10 and SD5 digital mixing consoles from **DiGiCo**, connected via a redundant Optocore loop with 2 units of the SD Rack and offering a total of 112 inputs and 89 outputs. Team Reynolds leveraged the **DANTE** AoIP protocol to facilitate uninterrupted and stable signal distribution and control, thereby ensuring unparalleled reliability and performance across the entire audio architecture.

"Considering the scale and the expanse of the loudspeaker deployment and the audio setup





in general, we knew from the get-go that we'd need a formidable infrastructure to ensure seamless and sustained signal distribution. And we were able to achieve this while also offering total ease of control over the entire setup by choosing to leverage the DANTE AoIP protocol. We deployed a total of 6 units of the DS10 audio network bridge from d&b Audiotechnik in combination with 4 units of the SWP-1 switch from Yamaha. Furthermore, we made sure that the aforementioned systems were connected with multimode fibre via custom built HMA patchbays and cables imported from Van Damme Cables, thereby allowing us to assure full-redundancy and exquisite stability" informs Selwyn Remedios of Reynolds Sound & Lighting Services as he details the meticulous planning and commissioning that went behind coalescing a truly superlative sound experience for the event.

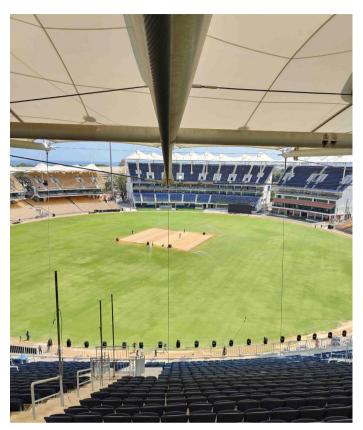
While the audio experience set the stage alight with its immersive brilliance, the visual spectacle was equally mesmerizing, thanks to Reynolds' expert commissioning of a mammoth entertainment lighting infrastructure, wherein the team meticulously deployed over 2000 worldclass lighting fixtures and 24 high-performance lasers across the stadium to create a visual extravaganza of unparalleled magnitude and impact.

From the captivating RGBW LED PARs to the dynamic moving head beams and washes, team Reynolds spared no effort in expertly combining the multitude of lighting fixtures to craft a truly magical and sensational visual spectacle. The breath-taking deployment included 800 units of RGBW LED PARs, 100 units of LED battens from Montana, 200 units of PR 330 moving head beams, 36 units of AQUQ 480 BSW spots from PR LIGHTING, 200 units of HYDRO BEAM X12 moving head beams from **AMERICAN DJ**, 60 units of X-FRAME BSW sharpys from CLAY PAKY, 120 units of CYAN 6000 XE moving head washes from SILVERSTAR, 36 units of ESPRITE moving head profiles from ROBE, 20 units of DIAMOND BACK moving battens, 48 units of COLLIDER FC RGBW strobes from EK Lights, and 4 units of 2.5 follow spots from EMLITE.

In addition to providing this gigantic lighting infrastructure to the event's designated lighting



LIVE



designer to showcase their creative brilliance; team Reynolds also ensured that the LDs were afforded unparalleled control by providing 3 units of the industry standard grandMA 3 fullsize lighting controller console from MA Lighting. The event's LD leveraged the unmatched feature set and power of the grandMA3 to enjoy precise control and synchronization of lighting effects, with team Reynolds further guaranteeing impeccable stability and redundancy across the entire lighting setup through ArtNet facilitating seamless signal distribution.

"Considering the magnitude of the lighting setup and the enormous number of fixtures required to do justice to an event of this scale, ArtNet was the only logical path for signal distribution to all the fixtures around the stadium. We deployed our newly acquired Netgear Pro AV line of switches with 10Gbps uplinks to ensure smooth operation and failsafe networking. Each of the **Netgear** Pro AV switches in-turn fed cleverly positioned ArtNet



Felix Remedios ensuring that the sound and light are working accordingly.

Nodes from Elation, which then ran DMX to the fixtures" informs Selwyn.

In the grand tapestry of the IPL 2024 season kickoff, Reynolds Sound & Lighting Services emerged as the unsung heroes, orchestrating a symphony of technical wizardry that transcended the boundaries of mere entertainment. And as cricket enthusiasts worldwide gear up for another exhilarating season, the memories of this grand spectacle at the MA Chidambaram Stadium will linger on, a testament to the power of sport and spectacle to unite and inspire.

Reynolds Sound & Lighting Services

Earn Course Certificates & CEU's ANY Place. ANY Time.

SynAudCon is the world leader in online training for audio practitioners.

Courses available that serve all levels of expertise and on a wide range of topics.

SynAudCon focuses on the principles: When the "why" is clear, the "how" becomes intuitive.

Drosonal Prosonal

When knowledge increases, opportunities will follow.



systems inlegrationasia