

For The Technical And Production Professionals in Asia



FIRST GLP IMPRESSION X5 IP BARS HEAD TO THE TINA TURNER MUSICAL

NEWS:

EESA Takes An Industry-Redefining Stand On Rigging Safety

ENNOVATION:

L-Acoustics Launches Line Array Technology into the Future with L Series

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FIRST WORDS





The Event Equipment Services Association (EESA) is India's leading not-for-profit national organization dedicated to promoting a structured, secure, and progressive business environment for and within the event equipment rental services industry and the event technical services industry in India. Recognizing the alarming rise in mishaps at events due to

gross negligence and an unacceptable disregard for safety standards and protocols, EESA took an unwavering stance on the matter, with the belief that a tangible difference could only be achieved by actively disseminating high-quality knowledge and information on this crucial subject. As a result, the Association assertively commissioned India's first-ever internationally recognized rigging certification Masterclass to a rousing response and followed it up with an exceptionally successful training seminar on chain safety. You can read more details about it in our Special Report pages.

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EAW Expands Further with GSL Professional as its Newest Distributor



(L-R) Steve Badham, International Audio and Acoustics Technical Sales Specialist, EAW; Fouad Fowzi, CEO, GSL Professional; John Dodson, Regional Representative, EAW, MEATHG.

GCC: Eastern Acoustic Works (EAW) has introduced GSL Professional as its newest distributor in the Gulf Cooperation Council (GCC) area as well as Egypt, thus extending its footprint in the Middle East.

Established over 20 years ago, GSL has built a dynamic team of highly experienced professionals to offer comprehensive solutions for recording, broadcast, hospitality, houses of worship, stadiums and more. The company's alignment with EAW further cements this dedication, having long admired EAW's commitment to delivering exceptional sound quality and innovation within the industry.

As the AV and live sound markets in the GCC region continue to grow, GSL recognized the need for toptier sound solutions. Aiming to deliver exceptional experiences to customers and their audiences, a partnership with EAW was a natural fit for the demanding requirements of local events and productions. EAW's products are highly regarded in the industry not only for exceptional performance and durability but also for innovative technology and design trends.

"We are thrilled about our partnership with EAW," said president Fouad Fowzi, CEO of GSL Professional. "EAW's combination of innovative design, strong

customer relationships, ongoing product development and commitment to quality and performance will be key to its success in this highly competitive market. Together, we will continue to deliver exceptional sound solutions to our clients in the GCC region and Egypt."

Further investing in EAW's regional customers, GSL offers a dedicated service centre located in Dubai to support clients and ensure a satisfactory after-sales experience. Featuring highly skilled and experienced technicians, the service centre handles a variety of maintenance, repair and support services. Additional support can be found through GSL's product specialists, who offer on-site assistance that stems from a thorough knowledge of EAW and extensive industry experience.

"Welcoming GSL Professional as our newest distributor is an exciting venture for EAW," concluded T.J. Smith, president of EAW. "GSL provides only the highest level of technical, marketing, service and sales support, for both consultants and integrators, as well as venue operators, engineers, end-users and more. We look forward to creating a strong and enduring partnership that will bring more opportunity to our GCC-region customers."

EAW

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PROLIGHTS Achieves ISO 14001:2015 Certification



GLOBAL: Music & Lights, the brand owner of PROLIGHTS, has received the ISO 14001:2015 certification for "Environmental Management Systems". This achievement confirms the commitment of the company to the research of new eco-friendly technical innovations. This certificate joins the already ISO 9001:2015 certification for "Quality Management Systems".

Music & Lights has been consistently oriented towards a more eco-sustainable production. The 2021 Best Performance Award of Bocconi University (sixth place in the 2023 FT Global MBA Ranking) has declared the company's excellence on a national level according to the criteria of performance, innovation and ecosustainability.

Music & Lights has directed its technological offer towards a sustainable upgrade of productive processes. With PROLIGHTS, the company's commitment is to develop and promote on a worldwide scale high-efficiency and eco-friendly lighting technologies.

Moreover, the company has made available for the staff a recreation room and a large green area with a farm and an organic vegetable garden. This is additional evidence of its eco-oriented vision encouraging all company stakeholders to join a more sustainable lifestyle, not only during production processes but also in wellness areas.

"Our work is focused on innovation, human resources and sustainability." Franco Sorabella, founder and CEO of Music & Lights, stated, "ISO 14001:2015 certification is for us a new starting point towards an optimization program of all our production processes: a commitment to developing an innovative company culture. We'll continue to work with determination and perseverance to reduce our environmental impact significantly and to develop innovative fixtures that combine high-performance and eco-sustainability".

PROLIGHTS



L-Acoustics K Series Brings Unrivalled Power to SIAM Songkran Music Festival





With performances ranging across diverse electronic sub-genres such as big room, progressive house and hardstyle, the festival requires a professional audio system that can keep the tempo strong for the 10,000 festival goers who came to dance each day.

Festival producers WAVE BCG and One Asia Ventures Co. Ltd. called on One Systems Global Production to design and deploy a full-range, powerful PA to create a dynamic concert speaker system for the festival. One Systems are known for providing audio and lighting support for high-profile events such as the Together Festival and Wonderfruit Festival in Thailand calling on their years of experience with large-scale outdoor events, they specified an L-Acoustics K Series professional audio system for SIAM Songkran.

"A powerful audio system is necessary to capture the energy of EDM music, especially in a spacious outdoor venue like the RCA," explained Anusorn Peetiwattanaphan, front-of-house engineer for SIAM Songkran, who regularly collaborates with One Systems. "A K Series-based system is especially popular with



top-tier artists, and we knew it would be accepted by our headliners like Afrojack and Hardwell."

Anusorn worked together with systems engineer Chayut Boonchuayjaroen and the One Systems team to model a concert speaker system using L-Acoustics Soundvision software that would deliver optimal coverage to the 6600 sqm audience area. Their system design consisted of a main PA of 16 x L-Acoustics K2 and 6 x K1-SB subwoofers per side. 12 stacks of 3 x KS28 subwoofers were ground stacked evenly in front of the stage. Out-fill consisted of 8 x K2 boxes per side, while 4 stacks of 2 x Kara II provided front-fill. On-stage DJ monitor systems consisted of 4 x Kara II atop 2 x SB18 subwoofers per side as well as a 115XT HiQ wedge.

A VIP Zone at the rear of the vast audience received coverage from a delay system of 4 x Kara II per side. The entire system was driven by 42 x LA8, and 15 x LA12X amplified controllers running through 2 x L-Acoustics P1 processors.

"This year's SIAM Songkran [was] a unique experience for EDM music lovers," concluded Anusorn. "The professional audio system provided by One Systems ensured that festivalgoers were fully engaged in the dynamic, high-energy dance music without skipping a beat throughout all four days."

L-Acoustics



Record High Visitor Turnout for Prolight + Sound Guangzhou Signals Recovery of the Industry









CHINA: The 2023 edition of Prolight + Sound Guangzhou (PLSG) illuminated a strong outlook for the global entertainment and pro AV industry, with a significant 61% increase in visitors, culminating in a new high of 85,046. The four-day show featured over 50 fringe events and showcased 1,403 exhibitors across 130,000 square meters of exhibition space, also representing a 35% growth from the previous edition.

At the fair's conclusion, Richard Li, executive director of Messe Frankfurt (HK) Ltd, stated: "Given the recent positive outlook for the global entertainment and pro AV industry, and the opening of China's borders in January this year, we are delighted that this year's show has set a new record for visitor numbers. The enthusiastic response underlines Prolight + Sound Guangzhou's status as an indispensable platform for both local and international industry players."

"The show goes beyond just showcasing the latest advancements in entertainment and pro AV technologies to also highlight the vast potential applications of these solutions in a variety of industries: from entertainment, construction, and the commercial sector, to cultural tourism and personal use. This wide coverage is one of the key reasons for the fair's growing popularity. The possibilities for leveraging lighting and sound solutions are endless. For instance, we strategically separated the Recording and Production Zone this year to help industry players capitalise on the rapid growth of the personal recording market, and we are pleased that it was well-received by both exhibitors and visitors," added Li.

Hongbo Jiang, director of the Guangdong International Science and Technology Cooperation Centre, was also delighted with the outcome: "As the cultural and entertainment industries make a full recovery, markets such as concerts, stage performances and cultural tourism are all flourishing. As a result, the PLS Unicorn Series was once again a highly popular attraction at the fairground, illustrating its position as a pioneer for showcasing excellence in the industry. The immersive experiences created by the pro AV solutions, media art and stage installations captivated audiences and demonstrated new standards for what's possible in the world of events and live performances.

NEWS

The show also boasted a diverse fringe programme and the highly-anticipated PLSG Annual Training Course. Participants and speakers alike praised the events for valuable information exchange, networking and training opportunities that enhanced the overall show experience."

Among the wide range of events, the uniquely situated Recording and Production Zome was particularly successful. It brought together leading industry media and top-tier exhibitors within the personal recording market. Visitors and buyers had the opportunity to make purchases directly from suppliers while seeking professional advice at the same time.

Hao Liu, Technical Manager, Synthax China, reflected on his experience, "We really appreciate the uniquely situated Recording and Production Zone because it's specifically designed for suppliers like us. This zone converges professional recording and production companies, which attracts our target customers. Not only does it draw a large amount of visitor traffic, but visitors also spend a considerable amount of time exploring exhibitors at the zone. As a marketing platform,

the show's cost-effectiveness is impressive. We have the opportunity to showcase our product quality and technical features here, contributing to the industry's development."

Major participating brands this year included the likes of ACE, ACME, Audio Center, Audio-Technica, Beta-Three, Big Dipper, BIK, BMB, Boray, Bosch, Bose, Cadac, CD-Stage, Charming, D&B Audiotechnik, Danacoid, Dare, DMT, Eagle Truss, EZ Pro, Fidek, Fine Art, Golden Sea, Gonsin, Haimei, Harman International, High End Plus, Hivi, ITC, Jusheng, Longjoin Group, Mode, Neutrik, Nightsun, PCI, Phoenix, Pioneer DJ, Plustruss, Polar Lights, Qiangli Jucai, Ray Long, SAE, Se Audiotechnik, Sennheiser, Showven, Shure, Soundking, ST Audio, Star-Net, Taiden, Takstar, Yamaha, Yeahtone, Yin Chuang and Zhonghui.

Prolight + Sound Guangzhou is organised by Messe Frankfurt and the Guangdong International Science and Technology Exhibition Co Ltd (STE). The next edition will take place from 23 – 26 May 2024 at Areas A and B of the China Import and Export Fair Complex.

Prolight + Sound Guangzhou

Robe Lighting s.r.o. Acquires Avolites

GLOBAL: Robe Lighting has agreed to acquire Avolites. The agreement was reached in the UK where Avolites will remain based and continue under the existing leadership team.

"This is a great acquisition for Robe", stated Josef Valchar, CEO of Robe lighting s.r.o., "Avolites has always been at the pinnacle of lighting control with products that complement our lighting fixtures; this will add significant value to sales made throughout the global distribution networks of both companies".

The acquisition of the Avolites business is an important part of Robe's strategic future growth plan.

Alongside the agreement, Robe has a wealth of resources that will assist Avolites to accelerate its ambitious innovation and product development programs.

"The Avolites leadership team wanted to ensure the best outcome for our employees, customers, suppliers and the brand," concluded Avolites MD Paul Wong, "Robe is an ideal home that will enable us to achieve just that, whilst maintaining our core values. Robe is a great fit for everyone associated with Avolites".

Robe



Sun Group and Global 2000 International Introduce City-Wide Access to Audio for DIFF 2023



© Danang International Fireworks Festival 2023 & Sun Group.

VIETNAM: There is nothing quite like a fireworks display: the flames, the smell of smoke, and the big explosions. After a three-year hiatus, the 2023 Danang International Fireworks Festival (DIFF 2023) in Vietnam made its highly anticipated return to Ba Na.

Working with its main sponsor Sun Group, international consultants Global 2000 International turned to Cinewav to provide high-quality synchronised audio via mobile phones. A first for an international fireworks festival. As such, locals and tourists across Da Nang, Vietnam's fifth most populated city, could listen to a clear, crisp soundtrack using their smartphones in perfect sync with the fireworks themselves.

Pham Tu Cau, vice president and CEO at Sun Group Central Vietnam, Executive Office of Central Region was instrumental in bringing Cinewav on board to play a part in DIFF 2023. "It truly inspired me. I was struck at the sound quality which perfectly matched the visuals. This is also the first time in Vietnam that a renowned festival like DIFF applies this technology. DIFF 2023 is a great way to showcase international talent to a local audience,

to attract tourists to the area and promote the local economy and businesses. I believe that Cinewav is a game changer for large-scale events."

For each scheduled firework event, visitors downloaded the Cinewav app to their smartphone from Apple, Google Play or Huawei AppGallery, got the audio ticket free of charge and pressed play.

"We're breaking all records in fireworks design and innovation. With Cineway, the whole city can enjoy the full experience of the fireworks which are carefully choreographed to musical scores. DIFF 2023 is combining the very best in knowledge and rich history in beauty, danger, and invention without boundaries,' said Nadia Shakira Wong, managing director of Global 2000 International.

This year, the festival theme was 'Light Up a Borderless World' with fireworks displays from the very best in pyrotechnics, including a local Vietnamese team and seven international teams - Art Eventia (France), Howard & Sons Pyrotechnics (Australia), Joho Pyro Professional





(Finland), Martarello Fireworks Company (Italy), Pyrotex Fireworx Company (United Kingdom), Surex Firma Rodzinna (Poland) and TW Hand Fireworks Co (Canada). Each team lit up the sky with fireworks and to set the mood, a bespoke melody and soundtrack were created to evoke strong emotions from the audience.

Andrew Howard, director at Howard & Sons Pyrotechnics (Australia), described his involvement at DIFF 2023: "We have designed and programmed every single pyrotechnic effect to launch and burst in perfect time with the music soundtrack. The audiences being able to immerse themselves in the emotive music soundtrack and then be mesmerised by the magic of our fireworks effects dancing in perfect synchronisation with the music is what we always want to achieve in producing our displays. Together the fireworks and the music soundtrack create a powerful pyromusical production, a once in a lifetime event experience creating vivid memories they will remember for the rest of their lives.

"Cinewav ensures that a broader audience at our fireworks displays are able to tune into the music

soundtrack and hear the powerful music scores and enjoy pyromusical production," added Howard.

Using Cinewav offered significant benefits to event organisers. Howard continued: "Traditionally event sites have a large-scale audio distribution system installed in main audience areas but not in all spectator vantage points. Our fireworks displays can be designed to be viewed by spectators spread over several kilometres of an event site or city not just the front row of seats. This technology gives the power of music to the people to ensure they can hear the music soundtrack."

Christian Lee, co-founder of Cinewav concluded: "This is the first fireworks festival that Cinewav has been involved with and we are proud to be a significant part of it.

Cineway



Yamaha AFC and NEXO Help Create an Immersive Opera Production





SOUTH KOREA: A recent production of Verdi's La traviata in Busan wowed audiences with enhanced acoustics and amplified sound alongside effects that tracked the performers as they moved around the stage.

Staged in the open cultural complex and former wire factory F1963, Yamaha AFC was used to create the spatial feeling of a classic concert hall, while each performer wore a TTA Stagetracker location sensor along with a wireless microphone pack.

The sound was reproduced in 3 dimensions by multiple speakers positioned around the venue including 5 x NEXO P12s along the top of the stage and NEXO ID24s suspended on wires above the heads of the audience. Additional NEXO PS speakers filled in from the sides, with amplification and processing for all NEXO speakers coming from NXAMPMk2 powered controllers.

Building on a successful earlier production of the Marriage of Figaro with the same director, sound engineer Suyong Lee designed the system using NEXO NS-1 configuration software which now includes AFC Design Assistant for the integrated design of immersive sound systems.

"In conjunction with the Yamaha PM5 console, the necessary sound effects were adjusted in real-time on the console" explained Suyong. "For example, the sound of the carriage was controlled by the touch screen of the console in accordance with the movement of the carriage projected on the stage between acts.

"The clear and precise sound quality of the NEXO P12 is perfect for classical music and the lightweight and variable HF directivity of the ID24s made it possible to achieve the coverage we need over the audience."

In a genuine team effort, the system was installed by Magic Alpha Sound with speakers supplied by Mania Sound. The Spatial Audio team from Yamaha HQ were on hand to advise on AFC and Sound Solution provided tech support for the Stagetracker deployment.

"Most of all I want to thank the director Yoon Sang-ho who didn't hesitate to agree with my proposal for an ambitious sound system design that helped take the performances to a new level."

Nexo



TSM Reports First Sale of Ayrton Diablo S Fixtures to Creative Rock Thailand





© Courtesy TST/Creative Rock

THAILAND: Total Solution Marketing Thailand (TST), Ayrton's exclusive distributor for Thailand, has reported its first sale of Ayrton fixtures in Thailand with the purchase of 16 x Diablo S by Creative Rock Thailand.

Creative Rock Thailand, which specialises in servicing high-end international conferences, was looking to upgrade its existing 700W moving lights to LED fixtures. "We had been hearing of the growing popularity of the 300W LED Ayrton Diablo so we compared it with several other LED moving light brands," said Creative Rock's managing director, Wikran Maneesri (Nit). "We found the Diablo to be compact and lightweight and surprisingly very bright for its size. It has everything we need for the conference market: framing shutters, good colours, smooth dimming and great output. It is very versatile, which means we can use it across many segments including conferences, theatre and live events.

"What's more, my team love it because Diablo's small size and light weight make it very easy to handle, and its build quality is great so it is a very easy fixture to maintain.

"As we are the first in Thailand to invest in Ayrton we initially had some reservations as to what to expect of these fixtures.... but their performance has well exceeded our expectations. Consequently, we are planning to grow our Diablo inventory as they have proved very popular and we are getting more Diablo requests from our clients."

Creative Rock Thailand was also very happy with the service received from TST which introduced Diablo S to the company. "We have worked with Total Solution for many years and have consistently received high levels of good post-sales service and technical support over the years, not just in lighting but also excellent support in media server products," confirmed Nit.

"We are very thankful to Creative Rock Thailand for being the first company in Thailand to believe and invest in Ayrton products," commented Tevin Heng, executive director of Total Solution Marketing Thailand. "We are delighted that the Ayrton Diablo S performance has surpassed their expectations and is getting good reviews from lighting designers and clients in Thailand."

Ayrton



INFILED GXII Series Serves as Main Visual for Eunpyeong-gu Cherry Blossom Festival



SOUTH KOREA: INFILED provided a GXII series screen for the Eunpyeong-gu Cherry Blossom Festival in Seoul. The high-definition screen served as the main visual solution for the festival stage.

This year's Eunpyeong-gu Cherry Blossom Festival was held next to the Bulgwangcheon River, where beautiful cherry blossoms were in full bloom, attracting a large number of tourists. To make the festival teeming with life, the event organizers carried out a series of activities such as book-sharing sessions, amusement fairs, and program performances.

As one of the highlights of the event, the performance configured a stage with a powerful surround sound system and an outstanding INFiLED screen. On this stage, well-known singers were invited to present wonderful performances to tourists.

The GXII screen on the stage had a size of 10m*4m, with horizontal and vertical viewing angles not less than 155°, ensuring that the tourists engaging in the festival

event can watch the wonderful show from all positions. Moreover, it also featured a pixel pitch of 3.9 mm and a refresh rate of 3840Hz, which was able to present vivid stage background images smoothly and made visual shock through gorgeous colours.

In addition to excellent picture quality, this large screen had other advantages. One was that it had the characteristics of lightweight, each cabinet was only 13.5kg, which was convenient for the construction team to quickly install the screen. Furthermore, it supported various signal input sources such as DVI, HDMI, DP, SDI, etc., to facilitate the display of screen content.

INFILED



Pro Sound Invests Big in State-Of-The-Art Technologies Across Sound, Light, Sfx, Trussing and Rigging



INDIA: The live sound industry in Bangalore is all set to be abuzz with excitement as Pro Sound – a leading event equipment rental service provider in the region – has announced a substantial investment in expanding their inventory lineup with a comprehensive range of cutting-edge technologies across sound, light, sfx and trussing systems.

First up, in a strategic move that demonstrates Pro Sound's commitment to delivering top-notch concert sound experiences, Pro Sound's recent purchase includes a comprehensive range of cutting-edge audio equipment from **L-Acoustics** – one of the world's most trusted brand in professional audio and concert sound.

Facilitated by Hi-Tech Audio & Image, the official distributors of L-Acoustics in India, Pro Sound's newly acquired L-Acoustics inventory comprises 18 units of the flagship K2 line array modules along with 12 units of the Kara II long-throw concert line array modules, 12 units KS28 high-power subwoofers, and 6 units of the SB18 subwoofers. To support the seamless integration and control of their L-Acoustics systems, Pro Sound

has acquired 4 units of the LA-RAK II flyable touring rack, equipped with 12 units of the LA12X 4-channel amplified controllers. This setup provides unparalleled flexibility, efficiency, and scalability for Pro Sound's audio engineers, enabling them to optimize sound reinforcement in diverse live environments.

Furthermore, the need to provide highly accurate onstage monitoring prompted Pro Sound to invest in 8 units of the X15 HiQ high-performance stage monitors. Renowned for their clarity and precision, these stage monitors ensure that artists can hear themselves and their fellow performers with exceptional fidelity, enabling them to deliver their best performances. And to power the stage monitors, Pro Sound has added 4 units of the LA4X 4-channel amplified controllers, providing robust and reliable control capabilities.

Speaking about the purchase, Jiten Jariwala, partnerdirector of Pro Sound comments, "Pro Sound started its journey in 2006 with point source speakers, and over time, we've built our inventory to allow us to support larger and more diverse range of events. Over the years we have listened to all the major manufacturers at various events and concerts etc. But for us, the performance value of an L-Acoustics rig has always stood out as a class apart. Be it power to weight ratio, the design, the finish or most importantly, the technology. We've always been amazed with the clarity and depth in sound; in addition to other crucial factors like the ease in rigging the line array modules, to tuning the system, and everything in between – all of it has top notch technology involved. Therefore, we always knew that for us to stepup to the next level of our service delivery, L-Acoustics would be our clear choice. And so finally, here we are now, with the most powerful K Series of L-Acoustics! What a fantastic feeling it is!"

In addition to the stellar line-up of pro audio investments, the company has also focused on enhancing its lighting and trussing systems with the acquisition of cutting-edge products from industry leader **MA Lighting**, and from **Kadence Pro** – a preferred brand among several rental service providers.



Recognizing the importance of top-notch lighting solutions for creating captivating visual experiences, Pro Sound has bolstered its lighting control inventory with the acquisition of the industry standard GrandMA 3 full-size lighting control console, purchased from Hi-Tech Audio & Image, the official distributors of MA Lighting products in India.

Jiten explains about the motivations behind the purchase as he primarily cites the console's ability to access Wide Area Networks and the advanced MA-Net3 protocol that allows for output up to 250000 parameters – thereby extending unparalleled dexterity and control. Furthermore, he states that he was impressed with the system's capability to support the GDTF (General Device Type Format) protocol natively (thereby allowing fixture manufactures to ensure their own fixtures are controlled as intended) is another key feature that positively impressed the purchase decision, as it forms the basis of file formats like MVR (My Virtual Rig) which is used to share data for a scene between a lighting console, a visualizer, a CAD program or similar tools.

Furthermore, Pro Sound has also added an impressive array of lighting fixtures from Kadence Pro, with purchase being secured directly from the manufacturers themselves. Among the newly acquired lighting fixtures are 90 units of the 18R Beam Moving Heads and 40 units of the Aura Moving Washes, both of which are known for their smooth color mixing and exceptional projection capabilities. And to further enhance their lighting setup, Pro Sound has acquired 60 units of the Tambora Lights, which are renowned for their robust build quality and high-performance output, making them ideal for illuminating large spaces and stages effectively. And to cater to a diverse range of lighting requirements, Pro Sound has also expanded its collection of Parcans, with the addition of 300 units of RGB LED Parcans and 100 units of Warm White Parcans.

Additionally, the company also recognized the need for a new sturdy and reliable trussing system to ensure the safe and efficient setup of their newly acquired lighting and audio equipment, in addition to assuring overall safety for performers as well as the audience. This prompted Pro Sound to make substantial investments in enhancing their trussing inventory; as they've acquired a brand new 8-pillar box truss system from Kadence

Pro that spans over 120 ft; featuring 1200mm x 600mm sections with pillars measuring 540mm in diameter; and the total structure boasting a remarkable load-bearing capacity of over 12 tons. Jiten explains that the plan moving forward is to further augment their trussing capabilities with the addition of a brand-new roof truss to their existing setup; as he believes it will allow the company to expand its capacity to handle larger-scale productions and accommodate more intricate rigging requirements.

And speaking of rigging; Pro Sound has also invested in high-quality chain hoists from Kadence Pro - with eight brand new units capable of supporting up to 2 tons of load and twelve units that can support up to 1 ton of load. Jiten asserts that these world-class chain hoists provide the necessary strength and reliability for safely lifting and positioning heavy equipment, and demonstrates Pro Sound's commitment to maintaining the highest safety standards in the industry.

"Pro Sound's recent investment in expanding our inventory with top-notch equipment and technologies showcases our commitment to delivering exceptional live event experiences, and positions us as a leading provider of safe, secure and high-quality event production services in the region. Overall, this strategic investment allows us to cater to a wide range of events - from large-scale concerts and festivals to corporate gatherings and conferences. We're also proud to announce that we have also booked our purchase of 2 units of the industry maverick Quantum 338 digital mixing console from DiGiCo, and I believe this is a first of sorts for the Bangalore market at least - where one company has acquired two units of this amazing console. We should be receiving delivery of the units very soon; and we're extremely excited about it. This newly expanded inventory now equips us with the versatility to meet the highest standards of safety and performance demands of various live applications, while providing exceptionally immersive experiences for audiences!" concludes Jiten as he expresses his joy and excitement about the company's new technological acquisitions.

Pro Sound India

Hi-Tech Audio & Image

Kadence Pro

NEWS

Cameri Theatre Invests in Robe



Taken by Louise Strickland during technical rehearsals of "The Chabadnikim".

ISRAEL: The Cameri Theatre in Tel Aviv is one of the busiest and most recognised in Israel, and since 2003 has been located in the vibrant cultural hub that is the Tel Aviv Performing Arts Centre.

Founded in 1848 shortly after the State of Israel itself was formally established, the theatre is focused on producing local works. It has five halls, the largest with a 1000 capacity, and has recently invested in Robe ESPRITE moving lights and Tetra2 moving LED battens.

These were the first moving lights in the venue and were initially purchased for a production of Kaymim Achadim lit by Nadav Barnea, explained technical manager Shabi Aaron Nahum, who was delighted with the new fixtures. The very first Robes in the house were ParFects, so they were familiar with the brand through these and generally. After deciding to invest for the production, they specifically needed lights with good shuttering, zoom and dimmer curves as the 7 x ESPRITES would be deployed on the front bridge.

Before making the choice Shabi checked out various spot fixtures with shutters, but ESPRITE came out on top.

"The shutters are perfect, they do not move even 1% on recall," he said, adding that the quality of the light output also impressed them.

The 20 x Tetra2s are rigged on the upstage bars of the Cameri's main hall and were also picked for the intensity and colour, as well as to illuminate an 8-metre-high rear screen, which they wash evenly and seamlessly. Shabi and his team also liked the Tetra's 4-45° zoom which assists in attaining that nice even wash and appreciate the refined dimmer curve in this fixture too.

All these Robe luminaires are now part of the house rig and used daily on all the shows, including, while were visiting, by Bambi (Avi Yona Bueno) one of Israel's best-known and most innovative lighting designers, who was lighting The Chabadnikim musical show, directed by Gilad Kimchi and Udi Gottshalk with his long-term programmer, Alon Cohen.

Bambi revealed that he had been encouraging the Cameri to invest in ESPRITES for some time. "They are absolutely amazing fixtures, very elegant and with such a great range of effects, he stated. On this show, five were on the front bridge and two in the side slips positions. "The shutters and the zoom are incredible," exclaimed Bambi, while Alon's thoughts included "beautiful fixtures where the light path is fully in focus throughout the zoom."

Bambi and Alon further both remarked on how the ESPRITES' high CRI enabled fantastic faces and flesh tones. They used the Tetra2s as a back curtain and for other effects for this highly visual show which featured an elaborate set designed by Eran Atzmon and brought a critical yet sympathetic focus on some serious social issues.

The Camera Theatre's new Robe lights were supplied by Danor Theatre and Studio Systems, Robe's very proactive Israeli distributor which has been a powerhouse in establishing the brand across all genres of entertainment lighting.

Robe



Proefx Soundgear (OPC) Invests in DiGiCo SD12



Balaji Parthasarathy owner of Proefx Soundgear (OPC) with the SD12.

INDIA: Proefx Soundgear (OPC) Pvt Ltd, one of the most dependable one-stop audio rental companies located out of Bangalore, India, has recently invested in acquiring a brand new SD12 digital mixing console from DiGiCo. The rental company has garnered a stellar reputation for commissioning top-notch audio systems for a plethora of music performances and live events across the board; and over time with the enhanced profile of events that the company was catering to – the team realized that the need to build on a DiGiCo platform.

After the need arose to replace older consoles and to come up with business strategies that would ensure Proefx Soundgear (OPC) maintains a niche in the market, owner Balaji Parthasarathy explains that he viewed the DiGiCo SD12 console to be a great financial investment.

"As a touring sound engineer myself; I've had the pleasure of working on several different consoles; and I can't deny that each console has its own set of merits. When it came to choosing the right console to add to our inventory at Proefx soundgear (OPC), we recognized that an SD console would be able to cater to a diverse range of event requirements with great ease – all within a lightweight package that would be easy to move around. With the SD 12 – it does everything that an engineer would need it to do, while offering the same kind of audio quality and functionality as the larger SD5 console

would, but in a lighter and nimbler framework. Plus, when you consider DiGiCo's reputation for constantly improving its products, you can't help but be excited to see how the console has steadily developed over the years since its launch, and how more and more engineers across the globe and in India count the SD12 as one of their personal favourite consoles to work on. The console has proved its mettle in applications ranging from broadcast to music festivals and is frequently seen on international riders. I personally believe the SD12 is going to be a fantastic long-term investment for Proefx Soundgear (OPC)" explains Balaji. He further reveals that the team of audio engineers at Proefx Soundgear (OPC) have had an in-depth training on using the SD12; and their personal experiences of putting the desk to the test have all been extremely positive.

"Honestly, it's really amazing what DiGiCo have achieved with this desk. It has been accepted extremely well around the world and in India as well; and our own team at Proefx soundgear (OPC) are thrilled with everything that the console has to offer. As I've stated before, the operation of the SD12 is identical to the SD5, and because several engineers know the SD5 very well, the SD12 pretty much becomes a walk in the park for them to operate. Even though the footprint of the console is small, the two large screens prove to be a big plus for engineers while working on-field. Plus, the build quality is fantastic and the whole feel of the desk is very easy to manoeuvre around. I definitely think the SD12 adds a whole new facet to our rental service; and we're excited to take the Bangalore event scene by storm with it!" he exclaims.

The purchase was facilitated by Hi-Tech Audio & Image, DiGiCo's distributor for India, who commented, "Proefx Soundgear (OPC)'s Balaji Parthasarathy had been wanting to invest in the SD12 since quite a good while now. We worked with them on costings and within no time; the purchase was confirmed. We're glad to have been of service to Proefx Soundgear in helping them secure their dream purchase of the DiGiCo SD12; and we're proud to welcome them into the ever-growing DiGiCo family in India."

Hi-Tech Audio & Image



SSL Live Consoles Enhanced with d&b audiotechnik Soundscape System



GLOBAL: d&b audiotechnik has entered into a technology integration partnership with Solid State Logic (SSL) to integrate the d&b Soundscape immersive sound system into the SSL Live console's ecosystem. This will enable a dedicated Soundscape control within the console's user interface and workflow. The integration allows users to remotely control d&b Soundscape object parameters on the d&b DS100 Signal Engine running Enscene and En-Space software modules directly from the console surface.

The Soundscape Control is designed to be compatible with all SSL live consoles that are running the newly announced SSL Live version 5.2 software, ensuring users can benefit from these features across the entire range of SSL Live consoles.

The technology integration provides users with a high degree of flexibility in assigning console channels to Soundscape / DS100 inputs, as well as coordinate mapping across all four mapping areas.

Al McKinna, vice president of d&b's immersive business unit, said: "This collaboration between SSL and d&b audiotechnik puts the immensely powerful possibilities of spatial audio into the hands of even more audio creatives. SSL users will benefit from an intuitive workflow on an outstanding live sound console to harness the innovative power of d&b Soundscape. Workflow optimisations such as this result in live sound professionals having more time to create unforgettable moments for the audience."

SSL's V5.2 software also delivers enhanced 'Rehearsal and Recorder' functionality, including multiple switching groups, flexible routing and locking override functions. Eight freely assignable switching groups can be used to manage multiple groups of instruments or even different acts within the same showfile. As a result, rehearsals can become very dynamic with fast comparisons.

Tom Knowles, director of Product Management, Solid State Logic (SSL), commented: "The latest V5.2 software update enhances the capabilities of the SSL Live production platform in key areas. As tours, events and houses of worship enhance their audiences' experience with next-gen immersive loudspeaker systems, it's important for Solid State Logic to support partners which have an established presence and technology in the space. We're delighted to integrate control of d&b's 'Soundscape' system to further enhance SSL Live consoles operator experience."

Solid State Logic



MADRIX Extends Customer Support with Hi-Tech Audio & Image



INDIA: Since 2005, MADRIX's software and hardware solutions have enabled ground-breaking pixel mapping in 2D and 3D, bringing life to architectural and entertainment projects all over the world. Now, the German manufaturer has welcomed a new partnership in India.

"We have always experienced the booming Indian LED-lighting market firsthand at PALM Expo and saw an enormous interest in our products; especially this year. A trend that has only continued in this fast-growing country and it is important that we serve our local customers with the right products and fast delivery times. By partnering with Hi-Tech Audio & Image, we are making sure that we are reaching more customers to supply them with the control hardware and software they want for their projects thanks to LED fixtures that are getting more and more affordable", explained Christian Hertel, Business Development at MADRIX.

The MADRIX product range offers powerful yet simple solutions for all kinds of creative LED installations by easily mapping each individual pixel to achieve smooth visuals and eye-catching effects alike. "We are very delighted to be associated with MADRIX as distributor in India. The cutting-edge technology of MADRIX is awe-inspiring and reliable for users. Christian Hertel and his team were very supportive during PALM Expo 2023, Mumbai. MADRIX is creating high-quality products backed by high-end engineering to achieve pixel-perfect results. Thus, we are geared up to explore limitless opportunities with MADRIX", noted Rajan Gupta, CEO & founder of Hi-Tech Audio & Image LLP.

Hi-Tech have a lot of experience in distributing professional systems for audio, video, and lighting. They are already representing lighting brands such as MA Lighting, Claypaky, ETC, ADJ, and Luminex. MADRIX was the next natural choice for clubs, residential projects, and the growing façade market.

"MADRIX products are appreciated by lighting designers worldwide. For us, it's an honour to be associated with such a highly acclaimed brand who has revolutionized the professional lighting industry. We trust the expertise of MADRIX and look forward to achieving new milestones", commented managing director Nirdosh Aggarwal.

"As head of the lighting department at Hi-Tech, I am very keen to learn all about MADRIX products. The symbiosis of hardware and software offered by the team from Germany is phenomenal. Thanks to this new partnership, we plan to offer flawless lighting solutions to our clients", concluded Yash Gupta, vice president sales & marketing, Hi-Tech Audio & Image LLP.

Madrix

SPECIAL REPORT

EESA Takes an Industry-Redefining Stand on Rigging Safety

Association assertively commissions India's first-ever internationally recognized rigging certification masterclass to a rousing response; and follows up with an exceptionally successful training seminar on chain safety



The initiators of the rigging Masterclass with the presenter. (L-R) Mankaran Singh. Harold Waldack. Anil Balakirshna. Avishkar Tendle.

The Event Equipment Services Association (EESA) is India's leading not-for-profit national organization dedicated to promoting a structured, secure, and progressive business environment for and within the event equipment rental services industry and the event technical services industry in India. And the association has consistently promoted endeavours and initiatives that look to empower its members with crucial knowledge and resources that elevate the standards of not just individual businesses, but the entire event industry at large.

Recognizing the alarming rise in mishaps at events due to gross negligence and an unacceptable disregard for safety standards and protocols; EESA took a resolute stance on the matter, with the belief that a tangible difference could only be achieved by actively disseminating high-quality knowledge and information on this crucial subject. Therefore, EESA planned and commissioned a comprehensive line-up of education endeavours that spotlighted strict adherence to safety protocols across disciplines of rigging and trussing. These initiatives delved into the deepest details of

upholding the highest standards of professionalism, and demonstrated how following such industry standards and protocols can ensure the safety and well-being of all stakeholders present at an event site.

To begin with; in a first of its kind initiative to take place in the country, EESA has successfully organized India's first ever internationally recognized rigging certification masterclass – an endeavour that aimed to equip participants with in-depth knowledge and skills necessary to safely and efficiently rig stages and equipment for events of all scales and applications. The initiative was conceptualized and spearheaded by proud EESA members Anil Balakrishna from Graflex Inc, Mankaran Singh from Men-At-Work-Stagecraft, and Avishkar Tendle of Natura Outdoor Education & Training Solutions – who worked together on organizing every minute detail of the masterclass.

With industry leader brands Global Truss and Broadweigh extending their invaluable support to the masterclass as Lead Sponsor and Premium Sponsor respectively; the multi-city educational endeavour was

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curated and presented by globally respected industry veteran Harold Waldack, managing director of ICRCsarl France, ICRS Middle East and Asiarig Co. Ltd, Thailand; who has conducted multiple rigging trainings across the world over the course of his illustrious carrier.



Attendees in Mumbai going through the theory at the Rigging Certification Masterclass.



The attendees at the Mumbai session.

The first leg of the masterclass session took place in Mumbai from 28th May 2023 to 1st June 2023 and was hosted at the business premises of Electrocraft – a proud EESA member; whereas the second leg of the masterclass which took place in Bangalore from 3rd June 2023 to 7th June 2023, was hosted at the business premises of Graflex Inc. The masterclass in the respective cities was spread over the course of 5 days each, and involved a meticulously designed mix of theoretical and practical curriculum.

Catering exclusively to registered members of EESA; the course curriculum covered crucial topics such as Risk Assessment, Rigging Basics, Calculations, PPE



The attendees at the Bangalore session.



The practical aspect at the Bangalore session.

(Personal Protective Equipment), Hoist Technology & Controllers, etc; and participants got the opportunity to learn some of the most essential aspects of rigging which includes dealing with different types of rigging hardware, load calculations, and proper rigging techniques; in addition to learning about international standards in safety protocols and best practices while constructing ground structures, and while working at heights and around heavy equipment. Mankaran Singh of Men-At-Work Stagecraft and Avishkar Tendle and his team at Natura provided invaluable experiential insights on various facets of rigging, with their knowledge contributions expertly complementing the wealth of knowledge shared by Harold Waldack himself. The end of 5-day intensive training schedule witnessed the participants knowledge on the subject matter being put to the test via a theoretical examination, which was curated and approved by Harold Waldack himself. And participants who were able to successfully clear the examination were provided with a certificate of

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completion authenticated by Harold Waldack; which officially grants them the distinction of being one of India's first internationally recognized certified rigging professionals.



Speaking about the successful culmination of India's first ever internationally recognized rigging certification masterclass organized by EESA; Felix Remedios, President of the Event Equipment Services

Association (EESA) exclaims, "We at EESA are extremely proud of the successful commissioning of India's first internationally recognized rigging certification masterclass. This initiative showcases the dedication and collaborative spirit of our esteemed EESA members, who have taken the lead in promoting safety and professionalism within the event equipment industry. We extend our sincerest appreciation to Anil Balakrishna, Mankaran Singh, and Avishkar Tendle for their visionary approach in organizing this masterclass and ensuring its resounding success. We are also grateful to our sponsors, Global Truss and Broadweigh, for their generous support, which played a vital role in bringing this masterclass to fruition. Their commitment to enhancing rigging standards and fostering professional development is truly commendable. At the same time, we also would like to extend our deepest gratitude and thanks to Harold Waldack - one of the world's most respected professionals in the field of rigging and safety - for taking the time and effort to share his invaluable wealth of knowledge and expertise with our members. And finally, to each participant who attended the masterclass – each of them is now at the helm of leading a positive revolution within the live event fraternity in India when it comes to safety and professionalism."

Hot on the heels of India's first-ever internationally recognized rigging certification masterclass; EESA worked together with it's EESA Platinum Partners – ChainMaster; a global leader in chain hoist technology – to offer a comprehensive educational seminar on the topic of 'Chain Safety in Electric Chain Hoists'.



Adam Beaumont conducting an online course on chain safety in electric chain hoists.

Curated and presented by Adam Beaumont, product manager, ChainMaster; the session was conducted online on 22nd June 2023, and witnessed a rousing turn-out of over 48 different event equipment service providers from across India tuning in to learn more about the topic. During the session, Adam explained about the various nuances of chain safety, the importance of regular inspection of chains, and various other intricate aspects concerning the overall maintenance of chains. Through a perfectly balanced mix of theoretical and practical demonstrations, Adam explained how equipment service providers can leverage the value proposition of chain hoist systems by simply paying attention to its regular maintenance and upkeep; and how this simple act can definitively enhance the safety and security of not just crew members working onsite, but also on-stage performers and the audiencemembers at large.

"EESA remains committed to promoting excellence and safety in event services, and the fact that we followed up the industry re-defining first ever rigging certification masterclass with such a high-quality education session on chain safety represents a significant step towards achieving that goal. We are grateful to our EESA Platinum Partners – ChainMaster – and to Adam Beaumont, for taking the time and effort to put together such a wonderfully informative curriculum, which I'm sure has benefitted all the companies who attended the session. EESA is committed to delivering such exceptional initiatives that empower our industry professionals and elevate India's event landscape to new heights," concludes Felix Remedios.



Keynote Speech of L-Acoustics L Brompton Technology Frame **Series Launch**



From the iconic Hollywood Bowl stage, Laurent Vaissié presents the L-Acoustics' L Series that aims to break the current barriers in sound design. He discusses the traditional details such as the specs and control, however, he also reveals how L-SA will be a game changer for future artists and live productions.

Claypaky Arolla Aqua Aims for the Spectacular



Designed to be light, powerful, and fast, the Arolla Aqua is Claypaky's top-of-the-range weather-resistant light. It is a true workhorse with an IP66 rating and technical and construction features that combine into an extremely minimalistic design and a 900W white LED light source.

Remapping Table Talk



Five key figures from top virtual production firms were gathered by Brompton Technology in 2021 to examine the state of the industry. This video, which discusses the evolution of frame remapping, creative applications for it, and the future of filmmaking, is one you won't want to miss.

ADJ Adds More Features to Focus Line with Focus Spot 7Z



Mike Turner is back to introduce ADJ's latest addition to its Focus Series of moving heads: Focus Spot 7Z. With this new model, LDs can add their creative flair to their shows using the moving head's extensive array of beamshaping features.



Will Al Be Able to Take Away My Job?



I am not sure how much you are all following the discussions about AI (Artificial Intelligence) these days, and thanks to CHAT GPT and others, this seems to be on everybody's mind. One of the consequences is that there are fears that millions of jobs might fall victim to AI and eventually

disappear since AI will be able to do this better, more consistently and at a fraction of the cost. I saw a cartoon recently where two guys spoke, and one asked the other: "Are you worried about the rise of artificial intelligence?" And the other guy answered: "No, I am more worried about the decrease in real intelligence these days." Jokes aside, we need to deal with these questions at some point.

In this month's column, I want to look at one particular task within the live sound industry: the systems engineer job. I want to look at this specifically because there is not so much creativity, but a lot of technical requirements are being employed in the process of doing the job. Hence it might seem obvious that a machine could do this better and faster. After all, the job description says "Systems Engineer," and engineering is often not considered very creative. The first time I saw this discussion and the accompanying fears was fifteen years ago when the debate about AUTO EQ started. People were apprehensive that all they had learned was for nothing if some algorithm and device could do this so much better. It turned out this was not quite the case then, and it is not now, either. Then and now, we need the human interface to make the call if what the Al offers is correct since many of the complexities are not yet understood, so the AI is an assistant at best. One good example from today is that in quite a few line array simulation programs, you can ask the software for a suggestion, and then the software will offer you an "Autosplay", which will tell you about the angling and splay inbetween array modules. I have yet to come across one

solution where I would like to apply the recommended auto-splay. My takeaway is that the amount it would take to feed all the relevant information into an AI-based system will be a multitude of the time that I need to do it myself, and then there is no win in using the AI. What does this mean for us in this industry?

The information we are taking in to make those decisions is highly complex. You take information in with your eyes and ears, and by communicating with other people and departments and all these together will then create a decision platform, where you decide on how to deploy your systems. No matter how hard I think about this, I wonder if it can be done well or better by a machine, and I would be happy to pick up the challenge any day. However, there are things and tasks within this job scope that are well within a machine's ability - the machine will typically also do this better than our brain can, which is why we are using the analyzer and FFT software systems to help us with tuning and deploying systems. It is fair to say that we already use some form of AI there. The art is to know when to use the AI and when to make your own decisions, and for this, there is no short cut, but to use everything you have learned over all these years, and now suddenly, your long learning curve makes very much sense and still does not put your job in jeopardy at all.

Beyond this, I am not worried that any job requiring more creativity will ever fall victim to AI, at least not within the next generation. Here the system of ears, brain and taste and knowing the band and the song materials gets so complex that if you wanted to feed all this into an AI system, you would spend ten times the time, and then you might as well keep doing it yourself. With this in mind, I wish you all happy mixing.

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



ACT Entertainment Presents New zactrack mini Tracking Solution



ACT Entertainment's zactrack mini is a briefcasesized tracking solution that offers easy transport and deployment for areas of 15x15 meters, by a single person. Designed to introduce tracking to new users and spaces, the zactrack mini is ideal for smaller venues, exhibitions and conferences, individual performers, rental companies, houses of worship and more.

At the heart of the zactrack mini is a master anchor, which offers multiple uses and can output DMX directly to fixtures with a single XLR cable. This simplifies the system for the user and removes the need for additional hardware utilized in other systems, such as the wireless access point, DMX node and network switches. Used as a standalone or integrated with an industry-standard lighting console, zactrack mini allows designers and operators to maintain hands-on creative control.

With this latest addition, zactrack now offers products that encompass all the tracking/following needs of any application or venue-from the smallest, most intimate spaces right up to the most complex stadium tours. The same feature set also provides the tools necessary for a designer to design and create zones that trigger certain actions, such as dimming and adding dramatic colours or gobo looks. This is a tracking solution that has evolved

to become an essential and indispensable creative tool within live environments.

Using ultra-wideband radio technologies, zactrack products can communicate through normal stage materials, such as truss, wood and cloth, or even in varied environmental conditions like rain, bright sunshine, fireworks, snow, haze and more. The use of a unified software suite allows users to learn one application and work with any of the zactrack products easily and intuitively.

Additionally, zactrack products adopt many industry standard protocols, making them agnostic and easily adapted to any industry, all from one system. This includes many protocols such as lighting, audio, video, cameras and stage automation. The products also work with any console, fixture, media server, immersive audio engine, etc.

All zactrack products share the same core values and technologies to allow simultaneous real-time tracking across any stage technology. The result of these shared values results is stable, accurate and precise tracking with the user or operator remaining in full control to incorporate tracking in all or only parts of their show.

ACT Entertainment

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Astera Caters to Industry Demand with Flexible Fresnels



Wireless LED lighting specialist Astera has launched two new fresnel products – the PlutoFresnel for medium to small spaces and applications and the LeoFresnel, a cable-free LED alternative to the classic 1K fresnel ideal for scenarios requiring more power and punch.

These are the first battery-powered fresnel lighting fixtures developed by Astera, which are supplied as a complete package with barn doors, a full yoke with a TVMP adapter for stand mounting, a removable handle and several other super-useful accessories.

The Pluto and Leo fresnels are supplied complete with multiple mounting options and the accessories mentioned above. Furthermore, the lenses can be removed so the light source can be used in different ways which will include being mounted to a projector that will utilise a lens to be launched later in the year.

The PlutoFresnel offers a 15° to 60° beam angle without any colour fringing, both wired and wireless DMX control with an inbuilt battery with up to 3 hours of run time. The full spectrum high rendition Titan LED engine offers an output that is comparable to a traditional 300W Tungsten fresnel, yet the power consumption is less than 80W, and the fixture weighs 4.5kg, ideal for small and less accessible spaces.

The PlutoFresnel has a removable handle, foldable legs and YokeBases making mounting and adjustment straightforward. The larger LeoFresnel is comparable in light output to a standard 1K tungsten lamp, however, it has an even higher lumen value than this industry benchmark when running in 6500K daylight white. It is also powered by the full spectrum high rendition Titan LED engine, and – naturally – consumes dramatically less power.

Its 15° to 60° beam emits a beautiful quality of light with no colour fringing as well as wireless and wired DMX control, with a 2-hour onboard battery, and a 250W power consumption. It weighs 14kg and has a removable handle compatible with Airline Track systems, plus a full range of helpful and practical accessories including quick-release YokeBases for mounting and adjusting, and a TVMP adapter T-Bolt thread handle on the yoke for attaching an Astera Runtime Extender or Airline Track.

The Leo fresnel lens is also detachable, and as previously mentioned, Astera will be launching a series of projection lenses which will transform it into a multipurpose fixture, complete with a slot for size B glass or metal gobos, making it hugely versatile.

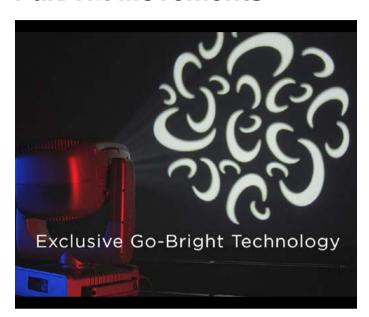
This feature combined with the dynamic zoom will also be of special interest to the event industry.

Both sizes of Astera Fresnel have a 4-leaf barn door system that can be extended to 8 leaves for the accurate shuttering of light, and the fixtures are compatible with several DoP Choice products including the Rabbit Rounder for beam modifiers and various soft boxes.

Astera/PlutoFresnel



Claypaky Arolla Aqua Weighs Less than 40kg for Quick Pan/Tilt Movements



IP66 weather-resistant lights have been taking an evergreater market share in recent years as they are not only seen as the perfect fixture for outdoor events, but also as ideal lights for indoor productions, since they are protected against the harmful effects of dust and a variety of other external agents, and therefore require less maintenance. In the long run, this results in time and cost savings, and a better return on investment.

The Arolla Aqua is Claypaky's top-of-the-range weatherresistant light. It is a true workhorse with an IP66 rating and technical and construction features which were "once unimaginable for this kind of light."

Claypaky's R&D department's challenge was principally to design a high-power, high-brightness fixture with top-level performance while at the same time limiting its weight and size. The Arolla Aqua's dimensions are less than 750 mm in height and only 38.5 kg in weight, thus enabling fast pan and tilt movements.

The Arolla Aqua fits a white 900 W (7000 K) LED light source, capable of a 40,000-lumen output. This means it can compete with both high-power-range lights (given its output) and medium-power-range lights (given its small size and weight).

Its uniform light beam is another key feature. The high quality of the beam, its density, and the total absence of spurious lights can be appreciated with the naked eye, and its zoom can be adjusted over a linear 5.5°-50° range (9:1).

The Arolla Aqua boasts an effects section consisting of two gobo wheels (one of which rotating) with very high-definition dichroic glass gobos; an innovative animation wheel which brings out some of the most typical effects of this feature, a four-sided prism, a 16-blade motorized iris, a framing system on four focal planes with rotation between +/- 60°, and a separate macro control channel.

Thanks to Claypaky's exclusive "Go-Bright" technology, there is no light loss or colour shift when gobos are inserted into the beam. The gobos can be swapped and morphed with each other and the animation wheel to create new, exciting textures.

The colour section consists of CMY colour mixing with 16-bit control, linear CTO and a six-colour wheel (including an 88+ CRI enhancement filter). This outstanding moving head comes complete with a soft edge frost filter, flood frost effect, ultra-precise 24-bit digital dimmer, digital stop strobe and four fan operating modes, right up to the highest level of quietness.

The Arolla Aqua aims to set a new benchmark for professionals who are looking for a high-power IP66 light which is compact, reliable and complete in every aspect, with "top performance and an unparalleled cost-performance ratio."

Claypaky/Arolla Aqua



- ✓ Mini/Micro LED
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- **3** 3D Naked-Eyes
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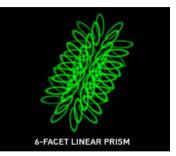


ADJ Extends its Focus with Focus Spot 7Z









The Focus Spot 7Z is the latest addition to ADJ's extensive Focus Series of LED-powered moving head fixtures, which all offer "carefully curated feature sets, robust build quality, and excellent value for money."

Powered by a potent 420W white light LED engine, which has a native colour temperature of 8000K, the unit's high-quality optics ensure a crisp even output. The LED engine offers an impressive 20,000-hour average lifespan, effectively removing the inconvenience and expense of lamp replacements. It also supports smooth 16-bit electronic dimming as well as variable speed strobing from 1 to 20Hz.

The Focus Spot 7Z provides lighting designers with almost unlimited creative potential. Its feature set begins with CMY colour mixing, which allows for a vast selection of colours to match any mood or look a designer may wish to create. There is also a variable CTO flag, which can be used to select any colour temperature of white light output from 2,700K to 8,000K. To aid programming, a selection of popular colours and colour temperatures can be easily selected using a selection of pre-programmed macros. In addition, the fixture also incorporates a separate 7-slot (plus open) dichroic colour wheel loaded with red, green, blue, orange and dark blue as well as CTB and High CRI filters. The fixture has a native CRI of >73, which can be increased to >85 using the High CRI filter.

Two independent GOBO wheels, each with seven slots plus open, allow for a choice of 14 different patterns. Both wheels feature indexed-rotating GOBOs, which are all replaceable, allowing for the use of custom patterns, text or logos. However, both wheels are supplied preloaded with a versatile selection of GOBOs, including a multi-coloured option. Some of the supplied patterns are particularly suited to generating aerial effects,

while others are intended for creating intricate breakapart projections. The fixture also features an indexed rotating animation wheel, which can be used to generate engaging and complex moving projections, especially when used in conjunction with one of the rotating GOBO options.

The fixture offers a wide motorized zoom range of $6^{\circ} \sim 48^{\circ}$, allowing for the creation of tight mid-air beam effects as well as wide break-apart pattern projections. It also features two separate variable frost filters. The medium option is ideal for blurring out GOBO patterns to create soft-edged textures, while the heavy option can be used to generate a wash output. In addition, the unit offers motorized focus, to allow for crisp GOBO patterns across variable projection distances, as well as a motorized iris, which can be used to create an even tighter beam.

Completing the fixture's line-up of beam-shaping tools are two independent rotating prisms. Both the 4-facet circular and 6-facet linear options are indexed and the two prisms can be layered to create intricate dynamic effects. The head itself can move through a range of 540° (pan) and 270° (tilt) with 16-bit fine control allowing for smooth movements and precise positioning.

Considering its expansive feature set and explosive output, the Focus Spot 7Z is an easily manageable fixture. It weighs just 51.7 lbs. (23.45kg) and has external dimensions of 14.73" (374mm) x 9.22" (234mm) x 24.81" (630mm) [length x width x vertical height]. It features convenient sidebar handles as well as both tilt and pan locks to prevent unwanted movement during transportation.

On the front panel of the unit's base is a full-colour LCD with corresponding push buttons. These provide access

ENNOVATION

to an intuitive menu interface which allows for easy DMX addressing as well as selection between the unit's various configurable operating parameters. The fixture offers three DMX channel modes (30 / 34 / 45) and is also compatible with the ArtNet and sACN protocols. The LCD screen is reversible by 180°, allowing it to be used conveniently regardless of the fixture's orientation. Connection sockets for signal and power are located on the rear of the unit's base. Both locking input and output sockets are provided for power, allowing multiple fixtures to be connected to a single outlet. 5-pin input and output sockets are provided for DMX, as well as RJ45 input and

output sockets to connect ArtNet and sACN networks, and the fixture is also equipped with ADJ's tried and true WiFLY EXR wireless DMX transceiver built-in.

Offering both power and versatility, the Focus Spot 7Z is shipping now from ADJ distributors and dealers worldwide.

ADJ/Focus Spot 7Z

New Power Supply Option for ETC F-Drive



The F-Drive R12 can now serve a wider range of installations with the new F-Drive Power Supply from ETC. The new, reduced-cost supply is perfect for sites with simplified power requirements. Now, customers can choose a dedicated 1000 W or 1800 W option with a simpler installation and reduced noise profile.

ETC still offers the industrial and expandable Mean Well RKP-1U Rack System with RCP-2000-48 power supplies. ETC recommends this solution for installations where multiple power supplies and F-Drive R12 units are connected together or where in-line, always-active power supply backup is necessary.

The F-Drive brings all LED power supplies together in one easy-to-use system. The sleek and intuitive design makes it easy to service and modify the critical components controlling your LED luminaires from the convenience of an electrical room or cabinet. F-Drive R12 features swappable output cards to make the system your own. F-Drive is compatible with a wide range of third-party LED fixtures and is specifically designed for seamless use with ArcSystem Navis luminaires from ETC.

ETC /F-Drive



L-Acoustics Launches Line Array Technology into the Future with L Series



Bringing line source technology to its pinnacle, L-Acoustics' L Series, with its patented Progressive Ultra-Dense Line Source (PULS) technology aims to usher in power, control, and consistency in line array design.

L Series comprises two elements that are designed to work together or on their own: **L2** above and **L2D** below. One L2 or L2D element provides the same contour as 4 x K2 elements in a format that is 46% smaller and 40% lighter. The audio benefits of L Series encompass SPL per size, consistency over the audience area, and improved rejection everywhere else. Accompanying the audio benefits, L Series possesses a smaller, lighter footprint that reduces truck space and requires fewer elements, cutting the number of actions needed to load in and out.

Each L Series element contains 8x 3" high-frequency drivers with 8 x 10" low-frequency drivers, complemented by 4 x side-loaded 12" drivers with front and back exits to deliver efficient, high-precision broadband coverage with a choice of cardioid or super cardioid patterns. L Series also features L-Acoustics Panflex technology, which provides sound designers

with quick access to a choice of four horizontal directivity patterns: 70° or 110° symmetrical, or 90° asymmetrical on either side. Each L2 element includes 4 x Panflex modules, while L2D contains 2 x Panflex modules on the top elements, and 2 x fixed L-Fins progressing from 110° to 140° on the bottom elements.

The operating efficiencies of L Series originate from its shape. With no inter-element angles, a pin-less auto-lock rigging system, and a single cable connector, repetitive load-in-/load-out actions are drastically diminished. This creates a set-up environment that reduces errors and leads to a stunning three-fold decrease in loading time versus a similar K2 configuration or up to five times faster than Kara II.

L Series is just as impactful on the environment as it is on deployment. Starting with material savings: 56% less paint; 30% less wood and 60% less steel. L Series is frugal in resources. Clocking in at 30% less volume and 25% less weight as compared to an equivalent line source array, L Series is also frugal in truck space and consequently in fuel consumption.

Adding to system efficiency, L Series is driven by the new LA7.16 high-resolution touring amplified controller, which supports L2 and L2D with 16 channels of high-power amplification and processing. LA7.16 comes in a new LA-RAK III touring rack offering 48 channels of amplification in a Milan AVB-ready package with more than 60,000 watts of power in 9U. Leveraging the high-resolution amplification of LA7.16 and the advanced Autosolver tools, L Series output can be modulated to achieve results that are impossible with traditional line array technology.

With L Series, L-Acoustics also introduces the new Clamp1000, which can carry up to 4 x L2/L2D. It can also be used with Kara II, K3, or K2, supporting up to 16 K2. Using Clamp1000 users can rotate a flown line array from the ground, drastically saving set-up time and the number of motors needed.

ENNOVATION

In January of this year, L-Acoustics began a comprehensive L Series pilot phase with partners Britannia Row and Solotech. Between April and October, the pilot program will progressively include six leading certified partners around the globe: PRG and Solotech in the Americas, Britannia Row/Clair Global and Novelty

Group in EMEA, and Tokyo Sanko and Winly in APAC will be deploying the new technology for various live events in October of 2023 when the pilot phase concludes.

Production will begin in the fall of 2023.

L-Acoustics/L Series

Scalable Generates Meta-Calibration for Movable Real-Time Projection Mapping





Scalable Display Technologies' new Real-Time Projection Mapping API can be leveraged to automatically calibrate a group of projectors displaying onto an intricate object that moves freely in any orientation or direction in a large 3D space while maintaining precise content mapping at every frame.

Scalable's Real-Time Projection Mapping API includes new calibration elements and a streamlined connection to third-party media servers. Historically, Scalable has calibrated to a fixed screen location, but with this new capability, it is able to auto-calibrate a single object at many different locations, generating a meta-calibration for the entire projected area. This new technique allows for high-accuracy 3D mapping in real-time as an object moves anywhere within the calibrated volume.

This latest functionality from Scalable is accessible from any media server integrated with Scalable's SDK to deliver cutting-edge visuals for the most engaging entertainment applications. Media servers integrated with Scalable's SDK may use the volumetric calibration in conjunction with a motion tracking system to achieve accurate image registration to a tracked object at up to 240 frames per second as the object moves freely within the space.

Scalable



Robust Pro Sound Reinforcement and Entertainment Lighting Demand Evident at PALM 2023



Palm Expo 2023 Inauguration.

The strong surge of visitors at the Pro Audio Hall 1 and Hall 3 Lighting Hall, crossing 27000+ footfalls was a fascinating display of professional buyers inundating the aisles creating an undeniable vindication of the Indian market estimated at over a billion dollars for pro audio equipment. It was this factor for the marquee booths expanding and display of the absolutely latest equipment showcased anywhere in the world of highend audio.

"This demand is so substantial I dare say there is a paradigm shift in the global pie chart for pro audio and pro sound consumption, major manufacturers need to realize this shift and redesign sourcing and supply for Indian consumption. Indian engineering talent is the second most important traction in making India the hub for global supply and product development. PALM is the perfect platform to provide distribution and talent" avers **Anil Chopra**, founding director of PALM Expo.

Attendees at PALM

PALM + AV-ICN Expo witnessed a total footfall of **27,786** and **21,659** unique visitors across the expo halls

over the course of three days from 25th May - 27 May 2023. The division of the expo halls facilitated easy movement of visitors and ease of access to the latest innovations and technologies introduced in the pro audio, sound and lighting industry and showcased at the expo. Visitor analysis after the expo provides insight on attendee demographics and estimates that the show floor was populated with approximately 45% Actual Users and 52% Trade Visitors. A total of 145 exhibitors displayed the latest pro audio and lighting products and technologies in Hall 1 and 3. PALM showcased various engaging products and latest technologies at the expo by top brands and distributors from the pro audio, sound, and lighting industry including Ahuja, Alphatec Audio, Ansata, Generation AV, HARMAN International, Integrated Entertainment Solutions, Italian Sound Design, Osram Lighting, Pink Noise Professionals, Sennheiser and Sun Infonet to name just a few.

Commenting on the annual event, **Vipin Pungalia**, director, Professional Segment, Sennheiser Electronics India Pvt. Ltd. stated, "PALM Expo stands out as a key industry event, attracting industry professionals who

SHOW REVIEW

gather to witness the cutting-edge technologies that are shaping the present and future of audio."

Robin Ghose, business development manager (Professional and Consumer), Audio-Technica India stated, "We are thrilled to participate in the PALM Expo 2023 and present our latest audio solutions to the industry professionals and enthusiasts. The PALM Expo provides an excellent platform to connect with our customers, showcase our offerings, and reinforce our commitment to superior audio performance."

PALM Conference 2023



PALM Conference.

The PALM Conference 2023 was a huge success as delegates thronged the conference room to listen to industry expert providing insights on studio sound, live sound engineering and design, audiovisual integration, and much more. The conference also delivered the most interesting and elaborate discussions on relevant and topical subjects. The PALM Conference started with Anil Chopra's keynote address carrying the most apt message for the pro audio industry. He said, "PALM Expo represents the growth and the tremendous power of India's pro audio industry. My keynote this year is that this country and all the players in the pro audio industry have to seriously look at manufacturing." The proceedings at the three-day PALM Conference, provoked the industry experts to re-analyze the Indian pro-audio, sound, and lighting market. It reflected on the major shift required to establish the profound industry in India and lead the market globally. The major discussions covered key topics like Artificial Intelligence and Machine Learning, Pushing Back Analogue Boundaries, Dynamics of FOH, Deploying Immersive

Audio in Live Sound, A New Frontier In Recording - The Firdaus Studio By A.R. Rahman, Future of live sound In Big Ticket Events, Dolby Atmos experience, and much more.

PALM's Highlight Content and Demo Features

The IRAA (Indian Recording Arts Academy) Awards 2022 felicitation ceremony took place on 25th May at supporting partner HARMAN's Live Arena at the expo. From 6:00 PM onwards winners and their families gathered in strength to receive their awards. Also present were esteemed members of the Jury, both past and current.



PALM Sound and Light Awards.

This years' **PALM Sound and Light Awards** recognized excellence and professionalism across a total of 20 categories including the coveted "AV Architect of the Year" which went to **Kelvin Ashby King**, Principal Consultant, Clarity Consulting.

The 5th consecutive year of **PALM Lighting Design Showcase** at the PALM Expo 2023 in India, lured visitors to the showcase conceptualised and accomplished by Ulhas Sahasrabuddhe and his team at SSL Media Technology & Solutions Pvt. Ltd. once again.

Introducing an exciting range of high-decibel sound reinforcement systems were Coda Audio and Pequod who displayed their latest technology at the **PALM Demo Qube**, which once again attracted many visitors.



AUSTRALIA

Brompton Technology Delivers Pixel-Perfect Colours for Sydney WorldPride 2023 mes

Cities compete to host the annual WorldPride celebration, with this year's honours awarded to Sydney and Novatech Creative Event Technology who powered the event with Brompton LED processing



Image Credit: Sydney WorldPride, SUBVRT, and Daniel Boud (photographer).

WorldPride is a global LGBTQIA+ festival that has been staged since 2000, with cities vying to be chosen as its host. Licensed by InterPride, this year's WorldPride took place in Sydney, making it the first-ever host city in the Southern Hemisphere.

The event showcased more than 200 celebrations of queerness and diversity on the world stage, which included the popular Sydney Gay and Lesbian Mardi Gras (SGLMG) events. A range of other festival events were also on offer including arts, sports, theatre, concerts, parties, and First Nations programming. Notable performers such as Kylie Minogue, Kelly Rowland, MUNA, and Charli XCX graced the stage to celebrate queer liberation. Novatech Creative Event

Technology, one of Australia's leading audio-visual production companies, supported the festival by providing a cutting-edge LED screen set-up that was powered by Brompton LED processing.

"We were elated to receive an invitation from SUBVRT to be involved with the production of three of WorldPride's major events in Sydney," enthused Novatech's tech lead, Nik Carr. "Given the worldwide recognition of WorldPride as one of the largest LGBTQIA+ festivals, this was an extraordinary opportunity for us. Furthermore, the festival's first-ever southern hemisphere iteration added to our excitement, making it an honour to support such [a] significant event on our home turf."





The Novatech team played a pivotal role in three flagship events held at the Domain in Sydney: the Sydney WorldPride Opening Concert; the Domain Dance Party; and the Closing Concert: Rainbow Republic. They were also responsible for providing LED screens, video production, lighting, and communication services throughout all three events.

The cutting-edge LED configuration comprised a 16m x 8m upstage Vanish V8T screen LED wall and a 10m x 1m Vanish V8T screen for surtitles above the stage. The auto-cue at FOH was displayed on a 4m x 2m Vanish V8T screen, and the delay screen featured a 6m x 4m Vanish V8T configuration. In addition, the IMAG screens were ROE CB5 on Air Frame, measuring an impressive 9.6m x 7.2m per side.

"For the upstage, surtitle, and IMAG screens, we utilised Brompton's Tessera SX40 LED processors, which were mapped across one 4k canvas," explained Carr. "In addition, we employed two pairs of cat6-linked Tessera XD data distribution units on each IMAG screen to ensure redundancy and simplify cabling, with fibres running back to the video sheds. Tessera S4 processors were used for the autocue/prompt screen and IMAG delay screen."

Carr noted that due to the presence of hosts and performers in front of the IMAG screens during the events, it was crucial to ensure that the visuals appeared pixel-perfect on camera. To achieve this, they relied heavily on the Tessera processor's internal Test Patterns,

particularly the LDM colouring on the panels. "This feature was incredibly useful for us, especially when we were replacing modules and masks," added Carr.

With approximately half a million attendees projected to attend the festival, Sydney WorldPride 2023 became Australia's biggest summer event of the year, transforming the Harbour City and giving the Australian tourism industry a much-needed boost.

"We received incredible feedback from all parties involved," Carr commented. "Brompton's Tessera processors once again met our expectations and satisfied all stakeholders including the broadcasters, lighting, and vision teams. Having reliable equipment is essential for us to achieve consistent performance with all our projects, and we're thrilled as always with our Brompton LED processors and how they perform on the world stage with international and national artists."

"Seeing our global network of partners trusting in our LED processors for events of all sizes is incredibly rewarding," concluded Luke Hurford, Brompton's business development manager, APAC. "With Novatech's deployment of Tessera SX40s at Sydney WorldPride, we are excited that exceptional visuals were brought to the Harbour City's biggest event since the 2000 Olympics."

Brompton Technology



INDIA

Phoenix Networks Powers an Unforgettable Event Experience at Indore Gaurav Diwas Celebrations

World-Class sound, lighting, trussing and SFX create an electrifying outcome

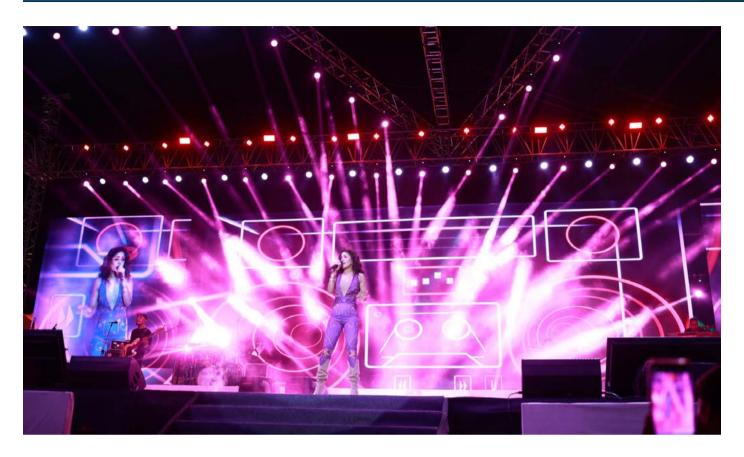


Hosted at Indore's iconic Jawahar Lal Nehru stadium and on the 31st May 2023, the second edition of the Indore Gaurav Diwas proved to be a grand commemoration of the birth anniversary of Devi Ahilya Bai, as the event also highlighted the rich cultural heritage that the state of Madhya Pradesh is so famous for.

While the event commenced with felicitations of esteemed government officials, including the honourable Chief Minister of Madhya Pradesh, Shri Shivraj Singh Chouhan; the true festivities commenced with an invocation of Lord Ganesha through the enchanting "Ganesha Vandana" performance, along with a captivating rendition of the "Shiva Tandav," a dance form associated with Lord Shiva. Adding to the grandeur was a breathtaking performance of "Krishna Leela" that involved more than 75 artists along with elaborate

aerial acts performed by nine experts at a time – all of which added an element of true awe and wonder. Furthermore, the event also showcased a mesmerizing stage-performance with over 100 artists paying homage to the life and invaluable contributions of Devi Ahilya Bai. Finally, the event culminated with an electrifying live performance by Sunidhi Chauhan, who truly enthralled the audience with her electrifying stage presence and soulful voice.

The energy and passion exuded by the various performers were truly infectious, as the event made for a truly memorable experience; and reinforcing it was an impeccable technical infrastructure of world-class standards, that was meticulously planned and expertly executed by one of India's leading technical solution providers – Phoenix Networks.



Animesh Mishra, director of Phoenix Networks, talks about the experience of bringing together an absolutely flawless experience in terms of sound, lighting, trussing, and special effects (SFX) at the Indore Gaurav Diwas Celebrations, as he exclaims, "We at Phoenix Networks have been fortunate to share a long-term working relationship with the state government of Madhya Pradesh; as we've been the official event technical partner for the Madhya Pradesh Foundation Day celebration event for over 10 years now. At the same time, we were also chosen as the official technical partners for the first edition of the Indore Gaurav Diwas that took place in 2022; which by itself was a spectacularly successful event. With this experience playing a pivotal role in enhancing their confidence in our team's technical prowess and capabilities, the organizing committee decided to entrust us with the responsibility of commissioning this year's celebrations as well. And we are ever so grateful for the honour and opportunity of being part of this truly awe-inspiring event experience!"

The performance stage itself was a sight to behold, as it measured 100ft in length, 80ft in width, and 4ft in height. To complement the stage, team Phoenix devised an

equally jaw-dropping overhead trussing infrastructure that spanned 100ft (I) \times 80ft (w) \times 40ft (h) with six pillars to add further stability, with the team using only the best in world-class trussing equipment. According to Animesh, this decision played a vital role in ensuring the highest level of safety while putting together the solid and formidable trussing infrastructure, which in turn was responsible for allowing the performers, especially the aerial artists to remain secure about their safety and well-being.

The formidable trussing architecture also allowed the technical team further dexterity in bringing together an absolutely enchanting and elaborate entertainment lighting scheme that comprised hundreds of different branded lighting fixtures from an assortment of world-class manufacturers. Over 16 units of Molefay blinders, 60 units of sharpys, 48 units of LED moving head washes, 80 units of RGB LED Pars, 24 units of warm white LED Pars, 10 units of profile spots, 6 units of high-performance laser lights, and 2 units of follow spotlights, came together in perfect unison to illuminate the various performances with sheer precision, and create a truly mesmerizing ambiance.



In tow, Phoenix Networks also provided an elaborate SFX solution that perfectly complemented the eyecatching lighting designs while also greatly enhancing the awe-inspiring moments of the evening. The SFX inventory deployed for the event included multiple fog machines and CO2 jets, in addition to 40 different fire effect systems, over 2000 units of single-use cold pyro systems, and a staggering amount of 10000 units of aerial firework shots that were perfectly synchronized to the music. The perfect timing and safe execution of these various SFX elements allowed the technical crew to create a wonderfully unique atmosphere for every performance, all of which left the audience undoubtedly awestruck.

The unsung hero of the entire event, however, was the impeccable sound reinforcement solution, which played a crucial role in delivering a magnificently immersive viewing experience for the audience. Armed with a plan to maintain sonic uniformity and linearity throughout the venue, team Phoenix chose to deploy an all - Adamson loudspeaker rig, wherein the sound setup deployed on and near the stage was to cover the first part of 400ft of the ground and the rest 400ft was covered by the delay reinforcement.

A stereo hang of 9 units of the Adamson E15 along with 3 units of E12 line array modules on each side comprised a mighty and powerful FOH solution, which was expertly aligned with a total of 10 units of the S10

line array modules that acted as center fills, alongside a total of 12 units of the E12 line array modules that served as outfills (6 units on either side of the stage). Over 40 units of the compact yet powerful E119 subwoofers provided for thunderous and impactful low-frequency fidelity; with team Phoenix ensuring further extensive coverage of the venue through the deployment of a total of 16 units of the Adamson S10 line array modules as the stereo delay reinforcement solution (8 units on each side).

At the same time, team Phoenix also ensured flawless audio production and mixing capacities by expertly deploying DiGiCo's famed SD10 digital consoles complete with Optocore interface to shoulder FOH and monitoring duties, while also affording a truly world-class RF infrastructure for the on-stage artists and performers in the form of multiple units of Sennheiser's acclaimed IEM systems along with Shure's Axient Digital wireless microphone systems.

Revealing details of how his team worked swiftly into devising such an elaborate yet meticulously executed comprehensive technical solution for the event, Animesh informs, "To be honest, we only had 2 days to plan, design and execute this event in a seamless manner; and every aspect of the planning and designing process had to account for the huge expanse of the stadium, and of course, the dearth of the time. Therefore, it was imperative that we approach each aspect of the technical requirement with the utmost level of precision, while ensuring that we maintain the highest level of safety and quality along every step of the way. Honestly, every time such a task comes up, it's actually quite exciting for us as it rejuvenates our passion for worldclass quality service deliverance. Having said this; I must commend our team of high skilled and experienced professionals who worked tirelessly as a cohesive unit in tackling the absolute mountain of challenges with sheer grit and determination. In fact, the organizing committee of the event were so impressed with the level of perfection we delivered, that they felicitated the entire Phoenix Networks team on stage with mementos to recognise our sincere dedication and flawless execution. All of this has truly been such a wonderful experience for our entire team!"

Phoenix Networks



AUSTRALIA

First GLP impression X5 IP Bars Head to The Tina Turner Musical

Neg Earth supplies LDs Bruno Poet and Max Narula with "flawless" new battens



Image Credit: Daniel Boud

The latest production of TINA, The Tina Turner Musical in Australia is the first show worldwide to feature GLP's new impression X5 IP Bar. The IP-rated linear LED batten contains 18 x 40 W RGB LEDs, a wide zoom range, and next-generation iQ.Gamut colour calibration algorithm to guarantee superior colour rendering.

Designed by Bruno Poet since the original production in 2018, the show is playing in a number of cities around the world, but only in Sydney has GLP's staple impression X4 Bar been replaced by the new impression X5 IP batten. Neg Earth supplied the first 24 of these after the rental company's project manager, Lindsey Markham, had suggested them to Poet and the show's

international associate LD (and co-collaborator), Max Narula. The production at Sydney's Theatre Royal is the ninth version of the show, which is also running in London, Stuttgart and on tour in the US, and is now serving as a tribute to the Queen of Rock'n'Roll following her sad death.

Narula explained the circumstances surrounding the unexpected adoption of the new fixtures for the ninemonth season in Sydney, followed by a two-year tour of Australia. "Traditionally, we have used X4 Bar 20s, but when we were looking last August there was no available kit in Oz, so we were asked to reach out to companies in the UK.





"We've worked with Neg Earth on arena shows previously; their personal attention to detail is next to none, and since they no longer wished to invest in further X4 Bars Lindsey instead suggested trying the impression X5 IP Bar, which we didn't know existed." GLP UK's Simon Barrett provided the rough specs and along with Neg Earth will provide back-up for the first field test. Local service company Resolution X is also on hand to provide local service support.

If there had been any limitations with the X4 Bars, noted Narula, it had been the slight lack of brightness and ability to handle warm colours well. All that has now changed with the impression X5 IP Bar.

The new firmware ensured complete compatibility with the X4 colour palette and enables precise programming on the 18 individual pixels. "We are very picky with the colours in theatre because we have time to tweak and fine-tune over the show's four-week technical rehearsals – and this includes the new lime chip," Narula continued.

"You can take your X4 shows and transfer them onto X5 and it gives you individual pixel control on RGBL as well, as RGB which is brilliant." Narula says there is a virtually limitless number of attributes presented by the impression X5 IP Bar: "They are absolutely fantastic:



they are bright and the colours are outstanding, with wonderful saturates. In fact, the spectrum on the warm side is now unmatched. In addition, they are silent, and the dimming curve is as brilliant as on the X4.

"The silent operation is vitally important," he added, "as a lot of the scenes in the show are incredibly quiet." Further to this, Narula highlighted the compactness of the unit, which is a great asset on this production given the way the truss is designed. Consequently, the 24 x impression X5 IP Bars form an integral part of the show's design and handle "some big light curtain scenes" effortlessly.





Finally, Max Narula also notes another extremely neat addition: the much-requested 2° frost feature, which is now also available on the X5 IP Bar.

The takeaway, he said, is that any designer can simply flip from X4 to X5 and notice no difference "apart from brilliantly new bright light." Adding: "If people want to use it, they know they can just drag and drop."

His enthusiasm is supported by Bruno Poet himself, who noted: "Since Max and the team did all the set-up in Australia, my first glimpse of the light curtains in action was when I arrived during cast dress rehearsals on stage. I was immediately blown away by the improvement over the original X4 Bars. The additional intensity made the light curtain look bolder and crisper, giving us a better balance against the video images behind. I was also really impressed by the quality of the colour we could achieve with the new lime chip.

Continuing, "I'm now a huge fan of the impression X5 IP Bar, which will be my go-to light curtain for future productions. A huge thanks to Neg Earth and the GLP team for getting these first units ready for us."

Max Narula summarized, "GLP have shown us how to design [shows] using light curtains. Now we have a



weatherproof version, which is great. I must say it's fun to be the first show in the world to use these."

Aside from Bruno Poet and Max Narula, other credits include John Viesta (US associate); Kathy Pineo (Australian associate); Sarah Brown (European associate); Tamykha Patterson (European programmer), Jason Fripp (Australian programmer), Sam Floyd (international production electrician); Dale Mounsey (Australian production electrician) and Jeremy Wahlers (US production electrician). The show's director is Phyllida Lloyd, choreographer Anthony Van Laast, and designer Mark Thompson.

GLP



THAILAND

L-Acoustics L-ISA Evokes a Unique Response from Fans of Wonderfruit

Artists Viken Arman, Photay, O/Y, Earth Echo and more treat audiences to a 360° performance at the Polygon stage within the 140-acre festival site



After a two-year break, Wonderfruit, one of Southeast Asia's most anticipated electronic and alternative music festivals, returned at the end of 2022 to delight 25,000 festivalgoers. A range of regional and international touring artists feature at the four-day outdoor festival, which has showcased an eclectic mix of live music and art, alongside wellness and lifestyle activities, since 2014.

This year, the fields of the Siam Country Club once again offered performances across world music, jazz and Thai funk during the day, and morphed into electronic beats after sunset.

Among the dozen stages on the 140-acre festival site, Polygon stands out for its originality. A 2,000-pluscapacity arena, Polygon comprises a 25m diameter honeycomb-shaped dome. This hemispherical structure is rigged with 360° L-ISA Immersive Hyperreal Sound technology from L-Acoustics, as well as cutting-edge lighting and visual effects. The dome, which debuted at Wonderfruit in 2018, is designed to be multi-sensory and even gently disperses scents to enhance the festival-goer experience.

Last year, the Polygon stage hosted live sets from electronic music artists such as Viken Arman, Photay, Âme and O/Y, who pushed the tempo late into the night.

Live sets allow electronic music artists to create new interpretations and arrangements of their well-known pieces. When the Polygon team informed the artists





that they would have the chance to perform in 360° immersive audio, they began working together to prepare their sets for this new technology. With the artists spread around the world, these sessions were conducted both in person and remotely.

French DJ-producer Viken Arman was able to put L-ISA to the test in a London studio before the festival began. Known for his minimal style of electronic music, Arman spent a whole day listening to his tracks on an L-ISA system and was immediately blown away by it. "I left the London L-ISA studio having a sense that this wasn't just an immersive gadget attached to a few surround speakers," he commented. "I could see many possibilities beyond a standard stereo output mix. It got me to think critically about the spatialisation of every sound in my tracks for the Wonderfruit set."

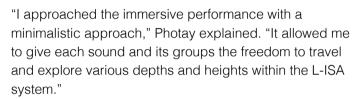
Ahead of his performance, Arman also tested his live mix at the Polygon stage on-site at Wonderfruit. There, Polygon's spatial engineers, led by Davey Williamson and including Matt Gush and Matt Hill, helped him to move his percussive and modular synthesiser elements around the L-ISA system.



American musician Photay (Evan Shortstein) depended on a more extended sound check slot at the festival. After a virtual consultation with Gush, he prepared most of his performance material in a home studio and on the plane to Thailand. During his sound check time, Photay solidified his vision of how he would organise his stems into channels with clear categories, allowing for smooth transient textures, rhythmic beats, melodies, percussion and drums.

LIVE





Like the other artists, Berlin-based musician O/Y had used an eight-point surround system before, utilising an audio interface to route eight channels to an ambisonic system. To prepare his show, he was introduced to L-ISA technology during a studio session where he began to experiment with using all 64 output channels. After that session, O/Y reorganised all his tracks' stems and reapproached the live mix, opting for a clean and concise overall mix on each of the 64 output channels without the need for bus mixes, input returns channels or master chain processing.

The Earth Echo collective, led by sound artist Phan Tu, had a different approach to preparing its daytime sound healing sessions. Earth Echo's sound bath content involves Tu using both a soundscape playback and live instruments, which she moves over the bodies of participants so that they can physically feel the sound around them.

Earth Echo's dedicated spatial audio engineer, Daniel Figols, shared his tracks with Gush, who then optimised the mix in the Delta Live L-ISA studio. "After Figols prepared our mix, we tested our content on a similar



Polygon rig at MDLBEAST's Soundstorm festival in Riyadh, Saudi Arabia, a few weeks prior," said Tu. "It was fundamental to understanding how our tracks reached ears and bodies within the live space and allowed us to adjust our sounds and stems for a more optimal experience at Wonderfruit."

Using L-ISA immersive audio, the Earth Echo program can deliver a more powerful auditory experience to ten times more participants per session, as there was no need to play the instruments in the space physically since the immersive configuration translated the physical sound bath experience perfectly.

For Photay, Viken Arman and O/Y, the Wonderfruit performances with L-ISA technology were a first. The comprehensive immersive audio system changed how they performed their unique brand of electronic music, and they felt more creative as they played and improvised. The musical dialogue with the audience was also an entirely new experience and proved to be a hit with the festival's audiences.

"The crowd during my set seemed more interested in listening than just dancing," concluded O/Y. "I believe L-ISA technology played a major role in evoking this unique response. It is a game changer for the festival experience produced by Polygon, powered by L-ISA."

L-Acoustics



AUSTRALIA

TDC Captures the Beauty of our Natural World at Vivid Sydney with "World First" Deployment of Barco Laser Projectors

LIVE

TDC's fleet of over 150 laser projectors illuminate multiple sites across Vivid Sydney 2023 including projecting onto Australia's largest museum object – the HMAS Vampire.





Opera House Lighting of the Sails: Life Enlivened.

It would be easy for a company like TDC – Technical Direction Company to deliver the same projection technology each-and-every year for Vivid Sydney however it's part of TDC's DNA to constantly explore the latest upcoming technology, to refine and optimise its video solutions offering.

TDC's highly experienced team of project managers, creative technologists, designers, and engineers are involved in redesigning projection to provide more pixels, brightness, better efficiency and from a technical point of view, a greater result for over twenty installations at Vivid Sydney 2023. These are in the form of projection design, mapping and illuminations onto Australia's

largest Museum vessel, the HMAS Vampire for Harbour Life, the Sydney Opera House Lighting of the Sails: Life Enlivened and a fully immersive projection experience at Vivid House to showcase four awe-inspiring artworks featuring Australia's natural world.

Vivid Sydney Festival director, Gill Minervini explained: "Vivid Sydney is Australia's biggest festival celebrating creativity, technology and innovation, and this year the festival celebrated the beauty and diversity of our natural world. Being able to collaborate with leading innovative partners like TDC is essential to bringing Vivid Sydney to life and creating a truly unforgettable experience for festival-goers."



In summarising the technical advancements at this year's Vivid Sydney, Michael Hassett, Founder and Managing Director of TDC enthused: "I am impressed with how Isaac Mckenzie, TDC's head engineer for Vivid Sydney explained the reasons for certain technology selections using specific routers and servers on particular installations. TDC is constantly trying to find ways of improving and refining the solution. Testing all of our solutions at our warehouse is an essential component of our R&D process."

New TwLite outdoor projection enclosures

TDC's newly designed TwLite projection towers house projectors outdoors. They can be rapidly deployed, have improved airflow for projector efficiency and lifespan, and are more robust and waterproof than previous designs. "We are excited with the efficiency TwLite towers provide during installation on site. Made with sustainability in mind, the towers can be reused which is very important," said Toby Waley, Head of Operations at TDC.



New TwLite outdoor projection enclosures.

All installations are controlled from a central point so the projection towers do not disrupt audience vantage points. All system design was carefully considered throughout the festival footprint. Lighting of the Sails: Life Enlivened (2023) at Sydney Opera House now has all laser projectors producing 4K resolution to bring the work of Dr John Olsen and Curiious to life. New projector coolers increase efficiency and light output. Fibre optic outputs from the custom media servers improve efficiency.



Inside Out with Spinifex Group and Australian Museum of Design at Customs House.

For Inside Out at Customs House, all laser projectors are upgraded from Barco UDM-W22 to UDM-W30 for increased light output and performance. Fully redesigned, there's no longer a centrally located projection tower and there's redundancy for each Barco projector.

Record-breaking laser projection

In total, TDC deployed 150 of the latest laser projectors for Vivid Sydney 2023 – the largest such installation ever mounted in the Southern Hemisphere. Laser projectors have more light output than conventional lamp-based projectors, they deliver superior fidelity and sharper contrast using significantly less power than older technologies.

The projectors delivered illumination that produce an eye-watering billion total pixels each evening, more than double the total pixels in 2022. At the same time, energy consumption was 150 kilowatts per hour (kWh) lower than last year. Put another way, TDC was able to deliver a 25% increase in projection coverage for Vivid Sydney 2023 while emitting less carbon waste than in 2022.

"Every year TDC evolves its technology offering and this year our project teams are very excited to be achieving a world first in laser projection," said Michael Hassett, founder & managing director at TDC.



Barco UDM projectors.

"The Barco technology has standout features including high brightness, low latency processing and a robust design – plus Barco is the only projection system that meets our requirements for colour uniformity, reduced power consumption and return on investment.

"Each year, we always provide manufacturers with some processing and operational suggestions for improvement in deployment which this year included low operational costs and monitoring using our TDC LiveView platform to operate the equipment from one central location. We are delighted to have that direct feedback included in the UDM-4K30 which visitors to Vivid Sydney will be the first to see in action anywhere."

Executive vice president, Barco Immersive Experience, Erdem Soyal added: "We greatly value our longstanding partnership with TDC and are more than happy to integrate their customer feedback into the design of our technology. From all corners of the globe, we will be watching the results of this world-first deployment by the experts at TDC of the UDM-4K30 with great interest and wish everyone who visits Vivid Sydney the very richest of experiences."

In view with TDC LiveView

Aligning with the theme of Vivid Sydney, Naturally, TDC deployed its TDC LiveView automated remote monitoring system that monitored thousands of pieces of equipment to troubleshoot issues and limit staff travel. Operators and engineers were based at a control centre. All data from each installation was provided by TDC LiveView



House of Naturalia at Barangaroo House.

and, if any technical challenges arose, engineers were dispatched immediately.

Drew Ferors, head of Technical Services & Training at TDC, noted: "TDC LiveView is an automated solution that will monitor thousands of pieces of equipment used at Vivid Sydney across our installations. With it, we can collect real-time data such as the temperature of all the equipment sitting outdoors in projection enclosures, along with information on how the kit is performing."

All TDC projector enclosures are climate controlled for enhanced equipment performance with installations at Vivid Sydney monitored by camera systems that also feed back to the LiveView App.

Gill Minervini, Vivid Sydney Festival director, concluded, "We always aim to improve the sensory experience for visitors to Vivid Sydney and one of the ways we do that is by partnering with technology experts like TDC. Experiencing the glorious vibrancy and fragility of our natural world has never been more important and we are thrilled that visitors are able to immerse themselves in the artworks deeper than ever before."

All photos @ TDC - Technical Direction Company

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