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Radiance Redefined Navigating the Ever-Evolving World of Lighting Control Consoles

MAY 2024

LIVE:

Meyer Magic Enthralls Ed Sheeran's Mathematics Concert In Mumbai

ENNOVATION:

ETC Mosaic Record Makes Console Effects Integration Easier than Ever

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"Sleep No More" What Lessons I Learned from this Immersive Experience

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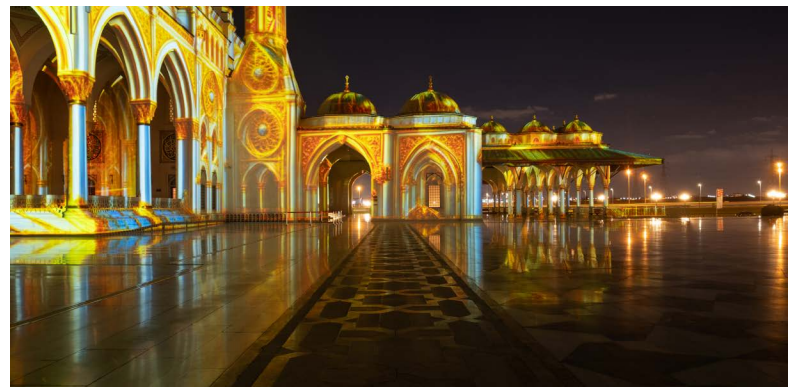
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In the mesmerizing tapestry of a concert’s sensory experience, lighting stands out as a palpable element, captivating audiences with its vivid hues and dramatic interplay. At the helm of this spectacle are the unsung virtuosos: lighting designers. Armed with a sophisticated arsenal of tools, they craft dynamic landscapes of light and colour, shaping the very essence of mood, ambiance, and storytelling

in each performance. Yet, at the heart of their artistry lies the humble lighting controller, the silent maestro orchestrating this symphony of illumination and shadow. Join us in this edition as we delve into the captivating world of lighting controllers, illuminating their pivotal role in the magic of live entertainment. This issue also highlights a number of events in the region with Ed Sheeran’s + - = ÷ x (“Mathematics”) Tour in Mumbai, India, taking the cake for its sheer state-of-the-art production design, coupled with breathtaking stage detail and impeccably executed technical reinforcement, all coming together in a seamless confluence to definitively raise the bar for live entertainment in the country.

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X5
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Wild Rice Purchases Robe Battens and Wash Beams to Boost Lighting Rig



Left to right: Peter Chi, Wild Rice's new technical manager, stage technician Roy Tee Lacno, technical intern Jedrick and previous technical manager, Sagaya David Kanagasingam © Louise Stickland.

SINGAPORE: Wild Rice @ Funan is part of a modern performing arts complex sitting at the heart of Singapore's buzzing civic and cultural district. Built in 2019, the main Ngee Ann Kongsi Theatre space offers an intimate 358-capacity space with the country's only thrust stage, which was inspired by the Royal Shakespeare Company's famous Swan Theatre in Stratford-upon-Avon in the UK.

In 2022, the theatre took delivery of a new Robe moving light package – 10 x T1 Profiles and 16 x ParFect 150s – which joined the original lighting rig that was specified by theatre design consultants Charcoalblue when the venue opened. More recently, the theatre invested in Robe again, purchasing Tetra2 moving LED battens and LEDBeam 350 wash beams to boost the general lighting rig.

The fixtures were delivered via Robe's Asia Pacific office, and these important lighting investments were overseen by Wild Rice's then-technical manager, Sagaya David Kanagasingam, who has worked at the theatre since 2019.

David explained that Robe T1 Profiles were first used at the Wild Rice in 2020 for a production of Peter Pan, the annual pantomime show that year, and they were specified by lighting designer Michael Chan who wanted additional key lighting for faces. Before then, David had used them a few times at the renowned Singapore Repertory Theatre (SRT) where he had worked for many years. There he also worked with Robe's original DL7 theatre-orientated luminaires, which he was instrumental in getting into SRT's main venue.

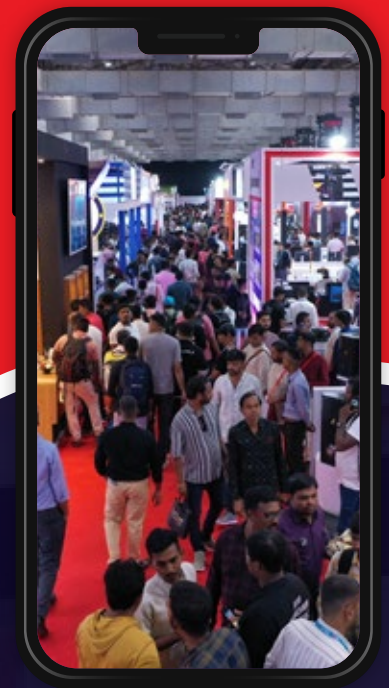
David and his Wild Rice team, which includes five full-time technical staff, plus interns and freelancers, were all hugely impressed with the

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beautiful flesh tones and high CRI of the T1s and the impact they had on Peter Pan. When the time was right, and everything was moving on from the pandemic, it was determined that they needed some additional moving lights in the venue to boost the lighting production values offered to incoming productions.

“We already all loved the T1s,” he recalled, “we knew they were highly compatible with the existing house rig and were certain that having them here would benefit everyone using the space.”

In addition to the quality of light, they needed a silent or low noise fixture, an especially pertinent issue with the open design of the main auditorium.

“We also wanted fixtures with a good range of subtle and nuanced colours, pastel tones and other more unusual hues that are frequently

used for theatrical shows,” he noted. The T1 met all the criteria and the price was right.

ParFacts were added to the order as ultimately useful general purpose LED luminaires which can be used in virtually any theatrical circumstance. Having all these Robes in the rig enables Wild Rice @ Funan to offer huge flexibility for its wide array of performances that embrace dance, drama, music, musicals, and comedy.

David’s positive experiences with Robe both here and at SRT – including for their acclaimed ‘Shakespeare in the Park’ outdoor productions – means that he trusts the brand as “reliable and very robust”. “This together with the range of whites, the colours and colour mixing, quietness and of course the brilliant service and support from Robe AP” all make Robe a winning choice for this busy environment.

Robe

The Music Never Stops with JBL Professional

THAILAND: Partygoers heading to the beautiful island of Ko Pha Ngan for the Half Moon Festival can look forward to a more immersive experience as they dance the night away at the three party zone areas (Prime Stage, G-Floor, The Cave) due to the upgrade of its 10-year-old sound system by JBL Professional Solutions in partnership with **Mahajak Development Co. Ltd**.

The Half Moon Festival is an outdoor dance music event on Thailand’s fifth largest island, Koh Pha Ngan, held during the half-moon, one week before and one week after the full moon. This highly anticipated bi-weekly event attended by tourists across the globe, has been the island’s best festival for more than 21 years and can accommodate up to 3,000 people attending.

“The client was looking to revamp their old audio system with a modernized system for better sound management as the previous system was more than a decade old,” said a spokesperson for Mahajak Development Co. Ltd. “The old system had had low-frequency blind spots which sound engineers could not control, but with the new JBL series of subwoofers and active speakers all sound is managed seamlessly through an app for improved sound quality.”

The complete system, across the three-party zone areas, consists of different types of speakers to ensure surround sound and that all audio is captured for maximum clarity. For the largest zone, the Prime Stage, 12 x SRX928S subwoofers were added to the existing front arrays, each made up of 5 x JBL SRX725 speakers per side.

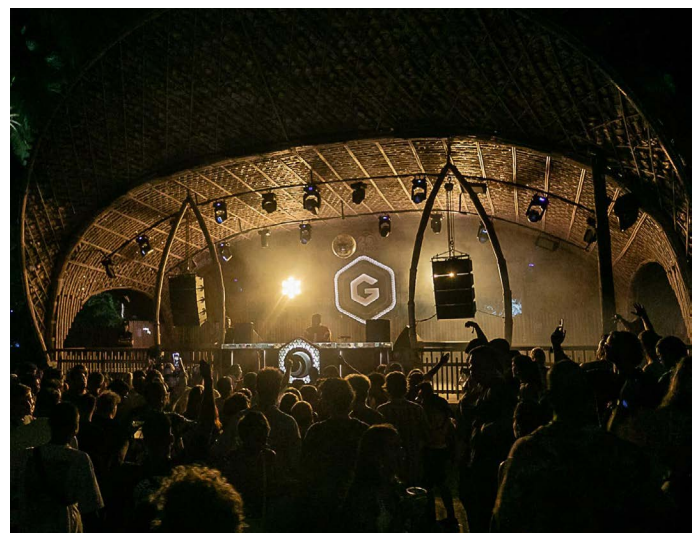


At the DJ console and the VIP area, 2 x PRX918S speakers and 2 x PRX918XLF subwoofers were installed respectively for low-frequency energy. Bluetooth control is made possible via the JBL Pro Connect app.

For the G-Floor zone which is a smaller area, the BRX300 series of line array speakers and subwoofers were used due to its compact and portable system that provides superior fidelity, high output and consistent coverage in a range of sound reinforcement scenarios.

“We are very impressed with JBL’s sound system that not only provides better coverage of the entire space but also enables the sound engineering team to customize the sound as desired. This ultimately allows partygoers to fully enjoy the DJ’s music more than the original sound system,” said Pee Pattanasiri, Founder of the Half Moon Festival.

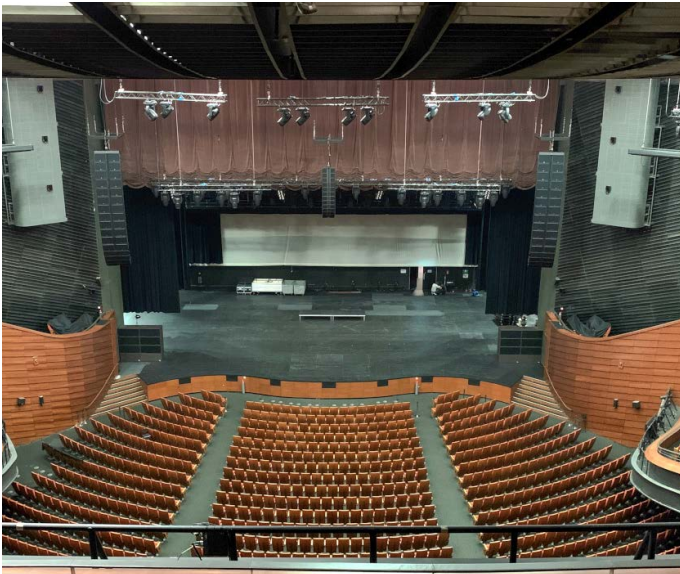
“Any outdoor music festival such as Ko Pha Ngan’s Half Moon Festival, requires a top-



of-the-range AV system for an immersive audio experience that will keep the energy of partygoers high,” said G Amar Subash, VP & GM, HARMAN Professional Solutions, APAC. “We would like to thank our partner Mahajak Development Co. Ltd. for utilising JBL’s range of products in creating unique and immersive entertainment experiences for consumers”.

JBL Professional

The Star Performing Arts Centre Upgrades to L-Acoustics K2 in 5000-Seater Star Theatre



SINGAPORE: For over a decade, The Star Performing Arts Centre has been Singapore's premier venue for music fans to enjoy live concerts. The Centre's grand 5,000-seat Star Theatre is especially appreciated for its intimate feel fostered by the design, which places the very last row of seats on the upper circle level at just fifty-six metres from the stage.

The venue consistently attracts world-class promoters and their artists who prize the venue for its top-notch technology. To maintain their exclusive status and meet the rising demands of live music fans for exclusive shows from iconic global entertainers, The Star Performing Arts Centre's management recently opted to upgrade the theatre's L-Acoustics Kara with touring grade K2 loudspeakers, delivering the same great clarity with even more headroom to its six-storey, three-tiered audience layout.

"Stepping up to K2 was a natural progression that allows the Centre to maintain the highest production value," said Gerald Fong, Project and Sales Director at L-Acoustics Certified Partner

Distributor, **Concept Systems Technologies** who led the audio system refurbishment. "When we were approached to consult on the upgrade, I knew that L-Acoustics K2 would deliver ideal power to this emblematic performance hall."

Leaning on the ability of K2 to serve up to two times the amount of SPL than the Kara, Fong's team began an upgrade project in October, replacing five Kara down-fill boxes with four K2 per side of the main left-right hangs. The new boxes complement the theatre's existing 12 K1 speakers per side and 13 Kara speakers of the centre cluster hang, delivering the same L-Acoustics signature sound of pristine clarity as before, with a brand-new oomph. All 25 LA8 amplified controllers have been replaced by 25 LA12X units that drive the entire system.

The new K2 system has already accompanied performances by iconic alternative rock bands such as Suede, Manic Street Preachers and Bloc Party and provided unrivalled live audio for concerts by American singer-songwriter Jack Johnson and British-Irish comedian Jimmy Carr to kick off the calendar year.

"We are pleased with the K2 upgrade. It allows The Star Theatre to continue answering the concert-goer's call for world-class live shows. This gives us the confidence of tour-level audio from a trusted brand for a diverse range of musical and speech-based performances," concluded Daniel Loh, Technical Director of The Star Performing Arts Centre.

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Astra Wash19Pix Lights Up the Chinese New Year Gala



AUSTRALIA: The vibrant and captivating Astra Wash19Pix by PROLIGHTS took centre stage at the 2024 Chinese New Year Gala in Adelaide, Australia. This annual celebration, held at the prestigious Adelaide Entertainment Centre, showcased the rich tapestry of Chinese culture through a dazzling array of over 60 performances. From the powerful grace of martial arts demonstrations to the soaring vocals of opera singers, the infectious laughter of comedians, the harmonious voices of choirs, and the mesmerizing movements of dance troupes, the Gala captivated the audience and illuminated the stage with a vibrant and captivating display of the enduring vitality of Chinese heritage.

Alongside the Astra Wash19Pix, 19 x Osram RGBW LEDs, an external pixel ring, and a top-tier optical system delivered impactful performances across all shows.

Feedback on the Astra Wash19Pix was overwhelmingly positive, with one person noting: "The efficiency and reliability of the Astra Wash19Pix allowed us to achieve unprecedented lighting quality. Its versatility and wide range of effects enabled us to create unique atmospheres for each performance, confirming it was the perfect choice for the event."

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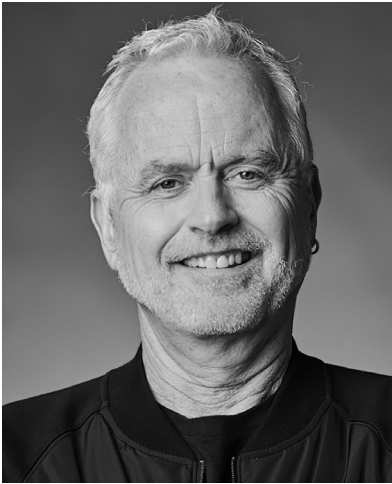


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Meyer Sound Welcomes Audio Rhapsody Led by Acclaimed Sound Designer Jonathan Deans



Acclaimed sound designer Jonathan Deans joins forces with Meyer Sound

GLOBAL: Meyer Sound has acquired Audio Rhapsody, a nascent startup founded by acclaimed sound designer Jonathan Deans. With the acquisition, Meyer Sound strengthens its position at the forefront of theatre sound solutions, utilizing Deans' expertise to develop software solutions to expand the company's portfolio of integrated digital systems.

This partnership is the latest milestone in Meyer Sound's legacy of innovation in theatre sound. From collaborating with legendary sound designer Abe Jacob in 1980 to bring the iconic UPA loudspeaker to Broadway to developing the new NADIA network-based digital audio platform, the company has continually pushed the envelope to create solutions that empower creators to deliver the ultimate sonic experience.

Deans, one of the world's pre-eminent sound designers, is renowned for his pioneering work in immersive sound and his commitment to advancing the artistry of the craft. With multiple Tony and Drama Desk award nominations to

his name, he has contributed to hundreds of productions spanning Broadway, the West End, and beyond and crafted soundscapes for 15 Cirque du Soleil productions. His relationship with Meyer Sound goes back to 1978 when he met founders John and Helen Meyer while working on a production of *Evita* using a Meyer-designed JM-3 loudspeaker. Meyer Sound acquired Deans' company Level Control Systems in 2005, leading to an expansion of the company's digital solutions.

"Jonathan is a recognized leader in the world of theatre sound," enthused John McMahon, Senior Vice President of Meyer Sound. "We're excited to join forces with him and his team as we continue to build upon our successes and expand our investments in the sector. My relationship with Jonathan goes back decades — to my LCS days — and I'm delighted to welcome a longtime friend into the fold," added McMahon.

"Meyer Sound has been there throughout my career, always providing support and always with an aligned focus on the audience experience, first and foremost," said Deans, who assumes the role of Meyer Sound's Senior Specialist, Theatrical Production Systems. "I founded Audio Rhapsody to build tools that remove the silos and barriers to creativity that are inherent in theatrical sound design systems and processes, and I'm so thrilled to complete that journey with a team of people who share the same passion."

A talented team of Audio Rhapsody partners joins Meyer Sound. GRAMMY and Thea Award winner **Jason Rauhoff, a former Meyer Sound employee, joins as Product Manager, Theatrical Production Systems. Rob Mele,**

also previously with Meyer Sound, assumes the role of Application Architect, Theatrical Production Systems, contributing to the software development team. Michael Kroll joins as Visual Designer, Theatrical Production Systems. (Audio Rhapsody's Mike Tracey will remain an independent advisor.)

The team will focus on developing the next generation of audio show control software for the NADIA platform, bringing fresh innovation to applications both large and small with a bold and intuitive approach.

"Helping people stay connected with platforms that are usable not by the few, but by the many, is really important to me," explained Deans. "This isn't just about the generation of 'now,' it's the generation that's coming; the sound people who will be doing things that we haven't even thought about. Being able to aid them in their creative paths is a rewarding part of this journey, and integrating Audio Rhapsody's software approach with the excellence of Meyer Sound technologies is a realization of that vision."

"We've always admired Jonathan's unique and exceptional vision, so this new chapter holds immense value for us," concluded Helen Meyer. "Jonathan isn't just a new employee; he's a dear friend. We're thrilled to welcome him into the Meyer Sound family, and we are eager to embark on this journey together."

Meyer Sound

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Powersoft Plans for New Headquarters to Become Human Audio Experience Centre



AF517 & Diorama.

GLOBAL: Featuring an innovative design by renowned architect Atelier(s) Alfonso Femia, the new Powersoft headquarters will stand as a hub of global audio excellence.

The recent signing of a preliminary lease agreement with Bluesky Immobiliare S.r.l., which will own the property, sets the stage for a plan aimed at bolstering Powersoft's path of growth and innovation. Located in an area of Scandicci, Florence, undergoing urban redevelopment, the Powersoft Human Audio Experience Center will be designed by Atelier(s) Alfonso Femia, an internationally acclaimed architectural firm with offices in Genoa, Milan and Paris.

The new headquarters, covering more than 9,200m² across four floors, is purpose-built to accommodate a projected increase in the size of the company's workforce, as outlined in its development plan for the coming years. By

centralising all corporate functions, the new HQ enhances departmental potential, improves cross-team collaboration, and delivers significant operational cost savings while boosting energy efficiency.

In the words of Luca Lastrucci, Powersoft CEO: "This plan marks a significant milestone in the company's history and growth trajectory. As Powersoft expands, there is a growing imperative to enlarge our space and fortify our resources, enhancing our business's efficiency and competitiveness in the market. Through ongoing investments in research and development, Powersoft aims to uphold its global technology leadership in the audio industry. The Powersoft Human Audio Experience Center will serve as a hub of excellence in audio technologies worldwide, so it is crucial that innovation is reflected in the architectural design of the building."

The Powersoft Human Audio Experience Center stands as a distinctive model of innovation and sustainability. The building's exterior profile, resembling the form of a sound wave, pays homage to the company's core business and underscores Powersoft's standing as a technological pioneer in the audio industry. The use of photovoltaic panels and energy-efficient technologies underscores the company's commitment to minimising its environmental footprint, while the LEED-certified building exemplifies how design and architecture can seamlessly integrate with the surrounding green space, featuring accessible areas for interaction, socialising, and organising events, including those for the local community.



Alfonso Femia, CEO and founder of Atelier(s) Alfonso Femia, commented: "Powersoft's new HQ will serve as a respectful addition to the local environment, contributing significantly to the city of Scandicci. The design seamlessly integrates production and storage functions, office spaces, and research laboratories, prioritising a harmonious balance that extends to the building's interaction with the urban surroundings. The architecture intricately blends compositional complexity with a focus on the surrounding green areas."

A tangible expression of corporate identity, technological excellence, and the major market change it represents, Powersoft's new HQ will be based on three core values: Human, Audio, Experience. The philosophy revolves around placing people, technology and experimentation at the core of the plan, with spaces designed to cater to the diverse needs of employees, clients, consultants and guests, as well as students and the local community. In addition to areas intended to foster innovation and technological excellence through research laboratories, spaces for quality testing, measurement and product demonstration, the Powersoft Human Audio Experience Center will boast green areas,

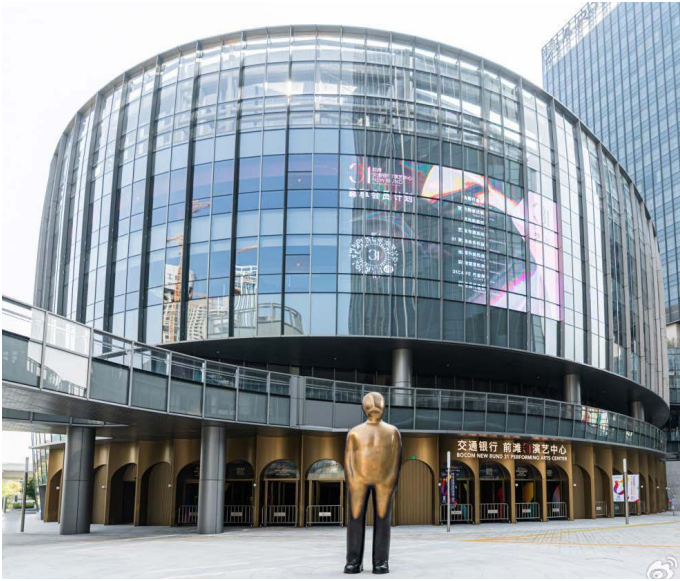
meeting rooms, fitness areas, a fully equipped canteen, meeting rooms and coffee corners – environments to cultivate a vibrant and inviting workplace conducive to collaboration and employee welfare. The new building will serve as a versatile, multifaceted hub, featuring spaces for events, demonstrations, and educational purposes, alongside exhibition areas dedicated to showcasing the history and evolution of audio technologies.

Aligned with the company's strategic goals, the Powersoft Human Audio Experience Center aims to be a premier technological hub for audio innovation, as well as a place for living, sharing and professional growth, capable of attracting, engaging and retaining highly qualified talent.

Construction is anticipated to conclude in the latter part of 2026, after which production lines and all company departments will relocate from the existing premises to the new HQ.

Powersoft

DiGiCo Quantums Shine at NEW BUND 31 Must-Visit Landmark



CHINA: Jointly built by Hong Kong Shun Tak Holdings and Shanghai Lujiazui Group, NEW BUND 31 is a new cultural and commercial landmark featuring art, leisure, and entertainment retail in a one-stop destination with trendy lifestyle and cultural experiences.

Officially inaugurated in October 2023, the Performing Arts Center has the largest professional indoor theatre in Shanghai, planned and designed by the renowned UK theatre company Theatre Projects. DiGiCo Quantum and SD Range of digital mixing consoles complement the setup, delivering excellent sound capabilities and versatility that allow this multi-faceted space to respond to any type of event.

A 2,500-seat theatre with professional acoustic design features DiGiCo Quantum digital mixing consoles to handle a large number of channels during live performances, with a Quantum 7 for FOH and OB, and a Quantum 338 at the monitor position. The Black Box Arts Space, adjacent to the theatre, utilises a DiGiCo SD12-96 and SD11,

with a further 10,000 sqm of outdoor green space catering to the needs of diverse productions, including festivals, exhibitions, and pop-ups, bringing the latest trending events for visitors and turning the NEW BUND 31 into a must-visit landmark to enjoy.

Setting the scene is the five-story atrium of the Performing Arts Center's lobby, adorned with arched elements reminiscent of the Roman Colosseum, enhancing the space with a sense of smooth elegance. The theatre is designed for a 360° immersive experience, complemented by wall decorations inspired by Chinese folding fans. These not only elevate the acoustic facilities to a high standard but also create memorable focal points. Throughout the performance hall, warm oak wood envelops the surroundings, featuring three levels of balconies and discreet VIP boxes hidden in between.

“DiGiCo Quantum digital mixing consoles have the familiar interface and all the advantages traditionally associated with DiGiCo, whilst also introducing new features like Spice Rack, Mustard Processing, Nodal Processing, and True Solo,” explained Cao Peijun, Sales Engineer at RAC. “Faster, more efficient, and more powerful, Quantum stands as the ideal and versatile solution for any engineer, providing exceptional intelligence and functionality.”

The Black Box Arts Space venue has a maximum capacity of 1,500 people, featuring a discreet 400-seat concealed seating arrangement. The seating is cleverly divided into three zones by acoustic panels, each outfitted with its own dedicated audio and lighting system. The versatility of the space caters to a diverse array of performance and exhibition requirements. Depending on

the specific needs of each live performance, the venue utilises either the DiGiCo SD12-96 or SD11, according to the needs of the performance. "In this specific configuration, we didn't need the Theatre specific software, as the system was capable of fulfilling the requirements for routine use, including theatrical performances or small-scale concerts," Peijun added.

The installation, which took place in August 2023, was led by Dafeng Industrial Co., LTD., working with DiGiCo's official distributor in China, **Racpro**. "The venue was already very familiar with DiGiCo products, so the team didn't require any in-depth training apart from familiarising themselves with the Quantum 7, which they hadn't used before and were new to the A/B Quantum switching

feature. However, they got started quickly and understood it in no time," noted Peijun.

"DiGiCo has firmly established itself as the industry standard for theatre," Peijun concluded. "In the case of the NEW BUND 31, the majority of the shows come from abroad. The engineer for Broadway musical The Sound of Music, for example, was delighted to see the Quantum 7 at the venue. The dual Quantum engines ensure failsafe performances, which are complemented by a robust channel configuration and user-friendly interface. This combination liberates engineers, allowing them to simply concentrate on delivering an exceptional show."

DiGiCo



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HOLOPLOT and AFMG Push Boundaries with Implementation of Matrix Array Products in EASE 5



GLOBAL: The inclusion of HOLOPLOT products in the latest EASE 5 update, will allow users to investigate the possibilities and impact of using Matrix Arrays in their venue, or any venue.

Users can model Matrix Arrays and Beam Optimizations in the company's Plan system design software to view sound pressure level simulations. The resulting array configurations can now be exported to EASE 5 for further analysis based on closed-room simulation. Long the standard for electro and room acoustic modelling, the EASE software contains over 150 brands of loudspeakers and more than 3,000 individual products.

AFMG's Managing Director Stefan Feistel and Emad El-Saghir, Fellow at HOLOPLOT, explain how the collaboration came about and

how the inclusion of HOLOPLOT's advanced loudspeaker systems in EASE 5 Second Edition will benefit all end users. "The changes required to accommodate the complexity of HOLOPLOT X1 and X2 data will benefit all end users of EASE 5, with the enhanced support for cluster-type GLL files recently released in EASE 5.59 and the improved data flow between HOLOPLOT Plan software and EASE 5," Feistel stated.

The addition of the room simulations with EASE 5 enables all closed-room performance metrics such as diffuse fields, STI and auralization predictions to be accurately obtained and easily compared with any product from the 150 brands contained in the **EASE 5** Library. Objective validation is another benefit of using brand-independent software to model speaker systems and room acoustics.

El-Saghir has real-world experience of the benefits of using EASE. Even within the early days of the EASE/ HOLOPLOT relationship, the importance of accurate room simulations was clear. "We were early adopters of the EASE software," explained El-Saghir.

"Before the new EASE 5 updates we had a hard time simulating large projects such as Sphere because of the huge arrays and large numbers of inputs involved. AFMG were very supportive, providing us with a dedicated server to run our calculations and simulations. By 2018/2019, we had a special version of EASE to run our simulations, so we could stop using the dedicated server. In the early planning stages of Sphere, I could actually design the layout of the system and size the arrays. At the time, the development of our own tools to design was [a] work in progress, so this allowed us to work on the Sphere. Today, our own tools are much more powerful, but back then these more simple tools were extremely helpful."

Complex projects such as Sphere often force advances in technology and X1 was further developed in response to the needs of Sphere's performance space. The innovations were also felt with EASE. The new performance requirement for HOLOPLOT simulations in the design of Sphere benefits all users. A 64-bit version of the calculation engine utilized by HOLOPLOT, as well as other advancements, are now available to all users regardless of their loudspeaker choices.

Existing users of EASE 5 requested HOLOPLOT's inclusion in the library, and the continuing relationship between these two pioneering companies has been mutually beneficial, as they both agree.

"You can now open a project in EASE and simply scroll down to HOLOPLOT in the loudspeaker library. This allows you to experience accurate calculations for the Matrix Array inside that venue and is a very interesting scenario for users to explore," noted Feistel.

"Beyond Sphere, EASE was utilized on other major HOLOPLOT projects," El-Saghir stated. "That's the power of the GLL format and the accessibility of combining HOLOPLOT Plan with EASE. The comparisons between simulation results and real-world experience are very pleasing and have been repeatedly confirmed in even the most difficult venues to achieve good agreement.

Concluding, "EASE must be the choice of any consultant that wants to use HOLOPLOT Matrix Arrays. It is the power and accuracy of AFMG's award-winning modelling engine that makes it the best possible solution for a meaningful simulation of our systems."

HOLOPLOT

New Performing Arts Centre Features L-Acoustics in Stereo and Immersive Configurations



CHINA: Inaugurated in December last year, the world-class Beijing Performing Arts Centre (BPAC), an extension of the National Centre for the Performing Arts (NCPA) nestled alongside the Grand Canal, reflects the area's history through a striking design inspired by the area's ancient granaries and transport ships. The centre's innovative architecture encompasses indoor theatres and an outdoor amphitheatre. The venue will host 300 performances and an equal number of art-related activities each year with the mission of attracting younger audiences to contemporary performances.

Leading the way with an L-ISA immersive sound experience

Three of BPAC's performance spaces boast permanently installed L-ISA configurations using L-Acoustics A Series loudspeakers: the 1,760-seat Opera House, the 500-seat Multi-Function Theatre and the extensive Outdoor

Theatre, while the indoor Concert Hall features a stereo L-Acoustics professional PA system. To inaugurate the space, BPAC opened its winter season in style, offering a new immersive audio production of *The Canal Ballad*, the centuries-old story of the local Grand Canal which highlights the cultural importance of the waterway in connecting the diverse regions of China.

"This new way of sound reinforcement completely immerses and surrounds the audience. The sound was so natural that it felt like it was not coming from any visible speakers. In my opinion, L-ISA is leading the way for the future of immersive audio experiences," said Hang Hongzhi, Vice Chairman of the China Institute of Stage Design.

No stranger to L-ISA immersive sound, the NCPA had previously delivered immersive audio



experiences for two national operas, *Minning Town* and *Daughter of the Party*.

For *The Canal Ballad* production, in the acoustically treated interior architecture of the theatre, the natural sound of the orchestra in the pit would be combined with accurate spatial audio mixing of reinforced speech and vocals. The opera uses a range of styles from classical Chinese to modern American. When it was first performed 12 years ago, the production positioned artists precisely on stage to achieve natural-sounding clarity without sound reinforcement. Over a decade later, the NCPA production team jumped at the chance to present the opera in L-ISA Immersive Hyperreal.

Enhancing the experience through L-ISA 3D spatial mixing

“An immersive audio experience must be presented in three key aspects, artistic expression, creative positioning in the mix, and 3D spatial audio immersion. The audience would then feel all vocal deliveries in the opera clearly

with well-defined localisation. We felt that *The Canal Ballad* opera would be enhanced through the power of L-ISA,” noted Wang Lei, NCPA sound engineer.

L-Acoustics Certified Provider Distributor **Rightway Audio Consultants** (RAC) designed and permanently installed the L-ISA configuration which envelops the Opera House using almost 150 x L-Acoustics speakers, all of which are hidden in the décor. The main 7.1 Scene System boasts 7 hangs of L-Acoustics A Series, the 5 central hangs using 3 x A15 Focus and 2 x A15 Wide, while the outer extension hangs use 3 x A15 Focus atop 1 x A15 Wide. 2 x centre-flown hangs of 3 x KS28 subwoofers provide low-end definition. 13 x 5XT boxes are in the stage lip for spatial front-fill, and 10 x 5XT provide monitoring to the orchestra pit. 30 x X8 speakers are placed around the sides of the walls on two levels to provide surround sound to the main floor and two balcony levels, while 6 x ceiling-mounted X15 provide overhead sound. Performers relied on X12 and X15 HiQ monitors and a hidden Syva in each wing for precise on-stage monitoring. The system is driven by 12 x LA12X, 25 x LA4X and 4 x LA2Xi amplified controllers.

The team at RAC leaned on the L-Acoustics P1 processor and M1 software measurement tools to optimise the immersive audio speaker installation. For *The Canal Ballad*, each of the dozens of performers was equipped with a BlackTrax tracking sensor which allowed the L-ISA Controller to automatically localize them in the 3D mix.

Hang Hongzhi, Vice Chairman of the China Institute of Stage Design, reflected that “everything was perfect in the show. The actors, performers and stage design, backed by the sound of L-ISA immersive technology created a refreshing rendition of *The Canal Ballad*.”

L-Acoustics

NUS University Cultural Centre Honoured to be First Venue Equipped with L-ISA Immersive Audio



SINGAPORE: The University Cultural Centre (UCC), situated at the Kent Ridge campus of the National University of Singapore, serves as a prominent performance venue, highlighted by the Ho Bee Auditorium, which accommodates up to 1,700 attendees. The horseshoe-shaped seating area features two tiers of balconies alongside stall seating.

It accommodates a wide range of event activities and productions, such as orchestral performances, musicals, faculty events, commencement ceremonies, and external hires.

Concept Systems Technologies, an L-Acoustics Certified Provider Distributor, offered to upgrade the venue's audio system, ensuring its suitability for the next decade and beyond.

L-Acoustics Application Engineer Chung Wah Khiew assisted Concept Systems by designing an L-ISA configuration using L-Acoustics Soundvision 3D modelling software. Their 5.1 design features 5 hangs of 5 x A15i Focus and 1 x A15i Wide each, with 8 x KS21i centre-hung subwoofers for low-end definition. 7 x X8 coaxial speakers deliver

front-fill, while 9 x 5XT coaxials and 2 x Syva colinear line source speakers deliver sound as deck-fill. 14 x 5XT provide fill to the Grand Circle and Circle seating areas. The system is powered by 10 x LA4X, 4 x LA2Xi, and 1 x LA7.16i amplified controllers. Driven by L-ISA Processor II, a P1 processor and an LS10 switch provide Milan-AVB signal distribution.

L-Acoustics Application Engineers trained the UCC technical team on the L-ISA technology and provided live mixing training courses. These training sessions armed the team with the vital skills and knowledge to adopt and harness the power of L-ISA immersive sound technology.

Installation of the new professional PA system in the Ho Bee Auditorium at the University Cultural Centre was commissioned in January 2024, making it the first venue in Singapore equipped with this cutting-edge sound technology which provides an immersive audio experience for audiences.

L-Acoustics L-ISA

Picture Productions and J Live Embrace a Quantum Shift with DiGiCo



Picture Productions Pvt. Ltd. of Chennai upgraded their inventory with DiGiCo Q338

INDIA: The Quantum 338 by DiGiCo has undoubtedly made waves within the Indian live event market since its launch in 2021, and continual acquisitions by some of India's leading event equipment service providers across the country have only solidified its position as a game-changer in the industry.

In recent times, two of India's most noted technical service providers in Chennai based Picture Productions and Ahmedabad based J Live (Jagdish Sound) have added to this technological trend – as Picture Productions have acquired the Quantum 338 console along with 2 units of the SD Rack for enhanced I/O and routing capabilities, while J Live have added the Quantum 338 along with a single unit of the SD Rack.

Team Picture Productions highlights the Quantum 338's remarkable adaptability and network capabilities as key factors influencing their decision, as they emphasize its support for DMI Cards and Dante which offers dependable network-enabled solutions for complex events like tours, festivals, and corporate gatherings.

Moreover, they praise its user-friendly interface, specifically mentioning the True Solo function and the native FPGA processing options like the Spice Rack plugin style, Mustard, and Nodal processing. However, the company affirms what truly sealed the deal for Picture Productions was DiGiCo's consistent support across their product line and the seamless compatibility between older and newer consoles, which ensures that every engineer, regardless of experience, can easily transition to the Quantum 338, thereby allowing the company to offer clients a world-class sonic experience with unparalleled flexibility.

On the other hand, Team J Live focuses on the Quantum 338's advanced features and capabilities that guarantee maximum ROI and exceptional performance, while commending its ergonomic design, functionality, and power – all of which make it a preferred choice for performers, artists, and event producers alike. Specifically, they highlight the console's smooth interface and its unique functions tailored to the Quantum range, such as the True Solo function and the native FPGA processing options. Moreover, they stress the importance of the Quantum 338's support for DMI Cards and Dante, enabling seamless integration into intricate event setups. For J Live, the Quantum 338's ability to deliver superior sound, features, and reliability solidified their decision to invest in this cutting-edge technology, ensuring they can offer their clients the very best in live event experiences.

Picture Productions

J Live

HiTech Audio & Image

ENCIRCLED Grows to Meet Global Demand for Excellence in Immersive Audio



©Grande Experiences.

GLOBAL: ENCIRCLED audio.solutions GmbH, a consultant, planner and integrator of immersive audio systems, has announced the expansion of its global footprint to meet rising demand for innovative audio products and projects worldwide.

As the official licensee of the IOSONO technology from Barco, ENCIRCLED audio.solutions distributes all IOSONO hardware and software products throughout Europe and is looking to grow its international partner network which is already established in China, Korea, USA, Australia and South Africa.

ENCIRCLED's expert team have supported dozens of projects with consulting, planning, simulation, commissioning and execution of 3D sound and immersive audio systems.

Max Röhrbein, Joint Managing Director, stated, "The appetite among audiences for thrilling, entertaining and inspiring multi-sensory audio experiences has never been greater and we are witnessing this in every part of the world, for venues indoors and out, spanning every

vertical from theme parks and museums to live events, concerts, retail, hospitality and corporate branding. Our goal is to find the best solutions in close relationship with our partners for practical and innovative spatial audio systems across the entire life of a project from concept to realization. Involving the ENCIRCLED team in planning and commissioning means we can assure the highest quality solution."

Technology solutions include a powerful Spatial Audio Processor with fully integrated IOSONO inside software by the ENCIRCLED company for real-time rendering of object-based immersive content to virtually any loudspeaker layout. The Spatial Audio Processor comes with extensive remote-control capabilities and synchronization with other technology, guaranteeing a smooth integration into show control systems.

The Spatial Audio Workstation plugin is a production tool for the creation of immersive audio content. The distribution of Barco's Anymix Pro plugin, a flexible audio processing tool that converts any audio source into any output from mono to 8.1.

IOSONO is a mature solution with over 100 systems deployed globally for clients demanding world-class audio rendering quality backed by state-of-the-art technology.

The Berlin-based company's globe-spanning high-profile installations include those at Walt Disney theme parks, Tokyo Disney Parks, Shanghai Grand Theatre, Kvamme Planetarium San Francisco and Deutsche Telekom Design Gallery in Bonn (GER).

Grande Experiences and THE LUME Melbourne unveiled "Leonardo da Vinci – 500 Years of

Genius" in Melbourne, Australia in March. Featuring an immersive journey with many historical artefacts, the exhibition features sound design by Des O'Neill at aFX Global, leveraging IOSONO Inside technology provided by ENCIRCLED.

Jan Langhammer, Joint Managing Director added, "ENCIRCLED offers extended service capabilities by partnering with creative, integration and technical leaders to develop features, customize interfaces and find the very best solutions for every audio-related requirement in your project. Our engineers have more than 20 years of experience in audio technology and thrive on challenging tasks. Demand for acoustic excellence has never been higher which is why we are looking to empower partners to elevate their media experiences to another level." IOSONO's patented wave field synthesis was first devised in the 1980s by researchers in the Netherlands and further developed at the renowned Fraunhofer Institute in Germany then

later at the Belgium pro-AV company Barco. ENCIRCLED was founded and led by former members of the professional audio unit at Barco.

Röhrbein said, "The ENCIRCLED DNA makes us unique. We deliver continuing support and development for a mature spatial audio rendering solution with a proven record of hundreds of incredible immersive systems which entertain audiences in shared loudspeaker-based experiences around the world."

Langhammer concluded, "To push the technology further we are always looking into the development of the IOSONO software. Together with the Barco Audio development team, we have implemented several new features and improvements for potential interactive applications, content compatibility with other popular object-based formats and general object control from external devices, such as tracking and mobile applications."

ENCIRCLED

SoundMindz and JBL Craft Sonic Revelry At Holi High 2024

INDIA: Holi, the vibrant festival of colors, holds a special place in the tapestry of Indian culture. Rooted in mythology and folklore, it symbolizes the triumph of good over evil and the arrival of spring, inviting people to shed inhibitions, come together, and revel in the kaleidoscope of hues that paint the atmosphere. In modern times, Holi has evolved into a celebration of joy, unity, and the spirit of togetherness, resonating with people across the globe.

On the 25th of March 2024, the MMRDA Grounds in Mumbai's bustling BKC became the pulsating epicenter of Holi festivities as the Holi High mega

event unfolded, transcending conventional music experiences to offer an immersive extravaganza like no other. This year, the organizers orchestrated a symphony of music and water, intertwining beats with aqua elements to create an enchanting ambiance that captivated the senses and ignited the soul.

With Holi High 2024 mesmerizing attendees who danced away to electrifying beats and chart-topping music, the event showcased a diverse range of popular music genres, catering to varied tastes and preferences. The lineup featured acclaimed artists such as Sukhwinder Singh,



Stebin Ben, Gurdeep Mehndi, and many more, ensuring a captivating musical journey for all in attendance.

All things in tow; one of the undeniable highlights of Holi High 2024 was its unwavering commitment to production quality. The stage, a plush and visually enchanting spectacle, served as the centre-piece of the event, complemented by state-of-the-art sound systems that enveloped the audience in a pristine soundscape, amplifying the euphoria of the moment. Spearheading the technical prowess behind the scenes was Mumbai-based solution provider SoundMindz, entrusted with the task of orchestrating a technological marvel that would deliver an unparalleled auditory experience.

SoundMindz left no stone unturned in crafting an immersive sonic landscape that would resonate with every soul present. Surveying the venue's dynamics and aligning with the event curators' vision, SoundMindz meticulously devised a plan leveraging cutting-edge technologies to ensure consistency and immersion. Central to this endeavour was the deployment of an all JBL by Harman Professional loudspeaker rig, meticulously tailored to meet the venue's expansive dimensions and the diverse requirements of the performers.

The main PA solution featured a total of 32 units of the VTX A12 dual 12" line array modules flanking the stage in a stereo hang as the primary PA solution that delivered unparalleled clarity and coverage. To ensure an encompassing experience for all attendees, a total of 12 units of the VTX A8 dual 8" compact line array modules were suspended as outriggers on either side of the primary PA system, while an additional 12

units of the VTX A8 modules served as the frontfill reinforcement solution, thereby guaranteeing a consistent sonic experience from every vantage point.

Complementing the VTX line array modules were JBL's powerful subwoofers, which included the formidable VTX B28 dual 18-inch subs and the compact yet potent VTX B18 subs, strategically deployed to enhance the low-end impact and fill the venue with pulsating bass frequencies. Artist monitoring on-stage was equally prioritized, as 6 units of the VTX A8 modules paired with 4 units of the VTX B18 subs served as in-fill reinforcement, while multiple units of the VTX M series professional stage monitors served as the floor-monitoring solution – thereby ensuring performers were emphatically immersed in a world-class sonic environment. Finally, driving the entire loudspeaker system were Crown Audio's robust and efficient power amplifiers, delivering the necessary power and precision to uphold the integrity of the audio experience.

"From the front row to the farthest reaches of the venue, every audience member and artist alike was enveloped in a symphony of world-class sound, transcending the ordinary to create moments of pure euphoria and connection" read a statement from SoundMindz.

In conclusion, one could say that Holi High 2024 at the MMRDA Grounds in BKC Mumbai was more than just a music event; it was an odyssey of the senses, a celebration of joy, and a testament to the transformative power of music and community. Through its innovative integration of music and water, its commitment to production quality, and its unwavering

dedication to crafting immersive soundscapes, the event left an indelible mark on all who were fortunate enough to partake in its magic, reaffirming the enduring allure of Holi and the boundless potential of human creativity.

[SoundMindz](#)

EAW Introduces Raymond Tee as APAC Technical Sales Manager



APAC: Eastern Acoustic Works (EAW) has welcomed Raymond Tee as its APAC Technical Sales Manager. In this role, Tee will be the primary pre-and post-sales technical support contact for EAW's APAC partners. He will also assist James Bamlett, the Senior Director of EMEA and APAC Sales, with identifying, training and managing new partners to strengthen EAW's network throughout the region.

"I first worked with Raymond over 20 years ago when he was handling EAW for our Malaysian distributor," explained Bamlett. "With his vast experience in the field, I'm very glad that we are finally able to close the circle and get him back to EAW."

Tee has held sales, technical and engineering positions at several international manufacturers, was the operations manager at a large rental company and most recently served as Powersoft's solutions engineer for APAC. He has provided support for EAW in a few of these positions, and along with the culmination of his experience in the field, he is a valuable addition to the team.

"With a journey spanning over two decades in the dynamic field of audiovisual (AV) technology, I've had the privilege of evolving alongside the industry," stated Tee. "I first worked with the EAW brand at the start of my career as a service technician and am proud to now join the team to use my extensive experience to support APAC sales."

[EAW](#)

TDC Unveils New Initiatives Led by Graham Henstock



Drew Ferors, Head of Technical Services & Training, with Training Consultant Graham Henstock.

© TDC – Technical Direction Company.

AUSTRALIA: Technical Direction Company (TDC) has expanded and revitalised its in-house training program, TDCT, with the engagement of Graham Henstock as a Training Consultant.

“Technology constantly improves and evolves, and TDC is at the forefront of delivering the best possible results for our important clients, whether it be record-breaking amazing visuals for events, immersive experiences, film or theatre productions with TDC Studios,” said Drew Ferors, Head of Technical Services & Training at TDC.

Graham Henstock brings over 25 years of industry experience and educational expertise to the team. His diverse career spans roles as an educator, designer, consultant, arts journalist, and technical manager. Henstock is esteemed as one of Australia’s prominent theatre professionals, highlighted by his recent tenure as Director at the National Institute of Dramatic

Art (NIDA)’s Centre for Technology, Production, and Management, where he led the Bachelor of Fine Arts program in Technical Theatre and Stage Management.

TDC has long collaborated with NIDA, providing students with training in stage and live performance technology such as LED screens, large-scale projection, and broadcast camera systems, as well as supplying such video technology for NIDA’s student productions throughout the year. TDC also provides an annual scholarship for eligible students taking the Diploma of Technical Services.

With extensive experience in independent productions and key technical roles at prestigious companies like the Melbourne Theatre Company and Sydney Theatre Company, Graham Henstock’s expertise extends across all facets of theatre and event production, characterised by creative and innovative problem-solving.

“We are committed to developing talent and ensuring our team members have access to the best training opportunities available. Graham Henstock’s knowledge and dedication to training makes him the perfect addition to our team as we enhance our own training program and empower our staff with the skills they need to succeed,” added Ferors.

Revitalised TDCT coursework includes a new Learning Management System

TDC’s training initiatives provide continuous learning opportunities for all staff members. The recently launched in-house Learning Management System (LMS) offers secure online access to more than 100,000 courses from over 200 training providers, allowing TDC employees

to pursue professional development at their own pace and convenience.

The updated TDCT coursework will be introduced to staff through the new LMS, with a combination of online modules, self-driven situational scenarios, and classroom-based learning. Graham Henstock oversees the development and integration of classroom and online modules, ensuring accessibility for all TDC permanent staff. He focuses on revitalising TDC's Video Fundamentals coursework, strengthening senior technical training, and developing industry-

specific project-based and soft skills. These are fundamentals that are currently not available at the requisite level from any training provider within Australia, which is another reason why TDC has developed TDCT in-house.

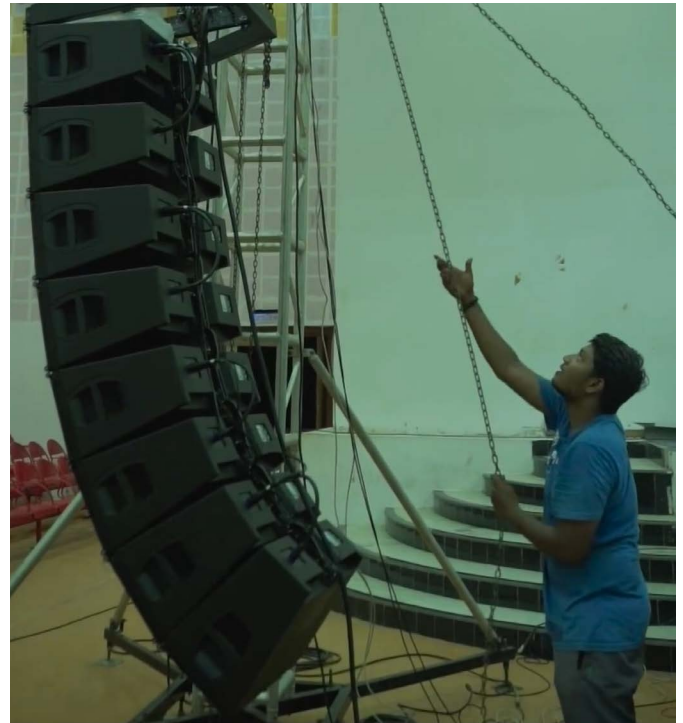
"At TDC, our people are our greatest asset. Investing in their development ensures consistent project delivery for clients," said Michael Hassett, Founder & Managing Director at TDC. "I'm excited to see Graham Henstock enhance the specialised training for TDC's technical staff."

TDC

Techcraft by Santhiya Events Upgrades Inventory with Cutting-Edge Sound and LED Technologies

INDIA: Techcraft by Santhiya Events, a prominent name in event equipment services based in Chennai, continues to raise the bar in live event production with its latest upgrades in sound and LED technologies; with their acquisition of state-of-the-art equipment underscoring the company's commitment to delivering top-notch audiovisual experiences for their clients.

Most notably, the company has bolstered its sound reinforcement capabilities with the addition of the renowned V Series line array system from d&b Audiotechnik. This upgrade includes 20 units of the high-performance 3-way passive V Series line array modules, 8 units of the compact yet powerful B22 subwoofers, and 5 units of the d40 four-channel Class D mobile amplifiers, all sourced through Ansata, the official distributors of d&b Audiotechnik in India.

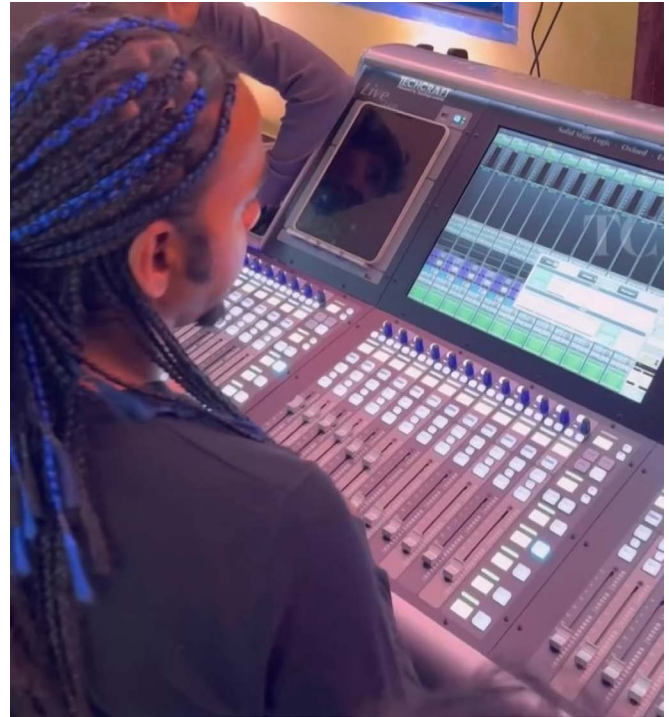


d&b Audiotechnik V Series.

Expressing his excitement about the procurement of the new d&b Audiotechnik gear, Aravind Sampath of Techcraft shares that the technical prowess of the system is what impressed a positive influence on his investment decision. He states, "The symmetrical dipolar arrangement of the LF drivers and coaxial MF and HF components in the V Series ensures exceptional horizontal constant directivity dispersion control, resulting in pristine sound quality and uniform coverage across venues of any size. Additionally, the B22 subwoofers' INFRA mode and Cardioid Subwoofer Array configuration offer impressive low-frequency directivity control, enhancing the overall listening experience."

Prior to this upgrade, Techcraft had expanded its LED inventory with over 1200 square feet of P3.9 outdoor LED walls from Digital Systems, a reputable Indian manufacturer. These LED panels, designed for flexibility and durability, offer exceptional picture quality and clarity, making them ideal for outdoor events. Aravind Sampath highlighted, "The P3.9 LED panels' ultra-high brightness and lightweight design ensure vivid visuals even in broad daylight, while its unique and innovative design facilitates easy handling and quick installation—a perfect blend of functionality and convenience."

Furthermore, earlier in the year, Techcraft became the first company in South India to acquire the renowned L450+ digital mixing console system from Solid State Logic (SSL); with the company's investment encompassing the L450+ control surface along with 3 units of the ML32.2 stage boxes to offer enhanced I/O and routing capabilities. The cutting-edge L450 console, equipped with SSL Live's patented Optimal Core Processing (OCP) technology, delivers superior sonic performance and advanced workflow capabilities. As Aravind commented, "The L450's unparalleled processing



The L450+ digital mixing console system from Solid State Logic.

power, extensive I/O options, and ergonomic design provide us with the flexibility and control needed to meet the demands of diverse live productions, from corporate events to live concerts."

With these strategic investments in cutting-edge audio and visual technologies, Techcraft by Santhiya Events reaffirms its commitment to being a leader in delivering immersive and unforgettable live event experiences, with Aravind rounding off stating, "As we continue to push the boundaries of innovation by constantly upgrading our inventory with the latest in professional live event technologies, our clients can expect nothing short of excellence in every production."

Techcraft by Santhiya Events

Ansata

Digital Systems

StageMix

GLP Reports Highly Successful Prolight + Sound



GERMANY: With participation at three major trade fairs in three months, GLP knew that expectations would again be running high at Prolight+Sound 2024. Assessing the impact of PL+S a few weeks after the fair, it was clear to GLP German Light Products that despite the noticeably lower number of visitors, the German trade fair would still have a permanent place in the calendar in 2025.

While international customers from Asia were surprisingly well represented, fewer visitors attended from the USA than recently. However, as expected, the local German-speaking audience was still out in force. The generally fairly positive outlook for the industry was maintained, judging from the high turnover of visitors to the GLP stand. The presentation of the new, graphics-capable and weatherproof (IP65) JDC2 IP hybrid strobe was undoubtedly the highlight of the GLP stand.

The relentlessly consistent, eye-catching product presentation, with the AI-generated avatar Gina, constantly drew large crowds, who responded with amazed faces. Meanwhile, the new FUSION Exo Hybrid 40 also proved to be in great demand,

appealing to visitors from all geographical locations.

GLP's renowned hospitality area was again a hub for spontaneous meetings, short breaks and contract discussions. The traditional GLP Family & Friends Dinner brought together several international industry leaders, while 'old hands' mixed with up-and-coming talent at the second edition of the Tech'n'Talents Party in the popular Fortuna Irgendwo club.

For many customers, Prolight+Sound was also an opportunity to get to know the new faces at GLP in person: Giulia Calani, Toto Bröcking, Rick Potter (GLP USA), Matthew Powell (GLP UK) and René Geissel.

Reflecting on the event, GLP Managing Director Udo Künzler stated: "We are pleased that we can once again speak of a successful Prolight+Sound this year. The generally lower number of visitors, which is probably due to the high density of trade fairs in winter/spring, is certainly thought-provoking. Nevertheless, we are satisfied with the outcome and will undoubtedly be there again next year."

GLP

King's Spectacular Rajasthan Concert Marks a New Era of Live Sound with Rajan Amplifiers and DAS Audio



INDIA: It's true that India's vibrant music scene is currently brimming with a multitude of talent that hold the potential to ascend to international fame and acclaim. Having said this, one must also note the truth in fact that few artists today command the adoration and respect quite like King. With his fusion of traditional Indian melodies and contemporary beats, King has carved a niche for himself, captivating audiences across the nation and beyond. And his concert at the illustrious JECRC University Grounds in Jaipur, Rajasthan – held in late February 2024 – not only showcased his musical prowess but also set a new benchmark in live sound production.

Playing host to a staggering crowd of over 25,000; the concert was not merely an event; it was an immersive experience meticulously crafted to delight the senses. And central to its success was the emphasis on production quality, evident from the plush and visually enchanting performance stage to the state-of-the-art sound systems that enveloped the audience in a pristine soundscape, allowing them to dance in perfect harmony with the music.

Behind the scenes, the team at Rajan Amplifiers, a renowned solution provider, played a pivotal role in spearheading the technical design and commissioning of the impressive audio production for the event. With a commitment to excellence, they went above and beyond to ensure that attendees were treated to an unforgettable sonic journey.

Surveying the venue and considering crucial factors such as its physical dynamics, the festival curators' technical vision, and the performance requirements of King himself, Rajan Amplifiers meticulously crafted a plan that integrated cutting-edge technologies to deliver an ultra-formidable live sound architecture. And the cornerstone of this architecture was the deployment of a comprehensive loudspeaker rig from DAS Audio, a trusted name in the industry.

A total of 24 units of the LARA self-powered cardioid line array modules flanked the stage on either side, suspended in a stereo hang, forming the main PA solution; with this setup offering optimum fidelity across the frequency range as



it effortlessly engulfed the entire audience area in a pristine, high-quality soundscape. Further enhancing the auditory experience were 24 units of the LARA-SUB powered cardioid subwoofers that were deployed in an 'end-fire' configuration, which helped team Rajan Amplifiers to envelope the audience in deep, resonant bass. Additionally, the deployment of AL60 augmented line array modules along with the SL-G Subs from famed manufacturers d&b Audiotechnik as the front fill reinforcement, ensured that audience members directly in front of the stage also enjoyed an equally impactful and pristine sound experience.

Team Rajan Amplifiers affirm that the decision to utilize the DAS Audio LARA system as the main PA solution was strategic, as they were able to capitalize on the system's capacity to offer wide dispersion capabilities and high-SPL output while also enabling ultra-quick system setup and tuning through its self-positioning technology that leverages NFC technology and DAS Audio's trademarked ALMA software.

On-stage, performers were provided with world-class RF infrastructure that included over 12 units of the Axient Wireless System from Shure and over 24 units of the 2000 series in-ear monitoring systems from Sennheiser; with this thoughtful

provisioning ensuring seamless audio pickup and artist-monitoring during the performance. And to offer sound engineers with unparalleled and comprehensive control over sound quality for the audience as well as the artist, team Rajan Amplifiers deployed DiGiCo's lineup of world-class live mixing consoles; wherein the current industry-favorite DiGiCo Quantum 338 digital console along with the acclaimed DiGiCo SD10 console, empowered sound engineers with world-class features to tailor the sound to perfection. Furthermore, two units of the SD-Racks were also supplied, offering unparalleled flexibility in terms of I/O support.

"Bringing together a high-quality sound experience for King's concert at JECRC University Grounds was both exhilarating and challenging. Our team at Rajan Amplifiers was driven by a passion for excellence and a commitment to delivering an immersive auditory journey for the audience. From meticulously planning the deployment of state-of-the-art audio technologies to fine-tuning every aspect of the sound system, we spared no effort to ensure that attendees were treated to nothing short of sonic perfection. Witnessing the crowd's euphoric response as they immersed themselves in the music reaffirmed the importance of our work and inspired us to continue pushing the boundaries of live sound production!" exclaimed Anil Panwar of Rajan Amplifiers.

In conclusion, King's concert at JECRC University Grounds not only showcased his musical brilliance but also exemplified the potential of live sound production to elevate the concert experience to new heights. With the expertise of Rajan Amplifiers and the cutting-edge audio technologies deployed, attendees were treated to a sonic journey they would not soon forget, setting a new standard for live performances in the Indian music scene.

Rajan Amplifiers

ETC ColorSource PAR jr Lights Up Without a Peep



Meet ColorSource PAR jr - the pint-sized powerhouse is the mini-me version of the legendary ColorSource PAR. PAR jr is a four-colour sensation that blends reds, greens, blues, and limes to create eye-popping hues that'll make your jaw drop. But that's not all, this tiny titan also conjures up some dazzling white light that'll illuminate your space like a supernova.

Unleash the Power of the Perfect Front of House Mix



With PALM Expo India just around the corner, this must-watch panel discussion is about to drop some serious knowledge bombs on achieving FOH mixing mastery. Whether you're a seasoned engineer or an up-and-coming live sound enthusiast, this panel is packed with insights and pro tips that will take your FOH game to new heights.

Experience the Live Magic of Leo Manzari & T.Nava's "Chic"



Step into Sweetspot Studios for a captivating live performance of "Chic" by Leo Manzari featuring T.Nava, captured with the QSC TouchMix-30 Pro digital mixer multi-tracking every input directly to a USB drive while delivering custom monitor mixes to keep the band locked in tight.

Elevate Your Projection Game with PROLIGHTS' Jaw-Dropping HD Optics



PROLIGHTS has unveiled their High Definition Optics for the Ecl Display series, and let's just say – your visuals will never be the same again. Think unparalleled precision, stark contrast that'll make your pixels pop, and distortion-free imaging so crisp, it'll look like the real thing projected right before your eyes.

OneTrack by ETC Expands with 277 V Compatibility



ETC has announced the expansion of OneTrack by ETC with the addition of a 277 V surface/suspension mount track plus 120 V and 277 V recessed mount track. ETC has also released OneTrack 277 V models of Irideon FPZ and Irideon WLZ luminaires. Together, OneTrack by ETC and Irideon offer track lighting solutions for a wide range of installations.

With the addition of 277 V and recessed mount options, OneTrack fits seamlessly into even more buildings, saving money on line voltage wiring and allowing more fixtures to fit on a circuit. Surface mount 277 V track is available in black or white, comes in standard lengths of 4, 8, and 12 feet (1, 2, and 4 meters), and can be used with the same suspension mount brackets and accessories as 120 V OneTrack.

The new 277 V version of OneTrack is also compatible with OneTrack Backbone by ETC, which adds an H-shaped aluminium extrusion to

reinforce the track. Backbone allows OneTrack to be used with full-sized theatrical fixtures using a hanging clamp and power and data pigtails.

The recessed mount track is available in black or white and comes in standard lengths of 4 and 8 feet (1 and 2 meters). Recessed mount track uses the same feeds and couplers as surface mount track, plus additional covers that must be ordered separately. OneTrack is designed so that 120 V luminaires cannot be accidentally installed on 277 V track systems, and vice versa.

OneTrack 277 V is available for sale in the Middle East and Asia for 240 V applications.

ETC/OneTrack

JBL Pro Connect App Enhancements Include New Demo Mode and Snapshot Language Support



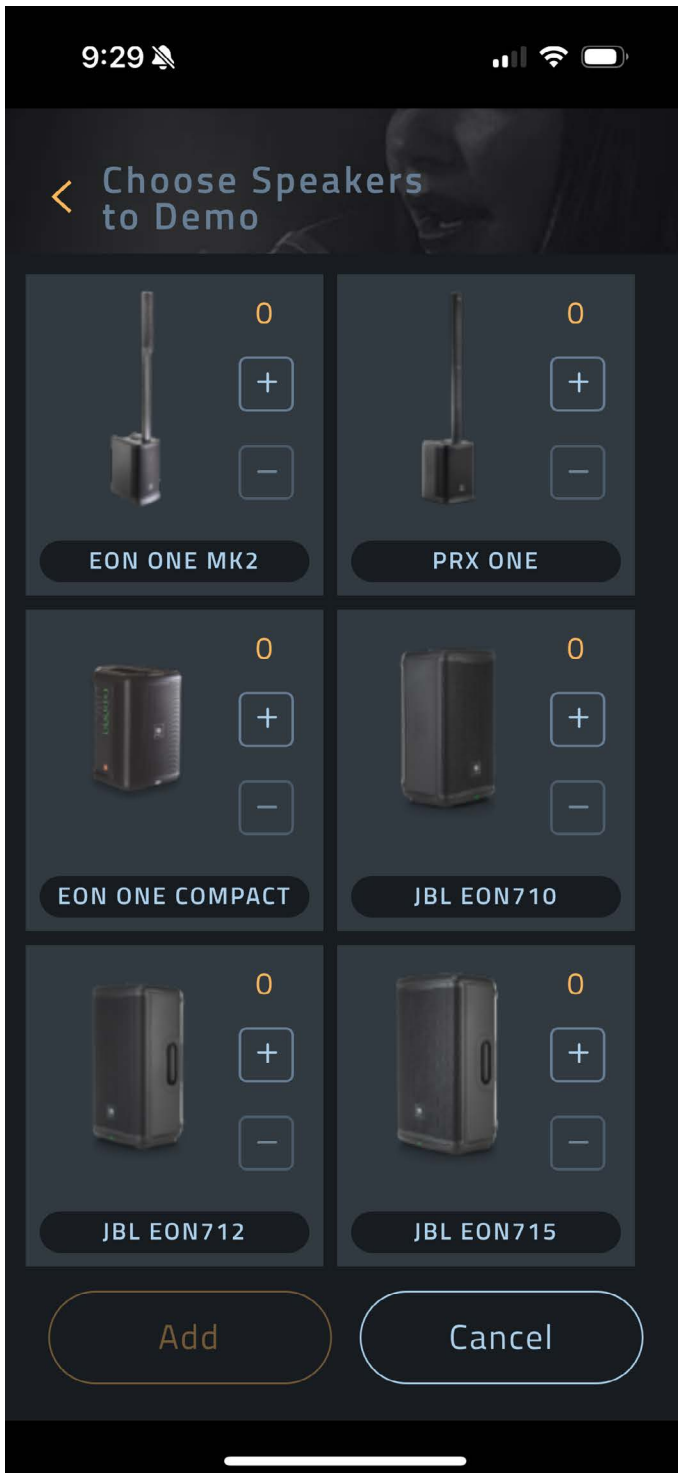
The new JBL Pro Connect V2 is HARMAN Professional Solutions' newest version of the universal control application for streamlined management of select JBL portable PA speakers and systems. It includes a variety of robust features and enhancements to further simplify hands-on control over a full suite of mixer, DSP, and Bluetooth features.

Explore the app and tour all its capabilities without being connected to speakers. The new Demo Mode allows users to configure and save settings and presets offline and then load up saved preferences when connected. Full Screen Mode enhances resolution for editing and adjusting controls including faders, dynamics, EQ, and FX sends. Snapshot Language Support adds the convenience of saving snapshots in select local languages once the keyboard has been loaded to the device.

Available for Android and iOS devices, JBL Pro Connect ensures that supported speakers and systems can be utilized to their full potential. Setting volume and adjusting EQ, activating Lexicon reverb and effects and dbx Digital DriveRack signal processing, customized ducking, saving and recalling presets, and more are all included features.

The app also offers a choice of pre-loaded presets for accessing popular control features like input EQ, dynamics, gates, limiters, and chorus delay. A variety of even deeper presets for EQ, gate, compressor, tap, delay, reverb, chorus, output limiter, output EQ, and more are also included. App-exclusive features and settings include snapshots, multi-speaker grouping, tap tempo, and more.

JBL Pro Connect is free for life and more speakers and systems are continually expanding the Pro



Other Highlights Include:

- Mix Out Pre/Post Fader support empowers users with the added capability to seamlessly switch their MIX OUT feature between pre- and post-fader to match their use-case scenario.
- Dive deep into the system mixer and DSP functions to optimize your stage sound for any scenario. Access app-exclusive features and speaker settings including snapshots, multi-speaker grouping, tap tempo and more.
- Activate ducking to make sure your voice stands out over background music. Adjust Lexicon reverb, chorus and delay effects for professional polish. Shape your sound with surgical precision with parametric EQ.
- Choose from eight optimized sound presets, or customize your own. Simply and quickly, adjust the main volume and source levels. Trigger dbx Automatic Feedback Suppression (AFS) to eliminate feedback. Optimize and protect speakers with dbx Digital DriveRack signal processing.
- NAdvanced Bluetooth Low Energy (BLE) technology for powerful wireless control functionality and performance. Connect and sync up to 10 JBL Pro Connect-enabled speakers.
- Group speakers for mixing, and rename channels for traditional channel strip functionality. Responsive portrait and landscape displays streamline operation.

JBL Pro Connect is currently available for the following speakers and systems: JBL PRX ONE, EON ONE MK2, EON700, PRX900 and EON ONE Compact, with additional models being added. Click the link below to download the app.

JBL/Pro Connect App V2

Connect ecosystem. From professional musicians and DJs to presenters, instructors and novices alike, JBL Pro Connect eases speaker setup and management and empowers users to have complete control of their portable PA experience.

NEXO Adds New Sub-Bass Speakers to P+ Series Alongside NXAMP Firmware and NeMo Updates



NEXO has expanded its industry-standard P+ Series point source loudspeaker range with three new sub-bass speakers, the L15-I, L18-I and L20-I.

Developed specifically for permanent installations, the new **models** are a development of the existing touring versions, and feature fabric-covered front grilles and quick-connect push connectors with IP cover protection. Available in black, white or custom RAL colours, cabinets feature threaded inserts on the back and both sides for use with a comprehensive range of mounting hardware.

L15-I, L18-I and L20-I subs feature single 15", 18" and 20" long-excursion neodymium drivers, extending the LF response of a P+ Series installation down to 40Hz, 32Hz and 28Hz respectively.

At the same time, NEXO has announced a new V3.1 release of its NeMo remote control app for a

group of NXAMP and NXAMPMk2 Powered TD-Controllers, now delivering the same powerful control, monitoring, logging and alerting functions for Windows and macOS. NeMo v2.4 remains available for iOS.

Also new from NEXO, new firmware LOAD5_28 for NXAMP and NXAMPMk2 Powered TD-Controllers delivers updated performance for NEXO GEO M12 line array systems including an additional +4 dB gain and more presence in the vocal range.

Developed in consultation with monitor engineers, updated pre-sets for NEXO P15 wedge monitor setups are also included. NeMo V3.1 and firmware LOAD5_28 are available to download free from the NEXO website, where full details of the new L15-I, L18-I and L20-I can also be found.

NEXO/ Software Updates

RCF RDNet Allows for Real-Time Discovery and Complete Monitoring



RDNet is an advanced platform for integrated monitoring and management of sound systems - from small live and installed setups to massive arena systems. With a networked architecture, RDNet combines system control, line array design, and detailed audio measurements into a powerful software solution.

Engineers and technicians can intuitively manage every device on the network, from individual components to multiple groups, with seamless integration of self- and externally-powered systems. With real-time discovery and comprehensive monitoring capabilities, you can stay ahead of the curve and ensure optimal performance at all times. Additionally, the complete real-time FFT analyzer, coupled with EQ integration and auto-alignment features, provides precision and accuracy. Customize your setup

with ease by adjusting Hi-Pass, EQ, gain, and delay settings on individual components, giving you full control over your sound experience.

The platform also offers comprehensive DSP control of compatible devices, with flexible configuration tools for efficient system tuning. Users gain real-time access and oversight of crucial parameters, such as volume levels, system health, and environmental adjustments, all from a centralized interface.

RCF/RDNet 5

DiGiCo Software Upgrade Offers Free Bump in Mustard Processing Numbers



DiGiCo has released its latest software release, Version 1742, for all SD and Quantum consoles. Now available for free download from the Info and Downloads section of the DiGiCo website, V1742 replaces the previous version V1619, which was rolled out a year and a half ago.

Of particular note, the installation of V1742 enables Quantum338 and Quantum225 owners to purchase and harness DiGiCo's optional new Pulse software extension, increasing their number of input channels, busses, and Mustard and Nodal Processors. V1742 will also offer Quantum7 and Quantum5 customers a bump in Mustard processing numbers for free.

The new software release enables DiGiCo users to benefit from KLANG's also-new KOS 5.5 upgrade, which permits standalone console integration without requiring a separate KLANG control PC to run KLANG:app. KOS 5.5 brings numerous

enhancements, including a streamlined setup process that automatically detects the console and greatly reduces setup time. Other helpful amenities include automatic console aux and aux node mapping/naming, as well as automatic show file load and save.

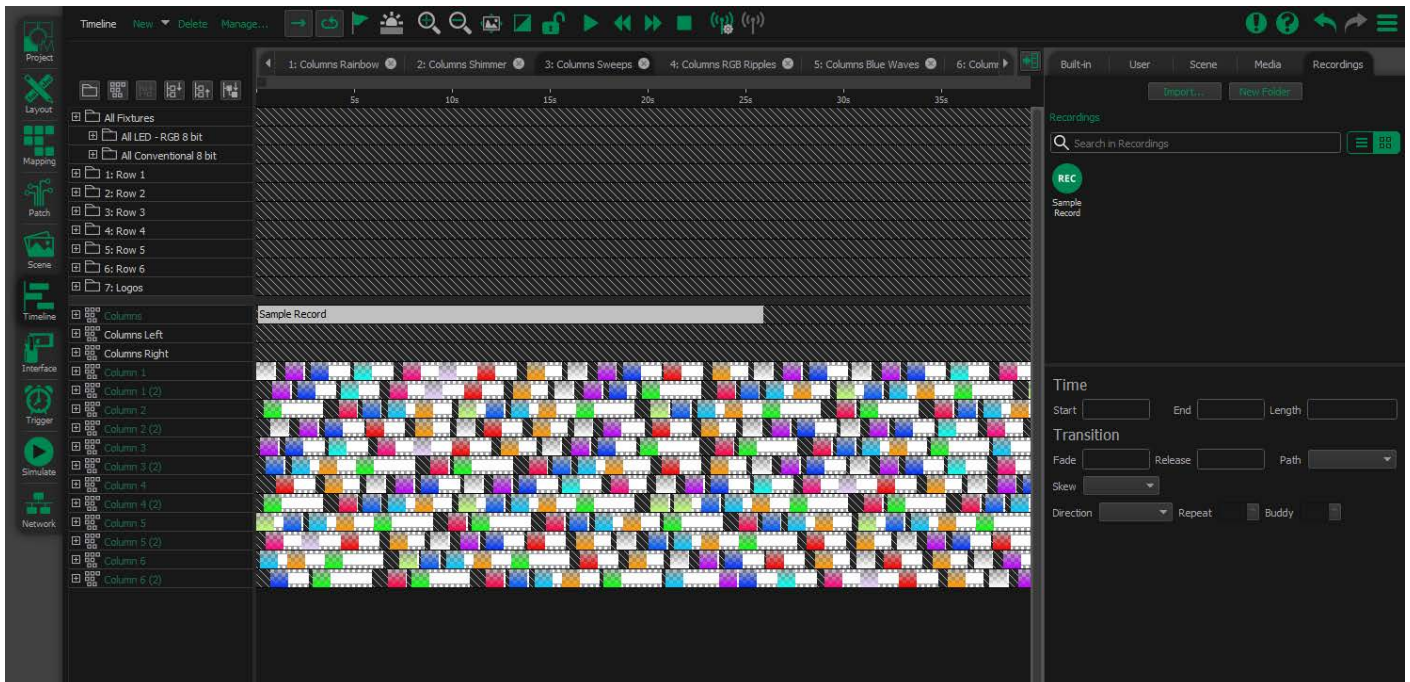
DiGiCo's V1742 release provides support for utilizing an internal Fourier Interface Card. Furthermore, the software broadens compatibilities with two more manufacturers' immersive audio platforms, offering native worksurface control of Meyer Sound's Spacemap Go and Adamson's FletcherMachine.

Adopters of the latest software update will discover a host of other benefits, including:

- Mix Minus added to Quantum consoles
- Mustard Dynamics now displayed on Quantum meterbridge
- Control Group and hard Mute indicators have been added to meterbridge multi-layer view for the SD7/Quantum7 and SD5/Quantum5
- KLANG positions now have a separate recall scope
- Support of Quantum852 session conversion
- Support for DMI-AVB card

[DiGiCo/V1742 Release Notes](#)

ETC Mosaic Record Makes Console Effects Integration Easier than Ever



The new Mosaic software v2.12 with Mosaic Record is now available in all Mosaic controllers. With the new Record app for Windows and Mac, users can capture up to 16 universes of sACN or ArtNet output from a console and save recordings on their computer. These Record captures can then be easily applied onto Mosaic timelines just like any other effects or presets, seamlessly blending into a show.

Mosaic Record makes programming any show a lot simpler, but it especially shines when adding moving lights to a Mosaic show. Moving lights can be programmed on a console designed to facilitate that process and the console's output is easily ported into Mosaic.

An FYI for the more technically minded: The Mosaic Record app is intended to help in programming Mosaic shows. Unlike Paradigm,

this app records from a computer and imports directly to Designer software rather than being triggered from a Mosaic touchscreen.

Mosaic Designer Software 2.12 also includes several other new features, including:

- Music timelines, where timing can be set to tempo and bars
- Customizable playback groups
- Quick script

Download Mosaic 2.12 and the new Record app at the link below.

ETC/Mosaic Designer 2

Avante Imperio Pro IMP118 Comes Ready for Life on the Road



The new Imperio Pro IMP118 active subwoofer from AVANTE Audio features high-quality components, precision audio engineering, a robust enclosure, a powerful integrated amplifier, and a flexible internal DSP. With a variety of hardware options, it can be deployed in numerous configurations for medium-to-large-scale concerts, parties and events.

At the heart of the Imperio Pro IMP118 is a powerful 18" high-power transducer driven by a high-energy 4-inch (100mm) voice coil motor assembly. It is implemented through an efficient bass-reflex system design to deliver an exceptionally linear frequency response from 32 Hz - 130 Hz (-10dB) / 38 Hz -130 Hz (-3dB) with a maximum SPL of 136 dB (peak). An integrated 3600-watt (peak) Class-D power amplifier provides ample headroom and minimizes distortion, ensuring highly responsive deep sub-bass output.

The enclosure is also fitted with an advanced DSP system that allows configuration for a wide variety of different applications and speaker

arrangements. Access to the DSP settings is provided via a large backlit LCD on the rear panel. An intuitive menu interface allows quick and easy setup, which is navigated using a single push-to-select rotary control.

DSP presets are provided for normal solo cabinet deployment as well as more advanced cardioid and end-fire coverage control patterns using multiple cabinets. The DSP also features FIR filters for accurate LP-crossover settings that can be configured to 60 Hz, 70 Hz, 80 Hz, 90 Hz, 100 Hz or 120 Hz. The menu interface can also be used to reverse the driver polarity, enter a delay time/distance and alter the volume level to optimize the signal gain structure.

The enclosure is designed to withstand the rigours of professional touring applications. Constructed from premium CNC-machined Birch plywood, it has a sleek black polyurea finish that is very durable as well as a black powder-coated steel grille to protect the speaker cone. It is fitted with a pair of recessed carry handles on the sides and features an XLR input socket alongside an XLR output for linking together additional active speakers. Power is supplied via a locking IP65-rated socket, which can't become accidentally disconnected during use. A locking IP65-rated output link socket is also provided, allowing the power supply for multiple speakers to be 'daisy chained' from a single outlet. The unit can be used globally as it is compatible with a power supply of 100~240V AC 50/60Hz. A protective rain cover is also provided for the amplifier panel and connection sockets, allowing for safe use outdoors in wet conditions.

A variety of integrated hardware accessories allow for versatile deployment. Firstly, a standard

M20 threaded speaker pole slot is located on the top of the cabinet to allow a mid/top cabinet (for example one of AVANTE Audio's Achromic X Series models) or small configuration of Imperio Pro IMP205 compact line array modules to be mounted above. The bottom of the cabinet is also fitted with skids, which fit into corresponding shallow recesses on the top for when multiple units are stacked. A convenient spring-loaded locking system then allows the cabinets to be secured together without the need for straps or any other additional hardware. Finally, the cabinet is fitted with 20 captive nut M10 fly points for applications that require the speaker to be permanently mounted overhead.

Weighing in at 101 lbs. / 45.8 kg, the unit can be easily managed by one or two people. To allow convenient transportation, a dedicated caster board (Imperio Pro IMC118) is available as an optional accessory. This locks securely to the bottom or the front of the cabinet, with the latter option covering the speaker grille to provide added protection during transportation and storage.

Avante/Imperio Pro IMP118

IP65 KL Series PAR light from Elation Now Available

Elation's popular KL Series full-colour PAR light is now available in an IP65 version, the KL PAR FC IP, which makes it even more versatile for production settings indoors or out. This theatrical and broadcast-grade luminaire pairs modern technology with classic design, serving as an excellent key, fill, and area wash light source for broadcast environments, film, theatre, or any production requiring outstanding colour quality.

Outstanding colour rendering quality, fully variable CCT control, and remotely adjustable LED refresh frequency- all in a traditional PAR form factor - make the KL PAR FC IP an excellent choice for today's fast-paced production environments. Its fully weatherproof IP65 protection gives this versatile PAR colour-changing luminaire application in all types of outdoor events and weather.

The KL PAR FC IP houses a powerful 360W 6000K RGBMA LED engine with 16-bit CCT adjustments



possible from 2,400K-8,500K for precise colour temperature control. The full-spectrum LED engine emits beautifully diffused saturates, soft-field pastels, and tunable white light, catering to the intricate demands of creative designers with a harmonious blend of vibrant colours and adjustable white balance. The RGBMA system

also allows for a perfect colour match with other fixtures in Elation's KL and Fuze ranges.

The unit produces the finest quality of light with high CRI (93) and TLCI (95) values, meaning that colour re-creation is extremely accurate both to the eye and to the camera. Output is up to 12,000 field lumens—brighter than existing 750W tungsten PAR fixtures—and is delivered with multiple lens choices that are easy to replace in the field.

Addressing the unique demands of broadcast, the KL PAR FC IP incorporates a green-magenta shift adjustment and a virtual gel library. This allows for easy correction of colour shifts and matching the white balance for cameras without the need for additional gels or filters. The fixture's LED refresh rate can be remotely adjusted, ensuring flicker-free performance with high-speed cameras.

The KL PAR FC IP includes Elation's ColourTune Technology, fixture software that allows for unprecedented control over output and colour accuracy. With ColourTune, users can customize lighting output to meet their exact needs, whether emphasizing brightness or colour fidelity. It offers a comprehensive suite of features, ensuring adaptability and colour precision for the highest quality lighting designs. ColourTune, which can be activated or disabled as needed, not only enhances quality but also saves time when colour uniformity across multiple fixtures is a must.

The KL PAR FC IP comes with a number of other useful features that make it a flexible complement to any professional lighting system. With a 7.5" gel frame and multiple included lens

choices (11°, 22°, 30°, 52°), it adapts to diverse production requirements. Optional accessories include 7.5" barndoors, an extra-wide 90° lens, and a 23° ovalizer lens.

Designed for both durability and portability, the KL PAR FC IP can be suspended using any standard clamp or floor-mounted using the integrated stand. It is fully self-contained without the need for an external power supply and offers locking power pass-through for easy linking of multiple units.

With DMX controllability and full RDM support, it offers manual access and standalone operation using the included touch bar encoder and display, providing instant control of intensity, colour temperature, green shift, and other important settings. The display and encoder are conveniently positioned at the backside of the fixture to ensure unobstructed access when mounted.

Elation/KL PAR FC IP

Avolites D7 Makes an Impression



The Avolites D7 lighting console was shown publicly for the first time at the Prolight + Sound Expo, with two variants – the D7-215 and the D7-330 – both running on Avolites' latest Titan v17 software. This initial product launch has enabled the Avolites team to gauge reactions and glean valuable feedback ahead of the full launch, planned for later this year.

The D7 is designed and priced as a workhorse console that will unlock more creativity for designers, programmers, and operators. It sits above the Avolites Classic Range – the Tiger Touch II, Arena, Sapphire Touch & Quartz – and offers many of the larger D9's most popular time-saving and handy features.

The compact D7-215 has two touch-sensitive screens, 15 motorised playback faders and 15 encoders. It can fit into a standard Peli Air 1650 case and falls within the checked baggage weight allowance of most airlines. The slightly larger D7-330 features 3 x 14" screens and 30 motorised playback faders / 30 playback encoders, offering more control for even larger shows whilst maintaining portability.

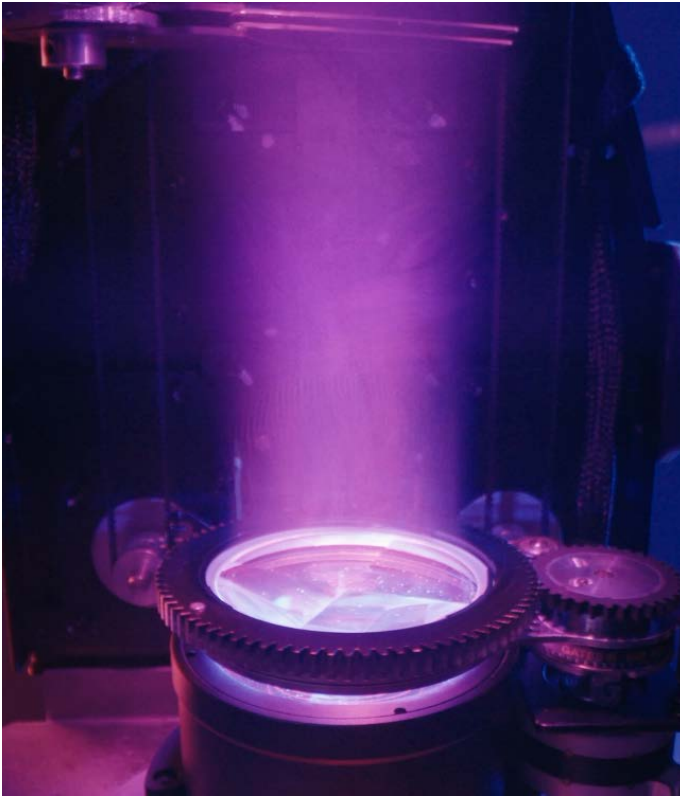
The motorised faders have an RGB LED indicator along each one, and there is a single-level RGB halo indicator for each encoder. There is an in-built LED light at the top of the screen panel and along the rear of the console.

Rear ports include a 4-port network switch, 4 x DMX, LTC Input & loop, MIDI ports, 2 and 1 x external monitors for the D7-215 & D7-330 respectively, 1 x Secondary Ethernet, Trigger in, GP IO and both variants are showfile compatible with all Titan Avo consoles. The USB port is conveniently concealed from plain sight in the right-hand side handle recess.

All the vital programming tools are to hand via a touch screen for speed and efficiency, and an enhanced back-lit keyboard located in a retractable drawer is optimised for assisting programming in dim or dark environments. The On / Off button is concealed under the keyboard drawer to reduce the chance of accidental activation. The D7-215 can control up to 32 DMX universes out-of-the-box with expandable networking via TNPs (Titan Net Processors).

Avolites/D7-215

Rhapsodya by Claypaky Has Arrived



Claypaky's Rhapsodya is a low-noise multi-spectral RGBAL LED fixture meticulously designed for various applications such as touring, live events, theatre, and TV production, and managed by a specially crafted, internally developed firmware algorithm.

It is an evolution of Sinfonya, particularly regarding the focus on quality of optics and colour management, and the whisper-quiet operation even at full output. Rhapsodya has a new product design that is sleek and modern, with a double power output (24,000 lm) compared to Sinfonya.

Rhapsodya's technology introduces new features that promise to reshape your lighting experience:

- **ACCUFRAME:** Rhapsodya utilizes two focal planes to achieve a remarkable level of precision.

Enjoy quicker, more accurate re-focusing while preserving the sharpness of lighting effects, making your work easier and performances more stunning. Say goodbye to time-consuming re-focusing and hello to streamlined performance.

- **LINEAGUARD:** This is a new frost system that features pairs of blades for superior uniformity and reduced unwanted reflections. This feature creates a more pleasing audience experience and guarantees a much smoother and softer entrance of the filters.

- **ABSOLUTE POSITION:** Rhapsodya's Absolute Position feature, for advanced pan/tilt control, remembers fixture positions in real-time, allowing for precision re-positioning with no distracting movement during hard resets. This enhances the precision of re-positioning and saves time since the time for refocusing before the show is always limited.

- **TONEDOWN:** It ensures an unprecedented level of quiet on stage, with noise levels as low as 27dB, allowing for a truly immersive experience. In intimate moments, you can even use the fixture without the fan, creating room for captivating new choreography. The days of disturbing background noise are behind us.

- **ACCUTUNE:** Rhapsodya incorporates an in-house firmware algorithm, ensuring precise control over the multicolour LED engine. This delivers vibrant, high CRI, and high-TLCl light optimized for both stage and TV. The simplicity of operation saves valuable time whilst ensuring uncompromising quality.

- **COLORMATCH:** With the latest calibration feature, integrated with Claypaky's CloudIO



software, you can effortlessly match the light output and colour temperature of all your fixtures for a flawless performance. This guarantees consistent, perfectly tuned lighting, regardless of the age or brand of your fixtures.

- **COLORSTRING:** The independent control of the four LED stripes within the engine unlocks a new level of graphics and colour effects. This feature empowers you to create intricate and dynamic lighting displays. With Colorstring, your lighting design possibilities are limitless. Achieve stunning graphics and colour effects, making every performance an unforgettable masterpiece.

With a broad beam angle potential of 6 to 60°, Rhapsody adapts seamlessly to venues of all

sizes without compromising on performance in both large and intimate spaces. Its colour wheel builds upon the foundation of Sinfonya, offering additional red, green, and blue options. This expansion adds three crucial points to the gamut that were unattainable with the engine's native colours.

Lastly, Rhapsody boasts a sleek, ergonomic design that not only enhances aesthetics but also reduces internal noise reflections, further elevating your show's performance.

Claypaky/Rhapsodya

“Sleep No More” What Lessons I Learned from this Immersive Experience



I know that this topic is everywhere and quite overladen, and I don't want to jump on this wagon all the time, but I had a personal experience last month that I wish to share since I found this eye-opening. I was invited to see a

“true” immersive show

on a recent overseas trip. As you might expect, I was a bit sceptical, but the more I learned about the concept, the more intrigued I became. How was this going to be? How would it sound? Would this work, and what kind of experience would it be? Please hang in with me for the ride and join me later in the discussion.

The show I went to see is “Sleep No More”. Sleep No More is an award-winning theatrical experience that tells Shakespeare's Scottish tragedy through a darkly cinematic lens. The story unfolds through an awe-inspiring blend of acrobatic choreography, a film noir soundtrack, and countless rooms of densely detailed atmosphere. Guests decide where and what to see, ensuring everyone's journey is unique and each visit is different. Performed at the McKittrick Hotel in New York, final curtains will be on 27 May.

The storyline was rather vague and rough, but the whole experience already began with the waiting in line for the entry and a vibe and environment were created that perfectly introduced you to this show and the context and the required measures, such as the audience having to switch off and seal their cellphones and wear a

“phantom of the opera” style mask so that they could be clearly identified as audience members. This was because you are “in” the show, meaning walking through the set and being right next to any actor. When I got out after the show, there were a thousand questions about the show, the content and what else, but what stayed with me was that this was great entertainment. It was done with an absolutely stunning performance by all the actors and backstage people involved. So, huge compliments to all those who participated. This will be a very different type of entertainment in the future. Let me share some more details of what I saw and experienced.

A location with multiple rooms (about 85 to 100 rooms) opened up to a limited audience of about 200 to 250 people, and the audience could decide where they went and what they wanted to see. You were free to move around and check out all the rooms and the content that happened in each room. There was no specific audience area, but you moved through the set next to the actors, so you were in the play, truly immersed 100%. Of course, depending on where you started or ended, you will have watched a different show and have a very different experience. The general content was very dark and quite thrilling. The music score was rather dramatic at times and added heavily to the suspense. General lighting was dark with spots but in a night time setting. From what I could tell, since I was not allowed backstage or to see the central control room, this show was highly scripted and was most likely run on a timecode-based timeline with obvious cues, which were then enacted by light and sound cues and by actor's action and acting. There was no real actors' dialogue of substantial context. Still, you got the story and content through the sound

cues and the physical and visual acting, which was a fantastic experience. The sound system was a distributed sound system throughout all rooms with an ongoing sound carpet of various classical, folk, and techno-style content. I imagine this to have at least 24 playback tracks on a timecode-based platform with probably more than 32 outputs, which would likely be more like 64. Since I am unsure, I could see all the rooms and all the offered content. This information is a bit vague, but it was far from boring, so there were many tracks on many outputs. I am sorry for the long intro. I want to share my experience now, offer my assessment and opinion, and strongly encourage you to see this if possible.

The tuning and set-up of the sound reinforcement system were done so that loudspeakers were hidden in pieces of set decoration. The playback and cues were offered so that some directional movement could be experienced, such as birds in the sky, insects chirping, etc. Overall, the audio experience was excellent, just almost no dialogue, other than lyrics in performed songs and nothing that would require specific information of events that might have happened at different times of the timeline, in other rooms and settings, which you might or might not have seen yet.

The biggest "turn-off" for me was, in fact, the audience in the set and every scene since this made you acutely aware that you were part of the play and that this was a performance. This also worsened as the show progressed, as people were curious about the details. At times, the actual set was hidden from audience members to those who did not push and shove to get closer for a closer view. But of course, you have to accept this since having this show performed for a single person would make it commercially unviable. In this regard, you permanently

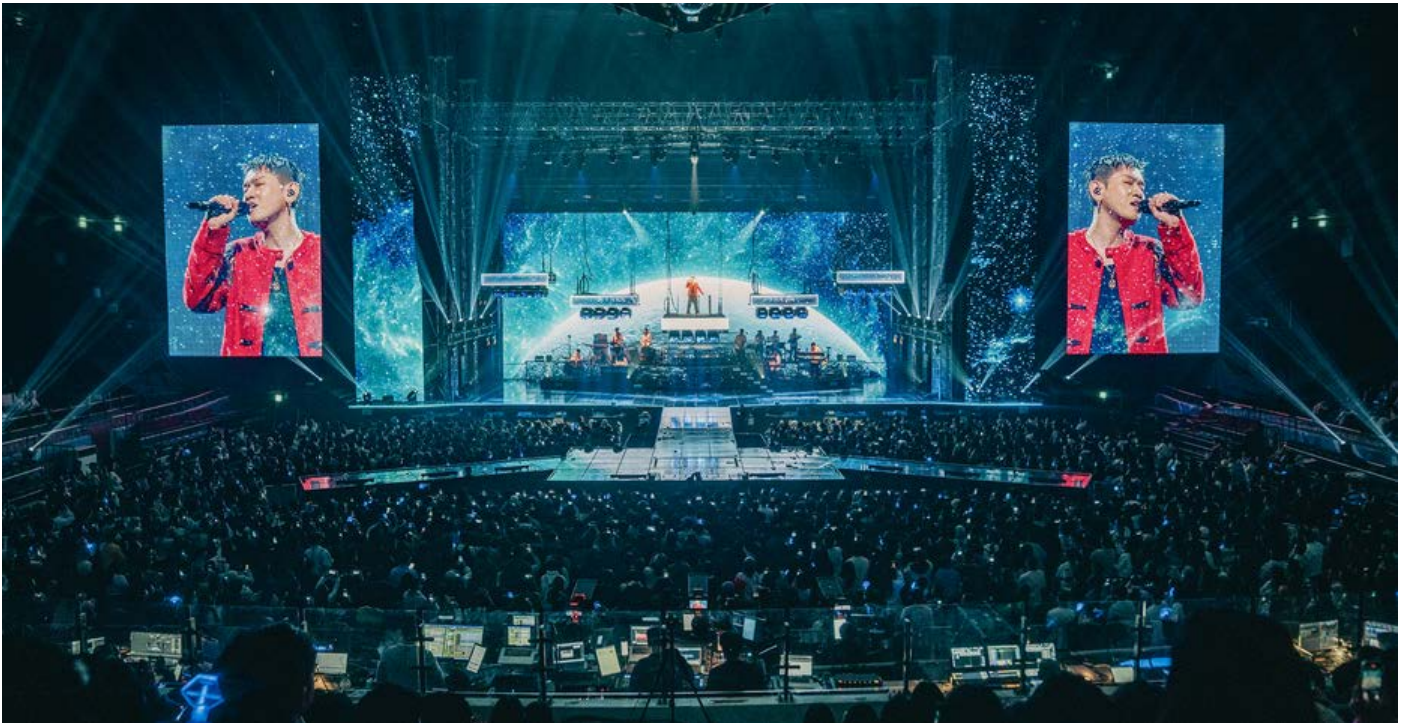
experience that you are in an immersive show, so you become part of it, and in many ways, having an audience in the set is not desired for my taste. The fact that Asian people have a different sense of personal space does not help with this either. This particular show had nothing, but any genuinely immersive show will have to face and be content with this problem.

What I came away with is that this immersive presentation, as we all know it, is inadequate. The amount of misunderstanding is exponentially higher than the few things that have proven to work to a certain extent. Immersive does not require one sense (audio only) but all senses, and then the moment something becomes immersive. Of course, the "other" audience members, with whom you have to share the experience for commercial reasons, become the big disrupters of your experience. Essentially, all this can only be perfected in an event where you are the only listener or viewer, and this would somewhat likely happen in VR only since. Otherwise, it is not commercially viable. In this regard, the people behind the show I watched did a fantastic job within the limitations of what was possible, which was very well worth the expense of the ticket. If you ever get to watch something like this, please go for it, and you will come back with a bucket load of impressions, which is always fantastic.

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

Navigating the Ever-Evolving World of Lighting Control Consoles

by Elton Noronha



Soyoun Lee from Lite Factory Korea, designed, programmed and operated the lighting for talented Korean record producer and singer-songwriter, Crush, at Seoul's Jamsil Arena. For the first time, Soyoun chose to run the lighting control on a full grandMA3 system.

Popular American artist Tyler Joseph – best known as the frontman for the musical duo Twenty One Pilots – once famously commented, “Live shows have been going on for so long, can you really do something that’s never been done before?”

While the comment, in and of itself, may have a sliver of merit to it at first glance – a deeper dive into the topic however, would help one realize that the live event landscape has undergone a remarkable metamorphosis over the years. Simple gatherings with static stages to have now turned into multi-dimensional spectacles with immersive experiences that transport audiences to realms of wonder and delight as they engage

the senses and stir the soul. The look and feel of today’s live events are defined by a symphony of sights and sounds, meticulously orchestrated to create a holistic sensory experience, with event producers and technical directors aspiring to envelope audiences in a tapestry of light and sound right from the moment attendees enter the venue.

This transformation is made possible by the wonder of present-day state-of-the-art live event technologies that have revolutionized the way audiences and artists perceive and interact with live entertainment – with each element carefully calibrated to evoke emotion and evoke wonder. And at the heart of this technological revolution

lies the seamless integration of audio-visual components, where lighting, sound, and visuals converge to create a mesmerizing tableau of colour and motion.

With lighting consistently being one of the most tangible aspects of the sensory extravaganza, the artistry and technical mastery of lighting designers takes centre-stage, as they wield a sophisticated array of tools to paint dynamic canvases of light and colour, shaping the mood, atmosphere, and narrative of each performance. And central to their craft are lighting controllers, the unsung heroes that serve as masterful conductors orchestrating the symphony of light and shadows that captivate audiences worldwide. Propelled by advances in technology and an ever-evolving quest for spectacle and immersion, the journey of lighting controllers parallels the trajectory of live events themselves, tracing a path from humble beginnings to the pinnacle of innovation. Once relegated to rudimentary manual boards with limited functionality, today's lighting controllers stand as marvels of engineering, boasting an arsenal of features that empower designers to push the boundaries of creativity and deliver unforgettable experiences.

LD's & Their Love for Lighting Controllers

In the pursuit of creating the perfect lighting design for an event, lighting designers aim to achieve 6 core objectives of their craft i.e. visibility, selective focus, create modelling, creating the mood, revealing the space, and finally – the most crucial of them all – supporting the story. When these functions are accounted for precisely, the result would usually culminate in a 'good lighting design' that is nuanced but subtle, as it highlights all the action, drama and emotion of whatever is going on on-stage, while ensuring that it does not draw too much attention to itself.

That being said, one cannot deny that achieving a 'good lighting design' demands lighting designers to bring their 'A – game', as they look to leverage their experience, expertise and every possible tool in their arsenal – crucial among them being the lighting controller. And when you view the role of an ace lighting designer akin to that of a master painter, it becomes easy to understand how a lighting console perfectly correlates to a colour palette by means of role and function.



"As a lighting designer, I believe that's the first step to figuring out how to derive the best out of any console lies in having the utmost clarity about the kind of look you want to achieve and the various cues that you'll need to do so. In your head, you've got to figure out a process and workflow of how you programme your lights and to understand the flow of the console itself can help you achieve your objective. Previously having entered the world of lighting with a Martin M series (now Elation Onyx) and Avolites console; today I personally prefer MA consoles for the kind of functionality and dexterity that they offer," comments **Guru Somayaji** - a reputed **independent lighting designer and live music consultant from India** – who confirms that he travels with his own rig consisting of a Grand MA2on PC Command Wing + Grand MA3on PC

Node + Akai APC 40; thereby ensuring that he's in complete control of his workflow irrespective of the geographical location that he's designing and operating a shows at.

Drawing in from Guru's comment, it's clear that in today's live event scenario, lighting controllers reign supreme as indispensable instruments in the hands of visionary designers who translate abstract concepts into tangible visual spectacles. With their ability to control an extensive array of fixtures, manipulate intricate lighting effects, and synchronize with other elements of production, lighting controllers have become a crucial linchpin of modern entertainment experiences. And what sets present-day lighting controllers apart is their unparalleled versatility and sophistication.

In the realm of large-scale live event mega-productions, the role of lighting consoles becomes even more pronounced. From stadium concerts to theatrical extravaganzas – these monumental spectacles demand nothing less than perfection in execution, thereby requiring controllers that can orchestrate complex lighting arrangements with flawless precision. Key features such as cue stacking, fixture grouping, and remote monitoring capabilities have now been noted by lighting designers and programmers as vital features for managing the intricacies of massive productions, to ensure that every moment unfolds seamlessly on stage.

Moreover, the advent of cutting-edge technologies such as LED videowalls, projection mapping, and immersive audio systems has further elevated the importance of lighting controllers as central hubs of integration. In an era where multimedia experiences reign supreme, the ability of controllers to harmonize disparate elements of production is paramount, enabling designers to orchestrate mesmerizing symphonies of sight and sound that captivate audiences on a profound emotional level.

From intuitive user interfaces that streamline programming workflows to advanced networking capabilities that facilitate seamless integration with other design elements, present day lighting consoles offer a comprehensive toolkit for realizing the most ambitious creative visions. Designers can harness the power of pixel mapping, dynamic effects generators, and timeline-based programming to craft immersive environments that transcend the boundaries of imagination. And this dynamic interplay between human creativity and machine precision fuels a perpetual cycle of advancement and drives the evolution of lighting controllers towards ever greater heights.

Synergies Fostering Advancements in Console Capabilities

As designers continue to push the envelope of what is possible, manufacturers respond with ground-breaking features and functionalities that empower them to explore new frontiers of expression.



Acknowledging the fact that the grandMA series of consoles is perhaps the most 'in-demand system' for lighting designers around the world; **Daniel Kannenberg, Brand Manager of MA Lighting** informs that the company collaborates closely with end users to ensure that their line-up of technological offerings always remains in sync with the ever-evolving market dynamic. Daniel confirms, "The feedback from our users is absolutely essential for our product

and software development; and we always get the best feedback from our users within live situations – out in the field in a real-world environment and at the real shows. Together with our distributors, we ensure that we stay close to our users across different markets. We meet them at events, at trainings or trade shows. And every single conversation gives us feedback that we can consider to be included within our future developments. Of course, we get a lot of feedback on our social channels and through our support cases as well. So, we have multiple ways, just as how we have multiple applications that our systems are used in.”



grandMA3 full

MA Lighting’s flagship offering is the grandMA3 system, wherein the smallest devices up to the biggest consoles – all offer one software, one layout, one system. Irrespective of whether users are working on an onPC connected to a grandMA3 Node or in a multi-user session with grandMA3 full-size consoles – the features and functional offerings are more or less the same. According to the company, the basis of this arrangement is an efficient parameter calculation which helps the brand to provide reliable backup scenarios, the possibility of real multi-user environments and synchronous DMX output in real-time – all while affording the greatest level of flexibility for the user.

Elaborating on this, Daniel informs, “The requirements of shows are ever-increasing, especially considering the fact that events these

days are getting bigger and more complex. For MA Lighting it is always essential that the fundamentals of our system are working. It is about the complete system integration, backup scenarios or multi-user environments which is always a big part of our development time. Next to this the users need tools to handle more complex fixtures in a fast and easy way. Especially in grandMA3 we take care a lot about the personal workspace, customization and functionalities which bring us closer to the reality, e.g. our Selection Grid, the integrated 3D or interactive sheets. Of course, the handling of fixtures is an important part, especially the support of the GDTF standard and some additional tools like MVR to bring the entire setup together with-in seconds. But we also want to low down the hurdle for new users with some intuitive tools like our MA Startshow – the place where the user can find a plethora of predefined objects, tools and layouts to immediately start programming.”

To complement and further enhance the capabilities of the grandMA3 system, MA Lighting also recently released the grandMA3 software version 2.0.0.4, which presents lots of new functionalities and workflow improvements for a variety of applications; with some of the key features including a Customizable Encoder Bar, Special Dialogs, Bitmaps, Soundfiles in Timecode, Selection Grid Improvements, and New Fixture Sheet modes. Additionally, data handling and organization has also experienced a lot of improvements; wherein sheets can be filtered and reorganized to create a personal workspace, and the transfer of fixture data is now easier with the new Clone window. Plus, working in big sequences with a lot of data is now improved by the use of new tracking functionalities; whereas the new Fixture Type Presets allows users to easily transfer predefined content from show to show.

The buck, however, does not stop with MA Lighting – as other leading brands within the complex and intricate ecosphere of professional entertainment lighting also make it a point to consistently and conscientiously keep up with end-user demands through their line-up of advanced systems and softwares.



ChamSys – a popular global manufacturer of professional lighting equipment – introduced three key product developments during COVID times in the form of the **MQ500M, MQ250M, Stadium Connect**. Of these varied offerings, the **ChamSys MQ500M Stadium Console** is noted to be quite popular among LDs internationally, mainly for its capacity to handle 256 Universes direct from the console (ArtNet / sACN) and its user-friendly intuitive UI, in addition to several other key performance features such as 15 fully motorised fader playbacks, 15 encoder playback with RGB indicators, 12 multi-purpose Macro/Executes/Playbacks keys, backlit buttons and RGB illumination of playbacks and more. On the other hand, MagicQ's (the software that runs on ChamSys consoles) provides powerful features right at the operator's fingertips, without the need to complicated macros' to achieve functions; with features like 'Group Based Cues' coupled with Group FX and Default Palettes making the process of adapting the show effortless.

On the other hand, **Obsidian Control Systems** (distributed by Elation Professional Lighting)



Obsidian Control Systems NX4.

launched the new **NX1** full-feature compact console at Prolight + Sound 2023 in Germany; that is intended for smaller to medium projects where a simple console is needed without a PC, but can also be used by rental companies or the mobile lighting programmer. The brand, however, hails the **NX4** as their flagship console, which runs the ONYX lighting control platform, and features 64 universe console; 4 XLR outputs, 10 motorized playbacks, display readouts over playbacks, 12 submasters, 9 push encoders, 22 executors + dual go buttons, 15.6" full HD touch monitor x 2 external ports, and some more. With the company's belief that the effects engine comprises one of, if not the most, crucial feature of a controller console, Obsidian asserts that the introduction of the first of its class DYLOS Media FX Engine (for both light and movement effects) allows for 'unparalleled ease and swiftness in creating dynamic looks on stage'.

Another major name within the professional lighting circuit is **ETC**, with the brand's flagship Eos Apex lighting control desk primarily targeting the theatre, film and broadcast productions where it excels with complex lighting design needs in particular. Apart from this, ETC's HOG 4 range of consoles have received praise and acclaim within the live scene, with the company affirming that the entire line-up has been built around the way lighting designers and operators work. Comprising 5 key models



ETC HOG 4.

which includes the flagship HOG 4-18 (with 16 universes, 8 onboard DMX512 outputs, 3 integrated touchscreens, 5 encoder wheels), the Full Boar 4 (with 12 universes, 4 onboard DMX512 outputs, 2 integrated touchscreens, 5 encoder wheels), the Road Hog 4-21 ((with 8 universes, 4 onboard DMX512 outputs, 1 integrated touchscreen, 4 encoder wheels), the HedgeHog 4X (with 6 universes, 2 onboard DMX512 outputs, 1 integrated touchscreen, 4 encoder wheels), and the Hoglet 4 compact wing that has been designed to provide optimal performance when paired with the HOG 4 PC software; the HOG 4's tools and feature set have been designed for programming efficiency, which means even advanced features like pixel-mapping and plot layout are optimized for programming speed. And with the view to further propel the capabilities of the **HOG 4 ecosystem**, the company also recently released the Hog 4 version 4.0 software, with enhancements including significant improvements to colour handling and Hog 4's Color Picker, a new 'Record Defaults' function, and Fixture Builder upgrades.

And finally, one of the most noted and respected brands within the professional lighting sphere – **Avolites** (now owned by Robe Lighting) – recently introduced the new **Diamond 7 (D7)**



Avolites Diamond 7 (D7) console.

console, which is touted as the next in the line to its flagship Diamond 9 (D9) console. The two main variants within the D7 series, namely the three-screen D7-330 and the two-screen D7-215, offer 30 and 15 faders respectively; with the entire lineup of the new D7 featuring a new clam shell screen panel and locking mechanism. The console control surface follows the Diamond 9 design language, with the D7-215 being capable of fitting into a standard Peli-Air case – all while being under European aircraft hold weight limit. Alongside, the company also released the latest version of their popular lighting control software - Titan version 17. According to the company, the main focus of v17 has been to greatly enhance the user experience and to further optimise performance, which is said to allow for a greater experience on larger shows as well as during longer programming sessions. Furthermore, Avolites affirms that a new version of their remote app, for both Android and IOS, will also be released shortly. As part of the enhanced UX users will notice improvements with colour picker, personality builder, cue list macro target console option, convert between hardware trigger and item trigger and much more.

Metrics that Matter

While manufacturers diligently contribute to the market by consistently offering new and

advanced technologies within the lighting console ecosystem, the ultimate deployment of these innovations for live events rests upon the investment decisions of event equipment service providers. These rental companies bear the weighty responsibility of not just keeping up with the demands and requirements of artists and lighting designers alike, but also ultimately ensuring that the investment decision bear fruit for their company in the long run.

Understanding the intricate decision-making process of these rental companies is paramount, as they navigate a landscape shaped by diverse considerations spanning cost, performance, scalability, interoperability, future-proofing, maintenance, and beyond. From assessing the initial investment and total cost of ownership to evaluating the console's performance capabilities and scalability for diverse event sizes and formats, rental companies meticulously weigh each parameter to ensure optimal value and return on investment. Moreover, interoperability with existing equipment and future technologies is a critical factor, as seamless integration fosters efficiency and versatility in production setups. Equally crucial is future-proofing, as rental companies seek solutions that can adapt to evolving industry standards and technological advancements without necessitating frequent upgrades. Additionally, considerations regarding maintenance and support play a pivotal role, as reliability and uptime are paramount in the fast-paced world of live events.

Inputs gathered from various regions across Asia suggest that most equipment service providers who specialize in commissioning high-profile events and mega-productions prioritize investing in console systems that support features like multi-universe control, pixel mapping, cue-stacking, timeline-based programming, advanced effects generators, integrated media servers, and compatibility with emerging protocols and standards. Alongside, other key features

such as enhanced connectivity options (e.g., Art-Net, sACN), advanced fixture control capabilities, support for immersive technologies like augmented reality, and integration with remote control and monitoring systems – are all considered key functional metrics that influences their purchase decisions.

That being said, a general consensus can be observed in the fact that rental companies across the board assess the need for investing in new lighting control technology based on certain standard factors such as technological advancements, client requirements, market demand, and the potential for enhancing their rental inventory offerings. It is learnt that while evaluating potential additions to their lineup, equipment service providers consider criteria such as the scalability and flexibility of the equipment, compatibility with existing fixtures in our inventory, ease of operation for our clients, and long-term support and serviceability.

“Ideally, the most desirable lighting console is one that scores high on key investment parameters like the scalability and flexibility of the system, compatibility with existing fixtures in our inventory, ease of operation for lighting designers, and long-term support and serviceability” comments **Jay Mathuria of Star Dimensions India Pvt Ltd** – one of India’s leading technology service providers – who are touted to have one the most expansive grandMA lighting control inventory in the country with three units of the grandMA3 full size control desks and one unit of the grandMA 3 lite, along with multiple units of the grandMa 2 consoles (full size and lite), grandMA2 fader wing, grandMA3 PU-L, and grandMA Network switches.

Anticipating the Future - Transformative Technologies & Empowering End-Users

As the foremost manufacturers of lighting consoles maintain their dedication to continually furnishing end-users with augmented



Star Dimensions MA lighting consoles.

functionalities and capabilities to remain at the forefront of innovation, industry insiders seem confident of exciting future advancements in lighting control systems such as artificial intelligence and machine learning algorithms to automate repetitive tasks and suggest creative lighting effects. Furthermore, features such as touchless control interfaces and augmented reality visualization to streamline workflows and open up new possibilities for artistic expression; coupled with enhanced connectivity options such as enhanced wireless DMX and Ethernet-based protocols, are also touted to revolutionize how users interact with lighting fixtures through control consoles of the future.

In light of the rapid development of lighting console technologies over the past few years though; lighting designers, operators and rental companies alike, universally express the vital importance of education and ongoing learning opportunities. They assert that such 'knowledge-sharing' initiatives are essential for mastering the complexities of console technologies and advancing their respective craft and business to unprecedented levels of excellence. And manufacturers have risen to this need, as several brands have made a variety of online and offline

training and education modules available to their users across the globe.

Speaking about MA Lighting's dedication to enhancing their customers' knowledge pool, Daniel shares, "First up, I must say that our global distribution and partner network plays a vital role in assisting us with staying connected with our end-users. Training and knowledge transfer for us is one of the most important parts of our work with our users – it is the key of a successful work with our products and to run a cool show. And that's what we want to provide. Therefore, we have the MA University as the central element of knowledge transfer. Here we provide a huge variety of training material for our distributors. They take care of delivering hands-on courses and trainings in their local area, done by MA certified trainers. Additionally, we provide an online learning platform completely for free, the MA E-learning, and lots of additional tutorial videos in the MATips. So especially these online platforms are a good first step to dive into the world of MA."

Guru Somayaji

Star Dimensions India

Avolites

Chamsys

MA Lighting

Obsidian Control

APAC

Jolin Tsai's Electrifying Vocals Supported by Sennheiser Digital 6000

Alongside the MM 445 capsule, sound engineers Wilson Hong and Kane Lau praise Sennheiser's Digital 6000 mic and reaffirm its ability to deliver crystal-clear sound on any stage



Pop diva Jolin Tsai has become acclaimed for her uniquely enchanting voice and magnetic stage presence. Between 2019 and 2023, her enthralling "Ugly Beauty World Tour" captivated audiences worldwide. The tour, named after her 14th studio album, Ugly Beauty, earned her nominations in seven categories and won her two major awards at the 2019 Golden Melody Awards. Tsai relied on a Digital 6000 microphone system to give her fans a spectacular audio experience throughout the show, which was packed with familiar tunes, dazzling outfits and electrifying dance moves.

Tsai has been a loyal user of the 5000 series for close to 15 years. However, in the realm of audio engineering, it is not only the artist but also the team behind her who rely on the reliability and versatility of superior equipment during live shows. Wilson Hong and Kane Lau are Tsai's trusted sound engineers.

Hong explained the switch from the 5000 series to **Digital 6000** "We were searching for a new microphone system and went for the D6000 due to its cleaner frequency handling, larger number of channels and a very user-friendly interface."



Besides the Digital 6000 series, the team was particularly impressed with the MM 445 microphone capsule, which was deployed for the latter part of the tour. "I personally prefer the MM 445 capsule over the others in the market as it delivers a very focused sound," stated Lau. "The super-cardioid microphone capsule picks up the entire frequency range needed for her vocals, giving the singer's voice greater presence and intensity. This also makes it a lot easier for me to fine-tune the EQ without any interference or feedback. I personally think that the MM 445 capsule is perfectly suited to pop stars who require [a] very strong vocal presence on stage."

On switching to the Digital 6000, Hong was particularly impressed with the excellent audio quality and the quick charging speed of the batteries. "The charging speed really took me by surprise. I thought I'd made a mistake and hadn't plugged it in properly, but it really does charge so quickly. This is so important and a great advantage for live shows," he remarked. "Digital 6000 is very easy to operate, and the audio

quality, reliability and user experience make the Sennheiser Digital 6000 my favourite wireless system to work with."

Tsai's live performance includes demanding singing and dancing routines. "The strength of Digital 6000 lies in the stability of the signal even when the singer is moving about rapidly. We don't have to worry about dropouts, which gives us and the artist complete confidence and assurance," Lau elaborated.

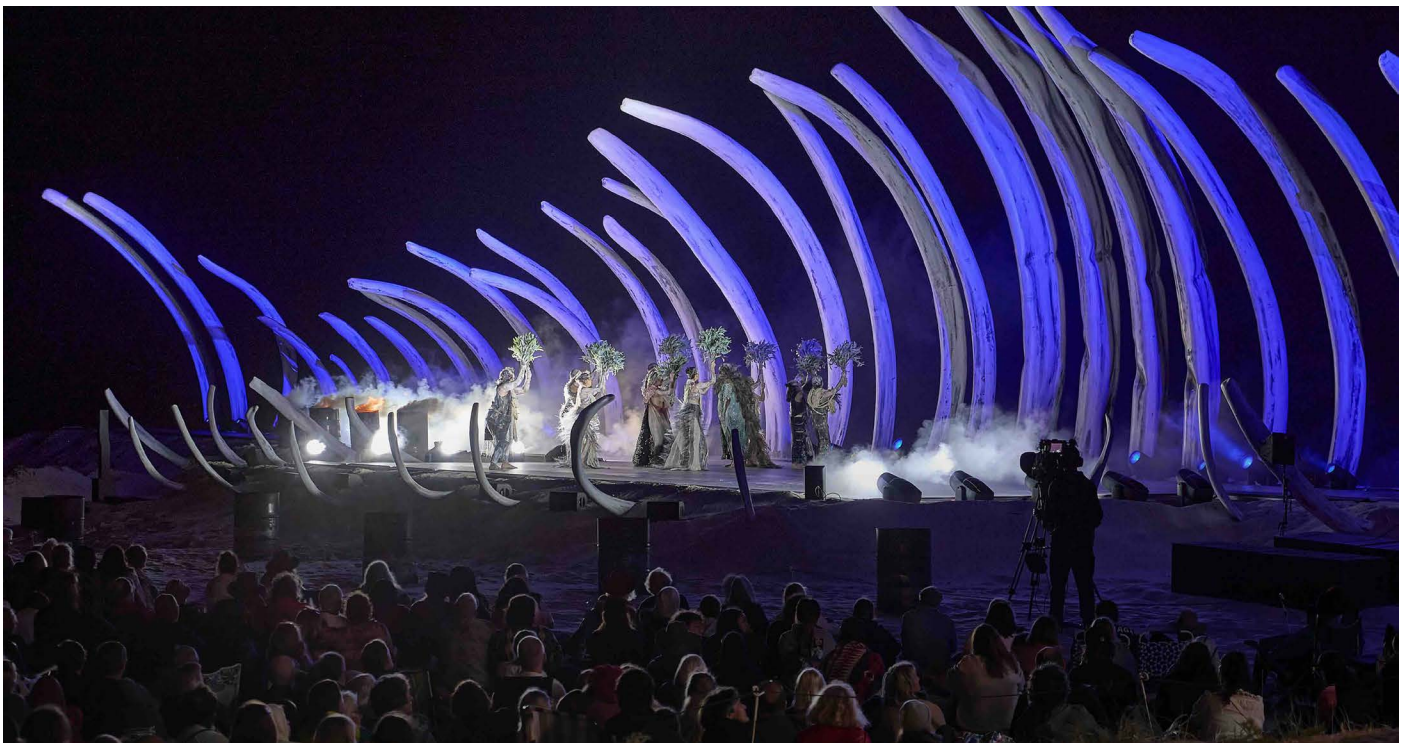
The reliability and superior sound quality of the Digital 6000 series make it a popular choice among artists and sound engineers embarking on large-scale tours and events. Tsai and her team's loyalty to Sennheiser is a testament to their confidence in the brand's ability to deliver crystal-clear, precise vocal sound, regardless of the stage size. "The Digital 6000 wireless system is now my top choice, and I will definitely request for it for future concerts and events," Lau concluded.

Sennheiser

AUSTRALIA

Novatech Celebrates Baleen Whales with New Intake of Ayrton Domino Wash Fixtures

Novatech's Ayrton Domino Wash, Domino LT and Perseo Profile were put to dramatic effect by Damien Cooper in the sands of Glenelg Beach for the Adelaide Festival



© David Solm.

Novatech Creative Event Technology of Adelaide has become the first production company in Australia to hold stock of Ayrton's IP65-rated Domino Wash fixtures. The company invested in 48 units, which were supplied by Ayrton's exclusive distributor for Australia, **Show Technology**, and immediately put them to work on the Adelaide Festival.

Domino Wash is an all-terrain luminaire developed specifically for resisting hot or

cold weather, wind, rain, hail, sand or dust. It combines a 210mm Fresnel lens with a 6.2° - 75° zoom and a feature set that includes framing shutters, gobo and animation wheels and the same excellent colour mixing as Ayrton Huracán Wash.

"We'd been looking for a high-powered moving wash light with a Fresnel lens for more theatrical uses, as well as outdoor uses," explained Ashley Gabriel, Director of Sales and Marketing at **Novatech**. "We needed one with enough punch



and zoom to handle long throw distances, and a Fresnel lens which was important to us to differentiate it from the other traditional LED wash lights in our inventory.

“Domino Wash answered all these criteria, plus the gobo wheels are a nice-to-have feature for the lighting designers to consider for effects and textures. Being IP rated, we can use the Domino Washes outdoors on large events whenever needed, as well as the more traditional indoor events.”

Novatech’s acquisitions were put to good use by lighting designer, Damien Cooper, on the world premiere of Baleen Moondjan which opened the Adelaide Festival and ran for four nights on the sands of Glenelg Beach.

A contemporary ceremony created by Stephen Page, the show celebrated the First Nations’ relationships between Baleen whales and their communities and featured the central motif of enormous 8m high whale bones that spanned the entire 53m width of the stage. Fixtures with enough firepower and breadth of zoom were

certainly needed to cover this expansive set, as well as deal with the challenging environment. 12 x Domino Washes (6 per side) were set into trenches dug into the sand on either side of the stage from where they provided side light for the performers and washes of colour to the front of the whalebone structures. “We didn’t have any front-of-house towers and no follow spots. It was all done through carefully placed lights and great programming by Harry Clegg,” said Cooper.

4 x Domino Washes and 30 x Ayrton Perseo profiles were sat behind the whale bones for backlighting, while 12 x Ayrton Domino LT fixtures were rigged on a side tower for higher lighting angles, completing the all-Ayrton rig.

“The Domino Wash has a great wide beam angle, going up to 75°, and I was happy with having a shutter system,” noted Cooper. “Plus they’re waterproofed to IP65 which was obviously very important on this production!”

“The Domino LTs were excellent, the furthest shot they were doing was 65m and I had six of them hitting performer Elaine Crombie as she walked



out into the ocean. It was like a corridor of light shooting hundreds of metres into the water."

Sand and the elements were the enemy of the production with sand pushing up onto side lighting positions one day. However, the Dominos did not even flinch. "We threw sand, rain, tidal spray and sunshine at these Domino Washes,"

added Cooper, "but we had zero problems, just great output. I'm thrilled with the result!"

"Our Domino Washes have been in heavy use since we first received them with indoor theatrical and corporate events following on from the Adelaide Festival beach production," noted Ashley Gabriel. "Right now they are in the centre of Australia in the Outback city of Alice Springs, being used at Parrtjima - A Festival in Light."

Parrtjima - A Festival in Light is the only Aboriginal light festival of its kind. In this application, a mountain range was lit from a distance of around 400-600m.

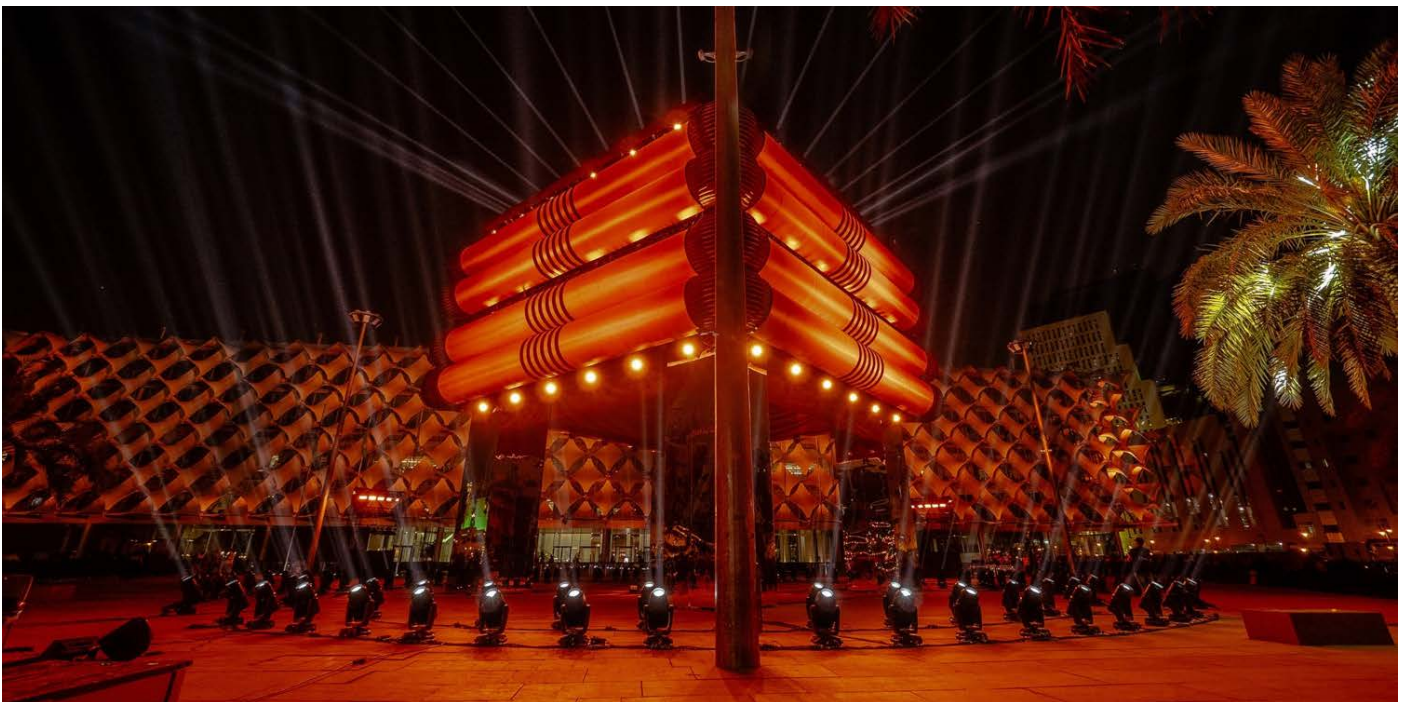
"We are extremely happy with them, and with the service we have received from Show Technology," Gabriel concluded. "The team there demo'd the Domino Washes and ran us through the feature sets, giving us options while all the time understanding how important our 'must-have' criteria were to us. The Domino Washes were just what we needed, and as always, Show Technology delivered for us right on time for this landmark event!"

Ayrton

SAUDI ARABIA

250+ Elation Proteus Featured for Kingdom of Saudi Arabia Founding Day Celebration

Riyadh's skyline was transformed for Saudi Arabia's Founding Day with LD Thomas Giegerich showcasing the Kingdom's rich culture amidst the dazzling glow of Proteus brilliance



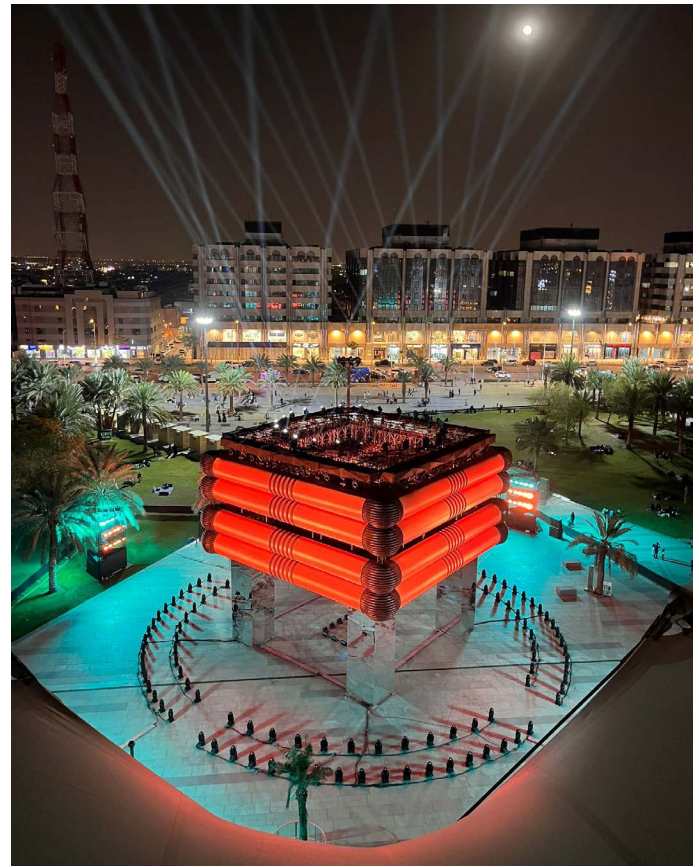
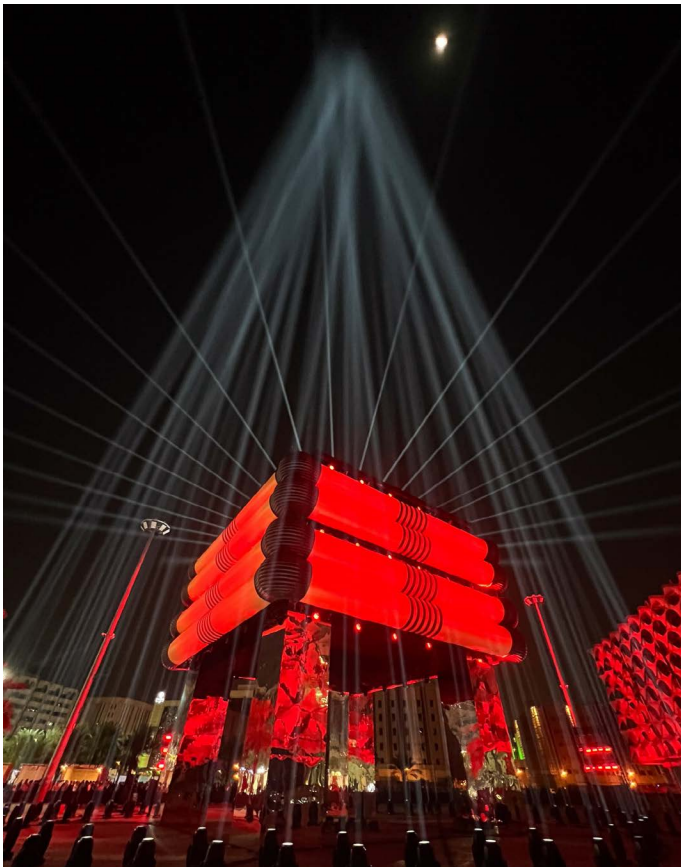
Lighting designer Thomas Giegerich of bright! studios and ES:ME Entertainment Services teamed up to illuminate a stunning agal art piece for Saudi Arabia's 2024 Founding Day celebration and used over 250 Elation Proteus luminaires to fulfil the brief. The event commemorated the founding of the first Saudi state and showcased the rich heritage and enduring spirit of the Kingdom.

An agal, a traditional cord worn by Arab men to secure their headcloth, served as the centrepiece of the art installation, symbolizing the cultural

richness of the region. Thomas, Managing Director of bright! studios, brought his expertise to the project, crafting a dynamic light show that captivated audiences and could be seen across Riyadh.

Rain or sand protection

In partnership with Alex Wuerfel, CEO of **ES:ME Entertainment Services**, Thomas orchestrated the intricate lighting design using Elation's IP-rated Proteus fixtures, chosen for their beam characteristics as well as their adaptability to the often harsh environmental conditions of the



Middle East. Alex, a long-time collaborator of Giegerich's, recommended the **Proteus** fixtures.

"At this time of year in Saudi, it's more about the possibility of heavy rain than a sand storm so it was an easy choice for me to make," stated Alex, who has relied on Proteus on similar projects across the region since 2019. "I like to use Elation Proteus with their marine grade specification because they work under all conditions." Alex fulfilled the role of technical director for the event, with ES:ME Entertainment Services serving as the lighting vendor.

A lasting impression

Founding Day is a new annual holiday in Saudi Arabia with cities across the country holding cultural and artistic events. In the capital city of Riyadh, celebrations took place across multiple sites, including King Fahad Library Park where the agal piece stood.

"The vision for the art installation was to create a regal ambience reminiscent of a crown, symbolizing the Kingdom's heritage," explained LD Giegerich. "We encircled the agal with 120 **Proteus Hybrids** on the ground with 24 Proteus Excaliburs crowning the top, three circles of lights that provided a striking contrast to the square shape of the agal piece. The beams were visible from across the city and the entire installation really left a lasting impression."

The juxtaposition of the **Proteus Excalibur** beams against those of the Proteus Hybrids added depth and contrast to the display, creating a mesmerizing visual spectacle. "We had decided on the Proteus Hybrid but we wanted a really punchy beam that would look good in contrast to it and we chose the Excalibur," Thomas said. "We wanted to give people something special, something that was visible from afar, and we accomplished that."



One of those special looks was what the designer calls 'twisters' in which he tilts the three circles of fixtures while panning to create an intricate, overlapping spiral beam effect. He says he saw the Excalibur at a shootout in Frankfurt last year while making fixture choices for the upcoming UEFA EURO 2024 championships and fell in love with its ability to do colour while projecting a powerful mid-air effect.

To enhance the visual look of the art piece further, 60 x **Proteus Rayzor 760 fixtures** were placed between each agal rope, creating an enchanting twinkle effect that delighted onlookers. "The client wasn't convinced of putting lights at that position," Thomas shared, "but we didn't intend to do more beams or punchy lighting with them. Once they saw the eye-candy twinkle effect they [could] produce (SparkLED), they loved it. It was super beautiful and a real lifesaver." An additional 30 Proteus Rayzor 760s adorned the King Fahad Library façade, extending the ambience of the event.

A 5-minute light show synchronized to music ran every half hour with sweeping beams, chases and intricate patterns of light filling the sky, to the delight of crowds. "The combination of the Hybrids and Excaliburs was really extraordinary and the outcome was very well received," Alex concluded. "Thanks to a great team for making this happen."

Elation

SHARJAH

Digital Projection and Artabesk Move Mountains at Sharjah Light Festival

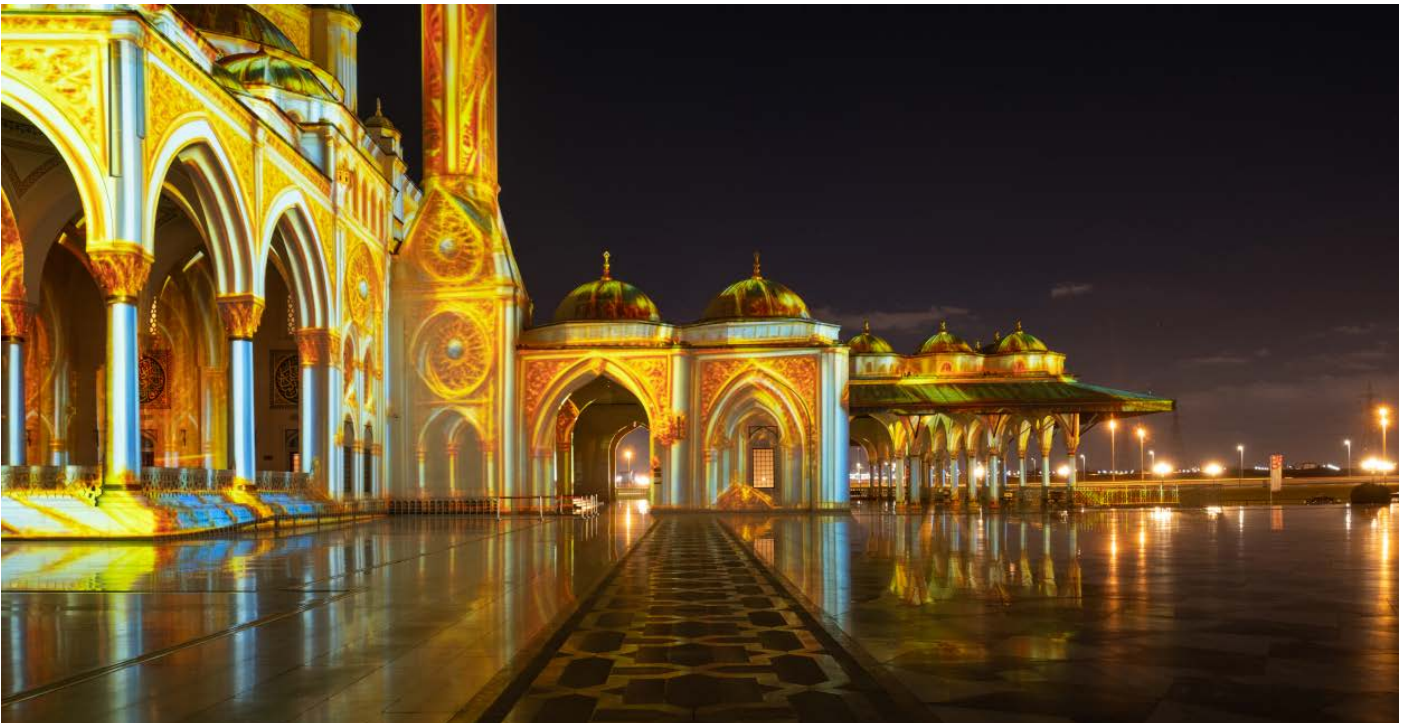
Using nearly 60 Digital Projection laser projectors, including TITAN Laser 37000 WU and M-Vision 23000 WU models, Artabesk created captivating visuals for the Sharjah Light Festival, projecting onto landmarks like the Sharjah Mosque and a 300 x 50m mountain surface



The 12-day Sharjah Light Festival, now in its 13th year, showcases the history, heritage and architecture of the eponymous emirate with a mesmerising carnival of lights, colours and music. The largest festival of its kind in the region, it invites internationally renowned artists to celebrate the city's built and natural environment, using large-scale projection mapping to illuminate and reimagine landmarks such as the Sharjah Mosque, the city's largest house of worship, and

the spectacular Hajjar Mountains, which overlook the Al Rafisah Dam.

For the 2024 festival, Dubai-based video mapping specialist and immersion content creator **Artabesk** once again enlisted its extensive Digital Projection inventory to create the truly unique visual experiences – including a 300m x 50m projection on the side of a mountain – its



500,000+ visitors have come to expect from the annual event.

A tourist destination in its own right, the Al Rafisah Dam is located in a picturesque spot surrounded by greenery and sandstone mountains around an hour's drive out of Sharjah city. During the Sharjah Light Festival, it was the venue for The Jewel of Al Rafisah Dam, a 3D projection mapping show inspired by the 'Golden Age of Sharjah', focusing on the ancient history of the city of Khorfakkan and the United Arab Emirates' native flora and fauna. At its climax, 12 swans emerge from the mountain behind the dam and dance on the waters of the Wadi Shie River.

Featuring content created by Artabesk, The Jewel of Al Rafisah Dam marked the first time visual content had been mapped onto a mountain of that size – a feat which involved several challenges, as Mounir Harbaoui, Founder and Managing Director of Artabesk, explained: "We had two main challenges for this projection: the brightness, as the mountain is a brownish, stone

colour, and the multiple shadows the mountain creates, as it is not a flat surface."

To overcome these obstacles, Artabesk turned to the TITAN Laser 37000 WU, a class-leading 3-Chip DLP projector whose 37000 (WUXGA)/31000 (4K-UHD)-lumen output makes it an ideal projector for large outdoor applications. "We decided to use our new TITAN Laser 37000, as it is capable of projecting up to 40m from each projector," stated Harbaoui, outlining how his team addressed the brightness issue. "We also switched off the street lights so we could create a completely dark environment." The second challenge was resolved by concentrating all 16 x TITAN Laser 37000 WU projectors on one point on the mountain, which resulted in a "super clear" image when viewed from the area where the audience was located.

Also among the four festival sites entrusted to Artabesk, which used a mix of TITAN Laser 37000 WU and M-Vision 23000 WU projectors, was the Sharjah Mosque, located on a 190,000m²



(2m sqft) site in Sharjah city. There, Artabesk employed 21 x TITAN Laser 37000 WU to create a 400m² linear projection, divided into eight areas across the entire surface of the mammoth mosque, whose minarets alone are almost 40m high.

Unlike the Al Rafisah Dam mountain projection, which featured moving visuals and music, for Sharjah Mosque Artabesk was limited to still images, given the sensitivities associated with projecting onto a religious site. Despite this, the powerful, ultra-bright imagery generated by the TITAN Laser projectors ensured that the strikingly illuminated mosque was widely regarded as one of the highlights of the festival.

In addition to delivering on the technological front, Digital Projection supported Artabesk throughout the festival, explained Harbaoui, who hailed the latest cooperation between the manufacturer and his company. "We always have support on-site when it is necessary," he



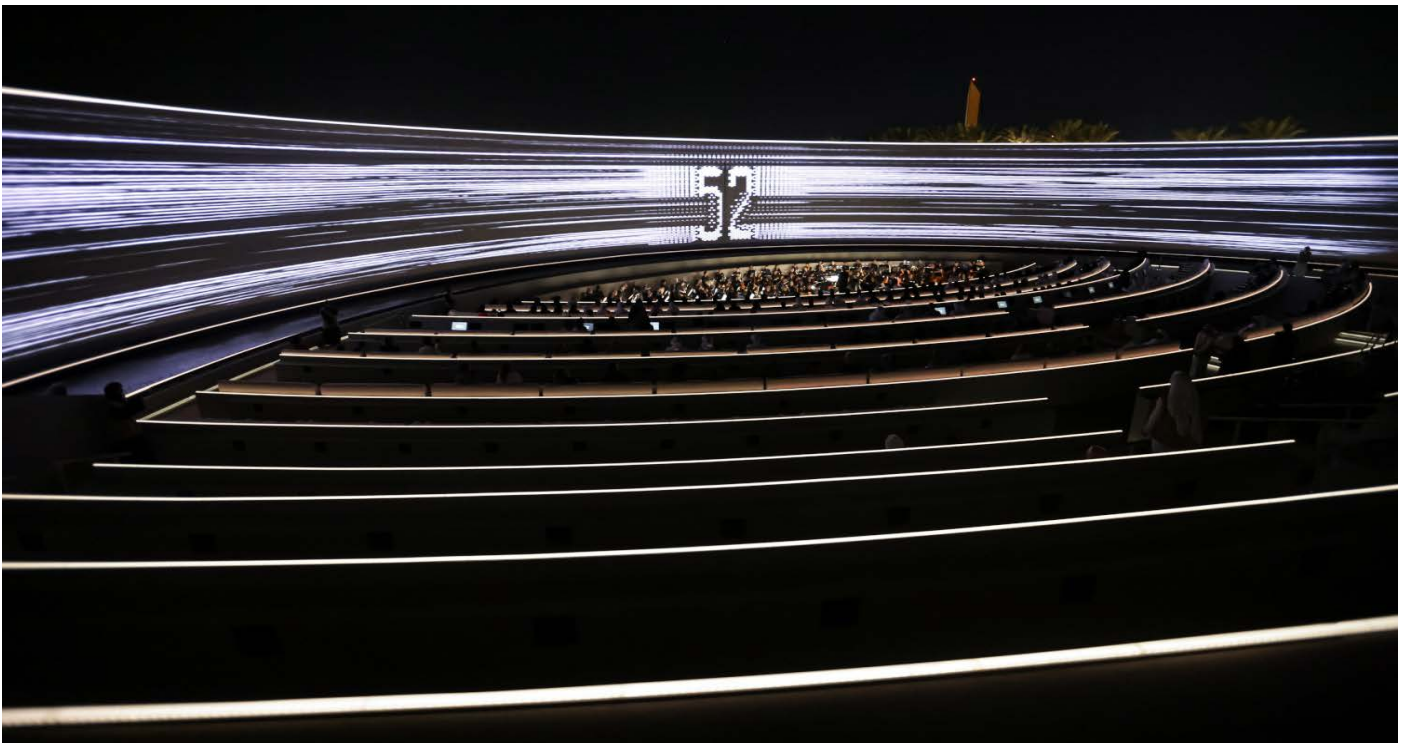
noted, "and Artabesk and Digital Projection's Dubai-based team, led by Alex Gnatyuk, always collaborate to make sure the projectors are in the best condition for each installation."

Digital Projection

UAE

Illuminating Brilliance: A Full grandMA System Selected for 2023 UAE Union Day Ceremony

Bringing together a powerhouse team of technical and production experts, the 2023 ceremony surpassed the success of its predecessor and left VIP guests breathless with anticipation



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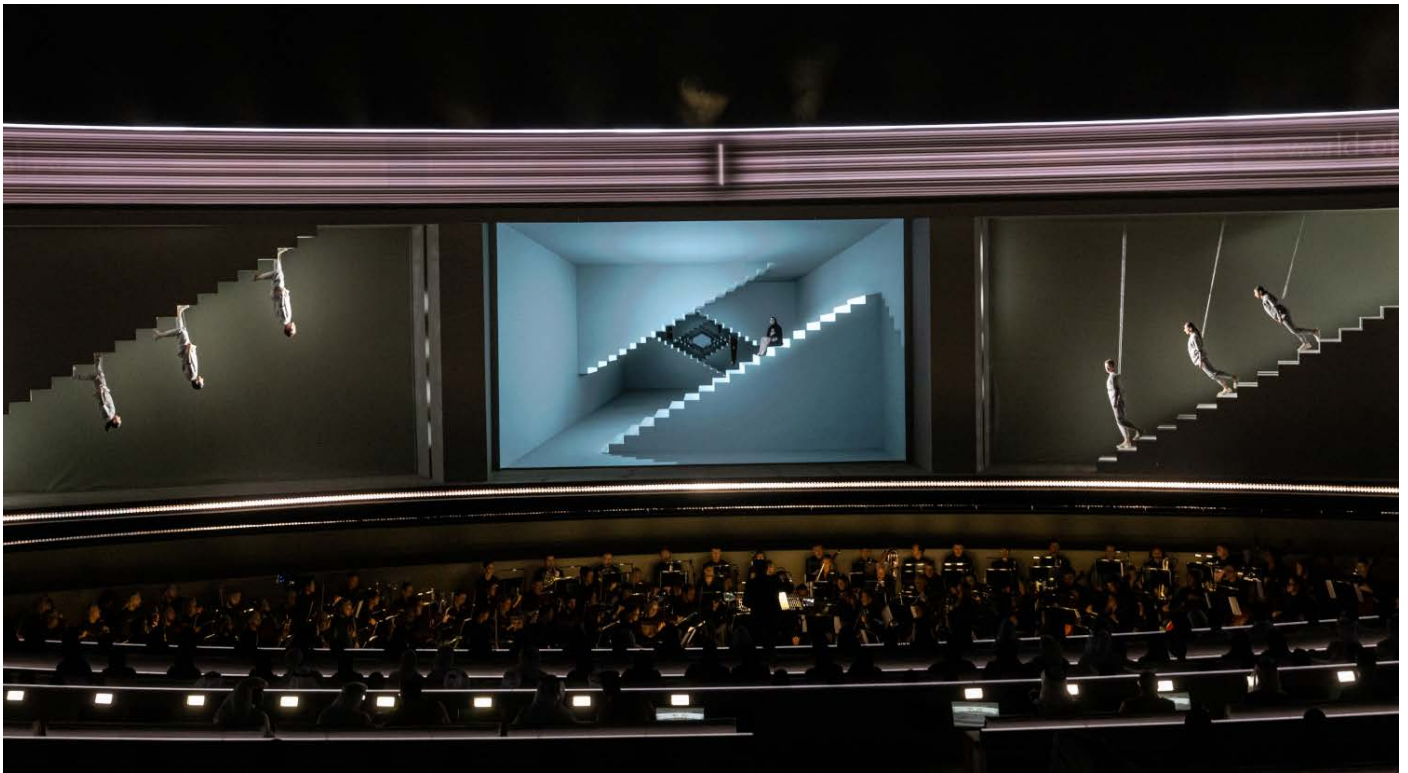
The 2023 UAE Union Day Ceremony was a dazzling spectacle that captivated VIPs from around the world. Held in Dubai's Expo City, the annual event reached new heights of grandeur thanks to the vision of Es Devlin, the event's creative director. Working alongside him were lighting maestro Bruno Poet and co-lighting designer Max Narula.

Bruno and Max decided to run this show, directed by Fransisco Negrin and Gavin Robins, as an all-grandMA3 control system, running mode

3, making use of several features to improve the complete production workflow, from drawing to remote updates on stage.

The system comprised 6 x grandMA3 full-size consoles (three pairs each with fully redundant backup) and three grandMA3 lights which were used for technical desks, running with 11 x grandMA3 processing units XL.

The main set comprised an impressive 60m diameter revolving circular – 'doughnut' style –



stage, which was divided into 17 individual rooms or compartments, each with its own stage space and artist production. Each of these performance elements had bespoke lighting and AV setups, and each was fundamental to unfolding the overall show narrative and revealing its bigger picture.

This ambitious fusion of imagination, architecture and engineering excellence challenged all the technical departments who rose to the occasion to produce a completely outstanding audience experience.

In front of the revolve and around the spherical auditorium was a 180° projection screen with a ring of water at the bottom which produced some beautiful natural aberrations and reflections of light.

The auditorium featured space for the Royal Philharmonic Orchestra who played live, and in front of the main stage area was a massive set of sliding doors facing the invited audience, which

opened and shut as the revolve turned to reveal the next scene.

The lighting team lit the 17 different artist stages of varying sizes and complexities with anything from a full military choir to acrobats, dancers and solo performers. All lighting was controlled centrally from the grandMA3 consoles, comprising over 1000 moving light fixtures – a mega-mix of Ayrton, Chauvet, Elation, Martin and Robe luminaires – plus vast quantities of LED tape, all supplied by Encore Middle East.

The high parameter count was what prompted the choice of a full grandMA3 control solution, a decision made by Bruno, Max and lighting programmers Chris Hirst and Dan Haggerty a few months earlier, when the design energized, and the enormity of the project was revealed. It was the first time for all of them using mode 3. Some of the rooms were lit with up to 60 moving lights whereas others had just 10 or 12, so there was a wide range of scenarios, all of which needed their own tailored looks and aesthetic treatments.



The overall story focused on the potential of renewable energy, which the UAE intends to pioneer and become a world leader.

In addition to the two pairs of grandMA3 full-size consoles on the show, a previz suite on-site enabled the lighting team, which also included lighting design associate Kathy Pineo, to work in Depence 3 on the third pair of grandMA3 full-sizes. All the consoles were connected to the same network, with the grandMA3 lights used as technical desks in different areas of the site.

The lighting plots for each room were drawn up in Vectorworks and imported seamlessly into the grandMA3s via MVR in 3D, so the consoles knew exactly where all the fixtures were positioned. All the effects were run using grandMA3's Selection Grid, which Max describes as "Brilliant, a very quick, smart and efficient way of creating some very complicated looking effects." The creative producer was Chelsea Raysbrook, the video content Designer was Charli Davis for Luke Halls Studio and the sound design was completed by Auditoria.

As a big narrative-threaded ceremonial show, it was programmed in a more theatrical style than

a standard concert or event production, with lighting run as one long cue list. Dan Haggarty appreciated the new web remote access as they had so many channels of LED, he could walk around the vast site, flash through and problem-solve using an iPad, which saved hours. The stage was designed by Wonder Works and constructed and engineered by Stage One.

The project's challenges were many – while lighting 17 rooms with static stage sets might sound simple, it was a huge and complex task that required serious attention to detail and plenty of imagination. Despite the many hours already spent in pre-viz, the final few days on site in actual reality were gruelling and intense, as one would expect to produce a show of this stature and significance.

Nevertheless, Max mentioned the "fantastic" support received from MA Lighting's product specialist technical team from HQ in the run-up to and during the show, adding, "The software was stable and ran like clockwork."

MA Lighting

INDIA

Meyer Magic Enthralls Ed Sheeran's Mathematics Concert In Mumbai

Arguably the concert featured the largest deployment of a Meyer Sound system ever witnessed in India



"Mumbai was our only Indian stop on our Middle East and Asia tour, and we brought our scaled in-the-round show with us. We were unable to carry everything with us due to restrictions in how much equipment we could freight between territories, and the PA system was one thing that we needed to source locally. Having PANTHER available in India ticked so many boxes! It is our system of choice; we know it so well and are confident of its abilities. And knowing that we could deploy this system meant that audio was not a concern at all. It also meant that we did not need to use delays which had formed part of other vendors' designs. This was a financial

saving, as well as one less logistical element to deal with," says **Ed Sheeran's Production Director Chris Marsh** as he provides a brief behind-the-scenes insight into the sonic marvel that was + - = ÷ x ("Mathematics") Tour concert that took Mumbai and the Indian live entertainment scene by storm in March 2024.

Since its kickoff in Dublin back in April 2022, Ed Sheeran's + - = ÷ x ("**Mathematics**") Tour has touched down in more than 100 cities around the globe, dazzling millions of fans with a career-spanning one-man stadium show in the round. And following his triumphant Divide Tour in 2017,



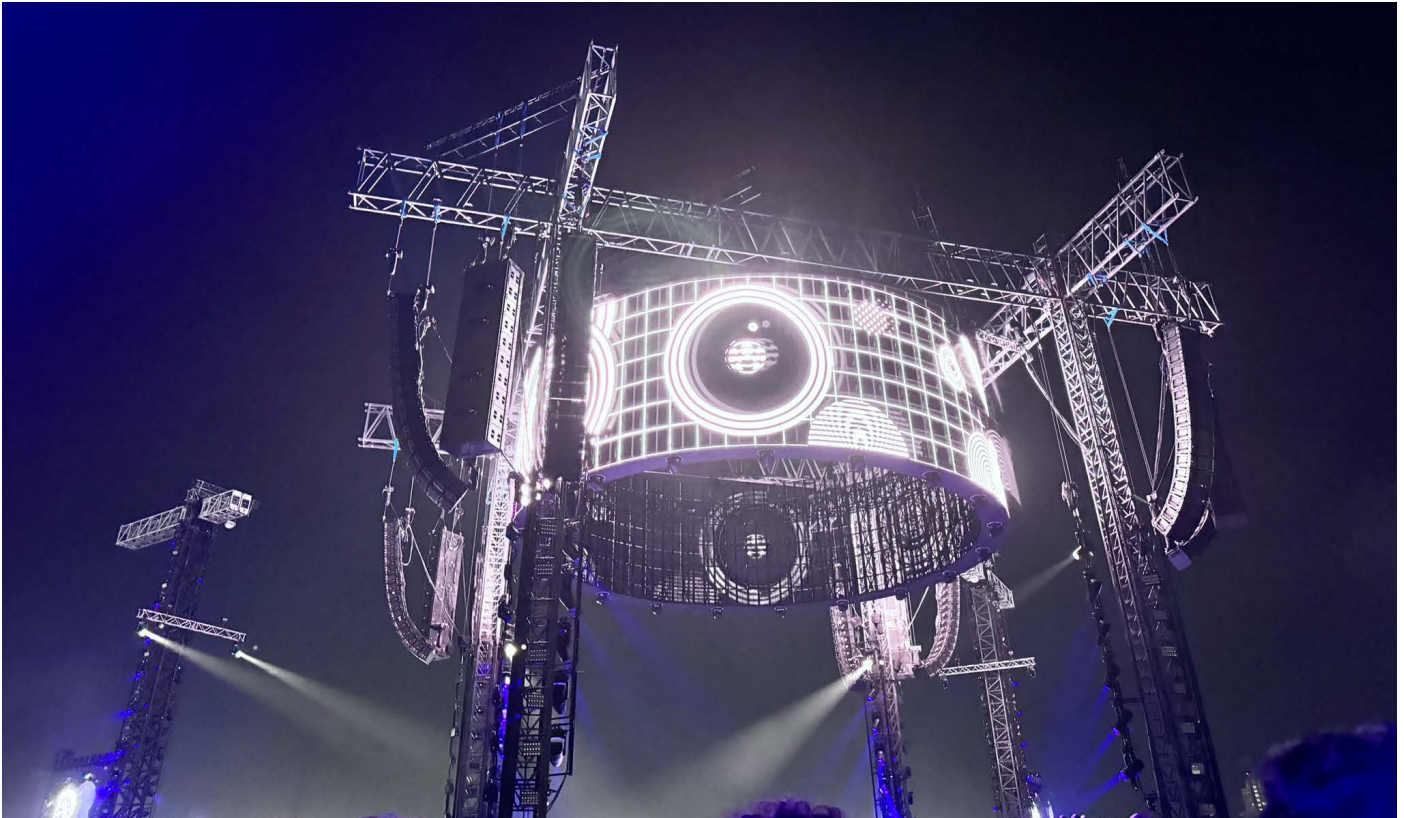
Sheeran returned to enthrall his Indian fan base once again, this time at the iconic Mahalaxmi Race Course in Mumbai on March 16th. The monumental event was brought to fruition by **BookMyShow Live**, the live entertainment arm of BookMyShow, in collaboration with **AEG Presents**. The event proved to be an unprecedented success, boasting a record-breaking attendance of over 55,000 enthusiastic fans, making it the largest live concert by a solo international performer in recent Indian history. The concert was not only a feast for the senses for Ed's fans; but also, an audio-visual spectacle that any world-class performer would be simply amazed by – as state-of-the-art production design, coupled with breathtaking stage detail and impeccably executed technical reinforcement, all came together in a seamless confluence to definitively raise the bar for live entertainment in the country.

Ingenuously crafted in a stadium-style setup, a first-of-its-kind mammoth 360-degree circular stage that rotated on its axis ensured an unparalleled view of Sheeran from every corner of the venue, while a giant circular 'HALO screen' positioned at the top-centre of the stage further

enhanced the visual experience. On the other hand, the audio amplification was taken to new heights with a monumental deployment of the globally acclaimed **PANTHER & LEOPARD line array systems from Meyer Sound**, strategically installed on an ultra-modern gigantic trussing arrangement to deliver a truly sublime sonic experience to the entire audience.

Arguably the largest deployment of a Meyer Sound system ever witnessed in India; the Mumbai leg of the Mathematics Tour delivered an unforgettable sonic experience thanks to collaboration between the tour production team, **Major Tom, Meyer Sound**, India-based distributor **Sun Infonet**, and equipment suppliers, **Total Multimedia, Phoenix Networks, Friends of Shiva**, and **PP Sound**. Sun Infonet's tech team was led by Jeremy Rana, Kallol Nath, and Jayakaran B; Animesh Mishra of Phoenix Networks, Anuragg Jai of Total Multimedia, and Kyle Mukerjee of Friends of Shiva were also key collaborators.

The intricacies of coalescing a monumental audio production that could do justice to the visually grandiose allure and appeal conceived



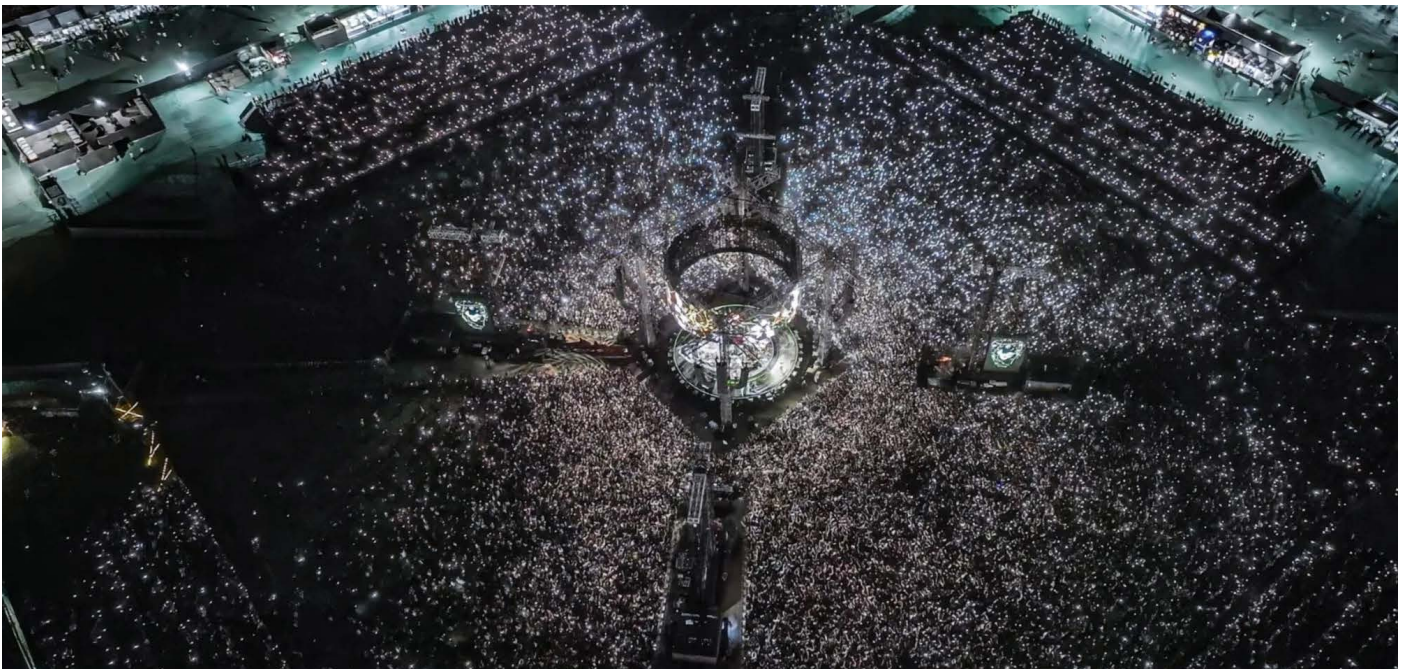
for the **+==÷x** concert in Mumbai demanded a world-class level of attention to detail, precision, and expertise to ensure a flawless execution that would elevate the concert experience to unprecedented heights. And this is exactly what the audio team working on the concert managed to put into effective action.

“Trust me, bringing together the enchanting aural adventure for the **+==÷x** concert had me and the team exploring the various complexities of mathematics and physics like never before!” chuckles **Animesh Mishra, Founder Director of Phoenix Networks**, as he affirms how the production team’s decision to entrust him with the responsibility of spearheading the planning and commissioning of the superlative audio architecture for the mega-concert turned out to be one of the most rewarding and fruitful experiences of his professional career.

Working in close collaboration with Ed Sheeran’s technical team that included the tour’s Technical

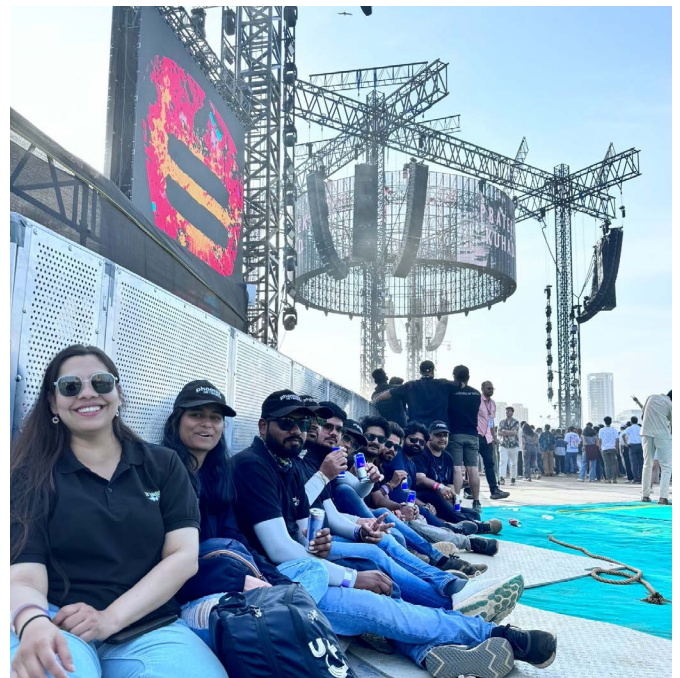
Director and Audio Production Head; the audio team meticulously planned the deployment of the colossal Meyer Sound system inventory with the objective of creating a 360-degree stereo sonic effect that seamlessly complemented the bespoke and breath-taking stage design. The audio plan, according to team Phoenix, not only accounted for the artist’s demands, but also took into consideration key factors such as the spread of the audience section, and variables such as the atmospheric conditions including heat, humidity and wind-speed among others – all of which would have a notable impact on the concert’s eventual sonic environment.

Speaking about how the audio team seamlessly integrated the comprehensive Meyer Sound system into the show’s setup, working out mapping and routing well in advance using MAPP 3D, **Marsh** explained “MAPP 3D is an essential tool in getting the message across when agreeing on box counts and quantity of hangs. The visual aid and the universal language used in this software bridges any barrier, and it was easy for



the local team to understand our design. Our task was made even simpler by Meyer Sound allowing us to borrow back our old systems engineer, **Charlie Albin**, who came and oversaw the installation with the local team”.

Sharing key details of the breath-taking main rig which formed the centre-piece of the mammoth audio setup; Animesh informs that over **128 units of the PANTHER line array modules** were strategically deployed in an arrangement that featured 2 array hangs of 16 units each suspended on each of the stage pillars, summing up to a whopping 32 units across 2 sets being suspended off of each pillar. Positioned at a height of 17 metres above the ground and inclined at a precise angle of 6 degrees downwards, the main rig ensured optimal sound coverage and impact for audience members, even those situated at the farthest distances from the stage. And to further optimize the coverage pattern and ensure truly consistent and uniform sound dispersion, an additional array configuration was deployed, which comprised a total of **12 units of the 80-degree long-throw PANTHER line array modules** at the top of the array and **4 units of the 110-degree wide-throw**



PANTHER line array modules at the bottom; with this strategic move being instituted in order to efficiently encompass both long and wide spans of the venue. Each of the modules within the array hang were meticulously tilted outward at an angle of 15 degrees to minimize sonic hotspots within the audience area located near the stage and ensure linearity across the overall audience area.

Furthermore, the audio team guaranteed thunderously impactful bass resonance throughout the vast audience landscape, as they chose to deploy a uniquely designed gradient of 4 suspended arrays of subwoofers, with each array comprising **10 units of the 1100-LFC subwoofers**, positioned at a height of 16.5 metres from the ground. The subwoofer hangs were complemented by an additional six ground-stacked and gradient subwoofer clusters that surrounded the magnificent 360-degree revolving stage, with each cluster comprising 3 units of the 1100-LFC subwoofers. While the ground-stacked subwoofer clusters offered a chest-thumping experience to the near-field audience, the suspended subwoofer arrays allowed the team to leverage the impressive throw of the 1100-LFCs to offer a similar high-quality low-fidelity experience for the far-field audience members as well.

“Rigging the system on a cantilever at significant heights and steep angles presented a unique set of hurdles. A comprehensive analysis using MAP3D software revealed an intricate set of requirements; primary of which was the fact that the system had to be rigged at a height of 17 metres with the rig point positioned at 22.7 metres, and a further need for the rigs to be angled downwards at 6 degrees, and outwards at 15 degrees. Plus, the fourth pillar that was to hold the PANTHER array on the cantilever had to be erected 4.22 meters outwards, with the second suspension point at exactly 3.25 metres and the pullback at 1.3 metres. Bear in mind that these precise measurements, right down to the T, were pivotal to achieving optimal coverage and dispersion, and eventually ensuring a consistent, pristine and immersive sonic experience throughout the venue,” recounts Animesh as he details the nuances of the audio architecture for the concert and highlights how innovative measures were required to overcome the plethora of challenges.

“Additionally, ensuring the stability of the rigs amidst the rigours of the outdoor environment was equally essential, as increased wind pressure posed a significant risk of displacement”, he explains; revealing that he and the team had to leverage their innate understanding of physics to suspend the loudspeaker rigs using hoists from three points. According to Animesh, this was the most practical solution to ensuring that the rigs would stay secured in place, as this strategic approach not only mitigated the risk of movement but also enhanced the stability of the hangs to an unprecedented degree.

Augmenting the main rig, a total of **22 units of LEOPARD line array modules** were strategically positioned around the circular stage to serve as front fill reinforcement, while a further 16 units of LEOPARD line array modules were deployed as in-fill reinforcement in stacks of 2 units each at each pillar, wherein each pillar was flanked by 2 stacks of the LEOPARD modules positioned at a height of 1.6 metres from the ground to deliver an absolutely sublime sonic experience for audience members located closest to the stage.

With complexities being inherent in large-scale productions such as this particular concert; effective signal routing becomes paramount to achieving clarity, balance, and coherence in the overall sound output, mainly because a robust signal distribution management architecture not only enhances reliability and resilience while mitigating the risk of signal loss or degradation, but also safeguards the integrity of the audio system throughout the production. And armed with a thorough knowledge and understanding of this; Animesh explains that the audio team collectively chose to deploy a total of 12 units of the **Meyer Sound Galileo GALAXY 816**, all of which were strategically positioned to offer unparalleled flexibility in terms of signal routing options; with 2 units of the Galileo GALAXY



(L-R) Dan Mosley, Animesh Mishra and Chris Marsh.

allocated to each of the audio towers, while 3 units were stationed at the FOH console area. The signal routing was primarily managed through **Luminex' GigaCore 26i** switchers which helped ensure truly seamless signal distribution with a defined backup source.

"The moment of truth for us was when the rehearsals finally came around – and that's when we saw our hard work pay off! The feedback we received during rehearsals was overwhelmingly positive, as the flawless audio quality surpassed even our wildest dreams. It was just a testament

to the kind of effort that went into bringing such a world-class experience together; and it was so gratifying to see just how successful our efforts were. From there on out, nobody had any doubts about the concert culminating in a massive success!" Animesh affirms proudly.

Meyer Sound share in the pride of the definitively successful Mumbai-leg of the Mathematics Tour, as Scott Gledhill, Meyer Sound's Director of International Sales excitedly exclaims, "Ed Sheeran's Mumbai show is a testament to seamless sound delivery, thanks to the collaborative efforts of the crew, Meyer Sound, and Sun Infonet. Continuing to set the standard for innovative live sound production — and making it happen around the world — is at the core of what we do, and our international partners are integral to that success."

This summer, the "Mathematics" tour heads to Europe for 25 dates, returning to a full production of 14 PANTHER arrays to present awe-inspiring sound in the round. "PANTHER has performed perfectly for us for two years now," says Marsh. "We have no intention of changing anything."

Photos courtesy of Ed Sheeran Mathematics Tour Organisers.

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