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Interview: Kramer Glocally Engaging the Industry with AV Experiences

Commentary:
PAMA Members Speak Out on the Implications of 5G on Professional Audio

Spotlight:
Sennheiser's TCC M Offers Speciality Solution for Medium-Size Meeting Spaces

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"With creation of Regions, we have decentralized the decision making process. We have shifted the center of gravity so that the decisions related to HR, marketing, products, and so on can be made by the Region simply because we are closer to partners and customers".

Marc Remond
Kramer's president for APAC region

Our Commentary column touches on the implications of 5G on professional audio. The Professional Audio Manufacturers Alliance (PAMA) recently surveyed its members who felt that 5G offered good potential. Still, many concerns were raised that need resolution before 5Gs potential can be effectively realized in workflow and products due to limitations presented by the current standards regarding infrastructure and hardware components across the industry. In our Interview column, Marc Remond, Kramer's president for the APAC region, soughts to delve deeper into what precisely the recent Israeli AV major's transformation means to the industry.

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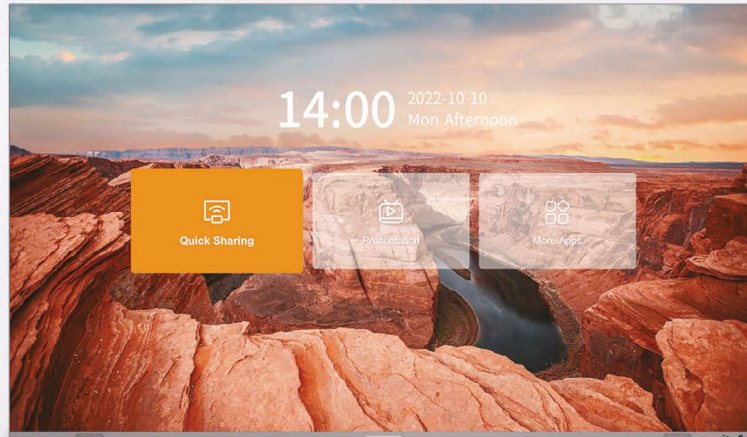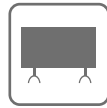## High-end All-in-One Screen

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Professional Audio Manufacturers Alliance (PAMA) Members Speak Out on the Implications of 5G on Professional Audio

In a recent survey, professional audio companies ranked 5G capabilities as offering "good potential" in terms of enabling high-resolution audio content for streaming and cloud-based storage, with "some potential" indicated for cloud-based production, low-latency distance collaboration and their companies to enhance products with 5G access and complementary features.

The survey was conducted by the Professional Audio Manufacturers Alliance (PAMA) of industry leaders to track attitudes and opinions about the state of 5G, its impact on professional audio, and the potential that 5G's spectrum usage, wireless connectivity and high-speed internet access offers for professional audio applications and products.

Many concerns were raised that need resolution before 5Gs potential can be effectively realized in workflow and products due to limitations presented by the current standards in terms of infrastructure and hardware components across the industry.
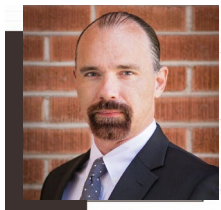
Chris Hansen, director of Recording, Harman International, noted a current limited scope of 5G application for Harman's product line and added, "Broader applications are being discussed but need to be defined."
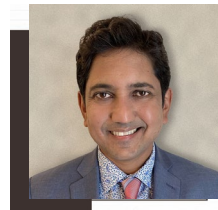
"Currently, the biggest challenge is for 5G to meet latency requirements for pro live audio productions," remarked **Prakash Moorut, Shure senior director of Spectrum and Regulatory Affairs**. "Furthermore, it is no guarantee that mobile network operators employ chipsets in their devices that cater to our internal guidelines. If these issues can be effectively solved, then 5G can play a much bigger role in the development of future products."

Dennis Stegemerten, solution architect at Sennheiser, agreed: "5G offers a lot of potential, but currently latencies are still very high. A lot of work has to be done before it can really enhance a brand's product portfolio. There are also uncertainties about the performance of public 5G networks and the ease of use of private 5G networks."

5G has potential in device management, as long as certain obstacles are addressed, per **Chris Regan, RF Venue co-founder and president** (and current chair of PAMA's Board of Directors). "Currently," he noted, "IT-enabled products can be cloud-managed through various apps and managed services, but those devices need local network configuration. If standards

evolve such that these devices could inexpensively and efficiently connect to the cloud over 5G without any integration on the local network, that could offer a real benefit and allow technicians to inexpensively monitor and manage equipment remotely."

"Some concern" was the overall response to the question of how 5G (and the evolving RF spectrum considerations that have gone along with it) may affect users of wireless microphone, instrument and IEM systems. Stegemerten reiterated that 5G does not currently fulfill the requirements of most of the Sennheiser product line, and any further widespread re-allocation of spectrum space may adversely affect the operation of the brand's established wireless solutions. However, he also notes that Sennheiser is fully engaged with the subject and is active in several European and international working groups around the 5G topic (e.g., 5G MAG and 5G Records). "There we experiment with broadcasters and other audio companies (e.g., Shure) to evaluate the potential of 5G networks," he remarks.

Moorut expressed cautious optimism about spectrum impact: "It is possible that, in the future, we could leverage shared/local spectrum available for 5G, especially in the context of private networks using bands like the Citizens Broadband Radio Service (CBRS) band in USA, 3.8-4.2 GHz in the UK, 3.7-3.8 GHz in Germany, etc. However, if more spectrum is cleared and auctioned, then it could severely limit the range that we have available for Shure products to operate. So I believe our goal as an industry should be to advocate for other options, such as sharing bandwidth. We have been successfully sharing spectrum with TV for decades, and we're open to exploring any number of other options. Shure has been active in sharing our perspective with the FCC, and we recently made an ex parte filing on the matter."

Regan notes how the 5G spectrum re-allocation that took place a few years ago has required manufacturers to troubleshoot and uncover new solutions: "Some of these mobile providers operate right 'next door' to wireless mics and in-ears, and that has caused interference in concentrated population centres. So far, it's been manageable, but there is certainly the possibility for some problematic times ahead if the spectrum keeps getting chipped away for 5G and its successors. But some 5G frequency bands are well above anything that might affect conventional wireless solutions, so we are hopeful that future 5G developments will stay in those ranges. Overall, I am optimistic. 5G audience interaction is an interesting area in development, where people will be able to use their phones to access various parts of an audio mix or stream content related to the live performance."

PAMA will continue to track developments in the state of 5G and the wider world of wireless in the future, keeping its manufacturer partners up-to-date with the most current info and forecasts. Currently marking its 20th anniversary, PAMA is the collective voice and forum for the leading manufacturers of professional audio products and the people who use them, continues to serve as an informal data aggregator for new and future developments in pro audio.

About PAMA:

Founded in 2003 and celebrating its 20th anniversary, the Professional Audio Manufacturers Alliance (PAMA) is the collective voice and forum for the leading manufacturers of professional audio products and the people who use them.

Learn more at www.pamalliance.org.

Glocally Engaging the Industry with AV Experiences

Kramer Electronics – since the time it had change of guard – is an altogether new entity. Not just a very go-to-market kind, but much more focused, connective and engaging, seeking its connects into a more dynamic and growth-oriented network. SI Asia – during a recent interaction with Marc Remond, Kramer's president for APAC region – sought to delve a bit deeper into what exactly the Israeli AV major's transformation means to the industry. Excerpts:

SI Asia: It's been some time since Kramer's transformation with re-branding, and go-to-market strategy. How all it has shaped up in the APAC?

MARC: The actual transformation started about three years ago, and that's when Doctor Kramer decided to retire, which allowed Fortissimo Capital – the largest private equity firm in Israel – to come in and inject some funds in the company. Because, Fortissimo recognized the potential in Kramer to become one of the top AV vendors globally.

The first step of transformation is focus on the team. So, Gilad Yran joined Kramer as our CEO, and very

Kramer launched the ENGAGE program recently.

quickly built a team around him. Ornit Sade Benkin has come in as our VP of marketing, and Shamir Shoham from software side came in as our products and solutions leader, and now we even have a new Operations leader who joined the company recently.

Step two is the structure. For 40 years, it was Doctor Kramer and family running the company. But for the past three years, we are turning a true multinational company with right people in right places. So, as for structure, we created regions which did not exist in the past. I joined roughly a year-and-half ago to lead the transformation in the APAC region.

SI Asia: Transformation from a family owned business to appointed and certified professionals to lead the business?

MARC: Yes, in terms of all that we needed to follow the ISO standards. We are making improvements in every function across the organization, even on the HR front. When I was interviewed for the role, I asked a lot of questions because the head-hunter was talking about the transformation that was happening. But one man cannot transform the company. You need to bring in right expertise, and right experience; you need to hire people who have the skills that you do not- so that, as a team, you're very well rounded, everyone leads the transformation in their own areas, and you can face any challenge. This is what Gilad has been doing globally; I've been doing the same across Asia Pacific.

Alok joined a year ago for marketing; we have a head of HR in the region; very soon we will have a Head of Operations, in Customer Service, and a Head of Products and Solutions. So, that structure is in place. The transformation related to bring in right expertise, right people and building the structure is well on its way.

Step three is about other aspects of the company. One is re-branding. I must say the re-branding is more than just a Logo; it goes deep into the roots and the DNA of the company. It is very right to the new culture statement of what Kramer is. The logo and the value proposition is an outcome of that culture, that DNA of the company.

As you see, we're not talking about products any more, we're talking about enabling end-to-end audio and visual experiences. We are more focused on the outcome of solutions rather than the capabilities of the products.

We have a vision. We have a mission and all aspects of the organizations are working towards delivering our value proposition to partners and end customers.

Step four is to take this transformation to the channel community. We need the End Customers to realize the benefits of the transformation. This is what we're doing with our Engage Partner programme. It is the way to bring our distributors, resellers and SIs on board and induce changes well in relationship with the channel.

At the end of the day, what we care about is the customer satisfaction. So, those are the few things, the feel, the structure, the culture, the re-branding, and go to market strategy.

SI Asia: In what precise ways you think Kramer had been able to make it better than the erstwhile practices and identity as such?

MARC: First, we have more expertise and more experience in the organization. We brought in talents and competence we didn't have earlier as a family business. Second- we're moving away from building products to building solutions. A good example is our third generation of audio visual signal management products.
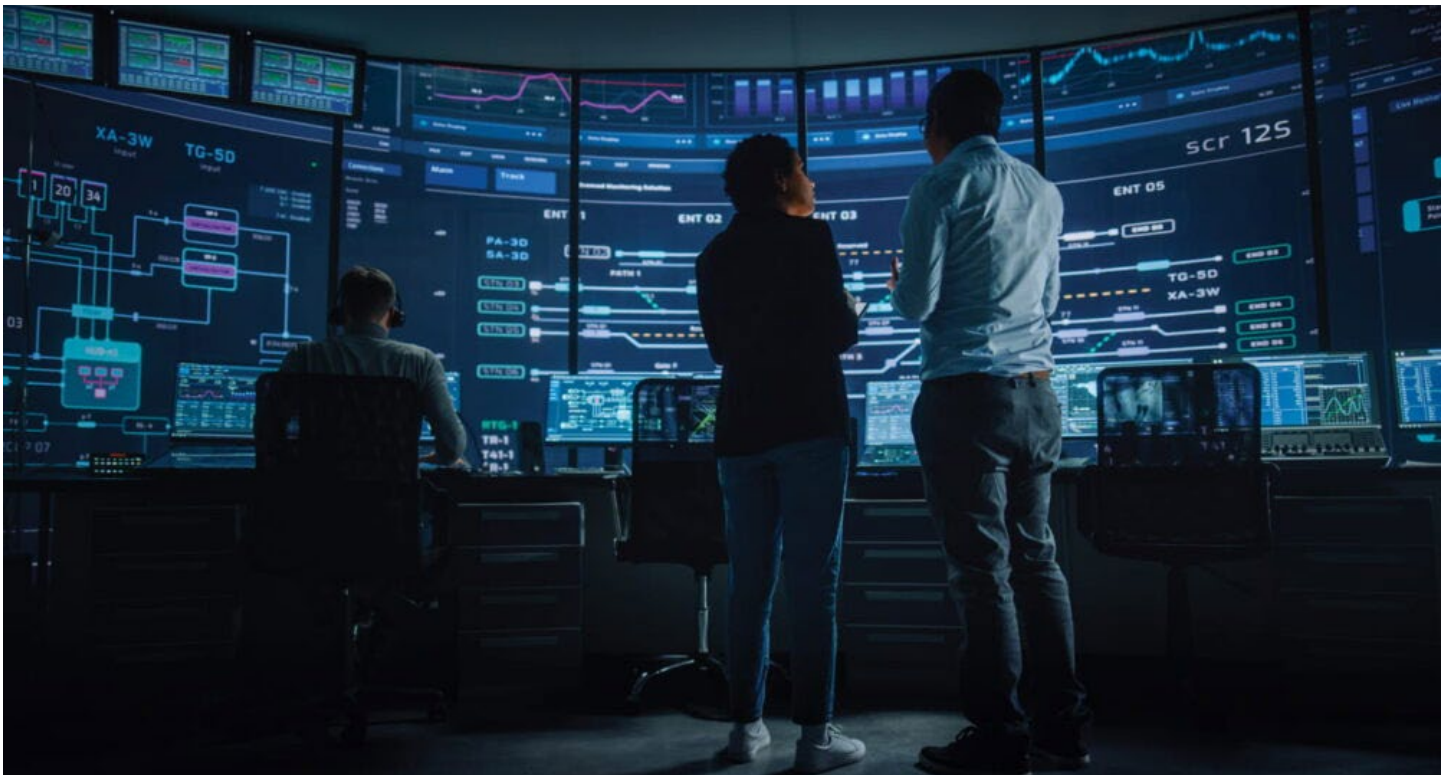
Kramer Series 3 solutions in action.

You may have heard of Kramer Series 3. It is the first time at Kramer that we launched an entire product line that is consistent and fully interoperable, meaning every product will support 4K 60 4:4:4, connected to the network, and offer a USB C interface. I'm talking about the mattresses, the switches, the extenders and everything else. All products were set as a solution.

Third – I touched it earlier – we're not talking about features any more. We're talking about the user experience we can create in the space. There is a big focus on the UI design nowadays. Our VIA for instance, we have redesigned the App for desktop and mobile. When it comes to touch control, room control, the touch panel UI has been totally revamped as well.

We believe that if the user experience is good, people will use our technology.

Finally, I would say, the fourth change is the decision making process. When Kramer was a family business, everything was centralized. All decisions were made in Israel by people who had little experience of how things are done in here in India, Singapore or in Australia.

With creation of Regions, we have decentralized the decision making process. We have shifted the center of gravity so that the decisions related to HR, marketing, products, and so on can be made by the Region simply because we are closer to partners and customers. We can make decision faster, implement programmes, initiatives or even ask for products to be developed to match the requirements of respective countries.

In essence, we are becoming *glocal* not just global; we have that local aspect which is needed when you want to become a truly multinational company.

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SI Asia: We have been hearing about Kramer's new Engage Partner Programme. Could you please elaborate what exactly is it?

MARC: Our go-to-market strategy is fully indirect; we do not sell anything directly to end customers. For 40 years, we've been working with distributors, resellers, system integrators, but we never had a framework on what this partnership between Kramer and the channel community actually means. It had been a kind of let anyone with a PO order a product from Kramer without necessarily making sure that they were properly trained or they had the competence to do a good job. But with the transformation that is happening at Kramer, we want to make sure that we have the right channel partners in the mix, and that they are doing job rightly.

That's where we decided to launch the *Engage Partner* program and engage is an acronym. It stands for enabling our partner network to grow, accelerate faster business, benefit and excel. So this is a concept of commitment, investment and quality delivery is part of the programme.

SI Asia: Very cleverly coined acronym to summarize the new philosophy.

MARC: We target distributors, resellers, system integrators, and we reward them based on their commitment and investment into Kramer. What we strive for is to transfer the knowledge, make sure they are competent, excel in what they do. If they do a good job, customers will be happy, and, of course, they will buy more Kramer products. So, it's a win-win situation for Kramer and for partners.

We have three tiers for the prospective partners: Platinum, Gold, and Silver accreditation. Of course, the higher the tier, the more investment in commitment is

required. For distributors, we only have the accredited distributor, but our distributors are all value-added distributors who are able to represent Kramer in the market providing support, training and so on and so forth. They are not just logistic partners, they are an extension of Kramer, which allows us as well to support the smaller resellers better.

We took six months to develop it internally, and we introduced it in Q1 to the Partner community across Asia Pacific. In India, it's happening in Q2 because we have a large community and also the financial year in India is slightly different. We decided to introduce in the beginning of the financial year, and it is being executed.

A big part of this initiative is focus on training, obviously, and signing agreements with the Partners. However, we do not want to work with everyone out there; we are quite careful in the selection of our partners. So, Kirti and the team have already planned, and engaging potential Platinum, Gold and Silver Partners across India, and the training or accreditation will mainly happen in Q3 and India.

SI Asia: What criteria for choosing partners?

MARC: Of course, there is a business element. We do have a selection criteria. Can the partner contribute to Kramer revenue in a specific significant way. But that is not the only factor. We want to make sure that the partners are willing to invest in time and people into training, and make sure they can design, implement and support Kramer solutions.
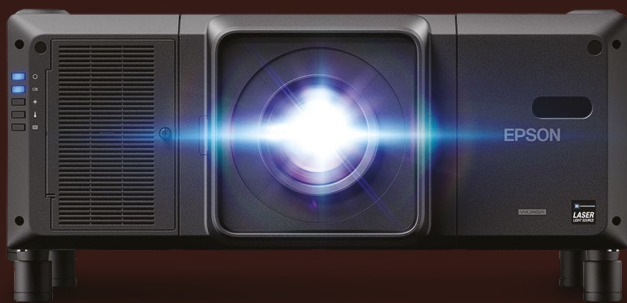
However, if one is a distributor, the selection criteria are slightly different. As I mentioned, we do not want to work with distributors who are a logistic companies. We want value added distributors who have a design support and even marketing capabilities.

SI Asia: Does the selection criteria involve any tech knowledge for the partner? Or just a zest to excel in business makes them eligible?

MARC: We have two kinds of training that the partners need to go through. One is a sales training, having a complete understanding of the full portfolio for the sales team and the marketing team. Another one is a technical training across the different product families that we offer ranging from audio visual signal management product, family control, unified communication and collaboration all the way down to the Connect, which is related to our cable and accessories as well.

So, we have a technical track for the technical community, and we have a sales track for others. The partners need to complete sales and technical accredited training to get their accreditation.

SI Asia: has there been any measurable success with this initiative till date? If so, what exactly is that?

MARC: Well, the first measurement is the growth of the company and the growth in the region. We had double digit growth in 2022 across Asia Pacific, India included, and we are showing double digit growth as well in H1 of 2023. So, this is a key indicator- we are growing faster than the market. The market is growing at about 5% CAGR on average. We are growing three to four times faster, which means we are winning market share against the others, which is a good sign.

Second- leading integrators are now working with Kramer. You may have heard that we signed a strategic partnership with Vega Global. So, we're working with every Vega entity very closely in India, in Singapore, in Hong Kong, and wherever they have a presence. That was not the case before; we had very little business with them in the past.

In Q4 of last year, we became a member of the GPA, and as a result of that we have access to all of their regional business units in Asia Pacific and beyond. Just to name a few, we are talking about Hikvision in China, Godrej in India and Esco. So, this is another sign that Kramer is being considered as a top brand in the ProAV business by the leading integrators.

Third- the level of engagement and traction we are getting in the market compared to the past. Via channels like LinkedIn, we have significantly increased our engagement with the market. So, we're very proactive compared to the past.

We are also out there on the market more proactively. We have initiated a new multi-city roadshow called K-wAVe. You may have heard about the initiative, and the stops we had in Bengaluru and other cities in India. The plan intended to cover 15 cities across Asia Pacific by the end of July.

This never happened in the past at Kramer, but when I joined, I said we need to bring the best of what Kramer has to offer down to every single market across the region- simply because not everyone goes to ISE or InfoComm events. We need to bring, the kind of ISE or other similar experiences down to the city level in different markets in the region, and make sure people experience Kramer.

SI Asia: Kramer has always been quite aggressive in terms of new product launches from time to time. Would you throw some light on the products that you think game-changing?

MARC: Let me start with last year. Last year alone we launched 27 products. That's a lot of product count in a single year. We launched collaboration devices. We launched quicklaunch Enterprise, which is a software product creating a room that is totally agnostic. You

Kramer quicklaunch.

can connect to Webex, Teams or Zoom. We introduced seamless switching with MV4X which supports a green screen and and picture in picture as well as video walls. So, this is a quite a lot last year.

As previously mentioned, this year we launched Series 3 - a complete product line supporting 4K60 4:4:4, connected to the network with your USB-C mattresses, extended switches, and a whole range of devices. That's a big one.

We also are enriching our AVoIP portfolio with the KDS 100, which we will launch in Q3 or Q4. Let's say second half for now, and we have new solutions like *quicklaunch* for education. So, we have a dedicated software for the classroom, which is a big thing. We're getting a lot of traction with this *quicklaunch* education; it was quite popular during the K-wAVe programme in India. We were also at the Infocomm Asia in Bangkok recently where the software got a lot of traction from many partners and customers.

We have a new Control called the KC Virtual Brain. Just to give you an idea, in the past you needed to put one brain in each room to control the devices but now, it is just one brain. We'll be able to control from five to 25 spaces with a single brain, just like they do in IT with a server where the do virtualization of server installing multiple software on the same server, we are doing this with one brain to manage multiple spaces so that the total cost of ownership is significantly reduced.

It's lot of innovation, software, virtualization, new AVSM portfolio, and finally USB-C. This USB C cable is has brought in a lot of revolutionization of cabling.

The traditional HDMI cabling didn't work for AV where higher quality cables with capability to run long distances are needed. The Krmaer USB-C does it. It delivers the 4K60 4:4:4 video with 60 Watt of power; will give you the USB services and network access. So, instead of four wires, one cable USB C for laptop, tablet, phone giving you all the services up to 50 meters.

So, people are talking about BYOD and BYOM in meeting spaces, now every laptop can have one cable to get all the services.

SI Asia: Hybrid is taken to be the centre-stage of all AV solutions today. With Kramer's focus on IT-oriented product/solution development, how does it intend to address the Hybrid requirements?

MARC: Well, you know, you cannot separate the AVIT convergence and Hybrid. You need AV&IT convergence to enable any kind of hybrid use case. It's a combination of IT and AV products that will enable the hybrid experience. So, we are very focused on providing/creating or enabling the most engaging and intuitive end-to-end audio and video experience in hybrid spaces as well.

It's actually a big problem today; we're talking about hybrid workplace, local versus remote. There's still a lot of improvement required to enhance the level of engagement and interaction during hybrid sessions across the board. What we're doing here is we're making sure that all the AV and IT devices can work together, and we can control all of the IT devices as well from our side.

So, when we talk about smart buildings, smart classrooms, and more of smart spaces, we want Kramer control to be able to control the display, the projector, the camera, the microphone, the speakers, the lights, the air-conditioners, and everything in the room. That will enable us to create the better hybrid experience. Because, once you control the audio and the cameras, you can produce a better hybrid event or you can have a better hybrid meeting.

So, for us moving forward, every AV product will be connected to the network so that it can be managed, monitored, troubleshooted right over the network, and there is no hybrid without AV & IT convergence.

SI Asia: Do you see something beyond hybrid taking shape in the coming times?

MARC: I think Hybrid is here to stay; there's a lot of work to be done to improve the overall experience. So, we are not yet done with it. Beyond that, there is a lot of focus on smaller aspects like the automation of meeting. People don't want to have different controls to control cameras, displays, and more. I think all of that will have to be automated one way or another.

Just to give you an example of what we do with quicklaunch education, we offer a WePresent QR code to the educator; once the educator scans the QR code with his/her phone, he/she get authenticated and the person can retrieve the profile from previous class, and can have access to the materials related to that. So, we want to automate all of that as much as possible.

From a UI point of view, we'll take that to automate the devices in the room. For a physical classroom, we don't need to activate the cameras in the room because students are there physically. But for today's hybrid classroom, we need activate the green screen, camera, lights, and streaming for remote participants. So, all of that automation based on the use case, I think, is the future.

Kramer

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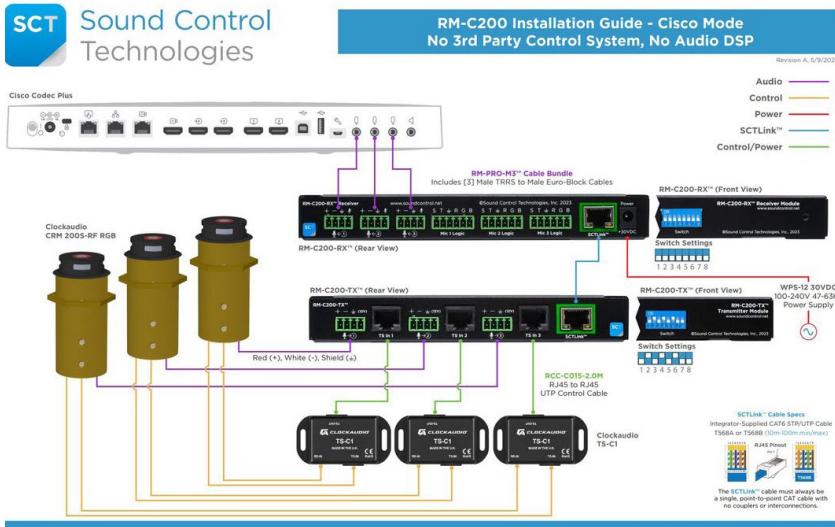## The smart answer.

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Clockaudio & Sound Control Technologies Collaborate to Streamline Audio System Controls

GLOBAL: In today's fast-paced world, efficiency and simplicity are paramount. Recognizing this need, Sound Control Technologies [SCT] and Clockaudio have come together to address the challenges faced by audio professionals in deploying and managing complex audio systems.

This has resulted in a collaboration that eliminates the need for third-party control systems or audio Digital Signal Processors (DSPs), saving both time and money while ensuring optimal system performance.

Traditionally, setting up and controlling audio systems required extensive integration of multiple components, including control systems and DSPs, often leading to complicated and time-consuming installations. With this collaboration, however, **Sound Control Technologies** and Clockaudio have developed

a solution that simplifies the process significantly.

With this new solution, audio professionals can now enjoy unparalleled convenience and flexibility. By leveraging Clockaudio's microphone technology and Sound Control Technologies' expertise, users can gain seamless control over audio systems directly from a Cisco Codec.

On the collaboration, Robert Moreau, managing director for Clockaudio NA, shared, "We are thrilled about this collaboration which simplifies the connectivity between our Clockaudio microphones and the Cisco Codec through this Sound Control Technologies' interface."

David Neaderland, president of SCT shared, "SCT is excited to have developed the RM-C200 solution in cooperation with Clockaudio to provide a seamless interface between the CRM 200S-RF RGB microphone and Cisco codecs utilizing the TRRS microphone input."

Both companies see that the collaboration offers benefits beyond streamlined installation and control. With the elimination of additional equipment, potential points of failure are reduced, resulting in enhanced reliability and system stability. This means fewer troubleshooting and maintenance requirements, translating into cost savings and increased uptime.

To learn more about Clockaudio products/applications or to inquire about rep opportunities and distributors contact: **info@clockaudio.com**.

Clockaudio

Genelec Strengthens Commitment to Sustainability with 5-Year Warranty

GLOBAL: Genelec has strengthened its commitment to sustainability by introducing a 5-year warranty on its designs. Also wanting to elevate the consumer experience, the new warranty program allows Genelec customers worldwide to extend their standard 2-year warranty by an extra 3 years, covering both parts and labour.

Since the company was founded 45 years ago, Genelec has put sustainability at the heart of its design philosophy, by producing loudspeaker solutions with a long life-cycle and low environmental impact, backed up with extremely high levels of reliability and long-term spare part support. This new extended warranty is an important step forward in that the extra 3-year warranty extension covers both parts and labour (where previously only parts were covered). The warranty extension is activated by the customer simply by registering their purchases online via the Genelec website, a process that has been made faster and simpler by providing QR codes on product packaging to allow easy scanning of models and serial numbers. Once the customer's details and proof of purchase are uploaded, Genelec distributor service centres worldwide can quickly verify the warranty status of any models returned for repair.

"We've always been focussed on designing loudspeaker solutions that provide decades of reliable performance for our customers, but we also want to offer them the extra peace of mind that comes with a secure extended warranty," commented Ole Jensen, international sales director at Genelec. "We're confident that our new 5-year warranty will make our customers' lives easier, highlight the trustworthiness of the Genelec brand, and signal our continued commitment to sustainable development."

Genelec/Warranty

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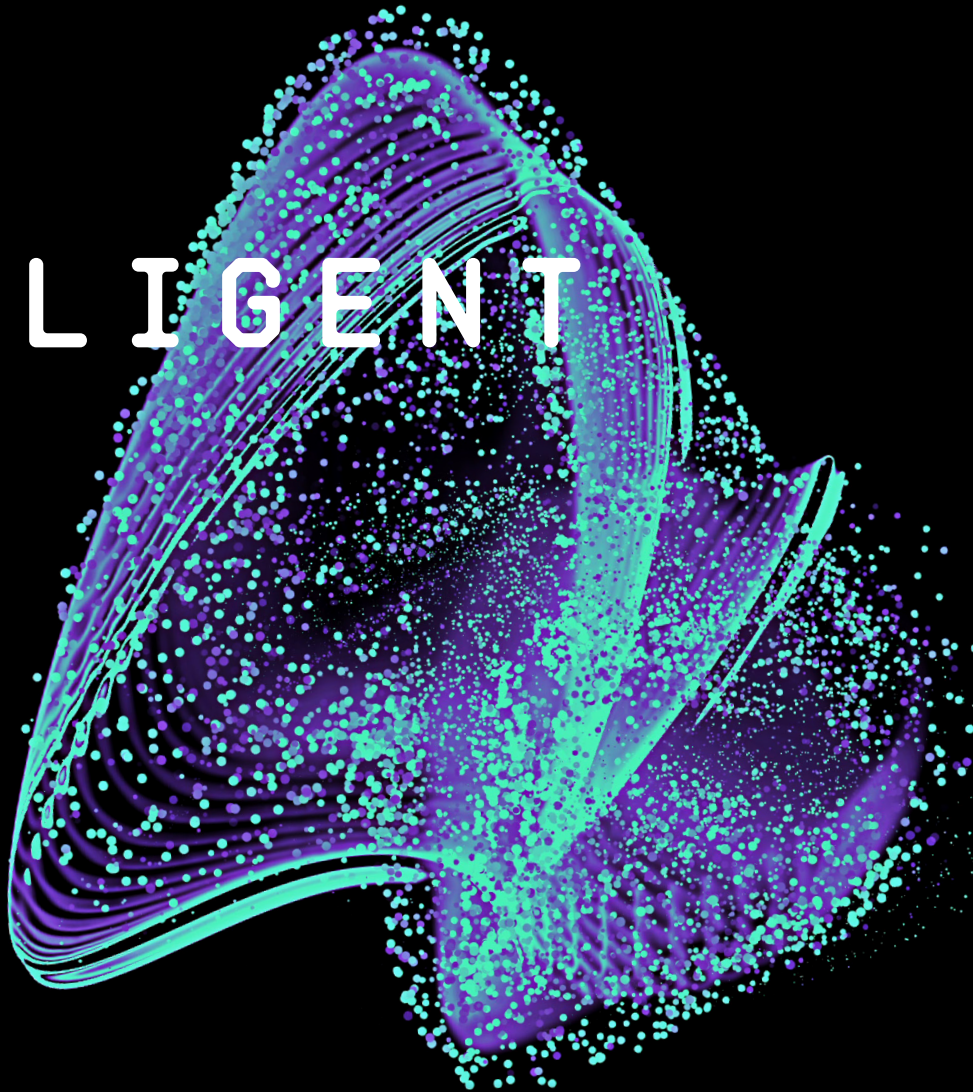
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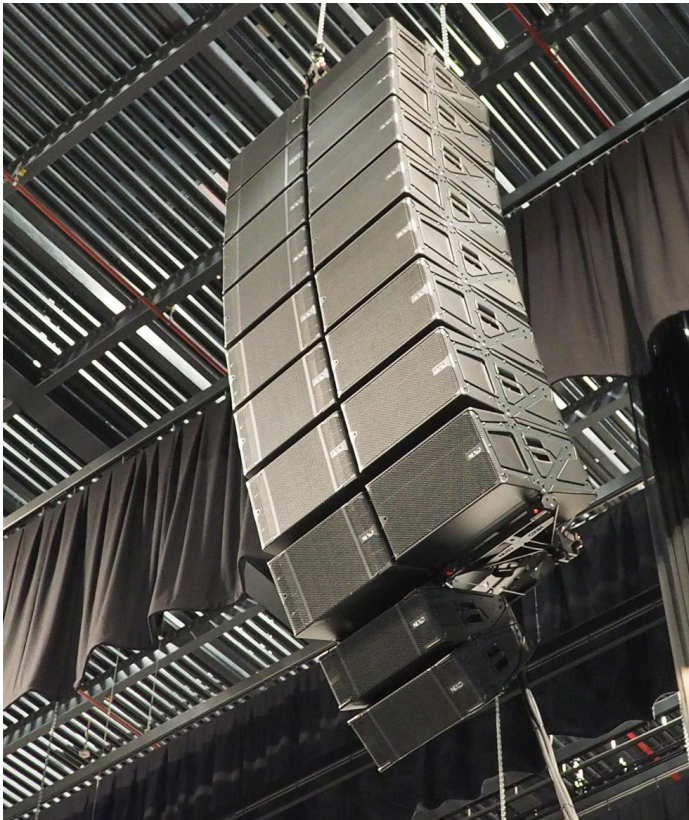
Zepp Hall Network Expands with NEXO STM-Equipped Concert Venue

MALAYSIA: A subsidiary of Sony Music Entertainment (Japan) Inc, the Zepp Hall Network has expanded with a new concert venue in Kuala Lumpur, equipped with a NEXO STM line array.

Located in the heart of the city, the new hall has a capacity of 2,414 and boasts similarly high-quality facilities as the existing Zepp Hall Network of eight performance spaces in Japan and one in Taiwan. The availability of a world-class, pre-installed sound system is central to the audience experience. Luckily, they also make set-ups and sound checks easy for performers while saving costs for event organisers.

Designed in collaboration with Bertrand Billon from NEXO's Engineering Support Team using NS-1 configuration software to ensure maximum throw efficiency and even SPL coverage, the STM system was supplied and installed by Concept Associates (KL) Sdn Bhd, a well-known distributor and audio-visual and lighting system integrator in Malaysia.

The STM system is configured in left and right arrays using 8 x flown cabinets of M46 Main modules supplemented by 8 x B112 Bass Extension modules per side. Pairs of M28 Omni modules are suspended from each cluster to provide down fills for the first few rows. The subwoofer system consists of 9 x ground stacked S118 bass units on each side with two additional subs below the stage centre for maximum coverage.

The system is further supported with 4 x mobile units of NEXO GEO M10 line array modules at the stage front which can be deployed as necessary to provide more fills for added clarity. Flexible stage monitoring is provided by 4 x NEXO P12 point source speakers, with an additional 12 x PS15R2 cabinets also available for use. Pairs of NEXO GEO M12 cabinets are stacked above pairs of LS18 subs for stage side fills.

Amplification and processing come from 18 x NEXO NXAMP4X4 Powered TD Controllers equipped with Dante audio network cards, providing a total of 72 amplifier active channels.

With additional support from NEXO Engineering, the system was set up, aligned, and tuned for high SPL levels and optimised frequency response throughout the hall. "From the moment the system was first turned on, we could sense the huge volume of sound and dynamics available to throw this venue into a frenzied party mood at any time" commented the team from Concept Associates. "And the balcony seats get to enjoy the same sound pressure levels, linear distribution, and full tonal performance as the audience on the floor."

Commenting on behalf of Zepp Hall Network Inc, Operation Division VP Shinichiro Honda concluded: "By ensuring our KL event space meets the highest standards of our hall networks in Japan, we are confident that we can ultimately contribute and help Malaysia's entertainment and events industry to continue growing to new heights by offering a world-class concert venue and event hall."

NEXO

NewTek Adds Ninth Heaven Technology as Newest Distributor

CHINA: NewTek, a leader in IP-based video technology, and part of Vizrt Group, has announced the appointment of Ninth Heaven Technology as a new distributor in China.

This strategic partnership with Ninth Heaven Technology signifies a significant step towards expanding NewTek's presence in the growing Chinese Pro-AV markets, including Enterprise, Education, Government, Esports, and more. NewTek recognizes the immense potential and importance of these markets and is dedicated to meeting the increasing demand for innovative video production solutions.

The addition of a new distributor in China also reinforces NewTek's long-term commitment to delivering accessible, easy-to-use, yet cutting-edge solutions to customers and end users worldwide.

Paul Dobbs, head of Channel Sales, APAC, Vizrt Group, expressed his enthusiasm about the collaboration: "Ninth Heaven Technology has extensive experience and expertise in the Pro-AV markets and coupled with their strong network and dedication to customer satisfaction, they are an ideal partner for us. We are confident that this collaboration will expand our reach to new heights in the Chinese market."

By appointing Ninth Heaven Technology, NewTek ensures a wider distribution network and increased accessibility of its products in China. This move will facilitate the growth of reseller partnerships and provide customers with more options to leverage NewTek's solutions for their video production workflows.

"We are thrilled to embark on this partnership with NewTek," said Song Wei, the general manager for Ninth Heaven Technology Co LTD. "As a leading distributor in China, we are constantly seeking state-of-the-art solutions to meet the increasing demand for high-quality live streaming and live production.

Collaborating with NewTek expands our product portfolio and offers our customers innovative solutions that empower them to achieve their creative visions. We are excited about the opportunities this partnership brings and look forward to delivering exceptional value to our customers in the Chinese market."

Newtek

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Colossal Wat Tha Sung Temple Updates to Efficient L-Acoustics Audio System

THAILAND: Built as peaceful sanctuaries for devout Buddhists to worship and meditate, Thailand's temples also attract a plethora of tourists and visitors. 200 kilometres from Bangkok, Uthai Thani province is home to one of the country's most unique and most visited temples, Wat Tha Sung Temple. Also known as the Crystal Temple, Wat Tha Sung is a sprawling complex of indoor and outdoor spaces dedicated to chant, meditation and prayer.

Within the temple compound, the massive, multi-purpose Sala 4 Rai temple, with its magnificent pillars hosts chanting, sermon sessions and meditation classes and also serves as a meal-time canteen for monks living on temple grounds. The hall was recently renamed Pra Suthammayan Thera Hall and updated with a completely renovated interior which included an audio upgrade.

When considering a new professional audio system, temple management turned to local L-Acoustics Certified Provider, **Vision One** . The Vision One team was familiar with the temple, having previously provided a new L-Acoustics Kara-based audio solution to the Sala 12 Rai, also known as the '100th Birthday of Pra Rachapromyan Cathedral'.

"We've been building a relationship of trust with Wat Thu Sung management since 2015," stated Vision One's chief operating officer Tanapat 'Tony' Mongkolkosol. As the concert-grade speaker system in Sala 12 Rai had been well accepted, the request for the Sala 4 Rai upgrade naturally fell on Vision One and L-Acoustics. "The audio team was familiar with L-Acoustics and wished to keep a consistent sonic signature across both halls," Mongkolkosol continued.

Using L-Acoustics Soundvision 3D modelling software, Mongkolkosol collaborated with the L-Acoustics APAC Application Project team of Alvin Koh and Chung Wah Khiew to present a system design of 46 x white L-Acoustics X12 coaxial enclosures distributed throughout the hall to keep controlled and consistent sound in the cavernous hall which is 90 m long and 70 m wide, with an 18 m high ceiling.

The rigging points of the boxes were set at 9.1 m above the ground, and mounted on horizontal structural beams and pillar columns. Careful placement in Soundvision ensured the precise calculation of speaker angles to deliver even coverage

and uniform SPL throughout the hall. An additional 14 X12 are used as monitors for monks' speeches and chants in four different locations in the space. A scant five LA7.16i amplified controllers work economically to drive the entire system of 60 x coaxial boxes.

Because some X12 speakers would be up to 150 m from the designated amplifier control room, Mongkolkosol and his team created two separate control rooms, one at the front of the hall and the other at the rear, to ensure speaker cable lengths for optimal system performance, keeping signal loss to a minimum. Fibre optic cables were used to link the two control rooms over a Milan AVB signal, with an analogue signal to fall back on. An L-Acoustics P1

Processor upscaled inputs to digital 96 kHz, while 2 x LS10s were employed as primary and secondary AVB redundant interface units.

"The end users at the temple are pleased with the signature sound quality, as well as the clarity and even coverage the system provides for their worship and meditation learning programmes. It is great to see a frequently visited temple in Thailand continually building its technical audio infrastructure, with up-to-date professional audio systems by L-Acoustics," Mongkolkosol concluded.

L-Acoustics
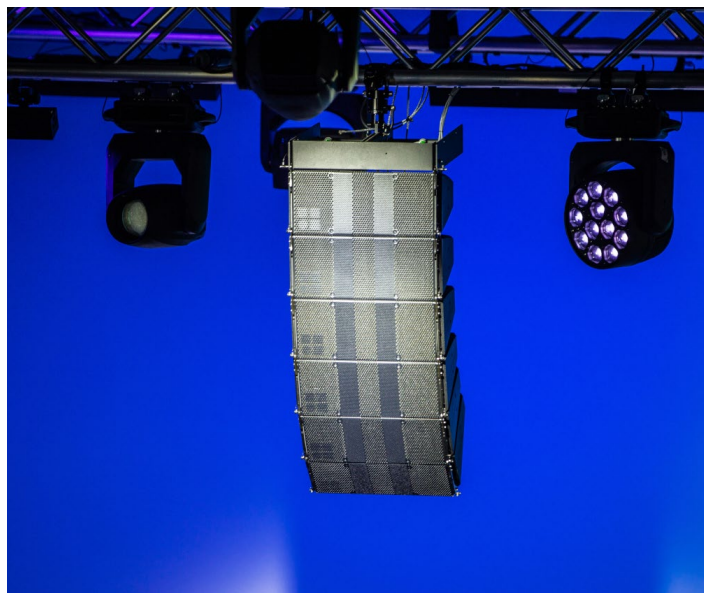
d&b audiotechnik T-Series Conveys Clear Performances at Mahidol University College of Music

THAILAND: The renowned Mahidol University College of Music in Bangkok has unveiled a brand-new Black Box Theatre that will host foreign performers and provide students with first-hand exposure to cutting-edge technology. To aid students in their journey, a complete d&b audiotechnik loudspeaker, subwoofer, and amplification system, including T10 loudspeakers, Y-SUB subwoofers, and 30D amplifiers, have been installed inside.

Located within the university's new South East Asia Museum site in Salaya, to the west of Bangkok, the space is a musical gathering point for performers, scholars, students, and music appreciators to collaborate in a harmonious atmosphere. 'Music is a powerful sound, the sound is energy, the sound creates an educational movement, the movement builds a change, and the change develops society,' is the motto of the new building, which is currently in 'soft-launch' mode.

Technical manager and chair of the Music Technology Department, Chayut Jessadavaranon, worked with Bangkok-based audio supplier Vichai Trading to specify and source the d&b system. "We wanted to install world-class equipment for our students, to help them study, to have a good experience, and provide them with useful skills with professional standard equipment," explained Jessadavaranon. "Before they graduate, the more they learn about and hear key audio brands, the more likely they are to get into the industry after finishing college. Our music students are delighted to have an opportunity to work with a d&b system."

In the Black Box Theatre, the team rigged 12 x passive 2-way d&b T10 loudspeakers in a six-a-side stereo arrangement, hanging on a fly bar. Four actively driven cardioid d&b Y-SUB subwoofers are on low-end duty, with the T10 loudspeakers powered by three d&b 30D amplifiers.

"The d&b system already has a great impact," Jessadavaranon continued. "The students are still

learning about the new loudspeakers and subwoofers, and we are all looking forward to officially opening the space for tuition and performance. Our other music hall is designed for acoustic music, and now that we have the d&b system in the Black Box Theatre, we're excited to be able to provide clear, high-quality sound to amplify instruments."

The College is currently working with the d&b APAC team to create learning opportunities for the students that focus on d&b technology, including the R1 Remote control software – which presents a d&b system graphically, channel by channel, loudspeaker by loudspeaker, group by group, with faders and

buttons arranged as required – and the d&b ArrayCalc simulation software to optimize system design.
"We have a full-time audio technician and sound engineer staff, and alongside our students, we will operate the d&b system and the associated software options," concluded Jessadavaranon. "We're looking forward to learning more about loudspeaker alignment using the R1 software, and how to rig, with a hands-on workshop."

d&b audiotechnik

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A Truly Divine Sound Experience at Shree Gorakhnath Temple Thanks to Beta3

INDIA: The Shri Gorakhnath Mandir also known as Gorakhnath Temple is a temple of the Nath monastic order group of the Nath tradition. The name Gorakhnath derives from the medieval saint, Gorakshanath (c. 11th century CE), a yogi who travelled widely across India and authored a number of texts that form a part of the canon of Nath Sampradaya. The temple is situated in Gorakhpur, Uttar Pradesh, India within large premises; and performs various cultural and social activities, while serving as the cultural hub of the city.

Attracting devotees from all across the country to seek the blessings of Sant Gorakshanath; the temple plays host to several forms of devotional and spiritual activities like meditations, chanting. Satsangs etc – all of which are hosted within the plush outdoor courtyard section of the premises, which features a step-style amphitheatre seating for devotees to congregate comfortably, in addition to a lavish stage to host the various devotional experiences.

And it is in precisely this section where you'd notice that the Shree Gorakhnath Temple has set a new benchmark of sorts within the realm of professional audio as well; by embracing cutting-edge technology to enhance the spiritual experience of its devotees.

To ensure crystal-clear sound projection and seamless audio coverage, two units of the compact yet extremely powerful Beta3 TLA121F line array modules are paired with matching subwoofers on either side of the stage to serve as the primary Front-of-House (FOH) solution – with the sheer performance presence of the system ensuring that every spoken word, musical note, and divine chant resonates with pristine clarity.

A consistent audio experience across the entire expanse of the outdoor courtyard section is further reinforced, as the temple compound walls adjacent to the courtyard have been outfitted with multiple units of the Beta3 the N10TF - 10" two-way full-range plastic body waterproof speakers. These strategically placed loudspeakers act as the fill reinforcement solution, delivering a uniform sound experience to every corner of the temple. Whether a devotee is sitting closer to the stage or in the outer perimeters, the Beta3 N10F loudspeakers provide an immersive audio experience, ensuring that no spiritual discourse or devotional music goes unnoticed.

A key point to be noted is the fact that design and integration team recognized the outdoor nature of the courtyard and the imminent possibility of varying weather conditions, and subsequently implemented TLA121F line array system and N10F reinforcement speaker system after strategic deliberation, mainly because these technologies also hold the capacity to withstand the elements without compromising on performance. The weatherproof design ensures that the equipment remains reliable and functional, even in

challenging situations, allowing the temple to provide uninterrupted spiritual experiences to its devotees.

Beta3's loudspeakers at the Shree Gorakhnath Temple are driven by the powerful DT series class-D amplifiers, that have been tuned to specifically meet the requirements of the venue. These amplifiers offer a comprehensive interface and simplified control functions, allowing easy adjustments and fine-tuning of the audio system while seamlessly integrating with the TLA series line array system and N series speakers, thereby ensuring optimal performance and reliability. More importantly, not only do these amplifiers not only provide ample power to drive the line arrays and loudspeakers but also ensure efficient energy

consumption, reducing the temple's overall carbon footprint.

A member of the temple's administration shared their comment, stating "Beta3's commitment to delivering exceptional audio solutions is very evident in their choice of high-performance products and technologies that's been installed at Shree Gorakhnath Temple. Several devotees have lauded the high-quality, uninterrupted and immersive experience that they've enjoyed; and there's no doubt that this has set a remarkable standard for houses of worship all across the country!"

Beta3 India

LEA Professional Names Technosound New Distribution Partner

MIDDLE EAST: LEA Professional has announced a distribution partnership with Technosound of Beirut, Lebanon to support its thriving customer base in the Middle East. This partnership allows LEA Professional to increase support for its existing customers in the region, as well as further develop new opportunities in the market.

Technosound has more than 50 years of experience in the audio industry and is a trusted distributor in the Lebanese high-end pro audio industry. The company has considerable expertise across various sectors including corporate, live events, hospitality, broadcast, and residential. Technosound will represent the full range of industry-first amplifier solutions from LEA Professional.

"We are always seeking new, dynamic partners to complete our offering," said Georges Bitar, CEO of Technosound. "LEA Professional is a game-changer in this industry and we are proud to work with an innovative partner that is always looking to make things better, easier, and more powerful. The Cloud platform is groundbreaking and the product line is vast and powerful."

LEA's smart, professional-grade amplifiers deliver "one of the most feature-rich and affordable amplifiers available in the industry" — featuring on-board DSP, a web browser-based user interface, third-party API control, and more audio system enhancements. For Pierre Fahed, director of Sales and Marketing along with the team at Technosound, these were features that differentiated LEA Professional solutions from others in the market.

"Technosound has a stellar reputation in this region of the world and we are excited to continue building momentum for LEA Professional's best-in-class amplifiers," explained John Dodson of ProCon AV, LEA's sales partner in the Middle East. "LEA's cloud and IoT-based technologies are revolutionizing the audio industry and I'm thrilled to bring in a forward-thinking distributor partner that can help build the brand's reputation in the region."

"Lebanon and the surrounding Middle Eastern countries are critical growth areas for LEA Professional," commented Scott Robbins, VP of Sales at LEA Professional. "We are thrilled to have Pierre Fahed and the Technosound team on board. The company is experienced, has a great customer base and will be critical in helping advance LEA Professional and our cloud- and IoT-based technologies in this region of the world."

Technosound can be contacted by email: **technosound3@gmail.com** or by phone: +961.1.613561.A detailed regional breakdown and contact information for all LEA Professional representatives and distribution partners are available by following the link below.

LEA Professional/Partner Map

Analog Way Joins Q-SYS Technology Partner Program

GLOBAL: Analog Way has joined the Q-SYS Technology Partner Program. This program enables software and hardware technology partners to create market-ready solutions that integrate seamlessly with Q-SYS, a cloud-manageable audio, video and control platform.

As part of the program, Analog Way has worked closely with **Q-SYS**, which has fully vetted and endorsed the Analog Way LivePremier plugin for Q-SYS with a Q-SYS Certified badge (developed with Q-SYS and supported by Analog Way and Q-SYS). This plugin allows easy control of any presentation switcher of the LivePremier series, including screen and layer content control, preset recall, Preview/Program transition, multiviewer management and audio routing. Philippe Vitali, director of Product, Analog Way stated,

"We are delighted to become a member of the Q-SYS Technology Partner Program and to provide our customers and partners with a Q-SYS certified plugin, designed to greatly simplify the integration of our powerful LivePremier 4K/8K presentation switchers into the Q-SYS control environment."

"We are proud to have Analog Way join our program and work collaboratively with us on a plugin integration that will enable elevated experiences for our shared customers," concluded Geno Zaharie, principal, Alliances & Ecosystem, Q-SYS.

Analog Way

Renkus-Heinz Brings the Sound Solution to a Wider Demographic with Qorsys

PHILIPPINES: On a never-ending quest to deliver the highest-quality audio solutions to as many people as possible, Renkus-Heinz has partnered with AV distributor **Qorsys AV Technologies** to bring the renowned Sound Solution to the Philippines.

Established in 2019 and based in Manila, Qorsys is a highly respected AV distributor that works to bring well-known AV brands to its customers throughout the Philippines.

"The Qorsys – Renkus-Heinz partnership is a natural fit, given our goal of becoming a well-rounded AV-centric distributor," affirmed Qorsys general manager, Ramon Borja. "Renkus-Heinz complements the other brands that we offer and allows us to enter into the high-performance and acoustically-sensitive environment markets."

Known for its digital beam-steering technology,

Renkus-Heinz is a leader in fixed installations in transportation hubs, houses of worship, sports venues, performance venues and many other applications. Bringing this technology to the Philippines is the first step to reaching a wider demographic of customers that can greatly benefit from Renkus-Heinz audio solutions.

"We view Renkus-Heinz as the leader in beam-steering technology, which no other brand can equal in terms of performance and reliability," added Borja. "Qorsys is purely a distribution organization. This allows us to work with various system integrator partners without them being concerned about competing with us for a project. We believe in assisting our partners all the way through a project, from design to commissioning."

The Renkus-Heinz product lineup features a broad spectrum of line arrays, passive column loudspeakers, point source loudspeakers and more, all equipped with integrator-friendly features.

"The Philippines has been one of our key markets in Asia," concluded Karan Kathuria, director of sales & business development at Renkus-Heinz. "This strategic partnership between Renkus-Heinz and Qorsys will help us channelize our beam steering across different market verticals. I am honoured and confident that this new partnership will ensure the best customer experience, helping Renkus-Heinz's vision of customer obsession."

Renkus-Heinz

Powersoft Expands Asian Operations with New Appointment

MIAO WANG
Solutions Engineer
Powersoft

CHINA: Miao Wang has joined Powersoft China as a solutions engineer in its new Beijing office. Wang, who hosted the highly anticipated Chinese launch of the UNICA platform at InfoComm China, is the latest hire for Powersoft's local operation, which recently relocated to the national capital from its previous office in Shenzhen. He will report directly to Abbu Hu, Powersoft's chief representative officer in China.

Welcoming Wang to Powersoft, Hu said she is "looking forward to working with Miao to further drive awareness of the Powersoft brand in the Chinese market".

Wang joins Powersoft from a local pro-audio equipment manufacturer, where he worked with clients to deliver professional sound solutions, introduce new products, and provide manufacturer support for important projects and installations. Previously, after studying professional audio at university, he worked as a sound engineer at a television station, handling live sound mixing and recording.

It was as a student that Wang first came across Powersoft's amplifiers, which, he explained, are as renowned in China for their power, quality and efficiency as in the rest of the world. He noted he is enthusiastic about bringing his pro-audio industry expertise to bear in his new role and spreading the word about the company's industry-leading hardware and software solutions with his Chinese colleagues.

"I am looking forward to contributing my experience and understanding of professional audio," he stated, "and sharing how Powersoft's powerful products provide the most suitable solutions for the market. I am also excited to collaborate with my new colleagues and partners to meet the needs of and provide the best service to our clients."

Powersoft

Latest Industry Leading AV Innovations from Biamp

With a commitment to developing solutions that are easy to use and simple to install, Biamp's new, extraordinary products hope to empower true human connection in any space. Their latest UC conference offerings include:

Modena MAX Connect

Modena MAX Connect enables the same comprehensive experience that users have come to love in dedicated UC conference rooms, now within BYOM collaboration spaces. With MAX Connect, users walk into any room, with any device, and join a meeting instantly using any video collaboration system, including UC platforms or messaging apps.

It's the "first and only" seamless BYOM collaboration experience: from joining a meeting to sharing content to adding remote participants, to controlling room AV, MAX Connect offers the same experience for all meeting participants and makes it simple for IT to manage and deploy.

MAX Connect receives content from phones, tablets, and PCs via wireless or wired connections and pairs with a flat panel display, which offers a welcome screen with connection information for attendees, and any other audiovisual peripherals in the room such as microphones, cameras, and loudspeakers. The user interface also includes a dashboard that displays meeting information, time, connection options, weather, and other important content for attendees.

To get started with the BYOM setup, users simply enter the meeting space and join via the app or web browser. Once connected, the user can stream video calls from their own PCs right to the installed meeting room peripherals; share, view, or annotate any content from their device, including presentations, websites, spreadsheets, photos, and videos; or draw, write, and brainstorm on a shared whiteboard. In addition to viewing content from the room display, all participants can also see a copy of the shared content on their own personal device making it easy to zoom in or focus on something of interest.

The MAX Connect collaboration experience can be controlled through an included handheld remote or with the new Apprimo Touch 8 MAX tablet. The new Touch 8 MAX is based on the award-winning Apprimo Touch 8i tablet, customized for the MAX Connect BYOM experience. It is pre-programmed and works out of the box to control room volumes and camera functions, as well as the content and layout of the room display. It is PoE powered and includes PIR sensors that turn the screen on automatically and adjust the screen brightness based on the ambient light level of the room.

MAX Connect also features enterprise-class security to protect the organization from connected devices the IT team does not manage, ensuring that bring-your-own-device-led meetings won't lead to security breaches.

EasyConnect MPX 100

EasyConnect MPX 100 is an easy-to-use media switcher designed for conference rooms equipped with a dedicated UC Room system, such as a Microsoft Teams Room or Zoom Room, but from which a user occasionally needs to use an alternate UC platform. The MPX 100 connects two hosts to the room peripherals and automatically switches between them. When a user needs to use an alternate UC platform, simply connect a laptop or other personal device to the second MPX 100 input and it will automatically switch away from the primary UC host system, connect the user device to the room AV peripherals, and return the room peripherals to the dedicated UC room host.

EasyConnect MPX 100 provides simple connectivity via USB or HDMI with no drivers required. It mounts behind the display and includes cables to the table. MPX 100 is SageVue compatible, offers passthrough to other Biamp AV solutions, and enables firmware updates on connected devices. The MPX 100 also includes extra USB ports for cameras, microphones, or touchscreens; HDMI 2.0 for displays up to 4K resolution; and up to 4K camera support.

Biamp

ClearOne Launches Dante-Compatible BMA 360D Beamforming Microphone Array Ceiling Tile

As the newest member of ClearOne's beamforming microphone array ceiling tile family, the BMA 360D aims to offer unrivalled audio performance and native compatibility with any Dante-enabled DSP mixer.

The new Dante-compatible beamforming microphone array allows integrators and users to leverage ClearOne's industry-leading microphone innovations in more projects and spaces than ever before. Dante integration in the BMA 360D enhances the array's functionality by delivering unprocessed beam audio on individual Dante transmit channels. Additionally, a smart-switched output is delivered on a separate Dante channel to provide the optimal mix of active inputs while enabling ClearOne's full suite of audio enhancements, which include echo cancellation, noise cancellation, and level control.

The BMA 360D incorporates the industry's only ultra-wideband, frequency-invariant beamforming mic array technology with uniform gain response across all frequency bands. With proprietary FiBeam and

DsBeam technology, participants experience natural and full-fidelity audio across all beams and within a single beam. DsBeam delivers superb clarity and intelligibility through unparalleled sidelobe depth below -40 dB, resulting in superior rejection of reverb and noise even in challenging environments.

Integrator setup is simplified by convenient preset beam patterns for common room layouts, while custom beam patterns can be created for unique floor plans. Combined with adaptive steering that focuses audio pickup on active speakers, the adjustable beam patterns provide impeccable coverage of every meeting or conference participant. The exceptional accuracy of ClearOne's beamforming and adaptive steering technologies also enhance the performance of voice lift and camera tracking functions for any attached DSP mixer.

The sound reinforcement capabilities of the BMA 360D have also been improved by individual Dante receive channels that drive powerful integrated amplifiers to enable 4 x 15 W or 2 x 30 W loudspeaker systems. Directly connecting in-ceiling or in-wall speakers to the microphone array can reduce system complexity and greatly simplify installation.

The BMA 360D comes in both 24" and 600-mm ceiling tile sizes, while a VESA-mount hole pattern provides support for pole mounting. Hard-ceiling mount adapter kits are also available for rooms without ceiling tiles.

ClearOne/BMA 360D

HOLOPLOT Breaks New Ground with Latest Product Innovation
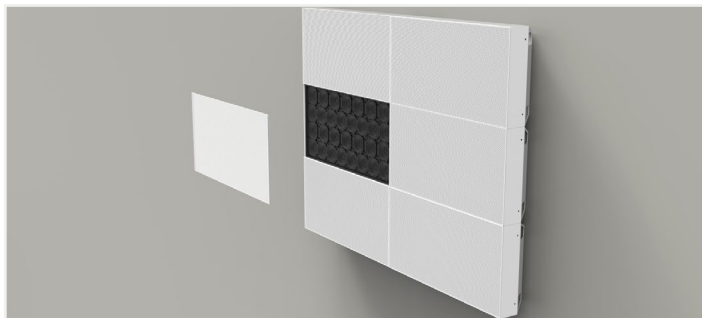
Courtesy of Holoplot.

Designed to "revolutionize sound reinforcement for a multitude of audio applications" - X2 is the latest hardware innovation from Berlin-based HOLOPLOT

Wrapped in a more compact hardware design, HOLOPLOT's newly conceived X2 embraces the same core technologies of 3D Audio-Beamforming and Wave Field Synthesis as its multi-award-winning X1, making it more accessible for integration projects across a variety of sectors.

The X2 is optimized for speech applications and builds on achievements from HOLOPLOT's formative years when tests of a technology prototype resulted in "some of the highest Speech Transmission Index (STI) measurements ever recorded on a train station platform".

The Modul 30 (MD30) is a Matrix Array loudspeaker, incorporating 30 full-range drivers in a single-layered matrix arrangement. X2 taps into intelligent software-based optimization of sound system design and performance, as well as guaranteeing seamless and customizable integration. X2 is specifically engineered to tackle longstanding acoustic issues, significantly decreasing the need for acoustic treatment, by mitigating unwanted reflections, and ensuring clear and consistent audio experiences. With the ability to be discreetly positioned behind acoustically transparent screens or wall panels, X2 preserves the architectural integrity of any space, while HOLOPLOT's optimization algorithms counteract transmission loss.

X2 boasts a compact size without compromising on the sound control that defines HOLOPLOT. The simple, intuitive mounting frame of X2 allows for clean and efficient installation, making it a practical choice for a variety of environments. Building on the modular Matrix Array principles of X1, X2 can be scaled effortlessly to meet the demands of a multitude of spaces. Recognizing the crucial role of clear communication in public address and voice alarm applications, X2 is an optimal choice for safety-critical applications such as train stations and airports.

Engineered to endure challenging environments, X2 is built to withstand extreme weather conditions including high temperatures, humidity, and water exposure. This durability allows X2 to be installed in outdoor venues or other demanding settings without compromising performance or longevity. Whether placed in a tropical resort, a humid indoor pool area, or large outdoor congregation spaces, the MD30 module delivers consistent, high-quality audio performance, no matter the climate or conditions.

With the announcement of X2, HOLOPLOT is also releasing a brand-new version of its sound system design software HOLOPLOT Plan. Alongside several feature updates, it now enables the planning and simulation of HOLOPLOT sound systems with X2 Audio Modules.

HOLOPLOT/X2

Crest Audio Débuts PCX 1616 Digital Audio Matrix Processor

Crest Audio, a Peavey Commercial Audio brand, has introduced the PCX 1616 digital matrix speaker management processors. The PCX 1616 offers best-in-class processing technology supporting 32 input and 32 output channels, with 16 analogue inputs and 16 analogue outputs and 16 digital inputs and 16 digital outputs via the optional Dante card allowing a signal to be routed in multiple configurations to meet virtually any requirement.

Harnessing power and flexibility to perform loudspeaker management functions as well as matrix mixing, room combining, and other audio processing functions, the PCX 1616 is well-suited for installed and portable sound systems. On each PCX Series processor, the crossover filters are fully adjustable, and any input can be routed to any output via the digital matrix system, allowing for any speaker management cabinet configuration.

The PCX 1616 has a 96kHz sample rate processing with an exceptionally quiet and accurate AD/DA interface (24-bit Delta Sigma) and filter response. Crest Audio's software and advanced DSP (digital signal processing) algorithms offer professional audio-grade signal processing and control features to manage, optimize, and protect the FoH (front of house); monitor and multi-zone the speaker systems; and ensure exceptional audio signal clarity and integrity without loss or colouration.

The front panel offers quick and simple visual LEDs to indicate functioning signal paths. Alternatively, an RJ-45 Ethernet port, located at the back panel, allows for a higher-resolution graphical user interface configuration. The PCX 1616 can be controlled with the intuitive PCX Editor Software via back-panel Ethernet or front-panel USB interface. Serial control is possible via RS 232 and RS 485. A security lock feature is included.

Each input and output features 5-segment LED meters. Input features include gain, mute, HP/LP, 5-band PEQ (parametric equalizer), polarity and up to 680ms of delay. Each output features an additional 5-band PEQ, gain, compressor/limiter, polarity, delay, mute, and crossover/band-pass filters. EQ filter types include PEQ, Low-Shelf, Hi-Shelf, Low-Pass, High-Pass, All-Pass1 and All-Pass2. In addition, the PCX 1616 offers the distinctions of 5-band PEQ and phase on both input/outputs, as well as +48V phantom power, noise gate, feedback, and an Automix channel on input.

To round out the PCX 1616's adaptability, the firmware of each processor can be field updated. Additionally, each processor provides the ability to save presets that are nameable with a descriptive text entry. Each unit has an integrated power supply accepting AC mains voltages of 95 to 240VAC, 50/60Hz.

Rack-mountable and lightweight, at no more than 10 lbs/4.5 kg, the PCX 1616 is designed for the touring or fixed sound installation markets.

Crest Audio/ PCX 1616

Extron Announces New DTP3 Transmitter with USB-C Charging

Extron's new DTP3 T 203 is a three-input twisted pair transmitter for sending USB-C video, HDMI, and control up to 330 feet (100 meters) over a shielded CAT6A cable. It includes proven technologies that extend video with optimal image quality. This DTP3 transmitter supports 4K/60 4:4:4 signals and is HDCP 2.3 compliant. To maximize image quality and eliminate latency, all supported video resolutions are transported without compression.

Capabilities such as 60 W of USB-C charging, dual buffered HDMI and DTP outputs, contact closure with tally output, and Ethernet remote control facilitate integration in professional environments. Integrator-friendly features include EDID management, auto-switching between inputs, and bidirectional RS-232 pass-through for control of remote AV devices.

As with other DTP3 transmitters, the DTP3 T 203 is backwards compatible with the DTP ecosystem and ideal for presentation venues, conference rooms, and wherever needed to meet application requirements.

The DTP3 T 203 provides reliable switching and transmission of USB-C and HDMI video at data rates up to 18 Gbps. In addition to enabling uncompressed extension of video, it supports HDR, Deep Color up to 12-bit, 3D, embedded HD lossless audio formats, and CEC. The transmitter is compatible with Show Me cables, which provide convenient connectivity and user input selection and control for TeamWork Collaboration Systems. Two of the transmitter's many integrator-friendly features include simultaneous transmission of bidirectional RS-232 signals from a control system for AV device control and Extron's EDID Minder technology, which ensures connected sources power up properly and reliably output content for display. Also, the DTP3 output can be configured to send video and embedded audio, plus control, to an HDBaseT-enabled display. These features and capabilities make the DTP3 T 203 the ideal transmitter for professional environments.

Extron/DTP3 T 203

Easily Add Biamp Impera Room Control to Zoom Rooms for More Flexibility over Controls

biamp.

ZOOM ROOMS FLIP FOR IMPERA ROOM CONTROL

Biamp has released a set of tools that make it easy to add room control to Zoom Rooms. Now a single control interface can provide both Zoom calls, as well as Biamp-powered room controls enabled by either the Impera Tango or Impera Uniform controllers.

Biamp has published everything needed to enable Room Controls that are powered by Impera, this includes a step-by-step guide [Integrate Biamp Control with Zoom Room's "Room Control" - Biamp Cornerstone] which explains how to control your ZOOM Room directly via the "Room Control" tab of your Zoom interface. In the guide, the company has also previewed sample Project Designer and Zoom Room Controls profile files that possess all the necessary features for activating Impera room control.

Using one of these Project Designer files, users can build out their control project the way they normally would. Room controls are enabled via the Zoom

web-based admin portal's Room Controls Profile. The provided JSON Profile file will require light editing explained in detail in the step-by-step guide.

In a matter of minutes, a Zoom Room can be running Impera room control, operating displays, sources, level control, lights, blinds and curtains, and more. Click on the links below to download the Impera Tango or Impera Uniform controllers.

Biamp/Step-by-Step Impera Guide

NEUTRIK Updates speakON Range of Audio Connectors

NEUTRIK has expanded its speakON range with upgrades to its 2-pole and 4-pole audio cable connector portfolio in the form of the new NL2FXX and NL4FXX.

New features of the NL2FXX and NL4FXX include a locking bushing that protects against unintended opening – uniquely providing locking bushing and strain relief for cable diameters of 6 mm to 12 mm in the S variant connectors, and 10 to 16 mm in the L variant connector

– and a unique two compound housing to improve the handling in daily operation.

Other features include:
• Up to 37 A rms current rating

• IEC 61984, UL 1977 and CSA C22.2 No.182.3 certification; ensuring component acceptance for cable assemblies and equipment in compliance with various AV and IT international safety standards, such as IEC/UL 62368-1

• Superior quality NEUTRIK manufacturing, robust construction and reliability

• Simple and reliable twist-locking system

• Improved kink protection with two-component bushing

The new connectors are easier to assemble, as the strain relief chuck mechanically snaps to the insert and aligns with the housing; allowing for faster, smoother assembly of the connector.

These new models affirm NEUTRIK's continuing commitment to the highest quality standards of engineering and performance, and meeting the latest international standards and safety regulations. Thus making it easy for their customers to design-in their products to support a trouble-free certification process.

NEUTRIK/NL2FXX

Brompton Technology Shows its True Colours with TrueLight

Brompton Technology's Tessera G1 receiver card delivers 20X more computing power than the current Tessera R2+. It is designed to drive next-generation LED panels that can meet the extreme requirements of virtual production and other fast-growing segments demanding maximum performance, such as simulators and eGames.

With the G1 already being integrated into new panels by "industry-leading LED manufacturers", these next-generation panels will deliver finer pixel pitches, ultra-high frame rates, and a broader spectral output of light, thanks to the addition of extra LED emitters per pixel. TrueLight, driven by the Tessera G1 receiver card, enables control of panels with extra emitters – for example, RGBW. This technology brings major benefits in situations where LED panels are contributing to the lighting of a scene, such as in a virtual production volume, where recreating reality is a top priority and the narrow spectral output of conventional RGB panels can cause colour shifts and unnatural skin tones.

TrueLight builds upon Brompton's Dynamic Calibration technology, the only system on the market capable of providing complete spectrally-aware calibration for extra emitters. It ensures that colourimetric precision and full colour and luminance correction are applied on a per-pixel basis, allowing for intelligent RGB to RGBW conversion that gives a broader spectral output for better lighting quality, while also maintaining precise colour accuracy.

Furthermore, TrueLight leverages other features within the Tessera software platform including PureTone for consistent linearity of both RGB and 'W' LED output, ThermaCal for temperature correction of all LED colours, ShutterSync to eliminate on-camera artifacts for direct-view applications, and Extended Bit Depth to significantly enhance the dynamic range of the video output.

Brompton Technology/TrueLight

AtlasIED Collabs with Fyne Audio for IsoFlare Premium Ceiling Loudspeakers Series

To provide its customers with the pinnacle in sonic performance, AtlasIED has unveiled the IsoFlare series of premium ceiling loudspeakers. The first products developed as part of AtlasIED's strategic investment in Fyne Audio, IsoFlare ceiling loudspeakers represent a new benchmark for preeminent installations utilizing the very latest design techniques and tools to create the next generation in point source technology.

Ideal for luxury hotels, casinos, high-end restaurants and bars, retail spaces, and corporate facilities, the new IsoFlare series' point-source technology provides a natural and accurate soundstage, accurate and linear response, and unparalleled consistent broadband directivity.

The series consists of seven models, including blind mount models in four-, six-, and eight-inch sizes, a four-inch low profile model, an eight-inch subwoofer, and two pre-install models. The new loudspeakers

offer an edgeless grille design in either square or round and black and white options to cater for the most demanding architectural constraints. For quick and secure installation, the IsoFlare series incorporates a patented toolless dog leg mounting mechanism on all models.

The IsoFlare series includes:
• FC-4T, 4" available in blind mount

• FC-6T, 6" model in both blind mount and pre-install versions

• FC-8T, 8" model in both blind mount and pre-install versions

• FC-4TLP, 4" low-profile model

• FC-8ST, 8" subwoofer

AtlasIED/IsoFlare

Sennheiser Unveils Scalable, All-in-One Conferencing Bars with Built-in Camera

Sennheiser has entered the unified communications A/V bar market with the most flexible all-in-one devices for small and mid-sized meeting rooms and collaboration spaces. Part of the Sennheiser TeamConnect Family, the TeamConnect (TC) Bar Solutions provide options for small (TeamConnect Bar S) or mid-sized (TeamConnect Bar M) meeting and collaboration spaces.

The TC Bar Solutions also come with benefits such as easy set-up, brand agnostic integration, easy management and control, high video quality, security and sustainability. The TC Bar S features 4 x microphones and 2 speakers, while TC Bar M has 6 x microphones and 4 x speakers. Both easily integrate with any meeting platform and can be further enhanced with other compatible products, including those from Sennheiser.

The TC Bar Solutions allow the customer to choose the right video conferencing device for their meeting room size. Easily integrate the TC Bar into a room design with multiple mounting options like wall mount, VESA mount, tabletop or freestanding. The option of using Dante for adding extension mics and/or a 2nd external USB camera make the device even more scalable.

The powerful full-range stereo speakers with their improved directivity pattern and optimized passive radiators ensure natural speech and outstanding intelligibility. Integrated beamforming technology enables a seamless transition between presenters and offers freedom of movement and configuration within the space.

The built-in DSP, as well as the option to adjust audio settings via Sennheiser Control Cockpit, allows users to further optimize room acoustics. The TC Bars also come with an automatic conference & music mode switch to provide the best audio to match the content.

The TeamConnect Bar Solutions feature some of the latest advances in meeting technology to further enhance modern hybrid meetings and lectures – taking video to the next level. The 4K Ultra HD camera is further enhanced by AI features like "Autoframing" and "Person Tiling", enabling all remote participants to clearly see everyone in the room. With advanced AI, even the smallest gestures and facial expressions are conveyed to ensure increased meeting inclusion and engagement.

Thanks to Sennheiser's open and agnostic ecosystem philosophy, the TC Bars are also compatible with many major Media Control Systems from our Alliance Partners, with certifications currently in process. For basic adjustments, several features, like zoom, person tiling and more, can be found on the included remote control.

When it comes to security, TC Bar Solutions follow industry best security practices, and their configuration is password protected. The communication to the

Sennheiser Control Cockpit, as well as 3rd party media control systems, is encrypted using industry-standard Transport Layer Security 1.2 and safe from misuse. The TC Bars also support IEEE 802.1x network authentication and, of course, for additional privacy, a lens cap is included.

With the addition of the TC Bar Solutions to the TeamConnect Family, Sennheiser now offers another option to customers to compliment the family's trusted ceiling microphone solutions to support large and midsized rooms as well as an intelligent speaker for smaller meetings. Each product is designed to function as a standalone solution. Additional coverage or features can be achieved by scaling with other compatible Sennheiser or third-party products and by leveraging the power of the Sennheiser Control Cockpit for ease of configuration and monitoring.

 TC Bar is expected to begin shipping in late 2023.

Sennheiser/TC Bar

Renkus-Heinz Revolutionises Steerable Product Line
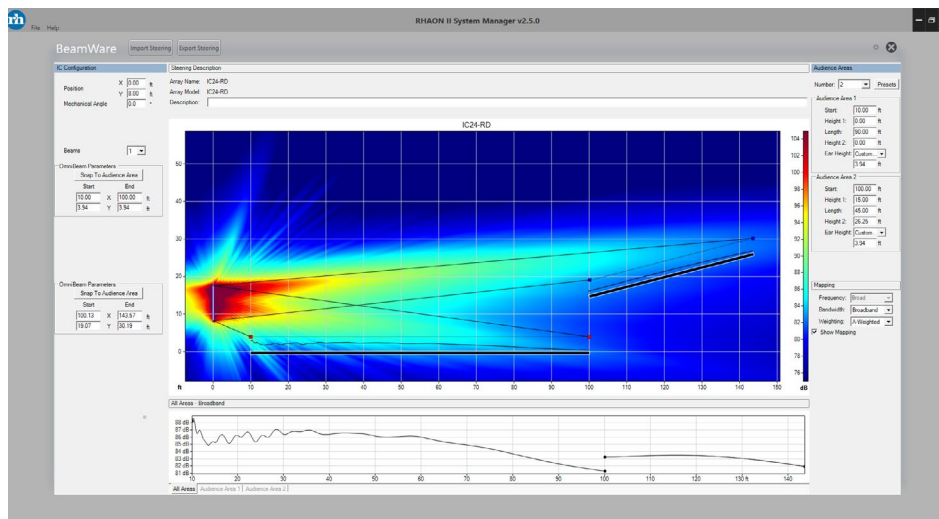
Renkus-Heinz has announced the launch of OmniBeam, the latest innovation in beam-steering technology that revolutionizes the entire Renkus-Heinz steerable product line.

Renkus-Heinz's new OmniBeam algorithm is the culmination of decades of industry-leading expertise in steerable technology. It replaces the previous best-fit approach of UniBeam to now deliver unmatched sound and coverage for 100% of venues with less time and knowledge required than ever before. By taking the rocket science out of simulating and commissioning steerable arrays, Renkus-Heinz hopes to make beam steering suitable for more than just reverberant spaces.

The result is custom-tailored coverage precisely dialled into the exact geometry of every space, resulting in the best, most consistent audio experience possible — that anyone, no matter their level of expertise, can achieve with minimal time, every time.

Renkus-Heinz/OmniBeam

TCC M: Speciality Solution for Medium-Size Meeting Spaces

TeamConnect Ceiling (TCC) family of ceiling array microphones have taken the AV conferencing domain by storm, and set a defining dynamic. Making the impact a sort of holistic, Sennheiser has brought the TCC exclusively for medium-size meeting spaces. Sennheiser's **product manager Jens Werner** explains here how and why TCC M is special.

Could you please expand on how the TCC M fits into the portfolio of Sennheiser's offering for the corporate and education sectors?

The TCC M is our newest addition to the Sennheiser TeamConnect Ceiling solutions portfolio. Unveiled at ISE 2023, the TCC M is our new ceiling microphone for mid-sized meeting rooms and lecture or collaboration spaces.

TCC M delivers all the innovation and features of our award-winning TeamConnect Ceiling 2 (TCC 2) to a new segment of the meeting space market. With a coverage area of up to 40 square meters, customers can now bring the power of TCC 2 to their mid-sized meeting space.

What new applications does the TCC M enable? What outcomes do you intend to deliver to End-Users with the TCC M?

With the worldwide success of our TCC 2 for large meeting spaces, and based on customer feedback, we wanted to provide the same experience to mid-size conference rooms and educational spaces with a new,

sleek design at an attractive price point, while also allowing us to make a sustainable impact with smaller housing. With the latest addition to the TeamConnect Family, we want to provide state-of-the-art technology that suits the size and set up of any conference room.

Sennheiser has been known for superior audio technology. From a technical perspective, how does the TCC M live up to Sennheiser standards?

Our TCC 2 is well known in the industry and TCC M delivers all the same innovation and features. These solutions employ patented automatic dynamic beamforming technology and TruVoicelift functionality, which significantly increases speech intelligibility while allowing the speaker great flexibility in terms of movement and position. TCC M features 15 high quality SMD electret condenser capsules made in Germany which offer outstanding audio quality. The microphone can constantly determine the position of the speaker and if additional control is required, priority and exclusion zones can be set using the industry-leading Sennheiser Control Cockpit to eliminate unwanted noise.

Ease of use and UX have become important considerations in today's hybrid landscape. How does the TCC M rate on these two aspects ?

Ease of use is one of our core ambitions for the complete Business Communication portfolio. Our products are designed to be easily installed and intuitively to use. With our TeamConnect Ceiling solutions our goal is that the end-user can use his meeting space without thinking about the microphone. Meanwhile our Sennheiser Control Cockpit is designed to allow for flawless digital workflows with an intuitive user interface.

Supply chain issues and product shortages have been a big challenge for OEMS as well as AV professionals. Has Sennheiser been able to find a solution to these issues?

By means of our own manufacturing, we have managed to navigate the supply chain crisis significantly better than others and have been able to provide customers with reasonable shipping timeframes. In addition, starting with all TeamConnect Ceiling Solutions manufactured in 2023, Sennheiser is extending the warranty period from two to five years with product registration.

Any other characteristic that makes the TCC M compelling proposition?

A new important topic that we will address with TCC M is network security. We identified that securing the control communication is very important to our customers. That is why each TeamConnect Ceiling Medium follows industry best practices and requires device password protection before use. The communication to our Sennheiser Control Cockpit, as well as 3rd party media control environments is encrypted using industry standard Transport Layer Security 1.2.

Sennheiser/TCC M

Four Pillars Distillery Chooses AtlasIED Loudspeakers

Music plays an essential part of the distillery experience

FACTFILE

Project Name: Four Pillars Distillery

Project Location: Melbourne, Australia

Project Segment: Corporate

Systems Integrator: Zelo Group

AV Highlight: The AtlasIED loudspeakers helped Zelo group to manage the numerous acoustic challenges in the space and meet the client's aesthetics requirements

In the picturesque countryside town of Healesville, Victoria, about an hour's drive from Melbourne, Australia, resides the Four Pillars Distillery and tasting room. Four Pillars opened its sleek, modern distillery in 2022, becoming the country's first carbon-neutral gin facility. Known for its infused-flavour gins including Bloody Pinot Noir gin, Green Apple & Rhubarb gin, and Fresh Yuzu gin, Four Pillars recently expanded its original site and tripled its capacity for hosting visitors. To help attract customers, Four Pillars' management team believed music needed to be an essential part of the distillery experience and chose AtlasIED loudspeakers to provide audio throughout the facility.

Built within a 1000-square-meter warehouse, half of the facility expansion contains large copper stills and

other machinery used in the distilling process, plus stacks of wooden casks to age and infuse the gin. The other half features Beth's crafted copper bar, a gin shop, event spaces, and a garden bar. The interior spaces are separated by large plate glass that allows visitors to watch the gin makers at their craft.

With background music or audio from live performances and projection screens showing movies or sporting events broadcast throughout the facility, Stephen Sokolowski, project manager for local integrator, Zelo Group, needed to find the right loudspeakers for the space. "The space is modern and clean, and we needed excellent sound quality. But the large flat spaces, the metal, glass, concrete, and tall ceilings used throughout presented numerous acoustic challenges," said Sokolowski.

After exploring options, Sokolowski chose the AtlasIED 2-way, all-weather SM82T loudspeakers based on their sound quality and commercial-grade durability. The largest of the SM Series at 16½-inch tall, the 30-watt loudspeaker can output 92dB. The loudspeakers include a high efficiency woofer and 1-inch high-frequency compression drivers. Additionally, the SM Series' weather-resistant capabilities suited the

space given the possibility of humidity created by the manufacturing processes.

Sokolowski's team needed to consider audiovisual design of the space carefully, and mounting the SM82T loudspeakers at the proper intervals and locations to make up for the challenges in the room became critical. The customer also wanted to ensure clean lines in the space and avoid mounting loudspeakers on flat surfaces. The SM loudspeaker's box-style mounting bracket allowed Zelo to mount them to ceiling trays to ensure they met the customer's needs.

"Any time we take on a project, we try to create a consistent acoustic wave through the venue, where loudspeakers work with each other to create fill. In this case, the AtlasIED loudspeakers were a great fit, and our customer has been delighted with the result."

Now in full operation, the expansion allows Four Pillars to produce more than one million bottles of gin per year. It also hosts 150-200,000 visitors annually to enjoy Australia's finest gin and onsite musical entertainment.

AtlasIED

Electro-Voice and Dynacord System Brings a New Level of Vocal Clarity to Binh Thuan Roman Catholic Church

A sound system comprising Electro-Voice and Dynacord solutions enhances audio intelligibility for the congregation at Binh Thuan Roman Catholic Church

FACTFILE

Project Name: Binh Thuan Roman Catholic Church

Project Location: Ho Chi Minh City, Vietnam

Project Segment: Houses of Worship

Systems Designers and Integrators: Duy Hoa Phat Corp

AV Highlight: To overcome the reverberation within the church without obstructing the visuals

Key AV Brand: Electro-Voice and Dynacord

Established in 1966, Binh Thuan church is a notable religious site within Vietnam's Catholic community and one of the biggest churches in Ho Chi Minh City. Since its original construction, the church has been through several renovations and expansions. However, as the church building grew, its existing sound system, which was selected more for its aesthetic than acoustic properties, could not keep up.

The church decided it was time for a new audio solution which could deliver high-quality sound across the whole chancel, the space surrounding the altar, with absolutely no delay or echo. This proved to be a challenge since the reverberation time was more than four seconds. Additionally, the loudspeakers needed to blend into the church's bright interior design to be visually unobtrusive.

The answer was found in white versions of models from the Electro-Voice EVC family of compact loudspeakers. A pair of EVC-1122-VI Vari-Intense 12" two-way loudspeakers address the main congregation seating area. The EVC-1122-VI has a unique asymmetrical horn design which allows uniform coverage of rectangular spaces, ensuring sermons can be heard clearly by every member of the congregation during services. The EVC-1122-VI are supported by 7 x EVC-1082 8" two-way loudspeakers.

In addition to the EVC models, a pair of EVID S4.2TB and a further 2 x Bosch LB2-UC30-L1 compact
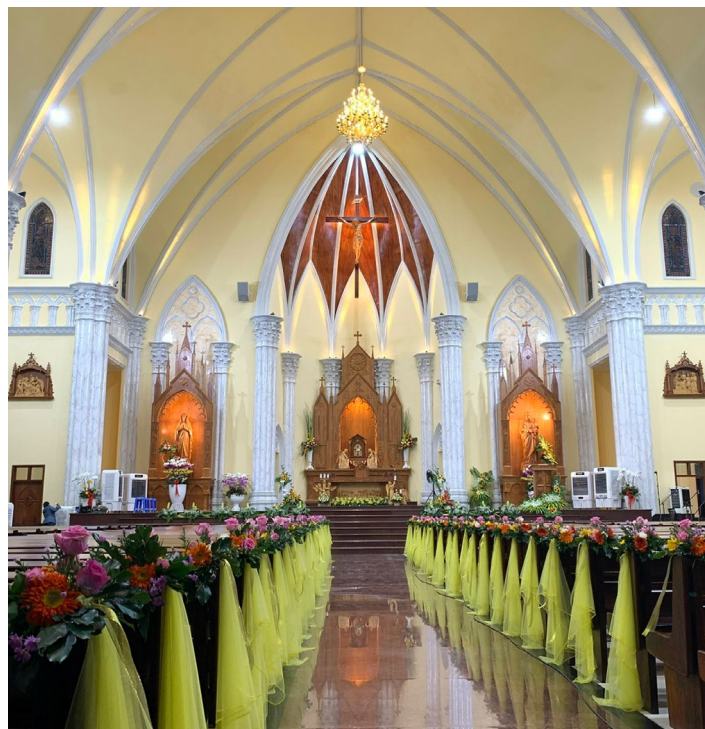
installation cabinets complete the solution. Power for the audio system is provided by 5 x **Dynacord** L1300FD 2x 650 W DSP amplifiers.

Electro-Voice microphones ensure an equally high standard of audio quality at the input end of the signal chain. Four wired ND96 dynamic supercardioid vocal mics are joined by an equal amount of RE3 UHF wireless systems featuring ND96 handhelds. Completing the microphone selection are 12 RE92HW cardioid hanging mics to capture the harmonies of the choir.

This combination of equipment precisely addresses the church's needs, especially in delivering the highest level of clarity for speaking and singing voices. And, importantly for a worship application, the durability and quality of Electro-Voice and Dynacord products mean that Binh Thuan Roman Catholic Church will be enjoying the advantages of its new audio solution for many years to come.

Electro-Voice

AUSTRALIA

tvONE CORIOmaster mini Seamlessly Integrates Multiple Projections at Contemporary TAFE Campus

Combined with Panasonic projectors, the CORIOmaster mini allowed integrator Videopro to navigate shadows by eliminating them from the image, thus creating a more seamless projection

FACTFILE

Project Name: TAFE Robina Campus

Project Location: Gold Coast, Australia

Project Segment: Education

Systems Designers and Integrators: Videopro

AV Highlight: To demonstrate student art and graphic creation content via a sustainable, smart and 'progressive' AV package

Key AV Brand: tvONE, Panasonic

Australian training organization TAFE has launched a state-of-the-art new campus in the Gold Coast city of Robina that offers a range of courses, including those related to hospitality, sport and events. Alongside them, the campus also provides learners with AV-rich facilities and projections driven by a tvONE CORIOmaster mini video processor.

Australian integrator Videopro was approached to specify a sustainable, smart and 'progressive' audio and video package. Their team had successfully used the CORIOmaster mini on previous projects where multiple projectors and screens required specific image formats and edge blending and knew it would be a fitting solution at the Robina campus.

©Videopro

At the heart of the projections inside the new building, the team has installed a CORIOmaster mini chassis with five slots, fitted out with a CORIOmaster HDMI 4K-2 Input module three HDCP Compliant, 2-Port Output Module HDBaseT with scaling modules. All the tvONE kit was sourced from tvONE Australia partner, Corsair Solutions.

"I went to a Corsair Roadshow hosted in Brisbane early on in the TAFE Project, and they had a CORIOmaster mini set up to demo how simple it was to blend five images together," explained Brad Hill, account executive at Videopro. "This is why we chose to put forward the CORIOmaster solution for TAFE Atrium concept, as we needed to blend five projectors giving a canvas for large background content. We are using the overlay of the windows on the canvas to adjust for

real-world alignment of the projectors and using the edge blending feature in CORIOgrapher to do the blend graduation between the projectors.

"The building's lobby features large pillars with light rings which cast significant shadows on the ceiling and the CORIOmaster mini allowed Videopro to navigate the shadows by reducing them from the image and creating a more seamless projection. Our lead tech, James Simpson, has great experience with the CORIOmaster mini's capabilities, including working on eliminating shadows."

The CORIOmaster mini is driving 5 x 13,000 lumen Panasonic PTMZ13KLB projectors, which are mounted in Ultralift housing mounted to the floor, shooting content up to a NewMat ceiling. The TAFE IT department is using the setup to demonstrate student art and graphic creation content.

"We really tried to keep the visuals equipment installation as simple to use and operate as possible," added Hill. "Without the CORIOmaster mini, we potentially would have had to go back to the drawing board and look at alternative concepts."

Simon Harrington from Corsair Solutions concluded: "Working with Videopro on this project was a real pleasure. They have an excellent reputation when it comes to the design and implementation of high-profile, groundbreaking installations and this project shows why. The power of the CORIOmaster mini meant it could eat the brief for breakfast, with plenty of spare grunt to overcome some architectural challenges along the way. It's so satisfying to be able to supply a product that fits the bill so completely, enabling Videopro to deliver such a stunning result for their customer."

tvONE

Audio Elevation at The Sai Hira Global Convention Centre

India's newest premier convention venue unveils a world-class aural experience with cutting-edge technologies from L-Acoustics, DiGiCo, and RCF

FACTFILE

Project Name: Sai Hira Global Convention Centre

Project Location: Prasanthi Nilayam, Puttaparthi, India

Project Segment: Hospitality

Systems Designers and Integrators: Hi-Tech Audio & Image

AV Highlight: Design and integration of powerful audio architecture that guarantees optimal sound projection at both auditoriums

The Sri Sathya Sai Central Trust has constructed a new facility, Sai Hira Global Convention Centre, at Prasanthi Nilayam, Puttaparthi; with Prasanthi Nilayam recognized as the main ashram of Sri Sathya Sai Baba. The Convention Centre, which has been constructed and donated by philanthropist Shri Ryuko Hira, is noted as a testament to the vision of promoting cultural exchange, spirituality, and global harmony, as it provides a nurturing environment for people of diverse backgrounds to come together, connect, and explore the teachings of Sri Sathya Sai Baba.

Earlier in the month of July 2023, Prime Minister Narendra Modi virtually inaugurated the Sai Hira Global Convention Centre; with the grand event witnessing the presence of prominent dignitaries and devotees

from around the world. During his address, PM Modi emphasized that the Sai Hira Global Convention Centre would serve as a hub for spiritual conferences and academic programs; where experts from various fields across the world are expected to gather at this prestigious venue. The Prime Minister also expressed his hope that this centre would contribute to the empowerment and enlightenment of the youth of the nation; as he lauded the establishment as a premier think tank for India.

These high-praises from the honourable Prime Minister himself, comes with due consideration to the fact that the magnanimous convention centre hosts world-class amenities and infrastructure that is more than well-equipped to facilitate a wide range of events and activities including but not limited to conferences, seminars, and cultural events, fostering dialogue and understanding among individuals from all walks of life; with the sprawling complex also featuring meditation halls, serene gardens and facilities for accommodation.

At the heart of the majestic convention centre lies two extremely versatile and 'high-on-tech' auditorium spaces, seating 300 and 1000 attendees respectively; both of which boast state-of-the-art audio infrastructure that comfortably surpasses industry standards.

Designed and integrated by leading solutions providers Hi-Tech Audio & Image, who are the official distribution partners for L-Acoustics, DiGiCo, and RCF in India; both auditorium spaces spotlight L Acoustics' industry leading loudspeaker technologies from the acclaimed ARCS family of products, coupled with DiGiCo's sublime sound mixing capabilities. Hi-Tech Audio & Image's certified L-Acoustics engineers Ganesh Chandra and Shaurya Gupta are noted to have worked

closely with eminent music producer, recording, and scoring engineer, and devout follower of Sri Satya Sai Baba – Sai Shravanam – in bringing together a truly world-class audio experience at both the multi-purpose auditorium venues that is sure to captivate and delight audiences.

The 300-seater auditorium at Sai Hira Global Convention Centre features a nimble yet powerful audio architecture that guarantees optimal sound projection throughout the entire space; with a total of **six units of the A10i Focus modules** (three on each side), complemented by **two units of the A10i Wide modules** (one on each side), coming together harmoniously as a high-performance stereo line array system to deliver an absolutely coherent, impressively consistent, truly immersive and crystal-clear auditory experience for every single seat within the venue.

And to further enhance the listening experience with impactful low-frequency response, the venue has been equipped with four units of the compact yet powerful **KS21i subwoofers** (two units on each side, set in cardioid configuration). The seamless integration of the subwoofers with the line array modules results in rich and accurate full-spectrum frequency fidelity, ensuring that the overall audio experience remains definitively captivating.

At the heart of the audio system at the 300-seater auditorium lies in the compact yet extremely dexterous **S21 digital mixing console from DiGiCo**, complete with the **D2 Rack**. The console's advanced features and intuitive controls allow sound engineers to fine-tune the audio to perfection, providing a seamless and engaging experience for audiences as well as those incumbents who grace the stage.

The 1000-seater auditorium, on the other hand, mirrors the excellence of its smaller counterpart despite a much larger stage gracing the venue; with the main sound system configuration spotlighting a stereo hang of **six units of the A15i Focus line array modules** (three on each side) complemented by **two units of the A15i Wide line array modules** (one on each side). Owing to the larger capacity of the venue, and the dynamics of the room itself, the design and integration team meticulously installed and aligned each module in a manner that ensures the sound coverage reaches every corner of the auditorium space without any compromise whatsoever on sound quality, clarity, or impact.

As with the 300-seater auditorium, the 1000-seater venue also features a total of four units of the **KS21i subwoofers**, with two units deployed on each side of the stage, set in cardioid configuration. And similar to the experience within the 300-seater auditorium, the meticulous subwoofer integration at this larger venue guarantees an impressive low-frequency response, adding depth and dimension to the audio experience, thereby enhancing the emotional connection between the audience and the event.

With this venue touted to host a plethora of different large-scale events, the need for greater flexibility and

dexterity has prompted the deployment of the famed **SD9 digital mixing console from DiGiCo**, coupled with the D2 Rack – with this solution serving as the central control unit to have complete command over the audio experience at the 1000-seater auditorium. When viewed at as a comprehensive solution, the sound system in total allows sound engineers to have unparalleled control over every possible sonic nuance, thereby ensuring flawless execution and an immersive experience for any event – be it music performances, conferences, or theatrical performances.

Furthermore, it's important to note that the commitment to audio excellence at the Sai Hira Global Convention Centre extends well beyond the auditoriums; as the venue's other infrastructure and facility areas like the the conference rooms and foyer areas etc have been outfitted with high-performance ceiling speakers from **RCF** which are well-known for their outstanding sound dispersion and fidelity. The ceiling speakers in these spaces have been strategically installed to provide consistent audio coverage throughout the respective designated areas. Moreover, conference rooms also sport high-end wireless microphone systems which facilitates seamless discussions and communication during conferences and other such corporate-themed events.

Rajan Gupta, director of Hi-Tech Audio & Image, expresses his thoughts on the company's association with the project as he commented, "It is such an honour and privilege for us at Hi-Tech Audio & Image to be a part of such a premier and esteemed project. We'd like to extend our sincerest gratitude to the entire management team at the Sri Sathya Sai Central Trust for their unwavering support throughout the design and integration process; in particular Managing Trustee R.J. Ratnakar, chief engineer Rameswar Prusti, and Col. Narayanan. Their vision and encouragement

The key people involved with the project.

have played a pivotal role in the success of the audio integration, making Sai Hira Global Convention Centre a beacon of excellence in the professional AV system integration industry. Also, a special word of thanks to Sai Shravanam for contributing his invaluable expertise in bringing together the meticulous design and execution of the audio architecture. Last but certainly not the least, our highly capable team of design and installation engineers, specifically Ganesh Chandra and Shaurya Gupta, who rose to the occasion and displayed their deep knowledge and expertise in designing truly world-class audio systems at the convention centre auditoriums that have definitively raised the bar for professional AV system integration. The Sai Hira Global Convention Centre stands as a testament to the kind of brilliance that can be achieved when innovation, expertise, and dedication converge in the realm of professional AV system integration!"

Hi-Tech Audio & Image