systems integration asia

2024

TRENDS AND
OPPORTUNITIES

Installation:
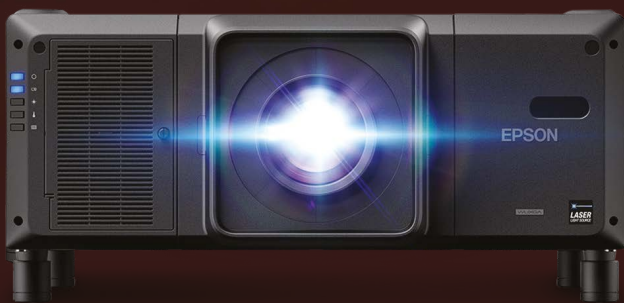**Mumbai's Premier Dining and Nightlife Destinations Vibe Up with Martin Audio**

VoiceBox:
India in 2024 - Election Year with Promises and Positives

Spotlight:
Getting and Staying ahead – Unlock Your Future at ISE 2024

CONTENTS

> "One of the significant trends shaping the audiovisual industry is the demand for more immersive experiences. Technologies like AR & VR have been gaining momentum and are expected to continue doing so in 2024 and beyond, especially in educational market."
>
> **Finson Lam, Managing Director, BAP, Hong Kong**

FIRST WORDS

Thomas Richard Prakasam

Publisher/Editorial Director
thomas@spinworkz.com

As we bid farewell to 2023, marked by persistent wars and political tensions, the entrance into 2024 is met with caution. It is my belief that, much like myself, many of you are hoping for the emergence of level-headed decision-making to alleviate global uncertainties. 2024 brings significant elections in several countries that might have an impact beyond national borders, carrying the potential for widespread ramifications. Amid these complex dynamics, the question arises: where will the AV industry uncover its most promising prospects in 2024? Prashant Govindan, Director of Generation AV, offers his insights, emphasising the impact of India's upcoming elections on various facets, including the economy, technological advancements, manufacturing, and, consequently, the AV sector. In our pursuit of a comprehensive understanding on opportunities, we also gathered perspectives from key players in the Asian market. Amidst this collective input, a unanimous consensus emerges — Artificial Intelligence (AI), Augmented Reality (AR), Virtual Reality (VR), and immersive experiences are positioned to lead the way in shaping the landscape of opportunities in the forthcoming year.

EDITOR, INDIA AND ME
Ram Bhavanashi
ram@spinworkz.com

FEATURES EDITOR
Elton Noronha
elton@spinworkz.com

ADMIN & CIRCULATION
Julie Tan
admin@spinworkz.com

MEDIA REP CHINA,HONG KONG, TAIWAN
Judy Wang
Worldwide Focus Media
+86-13810325171
judywang2000@vip.126.com

DESIGN & LAYOUT
Hazel Gundaya

India in 2024: Election Year with Promises and Positives

General Elections may define the government role in India's journey into future

Every scent of new (English calendar) year across the nations generally will bring a lot of wishful things, and so for India. How, the advent of 2024 will be particularly special for India for reasons more than one. Election Year, that it is, is bound to have its impact on the country's economy, technology strides, manufacturing sector, and therefore, for AV segment as well.

While the generic outlook – as it is visible at this moment in time – appears to be very positive, it does pose some questions that remains to be answered- says Prashant Govindan, Director, Generation AV.

SI Asia presents Prashant's perspective.

For one, a quick look back at the year that just passed by- will present a very reckonable scenario. Check it:

It's been a year of recovery and positive change for AV business in the country, just like the world over. The sector has witnessed a very rapid growth – it was reckoned to be three-fold increase over a generic assumption of 10 per cent CAGR by Q2 itself – measured by the number and size of projects. However, it remains to be seen if the recovery has come back to pre-pandemic levels.

Some key factors driving the positive upswing are:

* Return to office, return to offline meetings: Hybrid work is bringing back the need for AV in meeting spaces

* Return to campuses is bringing back students to real classrooms which is positively impacting the education sector

* The boom in travel, both for work (MICE sector) and for leisure has been increasing the need for entertainment systems in destinations of all dimensions- restaurants, bars, lounges, hotels, and convention centres

* Increased consumer spending on retail has spawned a whole new revolution in organised retail, including luxury retail

* Stadiums and sporting arenas refurbishing their sound and display systems. A big testament of this is brought in by the ICC World Cup, while IPL was already there playing a precursor; other local sporting events did have their share too

* Events and concerts have come back to pre-pandemic levels sparking spending into events and big ticket concerts/musical events

Alongside all this, revival of commercial cinema to almost pre-pandemic levels has contributed its might, spurring the demand for the segment's spending on AV as part of their entertainment fare in multiplexes.

Overall, the year merits to be called as 'recovery' year.

The Year Ahead
For 2024, the outlook is very positive especially for India, as the Indian economy appears to be outperforming its peers with strong growth. Positive consumer sentiment driven by low interest rates, have kept the Indian economy growing, and this is taken to continue to be the case into 2024 and beyond.

The overall inflationary trends are also in check, for now despite a large fiscal deficit. As long as the government keeps the consumer price indices under control, and inflation is kept in the single digit range, Indian economy should continue to grow, driven by the strong consumption model.

With General Elections round the corner (expected to be around April-May), and curbs on public spending in place, the market may see some slowdown in government projects as the *Model Code of Conduct* kicks in. However, despite this, the Union Budget for 2024 is expected to be loaded with announcements in long term infrastructure spending and possible tax cuts- judging by the kind of initiatives that the NDA Government had been taking over the past few years.

Post Elections- the second half of 2024 may see strong spending by the government, particularly in defence, education and infrastructure- which will spur a good demand for AV and allied segments, and now, with the addition of the fancied AI, AR and VR.

For the private sector, the macro-economic trends are taken to continue, and with greater liquidity in the hands of the consumer, the consumption story also will continue.

Global headwinds such as the war in Ukraine, and the turmoil in the Middle East remain to be of concern, especially since it impacts

the country's oil pool account, and therefore puts inflationary pressures on the domestic economy. Weighed against this is the energy from market experts' prediction that the US Fed rate will continue to be low, and it will channel more FDIs into the country which in turn will soften the blow of Indian currency depreciation.

Hopefully, and particularly, this would help import-heavy sectors like AV by taking the edge off import costs. Customs duties are expected to remain at current rates, as the Government would seek to subsidize more populist and people-friendly schemes- owing to the Election Year.

Overall, we will see growth but that needs to be tempered with the outlook on global and regional cues. Supply chain shortages would ease up as factories have now resumed full production and are catching up to demand globally- which means India will have better product availability, and, therefore it's faster project closures and better cash flow for AV segment.

The demand curve in India already took its upswing in 2023, and is taken to continue its journey through 2024.

Office space will continue to be utilised more effectively.

We, in the AV segment in particular, expect more office space to be utilised, thereby powering the ICT sector. The increase in travel and tourism fortunes has positive impact on retail, hospitality and entertainment. Customer Experience Centres, auditoriums, classrooms, retail spaces, airports, transportation and sporting venues- all will drive business.

House of worship projects are increasingly becoming important for the AV sector, with more and more installations embracing latest tech with Active LED technology and modern public address systems. As with temples, other places of faith are seeing increasing adoption of technology. Spiritual tourism and mega festivals like the *Kumbh Mela* have been using large format sound systems including line arrays and networked audio technology.

In terms of technology application domains, it would be a hot area for the fancied AI, AR, and VR particularly for Infotainment segment, beside for R&D in scientific applications.

Automation may be the first line of products that might integrate AI and analytics into learning user routines and adapting to user preferences. Deep learning algorithms are already analysing individual user behaviour and forming patterns of interactions, based on historical data.

We are not far away from a presumable day of our automated control systems asking us if we would like to make a presentation or initiate a zoom call with a set of people!

A very promising technology domain is VR and how the virtual meta space can replace a real meeting experience can be quite exciting in the times, if not months to come.

AI, VR and VR are expected to play key roles in the infotainment segment, beside R&D applications.

We do hear a lot of hype over the IoT, but it's a more industrial, and perhaps not so perceivable piece of technology that integrates mundane objects into a smart cloud-based solution. Add analytics and this becomes even more interesting! Add deep machine learning, and that would mean we have AI integrated as well. The possibilities can be limitless- should they be embraced the way they beckon on us!

Collaboration, UC and Meeting technologies have already witnessed a convergence and we will see more products make this convenience only larger, with user-friendliness made to the fore/core.

Make-In-India
Make in India is a real platform Indian industry appears to be trying to do its best- despite the hiccups of kind. However, since most components and sub-assemblies are still sourced from abroad, it still remains a question as to how much of the actual product is really made in India!

Unless the country – and the government that would reign post Elections initiate specific measures to make the country self-reliant in chip design, mass manufacturing of components and overall self-reliance in software, firmware and end-to-end manufacturing, the true Make-in-India will remain a pipe dream!

The *Atmanirbhar* will have its litmus test in the measures taken by the in-coming government.

Having said that, there have been some really commendable efforts from a seemingly small segment of manufacturers doing their best to make majorly, if not fully indigenous products. AV sector does benefit to some extent with these initiatives, but the road ahead visibly long and rough too.

Hope Year 2024 will make it some soft and worth taking.

MLA Mini Provides Shishi Zen Temple Believers with Elevated Experience

CHINA: Located in Lujiang, within China's Anhui Province, the Shishi Zen Temple serves as a place of worship and to enhance both the vocal and musical experience, the Zen Temple made the decision to embrace cutting-edge audio technology. After conducting thorough research, they opted for the Martin Audio active MLA Mini array, complemented by Martin Audio's renowned CDD series, as the basis for their new PA system.

The choice of the MLA Mini was based on its exceptional sound quality and its ability to optimise coverage, consistency and control of sound for a room's own acoustics, dynamics and the position of the listeners. This was particularly crucial as it ensured that both those near the Buddha statue at the heart of the Zen Temple and those worshiping at a distance could enjoy the same high-quality music and Dharma teachings.

The CDD series serves as an auxiliary system, guaranteeing consistent sound coverage throughout the venue and delivering an enhanced listening experience to the audience. This ensures that every nuance of the music is conveyed with crystal clarity. Additionally, the CDD's versatility in installation allows it to seamlessly adapt to different settings, maintaining audio quality and reliability.

The Zen Temple demonstrated a deep respect for the unique characteristics of their environment during the sound system installation. Despite the temple's spacious layout and towering architecture, the Martin Audio system was meticulously modelled and tuned to deliver outstanding audio performance for various events, be it a grand Buddhist ceremony or an intimate concert. This enables the temple's devotees to focus on their meditation and practice, while also providing visiting guests with the gift of beautiful music.

This unparalleled auditory experience has elevated the quality of Buddhist music and temple rituals to a new level. The Zen Temple remains committed to continually enhancing religious rituals and musical performances, fostering a more tranquil and spiritually enriching environment for all believers in the future.

Martin Audio

AP SERIES, ULTRA-LIGHT WEIGHT LED DISPLAY SOLUTION
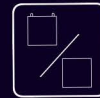
Energy-saving   Quick installation   Light weight   Indoor/Outdoor

Industrial design, great both in shape and texture;

Quick installation with patented quick-lock system;

Curved surface adjustment supported with 9 adjustable angles;

Easy maintenance, wide viewing angles and excellent display quality.

www.infiled.com / info@infiled.com

Major Cineplex Elevates Thai Moviegoers' Experience with Christie Projection Solutions

Major Cineplex's newly opened cinema complex at Robinson Lifestyle Chalong, Phuket.

THAILAND: **Christie** is pleased to announce that **Major Cineplex**, Thailand's largest cinema chain and a longstanding partner, is elevating the moviegoing experience for its guests.

This enhancement involves the deployment of RGB laser cinema projectors featuring Christie Real|Laser and RGBe illumination technology in 24 multiplexes located across Thailand, including Icon Siam, EmQuartier, Siam Paragon, Charn Changwattana, The Mall Bang Kapi, Robinson Chalong Phuket, and Central Westville.

Marking its 29th anniversary, Major Cineplex, founded in 1995, has emerged as a premier player in the theatre and entertainment industry across Southeast Asia. Operating over 800 screens in Thailand, Laos, and Cambodia, the company has set its sights on an ambitious vision: to expand its reach to 1,200 screens by 2030. This expansion plan underscores Major Cineplex's commitment to growth and innovation in the cinematic experience.

A testament to this commitment is the strategic deployment of Christie RGB laser projectors across its existing network, a move that highlights the company's dedication to providing audiences with state-of-the-art illumination technology. This forward-thinking approach not only enhances the movie-going experience but also solidifies Major Cineplex's status as a trailblazer in the adoption of advanced cinematic technologies in the region.

"Cinema holds a significant role in our business, and our constant pursuit is enhancing the moviegoing experience for the communities we engage with," says Vicha Poolvaraluk, Founder and CEO, Major Cineplex Group. "Our enduring partnership with Christie has been invaluable. The recent choice to incorporate Christie's state-of-the-art RGB laser projectors in our existing and new venues reflects our commitment to delivering an unparalleled moviegoing experience."

Han Kim, Executive Director, Cinema, Asia Pacific, Christie, commented, "We're delighted to continue our strong collaboration with Major Cineplex, a longstanding partner that has consistently relied on Christie's cutting-edge projection solutions to create immersive cinematic experiences for audiences.

Biamp Parlé Family of Conferencing Bars Earn Microsoft Teams Room Certification

USA: **Biamp**, a leading supplier of professional audiovisual solutions, today announced that its line of Parlé all-in-one video and audio-conferencing bars are now Certified for Microsoft Teams.

The Parlé bars now Certified for Microsoft Teams offer peace of mind and security to integrators, installers, information technology personnel, and end users, assuring them that the product is validated to work seamlessly within the rigorous standards of the Microsoft Teams unified communication (UC) platform and provide exceptional 4K video conferencing experiences in small-to-medium sized Teams Rooms. The Parlé family of conferencing bars includes the Parlé VBC 2500 video conferencing bar and the Parlé ABC 2500 audio conferencing bar, as well as the Parlé VBC 2500a and Parlé ABC 2500a conferencing bars that include a discrete output for Assistive Listening Systems.

"As organizations worldwide **coalesce around hybrid work** environments, those organizations that adopt Microsoft Teams need effective conferencing tools that work effortlessly within their Teams Rooms," said Joe Andrulis, Executive Vice President of corporate development, Biamp. "The Microsoft Teams certification of our Parlé conferencing bars further expands our portfolio of Microsoft Teams certified solutions for small and medium spaces, ensuring that IT managers can easily and confidently implement extraordinary video conferencing solutions across their Teams Rooms, and that users can enjoy unparalleled audio and video performance in these spaces."

The Parlé family of conferencing bars includes built-in Beamtracking microphones to actively track and intelligently mix conversations from around the room; smart loudspeakers for superior speech reproduction; and advanced signal processing with integrated echo cancellation and AI noise reduction—all within one plug-and-play package. The Parlé VBC 2500 and VBC 2500a also include a 4K camera with auto-framing to identify meeting participants and keep them in focus. For quick and easy start-up across all four models, the Biamp Launch feature automatically deploys tuning software that analyzes and optimizes the acoustic performance of any room at the

touch of button, delivering both a premium conferencing experience to users while offering significant time savings for installers and information technology professionals.

Parlé conferencing bars are highly flexible — including easy mounting to a display panel, installation on a wall, or placement on a tabletop — connecting to the Microsoft Teams Room with a single USB.

To learn more about Microsoft Teams Room certification, or to contact a reseller for more information, please visit **www.biamp.com/ microsoft**
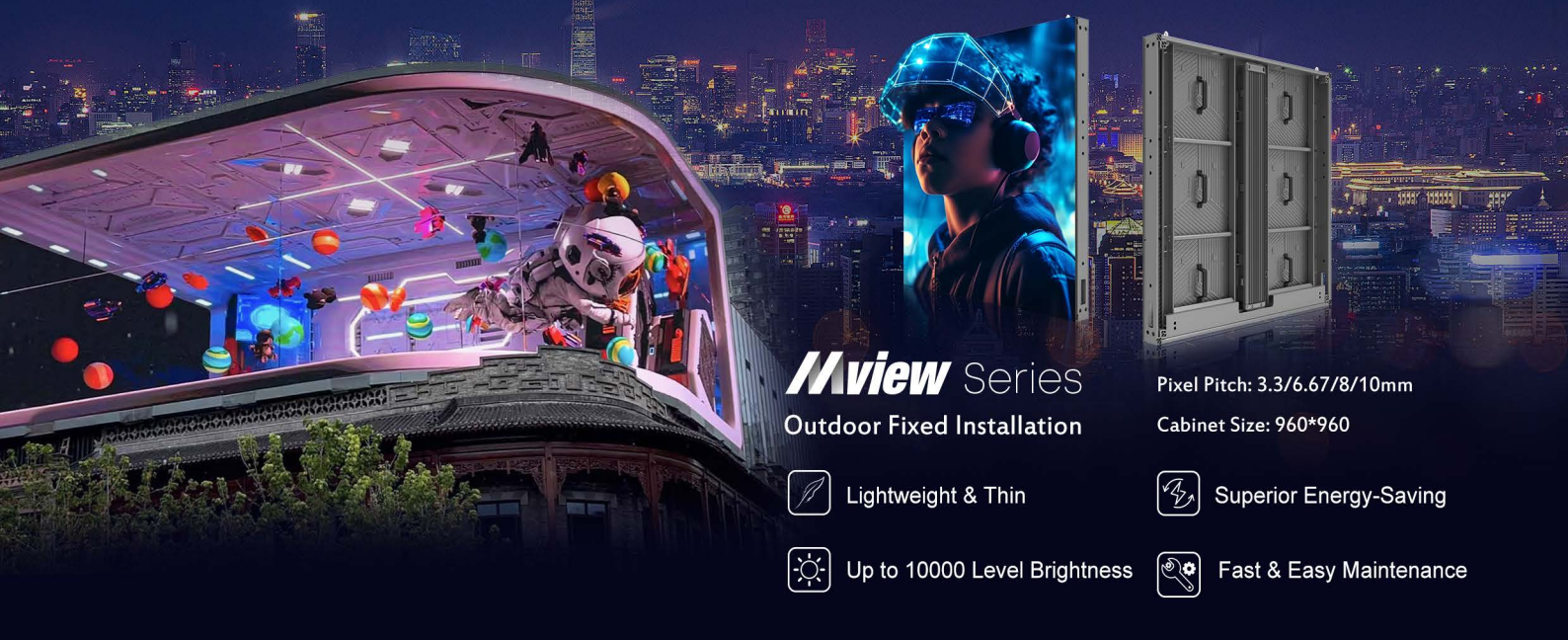
Bose Professional Announces Adam Shulman to Head Product Management

Adam Shulman
Director of Product Management

USA: **Bose Professional** announced the promotion of Adam Shulman to director of product management, a strategic enhancement that reflects the company's dedication to its customers and commitment to innovative, customer-driven system solutions. With more than two decades of expertise in system design and product innovation, Shulman is well positioned to spearhead a new era of ingenuity within Bose Professional's product strategy. His advancement supports the company's focus on engineering and product excellence.

John Maier, CEO of Bose Professional, expressed his confidence in Shulman's ability to drive the company's product vision forward. "Adam embodies the spirit of Bose Professional and his talent strengthens our pursuit of excellence and customer satisfaction," Maier stated. "With his unique grasp of audio technology and product innovation, his leadership will play a crucial role in the creation of systems that align with and anticipate the needs of our diverse customer base."

Director of product management, Adam Shulman shared, "As a new company, we have a 50-year legacy in professional audio, which provides us the rare opportunity to take a look at ourselves and the market with a fresh perspective. I am thrilled to move into this role at such an exciting time for Bose Professional."

The pairing of Shulman's promotion with the recent addition of Kenn LeGault as Vice President of engineering reflects a concerted effort by Bose Professional to amplify its leadership in the industry. These developments are clear affirmation of the company's enduring legacy and its dynamic strategy for future growth.

INTEGRATE
MIDDLE EAST

21–23 MAY 2024
DUBAI WORLD TRADE CENTRE

MENA'S PREMIER
PRO AV &
INTEGRATED SOLUTIONS
BUSINESS EVENT

The Middle East and North Africa premier forum and sourcing platform for the global Pro AV Community, connecting technology leaders with integrated solution buyers from the intersecting worlds of Education, Retail, Hospitality, Media, Metaverse, Entertainment, Real Estate, Communications and much more.

Co-located with

CABSAT

Organised by

مركز دبي التجاري العالمي
DUBAI WORLD TRADE CENTRE

Get in touch with us to exhibit or sponsor:
www.integrateme.com | **#IntegrateME**

Melbourne Convention & Exhibition Centre (MCEC) Elevates Event Experience with Harman Solutions

AUSTRALIA: Harman, a leading provider of audio, video, lighting, and control systems, reaffirms its ongoing collaboration with The Melbourne Convention & Exhibition Centre (MCEC) following the upgrade of MCEC's event technology infrastructure to provide an enhanced experience for both virtual and hybrid events.

MCEC, a renowned venue situated on the picturesque edge of the Yarra River in Melbourne's CBD, has long been recognised as a premier destination for conferences, exhibitions, and conventions. To continue delivering cutting-edge facilities, MCEC embarked on a project to replace their existing fleet of MVP-9000i touch panels, which had been in service for over a decade.

Small cantilevered meeting room. Photo by Stewart Donn.

Scott Reid, Senior Systems Engineer at MCEC, highlighted the necessity for the upgrade: "The MVP panels have served us well, but they were well overdue for replacement. We reached a point where we needed to find a new solution due to issues with the ageing equipment, such as battery problems and the unavailability of replacement batteries. With Harman's Varia solution, we were able to not only address these challenges but also future-proof our event technology capabilities."
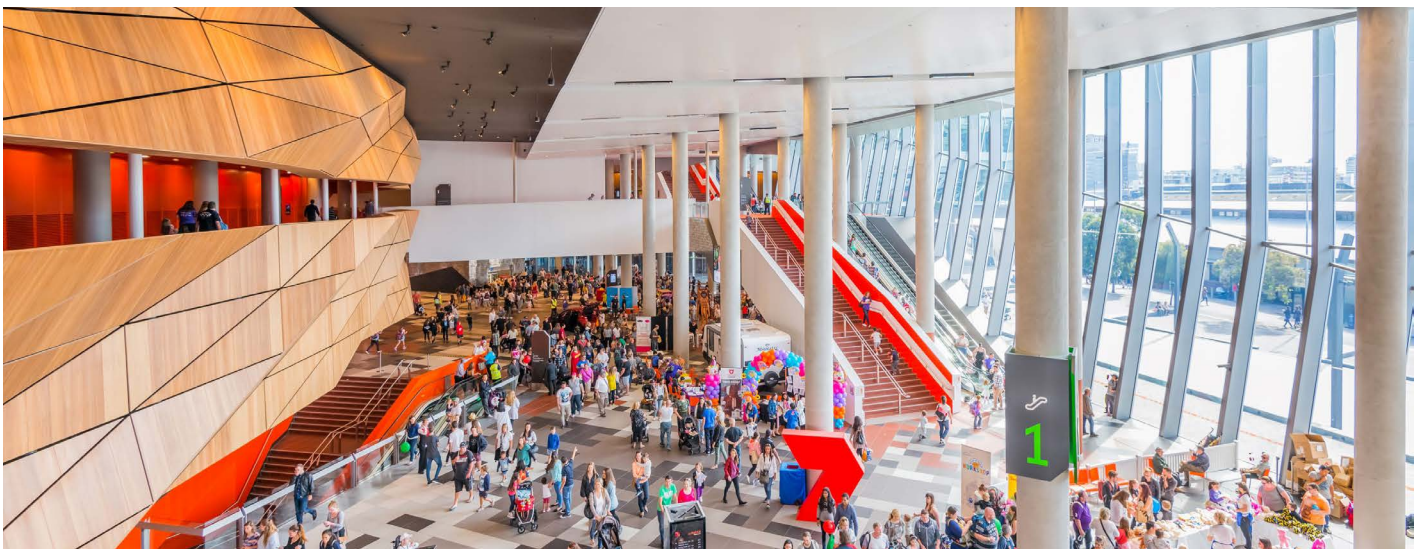
Main Foyer of Melbourne Convention and Exhibition Centre .

Front view of Varia Touch Panel in lectern.

Varia Touch Panel with table, top mount.

After exploring several options, MCEC identified AMX Varia Touch Panels as their ideal solution, leveraging its robust performance and wireless capabilities. MCEC chose the AMX VARIA-100 Touch Panel series, accompanied by the AMX VARIA-ACS-100F Tabletop Stands, as the core components of their upgraded system. These state-of-the-art touch panels provide an intuitive user interface and exceptional performance, according to MCEC's requirements for seamless event control and management.

Graham Barrett from Harman also discussed the seamless transition from the previous touch panels to the Varia solution: "There is a strategic partnership between MCEC, AMX and Harman which we established some time ago. One of the benefits was to be able to get Varia panels in the client's hands very early with the pre-release product models to prove out the functionality as well as the mechanics of how they can deliver that upgrade."

"Customers like MCEC have had a significant input about the required functionality of many AMX products over the years and Varia is the result the feedback gathered on previous models. That's all part of the partnership that we've had in place for many years," he added.

The AMX Varia touch panels, with their enhanced screen real estate and advanced features, provide MCEC with improved functionality and a modernised user experience. Additionally, the panels' light-sensing feature and ergonomic design contribute to their suitability for MCEC's diverse event requirements.

Scott Reid from MCEC spearheaded the project, ensuring a smooth transition and integration of the new Harman solutions. The MCEC team were responsible for the installation and commissioning of the touch panels, leveraging their expertise to maximise the benefits of the cutting-edge technology.

He expressed his delight with the Varia panels, stating, "The reliability and performance of AMX products are well-known. Plus, to make changes down the track, our team will be able to deploy an update or modification to the panels very quickly and easily. It is one of the big additional value propositions for Varia over and above old MVPs."

Varia Touch Panel in lectern, side view.

The upgraded system also seamlessly integrates with MCEC's existing AV infrastructure, which includes AMX NetLinx Controllers, AMX DGX Digital Media Switcher, BSS Soundweb London Signal Processors, and JBL Speakers.

"This successful collaboration between Harman and MCEC underscores our commitment to delivering world-class event technology solutions," said Vice President and General Manager at Harman Professional Solutions, Asia Pacific and India, G. Amar Subash. "With the Varia Touch Panels now deployed, MCEC is well-equipped to elevate the event experience, ensuring seamless control and management for organisers while providing a visually stunning interface for presenters."

Harman Professional

Starnetworks Becomes the Official Distributor of Holoplot in South Korea

KOREA: Over the past two decades, the Starnetworks group has consistently delivered cutting-edge technology and services that exceed their clients' expectations across a diverse range of projects, including concerts, musicals, festivals, as well as national and corporate events, all while crafting soundscapes that captivate audiences. In their pursuit of the finest and most innovative live sound technology, the company has proudly become the official distributor of Holoplot

Matrix Array systems in South Korea. This marks Holoplot's first foray into the burgeoning Asian live entertainment market.

"Our philosophy is to look at sound as both an art and a science," says Su Keun O, CEO at Starnetworks. "This philosophy aligns perfectly with Holoplot technology, which is science-based, software-driven, and hardware-enabled, offering unparalleled sound experiences through sound control."

The Starnetworks team had their first opportunity to witness the Holoplot X1 Matrix Array in action earlier this year at the ISE Show in Barcelona. They quickly realized that they were encountering something unique. "We were fascinated by how Holoplot could visualize sound dispersion and control the sound with such precision and the creative potential of

this. Since then, we've discovered many more benefits of Holoplot technology with X1 and the new X2 covering all bases in terms of application type. Utilized as a stereo system it completely removes hot spots and unwanted reflections, allowing us to achieve very high-quality, enjoyable sound."

The debut of X1 in South Korea happened at South Korea's very own Lightroom. The first Lightroom project opened in London earlier this year, also successfully equipped with a Holoplot X1 system. Lightroom Korea opened in Godeok, Seoul on November 1st, and serves as the second venue to host the highly acclaimed art exhibition, *David Hockney: Bigger & Closer (not smaller & further away)*, bringing a new burst of creative energy to the already globally renowned arts and culture scene of the South Korean capital.

"We are thrilled to partner with Starnetworks and bring the power of Holoplot audio technology to the Asian market," says Ryan Penny, Head of

Sales at Holoplot. "As a manufacturer offering a completely new technology, we're partnering with companies that see the difference in our systems and are willing to take a step towards the future. Starnetworks has already built a great reputation, South Korea is a market that is both forward thinking and is seeing growth in immersive experiences and we see this as a relationship that will extend that further."

What does the future hold post-Lightroom Seoul for Starnetworks and Holoplot? O is confident that it looks bright and promising.

"Our team is currently involved in projects with challenging acoustic environments and a need for high-quality immersive capabilities. We look forward to working with the state-of-the-art technology that Holoplot offers and can't wait to explore all the creative

Holoplot

Starnetworks

Cardinal Tien College of Healthcare and Management Creates Immersive Educational Environment with SDVoE Technology
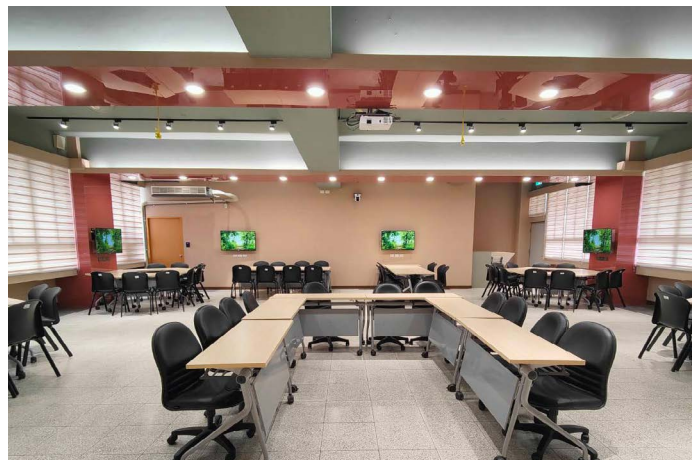
TAIWAN: Established in 1971, Cardinal Tien College of Healthcare and Management is a private, Roman Catholic junior college with two locations: a main campus in Xindian District, New Taipei and a secondary campus in Sanxing Township, Yilan County, Taiwan. Cardinal Tien College of Healthcare and Management offers a range of undergraduate and graduate programs in healthcare and management, including nursing, medical laboratory science, occupational therapy, physical therapy, healthcare management and long-term care. Cardinal Tien College of Healthcare and Management is recognized by the Ministry of Education of Taiwan as first-class in nursing departments and general subjects.

Challenge

Cardinal Tien College of Healthcare and Management continues to pursue teaching excellence. The college developed plans to update the existing audio-visual equipment in the Project-Based Learning (PBL) Interactive Classroom. The technical integration representative of this project, Chen Yue Lin of Sound Fun Technology, planned to upgrade the existing infrastructure with the latest technology to improve the management of several video sources across many devices, including a PTZ (Pan, Tilt, and Zoom) camera, a web camera, a desk computer, a projector and six televisions.

Solution

AV LINK transformed a traditional classroom in a Taiwanese junior college to deliver

uncompressed and zero-latency video sources across copper 10-Gigabit networks, which are centrally controlled by an IPS-M. The installation used the SDVoE-compliant IPS-AC transceivers and IPS-M controller (4K/60Hz AV over IP) to meet the diverse learning demands of engaging lectures and group discussion courses.

"AV LINK's products have always been my first choice for audio-visual system integration projects," said Mr Chen. "I used the IPS Series (4K/60Hz AV over IP) to create a smart classroom for this project to meet the school's expectation of immersive learning and engaging discussion. The solution enables instructors to deploy lecture materials to projector screens and six televisions simultaneously. The six groups of students have a television and can directly discuss the information provided by the instructor on the screen."

Mr Chen added, "After the discussions in each group, the instructor can deploy the students' presentation files for the designated group to the projector screen and six televisions through the smart environmental control system located on the podium or next to the cabinet rack to facilitate subsequent discussions. The APIs (Application Programming Interfaces) of the IPS-M controller can integrate the IPS-AC transceivers with a smart environmental control system, making the transmission of materials during the entire teaching and discussion process more efficient and interactive than in traditional classrooms."

"IPS-AC transceivers support video signals at 4K/60Hz in 4:4:4 and distribute them up to 100 meters via standard Cat6a cables," said Burt Lee, Vice President for AV LINK." IPS-AC transceivers enable HDMI 2.0, the delivery of

HDR, 10-bit color content, and multi-channel HD audio signals. The advanced capabilities of IPS-AC transceivers include the transmission of several control and data signals in addition to audio and video, such as IR, RS-232, USB HID, and USB 2.0."

SDVoE technology, as implemented through AV Link's IPS Series, allowed for high-quality, simplified video distribution across all displays throughout Cardinal Tien College of Healthcare and Management's Project-Based Learning (PBL) Interactive Classroom to create an immersive learning experience for faculty and students.

Benefits of SDVoE Technology
SDVoE reaches beyond existing standards to provide benefits no other technology can claim:

• A complete ecosystem – SDVoE Alliance members are manufacturers with expertise in signal distribution, display manufacture, IT infrastructure, chip design and AV software. The integrator has dozens of partners to align with and products to choose from.

• A flexible yet simple software platform – the SDVoE API allows rapid development of highly specialized software, custom-tailored to the needs of a vast array of end users.

• A full OSI stack solution – only SDVoE offers the simplicity of a complete top to bottom solution, fully encompassing infrastructure, transport, processing, and a simple control layer .

For more information on the SDVoE Alliance, please visit **www.sdvoe.org .**

AV LINK

Electro-Voice and Dynacord System Caters to the Contemporary and the Cultural at Kiên Giang Music Theatre

When the time came to modernise the sound system at the large theatre, many considerations came into play. Beyond the seamless coverage and sonic finesse required to clearly convey the nuanced content and powerful emotions of the traditional performances, the system also needed to provide ample output capacity for contemporary program material.

VIETNAM: Located in Rạch Giá, the capital city of Kiên Giang province in southwestern Vietnam, the Kiên Giang Music Theatre plays a significant role as a cultural and artistic hub – not only within the province but also throughout the wider region.

In addition to presenting contemporary program material, the venue has gained recognition for itscommitment to preserving and promoting the revered folk-art form of "cải lương" – a complex artistic genre that blends traditional melodies with various musical instruments. The theatre therefore serves as a prominent focal point for national cultural exchange and enrichment, and audiences can expect performances and production values of the utmost artistic quality.
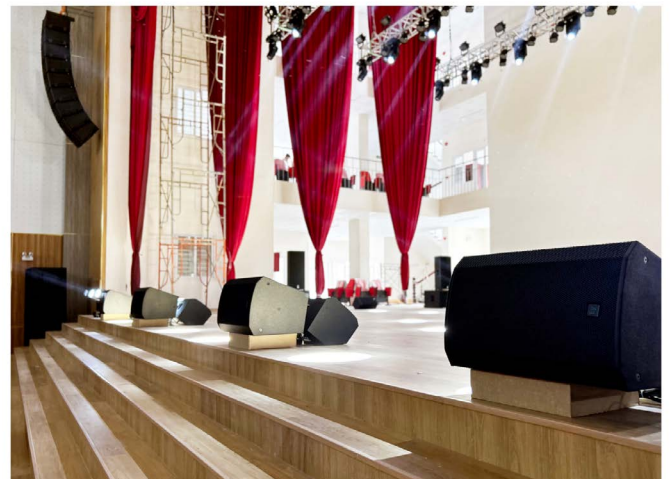
To achieve this goal, integrator Truong Thinh worked closely with experts from Electro-Voice and Dynacord to specify a state-of-the-art solution including two hangs of nine Electro-Voice X1 line-array loudspeakers supported by 10 X12-128 dual-18" subwoofers, all driven by Dynacord IPX series power amplifiers, along with multiple Electro-Voice ETX and EKX

powered speakers serving as fills and stage monitors, and a selection of Electro-Voice wired/wireless microphones to capture every detail on stage. As well as delivering the coverage and power the theatre required from an acoustic angle, the PA's compact form factor minimizes its visual impact from an aesthetic perspective. This complete system solution provides an exceptional audio experience for shows and events at the theatre and has invigorated the presentation of cải lương for new generations to enjoy – all reaffirming the theatre's prominence on a regional and national level for audiences and performing artists alike.

Electro-Voice

Dynacord

Christie HS and Inspire Series Deliver Captivating Visuals at Museum X
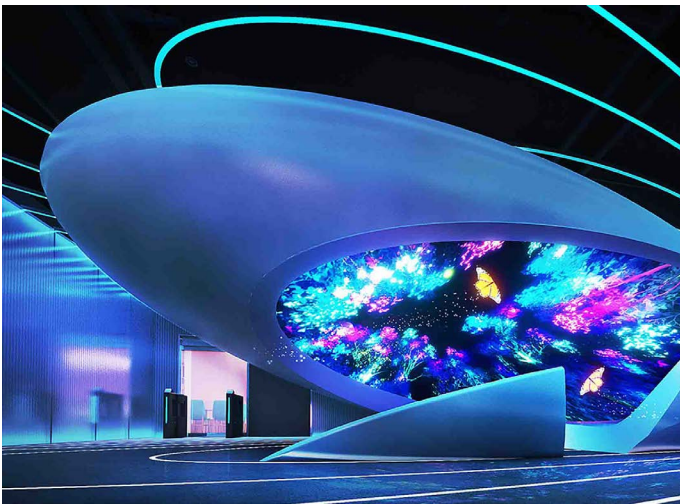
Christie's cutting-edge laser projectors illuminate the 'Ensemble' zone in Museum X.

SOUTH KOREA: **Christie** is pleased to announce that its high-performance **HS Series** and **Inspire Series** 1DLP laser projectors are illuminating immersive exhibition spaces throughout Museum X, a new interactive museum that combines digital media art and technology.

Located in the north-eastern coastal city of Sokcho, South Korea, this breath-taking exhibition venue is known as an "immersive new media playground". Since its official opening in August, Museum X has emerged as a popular destination for both locals and tourists. Spanning 1,750 square meters (18,836 square feet), the venue is divided into four zones and 16 experiential facilities where visitors can explore bright and colourful exhibits that showcase dynamic themes. Christie's trusted partner, SNC Alliance, supplied 34 laser projectors including the **Christie 4K7-HS** , which features 4K UHD resolution, along with Inspire Series **DWU760-iS** and **DWU960-iS** models. They were strategically installed across the venue by the local systems integrator, **Ten Square**

"To accommodate the diverse spaces, Christie's HS and Inspire Series projectors are chosen to ensure that visitors can experience the seamless integration of art and technology with unparalleled colour reproduction without compromising image quality," said Dong-Woo Lee, CEO, SNC Alliance. "The 4K7-HS projectors are particularly well-suited for this project, excelling in challenging, space-limited installations. Additionally, the versatile Inspire Series, with IP5X dust-resistant optical engine

and whisper-quiet operation, complements the setup. Both projector models offered hassle-free set up and enhanced the art and visual colours of the exhibition with optimal features."

Enthralling visuals and artworks created by **XORBIS** come to life within various exhibition zones. In the 'Ensemble' zone, a mesmerizing fusion of artificial intelligence and art unfolds, inviting visitors to immerse themselves inside a media cocoon where their digital drawings are magically brought to life. Illuminated by eight Christie DWU760-iS projectors, the artworks are displayed with captivating chromatics and colours that elevate the viewing experience.
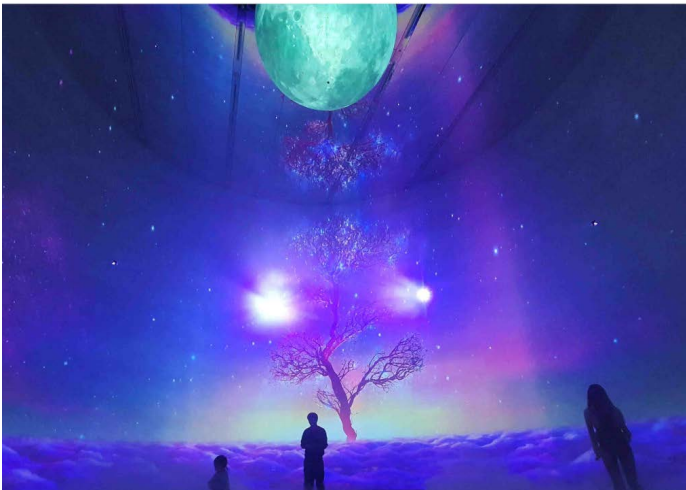
Visitors gather to experience the spectacular immersive space in the 'Surround' zone.

The 'Surround' zone, a hemisphere and cylindrical space, evokes multiple senses by merging the sea with space. Visitors are treated to panoramic views of the cosmic landscape, crystal blue sea, and vibrant sunset clouds that vividly fill the room. Eight Christie 4K7-HS and DWU960-iS laser projectors, discreetly installed, heighten the overall experience and transport visitors into fantasy realms with hyper-realistic imagery of magnificent skies and underwater worlds.

In the 'Symphony' zone, visitors seated on a huge bench are transported into a dreamy and mysterious atmosphere that highlights iconic urban and natural landscapes across Korea. Achieved through spectacular projections, six different themes come to life with 18 DWU760-iS laser projectors installed overhead. These projectors deliver bright and lifelike visuals, transforming the walls and floor to create a highly immersive experience.

Paul Lee, Sales Manager for Korea, Enterprise, Christie, commented, "We're thrilled that Museum X has selected our HS Series and Inspire Series projectors to illuminate its expansive exhibition spaces. This project serves as a testament to the diverse capabilities of our laser projectors, catering to a range of needs and preferences. We are confident that these professional-grade projectors will captivate visitors with awe-inspiring visuals, enhancing the overall museum experience in the years ahead."

The Christie HS Series and Inspire Series provide a range of brightness options in WUXGA or 4K UHD resolutions, ideal for 24/7 operation. With a compact and lightweight form factor, omnidirectional capabilities, and long-lasting laser illumination offering up to 20,000 hours of virtually maintenance-free operation, these projectors deliver unmatched value without compromising performance. Tailored for small-to-mid-size environments, both series feature the onboard **Christie Twist** warping and blending engine, along with optional **Christie Mystique** automated camera-based alignment tools, ensuring quick and easy setup and maintenance of multi-projector systems.

Christie

Tosō Bunka Kaikan Boosts Sound System with L-Acoustics Kiva II

JAPAN: Chiba Prefecture's Tosō Bunka Kaikan opened in 1991 in Asahi. Designed by Kunio Maekawa Architects, renowned for the nearby Tokyo Bunka Kaikan and the Tokyo Metropolitan Art Museum, the cultural centre complex features a 900-seat multi-purpose Main Hall and a 300-seat Small Hall. The space hosts a wide range of audio content, from classical ensemble performances and traditional Japanese enka music, to seminars and karaoke nights for the surrounding Tosō neighbourhood.

The Main Hall's audio system was original to the venue and was being pushed beyond its capabilities. "My team and I have been discussing the need to update the hall's original sound system for a while, until about four years ago when one of the speakers began producing undesired noise," says Tosō Bunka Kaikan Head Technical Supervisor, Shunsuke Nakakoji. The ageing system lacked punch in the low frequencies and lacked clarity, especially for vocals. For live music concerts, rental systems were being used to replace the sound system, requiring a 4-tonne truck to bring in equipment.

Mr Nakakoji reported the situation to the prefecture's council in charge of the cultural centre, and discussions about a sound system upgrade began. Representatives from the council were invited to a listening demonstration where Mr Nakakoji set up an L-Acoustics system in the hall. The directors heard a vast improvement in sound quality, and an agreement was made to upgrade the system over two phases of budget allocations.

In 2022, Mr Nakakoji turned to local L-Acoustics Certified Provider distributor, Bestec Audio, to acquire a mobile system that consists of 14 L-Acoustics X12 coaxial loudspeakers and six SB18 subwoofers. Mr Nakakoji knew that, when positioned correctly, the multi-purpose point source boxes would allow the Main Hall to host community lectures and karaoke events.

This year, Mr Nakakoji acquired a permanent system, which consists of a left-right array of eight Kiva II with six SB15m subwoofers each, hung and concealed behind a screen on either side of the stage. A centre proscenium array comprises 10 Kiva II boxes and three SB15m subwoofers. In-fill for the first rows is handled by one X15 HiQ box on each side, and six 5XT coaxial speakers embedded evenly across the stage lip.
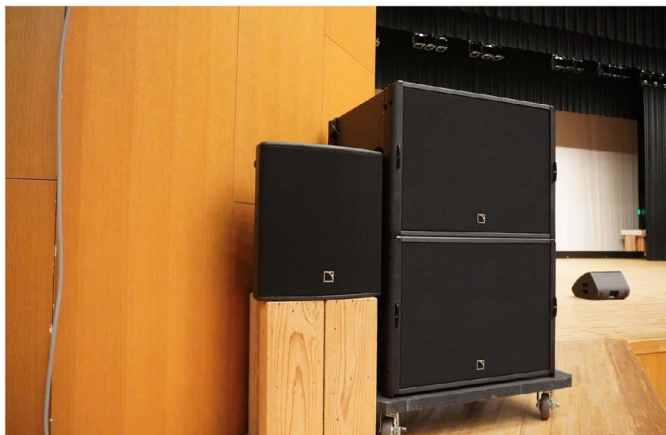
The X12 and SB18m from the first-phase purchase are regularly used as a mobile system to cover audience seats on either wing and supplement low-end definition, or for stage monitors. The entire system is driven by a total of 13 LA4X amplified controllers.

Mr Nakakoji and his team now lean on the energy efficiency and high-performance of the LA4X amplified controllers regularly. Despite the number of speakers and amplifiers increasing with the new system, audio rack real estate has reduced by a third. Using LA Network Manager, Mr Nakakoji has saved three categories of settings: Speeches, Karaoke and Full Power, allowing the technical team to easily switch to the best pre-set, depending on the day's programming.

Today, Tosō Bunka Kaikan confidently welcomes a variety of performances, and the new L-Acoustics concert sound system allows the venue to increase the number of amplified events in the calendar. "I think that promoters and audiences will spread the word about the great sound in the hall," says Mr Nakakoji. "And it's likely that this reputation will allow us to increase the number of events that we offer."

"Now, we can confidently work with event promoters on any musical programming. We can actively create and produce a diverse range of programmes, which will contribute to developing a lively cultural image for the Tosō region and its close-knit community," concludes Mr Nakakoji.

Learn more about the Chiba Prefecture Tosō Bunka Kaikan at **www.cbs.or.jp/toso**

L-Acoustics

REXKL Chooses LEA Professional Connect Series Amplifiers to Create Immersive Experiences

MALAYSIA: Kuala Lumpur is a city steeped in rich history and traditions. Originally a small hamlet of just a few houses and shops, it stands proud as the capital of Malaysia and is home to 1.8 million people. At the heart of Kuala Lumpur lies a new community and cultural hub, REXKL. Designed within what was once the legendary Rex Theatre, which twice shut down due to fires in 1972 and again in 2002, the hub opened in September 2023 as a part of a mission to rejuvenate the theater in a forgotten part of the city.

The two-story, 60,000-square-foot building features retail shops and restaurants in the basement and a picturesque bookstore and exhibition space on the upper floor. Shin Tseng and Shin Chang, the creative entrepreneurs who helped reimagine the Rex, wanted the new space to be a unique, immersive performance venue. Featuring the original theater's brick and exposed structure, it is now a modern, industrial marvel that hosts performers and exhibitors. With a desire for the space to captivate guests with vivid visuals and audio, the venue deployed **LEA Professional** amplifiers in the REXPERIENCE center, or **RXP** for short, within REXKL as part of its grand reopening and reinvention.
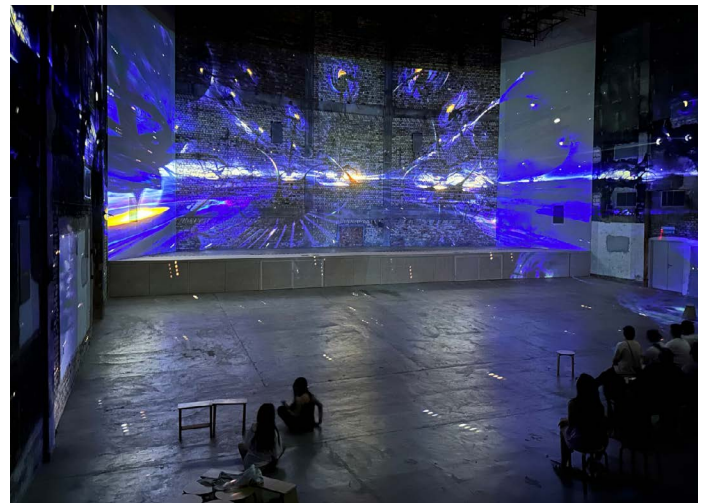
The venue management team's broad vision for immersive exhibitions meant the new RXP AV system needed to be flexible enough to meet the most demanding, highest-quality audio needs for immersive musical and visual performances, plus more basic productions, including corporate events and DJ shows. "The multidimensional nature of the events held in the RXP venue meant we needed to recommend a system that we could scale and adapt as needed," said Eugene Yeo, General Manager of **Acoustic & Lighting System** . "We've had a lot of success with LEA products and felt they were a perfect fit for RXP because they could provide the power, performance, and reliability needed." Set in a former movie theater, RXP reimagines the legacy of the Rex cinema space by bringing

in a new, cutting-edge digital art experience. As the first immersive venue in Malaysia, the venue team wanted to get the details right and spent over a year planning, working with the participating visual artists, and designing the spatial audio tracks. The immersive environment includes 18 projectors mapping visual elements on the walls and floor, while the spatial audio design required that the venue be fully modeled in 3D.

Eighteen compact two-way loudspeakers, backed by four subwoofers, are strategically located throughout the RXP to provide the spatial audio listening experience. To help meet the range of audio needs, Acoustic & Lighting System chose a combination of two of LEA Professional's **Connect Series 1504D** and five **Connect Series 704D** for the digital art experience. The 1504Ds power the subwoofers, while the 704Ds support the two-way loudspeakers. Both models include 96 kHz-capable Dante and AES67 connectivity options.

The high-power IoT-enabled four-channel 1504D provides 1,500 watts per channel into 2, 4, and 8 ohms and 70Vrms and 100Vrms. The CS1504D includes advanced DSP with 96 kHz linear phase FIR crossover filters, acoustically

transparent look ahead RMS and peak limiters, 32-bit floating-point DSP with built-in sample rate converters, and two Smart Power Bridge channels.

Conversely, each 4-channel 704D delivers 700 watts per channel. It supports high-Z (70V or 100V) and low-Z selectable by channel, giving the venue much-needed design flexibility and enough additional capacity to support future expansion efforts.

The Connect Series delivers an industry-first professional amplifier family to feature cloud connectivity, a revolutionary advancement and a significant benefit for anyone maintaining the systems. With **LEA Cloud** AV teams can remotely control and monitor the amplifiers regardless of the location or time of day. Whether from within the REXKL or on another continent, controlling the Connect Series amplifiers from afar helps teams work more efficiently, reducing travel and saving time and money.

For larger, mixed-used spaces like REXKL, LEA Professional's **SharkWare** software allows integrators to work both in offline design and online mode on a systems amplification configuration to ensure a more seamless, accessible, and flexible user experience with all LEA Professional Connect Series amplifiers. Available for both Windows and Mac, Sharkware includes features such as amplifier grouping, offline design, granular user access control levels, locked speaker tunings, and a graphical EQ. Sharkware also incorporates key features from LEA Professional's existing WebUI tool, allowing users to monitor the status of every amplifier connected to the network and the status and performance of individual channels.

In addition, the software allows users to view and adjust channel settings such as input settings, signal generator, crossover, equalizer, limiter, and load monitoring for all LEA Professional Connect Series amplifiers.

The REXKL has become a destination point for locals and a must-see spot for tourists. It's also a state-of-the-art performance center delivering the highest quality audio performance for every event. "Since opening, the "Other World" immersive experience in the RXP has really put the audio system to the test," said Brian Pickowitz, VP of Marketing at LEA Professional. "Creating an art exhibition that sparks discovery and inspiration among art lovers and bringing the venue back to life in such a unique way is incredibly meaningful and one we were proud to be part of."

Lightware Appoints Candice Siow as Regional Director for Southeast Asia

SOUTHEAST ASIA: **Lightware Visual Engineering** , a leading manufacturer of connectivity solutions for the professional integrated systems market and a pioneer in signal management, has announced the appointment of Candice Siow as Regional Director for Southeast Asia.

Based in Singapore, Candice joins Lightware with more than 15 years of sales management experience in the audio-visual industry. In her new role, she will be responsible for the company's operations in Southeast Asia and will focus on expanding Lightware's presence in the region, working in close collaboration with key stakeholders to deliver a unified corporate message and go-to-market approach.

Prior to joining Lightware, Candice spent 15 years with Kramer Electronics, most recently serving as regional sales director ASEAN. In this role, she consistently built sales revenues within the Southeast Asia region year-on-year, consolidating the company's brand presence, especially in Singapore. Previously, she also held senior sales and marketing roles within the business before promotion to regional sales director in 2022.

"I am delighted to join Lightware at a very exciting time in the company's development," commented Candice. "My goal is to build our presence in the region by working closely with our partners to deliver excellence to our users. I look forward to working with my new colleagues in the local region and as part of the wider international team."

"The recruitment of Candice marks a significant step in our regional strategy," commented Robin Enlund, President of the Greater APAC region at Lightware. "Her wealth of experience and impressive achievements in the audio-visual industry are an ideal fit for the business."

Powersoft Expands Presence in GCC Region with Dutco Tennant

From left to right: Julie Thomas (Dutco Tennant product manager), Varun Jagger (Powersoft EMEIA sales manager), Fabrizio Romano Bolzoni (Powersoft sales distribution manager), Jacob Thomas(Dutco Tennant general manager – business technology solution), Basil Varghese (Dutco Tennant applications engineer), Ramya PK (Dutco Tennant sr. key account engineer).

MIDDLE EAST: **Powersoft** is further expanding its distributor network in the GCC market by welcoming **Dutco Tennant** as its newest distributor. The appointment of Dutco Tennant will play a significant role in strengthening Powersoft's presence in the Middle East. The company will join historical Dubai-based distributor, Pro Lab, and Saudi Arabia based aDawliah.

Established four decades ago, Dutco Tennant LLC has built a strong reputation in providing a wide range of products and services, providing audio, video and UCC (unified communications and collaboration) solutions in the GCC region.

"We pick and choose our partners carefully after extensive research and Powersoft will play a vital role in our audio portfolio," states Julie Thomas, product manager at Dutco Tennant. "Powersoft is highly respected in the industry for its reliability and is an incredibly valuable addition to any portfolio of audio-focused brands. Incorporating Powersoft's solutions in our portfolio enhances our credibility as a provider of professional audio solutions," says Jacob Thomas, General Manager – business technology solutions of Dutco Tennant.

Dutco Tennant, based in Dubai, will focus on expanding Powersoft's regional presence in the installation market, with an emphasis on providing high-quality solutions across various areas, spanning from corporate, retail and venue centres to the hospitality industry. Additionally, the distributor will address the rising demand for clean energy solutions: "Powersoft's power conversion technology can significantly improve the efficiency of delivering processed and amplified audio to the end user, aligning with the industry's growing interest in sustainable practices," says Thomas.

"Through our partnership with Dutco Tennant, Powersoft fortifies its commitment to excellence in the GCC market," says Varun Jagger, EMEIA Sales Manager of Powersoft.

"Dutco Tennant's reputation for excellence in audio solutions aligns with our mission to make inspiring and innovative products while helping customers be more successful, and we are very pleased to welcome the company on board."

Q-SYS and Lenovo Collaborate to Deliver UC Compute Bundle Certified for Microsoft Teams

INTERNATIONAL: **Q-SYS** a division of QSC LLC, is delighted to announce the **Q-SYS UC Compute Bundle for Microsoft Teams Rooms** , now Certified for Microsoft Teams. This bundle streamlines the design, procurement and deployment of solutions for high-impact spaces.

Q-SYS is a software-based audio, video and control platform that delivers a holistic user experience in high-impact spaces. With features like room automation, automatic multi-camera switching, HDMI video distribution, and more, Q-SYS enables elevated collaboration experiences based on the needs of the space. In collaboration with **Lenovo** Q-SYS delivers the UC Compute Bundle which features the Lenovo ThinkSmart Core and ThinkSmart Controller for Teams Rooms. Pairing the UC Compute Bundle with the most comprehensive portfolio

of Certified for Teams Q-SYS devices allows systems integrators to purpose-build a complete Microsoft Teams Rooms solution to the needs of any space. Further, by installing the "Q-SYS Control for Microsoft Teams Rooms" application users can add room environmental controls alongside their Microsoft Teams controls on the same pane of glass.

"We're delighted to introduce the UC Compute Bundle in collaboration with Lenovo, who is known for their high-quality compute solutions," says Josh Arnold, Director, Collaboration Application Strategy, Q-SYS. "This solution simplifies the process of scaling Microsoft Teams Rooms into high-impact spaces."
"The UC Compute Bundle leverages Lenovo's ThinkSmart Core and ThinkSmart Controller for Teams Rooms to deliver tailored Microsoft Teams Rooms solutions for any collaboration space," says Shannon MacKay, General Manager of Worldwide Smart Collaboration Business, Lenovo. "Now, customers will be able to enhance their workspace experiences and drive a new level of productivity and connectivity."
For more information on the Q-SYS UC Compute Bundle, visit: **qsys.com/uc-compute-bundle**

QSC LLC

Riedel Adapts APAC Business Structure to Accommodate Further Growth
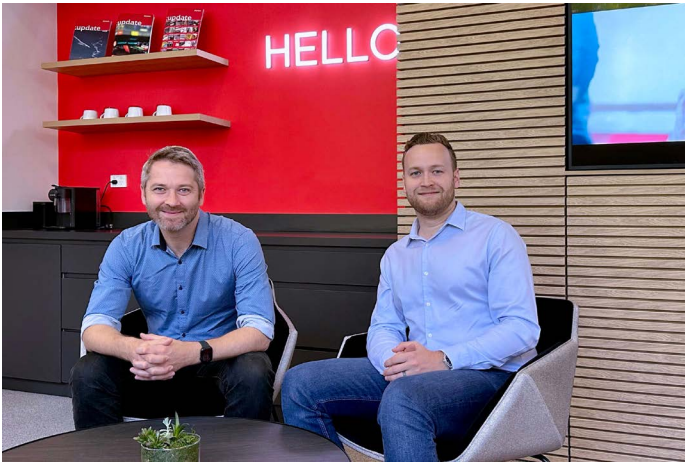
APAC: **Riedel Communications** today announced an expansion of its leadership in APAC to better align with market needs and position itself for continued success in 2024 and years to come. With significant growth in sales and team size, the company will divide the APAC region into two separate teams — Asia and Oceania — to reflect its commitment to a full-service presence in Australia and enhance customer relationships through more focused and direct sales and support services.

Effective from October 2023, Chris Johnson has been promoted to the role of Director Oceania, overseeing Australia, New Zealand, and surrounding countries. With almost two decades of experience in broadcast and live events, Johnson has been instrumental in leading the region to new heights since joining Riedel in 2016.

"We're really proud of what we've been able to accomplish so far in Australia and New

Zealand," said Johnson. "Our success is the result of a great team and our decision as a company to work locally and be close to our customers. We believe that close customer relationships are critical, especially as the broadcast and events industries are undergoing so much technological evolution. Having truly local technical support, service, and operations allows us to further improve our full-service offering across both our Product and Managed Technology divisions throughout Oceania."

To bolster the Product Division business in the region, Erik Miehs will assume the role of Regional Sales Director, starting Jan. 1, 2024. With close to a decade of experience at Riedel, Miehs brings a wealth of technical and managerial knowledge to his new position, having previously served as the Europe system consulting manager and most recently as sales manager ANZ.

"I'm proud to be playing a part in writing the next chapter in Riedel's strong 15-year history in Australia and New Zealand," said Miehs. "I'm thrilled to take on the new role and continue our team's expansion in the Oceania region."

Guillaume Mauffrey will continue to lead Riedel's Asian business units as sales director Asia with an increased focus on developing major markets such as China, Japan, and Southeast Asia. Here, he can rely on a strong management team of regional general managers, with Peter Chen (China), Vincent Lambert (Japan), and Marion Dimayuga (Southeast Asia).

"Our new organizational structure reflects the massive growth we've seen in both Asia and Oceania," said Daniel Url, CCO, Product Division.

EAW Concocts an Impressive Soundscape at Molecule, Agra

INDIA: Situated on the banks of the Yamuna River, Agra weaves together the tapestry of its storied past with the dynamic pulse of contemporary life, as the city offers a multitude of experiences that unfolds as a harmonious blend where ancient echoes seamlessly coexist with the rhythm of present-day vitality.

In the heart of this iconic city lies Molecule – a venue that is famed for offering a delectable dining experience that has impressed not just tourists and visitors, but also residents, with its unique blend of North Indian cuisine and its charming ambience. The restaurant is also rated highly as an ideal spot to socialize; with the plush space offering the perfect setting to host a wide range of events – ranging from private gatherings to full-blown parties and celebrations. And a key reason for this (apart from the fabulous dining options) is the bespoke aural experience that adorns the venue.

Amplifying the elegant ambiance at Molecule is a leading-edge audio architecture from Eastern Acoustic Works (EAW), that has been expertly designed and installed by Noida-based reputed solutions provider Pink Noise Professionals (PNP), who also happen to be the authorised distribution partners for EAW products in India.

The heart of Molecule's auditory virtue features a thoughtfully crafted loudspeaker system from EAW that spotlights the use of multiple units of the RS121 two-way self-powered loudspeakers deployed strategically across the venue to envelope the entire space with unmatched musical clarity and tonal accuracy; while multiple units of the RS118 self-powered subwoofers optimizes the aural experience with impactful low-frequency output.

Renowned for their expertise in audio installations, Pink Noise Professionals selected the RS118 and RS121 for their unparalleled sonic engineering and ability to seamlessly blend into Molecule's dynamic space; with the 'all-active' nature of the audio system extending further reassurances of hassle-free operation and maintenance. Team PNP also collaborated closely with the team at Impressa Controls to commission meticulous fine-tuning of the system to ensure that the sonic experience didn't just meet expectations, but exceeded them across every key performance metric. And the result is an immersive realm of sonic brilliance which steams from the seamless fusion of technology and artistry that elevates the overall guest-experience for all who enter through the doors of Molecule Agra.

Pink Noise Professionals

China's Qilihe Stadium Unveils a Sonic Renaissance with Beta Three

CHINA: The Qilihe Stadium in Lanzhou, Gansu, China was built as a multi-purpose stadium in 1957 that primarily served the purpose of hosting football matches, while acting as the home stadium for Gansu Tianma F.C. until the team moved to Ningbo in 2003. Before being demolished in 2017, the stadium held a capacity of 35,000 attendees as it played host to several high-profile events that have not just attracted consistent national attention but also played a prominent role in the development of subsequent sports venues in Gansu.

Retaining its original name and glory, the newly constructed stadium opened its gates this year with a capacity of 24,000 attendees, while notably boasting a plethora of modern amenities – most prominent of which includes a remarkable audio transformation that was designed and commissioned by reputed Indian manufacturer Beta Three.

Inputs from the company affirms that the design and integration team approached the project with the intention of achieving a consistent and high-quality aural experience across every seat within the stadium. And to do so, they first ran multiple acoustic simulations in EASE – one of the industry's leading softwares for acoustic system design – as this move afforded a clear insight into the kind of loudspeakers and deployment configurations needed to secure the desired results.

Armed with the results of the EASE simulations, in addition to key information relating to the load-bearing limitations of the steel-structures (from where the loudspeakers would be deployed); the design and integration team decided to adopt a 'de-centralized' sound reinforcement solution that would allow the

team to tailor the loudspeaker distribution precisely according to the needs of the individual sections housed within the stadium.

And as it stands today; Qilihe Stadium's newly elevated sonic experience primarily spotlights the extensive utilization of β3's S1200N two-way full range 12" loudspeakers and DT series multi-channel professional amplifiers; the harmonious synergy of which allows the audience to experience a full range of ultra-clear listening pleasure.

The west grandstand of the stadium features the deployment of 14 groups of the S1200N with 2 units of the loudspeakers comprising one group, hoisted under the horse track; with a similar configuration of loudspeaker deployment is noted at the east grandstand area as well. Additionally, the design and integration team have also outfitted 8 more groups of the S1200N speakers to act as additional venue sound reinforcement at the west end – thereby bringing the grand total of the S1200N loudspeaker deployment at the Qilihe Stadium to a whopping 72 units. Furthermore, the rostrum section of the stadium which is primarily used for the presentation ceremonies, is reinforced by four units of the β3 T15 two-way full range 15" loudspeakers in a manner that allows for easy portability and mobility.

According to the design and integration team, "The β3 S1200N proved to be perfect for the job as they're compact, easy to install, sports a precise acoustic design, and offers outstanding sound performance."

At the same time, the team also affirms that the exquisite design of the DT series multi-channel professional power amplifiers helps optimize the signal path, while significantly reducing signal distortion, and decreasing signal noise and cross-channel interference to the greatest extent possible – thereby significantly enhancing sound clarity. Furthermore, since the sequencer within the DT Series amps supports multiple protocols and multiple working modes, along with cross-gateway and cross-routing communication control, thereby allowing the amps to be easily configured in the main control room through the supporting PC software; all of which makes operation and control infinitely easier.

Team β3 affirm that they've received numerous words of appreciation and praise for not just the quality of the sound experience that they've coalesced at the Qilihe Stadium, but also for the level of service and dedication that they've maintained throughout the span of the project; as a member of the team ecstatically comments, "In the symphony of sports and technology, Qilihe Stadium stands as a testament to the seamless integration of legacy and innovation. Our clients are positively impressed with the performance of their newly installed β3 sound system at the stadium, and they've been extremely appreciative about the products as well as our service. We're proud to have had the opportunity to be part of such a prestigious project and witness the iconic Qilihe Stadium proudly entering into a new era, where the marriage of cutting-edge technology and architectural prowess will create unforgettable experiences for every spectator."

Beta3pro

Zouk Premiers in Tokyo with a Captivating Soundscape from Void Acoustics

JAPAN: Nestled in the bustling streets of Ginza and located within Granbell Hotel Ginza's new commercial complex, Zouk Tokyo joins the original Zouk Singapore and subsequent venues in Kuala Lumpur and Genting in Hong Kong, as the latest venue in the illustrious nightclub chain. And as the chain's first entry into the bustling Japanese nightlife market, Zouk Tokyo undoubtedly creates quite the impression; as the venue lives up to its promise of offering a nightlife experience like no other.

Spread across two plush basement floors, one of which has a lounge space, premium bar and VIP seating, while the floor beneath contains an impressive dance hall and stage – the space, in total, offers a 600m2 capacity, capable of holding 1,000 people. And while the lavish space, in itself, is awe-inspiring no doubt – what makes Zouk Tokyo truly stand out is the seamless confluence of state-of-the-art technologies with the venue's bespoke architectural design. The best example of this can be seen in the fact that the black and gold interior design contrasts with a lack of pillars, a sprawling atrium, and a 5m-wide lighting system called the Mothership which has been custom-created by a specialist lighting team from Barcelona, Spain.

Further enhancing the already visually-stunning ambience at Zouk Tokyo is its superlative soundscape, courtesy of a masterfully crafted comprehensive sound system from Void Acoustics that has been skilfully integrated by eastaudio – a Tokyo Sound System Laboratory member with a premier sound system production team that is behindmany of Japan's most famous nightclubs.

Eastaudio's Satoru Tocci Tochibori affords an insight into the design and integration process, as he explains, "Years of planning have gone into Zouk Tokyo, and we were asked to accommodate a variety of function types from the hotel group such as nightlife, corporate events and live shows. This meant carefully blending sound across multiple

environments, tight spaces, unusual angles and a desire for the Void system to subtly match the overall look and feel of Zouk Tokyo. We paid particular attention to balancing the sound pressure and power within the main floor and the rest of the corridors. We're really proud of the outcome."

A custom-coloured Incubus System from Void Acoustics graces the lower floor as the primary PA solution, with the Air Array three-way bi-amped sculpted loudspeaker arrays along with 4 units of the hyperfold subwoofers and 2 units of the incubus subwoofers being outfitted at the main DJ performance stage. Multiple numbers of the aesthetically captivating Tri Motion series loudspeakers have been also deployed as additional reinforcement. Furthermore, multiple loudspeakers from Void Acoustics' portfolio comprising the jet-engine inspired design

Airten V3, the sleek yet powerful Air 8, and the robust high-performance compact Venu 10 V2 and Venu 8 V2, have been deployed as fill reinforcement across various sections of Zouk Tokyo; with impactful low frequency fidelity extended through the nimble yet powerful VENU 215 V2 subwoofers. A high-quality sonic experience has been assured in common areas like the washrooms as well, thanks to Void Acoutics' contractor friendly Cirrus 6.1 discreet two-way, full range passive ceiling speakers. And confidently powering the entire loudspeaker setup at Zouk Tokyo are an assortment of power amplifiers from Void Acoustic's lightweight, versatile and power-efficient Bias Series.

"This was the first time we'd dealt with a full Void system, and it has provided us with a system worthy of Zouk Tokyo," says Jun-ichi Arai, Technical Chief at Zouk Tokyo, as he proceeds to praise the new system and the skilled team of experts behind bringing together a truly 'captivating' soundscape. He exclaims, "The main objective of this installation was to ensure audiences could still have conversations even with high-pressure sound and Void has helped us achieve this, making our venue the ideal space. Void is highly regarded by our DJs. The sound is almost too good to be true – the highs and mids are crisp and clean and the Tokyo Sound System is perfectly planned and tuned."

Void Acoustics

d&b En-Bridge Software takes Soundscape Interoperability with 3rd Party Systems to the Next Level

d&b audiotechnik has announced the launch of En-Bridge, a new software tool for the Soundscape ecosystem. With this new software, d&b streamlines the interoperability between the DS100 signal engine and leading third-party systems.

En-Bridge is a standalone software available for Windows and MacOS that provides OSC bridging and third-party protocol translation for remote control of Soundscape parameters on the DS100 signal engine. It allows BlackTrax tracking systems to be used for automatic object positioning on a Soundscape system, including their latest BT-1 system, by translating the BlackTrax RTTrPM protocol into DS100 OSC commands and providing additional mapping functionality.

For greater efficiency, En-Bridge also delivers a more consistent workflow for Soundscape console control with DiGiCo and SSL consoles, including support for bi-directional communication. This OSC bridging functionality can also be used for generic OSC controllers, allowing any connected controllers to communicate with two DS100s - allowing third-party integration and remote control to be used in redundant DS100 setups for Soundscape.
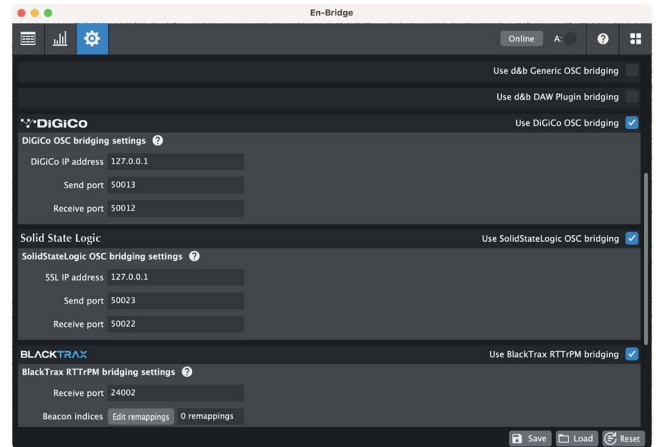
The En-Bridge software provides users with an intuitive, streamlined interface for establishing third-party interoperability for their Soundscape application, including communication monitoring, which allows users to monitor incoming data from third-party devices for troubleshooting purposes.

According to Al McKinna, Vice President immersive at d&b, interoperability between systems is vital to the design and creation of an immersive experience. As a flexible and intuitive new addition to the Soundscape ecosystem, En-Bridge extends the functionality of the DS100, thereby making it very easy to integrate third-party systems and support multiple device setups for redundancy.

Christian Ahrens, R&D application software development at d&b audiotechnik adds that Soundscape users will appreciate En-Bridge's ability to have multiple applications within one software tool, and moreover within a consistent

user interface, this makes it perfect for use in collaborative production workflows with distributed tasks and changing responsibilities. With these advanced OSC communication and bridging options for third-party devices, En-

Bridge takes the Soundscape interoperability concept to the next level, thereby aiming to make life much easier for its users.
En-Bridge is available as a free download from **https://www.dbsoundscape.com/global/en/ interoperability/**

LynTec Announces XRL Xtend Relay Module for Lighting

LynTec, a leading manufacturer of innovative electrical power control solutions for professional audio, video, and lighting (AVL) systems, today announced the latest addition to its Xtend Power Control (XPC) Series relay modules, the Xtend Relay Module for Lighting (XRL). Based on the same design as the 20-amp XRM Remote Relay Module, the XRL adds Truecon connectivity to enable the XPC Series to work with non-Edison connectors. It extends lighting power control across a venue easily and affordably, with up to 20 amps of power and DMX in/out.

According to Mark Bishop, president of LynTec, the XRM modules were introduced to offer lighting and production professionals a way to provide power control to their lighting setup anywhere in the venue — much more affordably. The XRL is Truecon-ready, further streamlining LED lighting installations.

LynTec's stand-alone XRL relay module comes in a 20-amp cube enclosure with two Truecon outputs, each independently controlled by its own electrical relay. The module can be placed anywhere imaginable: on rigging, behind line

arrays, or anywhere equipment is located. Each module contains two Truecon connections, a power plug, and an Ethernet port. Each Truecon can be turned off independently. Integration is simple and straightforward, by simply connecting the module to a power source and the network, and then plugging in the equipment that needs power control. Allowing users to set up and customize the protocol for each device, LynTec's IP-based GUI provides an integrated and affordable approach to whole-venue power control.

LynTec

G&D Presents the Latest Generation PersonalWorkplace-Controller

G&D's latest generation PersonalWorkplace-Controller.

The PersonalWorkplace-Controller is a fully integrated solution that supports the smooth operation of complex activities and processes in control rooms or control centres. More and more image and video signals are now entering the control room, where they need to be monitored, controlled, and managed.

Employees as well as teams must process a lot of visual information, analyse information and coordinate activities. This is often carried out on many screens at different places in the room. With the all-rounder by the German manufacturer, workflows and processes can be conveniently operated from one monitor by flexibly displaying multiple sources. The latest generation of the PersonalWorkplace-Controller will be launched at the beginning of 2024. The system captures and transmits up to 27 image sources to up to four 5K displays or other screen configurations as well as additional IP streams. Each source can be dynamically scaled, repositioned, and controlled.

Individual Configuration Optimizes Workflows

Instead of using a separate monitor for each process, the PersonalWorkplace-Controller captures and transmits multiple video signals and streams to a larger monitor or multiple displays. Working areas can be flexibly configured, scaled, and arranged using different computer sources and video streams. The image sources can be individually overlapped, cropped, or protected against each other without being restricted to the conventional four- or six-image layout. Users can easily switch between saved pre-sets making the system quick and easy to use even with different application or by different employees.

In addition to the clear visualisation on one monitor, the PersonalWorkplace-Controller also enables integrated and flexible access to all required data in real time. The new range offers an optimal user experience with supported resolutions of up to 5K @ 60Hz. Multiple screens of the same resolution can be combined as extended monitors to create large displays.

Especially when setting up ergonomic workplaces and monitoring areas on larger screens, operating several computers from a single console greatly facilitates the work process. The displays can be used in landscape or portrait format or in combination.

One Single Solution, Countless Possibilities from G&D

The different variants of the PersonalWorkplace-Controller offer unlimited potential for individual
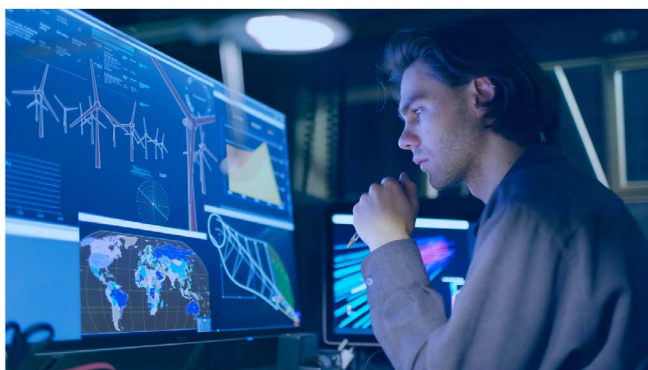
One of the many possible applications of the PersonalWorkplace-Controller.

fiber. With the new models, which are equipped with the "MAX" add-on, the application is no longer restricted by the physical limits of local cabling.

Furthermore, the all-rounder stands out with its robust design and redundant critical components and can therefore be used wherever mission-critical processes need to be monitored and controlled.

design solutions and can be deployed in a variety of ways for different application areas. The system provides invaluable benefits both at individual operator consoles and in the context of a video wall. In addition to the optimized product variants, the manufacturer is also launching a new input card system that enables the seamless integration of remote sources via

Control room specialist G&D will be demonstrating the new PersonalWorkplace-Controller generation of live at Integrated Systems Europe (ISE) in Barcelona from January 30 to February 2, 2024. Interested readers can find further information at: **https://www.gdsys.com/en-us/products/video-processing**

Guntermann & Drunck GmbH

New d&b En-Snap Software Enables Positioning and Editing of Soundscape Objects

En-Snap, the **d&b Soundscape** cue automation and show control software provided in collaboration by d&b and Gareth Owen Sound
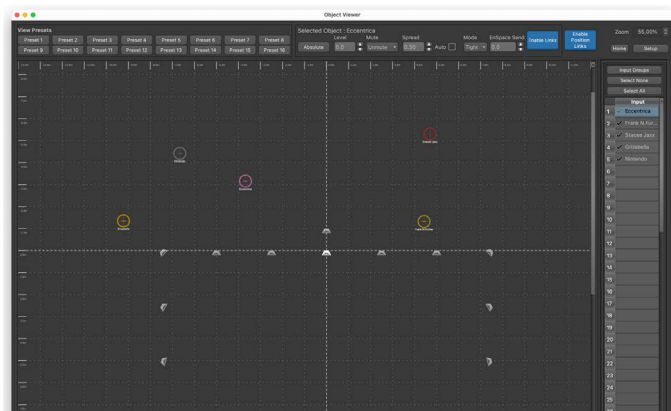
(GOS), has been given a major upgrade and is now available to all Soundscape users as En-Snap V3.

In addition to a range of new cue automation features and significant show control workflow improvements, the update adds the ability to use En-Snap as a standalone sound object control user interface for FoH for all types of immersive live stage performances using a d&b Soundscape system.

d&b

The all-new Object Viewer allows users to monitor and control the positions of sound objects directly in En-Snap, within an intuitive workflow that supports positioning and parameter editing for a single object or group selections in absolute and relative editing modes. The ability to organize the visibility of objects, background images, and view sections in user-defined "view pre-sets," combined with options to colour objects and assign names, ensures maximum customisation. Input groups for quickly selecting multiple objects for mass editing and object linking with multiple mirror modes for group positioning ensure efficiency within the streamlined, user-centric workflow of the new Object Viewer, which is designed (from scratch) for object-based content creation in immersive live applications.

En-Snap V3 also improves the Cue & Show automation functionality with the integration of "(Soundscape) Coordinate Mapping" which supports relative object positioning to one of four mapping areas and the ability to link DS100 scenes stored on the device within any En-Snap cue. A new Inspector section allows editing of one or more sound objects directly in the En-Snap cue section.

This is complemented by a new category of innovative controls integrated into En-Snap V3: "Position Dependent Spread," which allows the automatic adjustment of object spreading based on object position, and "Tracking System Management," which handles OSC position data sent from third-party tracking systems, including cue-based assignment of tracking tags to sound objects.

Since En-Snap's introduction, sound design firm, GOS has tried to make En-Snap an innovative yet intuitive interface for d&b's DS100 Soundscape signal engine. With V3, GOS has taken the control capabilities a big step further as the software now allows En-Scene positions and parameters to be viewed and edited directly within En-Snap. Furthermore, metering has been integrated directly into every object right on the object viewer screen making mixing and editing far more fluid. GOS has been using V3 in its theatre shows both in London and on Broadway for some time, and to date, it has worked flawlessly.

According to Georg Stummer, Manager Advanced Systems, d&b audiotechnik, En-Snap V3 provides Soundscape users with an easy-to-use control solution for their most creative projects. The new software version not only gives them a more time-efficient and coherent workflow, but also a comprehensive feature set that is innovative and inspiring.

En-Snap supports single and multiple DS100 setups and is available for MacOS and Windows. En-Snap V3 is a multi-window application with separate windows for Cue automation and Object Viewer and provides compatibility with V1 licenses and show files. To take advantage of En-Snap V3's many features, the software must be connected to a DS100 Signal Engine.

d&b audiotechnik

Extron's Powerful New USB-C Pro AV Dock for Unified Communications Spaces Now Shipping

is always looking for innovative ways to streamline the meeting experience for end users since USB cameras, microphones, and other peripheral devices are becoming more common in small huddle spaces. The UCS 601 Pro 4K USB-C Dock leverages the full power of USB-C connections by providing a single connection for video, USB data, and power for USB-C laptops, thereby taking small collaboration spaces with local and remote users to a new level.

In the evolving landscape of collaboration spaces, the integration of USB peripherals, including cameras and microphones, has become indispensable for effective meetings in UC spaces. The UCS 601 Pro 4K USB-C dock is now available to adeptly connect USB-C laptops to HDMI displays, supporting up to three USB devices, and ensuring high data rates of up to USB 10 Gbps. The HDMI output is engineered to support resolutions up to 4K, while the USB-C input efficiently handles video/audio, USB data, and even charges the user's laptop with its integrated 60-watt power supply. Perfectly tailored for platforms such as Teams, Zoom, and other UC applications, the UCS 601 4K USB-C Dock is the optimal Pro AV docking solution for environments that require minimal AV hardware yet desire maximum functionality.

According to Casey Hall, chief marketing officer for Extron, the ProAV solution-provider

The user-friendly UCS 601 offers intuitive collaboration in UC spaces, including simple rooms without a control system. It will automatically connect laptops to the room's display and USB cameras or other room devices. As laptops are disconnected, the display will automatically go into standby mode, offering an automated approach to energy savings. Its compact one-quarter rack width 1" (2.5 cm) high metal enclosure makes it easy to mount within furniture or under a table using the included ZipClip 200 mounting accessory or in an equipment rack using an optional rack mounting shelf. The UCS 601 Pro 4K USB C Dock is ideal for Teams, Zoom, or other UC meetings in huddle and collaboration spaces wherever a full-featured Pro AV docking solution is needed.

For more information about the UCS 601, **click here**

Extron

Sennheiser TeamConnect Ceiling Medium Now Supported by Crestron Automate VX

Valued strategic partner integrates Sennheiser's latest ceiling microphone into multi-camera switching solution, driving more equitable meeting experiences

Sennheiser, the first choice for advanced audio technology that makes collaboration and learning easier, is pleased to announce that its TeamConnect Medium (TCC M) ceiling microphone for mid-sized meeting rooms and lecture or collaboration spaces has been integrated into the Crestron Automate VX voice-activated speaker tracking solution.

Automate VX technology enables a high-quality meeting experience with production-style cuts across a variety of applications including corporate boardrooms, multipurpose spaces, and training rooms. The combination of TCC M and Automate VX technology leads to more inclusive meetings, especially for mid-sized

collaboration spaces and lecture halls. High-quality audio and intelligent video technologies are vital to supporting a critical and dynamic collaboration experience.

With the Automate VX solution, multiple cameras around the room work together to track active speakers, while removing distractions that are typically visible when a camera pans, tilts, or zooms. As the conversation moves around the room, TCC M's patented automatic dynamic beamforming technology ensures the speakers are continuously being heard.

With the integration of the complete Sennheiser TeamConnect Ceiling Family into Crestron's Automate VX technology and the Intelligent

Video Designer software, integrators can now streamline the setup of larger systems, making the process more efficient and time effective.

"This exciting integration between Sennheiser's TeamConnect Ceiling Medium and Crestron's Automate VX brings optimum equity to meeting participants in meeting rooms, lecture halls, and collaboration spaces," said **Bob Bavolacco, Director of Technology partnerships for Crestron**. "It provides a premium Sennheiser audio experience coupled with the unparalleled Crestron Automate VX multi-camera switching technology."

Launched earlier this year, TCC M delivers all the innovation and features of the award-winning **TeamConnect Ceiling 2 (TCC 2)** to a new segment of the meeting space market. With a coverage area of up to 40 m², customers can now bring the power of TCC 2 to their mid-sized meeting space, with a sleek design and at an attractive price-point.

The TCC M offers the same ceiling installation options as the TCC 2, but in a round shape. It can either be surface-mounted, suspended, or flush-mounted, allowing for cable-free tables and flexible furniture arrangement.

"This integration with Creston's Automate VX is a further example of the flexibility of the TCC M, a member of the TeamConnect Family Solutions," said **Charlie Jones, Global Alliance & Partnership Manager at Sennheiser**. "It also demonstrates our commitment to working with our partners to deliver solutions that create inclusive and productive collaboration experiences, whether participants are in the room or joining remotely."

For more information about Creston's Automate VX solution, visit **https://www.crestron.com/Products/Featured-Solutions/Automate-VX.**

To learn more about Sennheiser's TCC M and the complete TeamConnect Ceiling Solutions, go to **https://www.sennheiser.com/en-us/product-families/teamconnect-family**

TRENDS AND
OPPORTUNITIES

Where will the AV industry find its most promising opportunities in 2024? We've curated insights from key players in the Asian market to gain a comprehensive perspective. From the collective input, a unanimous consensus emerges—AI, AR, VR, and immersive experiences are poised to spearhead the landscape of opportunities in the coming year.

**Abdul Waheed
Managing Director
EYTE Technologies
India**

To Grow Industry Needs to Unlearn, Relearn and Adapt

The realm of technology is continually evolving, progressing at an unprecedented rate. Those engaged in technology must remain agile, embracing and adapting to these rapid changes, recognizing that change itself is a fundamental constant in the universe.

In the domain of Audio-Visual (AV) technology, growth is accelerating. Digitalization, hybrid work models, collaborative efforts, the convergence of AV and IT, and client demands for Enhanced Low Voltage (ELV) services within a unified experience are among the challenges confronting professionals in the post-COVID era.

Anticipating and preparing for these challenges is imperative, as future hurdles will likely be equally demanding, if not more so. Encouragingly, modern workspace designs are increasingly reliant on cutting-edge technology.

As the new generation assumes decision-making roles within organizations, their decisions emphasise the integration of high-end technology to elevate productivity. They advocate for systematic and logical work methodologies that enhance efficiency.

Contemporary office layouts reflect a trend toward more collaborative spaces, increased meeting facilities, Unified Communications (UC), and the rapid deployment of user-friendly technology. Staying ahead in this competitive landscape necessitates a willingness to unlearn, relearn, and continuously acquire new skills, adapting to evolving strategies.

Therefore, the upcoming year presents an opportunity for personalized growth and adaptability in this ever-evolving technological landscape.

Tanadej S'prayoon
CTS-D, CTS-I, MM,
Principal Designer
Protime Business Co.,
Ltd., Thailand

Immersive Experiences will Grow in Stature

2024 will be an exciting year for sound and visual-related industry since there is an effect of the "New Normal" ways of living post-Covid. All businesses are fully back to their normal operation, although micro-economic health still varies from business to business, and industry to industry. However, speaking as a veteran in the local AV industry, audiovisual companies in Thailand seem to be doing just fine. Lots of activities, and lots of businesses are there for anyone who is adaptive to changes and the major trends – AI-aided contents and immersive experiences.

Computer-Aided Design has resulted in the creation of AutoCAD program, it seems that Artificial Intelligence-Aided Design (AIAD) is in the next line-up. AI-created sound and human-voice re-creation are creating a virtual reality, in which, it is built upon the internet-world, shared among people through the chaotic social media world, competing against friends on gaming platform, publicised by Facebook's algorithms and such. With all these technological elements made available and accessible to the majority of the public, at the very least in the major cities around the world, a manifestation of AV business is everywhere.

Immersive experience will be the new "thing", from art-installation, concerts, shows, game-casting, golf-simulation, restaurants, etc. Everyone is free to choose their choice of activities and to immerse him/herself in the moment through all five(5) senses – sight, smell, sound, taste, and touch. Speaking of which, any AV business that is adaptive to changes, loves progress and development, will surely be part of the virtual scene.

**Rudi Hidayat
CEO, V2 Indonesia
Indonesia**

AI, AR, XR and VP Show Strong Promise in Indonesia

In terms of the technology landscape we are witnessing several significant trends. In the realm of LED display technology, we can observe a growing demand in three distinct categories: modular LEDs (the economical choice), All-in-One LEDs (AIO) for seamless integration, and Chip-on-Board (COB) technology for enhanced performance. Moreover, there is a notable shift in the demand for interactive collaboration boards, with a particular focus on replacing traditional projectors. These boards range in size from 65 inches to 98 inches, catering to diverse professional needs. In the realm of Digital Out-of-Home (DOOH) advertising, the latest game-changing trend revolves around anamorphic 3D content. This innovation has the potential to revolutionize the advertising sector, offering captivating and immersive experiences for consumers.

As far as market trends are concerned, in Indonesia, the market has shown a pronounced focus on artificial intelligence (AI) since the establishment of ChatGPT. One noteworthy development is the creation of virtual human interfaces for the hospitality industry. These digital receptionists seamlessly integrate with digital signage systems, enhancing the guest experience. Furthermore, we are witnessing an upward trend in various sectors such as museums, galleries, and corporate and government spaces. These sectors are increasingly adopting technology-driven solutions to replace traditional methods. This shift involves the incorporation of cutting-edge technologies like sensors, augmented reality (AR), and motion capture, providing immersive and interactive experiences.

Additionally, in the realm of content production, Indonesian professionals are demonstrating a growing confidence in utilizing extended reality (XR) and virtual production (VP) technologies for film, advertising, and promotional content creation. These technologies are reshaping the landscape of content production and contributing to the industry's evolution."

With regards to technology disruptions, the adoption of cloud systems has emerged as a crucial communication channel for content management systems (CMS), applications, and software. This technology not only streamlines operations but also facilitates scalability and accessibility. Moreover, there's a notable innovation in the form of cloud-based teleporter holograms, which are redefining communication experiences. These holographic solutions leverage cloud infrastructure to enable real-time, immersive interactions, transforming the way we connect. Furthermore, the integration of robotics and automation is making significant inroads into the audio-visual business sector. This digital transformation is seamlessly blending automation technologies with audio-visual solutions, enhancing efficiency and user experiences.

**Finson Lam
Managing Director
BAP TECHNOLOGY
CONSULTANTS LTD.,
Hong Kong**

Technology Trends Offer AV Industry Increased Opportunities

The audiovisual industry is ever-evolving, driven by technological advancements and changing demands. As we enter 2024, there are a number of AV trends in audiovisual technology to keep an eye on.

1. Advancements in Display Technology: The AV industry is likely to see continued advancements in display technology, such as the development of higher-resolution displays (e.g., 8K and beyond), flexible and transparent displays, and improved colour accuracy. These advancements will enhance the visual experience and enable new possibilities in various AV applications.

2. Augmented (AR) and Virtual Reality (VR): One of the significant trends shaping the audiovisual industry is the demand for more immersive experiences. Technologies like AR & VR have been gaining momentum and are expected to continue doing so in 2024 and beyond, especially in educational market. It provides a highly immersive and interactive environment that simulates real-world scenarios, which enhances learning by allowing students to gain hands-on experience and apply theoretical knowledge in practical situations. The immersive nature stimulates multiple senses, making the educational experience more memorable and impactful. This can lead to improved knowledge retention and understanding of complex concepts.

3. Artificial Intelligence (AI): AI is a transformative force in many industries, and the audio-visual sector is no exception. It can be utilized for various purposes, including image and speech recognition, content analysis, and intelligent automation of AV systems. This integration can lead to improved user experiences, simplified control interfaces, and enhanced operational efficiency.

4. Increased Demand for Collaboration and Communication Solutions: With the rise of remote work and virtual collaboration, there will likely be an increased demand for AV solutions that facilitate seamless communication and collaboration. This includes video conferencing systems, interactive displays, wireless presentation technologies, and cloud-based collaboration platforms.

5. Rise of Green AV Design: As sustainability and energy efficiency become a more significant concern, there is a growing emphasis on energy-efficient AV solutions. AV systems will incorporate intelligent control systems for optimizing energy usage, and incorporating natural lighting and ventilation designs to reduce reliance on artificial lighting and cooling. This includes technologies that automatically adjust power settings based on usage patterns, ambient lighting conditions, and scheduling. Energy-saving modes, motion sensors, and smart power distribution will be implemented to reduce power consumption during idle periods.

CK Lum
Managing Director
Hitecindo Kharisma
(M) Sdn Bhd, Malaysia

Navigating Transformations: The Evolution of the AV Market in Malaysia

As we reflect on nearly four years since the emergence of COVID-19, it's undeniable that the pandemic has reshaped the world in unprecedented ways. Within this transformative landscape, the impact on the Audio-visual (AV) systems market in Malaysia has been particularly noteworthy.

Adapting to Change: Shifts in AV Trends Post-2022: For HIKA, a key player in the AV industry, the pivotal changes began to emerge in early 2022, coinciding with the gradual return of the general working crowd to physical office spaces. A significant trend that emerged was the heightened need for online and hybrid work/learning facilities. Unlike the pre-pandemic era when video and audio conferencing were often an afterthought for local customers, these capabilities became essential.

Observations indicate that customers increasingly favoured simpler all-in-one solutions. These solutions needed to be functional, easily integrated as upgrades to existing AV equipment, and economically viable.

This marked a departure from the previous norm and underscored the evolving priorities in the post-pandemic AV landscape.

Anticipating Trends for 2024: Continuity and Innovation: Looking ahead to 2024, HIKA envisions a continuation of the same requirements observed in 2023. However, a notable shift is expected with a significant increase in new projects rather than mere upgrade or retrofit endeavours. Additionally, there is a forecasted surge in demand for Control Room Visualization projects, an area where HIKA has traditionally excelled.

Strategic Preparedness: Renovations and Experience-Centric Approach: In preparation for these anticipated shifts, HIKA has undertaken strategic initiatives. Renovations in our office include the installation of infrastructure and equipment dedicated to testing new systems and solutions. This forward-thinking approach ensures that proposed systems not only meet but exceed performance expectations, providing optimal value to customers.

A pivotal aspect of HIKA's strategy involves the establishment of an "Experience Centre." This centre serves as a tangible manifestation of the solutions HIKA offers, allowing potential clients to touch, feel, and experience first-hand the proposed AV solutions. It goes beyond a mere showroom, aiming to create an immersive environment that reflects the everyday experience of the HIKA team.

Bui Duc Son (Tony Bui), Director, Hoang Minh Investment Technology JSC, Vietnam

Emerging Trends in the Vietnamese AV Market for 2024

The audio-visual (AV) landscape in Vietnam is poised for a transformative journey in 2024, marked by several key trends that reflect the evolving needs of organisations and industries. As we look ahead, here are the prominent shifts shaping the AV market in the country:

1. Embracing Simplicity for Enhanced Collaboration: Organizations are leaning towards streamlined solutions tailored for smaller meeting rooms accommodating 2, 3, or 4 users. The advantages of simplicity in operation and increased efficiency are driving this shift, reflecting a strategic choice for optimized collaboration spaces.

2. Microsoft's Ecosystem Dominates Online Meetings: The online meeting platform is experiencing a notable shift towards Microsoft's ecosystem, particularly Microsoft Teams Room. This transition is indicative of a broader industry trend, emphasising the reliability and integration capabilities within the Microsoft suite.

3. Elevating User Experience with Seamless Connectivity: The focus on user experience takes centre stage, with an emphasis on simplifying operations and facilitating direct interactions. AV systems are evolving to allow diverse connections with employees' mobile devices, including laptops, phones, and tablets. This seamless connectivity aims to enhance productivity and user convenience.

4. Digital Transformation in Education AV: Education AV applications are undergoing a significant transformation, with a growing interest in digital training content. The integration of Virtual Reality (VR), Artificial Intelligence (AI), and Augmented Reality (AR) is supporting more intuitive and learner-friendly teaching methods. Flexibility in content adaptation to existing facilities is becoming a key consideration for educators.

5. Quality Investment in Hospitality AV Systems: In the hospitality industry, there is a discernible trend towards investing in the quality of AV systems. High-end brands such as Crestron, Extron, QSC, BOSE, BIAMP, and Sennheiser are gaining prominence. This shift signifies a commitment to delivering premium audio-visual experiences to patrons, contributing to the overall guest satisfaction.

6. Technological Advancements in Entertainment and Events: The entertainment and event organization sector is witnessing an extension of technological applications. Mapping and interactive video effects are becoming integral to creating distinctive impressions. Coupled with high-performance sound systems and additional stage lights, these advancements are redefining the landscape of live events, promising immersive and memorable experiences.

Getting and Staying ahead - Unlock Your Future at ISE 2024

The world's leading pro AV and systems integration show is not just Your Destination for Innovation but a place to be inspired and let your own potential grow

Integrated Systems Europe (ISE), the world's leading global exhibition for professional audio-visual (pro AV) and systems integration, is excited to unveil its extensive conference programme for 2024, including the debut of the European / Latin American AV Summit and a new Sustainability Workshop. Collaboratively curated by AVIXA, CEDIA, and ISE, this comprehensive series is hosted by more than 190 industry experts from vertical market sectors and offers a transformative experience, equipping attendees with industry knowledge and insights required for success in the year ahead.

The conference programme takes place across the four days of ISE, with an agenda that will empower participants to elevate their skills, forge valuable connections, and engage with the trailblazers reshaping the global AV industry.

The ISE 2024 Conference Programme includes:

Content Production and Distribution Summit: 'Brands: The New Broadcasters'
Wednesday 31 January| 10:30 - 17:00 | Location: CC5.2
In its second year now, the summit chaired by Ciarán Doran will explore the strategies and technologies behind creating, managing, and distributing video content for promotional and informational purposes.

"From a technology point of view, we are living in the age of convergence, there is no 'broadcast', just eyeballs (and money) and the money moves where the eyes move. The new breed of AV Broadcaster is communicating directly with millions of consumers and buyers, no longer limited by geography or technology, only their imagination. We'll examine how creativity and

Photo copyright Benjamin Arthur.

new technologies are now being combined to offer new methods of not just creating material and distributing to consumers but engaging and exciting them." comments Conference Chair and Managing Director, Deep Blue Sapphire Limited, Ciarán Doran.

Smart Workplace Summit: Tackling the New Challenges'
Wednesday 31 January – Thursday 1 February |15:30 - 18:00 | Location: CC5.1
Conference Chair and former Operations Manager, Google, Gary Keene and his guests will be looking at a number of the emergent challenges including cybersecurity, the use and the ethics of AI, purpose-driven design, inclusive design and environmental benchmarking.

"We'll aim to help you understand where you need to focus your attention and ensure you leave knowing the first steps you should take. Our guests are already delivering solutions, so this should be a fascinating set of sessions for manufacturers, end-users, and systems integrators." comments Conference Chair and former Operations Manager, Google, Gary Keene.

Education Technology Summit: 'Educating Humans in a Digital World'
Thursday 1 February | 10:30 - 14:30 | Location: CC5.1
The summit, led by Conference Chair and Consultant, 1EdTech and EUNIS, Gill Ferrell, will delve into the 'hows' and 'whys,' offering insights into the future of the critical use of technology for educational experiences.

"In the last year we have seen an explosion of new AI powered tools, as well as seeing familiar tools supercharged by the application of data and machine learning. The summit will bring together experts who are able to look beyond the market hype and the fear of the unknown, to take a realistic view of how the latest in innovative technologies might serve to enhance learning." comments Conference Chair and Consultant, 1EdTech and EUNIS, Gill Ferrell.

Live Events Summit: New Solutions for New Challenges
Thursday 1 February | 10:30 - 14:30 | Location: CC5.2
Conference Chair, Stew Hume, TPi Editor together with leading experts like the team from Celestial will focusing on actual challenges and evaluating new solutions for the live events industry.

"The goal is to look at how new technologies might help change productions in the future. We're excited to invite the team from Celestial and as one of the front runners in large outdoor drone shows, the team will discuss how this solution was adopted at some major live events including the Eurovision Song Contest and Secret Garden Party this year. There'll be two panels talking about some of the major developments within the world of video and audio and how we're starting to see some major ripples from technological innovations that took place over the pandemic." comments Conference Chair and TPi Editor, Stew Hume.

Sustainability Workshop
Friday 2 February | 10.30 - 14:30 | Location: C1.1
New for 2024, CEDIA presents an exclusive conference session dedicated to addressing the global issues of climate change, nature loss, and social resilience within our industry. Delve into the complexities of being both part of the problem and part of the solution

Tech Talks Español
Tuesday 30 January - Thursday 1 February | 11:00 - 14:30 | Location: Hall 4, ISE Show Floor Stage
Presenting a range of free-to-attend sessions will be a host of industry expert curators, including the Catalan AV Cluster, all taking place in the Spanish language.

Tech Talks
Tuesday 30 January - Thursday 1 February | 11:00 - 14:30 | Location: Hall 4, ISE Show Floor Stage
The free-to-attend English-language Tech Talks provide visitors with the exclusive opportunity to hear from a range of curators who will discuss the AV industry trends and range of technology and creative innovations, as well as business best practice developments.

"In our 20th year, ISE returns bigger and better than ever before. Our extensive conference programme looks at the current state and future of our industry, providing attendees with the opportunity to connect, collaborate and go on to create. This year's sessions continue to provide something for everyone across the four days, with special additions in celebration of our anniversary," explains Mike Blackman, Managing Director of Integrated Systems Events.

Registration for ISE 2024 is now open. Visit **www.iseurope.org** to secure your space and sign up for updates. Readers of Systems Integration Asia can register for FREE using code *"systemsintasia"*.

Mumbai's Premier Dining and Nightlife Destinations Vibe Up with Martin Audio

Martin Audio solutions help enhance the experience of guests

FACT FILE

Project Names: Matahaari and Bastian At The Top

Project Locations: Mumbai, India

Project Segment: Entertainment

Systems Designers and Integrators: Sound Mindz for Matahaari and Superwaves for Bastian At The Top

Matahaari.

There's no contesting the fact that Mumbai sports one of the most diverse and vibrant cityscapes in the world; as the ever-bustling metropolis hosts a unique melange where the

pulse of culture meets the rhythm of the night. And amidst this potpourri of all things dynamic and spirited; two iconic destinations, in the form of Matahaari and Bastian At The Top, have emerged as the epitome of sensory indulgence. While Matahaari stands proud as an avant-garde haven for nightlife enthusiasts, Bastian At The Top exudes the vibrance of an opulent culinary oasis – with both venues having transcended the ordinary to become Mumbai's premier dining and nightlife destinations.

What sets these venues apart, however, is not just their magnetic allure, but the immersive sonic symphony that envelops patrons in an audio experience like no other. And the mesmerizing transformation that has taken place at these two world-class spaces has been orchestrated by the cutting-edge audio architecture from the industry powerhouse, Martin Audio.

Located in the upscale locale of Worli, Matahaari boasts a modern and aesthetic interior, creating a sophisticated ambiance ideal for a variety of social events. The venue is known for its lively nightlife atmosphere which is further enhanced by its elegant decor. The establishment seamlessly merges a fantastic dining experience with a energetic night scene, making it a sought-after destination for ardent dance-music revellers in the city.

While Matahaari opened its doors over five years ago to thunderous applause and praise; over time, the management noted that the venue needed to overhaul its existing audio architecture to make way for a new and robust sound system that would enhance the auditory experience for their patrons. The venue's management sought a seamless blend of

powerful performance and clarity to elevate the atmosphere of their establishment; and the answer came in the form of an eclectic mix of high-performance products from Martin Audio's exhaustive portfolio.

With the client's brief being limited to achieving a sonic experience that's crisp and clear, regardless of the volume, without any distortion that could detract from the refined ambiance of Matahaari; Sound Mindz – the designated system integrator for the project – surveyed the venue as they took stock of the key challenges in bringing together the desired soundscape, paramount of which were the acoustical intricacies of the venue – namely, the extensive use of glass and mirrors as part of the décor. It is also revealed that the set of challenges were further compounded with the fact that the design and integration team had an extremely short time-frame to complete the installation.

These challenges were adeptly met by employing a combination of high-grade audio equipment; with the team at Sound Mindz working closely with the installation team at System Integration Design to outfit the venue with a total of 8 units of Martin Audio's Blackline x15B 15" passive two-way portable loudspeakers, complete with custom flyframes and flypoints, at strategic points across the space to provided the desired clarity and powerful sonic presence. Furthermore, 4 units of the Martin Audio Blackline x218 passive subwoofers placed at key locations across the venue floor, offer impressive low-frequency fidelity that ensures a warmer and more full-bodied soundscape.

The outcome is a sound installation that not only meets but exceeds the expectations of our

clients. The tailored audio solution now amplifies the charisma of Matahaari, matching its high standards of sophistication and ensuring an immersive auditory experience for all its patrons.

"The performance and clarity of Martin Audio's equipment are unparalleled. Their technology integrated seamlessly into our system, elevating the audio experience significantly. Their products are a go-to for any sophisticated audio setup" comments Jeetendra More of Sound Mindz, as he explains that despite all the challenges, the team were able to achieve a sound installation that not only met but exceeded the clients' expectations, as the tailored audio solution now amplifies the charisma of Matahaari, matching its high standards of sophistication and ensuring an immersive auditory experience for all its patrons.

Clearly pleased with the outcome, Jeff Mandot, National Sales Manager, VMT – the official distributors of Martin Audio products in India – positively exclaimed, "I am immensely pleased with the level of expertise and professionalism displayed by the design and installation team during our collaboration. Their attention to detail in pre-designing was impeccable, ensuring a smooth transition into the sales phase; and working with this team has not only been a pleasure but a learning experience. In fact, their understanding of the enterprise-level requirements and the ability to execute plans efficiently made a substantial difference; and I am confident in recommending their services for any complex project. Their dedication and passion for what they do is evident in the results we have achieved together."

Bastian At The Top.

On the other hand, Bastian at the Top marks a new pinnacle in the city's fine-dining scene as it sits elegantly perched atop the 48th floor of the towering Kohinoor Square building in the busy locale of Dadar. The newly opened restaurant is more than just a place to eat; it's a destination that offers a feast for both the stomach and eyes. While the spellbinding 360-degree views of the bustling city below creates a mesmerizing backdrop for an unparalleled dining experience; the culinary offerings present a delightful exploration of Asian cuisine that has been thoughtfully crafted to cater to a variety of palates.

Considering the bespoke and elegant architectural design of Bastian At The Top, the venue's management desired a comprehensive sound system that would not just enhance the restaurant's rich atmosphere with unmatched clarity and depth, but would also blend in well with the aesthetics of the space.

Working off of this brief; team Superwaves – the designated system integrator for the project – took on the challenge of designing a sound system that would meet the client's expectation – by focusing on achieving a loudspeaker design that delivered uniform sound distribution

throughout the space, while meticulously balancing acoustics with the aesthetic appeal. And to bring this vision to fruition, team Superwaves chose to outfit the venue with an assortment of high-performance products from Martin Audio's vast and impressive catalogue of world-class technologies.

The loudspeaker design at Bastian spotlights multiple units of the CDD 12 passive coaxial differential dispersion on-wall loudspeakers, which were chosen for its superior sound dispersion and aesthetic compatibility, being installed at precise locations across the flanks of the main-dinging space to achieve optimum results in terms of coverage and clarity. On the other hand, the more compact CDD10 loudspeakers were strategically placed in areas requiring smaller-scale solutions, but with the same desired sonic outcome. Completing the setup are multiple units of the Blackline X118 passive portable subwoofers, which emphatically add a notable layer of deep resonant bass, thereby enhancing the overall aural experience for patrons.

Speaking about the experience of working on the project and with Martin Audio products, Gurvinder Saini of Super Waves comments, "Working with Martin Audio products for the sound installation at Bastian Mumbai has been a remarkable experience. As a system integrator, I am constantly seeking superior sound solutions that meet and exceed client expectations. Martin Audio's products have done just that."

The management team at Bastian At The Top seem to resonate with Gurvinder's views, as Kunal Jani of Bastian Hospitality too praises the newly equipped Martin Audio system at the venue, stating, "I am thrilled to express my utmost satisfaction with the sound installation at Bastian Mumbai. The integration of Martin Audio products has elevated our space to a whole new level. The clarity, depth, and richness of the sound are unparalleled, creating an immersive audio experience for our guests."

Jeff Mandot, again expresses his elation with the successful commissioning of the project as he affirms, "The successful installation at Bastian, Dadar, is not just a project; it's a benchmark in the industry. It is in fact a perfect example of how a well-thought-out audio solution can transform a space. Superwaves has selected and integrated the best products from Martin Audio and has created an audio environment that complements the restaurant's upscale ambiance. Furthermore, it showcases the evolving demands of hospitality venues and our ability to meet these with innovation and quality. This project is a shining example of how VMT is setting new standards in audio excellence."

VMT