Creative Technology Korea Successfully Delivers VCT 2024

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Our Feature column takes a closer look at Projection Mapping, and how it continues to shape the present and future of live event experiences. Industry analysts report that the Projection Mapping Market size is estimated at USD 4.58 billion in 2024, and is expected to reach USD 12.34 billion by 2029, growing at a CAGR of 21.87% during the forecast period (2024-2029), as they suggested that the live events/festivals market could potentially contribution close to 50% of those figures. Narrowing down the focus to the Asian market – key industry reports indicate that projection mapping products and technologies comprised over 15% of the overall sales figures for the live event technology market in Asia in 2023; further assuring that that these figures will continue to grow steadily by a healthy minimum of 10.5% annually. And the proof of this pudding lies in the increasingly widespread adoption of projection mapping in the live-event realm.

The PLASA Show, held in September, was widely regarded as a great success. Numerous new products were unveiled at the event, and we highlight these innovations in our Ennovation column's PLASA Roundup. In our Live column we cover the 2024 Valorant Champions event, which is the pinnacle of the global VALORANT esports calendar. With impressive LED setups, lighting, and show power, CT Korea contributed to the immersive experience for over 15,000 attendees.

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Clear-Com Partners with Goldenduck to Enhance After-Sales Support

THAILAND: In a move that underscores its commitment to providing exceptional service and support, Clear-Com has fortified its long-standing partnership with **Goldenduck**, a leading AV solutions provider in Thailand. This collaboration, which has been thriving for nearly a decade, is poised to elevate the after-sales experience for Clear-Com customers, distinguishing the brand as a leader in the region's competitive AV landscape.

The AV industry in Thailand, much like in other regions, is marked by its fast-paced evolution and the increasing complexity of technologies being deployed. As the demand for communication solutions continues to grow, so does the need for reliable, efficient, and expert support services. Clear-Com's partnership with Goldenduck directly addresses this need by offering a comprehensive after-sales service package that far exceeds industry norms.

At the heart of this partnership lies Goldenduck's state-of-the-art service centre, staffed by a team of fully trained pre-sales and commissioning engineers. These professionals bring a wealth of expertise and technical acumen, ensuring that every Clear-Com system operates at peak performance. The in-house repair centre, equipped with the latest tools and technologies, further enhances this offering by minimising downtime and ensuring that issues are resolved swiftly and effectively.

Hans Chia, Clear-Com's Regional Sales Manager for Southeast Asia, highlighted the importance of this collaboration. "Our partnership with Goldenduck is a testament to our unwavering commitment to our customers in Thailand. In an industry where after-sales support can often be an afterthought, we are proud to offer a level of service that is both proactive and comprehensive. Goldenduck's expertise ensures that our customers receive not just a product, but a complete, end-to-end solution that includes ongoing support and maintenance."

The strategic alliance between Clear-Com and Goldenduck is particularly significant in a market where customers are increasingly discerning about the after-sales support they receive. With the complexity of AV systems, even the most advanced products can fall short without the backing of robust support services. This is where the Clear-Com and Goldenduck partnership shines, providing peace of mind to users who rely on these systems for critical communications.

Chanunkarn Boonmarkmee, a key figure at Goldenduck, shared her perspective on the partnership. "We are thrilled to continue our collaboration with Clear-Com, a brand that

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shares our commitment to excellence. Over the years, we have developed a deep understanding of Clear-Com's products and the unique needs of our customers. Our fully trained team is dedicated to ensuring that every Clear-Com system we support operates flawlessly, allowing our customers to focus on their core business without worrying about technical issues."

This partnership also reflects a broader trend in the AV industry, where after-sales support is becoming a crucial differentiator among brands. As technology becomes more advanced, the need for specialized support services grows. By aligning with Goldenduck, Clear-Com is not only addressing this demand but also setting a new standard for after-sales service in Thailand.

The impact of this partnership extends beyond the technical aspects. It reinforces Clear-Com's reputation as a brand that is deeply invested in the success of its customers. By providing high-quality support, Clear-Com ensures that its users can fully leverage the capabilities of their communication systems, leading to better outcomes and greater satisfaction.

As the AV landscape in Thailand continues to evolve, Clear-Com and Goldenduck are well-positioned to meet the challenges ahead. This partnership is a clear indication of Clear-Com's strategic vision and its dedication to maintaining its leadership position in the market.

Clear-Com

Thijs Bruins Joins Follow-Me as Global Sales Manager

GLOBAL: Follow-Me, manufacturers of high-end performer tracking solutions for lighting, immersive audio, video mapping and stage automation applications, has appointed Thijs Bruins as Global Sales Manager. Thijs will oversee the Follow-Me global sales network, aligning existing partners, expanding the network to improve customer experience and providing a strong base for the company's future growth.

"We are really happy Thijs is joining Follow-Me," Marc van der Wel, Managing Director said, "He brings lots of technical and commercial knowledge, industry experience and enthusiasm to our growing company."

Thijs has a wealth of technical expertise. Starting out at a young age as a lighting technician and continuing to juggle this freelance work and training, his early experience underpins his deep understanding of the live events, theatrical and AV industries. After years of freelancing, Thijs moved on to the role of Manager of Special Projects at Trekwerk, before joining TAIT as Business Development Manager. Thijs oversaw the growth of TAIT's presence in Europe, even through a global pandemic.

"Thijs will be communicating with our customers, show designers and sales partners to further establish and grow our market presence, expanding our renowned client support," explained Marc.

"Follow-Me is a company that has truly revolutionized the live entertainment industry with its innovative performer tracking solutions and I'm eager to contribute to our continued global growth by connecting even more clients with the cutting-edge technology that Follow-Me is known for," said Thijs.

CT Middle East Invests in Robe

©Louise Stickland.

CTME's Head of Lighting, Sam Connolly and Elie Battah from Robe Middle East.

MIDDLE EAST: Creative Technology Middle East (CTME) is based in the UAE, KSA, & Qatar, and delivers technical design, planning and production for some of the most ambitious and dynamic live events and system integration projects in the region.

Creative Technology has been steadily investing in new Robe moving light fixtures over the last three years, including the recent purchases of 24 x FORTES, 80 x LEDBeam 350s and 4 x RoboSpot BaseStations with Motion Cameras.

The latest purchases have happened since CTME's head of lighting, Sam Connolly, started with CT three years ago and were driven by him coupled with the company's previous experience with Robe moving lights, including BMFLs.

However, the time had arrived to update these with newer technologies. Before joining the team at CTME, Sam enjoyed 10 years working in the region on interesting and demanding shows,

so was therefore very familiar with the tough working environment for any equipment plus everyone's high expectations.

When he came onboard, CT's BMFLs were regularly out on projects, and whilst "a great light for this market with energy efficiency in mind, it was the time to look at some new and more sustainable technology," he explained.

The FORTES were purchased soon after he arrived, specifically to keep sustainable technology and to follow the high success of the BMFL. Creative Technology also invested in the Robe RoboSpot Follow Spot systems to work in line with the FORTE. Sam commented that the RoboSpot is an "excellent" and "easy to use" system.

When Sam joined, he had already had previous experience in Robe's LEDBeam 150 and knew how popular it had been in the market. So,
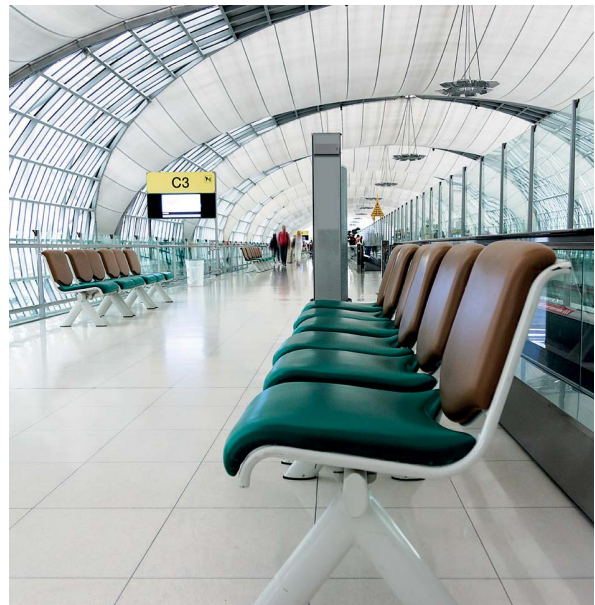
when the LEDBeam 350 was launched this fitted perfectly with the need for a compact bright and versatile LED Wash/Beam fixture.

A further 40 x LEDBeam 350s joined the inventory in 2023. Sam likes the impressive 3.8 – 60-degree zoom, the brightness and the speed of the fixtures. "It's a great little light!" he declared. As with all the Robe elements, they were delivered by the **Robe Middle East** subsidiary, which is managed and run by Elie Battah, who commented, "It is very important to us for a company of CT's calibre to commit to our products and technology, and I am very pleased that this relationship is advancing and enjoy seeing the kit on a wide range of excellent projects."

When Sam started looking at the FORTE, there was no other 1000W LED engine luminaire on the market in this class, and he needed a good, solid LED profile fixture with a versatile feature set. He believes that Robe's TE (TRANSFERABLE ENGINE) technology – the ability to replace or change the LED light source – dramatically increases the value and longevity of the hardware.

Robe's support was also a vital part of the equation, and several CT crews have received RoboSpot training from Robe. They work with a wide array of LDs and many different moving lights, "Everyone is always happy to work with Robe and the FORTES," Sam stated. CT services a multiplicity of projects across an array of sectors – corporates & industrials, broadcast, music concerts and festivals. This year's shows have included being the lighting supplier for Hans Zimmer (LD John Featherstone) at the CocaCola Arena which featured a large Robe moving light rig and RoboSpots.

He is now looking at iFORTE and iFORTE LTX (the IP-rated version of the FORTE) as so much work in the Middle East is outdoors, and also more LEDBeam 350s as they are a light that active companies can never get enough of. Sam's overall impression of Robe is that they are a brand that designs and builds robust, reliable products, especially since 2014 when the BMFL range was launched, which he feels "definitely helped put Robe on the map in the world of moving lights."

Around 150 people currently work out of CT, with 12 in the lighting department plus freelancers when needed. The company supplies full production – lighting, sound, video, staging & rigging and they are involved in an average of 6 significantly large projects per month plus a host of medium and smaller-sized events.

CTME just won two prestigious awards at the 2024 Middle East Event Awards staged at Dubai's Madinat Marina, one for Best Video Solution and one for Best Light & Sound Solution, which are a great tribute to the whole team.

Creative Technology Middle East

Ayrton Huracán Shines at The Star Theatre

©Azhar/The Star Theatre.

SINGAPORE: The Star Theatre, the main venue at The Star Performing Arts Centre, has invested in a quantity of Ayrton Huracán Wash fixtures supplied by Ayrton's exclusive distributor for the region, **Total Solution Marketing**

The Star Theatre is a 5000-seat capacity theatre that features a traditional horseshoe-shaped auditorium with plush seating that helps create an intimate ambience. It prides itself in using only high-end professional equipment in its broad programme of events and performances. The Huracán Wash units will become a fixed installation as part of the permanent lighting rig, and mark the second investment in Ayrton for the venue.

40 Huracán Wash fixtures were installed at the request of The Star Theatre's Head of Lighting, Mohamad Azhar Bin Mazlan, who explained why he chose them: "I specified these particular fixtures because of the Fresnel lens, good zoom range, good colour mixing, great output and, most importantly, the framing shutters. These really facilitate the lighting operators to carry out exact focusing with great precision. The Wash fixtures will be used to complement our existing 60 Khamsin Profiles which were purchased for the Theatre in 2020."

Azhar discussed how and where the new Huracán Washes would be rigged. "Most of them are rigged as part of our default in-house rig and perform over throw distances ranging from 10 – 25m. They will be used for lighting our anchor tenant, New Creation Church, at weekly Sunday services, and put to full use at the many concerts, conferences and dance performances held at the venue. The Huraçán Washes complement our previous purchase of Khamsin Profiles very well because of their artistic output, vibrant colours and creative aesthetics on stage."
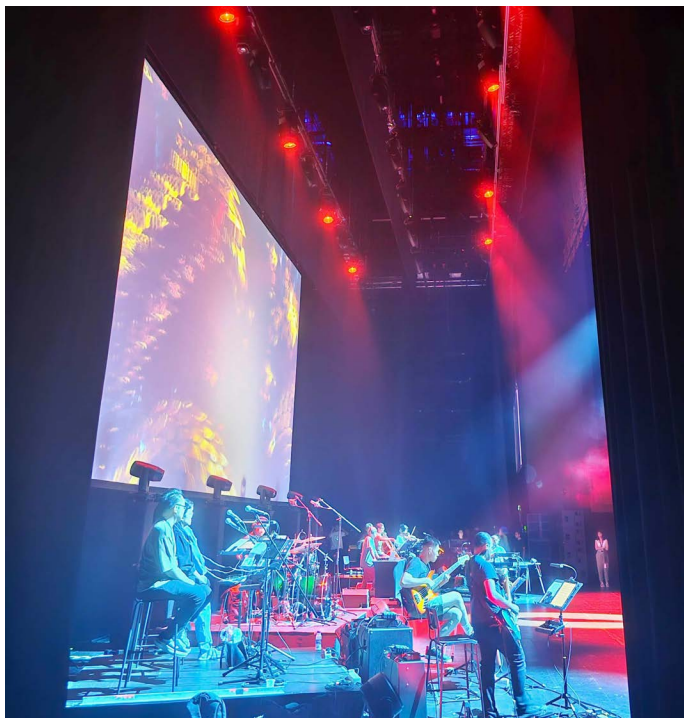
The technical team at the Theatre and the incoming lighting designers have been equally impressed with the new Ayrton lighting fixtures and the service provided by Total Solution Marketing. "Our partnership with TSM has been well established since day one, and the team always provides great pre-and post-sales service," said Azhar. "They are passionate in what they do and give the best support to their clients. We know Ayrton fixtures are always very high quality and well built, with good output. The colours are great and we find them extremely reliable."

"It is exciting to be part of a partner's project over many years and with many different products," commented Ayrton CEO Chris Ferrante. "We first met the team at Star in early 2019 and we are delighted to continue this partnership with the addition of the Huracan Wash. We are also humbled that the team at Star continues to entrust us with providing them their state-of-the-art lighting equipment."

Ayrton

LSC & Avolites Announce Partnership for Australia & New Zealand

L-R: Gary Pritchard, LSC's Founder & Managing Director, Avolites Paul Wong and Ron Carrington

AUS/NZ: Two of the best-known brands in the global entertainment lighting technology industry have announced an exciting new partnership destined to change the landscape of the market in Australia & New Zealand. In September, Melbourne-based manufacturer **LSC Control Systems** became the Australia & New Zealand distributor for UK-based lighting controls and visual systems manufacturer, **Avolites** Both companies are owned by Czech Republic-based moving light and LED manufacturer, Robe lighting s.r.o.

This significant development will be mutually beneficial to both brands in Australia & New Zealand – and to the market as it signals a new period of opportunity for the region's professional lighting industry. It also brings these two renowned brands full circle. Although in robust competition for more than 30 years, the two enjoyed a successful partnership back in the 1980s, when LSC provided certain products under OEM license to Avolites. The acquisition has changed the outlook once again.

As Robe businesses, both companies can now draw on each other's strengths together with the resources and dynamics of the wider Robe group, to offer a new level of solutions and support to the thriving Australasian market. With LSC's role as a provider of world-leading power and data distribution solutions, complemented by Avolites' renowned visuals and lighting control products, the future is visibly bright.

Avolites' Managing Director Paul Wong is thrilled by the development: "We're all very happy to welcome LSC as our representative for Australia and New Zealand. Their years of industry experience and strong relationships will strengthen Avolites in the region. We all take great confidence from the natural alignment between the two brands!"

Gary Pritchard, LSC's Founder & Managing Director, agreed: "This is incredibly exciting news that allows us to provide a very attractive turnkey offering to the customers. Two manufacturers

working together in their respective fields of expertise can only benefit the market."

He added, "Just a few short years ago, we wouldn't have imagined that an opportunity like this was possible. But now, I'm delighted to say that some big, bold moves in this incredible industry have made it a reality!" This new reality continues the long and interwoven stories of both brands and presents an optimistic future.

"Avolites' latest range of lighting control consoles and media servers perfectly complements our product portfolio," said LSC's Business Development Manager, Darren McLanders, "It's a powerful synergy and we're looking forward to passing it on to our customers here in Australia and New Zealand."

Darren continued, "The Avolites team has done an amazing job over the years, establishing a real presence, particularly in the UK, supporting and training console users at festivals and shows. It's a model we'll follow here, with regular training and direct product support from industry professionals, giving users the confidence and support they need to grow an advanced range of products."

The Avolites brand will be officially relaunched to the Australian & New Zealand market during the 2024 Entech roadshow events, set to visit Sydney, Melbourne, Adelaide, Brisbane and Perth during October.

Robe

Gujarat's Mahesh Sound Expands JBL VTX Inventory with New Round of Investment

INDIA: Gujarat-based event equipment rental service provider Mahesh Sound has once again strengthened its position in the live sound market by significantly upgrading its JBL VTX loudspeaker inventory. In a bold move to stay ahead of the curve, the company has expanded its existing JBL VTX A series line array system with a new round of investment in the globally acclaimed system, which saw the company adding multiple units of the VTX A12 and A8 line array modules, along with VTX B28 subwoofers and the VTX M22 stage monitors – thereby coalescing a comprehensive system specification.

In a move to reinforce its commitment to delivering exceptional audio experiences for a wide array of live event formats, Mahesh Sound have added 18 more units of the VTX A12 dual 12-inch line-array loudspeakers and 18 more units of the VTX A8 dual 8-inch line-

array loudspeakers. The newly added VTX A12 and VTX A8 units are equipped with JBL's next-generation transducer technology and a high-frequency waveguide design that provides superior sound coverage – with VTX A12 offering 90-degree dispersion, making it an ideal choice for large-scale events requiring powerful, wide-area sound reinforcement; while the VTX A8, with its 110-degree dispersion, ensures optimal performance in more intimate venues or where broader horizontal coverage is necessary.

In addition to this, Mahesh Sound has bolstered its subwoofer capabilities with the acquisition of 18 more units of the VTX B28 dual 18-inch subwoofers. Outfitted with JBL's Differential Drive transducers and an exclusive port design; these subwoofers are known to deliver deep, uncompromised low-frequency performance that

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meets the demands of even the most challenging live shows. More importantly, the VTX B28s integrate seamlessly with the company's flagship VTX full-range systems, thereby assuring Mahesh Sound with the capability to provide a rich and immersive audio experience for their audiences.

Recognising the critical role of stage monitoring in live performances - Mahesh Sound has also added eight new units of the VTX M22 dual 12-inch professional stage monitors to its inventory, with due consideration to the fact that these monitors offer exceptional clarity and feedback rejection, ensuring that performers can hear themselves with precision, regardless of the complexity or scale of the event.

And to support its expanded loudspeaker and subwoofer setup, the company has also invested in multiple units of the Crown I-Tech HD 12000 power amplifiers. Known for their high performance and reliability, these amplifiers provide the necessary power to drive Mahesh Sound's VTX systems, ensuring consistent, high-quality sound output for all types of live events. The decision to upgrade its inventory comes as Mahesh Sound looks to capitalise on its already strong business portfolio and expand its service offerings. The company has been witnessing

increasing demand for world-class audio solutions, particularly for high-profile live events; and this investment positions Mahesh Sound to cater to a broader range of events, from concerts and festivals to corporate shows and private gatherings, with the ability to deliver exceptional audio performance across diverse formats.

"We've always believed in delivering the best possible sound experience for our clients," said a spokesperson for Mahesh Sound. "With this latest round of investment in JBL VTX loudspeakers, subwoofers, and monitors, we're confident in our ability to handle larger and more complex events. Our goal is to ensure that every audience, no matter the size of the venue or type of event, experiences crystal-clear sound that elevates their overall experience. The addition of this new gear also aligns with our company's ongoing strategy to future-proof our inventory. By continuously investing in cutting-edge technologies from industry leaders like JBL and Crown, we aim to remain at the forefront of the live sound rental market, offering clients the reliability, flexibility, and performance required for our events."

Mahesh Sound

CODA Audio System Chosen for Gala Volkswagen

CHINA: During the Beijing Autoshow, the Volkswagen Group presented product highlights, as well as the progress of its 'in China, for China' strategy, at the city's iconic Phoenix Media Centre. Live-streamed around the world, with the unveiling of new models from Volkswagen, Audi, Porsche, Lamborghini, Bentley, and Ducati, the Volkswagen Group Media Night celebrated 40 years of Volkswagen presence in China in front of a large audience of Volkswagen Group executives, management representatives, and other business partners.

The live show, in which the cars were the stars, demanded premium quality audio for both music playback and speech presentation. Leading production specialist Tongbo was engaged by Creative Audio Visual Equipment Trading of Shanghai to supply an audio package which could deliver powerful background music as well as crystal-clear speech. Tongbo installed and supported a CODA Audio system designed by audio expert Oliver Tschotow, which comfortably met the brief.

The main system comprised left, centre, and right clusters of N-APS (12 in total) complemented by 2 x HOPS8i as infills. A further 13 x HOPS8i were ceiling-mounted as delays, with 2 more deployed as monitors alongside 2 x HOPS12. 4

x HOPS5 were used as delays at the rear of the auditorium. The overall system was supported by 12 x SCP subs and powered by CODA Audio DSP amplification using 3 x LINUS T-Rack and a single LINUS M-Rack.

A spokesperson for Creative Audio Visual Trading commented: "We consider that the audio quality of the CODA loudspeakers is excellent, delivering clear sound at moderate volumes free from any noticeable noise or distortion. The high frequencies are bright without being harsh and the low end is full-bodied and powerful, providing a comfortable overall listening experience."

Global Sales and Marketing Director for CODA Audio, David Webster, concluded, "Tongbo's commitment to CODA Audio in China is fantastic to see. The work they do is of the highest calibre, providing systems for any number of incredibly high-profile and prestigious events. A system deployed for a show of this nature needs to deliver crystal clear audio of the highest quality and be flexible enough to cope with the multiple demands of speech presentation and powerful background music reinforcement. The CODA system deployed by Tongbo proved to be exactly what was required for this important celebration."

CODA Audio

Martin Audio Elevates Sound Excellence at Epik
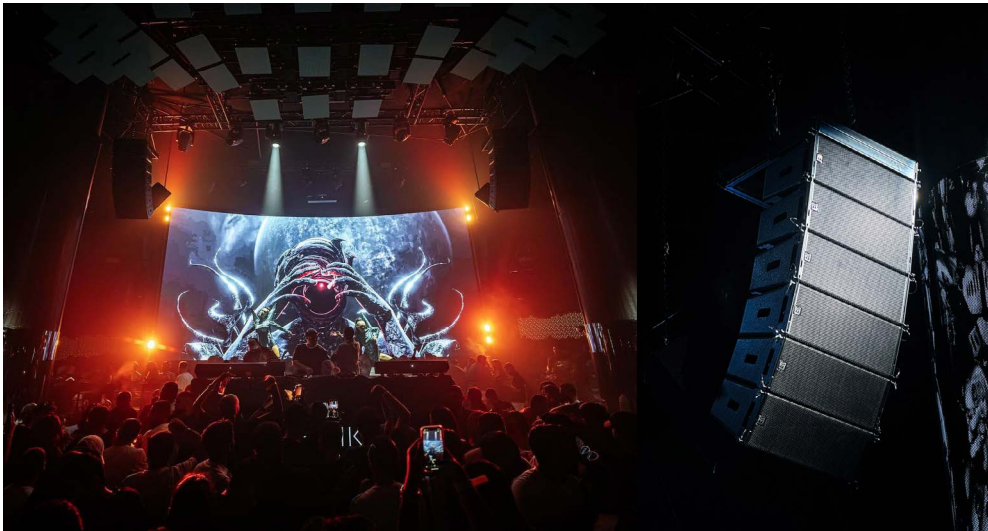
MIDDLE EAST: Pulse Middle East has completed a ground-breaking audio-visual installation at the exclusive Epik Club, situated in Dubai's Meydan Grandstand, setting a new standard for audio excellence in nightclub venues. Based in the UAE and serving clients across the MENA region and beyond, Pulse ME specialises in AVL Integration for nightlife, museums and places of worship.

Pulse's long-standing relationship with Martin Audio dates back to the team's touring days. The journey began with the W8L Longbow while the LE1500 wedge monitor, with its unparalleled clarity, further cemented the preference for Martin Audio products.

This time, Pulse's team chose to work with the Wavefront Precision WPS system at a venue that is set on 25,000sq. ft of space—a decision driven by several compelling factors.

The WPS system's clarity and natural sound quality immediately impressed them. What stood out was the mid-range clarity that required no additional EQ adjustments, delivering flawless audio straight out of the box. This capability not only simplifies set-up but also ensures consistent performance across different environments.

"The WPS stands out not only for its technical specifications but also for its ability to reproduce sound with such fidelity and transparency," said Sammy Bachour, Pulse's Head of Audio. "This makes it an ideal choice for high-quality audio projects.

The deployment of 12 WPS units per side created a powerful environment at Epik Club, capable of handling the dynamic range and complexity of the performances. The system delivered clear and balanced sound throughout the venue, ensuring that every listener, regardless of their position, enjoyed an exceptional audio experience.

Additionally, six WPM units were utilised alongside SX115 subs as DJ monitors. This ensured that the DJ had the same high-quality audio experience as the main PA system, providing a consistent and accurate reference. This not only enhanced the DJ's performance but also elevated the overall sound quality of the events at Epik Club.

"It's a masterpiece, bringing music to life with perfect authenticity," concluded Joe Chidiac, Managing Partner of Pulse Middle East. "This extraordinary PA transforms any space into a concert hall, delivering sound just as it was intended to be heard."

The installation at Epik—which holds over 1,000 people—not only met but exceeded expectations, showcasing WPS as a top choice for high-quality audio installations.

Martin Audio

Vari-Lite VL2600 SE Series Wins Exclusive Plasa Sustainability Award

GLOBAL: Vari-Lite, the originators of the modern moving headlight fixture and Signify entertainment lighting brand, has received the Plasa Award for Innovation in Sustainability for the VL2600 SE Series at the Plasa Show London 2024.

The award is a special category in the Plasa Awards for Innovation, a respected industry award celebrating future-focused technology that improves safety, efficiency and performance through new methods and materials. Product entries were judged by a team comprising 13 independent technical specialists from an array of backgrounds. The Sustainability Award is only awarded at the judges' discretion, and it has only been awarded three times in the last ten years.

"This award from Plasa is a great honour, and it exemplifies why the VL2600 SE Series is the smart choice product with a sustainable future," said Martin Palmer, Vari-Lite Marketing and Product Management Leader at Signify. "The VL2600 SE Series offers significantly increased output to new and existing fixtures. It's possible to rent a VL2600 luminaire on every continent on the globe, and this new SE Series increases sustainability by extending the life of these highly specified light fixtures with notably higher output and the same outstanding features. It was exciting to have the judges validate the impact of this approach."

To be eligible for the Sustainability Award, product entries were required to show a significant reduction in the environmental impact of the product life cycle. According to Plasa's article in Light and Sound International, "The judges found that the upcycling commitment and longer product lifecycles enabled by [the Vari-Lite VL2600 SE Series] sets the benchmark for other manufacturers to follow."

"Sustainability is core to our DNA at Vari-Lite," added Sameer Sodhi, Vari-Lite Business Leader at Signify. "Signify is a world leader in sustainability, and so it is never our intention just to release a plethora of new products superseding or making irrelevant our current portfolio. That's why the new VL2600 light engine leverages advancements in LED technology to increase the output of the current family of fixtures, reducing cost and impact on the environment."

Vari-Lite

CODA Audio CiRAY Makes Korean Theatre Debut

SOUTH KOREA: The Hongcheon Culture and Arts Centre serves the South Korean city of Hongcheon-gun. Opened in 1995 the Centre comprises a theatre, a small auditorium and exhibition space, and stages a wide range of events including concerts, plays, musical theatre, lectures and presentations. The Centre recently decided to upgrade the audio provision in its 500-seater theatre and engaged Seoul-based specialist **Soundus** to install a state-of-the-art CODA Audio system to meet the brief. Established in 1994, Soundus imports and distributes world-class audio equipment as well as offers audio-related solutions including system design, installation and tuning.

A CODA Audio CiRAY system was chosen for the venue, designed by Soundus Sales Manager Beomki Jo who said: "The Hongcheon Arts Centre is a multipurpose venue that stages a wide variety of events, so the solution needed to cater for everything from music performances to speeches. We decided that CiRAY with its 10-inch driver offered the most suitable solution, offering the high output of a large system with the flexibility of a compact system. This met the venue's demands for a flexible, competitive, high-quality solution."

The design utilised CODA's proprietary state-of-the-art prediction software, System Optimiser, to determine the installation points and angles between the line array loudspeakers with 3D simulations created using AFMG EASE 4.4. The main flown system comprised 16 CiRAY units (8 per side) with 4 SCV-F compact 18" sensor-controlled subwoofers (2 per side). The structure and layout of the space were such that the maximum height for mounting the arrays was significantly lower than the balcony, so Soundus deployed 4 x HOPS8i (8" High Output Point Source) mounted on the auditorium ceiling to ensure complete coverage of those seats. A further 2 x HOPS8i and 2 x HOPS12i were wall-mounted to provide onstage side-fill monitoring, with 2 x portable CUE TWO compact 3-way stage monitors for floor monitoring.

Beomki Jo added, "The choice of system for the Hongcheon Arts Centre project was based on evaluations made by the Centre's representatives during loudspeaker demonstrations. Since the completion of the installation, they have expressed great satisfaction with the sound quality and performance."

Paul Ward, Director of Global Business Development for CODA Audio concluded, "Soundus has done great work in Korea as our valued distributor for many years, ensuring that the brand is professionally supported and utilised in the best projects. The choice of CiRAY for this venue is a good example of the great flexibility it offers across such a wide range of installation and touring applications."

CODA Audio

Goldensea Acquires SGM

GLOBAL: As of 1st September 2024, **Goldensea** acquired the business of SGM Light AS, bringing SGM under the ownership of Goldensea. In the coming days, SGM will restart trading under a new legal entity, retaining the SGM name.

Established in Italy in 1975, and now located in Aarhus, Denmark, SGM is a well-respected lighting manufacturer pioneering the use of IP65 moving lights before, more recently, focusing on architectural lighting. Both these aspects create strong synergies with Goldensea which is investing heavily in both entertainment and architectural IP65 solid-state lighting products.

As a globally renowned brand, SGM has always focused on technological innovation, being the first in the industry to launch all-weather waterproof moving head fixtures. It has extremely experienced R&D, creative, operations and sales teams alongside mature sales channels and partners.

SGM's unique patented technology covers both the architectural and stage lighting portfolios,

and its products are well-known in the industry for low maintenance costs, unique design, and consistent performance. SGM's products are widely used in many projects worldwide, including Louis Vuitton's Headquarters in Paris, Le Stade de France also in Paris, The Three Sister Bridge in Pittsburgh, Pennsylvania USA, Singapore's Sky Tree Lighting as well as on Adele's recent record-breaking shows in Munich and Metallica's European tour.

Recognizing the qualities and potential within SGM, Goldensea identified complementary aims and philosophies between the two companies, and the benefits its financial investment can bring to SGM's product development and growth. "Our investment in SGM aligns with Goldensea's future strategic and long-term development plans," said Christopher Agius Ferrante, VP of Goldensea "The purchase of SGM is highly complementary to our existing business, and will help to enrich and strengthen the product range and expertise that we can offer all our clients – for both architectural and stage lighting equipment."

Goldensea stated that all SGM Denmark staff will remain in place. "We strongly value the whole SGM team and are excited to have them on board as we seek to invest and grow in our determination to make SGM sustainably successful," continued Ferrante.

From an operational perspective, SGM Lighting has begun the process of reviewing the order book which was existing as of the 1st of September and will be contacting all customers to discuss these orders, advise of new lead times (should there be any) and deliver other pertinent information. Due to the necessary change in legal entity, all customers are advised that new orders will need to be placed instead of the existing orders for them to remain valid. They have apologised for this inconvenience.

In the coming days, SGM will also be able to accept new orders for all current SGM products. SGM also announced that all existing warranties which were valid under the old entity are to be honoured going forward.

SGM

QSC Pro Audio Appoints Electrosmith as Distributor

SOUTH KOREA: QSC APAC Pte Ltd. has appointed **Electrosmith Inc.** https://electrosmith.co.kr/ as a distributor for its Pro Audio product portfolio in South Korea.

"We are excited to start our journey with Electrosmith and to expand into the Korean market with QSC being their primary Pro Audio brand," said Kim Muurholm Jurgensen, Director of Pro Audio Sales APAC, QSC. "The management is very experienced, and the team is growing rapidly due to their success with their existing portfolio. We look forward to collaborating with them to help make QSC a long-term trusted and leading player, leveraging on our global reputation and Electrosmith's expertise in the Korean market."

"I would like to express my gratitude for partnering with QSC, a company with a rich tradition and reputation in the global audio industry as a distributor in Korea," stated Albert Kim, Founder & Managing Director, Electrosmith. "We started the business based on video projection 20 years ago and now offer audio and visual solutions. With our expertise and network, I am confident that our business will successfully

expand, supported by a long-lasting partnership with QSC in the Korean market."

"We are ready to embrace new chapters powered by our experienced team and are optimistic for new products like L Class," said Daniel Hong, Business Development Director, Electrosmith. "The reputation QSC has for quality and innovation aligns perfectly with our commitment to offering the best solutions to our clients. We look forward to a successful collaboration and introducing QSC solutions to new and existing customers."

QSC

Ashoka AVL Strengthens Audio Arsenal with Major Adamson System Upgrade

INDIA: Kerala-based event equipment rental service provider Ashoka AVL has made a significant investment in upgrading its loudspeaker inventory with a new system from Adamson. The company has added 18 units of Adamson's E15 large format line array speakers, 12 units of E219 dual 19-inch subwoofers, and 12 units of PLM 20K44 amplifiers from Lab Gruppen which are renowned for their power efficiency and reliability; with this acquisition bolstering Ashoka AVL's existing inventory of Adamson loudspeakers which includes the S10 compact 2-way, full range line array modules and the E119 single 19" subwoofers. And like the previous Adamson system purchase, Ashoka AVL's recent system update was once again facilitated by Stagemix Technologies LLP, who are the official distribution partner for Adamson in India.

Arun Ashok, Director of Ashoka AVL, explains that this strategic move reflects the company's commitment to expanding its capabilities and catering to a wider range of live event formats. He affirms that with India's live events industry experiencing rapid growth and an increasing demand for high-quality audio, Ashoka AVL's decision to invest in this cutting-edge system comes at an opportune time, as the Adamson E15 line array speakers are widely recognised for their exceptional sound clarity and coverage, making them an ideal choice for both small and large-scale events. And when coupled with the E219 subwoofers, which deliver powerful low-end frequencies, the system promises to enhance the overall audio experience for audiences across various venues. Additionally, the combination of Adamson's advanced speakers and Lab Gruppen's efficient PLM 20K44 amplifiers ensures reliable, consistent performance across different environments. This enhanced capability allows Ashoka AVL to meet the increasing technical demands of their clients, while maintaining the high standards for which they are known.

"All in all, the system offers excellent sound quality, consistent coverage, and a lightweight and compact design!" Arun exclaims.

With Stagemix Technologies playing a pivotal role in guiding Ashoka AVL's investment decision as they reinforced the company's alignment with global leaders in professional audio solutions – it comes as no surprise that the distribution company is pleased with this development.

Karan Nagpal from Stagemix remarked that the E15 is a popular choice for rental and touring companies, and by upgrading to this advanced system, he believes Ashoka AVL is well-positioned to stay ahead in the competitive event rental market, ensuring that their clients receive world-class audio solutions for live events of all sizes. "Adamson is known for its high performance and reliability, which makes it a valuable addition for any high-quality rental solutions company", he asserts.

Ashoka AVL

StageMix Technologies

Pixotope Forges Strategic Partnership with Happy Elephant Consortium for APAC Expansion

APAC: Pixotope Technologies AS has announced a landmark partnership with the Happy Elephant consortium as its exclusive distributor for Greater China and selected countries in the Southeast Asia region. This collaboration marks a pivotal moment in Pixotope's global growth strategy, set to transform virtual production accessibility in one of the world's most vibrant and rapidly evolving markets.

The Happy Elephant consortium, uniting the formidable talents of Happy Elephant, Totem Vision, and Socam, brings a wealth of expertise and established market presence to this partnership. Their collective prowess in digital display technology, studio design, and audiovisual integration matches seamlessly with Pixotope's state-of-the-art virtual production software. This synergy promises to catalyze innovation and unleash creative potential across the region.

Marcus B. Brodersen, CEO of Pixotope Technologies AS, expressed his enthusiasm: "Our partnership with the Happy Elephant consortium opens up unprecedented opportunities for Pixotope. By combining forces with Happy Elephant, Totem Vision, and Socam, we're not merely expanding our reach – we're unlocking a new realm of possibilities for content creators throughout Asia-Pacific. Their profound understanding of local markets, coupled with our cutting-edge technology, will empower media producers to redefine the boundaries of virtual production."

The exclusive distribution agreement, centred on Pixotope's enterprise product portfolio, encompasses the entire Greater China and selected regions in Southeast Asia, positioning the partnership for significant market impact.

XiaLi, CEO of Happy Elephant consortium, shared their perspective: "We are thrilled to partner with Pixotope and further expand the reach of their groundbreaking virtual production platform to the APAC market. This collaboration perfectly aligns with our commitment to delivering advanced, comprehensive media solutions. Together, we will enable storytellers across Asia to craft immersive, high-quality content that resonates with global audiences."

To ensure seamless integration and local support, XuYang, Pixotope's sales manager in China, will serve as the regional sales manager and key liaison between the partners, providing continuity and leveraging his regional expertise. The partnership is effective immediately, with Pixotope and the Happy Elephant Consortium collaborating closely to ensure a smooth transition and capitalize on the myriad of opportunities ahead.

Pixotope

A&L Vietnam Hosts Unforgettable BlackTrax Hands-On Spatial Technology Experience

VIETNAM: Acoustic & Lighting System (A&L) Group's Vietnam team hosted an industry meet & greet with Vietnam's creatives at Revons Studio in District 4, Ho Chi Minh City. The event, titled "Spatial Visualisation", invited Vietnam's top show designers, production directors, choreographers and technical directors to touch, experience and experiment using the BlackTrax real-time tracking & automation solution.

Acoustic & Lighting System (A&L) Group is a value-added event technology distribution network, with regional coverage across six countries in South East Asia, including Malaysia, Singapore, Indonesia, Thailand, Cambodia, Vietnam, and certified BlackTrax reseller for the region.

For this event, the Group's Vietnam branch chose to showcase the company's solution package of BlackTrax integrated with multiple lighting, video and immersive products. Attendees were given an inside hands-on experience on the BlackTrax spatial integration with disguise media servers, automated stage lighting and even a unique implementation featuring ARRI SkypanelX fixtures.BlackTrax is a leading vision-based tracking system from the Toronto, Canada-based **CAST Group**, and is used throughout the world by top artists, famous touring acts such as Cirque du Soleil, and world-renowned media technologists such as Bild Studios, XiteLabs and many more.

With a diverse range of attendees from various industries, the event provided the perfect platform for A&L to connect with Vietnam's top creatives, who for the first time were able to experiment directly to push the BlackTrax system to its limits while having A&L's dedicated BlackTrax tech team in person to engage in deep technical dialogue about methods to incorporate BlackTrax into their creative work. The A&L team also welcomed creatives from Hanoi, who flew in from Vietnam's capital to join in and attend this unique event I Ho Chi Minh City.

"BlackTrax has been on the minds of many Vietnamese designers, creatives and technical teams for many years now, but we received extremely positive feedback from the attendees that this was the first time they were able to see the solution working correctly in its full form and function. The open-format, open-sharing and hands-on format really put the equipment in the creatives' hands and the ideas that came out from this event already [have] our new rental partner's upcoming calendar filling up with requests," shared Bernard Alexander Raj, the BlackTrax lead tech from A&L for this event.

"Our attendees had a great time: running, jumping, twirling and being really interactive with the BlackTrax system we set up. We had some very influential show producers visit us for this event, and hearing them say to us "I will use this in my next show" gave us confidence that our know-how and solution delivery [were] strong enough to convince them to invest their creativity into this solution," added Tram Bui, of A&L Vietnam's Sales Team.

BlackTrax

DZ Engineering Shifts to DZE Asia for Expansion into Global Market

©Singapore Grand Prix

SINGAPORE: DZ Engineering SRL has been well-known in Singapore for its lighting solutions for Formula One since 2008. This year, DZ Engineering has shifted the spotlight to its sister company, DZE Asia Pte Ltd, also a subsidiary of the Dino Zoli Holding Group. Established in 2019, DZE Asia will cover the entire Southeast Asian market with its offerings in advanced lighting technology and innovative solutions within the motorsports industry.

As the motorsports landscape expands globally, the shift to DZE Asia signifies a natural progression by the wider company to better align with the industry's dynamic changes. At the forefront of the industry, DZE Asia is committed to meeting the evolving needs of clients with specialised, professional services such as race electronic systems, race track lighting solutions, and overtrack signage lighting systems. The company is led by Roberto Grilli, Global

General Manager, and Marco Scaioli, Director of DZE Asia. Renowned in the sector as the "Lighting Man," Grilli brings over 20 years of expertise in both the motorsport and lighting business with an extensive background spanning from integrated solutions for race track circuits to sports venues, museums, and architectural lighting in places of worship. Equipped with a deep understanding of the industry, Grilli drives the company's growth through strategic collaborations and innovative new projects.

Scaioli, as Director of DZE Asia, brings a wealth of experience from the broadcast TV production industry. His team's deep understanding of high-pressure, fast-paced environments, combined with their technical proficiency and industry knowledge, positions DZE Asia as a leading provider of innovative, reliable solutions in the ever-changing global motorsports industry. Marco Scaioli, Director of DZE Asia explained,

"DZE Asia is committed to driving impactful change and delivering exceptional value to our clients. We are always pushing boundaries and continuously provide tailored solutions that best fits our clients' framework. This shift marks a new chapter of growth as we expand our reach globally while maintaining our commitment to our company vision. We look forward to working towards deepening our partnerships with current clients and exploring exciting opportunities on a global scale."

Trusted by Key Industry Leaders

With the company's diverse portfolio of clients and services, DZE Asia is ready to take on a new set of challenges and achieve even more in the years to come. Since 2019, the company has partnered with prominent clients both in Singapore and internationally, such as delivering Race Communications Systems for the Formula One event in Hanoi, Vietnam, for Vingroup. DZE Asia has recently been awarded an exclusive five-year contract to design, deliver, and manage the Race Track Lighting System,

Race Communications Systems, and Overtrack Signage Lighting System for the Formula 1 Singapore Airlines Singapore Grand Prix 2024. This year, they have participated in the project of revamping the Formula One Pit Building paddock lighting system by replacing the existing metal halide lights with efficient LED lights, marking a pivotal shift in motorsports lighting by reducing energy consumption by over 60%.

The successful installation of LED lights for the building facade and paddock area showcases DZE Asia's expertise in the planning, procurement, and installation phases, further solidifying its position as the leading lighting solutions provider for Formula One races in Singapore and beyond.

Robust Service Portfolio

Experts in lighting, motorsport, telecommunications and audiovisual systems, DZE Asia has consistently delivered exceptional, innovative services for motorsports events. Among the company's multiple scope of highly specialised, unique services include:

• *Race Track Lighting System:* DZE Asia offers infrastructure designed for night-time motorsport events. Made up of strategically positioned light projectors, visibility across the track and surrounding areas is ensured with minimal glare for drivers and cameras and optimal lighting for high-speed racing and live broadcast coverage.

• *Race Communication Systems:* DZE Asia performs installation, testing, commissioning, operation and removal of critical equipment, offering an all-encompassing seamless communication, safety and operational efficiency throughout events - providing optimal experiences for motorsport professionals.

• *Overtrack Signage Lighting:* The bright and clear illumination of advertising signages around the circuit enhances visibility and impact. DZE Asia strictly adheres to local standards, laws, and regulations, ensuring peak operational efficiency throughout the event. Prioritising optimal visibility creates an engaging and vibrant environment for all attendees.

Aiming Further and Higher
The years ahead are set to be exhilarating with a range of exciting new projects. In 2024, DZE Asia is thrilled to be working on a number of projects in Asia Pacific. Driven by their commitment to technological innovation and in light of AI's growing impact — DZE Asia and Dino Zoli Foundation, an institution dedicated to preserving Italian culture worldwide, are organising an art exhibition titled "Art in Motion: AI Creatives at the Singapore Night Race." Held at The Arts House from 18 to 24 September 2024, the exhibition will explore advanced AI and digital artistry, focusing on themes of speed and technological progress within the Formula 1 Singapore Airlines Singapore Grand Prix context.

Not to be missed by art and Formula One enthusiasts, the exhibition will feature a selection of Italian and Singaporean artists, showcasing their unique artistic approaches and perspectives through AI in art, with the full support and promotion from the Embassy of Italy, EuroCham, and the Italian Chamber of Commerce in Singapore. It has also been selected by the Singapore Tourism Board to be part of the official programme of Grand Prix Season Singapore 2024 (GPSS).

Meanwhile, the company is also working with MGPA to manage the Race Communications Systems for World Superbike and MotoGP in Lombok, Indonesia, and is overseeing the asphalt work for Indonesia's airport in the new capital, Nusantara, supporting Dromo on this project. DZE Asia's part in the DigiFlag system for Racing Spirit at the Thailand Super Series (TSS) event further highlights its dedication to innovation and excellence within the motorsports sector.

DZE Asia is enthusiastic about advancing their services and reaching a broader clientele, providing top-tier solutions for electrical and telecommunication needs. This shift is a crucial, strategic step for the company towards new market opportunities and driving growth. As the motorsports sector continues to expand rapidly across new markets in Asia, the Middle East and South America, DZE Asia is eager to meet the demands of new clients and provide enhanced services for these events worldwide.

DZ Engineering

Brompton Technology Joins INFiLED's 15th Anniversary Event in Shenzhen

Elijah Ebo, Director of APAC Operations at Brompton Technology.

CHINA: Brompton Technology was delighted to join INFiLED's 15th-anniversary celebration at the InterContinental Dameisha Resort in Shenzhen, China. The event highlighted INFiLED's role as one of the leading providers of innovative LED display solutions and celebrated the long-standing partnerships, including the one with Brompton Technology, that have propelled advancements in the LED industry.

The anniversary featured a variety of meaningful activities, including speeches from INFiLED's CEO and Vice President, along with testimonials from key business partners such as Brompton Technology, LANG AG, and RM Multimedia, highlighting their successful collaboration with INFiLED. The event also included an awards ceremony to honour esteemed suppliers, a showcase of notable projects from the past five years, and engaging performances prepared by INFiLED employees.

Elijah Ebo, Brompton's Director of APAC Operations, expressed deep appreciation for the collaboration between the two companies. "For years, **INFiLED** has been more than just a partner; they've been a key player in our shared success," Ebo said. "After all, without high-quality LED panels, what use is processing?"

Ebo also discussed the impact of their partnership on industry innovation, citing projects like adapting the Tessera Studio Mode feature for INFiLED's 5000-nit ER5 panels and RGBW support for their AR5.95 displays. "Our joint commitment to pushing boundaries and enhancing quality and customer service has been remarkable," he added.

Recalling his visits to the INFiLED factory, Ebo praises the team's unwavering determination to overcome challenges. "Working with Wesley [Zhang, R&D Manager at INFiLED] and the rest of the INFiLED team to devise solutions, often followed by basketball games and celebrations, has been both rewarding and enjoyable."

Following the speeches, the celebration moved on to the strategic supplier awards, where INFiLED recognised the suppliers who have played a pivotal role in maintaining the quality of its products. These partnerships have been instrumental in enhancing INFiLED's positive reputation among customers and helping to solidify its position as a premium brand. Brompton Technology was among the award recipients. "Over the years of working together, the top-notch processors provided by Brompton Technology have significantly aided INFiLED in expanding its presence in the fields of virtual production, live events and beyond," said Wesley Zhang, R&D Manager at INFiLED.

The grand finale of the event featured a series of entertaining performances by INFiLED employees, followed by a recognition ceremony honouring staff members who have been with the company for over a decade.
Michael Hao, CEO at INFiLED, comments: "INFiLED looks forward to continuing its commitment to excellence by deepening collaborations with quality partners across various industries, providing innovative LED display solutions that enhance viewing experiences through cutting-edge products."

"Partnerships like these are deeply valued at Brompton," Ebo concluded. "They empower us to achieve more, push boundaries and make a lasting impact in our industry. We were thrilled to celebrate this milestone with INFiLED and wish the company continued success for many years to come."

Brompton Technology

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ETC Unveils Season Two of On Headset Podcast Series

GLOBAL: ETC has launched season two of its acclaimed podcast series, On Headset. Offering a unique glimpse into the fascinating realm of theatrical lighting design, this immersive audio experience invites listeners to join real-time programming sessions with renowned lighting designers as they craft the visual magic of major productions.

In season two, also known as The Paule Project, listeners will embark on an educational journey with internationally acclaimed lighting designer Paule Constable and programmer Will Frost, as they share lightly curated recordings of headset conversations during the tech rehearsals of the National Theatre's production of The Normal Heart. This iconic play, depicting the 1980s HIV/AIDS crisis in New York, serves as a perfect case study in theatrical lighting, providing valuable insights into the creative process behind bringing a show to life on stage.

"The National Theatre graciously granted us access to their groundbreaking production, allowing us to offer listeners an exclusive behind-the-scenes look at the intricate work involved in lighting a show," said Declan Randall, outreach and training specialist at ETC. "From conceptual discussions to the creation of lighting groups and presets, each episode of On Headset provides invaluable knowledge for both seasoned professionals and aspiring lighting enthusiasts."

Spanning five episodes, season two of On Headset delves into various aspects of lighting design, including collaborative processes, programming techniques, and the integration of lighting effects. It offers listeners the unique opportunity to experience real-time programming, guided by Constable's audio instructions, alongside supporting materials such as show files, a lighting plot, and a lighting operator's guide.

Each episode provides a comprehensive understanding of the intricacies involved in lighting design and programming through the collaborative efforts between Constable and Frost, allowing listeners to witness the evolution of the lighting design from its initial stages to the polished production seen on stage.

"Our goal with On Headset is to bridge the gap between conventional classroom training and the practical experience of operating an Eos desk in a theatre," added Randall. "Whether you're seeking to enhance your understanding of context or improve your muscle memory, our 'console flight simulator' caters to both needs, offering an engaging and educational experience for all."

"We're excited to unveil The Paule Project and invite listeners to join us on this immersive journey into the heart of theatrical lighting," concluded Randall.

ETC/OnHeadset

Mumbai's NEO Entertainment Steps Up with Martin Audio WPC

INDIA: Headquartered in Mumbai, India; Neo Entertainment is a burgeoning premier event production company that excels in delivering high-quality sound, lighting, trussing, and LED solutions. With a reputation for innovation and precision, Neo Entertainment transforms events of all scales into immersive experiences. They leverage the latest technology and industry expertise to provide tailored audio-visual services, making every event – from concerts and corporate gatherings to weddings and private functions – stand out with exceptional style and clarity.

Betson Carvalho Director, Neo Entertainment asserts, "What sets Neo Entertainment apart is our commitment to client satisfaction and attention to detail. We work closely with clients to understand their vision and bring it to life

with a seamless blend of creative concepts and technical excellence. And our experienced team ensures that every aspect of the production, from sound systems and lighting setups to stage trussing and LED displays, is executed flawlessly, creating a dynamic and engaging atmosphere that captivates audiences. Whether it's a small intimate gathering or a large-scale event, Neo Entertainment is dedicated to elevating the experience with top-tier service and a passion for perfection."

And in a move that looks to further propel Neo Entertainment's value proposition, the company has made a significant advancement in their audio capabilities by choosing to update their existing inventory of Martin Audio loudspeakers with a new round of investments. The company has recently upgraded from their previous setup

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to the state-of-the-art Martin Audio WPC System. This acquisition features a powerful configuration of 16 units of the WPC line array modules and 8 units of the SXH 218 subs, along with IK 42 Amp Racks & Accessories, with the purchase being facilitated by VMT – the official distribution partner of Martin Audio in India.

"Choosing the Martin Audio WPC System has been a transformative step for Neo Entertainment. The powerful combination of 16 WPC tops and 8 SXH 218 subs, paired with the IK 42 Amp Racks, has revolutionized our sound capabilities, delivering clear, dynamic, and impactful audio that truly elevates events. Martin Audio's renowned precision and reliability provide us with the confidence to push the boundaries of what we can achieve in every performance" Betson explains, indicating that this move highlights their dedication to delivering superior sound experiences and trust in VMT to provide top-tier audio solutions.

Neo Entertainment's acquisition of the Martin Audio WPC System marks a significant milestone in their audio journey. The choice of 16 WPC tops and 8 SXH 218 subs reflects their commitment to delivering unparalleled sound quality at every

event. We're proud to support them with this upgrade, knowing that Martin Audio's cutting-edge technology will enhance their productions and set a new benchmark for their audience experience." Mr. Kekul Sheth Head of Sales, VMT Distribution.

"The event production industry is evolving rapidly, and Martin Audio's growth reflects the increasing demand for superior sound solutions. Their WPC System is a game-changer, offering unmatched audio clarity and impact. Neo Entertainment's acquisition of this system underscores the industry's shift towards cutting-edge technology to deliver exceptional experiences. At VMT, our mission is to empower our clients with the finest audio equipment available. Seeing Neo Entertainment elevate their setup to the Martin Audio WPC System reflects our shared commitment to excellence. We look forward to continued collaborations and are dedicated to supporting them as they set new standards in the event production industry," said Jeff Mandot Director of Sales, VMT.

Neo Entertainment

VMT

IN PERSON AUDIO TRAINING

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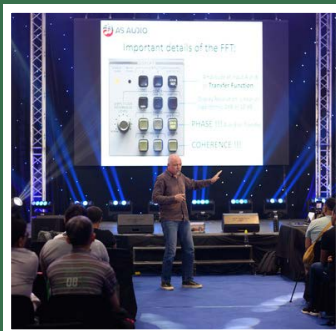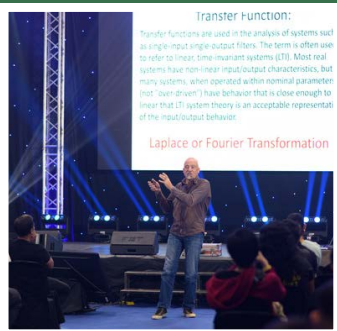
Customise Training

Should your organisation want a specialised customised training, reach out to Alex with your thoughts and he will be able to create the training to meet your objectives.

About the Trainer

Alex Schloesser, born German and living and working in Asia since 2010. Alex has studied Electro Acoustics at the University for applied Sciences. Coming out of University in 1987 he became self-employed and started working as a Sound Engineer. Having close relationship with Apogee Sound Inc and Adamson System engineering helped Alex develop a deep understanding of large scale systems. Between 2005 and 2010 Alex has worked with Real Sound Lab, a company developing measurement software and correction tools and during this time he was responsible for three hardware units and four software developments as Director of Pro Audio.

With a continuous learning curve Alex draws from a wealth of knowledge, which he likes to share with equally passionate colleagues from the industry. Having worked as a sound engineer for Broadcast and live sound and a system engineer for multiple tours for over some 30 plus years means that Alex bridges the theory with anything required for the practical job requirements. In 2010 Alex moved to Asia to continue his career here and he is working throughout the APAC region ever since.

"LOOK OUT FOR MORE DETAILS ON UPCOMING TRAINING PROGRAMME"

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Elevate Your Lighting with LunaBulb

With the LunaReflector for boosted output and precision, you can achieve a sleek, bare-bulb effect, a soft, diffused glow with LunaLens, or a bold look with the LunaDiffusor. Plus, it's all compatible with the LunaSnoot. Inspired by James Friend ASC BSC, the LunaShade gives you even more creative freedom to shape or soften light just the way you want on set.

State of Virtual Production with Brompton Technology

Gain a front-row seat to the future of VP with this insightful panel discussion from Filmart Hong Kong featuring industry leaders from Brompton Technology, Aoto, and Disguise, hosted by Roger Proeis, co-founder of Votion Studios. Together, they dive deep into the evolving landscape of virtual production, highlighting the latest trends, innovations, and challenges shaping this rapidly advancing field.

Meet the Mini-B

With 330 high-output RGBW SMD LEDs arranged in 10 independently controllable concentric rings, the Mini-B Sparky Aqua delivers vibrant colours and smooth, even light distribution. Its wide 120° flood and intense strobe effects will leave you spellbound. Watch the video and see the magic unfold.

PLASA London 2024 Highlights

Missed out on the excitement of PLASA 2024? Don't worry—we've got you covered! Check out the official highlights and catch up on all the thrilling moments you may have missed!

29 - 31 October 2024

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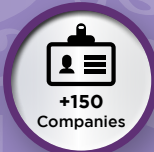
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SIXTY82 Launches Latest in Super-Strong Box Truss Series

SIXTY82 has launched the latest in its TPM Series of super-strong box truss, the TPM39 Series. Yes, the TPM29 Series has got a big – 39cm - brother!

Sharing all the benefits and features of the TPM29 Series, the new TPM39 is up to 25% stronger - yet fully compatible and interchangeable with - the M39 box truss, with all the reliability and versatility the industry expects from SIXTY82 products.

The TPM Series is renowned for its universal features of increased strength, stability and support, giving it the ability to withstand more load without deforming. Designed and manufactured in Holland, the extrusion process ensures a precise and uniform shape that is 100% square with a perfect fit which, combined with stronger alloy truss spigots, are key factors in improved strength and endurance. The extruded end frame also makes the TPM Series bounce- and smash-proof.

SIXTY82 has introduced a new, unique feature to TPM39 by the removal of the end diagonal, an innovation which brings huge benefits. Removal of the end diagonal means the smaller TPM29 Series can fit inside TPM39 structures for more efficient transportation and storage options. This simple adaptation reduces the volume of space required for shipping and maximises the number of trusses that can be transported in shipping containers. This in turn ensures a cost-effective and more environmentally-friendly transport solution, especially over long distances.

Available since September 2024, TPM39 Series offers a choice of four form factors: TPM39L Ladder truss, TPM39S Square truss, TPM39RP Rectangular truss and TPM39SMB Square Middle Beam truss. TPM39 offers a stronger, better, future design for entertainment truss and is the perfect solution for anyone looking to expand their M39 series and take advantage of the latest innovations in truss technology.

SIXTY82/TPM39

BroaMan Joins the 12G-SDI Evolution

With the increasing demand for higher bandwidth, in both the broadcast and live event spaces, 12G SDI is a great option to support higher speed UHD formats (4K, 8K etc), with higher bitrates and a greater number of colours. BroaMan have been early subscribers to this evolution, ensuring their devices are capable of delivering uncompressed, unencrypted video signals, securely and robustly. Consequently, BroaMan has been able to announce three 12G SDI capable models in its product portfolio: Mux22-12G / Repeat48-12G / Repeat48WDM-12G.

Mux22-12G converter/multiplexer boasts a channel capacity of up to 8x 12G and 16x 3G/HD/SD-SDI. Features include: Intelligent MicroMux I/O module; Dual Input with adaptive EQ; Dual Output; Optional reclocker for each input or output. MUX22 has optionally the feature to have video path redundancy.

Selectable audio/sync modules include: Intercom module – 4 four-wire ports for Clear-Com (IC422) or RTS (IC485) or generic intercom (IC444) with 4 Line In, 4 Line Out, 4 GPI and 4 GPO; MADI module – 4 duplex SC MADI ports; FrameSync8 module – 8x Word Clock, BNC 1Vpp, BNC 3Vpp, Black Burst (bi-level) or Tri-Level, PAL/SECAM, NTSC, 720p59.94, 720p50, 1080i29.97, 1080i25 with Line, Frame, Pixel, Percent and Degree shift option.

The device also features: Built-In CWDM module; 2 fibre auxiliary ports for third-party devices and protocols; Full integration into SANE and Optocore network; Optocore module with 2 LAN ports and 2 SANE/LAN ports; RS485 or optional GPIO port; Word Clock and Tri/Bi-Level sync input and output and Redundant power supplies. It is fully controllable via the Optocore Control Software.

Likewise, the Repeat48-12G / Repeat48WDM-12G interfaces are also 12G/3G/HD/SD-SDI Video/MADI Repeater capable.

Repeat48-12G features include up to 24 video channels/MADI streams; Up to 24 EOE converters, which can be configured as: MADI/SD/HD/12-G/3G-SDI input to fibre transmitter; Fiber receiver to SD/HD/12G/3G-SDI output. The Repeat48 is a set of optical-to-copper (and back) 1RU converters. Functioning as stand-alones, they convert from BNC to fibre (and back) as required.

Repeat48 CWDM features include: Up to 24 video SD/HD/12G/3G-SDI I/O channels/MADI streams; Built-in CWDM or DWDM modules; Auxiliary fibre ports for external MUX/DEMUX connection, enabling Optocore integration.

This converts from BNC to fibre, gathers all of the converted fibre signals and 'muxes' them onto a single fibre for easier transportation. For this reason, the R48W is generally bought in pairs or with another WDM-capable device, such as a Mux22.

Common features of both are: No configuration or user operation is required (the device is plug & play); In addition, they feature channel status LEDs; Modular hardware design, and Built-in dual power supply with automatic switchover.

BroaMan/Mux22

L-Acoustics Introduces HYRISS: One Space, Endless Experiences

L-Acoustics has unveiled HYRISS (Hyperreal Immersive Sound Space), an audio solution set to redefine how we experience spaces through sound. HYRISS represents a paradigm shift in design, elevating the role of audio to match the importance of visual aesthetics in creating truly immersive, emotionally resonant environments.

In an era where visual design often takes centre stage, HYRISS elevates the ambience of our most cherished living and gathering spaces by making sound an integral part of the environment. This innovative system combines L-Acoustics' cutting-edge hardware, software, and services to create adaptable, high-quality sound environments suitable for a wide range of applications, from luxurious residences and yachts to high-end hospitality and corporate settings.

Sound: An Integral Part of Your Life
HYRISS enables full control of the sonic environment, from creating serene atmospheres for relaxation to transforming spaces into dynamic entertainment venues. It eliminates the need for dedicated media rooms by allowing a single space to effortlessly become a concert hall, sports stadium, or cinema.

Sound Experiences – Reinvented
HYRISS supports a wide range of audio formats, from mono to expansive Dolby Atmos soundscapes and beyond. Its high-resolution, three-dimensional network of loudspeakers provides exceptional listening conditions and absolute acoustic comfort. The system can enhance voice for presentations, immerse

listeners in music through chosen speakers, and dynamically adapt a space's acoustics for various activities.

By integrating discreet in-wall speakers, high-power amplification, and advanced spatial audio processing, HYRISS delivers concert-level sound quality while maintaining aesthetic elegance. This seamless integration allows for the creation of living spaces that engage all senses, providing a richer, more immersive experience that touches the soul.

HYRISS leverages three core L-Acoustics technologies:

* L-ISA precisely positions instruments in space, mimicking live concert settings.

* Ambiance uses state-of-the-art sensing microphones and the L-ISA Processor II to transform room acoustics.

* Anima utilizes advanced algorithms and machine learning to localize, spatialize, separate, and immerse audio content beyond its original design, transforming ordinary sound and music into extraordinary experiences.

The true magic of HYRISS lies in its flexibility. A space equipped with HYRISS can effortlessly transition between various acoustic environments, from a serene atmosphere for relaxation or meditation to a dynamic entertainment space, ensuring that the auditory environment always matches the intended use of the space and the desired emotional impact.

Each HYRISS installation is a masterpiece crafted by certified experts. L-Acoustics collaborates with qualified system integrators and end-users to define desired experiences, operational conditions, and budgets, ensuring a personalized solution optimized for each unique space.

With HYRISS, L-Acoustics is pioneering a new approach to spatial design where sound plays a central role in creating emotionally poignant environments. The HYRISS solution is now available for custom installations, offering a new frontier in the creation of immersive, multi-sensory spaces that touch the heart and stir the soul.

For more information on HYRISS, or to request a visit to the HYRISS London showroom, click the link below.

L-Acoustics/HYRISS

Astera Expands LunaBulb Functionality with New LunaBulb Accessory Kit

The LunaBulb has been designed as an advanced LED luminaire which incorporates all of Astera's core innovations but maintains the exact same shape of a 100-year-old traditional tungsten bulb. The all-weather LED-based LunaBulb is available with an E26, E27 and B22 fitting and, like a conventional 25-watt bulb, screws directly into an AC-wired bulb socket. A spring-loaded clip allows the light to be converted from a slimline shape to a conventional bulb, granting it both aesthetic and practical value on sets both indoors and outdoors. With fully adjustable white levels (1,750 – 20,000K) and colour (RGB, Mint and Amber, with RGB, HIS, XY and Filter Gel colour selection options), the LunaBulb provides beautiful, flicker-free lighting in a variety of settings, and because of its underpinning Titan LED engine, can be coordinated seamlessly with the wider Astera ecosystem using Astera's intuitive app, whilst configuration and DMX assignment is made simple using the Astera PrepCase.

Now, the new LunaBulb Accessory Kit will even further extend the ways in which the LunaBulb can be used on set or during an event. Each LunaBulb Accessory Kit includes:

LunaShade (four): With two Blocker and two Diffusor shades, the LunaShade has a quick snap-on fitting and can be applied to the traditional LunaBulb to change the directionality of the light or create a more diffuse appearance. Inspired by James Friend ASC BSC, the LunaShade allows even more precise control over the directionality and quality of light produced by the LunaBulb.

LunaReflector (four): Fitting the slimline format of the LunaBulb, the LunaReflector increases the light output of the luminaire by reflecting it forward and narrowing its beam angle.

LunaDiffusor (four): This snap-on dome diffuser for LunaReflector not only diffuses light beautifully but maintains the exact same look and diffusion density as the upper part of the existing Astera NYX Bulb. As such, when a LunaReflector and LunaDiffusor are combined, the LunaBulb ideally emulates the appearance of Astera's existing NYX Bulb, meaning that both products can be seamlessly combined in a single production.

LunaLens (four): The LunaLens is a snap-on optical device with a slight diffusion that is added to the LunaReflector, and which imitates the front look of a PAR16 bulb. It blends colours effectively whilst offering only a slight reduction in the output of the LunaReflector.

White Snoot (four): The white snoot can be screwed onto the LunaReflector to avoid glare in the camera or the viewer's eyes and is fully compatible with the snap-on LunaDiffusor and LunaLens.

Astera/LunaBulb Accessory Kit

FROM THE PLASA SHOW FLOOR

Movies and Movers Turn GLP's Show into Pure Magic

FRONT

For the 2024 edition of the PLASA Show, at least, the familiar 'GLP' acronym stood for 'German Light Picturehouse'. Visitors to its booth were guaranteed the red carpet treatment, as this year's exhibit theme was a vintage pop-up cinema. The eye-catching feature was seen by all entering the Olympia as it again occupied GLP's characteristic prime position right inside the main entrance.

GLP UK's full team was out in force, handing out free popcorn while visitors settled in to watch a short movie detailing the timeline of GLP from 1994 to the present. The screen itself was vignetted by no fewer than 26 of GLP's new JDC2 IP hybrid strobes, which was the company's main product focus. This was the unquestionable star of the show, sending all the features of the

product's predecessor, the JDC1, into orbit in a wonderfully choreographed display of visual gymnastics.

Aside from its IP65 weatherproof rating, the JDC2 IP offers greater visibility, increased output and advanced creativity, with the new integrated beamline equipped with 84 high-performance LEDs.

Already seen as an essential item in the production designer's toolbox, it offers optimised steep flash ramps for an even more realistic and intense strobe impression, with 12 individually controllable segments and extended intensity flash effects provided across more than 100 static and dynamic strobe patterns.

GLP/JDC2 IP

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Robe Unveils Lighting Tech Extravaganza

iFORTE Fresnel.

PAINTE Fresnel.

Robe used the buzz and hustle of the 2024 PLASA London expo to launch four new important and super-cool products – the iFORTE Fresnel, the PAINTE Fresnel, the SVOPATT, and the SVB1.

The new 'Robe Live' expo production performance extravaganza premiered on stand A70, "The Fifth Dimension." It featured three live performers, lots of tech, and heaps of imagination—guaranteed to be another blockbuster crowd magnet on the show floor! This show had a few surprises, and there were even rumours of one of Robe's most popular products being present!

Robe's other businesses – architectural and LED lighting manufacturer Anolis, networking and control specialist Artistic Licence, legendary UK-based console manufacturer Avolites, and Australian-based power distribution gurus

LSC – were all located on adjacent stands. This illustrated the natural synergy and interconnection between all these leading brands, which were integral to Robe's plans and visions.

The Fifth Dimension
The dramatic new live show featured a diversity of Robe fixtures like iBOLT, iFORTE LTX, T32 Slim, Footsie1 and Footsie2 Slim, iSpiiderX, TetraX, Tetra2, the ever-popular LEDBeam 350, the RoboSpot remote follow spot system, and the workhorse iT12 range of luminaires. This was a great forum to showcase the products in a setting for which they had been developed. The lively timecoded show with real performers was specially designed by Robe's in-house creative team and tailored to the booth space.

Apart from drawing crowds to the stand to catch the action, it also gave a snapshot of what the

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SVOPATT.

fixtures were capable of. The show played 5 times a day at 90-minute intervals, ensuring some serious excitement on stand A70!

Featured Products

• **iFORTE Fresnel**The most powerful Fresnel Wash of Robe's iSeries, the IP65-rated iFORTE Fresnel delivers a fabulous soft beam with advanced beam control, designed for the harshest weather. The iFORTE Fresnel combines immense power with great subtlety and is ideal for any outdoor show environment. It is available with a choice of two patented data-capturing IP65-rated TRANSFERABLE ENGINES offering all the advantages of quick and cost-effective replacement, and the ability to keep up with the constant LED development elongating the longevity and ROI.

The iSE-TE 1000W White XP (Xtra Performance) 6.700 K, 40.500 lumens (Integrating sphere) with CRI70 is for maximum output requirements, while the iSE-TE 1000W White HCF (High Colour Fidelity) 6.000 K, 27.540 lumens (Integrating sphere) offers a CRI of 96 for exceptional colour rendition.

The patented F2L two-element smooth outer surface lens maintains a traditional Fresnel-style beam, the curved finish reducing the accumulation of outdoor detritus, while the unique parCoat hydrophobic, oleophobic-

resistant coating facilitates easy cleaning without damage. A motorised 10:1 zoom optical system, with a 6° to 61° zoom range, provides all the wash flexibility needed for multiple applications.

The iFORTE Fresnel features a CMY colour mixing system. Two colour wheels and a variable CTO of 3.000 – 6.700 K offer all the tools needed to achieve everything from dense saturates to refined pastels. ChromaTint patented green content control software allows fast adjustment, ideal for broadcast users. In a departure from other Robe fresnels, the patented PLANO4 framing shutter module has four individual blades in separate planes with module rotation of +/- 60° to maximise beam control. This and many, many more features plus the all-weather reliability make it a fantastic addition to the iFORTE family of fixtures.

• **PAINTE Fresnel** The compact yet potent PAINTE has been a massive success for Robe proving that small is beautiful. The PAINTE Fresnel delivers a quiet, quality wash solution for short to medium-throw applications in theatrical, television, installation, live or corporate settings. The PAINTE Fresnel colour palettes are properly boundless using the advanced CMY colour mixing system, a wheel with nine dichroic colours, variable CTO and Robe's ChromaTint patented plus / minus green.

These luminaires are designed for noise-sensitive environments with multiple fan controls and a choice of a TE 310W HP (High Performance) White LED engine for maximised output or TE 310W HCF (High Colour Fidelity) engine for optimal colour rendition with an inherent CRI of 96.

Robe's game-changing TRANSFERABLE ENGINE technology brings interchangeable task-specific solutions, enabling maintenance of light quality and consistency across rental inventories. With all the softness of a classic Fresnel beam, the

motorised 8.3:1 ratio zoom has a range of 6°- 50° from the 150mm Fresnel lens, making it a perfect compact wash luminaire.

There are impressive levels of beam control including medium and light frosts; RotaScrim-graduated filter with position control, +/- 180° rotation and edge colour correction; the rapid 4Door internal barndoor system for accurate individual leaf control and +/- 90° module rotation for maximum flexibility.

The PAINTE Fresnel is packed with Robe innovation including Cpulse flicker-free management for HD and UHD cameras; L3 Low Light Linearity dimming software for smooth imperceptible fades to black; AirLOC (Less Optical Cleaning) technology that keeps the optics pristine for far longer and EMS Electronic Motion Stabiliser technology for enhanced fixture stability.

• **SVOPATT** Iconic Czech luminaires are instantly recognizable in the lighting world, and Robe has been inspired to honour this past legacy with the SVOPATT. As with all Robe products, it's proudly made in the Czech Republic.

SVOPATT features a cool contemporary housing with nine individual modules each containing 7 x 40W RGBW multichips and the centre pixel also contains a 200W white LED strobe – seriously bright, worthy of its lineage and ready to make an impact with the SVOPATT™ both as a scenic element and a source of captivating effects.

An RLCT lens coating helps maintain high performance and protects against scratches and scuffs whilst preventing particle adhesion, ensuring optics stay cleaner for longer. Multiple modes and protocols include ArtNet and sACN for easy pixel mapping; there is a choice of RGB or CMY colour mixing modes; a variable CCT range; an onboard DataSwatch colour library with 66 preset colours, and tungsten lamp emulation.

On top of that, the SVOPATT has a comprehensive colour control set. Each individual module contains a noise-dampened motorized zoom, and the 3.8° - 50° zoom range enables the creation of tight beams or wide washes from each individual module. Cpulse software eliminates on-screen flicker and the +/- green content control makes it great for studio environments and broadcast scenarios.

• **SVB1** The eye-catching SVB1 is a multifunctional effect, beam, and wash luminaire, a versatile, compact powerhouse in the new Robe SVOPATT family. It delivers high output and extreme speed with continuous pan and tilt rotation for spectacular results. With seven individual 40W RGBW LED cells plus a central pixel with both RGBW and a powerful 200W white strobe LED module, the SVB1 offers full pixel mapping for anything from mind-blowing to beautifully ephemeral looks and effects.

An RLCT lens coating protects against scratches and prevents particle adhesion, ensuring optics stay cleaner for far longer. The motorized zoom range offers precise 3.8° beams, up to expansive 50° washes, and the rapid speed and

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wide coverage are further enhanced by 360° continuous pan and rotation. It's a dynamic choice for all sorts of lighting projects.

Colour mixing modes can be RGB or CMY, there is a variable CCT range and an onboard DataSwatch colour library with 66 preset colours, plus tungsten lamp emulation, and full-colour control. As with the SVOPATT, Cpulse software offers flicker-free operation and +/- green content control, so this luminaire is ideal for studio environments.

Many modes and protocols include ArtNet, while sACN ensures straightforward mapping and network communication is streamlined with REAP (Robe Ethernet Access Portal). An Epass Ethernet pass-through switch maintains connectivity even when the fixture is powered off.

Anolis Robe's architectural and LED lighting brand showcased its new Agame colour-changing 'window reveal' light together with a selection of fixtures from the Ambiane, Eminere and Calumma families. The latest additions to these ranges include the Calumma Urban with its street light optic, the Ambiane SP16 Wall Mount and the Eminiere MC Remote.

The S and M-sized Calumma Urban is available with customisable chip choices, and it has forward and side asymmetric optic variants for pole and wall mounting. The Ambiane SP16 Wall Mount adds another fixing method to the range, so Anolis now offers, wall, recessed, adjustable, surface and pendant mounting options for fixtures in the Ambiane family.

The Eminere Remote MC is the latest addition to the Eminere range, bringing all the multichip advantages to the Remote versions of this highly successful range.

Artistic Licence The Artistic Licence was on hand to meet friends and colleagues new and

old to discuss 'all things lighting control'. A wide range of innovative and flexible load controllers will be displayed including mains and low voltage dimming for LED fixtures, DALI control and switched loads, and Artistic Licence will be highlighting its 'Extreme' range of DMX-protected products in addition to offering visitors a sneak peek of new introductions for 2025.

'Control Without Compromise' seminars were delivered daily in the Robe Theatre space by Artistic Licence product application specialist, Tim Smith. The seminar focused on full venue lighting control, in particular auditorium lighting and how consultants, specifiers and designers can meet the needs of day-to-day users of the space as well as production crews. Importantly it focused on how to address some of the most encountered system design issues.

LSC The newest member of the Robe family of businesses – LSC Control Systems from Australia – showed its complete PD product range alongside Robe - increasingly popular solutions with advanced protections and monitoring capabilities. Visitors can share in the benefits of safety, reliability and peace of mind when working in venues and on productions and projects worldwide.

The UNITY range of power distribution and dimming systems was central to LSC's stand appealing to consultants and specifiers, plus LSC's latest product additions – the GEN-X and the APS-X, which bring Ethernet functionality to the inputs of the GEN-VI and APS systems respectively. LSC's new NEXEN range of Ethernet/DMX converters was there, plus the latest major software update to the Mantra lite control platform. Mantra V4 sees the addition of colour mixing options for 7+ colour LED systems and full support for multi-intensity fixtures and much more.

Robe

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Avolites Presents New Diamond 7 Console and Prism One Media Software

Avolites Ltd – a Robe business – chose this year's PLASA show to debut its new Diamond 7 (D7) console in the UK - the newest addition to the Avolites Diamond collection.

The two variants, the **D7-330** and **D7-215** received lots of attention across the show days from students and industry professionals – not surprising as it is the only console on the market to offer high-end performance that can travel anywhere you go!

Also making its debut at the PLASA show was **Prism One**, the latest version of Avolites' Prism media software (soon to be released) designed principally for lighting designers.

Key new features include an added preview window, crossfade on a layer, hardware decode acceleration for H.264/H.265, control over multiple banks and layers, live input and NDI input, as well as virtual return and region of interest on outputs.

All of these were demonstrated to an enthusiastic audience who were surprised at the ease of use of the Prism software – much like Titan, Avo's long-standing lighting control software.

Other Avolites hardware highlighted on the stand included our flagship lighting control console, the Diamond 9, with variants D9-330 and D9-215, along with the T3 and T3-W – Avo's smallest-footprint professional lighting control product.

The Tiger Touch II and Quartz consoles from the Essential Collection were once again popular with stand visitors and constantly in use. All the Avo console stations complemented the company's powerful 'Production Grade' Q3 media server, demonstrating the Synergy feature set (which unites lighting and video control, offering creative programmers a streamlined workflow for all visual elements onstage).

The eight-seater theatre-style Titan software training area was also new at PLASA. Visitors could rock up and listen to a 30-minute session throughout the day covering Titan Basics, Effects Engines and Synergy or Advanced Programming. All the sessions were at or near capacity, with peak times heavily oversubscribed, and this popular addition to the stand is likely to become a regular feature going forward.

Avolites

DiGiCo Sets the Stage for Quantum326

When the DiGiCo Quantum338 made its official 3:38 pm launch at the 2020 NAMM Show, the crowd that was there to witness the console's unveiling was unprecedented, with hundreds of curious onlookers gathered around the company's booth. Since then, that product has gone on to be a massive global success, both out on tours and in myriad fixed installs. But with console-footprint "real estate" frequently being in short supply, DiGiCo has fielded many customer requests for a more compact, two-screen model, setting the stage for the new Quantum326 launching at PLASA.

"A considerable number of audio professionals have asked us for a smaller version of the Quantum338—and specifically one with zero compromises to its feature set—so we've had our R&D team give the people what they want," said DiGiCo Managing Director Austin Freshwater. "Aside from sporting one less screen and a dozen fewer faders, the Quantum326 is every bit the same remarkably powerful, versatile, and robust desk as its larger sibling, perfectly extending our full Quantum experience to a host of smaller performance spaces and touring productions with tighter logistics constraints."

Just like the Quantum338, the Quantum326 represents a dramatic leap forward in power and connectivity. Based on the latest seventh-generation FPGAs, DiGiCo's newest mixing console offers 128 input channels with 64 busses and a 24×24 matrix, all with full channel processing. Twenty-six 100mm touch-sensitive

faders are laid out in two blocks of 12 fader banks, plus two dedicated user-assignable faders, each complete with high-resolution metering. The desk also features a pair of 17-inch, 1000-nit high-brightness multi-touch screens, plus 58 individual TFT channel displays. Other amenities include "Ultimate Stadius" 32-bit ADC and DAC conversion, six single MADI connections, dual DMI slots, and much more.

The **Quantum326** may also be upgraded with DiGiCo's optional Pulse software update, increasing the console's number of standard input channels to 156 (from 128), busses to 72 (from 64), Mustard Processors to 48 (from 36), and Nodal Processors to 72 (from 64). Another perk of the recent Pulse upgrade is the addition of Mix Minus functionality.

For theatre applications, a Quantum326T version, equipped with the manufacturer's theatre-specific software package, will additionally be available. This model comes with the Pulse upgrade already installed as standard, further supplying the user with a generous 36×36 Matrix.

Debuted at PLASA, the new Quantum326 and Quantum326T will begin shipping on October 24 of this year.

DiGiCo

Obsidian Showcases World's First IP66 Range for Entertainment Data Distribution

The Obsidian Control Systems team attended PLASA with groundbreaking devices in its award-winning **NETRON** https://obsidiancontrol.com/netron data distribution range, including the world's first line of IP66-rated data signal products for entertainment.

Despite the immense amount of IP-rated entertainment technology on the market, lighting professionals have lacked IP-rated data distribution devices to provide the required infrastructure. Obsidian has changed all that. On display was a 6-port RDM Splitter **RDM6 IP**, 6-port EtherDMX Node **EN6 IP**, and an 8-port managed POE Network switch **NS8 IP**, all IP66 rated and in stock and shipping.

The NETRON IP66 range blends the proven chassis and connector technology of Elation's market-leading IP65 PROTEUS lighting fixtures with the NETRON data platform. The NETRON IP66 range utilizes a custom-designed die-cast body, impact-resistant paint, IP ports, and touch controls, providing reliable data distribution for any location that requires dust and moisture protection.

Obsidian also showcased a comprehensive line of NETRON products in smart form factors optimized for system integrators and fixed installations. The range comprises 12 new devices and encompasses network switches, EtherDMX nodes, DMX power relays, RDM splitters, and more.

Obsidian Control Systems

FANTEK Incorporates LoadSense Load Monitoring Into Two Lifting Towers

TK6422LS Top Loading Tower.

FT5023LS Front Loading Tower.

FANTEK highlighted the importance of safety at PLASA 2024 by showing two new lifting towers that incorporate LoadSense, the company's innovative new weight sensor.

Designed to keep users informed about the amount of load they are handling on their towers, LoadSense promises to significantly reduce instances of overload, which is a common problem in the industry. It also ensures that all FANTEK towers equipped with LoadSense will meet the requirements of the EN17206-2 standard, which establishes the need for an overload warning system in lifting towers.

Developed and patented by FANTEK's engineering team, LoadSense is a completely mechanical system that does not require electronic components. This unique feature ensures that LoadSense is available for use 100% of the time, eliminating any potential electronic failure that could compromise safety.

At PLASA 2024, FANTEK showed the **FT5023LS Front Loading tower** and the **TK6422LS Top**

Loading tower With a maximum height of 4.98 meters, the FT5023LS can lift 235 Kg in its mechanism mode and 455 Kg in its structural mode. The LoadSense system not only allows this tower to be compliant with EN-17206 but also, thanks to its Dynamic Overlap system, ensures that forces are correctly distributed over the profiles, thus increasing their resistance and reducing deflection.

The FANTEK TK6422LS is a telescopic lifting tower that is designed to lift vertical loads up to 225 kg to a maximum height of 6.4 meters. It is made up of five extendable steel profiles raised by a high-resistance steel cable. The tower section is secured at working height with an automatic steel safety pin, and the legs are fitted with non-slip rubber pads. The entire system is controlled by a manually operated winch with a double crank.

Already renowned as a leader in the lifting tower industry, FANTEK is dedicated to offering its customers cutting-edge solutions that offer the best in terms of design and manufacturing. By incorporating LoadSense into lifting towers such as the FT5023LS and TK6422LS, FANTEK is also ensuring that its products deliver the ultimate in user safety.

FANTEK

Claypaky Takes Volumetric Effects to the Extreme

Tambora Rays Shield Family.

Making its world premiere at the show, **Tambora Rays** is the perfect blend of volumetric effects and single-pixel mapping for unparalleled performance: the 9x3 rows of high-power RGBWW LEDs will inspire your creativity. With pixel-to-pixel control, a total of 27 single LEDs can be managed for enormous creative potential and stunning lighting effects. This compact and lightweight powerhouse can be used in grids, as a stage or screen border, arranged in vertical or horizontal arrays, or as columns or flying bars thanks to mechanical accessories.

But there is even more: Tambora Rays, Tambora Flash and Tambora Stormy share the same design and body structure. This means that you can let your creativity run wild and combine the three for stunning visual and graphical effects.

Tambora Stormy is the classic strobe, translated for the 21st century. Following the success of the Tambora range, Claypaky has now further expanded it with the introduction of Tambora Stormy. This advanced pixel-mappable strobe light is designed for powerful and versatile applications. With mechanical accessories, you can combine them with Tambora Flash and Tambora Rays for new creative possibilities in both horizontal and vertical configurations. Its efficiency, compact size, and easy rigging make the Tambora Stormy a must-have for various setups.

The Tambora Stormy is packed with high-performance SMD RGBW LEDs for powerful, seamless wide-angle projections, fast feedback, and rapid-firing strobe effects. With 27 individually controllable segments, you get dynamic colour effects and pixel-mapping combos for creative lighting designs. Each segment offers fast feedback, individual colour control, and smooth dimming, letting you tailor your lighting to any scenario.

Another world premiere was the Mini-B Sparky Aqua, a game-changer in the world of compact and lightweight mini moving-heads. This IP66-rated fixture is making waves with its rugged

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Mini-B Sparky Aqua Family.

design and powerful performance, ideal for both indoor and outdoor environments where durability and effects are essential.

Built to withstand the elements, **Mini-B Sparky Aqua** doesn't compromise on brightness or reliability. Its high-output RGBW SMD LEDs, arranged in 10 individually controllable concentric circles, not only deliver intense colours but also ensure even light distribution across a wide 120° flood and extreme strobe effects. Whether illuminating a stage during a concert, enhancing architectural or theatrical features, or creating dynamic light shows for TV broadcasts, this fixture excels in versatility and impact.

The following products were launched on the market in recent months and presented at the show:

• RHAPSODYA: A high-power, low-noise multi-spectral LED-based fixture designed for a variety of applications, including theatre, TV production, touring and live events.

• VOLERO CUBE: A brand-new, multi-function, multi-effect moving head is a real "4-in-1 fusion fixture" boasting 4 powerful 60W RGBW LEDs and plus-shaped cool white LED strips for strobe that can be pixel-to-pixel controlled allowing for blending different levels of effects and unleashing your creativity like never before.

• MINI-B AQUA PX: A mix of flexibility, lightweight design and lightning-fast pan-tilt movements. Born from a strong demand from lighting pros for a mini-washlight that's not only compact and agile but can also brave the elements and play with the lighting creativity. Mini-B Aqua PX inherits the core strengths of its predecessors, adding the pixel-to-pixel control of each LED.

• HY B-EYE K15 AQUA: This is the newest addition to the IP66 Shield family. It guarantees true IP66 protection and has undergone rigorous testing to withstand transportation vibration, shock, extreme temperature fluctuations, hailstone impacts, electrical stress, harsh environments, UV exposure, and more.

• TAMBORA FLASH: A hybrid fixture that can act simultaneously as a strobe, wash, and blinder, specifically designed with a modular approach for use in a linear array, to offer new creative opportunities to lighting designers.

• SKYLOS: This emerged as an ultra-versatile and weather-resistant fixture boasting remarkable light output and exceptional construction features. Particularly valued in the touring sector, Skylos meets the demand for dense, solid beams of light and ever-increasing light output.

• AROLLA AQUA: It represented Claypaky's latest top-of-the-line weather-resistant light, a truly versatile workhorse IP66 fixture with technical and construction features previously unimaginable for this type of light.

Claypaky

Inflection and Reflection

As you know, I am a gearhead and tech geek like anyone. At the same time, I am definitely in the second half of my career in this fantastic industry. Having passed the great sixty years of age recently, I was asked and invited to reflect on some aspects of this industry. After a few weeks of grief that I am that old already, I started thinking back and then going back some 37 years since I started in this industry; there are quite a bunch of memories to draw from. Throughout the almost seven years I have been writing this column, I have tried many times to engage with the readership, and sometimes I took to provoking a response and reaction. I want to be clear that I am just stating my opinions based on my character and my set of experiences. Knowing this industry and having watched so many great talents pass away in Club 27 (those who pass away at the age of 27), I never thought I would make it this far, to be honest. Now that I have made it this far, I am thrilled to draw from this giant pile of experience.

I want to tackle a few different aspects again without promoting or bashing anyone or any particular brand or product. I genuinely believe that any brand with loyal customers deserves to be out there, and I never shared the often-promoted elitism of those in the top-tier performance products. When I started in this industry, resources were scarce on most gigs. This means that I had to choose what I would bring, a set of compressors or some noise gates, but most times, a very limited set of gear to manage the audio on the job. Looking at this from today's perspective, where everything is available in abundance due to the available digital platforms, I find that this does not necessarily make things sound better all the time. It is somewhat similar to the development of the internet, where the overarching opinion was that the availability of information would be a massive boost for society's progress. Some 25 years later, people still take to the internet mainly not to increase their knowledge but to look for entertainment, often adult entertainment, that is.

I remember very well that the first few gigs I heard mixed on a fully digital platform; I remember the distinct feeling that the gig sounded "over-processed," and just because everything was available on every channel, it did not make using it all on every channel any better. From a creative perspective, I support the notion and opportunity to use whatever I please on every single channel, but then making a conscious decision and verifying it by listening to your changed results is as critical now as it has been 30 years ago. To me, the question is, if I only have four channels of compressors available for this gig, where will I use them? Is this better than having 60 compressors and just throwing them at everything? I am tempted to think that having less makes for more informed decisions, and scarcity makes it easier to listen and focus on what you have and how to use it.

Another aspect is that with today's large-scale mixing platforms, you need to be quite tech savvy, and then the question remains if this means leaving some of the creativity and musicality on the table. The term "sound

engineer" has a good ring to it, but after a while, you find people looking for more creative job descriptions, such as" sound designer" and other terms which play more on the creative side of our job. My career started as a monitor engineer. I remember very well that I did not find this job particularly creative since I was serving the musicians on stage and delivering what they were looking to hear. Being a monitor engineer was not bad; I just wanted to be more creative, if possible. Once I moved to Front of House, there was not really any going back for me as a choice. I believe that all those other experiences helped me master the craft and made for better and quicker decision-making rather than too much trial and error on the job.

As for loudspeakers, I am a bit disappointed that we will still use rather ancient driver technology in 2024, even if this old technology has been perfected and efficiency ratings have been rising continuously over the past three decades. Some new technology was occasionally presented but did not break through, which I find a bit sad in the interest of progress and innovation. I always thought that beam steering is a fantastic technology to be used in challenging acoustical environments, particularly in old Roman Catholic churches. However, even with the slightest understanding of this technology, you must admit that using this broadband on musical content must create audible artefacts. Every time I have listened to one of those systems and solutions, I have heard exactly that. When I look at other people experiencing the technology, I find that they are so delighted by the possibilities that their hearing seems oblivious to the audible TANSTAAFL.

With gear development being all over the spectrum, from still using ancient technology to fully embracing digital platforms, this leaves me to look at the education side of our industry. As much as any education platform currently has flaws and shortcomings, there is only one way to progress: to try to improve while at it. Coming from a country where education is accessible to a space where everything is paid for, I admit that I would not be here today if my parents had to pay for my education in this industry since they would not have supported such a venture into Rock and Roll at all. The challenge here is what a meaningful knowledge base is. It's funny that you only dispose of unnecessary knowledge once you have learned and understood it and then file it as not applicable to your job. The learning has been done nonetheless.

Most education platforms try to deliver the basics of physics, which is a good start, and the challenge will always be to tie this to the reality of your job every day. Too often, I had people approach me looking for the holy grail and the one recipe for success, and seeing their disappointment when hearing that there was none was heartbreaking. It is all about having a good set of tools in your inventory and using them to the best of your knowledge. I have picked up woodworking as a side hustle for about five years now, and I have found this to have scary parallels to our industry. After I have gone wrong a thousand times, I think I am at a decent level with a reasonable skillset now after blisters, broken pieces of wood, and broken down machines because I used them wrong. I have learned to enjoy the path to acquiring the skillsets as much as being able to use and apply what has been learned. Back to the wood shop now...

Join the conversation and share your thoughts with Alex. Alex can be reached at
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PIXEL POWERHOUSE

A closer look at Projection Mapping, and how it continues to shape the present and future of live event experiences

by Elton Noronha

Seoul Light DDP Autumn Festival that featured Barco projectors with images coalesced into a single canvas by Screenberry Atlas x8 media server. Photo courtesy of DDP.

Ever wondered how you could breathe life into heritage buildings, water fountains, and basically any object with mass and volume?

Perhaps with vibrant animations and mind-bending visuals, you say?

That's the magic of projection mapping, and if you've been to any major live event in the last few years, chances are you've seen it in action. What was once a futuristic gimmick has now become a staple in the world of live events, particularly across Asia, where the technology has been adopted with open arms.

Industry analysts report that the Projection Mapping Market size is estimated at USD 4.58 billion in 2024, and is expected to reach USD 12.34 billion by 2029, growing at a CAGR of 21.87% during the forecast period (2024-2029), as they suggested that the live events/festivals market could potentially contribution close to 50% of those figures. Narrowing down the focus to the Asian market – key industry reports indicate that projection mapping products and technologies comprised over **15% of the overall sales figures for the live event technology market in Asia** in 2023; further assuring that that these figures will continue to grow steadily by a healthy minimum of **10.5% annually**.

And the proof of this pudding lies in the increasingly widespread adoption of projection mapping in the live-event realm.

Take **iMapp Bucharest**, for example. Christened as the "largest video mapping event in the world" and held annually; this event gathers the best projection mapping artists from around the globe to showcase their talent – both creative and technical. And the year 2023 witnessed the 23,000 sq.m façade of the iconic **Palace of Parliament** (the world's second-largest administrative building), transform into a jaw-dropping canvas with a breath-taking symphony of light and motion powered by industry leading technologies like the **Panasonic PT-RQ35K** 30,000 lm 3-Chip DLP projectors.

Beating Retreat Ceremony. Photo courtesy of Modern Stage Services.

Closer to home, the year 2023 witnessed India's **Beating Retreat Ceremony** taking things up a notch with a full-scale projection mapping display. In celebration of the country's republic day, New Delhi was transformed into a "visual-supernova", as an elaborate projection mapping extravaganza synchronized perfectly with a drone display (of 3,500 drones!). Beating Retreat 2023 featured a 3D anamorphic projection mapped onto New Delhi's Secretariat Buildings – a first

of its experience for people of the city – as the 14-minute visual feast was powered by 14 **PIXERA systems** (including one **PIXERA Director license**) that were matched perfectly with 61 precisely positioned units of **Christie 20k-lumen laser projectors**, a further 8 units of high-performance 40W RGB laser projectors, and high-performance lighting comprising 96 units of moving heads and 180 units of LED PAR lights.

Jhansi Fort Experience. Photo courtesy of Digital Projection.

A year prior, the **Jhansi Fort experience** in India was inaugurated – ahead of schedule – in April 2022 with a state-of-the-art sound-and-light show that spotlighted an eye-catching 270-degree, 83m-wide projection canvas on the walls of the hilltop Jhansi Fort. The 32-minute presentation was programmed with **Dataton WATCHOUT** show composer software and played back using 8 units of the **Digital Projection TITAN Laser 33000 4K-UHD** projectors: three stacked in the centre and three on the right, with a further two on the left-hand side.

Over to the neighbouring country of China, and the year 2022 once stood testament to the glory

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of projection mapping, as the **National Day festival celebrations** in the Kangbashi District of China's Inner Mongolia Autonomous Region came alive with a spell-binding display of projection prowess. A "dream-like" water curtain projection show graced the fountain at the Ulan Mulan Lake that runs through the city. The fountain itself consists of 2,970 sub-fountain nozzles and 1,678 underwater lights reaching up to 230m – said to be the highest known fountain in Asia. And for event, 28 units of M-Vision Laser projectors were strategically deployed to create a spell-binding visual spectacle as enchanting video content was projected onto a "screen" of water that was created by multiple water jets measuring 200m long and 20m tall.

Vivid Sydney 2022 Festival.

And let's not forget the grand projection mapping experience at the **Vivid Sydney 2022 festival** which witnessed one of (if not the …) biggest projector deployments to have ever taken place in the country; with over over 110 HD projectors across 27 sites for 23-nights spanning over 200 total hours of projection including testing and line up. As a crucial part of this extravaganza, **Barco's UDX-4K** high-brightness projectors were deployed for the 9,000 square meter sails for Sydney Opera House Lighting of the Sails to show "Yarrkalpa – Hunting Ground" that spotlighted the story of the Parnngurr community from the edge of the Great Sandy Desert in East Pilbara region, Western Australia.

More recently, the **Seoul Light DDP Autumn Festival** that ran August 29 to September 8, 2024, enjoyed a 222m curved exterior façade of the Dongdaemun Design Plaza (DDP) that was lit up and designed as the world's largest three-dimensional amorphous structure thanks to a total of 26 units of Barco's high-performance projectors. 14 units of the UDX-4K40 and 12 units of the UDX-W32 units coalesced into a single Screenberry Atlas x8 media server using 7 units of Datapath's Fx4 multi-display controllers. A detailed digital model of the building combined with pose estimation algorithms allowed for the Screenberry 3D Scene Editor to work its magic as it precisely aligned the position, orientation, throw ratio, and lens shift of the virtual projectors to correspond with the physical ones. This method seamlessly blended all projectors into a single image, achieving pixel-perfect mapping of the building and significantly cutting down on setup time.

Advancements in Key Projection Mapping Technologies

Projection mapping has come a long way, and the technology powering it is evolving faster than you can say "pixel." If we peek under the hood, it's clear that advancements in **projectors, media servers**, and software are what keep this tech fresh, exciting, and always pushing the boundaries.

On the projector front, we're seeing some real powerhouses in the scene. With the current industry trend being a preference for laser projectors with high-lumen output, preferably above 35k lumens, products like **Christie Griffyn 4K50-RGB, Digital Projection's Titan 47000 WUXGA and 41000 4K-UHD, Barco's UDX series (UDX-U45LC, UDX-U40, UDX-4K40 FLEX, UDX-W40 FLEX)**, and **Panasonic's PT-RQ6LBE** have raised the bar for brightness and lifespan, ensuring that events stay visually stunning

from start to finish. These models deliver high-lumen output that cuts through even the most challenging lighting conditions, meaning brighter, sharper visuals no matter where they're used.

But projectors are only half the story. The brains behind the visuals lie in media servers – the likes of which include industry leading technologies like **Dataton's WatchOut 7, PIXERA** (PIXERA & PIXERA 2.0), **disguise' VX4, Green Hippo's Tierra+ MK2 and Boreal+MK2,** etc. As comprehensive hardware + software packages, these beasts handle massive amounts of data, ensuring multi-layered content plays smoothly and seamlessly, as they form the backbone of every projection mapping show, synchronising content, controlling multiple projectors, and delivering the magic in real time. More importantly, they offer a slew of enhanced features and capabilities to users, the likes of which include, but are not confined to multi-user collaboration, enhanced user interface, enhanced audio and video engines, avant-garde synchronization engines, better flexibility in terms of system configuration and output management, customized control, and more.

And of course, let's not forget about the content mapping softwares – the tools that allow creators to breathe their visions to life. Tools like **HeavyM, MadMapper, Resolume Arena, TouchDesigner, Isadora,** and more continue to empower artists and technicians alike to create complex, dynamic, and interactive experiences with ease. Whether you're mapping a single wall or an entire city block, these platforms allow for unparalleled creative freedom and precision.

Interactive 3D Projection Mapping

If regular projection mapping is cool, interactive 3D projection mapping is next-level. Imagine being able to **interact** with a projected image—walk past a building, and the visuals respond to your movement. This immersive, participatory

experience is what makes interactive 3D projection mapping so exciting.

Unlike traditional mapping, interactive 3D systems use **HD Cameras, motion sensors, touch inputs**, and **AI-driven software**, in addition to a slew of high-performance projectors, media servers, content management platforms etc, to change visuals in real time based on user interactions.

Real-time tracking 3D Projection Mapping at the 51st Singapore National Day Celebrations. Photo courtesy of Hexogon.

What's interesting is that the concept in Asia was first implemented on a large scale in **Singapore** for the country's 51st **National Day Parade celebrations**, way back in 2016. The visual spectacle involved a 360 degrees real-time tracking 3D projection mapping onto two objects – a large moving bolder that will be split into 8 pieces, and Sky City that is made up of fifteen collapsible fabric structures which stands 20 meters tall and 60 meters in diameter. The Sky City, hoisted to 35m above the central stage was the highlight of the show, which represented the future and dreams of modern Singapore. A total of 40 tracking cameras, 66 Christie Boxer 4K30 (30,000 lumens, 4K resolution) digital projectors, 250 tracking beacons, 12 Photon Servers and together with VYV tracking solutions were deployed for this task.

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In more recent times, the **2023 edition of Prague's famous Signal Festival** witnessed buildings and scenery throughout Prague being transformed with art – from light design and visual artwork to AI-created content; as seventeen artists participated along a 5 km (3 mile) route in the city. Of these, Signal Playground: Rainbow – an interactive exhibit and the first installation designed specifically for children – stood out with great prominence. The show, wherein the rainbow and its characteristic colour gradient formed the main visual theme and inspiration, consisted of several different exhibits that invited exploration through interactivity. A total of 4 units of the Christie 4K10-HS projectors were deployed for two interactive experience pieces. One projector was used to light up a round 3-meter screen where children could see how interaction with a floor-mounted round table in front of the screen affected the animation in real time. On the other hand, the remaining three projectors were used with ultrawide lenses for the biggest piece, which was an interactive floor where children could step on animated spots that then became part of the rainbow on the front wall.

Instances like these clearly indicate that the ultimate goal of projection mapping is to offer **hyper-interactive** and **hyper-immersive experiences** for the audience. Gone are the days when projection mapping was a passive experience for spectators. Now, audiences expect more interaction, whether it's via smartphone apps, motion sensors, or even wearables – all in the quest to make the entire experience dynamic, where each person's interaction influences the show.

Trends in Projection Mapping for Live Events – Present & Future

Over the years, projection mapping systems have kept evolving to become more **portable** and **adaptable**, simplifying their setup and use. With projectors becoming smaller and battery technology improving, this enhanced mobility presents fresh opportunities for artists and event planners to craft unique experiences across diverse settings. For example, the introduction of high-performance projectors with ultra-short throw lenses has resulted in professionals now being able cover an entire floor with high-quality visual content using just 6 or 8 such projectors, instead of 40 or 45 projectors which was previously the norm. Such developments foster healthy collaborations, which essentially hold the key driving innovative projects that push the boundaries of creativity and technical brilliance. By integrating diverse expertise, new possibilities emerge for creating larger-scale spectacles, more interactive content, and more immersive environments that engage audiences in truly novel and memorable ways.

With the expansion of the projection mapping industry, though; there is a growing emphasis on **sustainability** and **reducing environmental impact**. Emerging trends in this space include the adoption of energy-efficient projectors, reducing waste through the use of digital media, and exploring methods to lower the carbon footprint of large-scale events. Additionally, projection mapping is being harnessed to promote environmental awareness, displaying visuals and messages that encourage action on climate change and conservation efforts.

Projection mapping is all about staying ahead of the curve, and the latest trends are making sure the experience is fresher than ever. Experiences such as **drone projection mapping**, which was genuinely a rarity at one point in time, are now becoming increasingly more sought after, as drone mapping software platforms now offer automated flight planning and data processing that aim to make it easier than ever to get started with drone-based 3D mapping.

Then, there's also the rise of **holographic projections**. What was once a sci-fi fantasy is slowly becoming reality, with several brands secretly experimenting with holographic technologies that project 3D objects into real-world spaces without the need for a physical screen; concrete development in this space will surely open up an entirely new frontier in live events, where holograms could interact with real-world performers or objects in real-time. To be honest though, the use of holographic projection has already graced the live event sphere almost a decade ago as it was introduced by superstar DJ Eric Prydz's for his "EPIC" line up of concerts. For example, at the EPIC 5.0 edition, animations were displayed on the massive transparent and reflective 20m×9m Holo-Gauze screen to produce the large immersive and jaw-dropping holograms. 4 units of the Panasonic RZ31K laser projectors, each boasting a brightness of 30,000 lumens, combined to project a unified image and optical illusion onto the Holo-Gauze screen positioned in front of Prydz, as fans were treated to a slew of breath-taking holographic visuals, including a giant helix, huge speaking head, and numerous rotating particle effects.

Driving the shift towards more immersive and hyper-interactive experiences is the growing focus on **8K** and **16K projection mapping**, particularly for large-scale events where superior resolution is critical to achieving stunning visual clarity. There are reports that major brands are fiercely competing, with each investing significantly in research, development, and production to be the first to deliver ultra-high-performance projectors capable of supporting these massive resolutions. As a result of these advancements, ultra-high-resolution visuals are expected to become standard at festivals and brand activations in the near future.

Another highly promising area of advancement is the fusion of Augmented Reality (AR) and Virtual Reality (VR) with 3D projection mapping. **Augmented reality** enables digital content to be superimposed onto physical objects, providing an interactive and immersive experience where users can engage with the content more effectively. In contrast, **virtual reality** immerses users in entirely digital environments, where 3D projection mapping further elevates the immersive experience to new levels.

On the other hand, the use of advanced software and hardware to create more complex and dynamic projections is an interesting development, wherein **Machine Learning** and **AI** can analyse the environment in real time, allowing projections to adjust instantly for a more seamless and lifelike appearance. Additionally, advancements in hardware, such as high-speed projectors and sophisticated sensors, enable the creation of highly precise and detailed visuals. The integration of AI in content creation also opens the possibility for AI to autonomously design visuals based on audience preferences or generate evolving art during events, resulting in visuals that not only adapt and respond in real-time but more importantly 'react' to its environment and audience on an even deeper level. Think concerts where the projections change based on the music's tempo, or festivals where the visuals shift according to the crowd's energy.

And finally, no discussion about projection mapping would be truly complete without touching on the topic of 4D projection mapping; now, would it? Many creative and technical event directors worldwide believe in common that **4D projection mapping** will make waves in the next few years. But is that really the case? For starters, one must understand that the essence of **4D projection mapping** lies in the fact that it combines visuals with sensory experiences. And this is primarily what makes industry insiders believe that it's poised to become the next big

thing in applications like performance theatres and concerts, where the goal is to create an all-encompassing environment for the audience. Imagine watching a projected scene, and not only does the imagery change, but you can also feel the environment shift around you—wind, scent, even temperature. That's what 4D projection mapping is all about. The start of course, is expected to be at a relatively smaller scale. But with advancements in technology and the thirst for enhanced experiences – 4D mapping certainly stands a great chance of revolutionizing the live event industry; once it hits the ground running, that is.

Challenges and Growth Opportunities in Projection Mapping

While projection mapping is a visual marvel, it doesn't come without its hurdles. For starters, the **high cost** of equipment can be prohibitive, particularly for smaller event companies. High-power projectors and media servers don't come cheap, and when you add in the cost of software and custom content, the price tag can be eye-watering. This naturally limits access to the technology, especially for mid-size productions.

Another major challenge is the **technical expertise required.** The complex interplay between projectors, media servers, and software demands highly skilled technicians who understand not just the hardware, but also how to design, deploy, and troubleshoot these systems. And with technology advancing rapidly, keeping up with the latest innovations can feel like an uphill battle.

That said, these challenges also present growth opportunities. There's a burgeoning demand for **training and certification programs**, particularly in developing regions where projection mapping is still a relatively new

concept. Several brands within the sector have recognised the value in this and are already offering certification programs for budding projection designers and technicians. Additionally, there is significant growth potential in the realm of **sustainability**. With governments worldwide shifting towards greener initiatives, the demand and subsequent adoption of energy-efficient projectors and systems that minimize power consumption in projection mapping has surged. This shift has played a crucial role in making projection mapping an increasingly popular choice for government-supported live event projects in particular. And in turn, this trend could greatly benefit the live event industry, particularly in regions where live entertainment has yet to be formally acknowledged as a key industry that contributes to both the economy and the cultural fabric of the nation.

A World of Wonder Awaits in Projection Mapping

Projection mapping has turned live events into something magical, pulling the audience into immersive, visually captivating worlds. As technology continues to evolve – incorporating AI, interactivity, and even 4D experiences – the future looks bright (quite literally!). And despite the challenges, from cost to technical know-how, there's no doubt that projection mapping is here to stay, and it's only going to get bigger and bolder.

Whether you're watching a concert, attending a festival, or even just walking by a building that suddenly comes to life with swirling animations, projection mapping has the power to transport you into another world. And that's the beauty of it—it's not just about seeing something; it's about **experiencing it**.

MALAYSIA

JBL Reigns with Precision and Power at Sultan of Selangor's Cup

JBL's Venue Synthesis 3D acoustic simulation software was a key component in the success of the audio design

The Sultan of Selangor's Cup, returning after a four-year hiatus, was held at the iconic Merdeka Stadium and saw Singapore and Selangor renew their long-standing football rivalry that dates back to the 1920s. Despite a valiant effort and enduring challenging conditions, the Singapore Premier League (SPL) Selection was narrowly defeated 2-1 by the Selangor Selection. The result marked Selangor's third consecutive victory in the Sultan of Selangor's Cup, following their wins in 2018 and 2019, bringing their total number of titles to 10.

Needless to say, the game was a spectacle of energy, excitement, and sporting passion, underpinned by an immersive, crystal-clear soundscape. And integral to this success was the state-of-the-art sound system from JBL, expertly designed and deployed by **MD EVENTS ASIA and Systems Electronics & Engineering Sdn Bhd**. Their collaborative efforts ensured that every moment of the game was felt as much as it was heard, delivering an extraordinary auditory experience to thousands of spectators.

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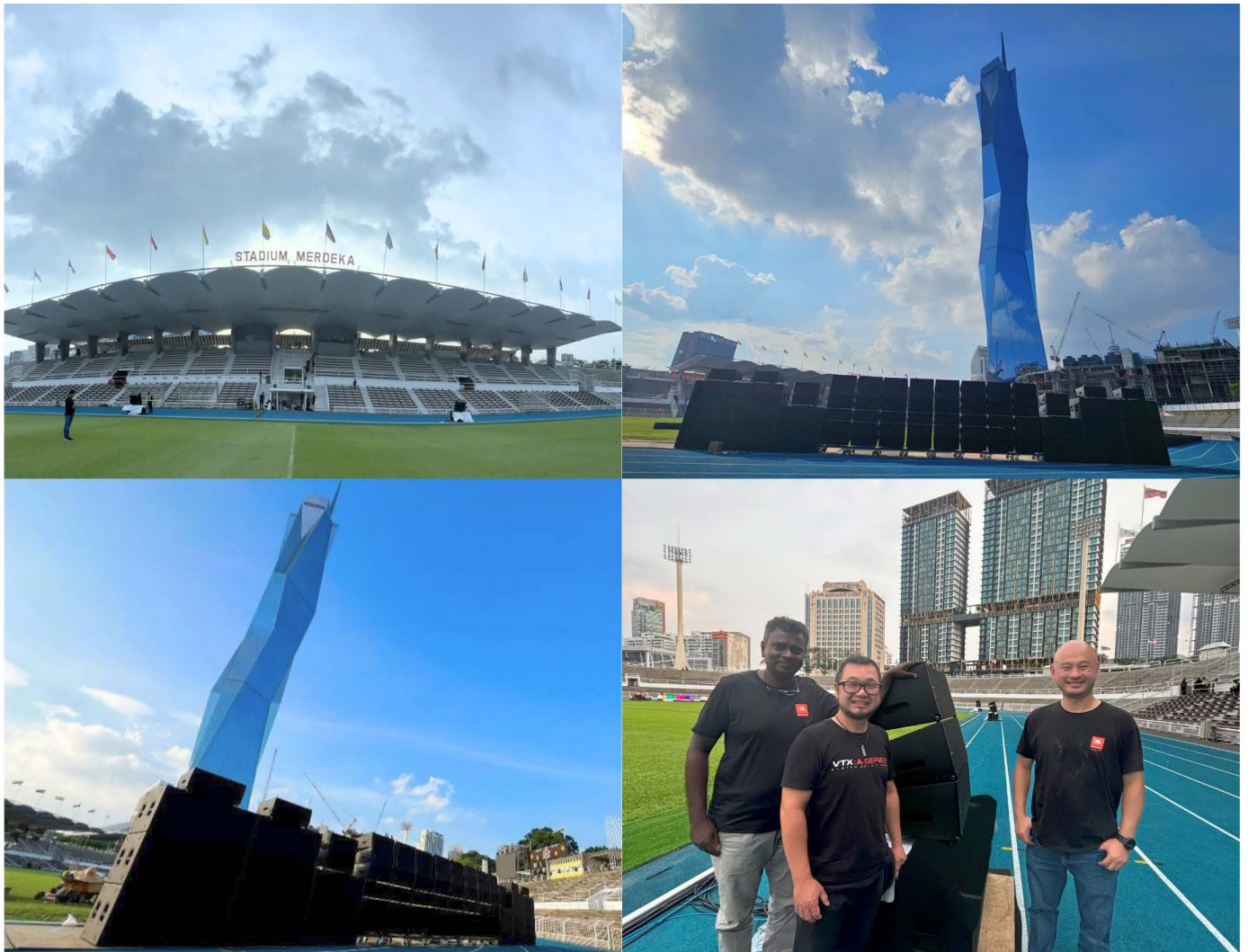
From the outset, the organisers prioritised production quality, fully aware that creating an unforgettable atmosphere was not just about the game but the entire sensory experience. Turning to the expertise of MD EVENTS ASIA and Systems Electronics & Engineering Sdn Bhd to lead the technical design and implementation of the audio production proved to be a masterstroke. Their remit was clear—deliver a sound system capable of covering the vast arena with consistent clarity and power, providing every audience member with a front-row acoustic experience.

Understanding the sheer scale of the task at hand, the audio team approached the challenge with a meticulous eye for detail. The venue, Stadium Merdeka, with its open seating

arrangement and wide audience areas, posed acoustic challenges that required precision planning. The team conducted thorough site surveys, factoring in the physical dynamics of the stadium, the expected audience size, and the technical vision of the organisers.

It was immediately clear that a standard sound setup wouldn't suffice; which is what prompted the team to craft a bespoke solution centred on JBL Professional's highly regarded SRX910LA two-way active line array modules, complemented by the thunderous SRX928S dual 18-inch active subwoofers. According to them, this "winning" combination offered both power and precision, enabling the system to not only cover the entire

seating area but do so with crystal-clear audio and deep, immersive bass frequencies.

One of the major challenges that the team had to overcome was ensuring even sound distribution across the vast expanse of the stadium. In a venue the size of Stadium Merdeka, there is always the risk of certain sections receiving too much or too little sound. However, the use of JBL's SRX910LA modules allowed the team to provide even coverage, thanks to their advanced waveguide technology, which ensured that the sound spread uniformly across the audience area. The high-frequency output was particularly impressive, providing crisp, intelligible audio for every seat, whether close to the stage or at the farthest corners of the stadium. Plus, the SRX910LA's lightweight design and easy setup options also contributed to the overall efficiency of the setup, allowing the technical crew to focus more on fine-tuning the system rather than spending excessive time on installation. This flexibility was a critical factor in ensuring the team could meet the tight deadlines typically associated with such large-scale events.

In total, 56 units of the SRX910LA line array modules were deployed along with 16 units of the SRX928S subwoofers, strategically arranged in a circular formation around the stadium's circumference to ensure that every section of the audience was treated to the same pristine sound experience. Each line array was meticulously positioned, with particular attention paid to the firing angles to ensure perfect coverage from the first row to the last. The team's expertise ensured that no seat in the stadium was beyond the reach of the audio system, maintaining a consistent sonic experience throughout. And while the SRX910LA modules brought impressive clarity, handling the full range of audio with finesse; the SRX928S subwoofers delivered the low-end punch that added depth and presence

to the soundscape. The strategic placement of the SRX910LA + SRX928S stacks ensured that the bass frequencies filled the stadium with impact, without ever overwhelming the mids and highs. This thoughtful configuration ensured that the audience not only heard but felt the audio in every sense, amplifying the emotional intensity of the event.

At the same time, it is believed that JBL's Venue Synthesis 3D acoustic simulation software was a key component in the success of the audio design. With its unique ability to offer a predictive model of how the sound would behave in the stadium, the use of JBL's Venue Synthesis would've allowed for precise adjustments before the actual setup. By using the software to simulate the acoustics of the venue, the team would've been able to optimise speaker placement and fine-tune the entire system to minimise any acoustic anomalies, such as reverberation or sound reflections.

In addition to the impressive tech system, and perhaps most crucial to the success of the sound design at the Sultan of Selangor's Cup event, was the collaborative spirit between MD EVENTS ASIA and Systems Electronics & Engineering Sdn Bhd. Both teams brought their extensive experience and technical know-how to the project, ensuring that the system not only met the high expectations of the organisers but exceeded them. Their ability to work together seamlessly, troubleshooting and making adjustments on the fly, ensured that the audio experience remained top-notch from the first whistle to the final moments of the event.

MD Events Asia

Systems Electronics & Engineering Sdn Bhd

SOUTH KOREA

Creative Technology Korea Successfully Delivers VCT 2024

The 2024 Valorant Champions event is the pinnacle of the global VALORANT esports calendar. With impressive LED setups, lighting, and show power, CT Korea contributed to the immersive experience for over 15,000 attendees

Creative Technology Korea (CT) has once again proven its expertise in delivering world-class events, orchestrating the 2024 Valorant Champions (VCT) in Seoul. The pinnacle event of the VALORANT esports calendar saw the top teams from around the world battle for supremacy in an electrifying series that ran from August 23rd to 25th.

After a year filled with intense competition, surprises, and unforgettable moments, the best VALORANT teams converged in South Korea for Champions Seoul. Sixteen elite teams, representing their regions, fought for their chance at glory, with the top four teams competing at the prestigious INSPIRE Arena in Incheon. The grand finale solidified the global excitement surrounding VALORANT, drawing thousands of fans and capturing the attention of millions of viewers worldwide.

Creative Technology Korea's contribution to the event's success was nothing short of remarkable. Responsible for delivering state-of-the-art video switching, audio, and lighting, CT Korea played a key role in making the spectacle unforgettable. Their engineering expertise was showcased in the intricate LED structures, lighting, and power systems that brought the event to life in a visually stunning fashion.

The event featured 2,840 LED tiles, displaying over 46 million pixels, and required an astonishing 89,000 man-hours for preparation and installation. Sixteen kilometres of power and signal cables were laid to ensure flawless transmission throughout the venue. To illuminate the event, 1,400 lighting fixtures were strategically placed, connected by 10 kilometres of cable.

The event's power needs were equally impressive, with 3,400 amps of show power—enough to supply 34 homes—supported by 4 kilometres of main power cable. The LED setup included four main event walls, a video floor, and a stage façade, all of which enhanced the visual impact of the competition. This high-tech feat was completed with diamond-shaped doors that tracked the players and a central main wall that served as the visual focal point of the entire event.

In addition to the 15,000 ticket holders who attended the finals at Inspire Arena, more than 10,000 fans participated in the VCT Fan Fest at the Inspire Grand Ballroom. From August 23rd to 25th, fans engaged in a wide array of interactive activities, ranging from meet-and-greets to

fan-driven activations, making the event an immersive experience.

Creative Technology Korea's flawless execution of the audiovisual elements during the VCT 2024 has reaffirmed its reputation for technical excellence. As VALORANT esports continues to rise in prominence, CT Korea has positioned itself as an essential partner in delivering world-class esports events.

Creative Technology APAC

THAILAND

Kim Sungkyu Dazzles Fans with Stellar Performance and World-Class Production from One Systems Global Production

One Systems Global Production meticulously planned sound architecture to the visually striking lighting design, came together to create an unforgettable experience for both the audience and the performer

I Kim Sungkyu, renowned as the lead vocalist of the iconic South Korean boy band INFINITE, has steadily carved out a name for himself as a solo artist, captivating audiences with his unique blend of heartfelt ballads, powerful vocals, and magnetic stage presence. Over the years, he has garnered a dedicated fanbase, known for his emotive performances and versatility. His journey as a solo performer has seen him transcend the boundaries of K-pop, and the concert held in late August 2024 at the MCC Hall in Thailand marked a significant milestone—his first official performance in the country. It was a long-awaited event for fans who had been yearning to see him perform live in Thailand, making the concert a landmark achievement not only for Sungkyu but also for the burgeoning K-pop scene in the region.

The concert's success was not only defined by Sungkyu's performance but by the high standards of production that enveloped it. The organizers, keen on delivering a stellar show, entrusted **One Systems Global Production** with the responsibility of curating an unforgettable audiovisual experience. With a brief that called for technological excellence, One Systems embarked on crafting an audio and lighting infrastructure that would leave no room for compromise—one that would complement Sungkyu's performance and create an immersive environment for the audience.

The concert's sonic landscape was an integral part of the production, as One Systems knew that achieving the perfect sound was paramount. And after an in-depth venue survey and multiple consultations with the concert curators, One Systems set about designing a live sound architecture that would not only meet but exceed expectations. The venue, MCC Hall, presented unique acoustic challenges, and the team was tasked with ensuring optimal sound coverage for the entire audience, regardless of seating location. And to achieve this, One Systems opted to rely on a comprehensive loudspeaker system from globally reputed manufacturer L Acoustics.

A total of 20 units of the highly revered K2 high-performance large-format line array modules were flown in a stereo hang, forming the backbone of the main PA. The K2 modules, known for its precise coverage and smooth voicing, was complemented by a total of 6 units of the KARA II line array modules that were positioned as front fills, ensuring that even those seated in the front rows were immersed in pristine audio. The combination of K2 and KARA II systems allowed team One Systems to maintain sonic consistency across the venue, thanks to their shared tonal characteristics and adjustable coverage patterns.

Bass response, an equally crucial component of high-quality immersive concert environments, was capably delivered by a total of 14 units of the L-Acoustics SB28 subwoofers, which were

strategically deployed to deliver powerful, resonant low frequencies across the entire audience area – as thunderous bass lines and deep kick drums filled the hall with precision and impact, thereby enhancing the overall energy of the performance. One Systems' choice of subwoofer placement ensured that the low-end never felt overwhelming but instead remained tight and controlled, adding depth to the soundstage.

For monitoring, the artists on stage enjoyed the high-performance sound of six 115XT HiQ floor monitors. Additionally, the stage-fill solution also comprised 6 units of the KARA II loudspeakers paired with 2 units of the compact SB28 subwoofers, ensuring that every performer had the clarity and definition they needed to deliver their best.

The entire loudspeaker system was powered by multiple L-Acoustics LA12X amplifiers, renowned for their efficiency and power, providing a

flawless driving force behind the system's output. And at the front of house (FOH); sound engineers worked their magic using a DiGiCo digital mixing console, known for its unparalleled audio control and flexibility. This enabled the team to tweak and perfect the sound mix in real time, ensuring that every nuance of Kim Sungkyu's vocal performance was clearly heard without overpowering the instrumentation.

As the soundscape emphatically engulfed the audience in Kim Sungkyu's mesmerising voice; it must be noted that an equally impressive component of the performance experience was the lighting design, which played a crucial role in creating the visual spectacle that accompanied Sungkyu's performance. One Systems assembled a sophisticated array of lighting technologies that blended the best in modern entertainment lighting. The intricate light displays were programmed to synchronise seamlessly with the music, adding a layer of visual storytelling that elevated the entire experience.

A total of 13 units of the acclaimed Clay Paky Scenius Spots were deployed, offering precision beam control and a wide colour palette that bathed the stage in dynamic and vibrant hues. These high-performance fixtures were complemented by 28 units of Brightly Beam 260 moving heads from Taurus Lighting, which provided crisp, high-intensity beams that cut through the air, adding excitement and drama to the show. The combination of these lights brought a sense of grandeur to the performance, with sharp beams and spotlights illuminating key moments of Sungkyu's set.

In addition, 22 units of B-Eye 1519 moving head washes filled the stage with soft, wide washes of colour, while 20 units of Strobe Cyclone moving heads added pulsating flashes and strobe effects, enhancing the energy of the more upbeat tracks. The lighting design further featured numerous
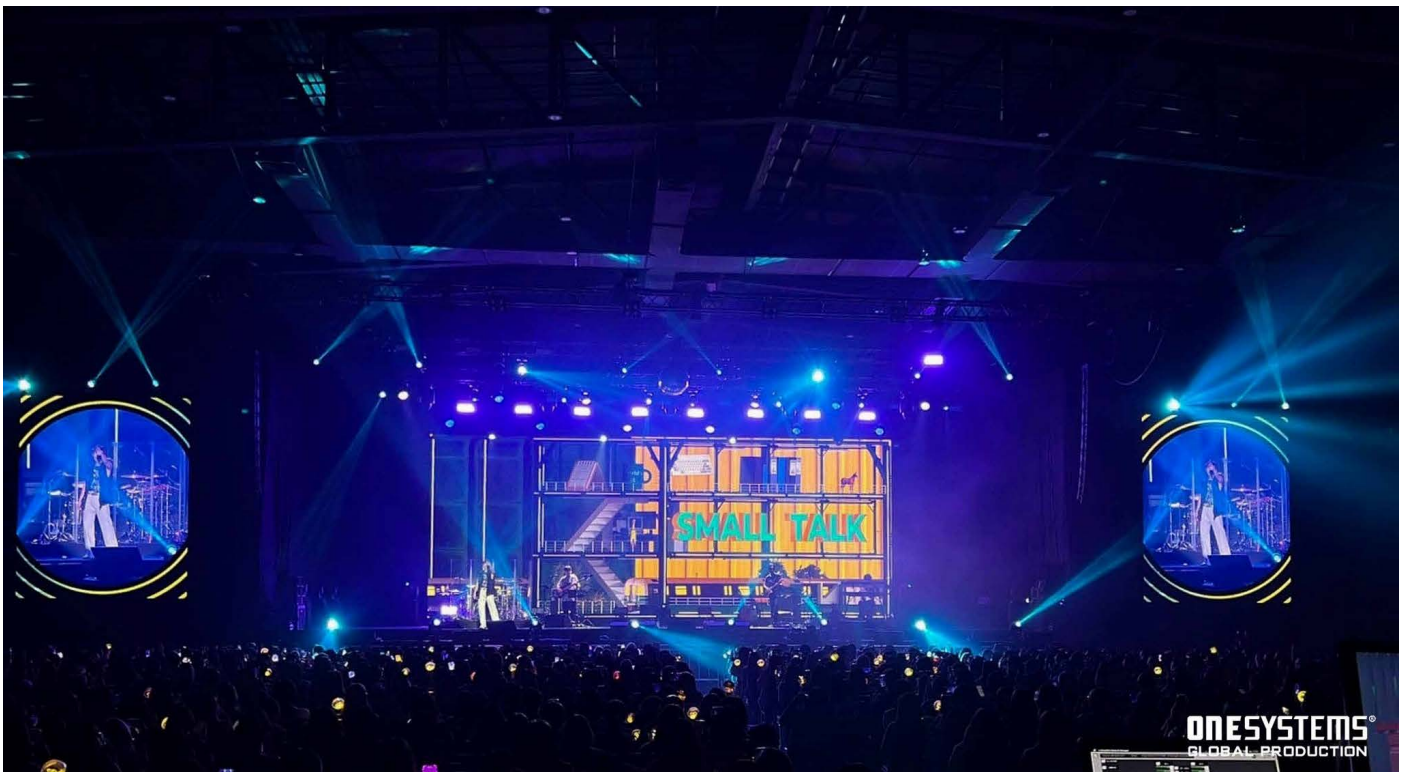
LED PARs and Fresnel LEDs, which were used to highlight different sections of the stage and performers, ensuring that every detail was visible and every mood properly accentuated.
All lighting elements were controlled via the grandMA2 full-size lighting console from MA Lighting—a trusted and dependable control surface that allowed the lighting team to execute complex cues with precision. The console's versatility and intuitive interface meant that the lighting effects could be adapted in real-time to match the ebb and flow of the performance, ensuring that the visual experience was as dynamic as the music.

For Sungkyu, the concert at MCC Hall wasn't just another show—it was a testament to the growing influence of Korean pop culture in Southeast Asia and beyond. More importantly, it marked an important chapter in his journey as an artist, allowing him to connect with his Thai fanbase in a live setting for the very first time. And For

the concert organisers and technical teams, it was an opportunity to push the boundaries of what is possible in live event production. The collaboration between One Systems and the organisers ensured that every element of the concert—from the meticulously planned sound architecture to the visually striking lighting design—came together to create an unforgettable experience for both the audience and the performer.

One Systems Global Production