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Interview: Derek Graham

CEO, ClearOne

News:

Kolkata's Carpe Diem Seizes the Moment with Electrovoice & Dynacord



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The larger the project the more economical AVoIP becomes and the overall solution is easier to manage.

Clients don't necessarily come out and demand for provisions like AVoIP – it's just the way that the industry has progressed that the technology has become more viable

Christopher Lim general manager, ESCO



To read more go to our Feature on page 44







FIRST WORDS

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Our Feature column delves into the professional AV landscape in Asia. All surveys and reports consistently highlight APAC as a pivotal growth region for the global professional AV market. Industry experts express unwavering confidence that the market will continue its upward trajectory. This is primarily attributed to the rapid advancements in audio and display technology, the swift adoption of cloud solutions and artificial intelligence, and the emergence of the internet of things alongside smart building technologies. While challenges persist, the future appears promising for the region.



Thomas Richard Prakasam
Publisher/Editorial Director



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



FEATURES EDITOR
Elton Noronha
elton@spinworkz.com



David Lim



ADMIN & CIRCULATION
Julie Tan
admin@spinworkz.com



MEDIA REP CHINA,HONG KONG, TAIWAN Judy Wang Worldwide Focus Media +86-13810325171



DESIGN & LAYOUT Hazel Gundaya

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Spinworkz Pte Ltd
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Capitalizing on Core Competences to Maximise Customer Benefit











ClearOne – a global provider of innovative collaboration and conferencing solutions – had been making some very decisive market moves since the time it had change of guard some eight months ago. Transition in management, transition in manufacturing, and transition in market approach. Derek Graham, the company CEO, in a recent interaction with SI Asia,

spoke about all that, and where the Salt Lake, Utahheadquartered conferencing major is heading towards.

SI Asia: It's been about seven months since you became ClearOne's permanent CEO. How would you describe your time in the new role?

DEREK: It has been challenging, but also rewarding. It has been challenging for us to meet the demand for our products. We have had supply constraints due to our manufacturing transition from China to Singapore. It has been encouraging to see that our customers have stuck with us through this. It has been rewarding to see the positive responses from our partners and the market to our recent new product announcements and our participation at InfoComm USA.

SI Asia: How do you find you're meeting ClearOne's goals in terms of positioning the brand on the market, upping the ante of technology innovation, passing on

the benefits to customers, and, of course, financial strength of the company?

DEREK: To begin with our positioning in the market, in the context of this discussion, ClearOne's market standing consists of two main components: the perception of the ClearOne brand in the market, and ClearOne's market share. I think that overall, the perception of the ClearOne brand has improved over the last few months due to our announcement of the Dante-enabled BMA 360D, which will support interoperability with 3rd party DSP mixers, and a very successful InfoComm show that generated quite a bit of interest in our new products. I expect the market share component of our standing to improve as we complete our manufacturing transition from China to Singapore and ramp our production volumes. Over the past seven months, we have had a significant revenue backlog due to delays in our manufacturing transition. I expect that situation to be resolved in the near future.

On ClearOne's technology innovation, over the past few months, ClearOne has released new software and firmware for our CONVERGE Pro 2 DSP and BMA 360 beamforming microphone array that implements built-in camera tracking without the need for a separate control system, customizable beam pointing, and a chairman microphone "ducking" feature. We have also released three new cameras with artificial intelligence-based auto-framing and smart face-tracking features.

In addition, we have announced a new Dante version of our ceiling tile beamforming microphone array that is compatible with any 3rd party DSP that supports Dante.

Finally, we have announced a new wireless microphone system called the DIALOG UVHF that delivers incredibly robust reception and more available spectrum on-demand than any other product in its

class. All of this demonstrates that we are meeting our goals to leverage our technology strengths to deliver new, differentiated products and features to the market.

Coming to passing on the benefits to customers, our customers are now able to deploy new technologies at lower cost – like the built-in camera tracking feature we recently released that eliminates the need for a separate control system. Our customers have also benefited by gaining more design flexibility. For example, the BMA 360D allows our customers to pair our microphone with any vendor's Dante-enabled DSP.

About our financial strength, at the time of this interview, ClearOne's cash position is a bit over \$20 million after payment of \$1.00 per share special dividend in June of this year. I believe that our strong balance sheet, especially our cash position, provides us the necessary ramp to launch our products, build strong teams, and compete effectively in the market.

SI Asia: At one time pre-COVID, ClearOne had a notion of wanting to be an IKEA sort of entity for the AV World...Is there any deviation on that objective now?

DEREK: IKEA makes almost everything a person needs to furnish a home, both as separate pieces, and as ensembles to furnish say, an entire bedroom or office. It is a pretty good analogy to say that pre-COVID, ClearOne wished to be somewhat like the IKEA of the AV world. For example, back then, we developed our own conferencing software and video conferencing hardware codecs. One of the big changes that happened during COVID was that Microsoft Teams, Zoom, and Google Meet grew to dominant market share positions for software conferencing and inroom dedicated video conferencing systems. Today,

it doesn't make sense to try to compete head-to-head against those companies. Post-COVID, we still offer technology components and system-level bundles, but we are focused primarily on areas where we can offer differentiated features and performance advantages compared to our competition.

SI Asia: ClearOne's core competency – as we have known – has been on conferencing and collaboration. How has it helped to meet the requirements of today's hybrid work and learning environments?

DEREK: Many years ago, ClearOne recognized the need for high quality audio in many different use cases from personal conference up through large room conferencing and we developed products to meet that need. Due to the resulting broad portfolio of conferencing products, we were well positioned when COVID became a global catalyst for teams to start working in a hybrid manner.

SI Asia: How do you anticipate the world of hybrid communication will change in the coming years? How long do you expect it to last and what trends are you seeing?

DEREK: I anticipate that audio and video technology will improve in ways that make the meeting experience just as good for remote participants as it is for local participants in the same room. The industry buzzwords for this are "Inclusion" and "Meeting Equity." One example of this technological improvement is one-touch user interfaces that can be used to start a hybrid meeting. These interfaces make it just as easy to start a group video call as it is to walk into a conference room, sit down, and start talking. Another example is people tracking cameras powered by

artificial intelligence that automatically pan, tilt, and zoom in on the active talker in a room. Cameras like that make it easier for remote callers to see good images of participants sitting around a large table in a conference room.

I think hybrid communication is here to stay. The trends I see are technologies that are driving a more inclusive and equitable experience for all participants as I described above. That means everyone in a meeting can see, hear, and participate equally well, regardless of where they are physically located.

SI Asia: How about the notion that ClearOne is not as aggressive in the East/APAC as it is in the Americas, Europe, and Middle East?

DEREK: We compete aggressively in all of the markets we serve. Our supply chain issues over the last 12 months have made it difficult to meet the demand. As we solve our supply chain issues, we expect to be able to get back to a growth mode in APAC and elsewhere.

SI Asia: How would you compare the APAC market against Europe or the Americas?

DEREK: All three markets are very competitive with local and global players vying for increased market share. We see that the APAC market demands the highest performance from products. The performance requirement for audio products in APAC seems to be driven in part by building materials. We encounter a large fraction of meeting spaces constructed with highly reflective hard surfaces that create echo and reverberation. Those types of building materials are somewhat less common in Europe and much less common in the Americas.

SI Asia: After the touch-less ceiling array, what do you think is the next biggest game changer in AV?

DEREK: Artificial Intelligence is the next biggest game changer in AV. AI is being deployed in individual cameras today. It is also beginning to be deployed at a system level to provide the best views of a meeting when multiple cameras are installed to cover a single space. Some companies are offering AI-based meeting summaries, action item capture, and automatic indexing for recorded videos that helps viewers jump to a desired section of a recording. That can be very valuable for educational and training video content.

SI Asia: Eight months from now, where would you like to see ClearOne?

DEREK: At that point, I want to have a track record of several quarters of increasing revenue. I would like to see our company generating profits again. I want to see that our Dante-enabled BMA 360D has become wildly successful due to its great audio performance and the fact that it gives system integrators the ability to design the best overall solution to meet customer requirements. I also hope that as a result of our performance, the investor community will reward our performance by driving up the price of our stock.

ClearOne

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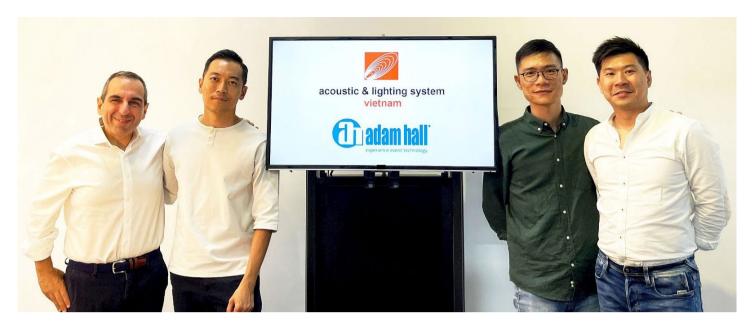
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(L-R) Alessio Foti, Adam Hall's global business development manager; Eugene Yeo, director at Acoustic & Lighting, Ben Lee, country manager at Acoustic & Lighting System Vietnam, and Glenn Lin, Adam Hall's business development manager for Asia.

Adam Hall Group Appoints Acoustic & Lighting System as Exclusive Distributor for Vietnam

VIETNAM: The Adam Hall Group continues to expand its international sales network. With Acoustic & Lighting System, the event technology provider headquartered in Neu-Anspach, Germany, has gained an experienced distribution partner in Vietnam. Acoustic & Lighting System is one of the leading event and AV technology distributors in Southeast Asia and will take over the exclusive distribution for the solutions of the Adam Hall Group brands LD Systems, Cameo, Gravity and Palmer with immediate effect.

In addition to the Vietnam market, Acoustic & Lighting System with its more than 150 employees also covers the sales markets of Malaysia, Singapore, Indonesia and Thailand. The extended range of services offered by the A&L Group includes technical project consulting as well as a comprehensive service and maintenance offer for all sales brands.

"The Vietnamese market is one of the fastest growing regions in Southeast Asia and offers tremendous opportunities for a broad-based manufacturer like Adam Hall Group," comments Ben Lee, country manager Vietnam of Acoustic & Lighting System.

Glenn Lin, business development manager, Asia Pacific, adds, "The A&L Group has more than 30 years of sales experience in Southeast Asia and extensive expertise in audio and lighting. Given the rapidly growing pace in Vietnam, Acoustic & Lighting System is the perfect partner for the Adam Hall Group."

Adam Hall Group

Acoustic & Lighting System



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Queen Sirikit National Convention Center.

HARMAN Professional Solutions Offers Major Technological Upgrades to Queen Sirikit National Convention Center

THAILAND: To provide the Queen Sirikit National Convention Center (QSNCC) with versatile audio and control solutions, HARMAN Professional Solutions collaborated with Mahajak Development, Stonehenge Inter and Atkris Co. Ltd to develop a system featuring JBL Professional, Crown, Soundcraft and more. Following extensive renovations starting in 2019, the Queen Sirikit National Convention Centre reopened in late 2022 with 300,000 square meters—three times larger than the original venue layout—available for a variety of events and activities. Along with increasing space, deploying state-of-the-art technology throughout the QSNCC was a key priority. Owners of

the center hoped that doing so would not only ensure the QSNCC's long-term success and adaptability, but also strengthen Thailand's global position as a world-class MICE destination for both national and international events. To meet this request, HARMAN Professional Solutions partnered with Mahajak Development, Stonehenge Inter and Atkris Co. Ltd to tailor a bespoke solution combining world-leading products from JBL, Crown, Soundcraft, dbx and BSS.



One of the large halls at QSNCC.

The QSNCC consists of three main zones: eight large halls, four plenary rooms and four ballrooms. Each area sports an audio system featuring JBL Control 300 Series ceiling speakers and VPX700 Series speakers. The former incorporates JBL's legendary sound quality and technology into discrete mounted enclosures





Interior of the ONSCC.

designed to blend into ceilings and walls, while the latter utilizes custom JBL transducers for higher power handling, lower distortion and reduced power compression. All three zones' respective systems are powered by Crown CDi Series amplifiers with BSS controllers providing system control.

Additionally, there are 50 meeting rooms spread throughout the conference center with individual audio and control systems. In each of these rooms, the installation team deployed JBL Control 10 Series ceiling speakers—an ideal solution for medium-sized spaces like conference rooms—powered by Crown CDi Series amplifiers and controlled by a Soundcraft Ui Series digital mixer and dbx sound management system. Finally, the center's various public areas also feature JBL Control 10 Series speakers, Crown CDi Series amplifiers and BSS sound processors.

A spokesperson from Queen Sirikit National Convention Center reported that the installation process was smooth and well-organized, and that the team delivered outstanding dedication and quality



Another interior view of a Hall within QNSCC.

service. They also noted that HARMAN Professional Solutions never fails to provide reliable solutions that help create immersive experiences for visitors. "At HARMAN Professional Solutions, we continually embrace new innovations and technologies to deliver excellence for our customers and this project was no different," said Amar Subash, VP & GM, HARMAN Professional Solutions of APAC. "We are delighted to witness the successful re-opening of Queen Sirikit National Convention Centre and we appreciate the opportunity to collaborate on this leading international MICE venue."

Harman Professional Solutions



(L) Gabe Perry and (R) Martin Coster.

Absolute FX Named S.E. Asia Distributor for Alcorn McBride Products

SINGAPORE: Absolute FX Pte Ltd, a leading provider of audio, video and show control solutions, is pleased to announce its recent appointment as primary distributor for Alcorn McBride products in the Southeast Asia region. This partnership brings together the technological prowess of Alcorn McBride Inc, a renowned manufacturer of innovative show control, audio, and video equipment, and Absolute FX's extensive expertise in delivering top-tier AV and control systems across various industries.

Alcorn McBride is a world leader in audio, video, and show control products for themed entertainment. Since 1986, their products have been used in every major theme park in the world and forms the heart of thousands of museums, visitor centres, and casinos. Known for their reliability, versatility, and cuttingedge design, Alcorn McBride's solutions have played a pivotal role in creating unforgettable moments for audiences across the globe.



"We are thrilled to announce our collaboration with Alcorn McBride Inc as their primary distributor in Southeast Asia," said Martin Coster, director of Absolute FX Pte Ltd. "Their reputation for ultra-reliable, high-quality products, specifically designed for the requirements of the themed entertainment industry makes them an ideal partner for us."

Absolute FX Pte Ltd has been a prominent player in the audio-visual industry for over 25 years, offering an extensive range of AV solutions tailored to the unique needs of clients in sectors such as themed entertainment, visitor centres, museums, and retail. As the distributor for Alcorn McBride Inc products in Southeast Asia, Absolute FX will be able to deliver regional services and support for their entire range of products.

"We are excited about the opportunities that lie ahead with Absolute FX as our distributor in Southeast Asia," said **Gabe Perry, Senior Sales Engineer of Alcorn McBride Inc**. "We look forward to a successful partnership that will bring the benefits of Alcorn McBride's products to a wider audience in the region."

Alcorn

AbsoluteFX



(L) Darren Waszkinel and (R) Kelvin Thong of Hewshott.

Hewshott Witnesses Growth with New Appointments

APAC: Hewshott is delighted to announce the appointment of two associates with Darren Waszkinel joining the Australia office and Kelvin Thong appointed to the Singapore office. Excited about the addition of new members to the team, Group CEO Peter Hunt wished Darren and Kelvin a warm congratulations on their respective appointments. He said, "We have seen a surge in activity, some very high-profile projects come on-stream and each office witnessing growth. Both Darren and Kelvin will build on our capabilities in Australia and SE Asia to expand our comprehensive, multi-disciplined services to our clients throughout the region, and set us up for our next stage of growth and change."

Darren brings with him a considerable amount of experience in the technology and project management space having worked across Europe and Asia Pacific. He will be working alongside Hewshott's consultants managing some existing projects and diving into new ones. Having successfully managed global initiatives in the complex technical space, Darren is passionate about technology, user experience and delivering projects to a high standard.

When asked about his new role, Darren stated, "I am thrilled to be a part of Hewshott and join such a talented team. The company's commitment to excellence and innovation aligns perfectly with my own and I look forward to collaborating with Peter and his team to achieve new career milestones."

Kelvin will be based out of the Singapore office and is a seasoned AV industry professional with unrivalled experience throughout SE Asia. He has worked with Fortune 500 companies, mainly in financial services, pharmaceutical, retail and the technology sectors. This combined with significant outcome-based focus makes him a solid performer across the board. Kelvin excels in everything he does and his ability to think clearly and help with project delivery will be felt throughout all of Hewshott's work across the region. On the rare occasions when Kelvin has some downtime, he can be found at home with his family or soaking up some fresh air on the golf course.

"I am excited to take on this new role, working along the world class consultants that define Hewshott. I'm looking forward to bringing my years of experience in Singapore and SE Asia to the table, and want to become a solid asset to our customers as well as the company - I can't wait to get started."

"Besides Darren and Kelvin coming onboard, we have three new Hewshotters in the India office – Darshan, Santosh and Shadab – and in the USA we welcomed Dakota recently, making this a record-breaking six hires in just one month, which is a testament to continued demand for our services" added Peter.

Please join us in extending congratulations to Darren, Kelvin and all new members of Hewshott's team as they embark on an exciting journey in the industry.

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Barco Appoints Rajeeva Lochan Sharma as Managing Director for India



INDIA: Barco, a global technology leader that develops networked visualization solutions for the entertainment, enterprise, and healthcare markets, has announced the appointment of Rajeeva Lochan Sharma as the managing director of

Barco India. He succeeds Rajiv Bhalla, who decided to move on from Barco after successfully growing the India footprint for the company over a period of seven years.

In his previous role, Rajeeva worked as Vice President of Operations & Special Projects at Barco India and has been associated with the company for over 20 years now in different roles and has been a strong contributor to the growth of Barco India. An Engineer by qualification, Rajeeva is a seasoned leader contributing by leading many strategic initiatives in Barco, like business development of Smart Cities, in country for country initiatives by launching many country-specific products apart from leading manufacturing operations.

Speaking on the appointment, Ann Desender, chief financial officer, Barco, stated, "We are pleased to extend a warm welcome to our new managing director,

Rajeeva Lochan Sharma. With a proven track record of leadership and expertise in the industry and a two-decade stint at Barco, we are confident that Rajeeva will play a pivotal role in steering our company toward greater heights. His strategic vision and collaborative approach will undoubtedly strengthen our organisation's growth trajectory in India while fostering an even more vibrant and dynamic work environment. We'd also like to thank Rajiv Bhalla for his immense contribution to Barco's business growth in India and for building a high-trust, high-performance workplace culture, which resulted in Barco India being recognized as a Great Place to work for 3 years".

Commenting on his appointment, Rajeeva Lochan Sharma, MD, Barco India, said, "India's immense business potential and burgeoning opportunities in our domains are undeniable, and I am committed to driving our company's expansion and innovation within this landscape. I am energized by looking at synergies across our different teams to collaborate & create a multiplier effect for our business. I am also excited to leverage the frugal innovation & software capabilities of our teams in India for global good for the company. Together with our exceptional people and partners, we will leverage our products' technology's transformative power to empower businesses, foster digital inclusion, and make a meaningful impact on the lives of millions."

Barco



Harman Professional Solutions illuminated the new Tokyo Riverside Apartments with Martin VC-Dot 1 outdoor LED lights

Martin Illuminates the Luxurious Tokyo Riverside Apartment Complex

INDONESIA: To provide the new Tokyo Riverside Apartment with vivid and engaging lighting, architectural firm PT Chayolite deployed a selection of Martin lighting solutions.

Located in the Pantai Indah Kapuk 2 precinct (PIK2) within Jakarta, Tokyo Riverside Apartment is a luxury living complex featuring modern Japanese architecture and smart living tools. Developed by Agung Sedayu Group, the complex is conveniently located near a variety of amenities, including sports and recreational facilities, a 2.5-mile white sand beach

and the Soekarno-Hatta International Airport. To accentuate its impressive architecture, PT Chayolite and HARMAN Professional Solutions were appointed to illuminate its façade in a way that complemented its luxurious details. To meet this requirement, the installation team deployed Martin VC-Dot 1 outdoor LED lights.

Featuring individually controllable LED-based lights connected by flexible-yet-durable wire, the VC-Dot 1 offers the artistic flexibility and user-friendliness of LED video in a IP67-rated design for permanent outdoor or indoor use. In terms of infrastructure, the VC-Dot 1 only requires the Martin VC-Feeder and P3 PowerPort, keeping the setup simple without sacrificing versatility.

The outdoor P3 PowerPort 1000 is a highly versatile control source that can be installed remotely both indoors and outdoors, making it ideal for long-term and permanent installations. The resulting setup provides an energy-efficient and long-lasting lighting solution for the Tokyo Riverside Apartment's exterior that heightens the building aesthetics and visual impact.

A spokesperson for PT Chayolite reported that working with HARMAN Professional Solutions provided them with the assurance of high-quality products that they can adapt for a variety of uses.

"We are thankful for the opportunity to work with PT Chayolite on this luxury residential project," said Amar Subash, VP & GM, HARMAN Professional Solutions of APAC. "Tokyo Riverside Apartment now boasts a visually stunning façade with lighting effects that complements the elegance of PIK 2, an upscale urban city at the coast of Jakarta."

Harman Professional Solutions



Kolkata's Carpe Diem Seizes the Moment with Electro-Voice & Dynacord

Rudresh and Siddhant Agarwal, along with Shreekant Servaia, Carpe Diem is a brand-new sprawling 6,000sq ft property that promises to offer the best of entertainment, nightlife and dining to residents of Kolkata. Spread across two floors and located in the heart of Stephen Court (also known as the city's dineand-dance corridor) in the bustling Park Street locale; the venue kicked open its doors with great fervour as it has, ever since, continued to invite patrons to explore a whole new world when it comes to the all things enjoyable.

"When I was working on the place, the name Carpe Diem popped up and I decided to go ahead with it because we want our customers to walk in and forget about the worries of tomorrow, and just enjoy the moment. Hence Club Carpe Diem, or rather #SeizeTheDay," explains Rudresh, as he affords an insight into the conceptual stages of the venue.

With the overall décor sporting a predominantly wooden theme that extends from the floor to the walls; Club Carpe Diem has four zones, of which the ground level houses two. As you walk into the venue, the first section is seen to host comfortable couches and bookshelves for a relaxed feel; whereas the larger second section sports adjustable tables that can be elevated into bar tables – thereby allowing the place to transform into a dance floor on busy days. And overlooking this larger section is the mezzanine seating area and private section that can seat at least 60 people, and comes complete with premium leather upholstery and Victorian-style chairs.

"We have, till date, not seen something like this in the city and we hope that our patrons like it. On big match days, we plan to roll down the screen on the 3D mapping wall so that matches are a better experience!" exclaims Siddhant as he speaks about the asymmetrical video wall, made up of eight TV screens; and the adjacent wall that has a 24-ft wide woodwork panel designed for 3D projection mapping.



Beyond the enchanting visual appeal of the venue though, Carpe Diem sports an equally magnificent soundscape that keeps patrons coming back for more. And this is all thanks to a meticulously curated amalgamation of Electro-Voice loudspeakers and Dynacord electronics which emerged as the victorious formula for the venue.

Detailing the project's genesis, Dipankar Sengupta of Bosch, who spearheaded the initiative from the brands' standpoint, elucidated, "Adjacent to some of the city's most eminent clubs, Club Carpe Diem aspired to vie at the apex of entertainment. And the owners were well aware that acquiring the right sound system for the space would be integral in achieving this pinnacle. Given their nascent foray into the professional audio realm and a predetermined budget, we shared a few alternatives from both Electro-Voice and Dynacord; following which, a discerning comparative analysis through a product showdown with a formidable contender was found to be the optimal route to find the best resolution. We emerged victorious, and therefore, secured the project."

Leveraging a thorough understanding of the acoustical and structural properties of the venue itself, Electro-Voice loudspeaker models were meticulously chosen to harmonize with the unique requisites of diverse areas within the establishment. The spectrum encompassed the compact yet powerful

EVID and ZX1i surface-mounted models for the bar and dining precincts, while also keeping room for the higher-output EKX and EVF models for the main section (which converts into the dancefloor) that accommodates pulsating DJ sets and thrilling screenings of sporting and other events.

A total of four units of the EKX-15 15-inch full-range loudspeakers combined with two units of the EVF-2151D dual 15-inch subwoofers have been outfitted are the main system which efficiently covers the lounge and dancefloor sections on the ground level. The mezzanine area, on the other hand, has been outfitted with four units of the ZX1i 8-inch two-way full-range loudspeakers, with the private dining room section featuring four units of the EKX-12 12-inch loudspeakers along with a pair of EKX-18S 18-inch subwoofers to provide impactful low-end fidelity. Finally, the smaller 'chillout area' sports a nimbler reinforcement measure with a pair of compact EVID 6.2 loudspeakers, whereas the DJ booth has been outfitted with the ZLX-15P 15-inch powered loudspeakers to provide a reliable and powerful monitoring solution for performing DJs. The entire loudspeaker system is powered through Dynacord L Series two-channel amplifiers, with four units of the L3600FD amplifiers, a single unit of the L1800FD and a single unit of the L1300FD deployed within the impressive amplification rack.

Club Carpe Diem's metamorphosis into an acoustic haven stands as a testament to the meticulous selection, diligent curation, and synergistic integration of Electro-Voice and Dynacord technologies; with this triumphant collaboration not only fortifying the venue's competitive edge but also being heralded an auditory odyssey that transcends mere sound and transforms into an unparalleled experience for all those who visit.

Bosch





Beta Three Harmonizes Sonic Tapestry with Spirituality at Mundgod's Tibetan Monastery

INDIA: In the heart of Mundgod in Hubballi, Karnataka, lies a sanctuary of profound spirituality and learning – the Tibetan Monastery. This revered institution serves as a haven for thousands of incumbents dedicated to pursuing theological studies and embracing a spiritually holistic life. A recent transformation has elevated their collective experience within the plush meditation hall, where prayer, chants, and enlightenment resonate. And this transformation comes courtesy of BetaThree (Beta3), a renowned Indian pro audio brand, which has seamlessly woven its advanced audio architecture into the monastery's essence, creating a symphony that enriches both soul and sound.

The Tibetan Monastery's meditation hall is more than a physical space; it's a conduit for collective spirituality.

And at the core of this transformative journey are Beta Three's N Series loudspeakers; where the meticulous arrangement of the loudspeakers serves to harmonize this sanctuary of devotion.

In an exquisite arrangement, the monastery's plush meditation hall boasts two units of the N15 loudspeakers, standing as sentinels of sound on either side of the main stage, complemented by eight strategically positioned N10 loudspeakers throughout the expanse of the room.

The N15 loudspeakers with its powerful and pristine audio projection, coupled with the precisely outfitted N10 loudspeaker units, blanket the expansive space with an enveloping audio embrace and bridges the gap between the stage and the farthest monk. This enveloping soundstage enhances the monks' congregations, prayers, and teachings, fostering an environment where every word resonates as if etched in the air itself.

Plus, with the N15 and N10 sharing the same tonal signature, those within the room are treated to a truly unique experience of sonic continuum, thereby enabling them to immerse themselves fully in the teachings, unburdened by fluctuating sound quality.

Behind the symphony of sound created by the N series loudspeakers lies the DT series class-D amplifiers that have been meticulously chosen to power the system. These amplifiers provide the necessary power for the loudspeakers to assure optimal performance, as they effortlessly adapt to the dynamic range of the monastery's activities, from serene meditation sessions to powerful collective chants. And finally, at the heart of Beta3's pro audio architecture is the Σ C2600U digital loudspeaker management unit which empowers users with unparalleled control over the quality of sound as it fine-tunes the tonal character emanating from every loudspeaker to precisely adapt to the unique acoustics

The amalgamation of Beta3's pro audio architecture with the sacred meditation hall of the Tibetan Monastery transcends the boundaries of technology and spirituality as it stands as a true testament to the harmonious coexistence of innovation and tradition, where modern audio engineering elevates centuries-old practices. And there is little to no doubt in the fact that this auditory transformation has definitively reinforced the monastery's role as a bastion of spiritual growth and collective enlightenment.

Beta3

MG Series

of the meditation hall.

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VM Manu, director at Avientek.

PPDS Partners with Avientek as Part of Continued Growth and Expansion Strategy in Middle East

MIDDLE EAST: PPDS, the exclusive global provider of Philips professional displays and dedicated AV software solutions, is delighted to announce the latest phase of its growth and expansion strategy in the Middle East, with a new partnership with AV and UC distributor Avientek. Avientek – founded in Dubai in 2016 and now present in more than 20 countries, including India – will introduce, promote and distribute PPDS' entire suite of highly innovative and multiaward-winning solutions as the display brand of choice in the Middle East.

Aligned in their efforts to bring world-leading solutions to key market verticals – including Hospitality, Corporate, Retail, Media, Transportation, Control Rooms, Government, Broadcasting, Education, Industrial and Healthcare – available solutions from PPDS will include digital signage, e-Paper, interactive displays, direct view LED and business and hospitality

TVs, as well as solutions including the recently launched and evolutionary new cloud-based device management platform, **PPDS Wave**.

The two companies will work closely together to ensure partners and customers receive the highest level of service, with PPDS' highly trained global team, including its Key Account Directors, on hand to provide expert knowledge, support and technical training to ensure opportunities in the market are maximised, and projects are completed with quality and confidence.

VM Manu, director at Avientek, commented: "Avientek is a distributor of AV and UC products and has been operating in the market for the past seven years. Working with PPDS, Philips professional displays are the right fit for our product lineup, which meets the display demands of the AV sector. We chose PPDS and Philips professional displays for their innovation, reliability, seamless integration, picture quality, durability, long-term performance, customer satisfaction, and competitive advantage. We are delighted and excited by the opportunities ahead as a result of this partnership with PPDS, and my team and our partners and thrilled to have them on board."

Wim De Geest, executive director MEA, PPDS, added:

"Avientek is a growing and internationally recognised market leader for delivering quality and innovative display solutions to the channel. As we continue to expand and strengthen on a global scale, it's important we form partnerships with organisations that are strategically aligned with our efforts in bringing outstanding, long-term value to customers and doing business in the right way. Together with Avientek, we look forward to a long and successful working relationship, bringing the power of Philips professional displays to an even wider audience."

Avientek

PPDS

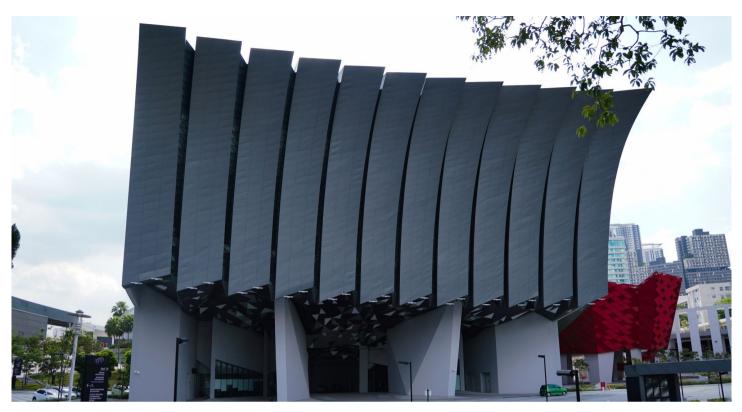
How to fit a olector in this room? **Why complicate** when you make things without breaking the bank? Why waste ene there's option?



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Overwhelmed with questions? Look no further, our G50 is the smart answer!

Leading in size, weight and energy-efficiency, the G50 is an affordable yet powerful single-chip WUXGA projector designed for boardrooms, museums, exhibitions, experience centers, and entry-level simulation applications.



Auditorium Seri Angkasa is a broadcast theatre part of Radio Television Malaysia's brand-new Mediacity project.

L-Acoustics Installed in Radio Television Malaysia's Angkasapuri Mediacity

MALAYSIA:: Angkasapuri Mediacity's recent opening in Bukit Putra, Kuala Lumpur marks the dawn of a new era for the Malaysian broadcast media industry. The 18-storey office building serves as the new headquarters for Radio Television Malaysia (RTM) and Malaysia's Ministry of Information.

Launched in October last year, the building also contains within its sixty-thousand square metre space, a music recording studio, several television broadcast studios and auditoriums, and an outdoor plaza; all fully equipped with modern digital equipment and

broadcasting systems. As part of the RM860 million project, its Auditorium Seri Angkasa has been installed with an L-Acoustics Kara system to ensure a modern live audio solution that will cater to its broadcast programming of music and orchestral concerts, and television variety programs.

Spearheaded by Sean Iskhandar of Motifv8 Projects, the installation was a close collaboration with Stagetec Asia and VME, who have been working with RTM for many years. Iskhandar has been working on various L-Acoustics K Series system rental and installation projects since 2012, including the proposal design for an L-Acoustics Kiva II-based system in the Auditorium Perdana of the older RTM building in the same Bukit Putra vicinity.

Iskhandar led the team at Motifv8 to work with system integrators VME for the brand-new broadcast auditorium through a bid-for-tender process. Knowing



Auditorium Seri Angkasa has been installed with L-Acoustics Kara-based system.

that RTM's technical and sound engineers were already familiar with the kind of operation, performance, and signature sound qualities an L-Acoustics system can offer, he proposed a Kara-based system design.



The LCR system consists of two L-Acoustics A15 boxes serving as centre-fill and a main L/R system of 12 Kara per side.

Motifv8 worked with L-Acoustics Director of Application Project APAC, Alvin Koh, to propose a design using the L-Acoustics Soundvision 3D modelling software. The initial proposal included a centre hang of six L-Acoustics KS28 subwoofers; however, it was quickly apparent that the hang would appear in-frame of certain broadcast camera angles. So Iskhandar and Koh returned to the design and proposed splitting the centre hang into two. This proposal was accepted, and Motiv8 built a custom rigging bar for the two clusters of three subwoofers hung in cardioid mode. An LCR system was chosen, with two L-Acoustics A15 boxes serving as centre-fill, while the main L/R system consists of 12 Karai per side. An L-Acoustics X8 per side delivers side-fill. Eight LA4X amplified controllers drive the entire system.

"The RTM team is very pleased with the brand-new installation," says Iskhandar. "Their engineers now have a system that delivers consistent coverage and SPL throughout the auditorium with headroom that fits their range of broadcast performance content."

In line with RTM's goals to be a media hub for the region, the brand-new Angkasapuri Mediacity can now support digital media creative content production with a modern technological infrastructure.

L-Acoustics

Lightware Appoints Sam Ng as Regional Director for Greater China Office



CHINA: Lightware
Visual Engineering,
has announced the
appointment of Ping-Sum
(Sam) Ng as regional
director for Greater China
Office. In his new role, Sam
will oversee Lightware's

expanding business operations in China, Taiwan, Hong Kong, and Macau, and ensure the company continues its impressive momentum of growth in the region.

With an extensive background spanning over two decades in the AV industry, he joins Lightware following a highly successful career with other leading brands in the AV industry — including AMX, Extron, and Biamp.

"I firmly believe that my vast industry knowledge and expertise will be instrumental in driving Lightware's growth and success in the Greater China region," Sam comments. "I look forward to leading our team towards achieving new milestones and expanding our presence in this dynamic market."

"It is a demanding market with many complexities, and we believe Sam's twenty years of experience at the top of the AV industry in the region will give us the firm footing we need to continue to pursue our growth plans," said Tamás Rapcsák - global sales director at Lightware

Lightware

AUDAC Appoints Mahesh Baliga as Sales Manager for India



INDIA: AUDAC is pleased to announce the appointment of Mahesh Baliga as the sales manager for India. In this role, Baliga will be responsible for driving AUDAC's growth and

expansion in the Indian market, working closely together with the company's Indian distributor, **AV Essentials** & AUDAC's APAC sales manager Sebastian Chong.

With over 10 years of extensive experience in the audio video industry, Mahesh Baliga brings a wealth of expertise in channel sales management and business development to his new position. Prior to joining AUDAC, Mahesh Baliga held various managerial positions at reputable companies within the industry. Notably, he served as Regional Manager for Install Sales at Alphatec Audio Video Pvt Ltd and as Regional Sales Manager at AWAN India Pvt. Ltd...

Sebastian Chong, the APAC sales manager at AUDAC, expressed enthusiasm for Mahesh Baliga's appointment, stating, "Mahesh wealth of experience in the AV industry and strong track record in sales management make him a perfect fit for this role. We are confident that his leadership and strategic vision will further strengthen our position in the Indian market."

AUDAC

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Powersoft Steps Up Japan Ambitions with New Office



JAPAN: Powersoft is preparing for a new era of growth in Japan following the opening of a dedicated office in Tokyo. The Japanese office is the Italian company's fourth, joining its headquarters in

Scandicci, its US business in Flanders (New Jersey) and its China representative office in Beijing.

Spearheading Powersoft's expansion in Japan is its newly appointed market development manager, **Haruka Murayama,** a pro-audio veteran who brings nine years' industry experience to the role. Murayama most recently spent five years in sales with Bose Professional's Japanese subsidiary, where she became familiar with X Series, Powersoft's high-powered live sound amplifier platform, and previously worked for the Japanese distributor of Harman, Shure and DPA Microphones.

The opening of a representative office in Japan is part of Powersoft's strategy for growth by increasing its presence globally, with a focus on the European, North American and Asian markets. The new office will ensure a direct connection to the market, allowing for more effective management of customer feedback.

Luca Giorgi, Powersoft's sales director, says Murayama's experience and expertise will be essential to meeting the challenge of growing the Powersoft business in Japan. "Powersoft views Japan as a very strategic market where we have more potential for growth," he explains. "Powersoft's growth in the country has been good through our historical Partner, AudioBrains, but we believe that we can increase and consolidate that growth by adding Powersoft's local resources, and it's for this reason that we have decided to set up a representative office with Akira Mochimaru and the recent appointment of Haruka: to have local people able to boost the generation of extra demand through local relationships.

"This direct link with the market will help us to better receive feedback and requests from clients and enable Powersoft to provide better products and services to such a demanding market."

Murayama says she is relishing the opportunity to accelerate Powersoft's expansion into Japan, where the company's amplifiers are considered the benchmark for tours and installations. "I am confident in promoting our products because Powersoft is already known for its high quality and innovation, which customers appreciate," she adds.

"Powersoft's growth in the APAC region is a concrete investment aimed at taking advantage of the many opportunities that the Asia-Pacific market offers for developing and intensifying business activities, offering our portfolio of unique and innovative solutions and products, and adding a further piece to our international growth and development plan," concludes Luca Lastrucci, CEO of Powersoft.

Powersoft



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Service in session at Wesley Methodist Church, Singapore.

Outline Chosen for Superior Audio Quality by Wesley Methodist Church

SINGAPORE: Wesley Methodist Church is the oldest Methodist church in Singapore, with its roots going back to 1885. To provide increased capacity for its ever-expanding ministry, the church has undertaken development programmes over the years, including improving the sanctuary, adding a four-storey educational block with a concert hall, a new baptismal hall with basement rooms, and Wesley Plaza. Most recently and in the wake of the COVID 19 pandemic, further works were undertaken to address the limitations of the L-shaped main space and its relatively low ceilings, while adding the facilities to create, capture and stream live content from the church.



Some services are live streamed at Wesley Methodist Church.

In 2022, the church committee appointed local architects **Ong & Ong** and acoustics/production consultant **Truephonic LLC** to collaborate on the concept and design.

Extensive building works were undertaken which included reorientation of both stage and audience and this fundamental change necessitated a complete review and subsequent replacement of the installed

media infrastructure, including the sound system. The choice of loudspeakers proved to be something of a test, given the unusual layout of the room and its physical constraints - the relatively low ceiling and asymmetric layout meant that the ideal solution was a distributed audio system, using small clusters of super-compact line-source modules supplemented by subwoofers.



A service in session at Wesley Methodist Church.

Three well-respected loudspeaker manufacturers were invited to demonstrate their products at a listening test in the hall, which was conducted in darkness so that each system could be evaluated purely on its audio performance and with its brand unknown to the selection team.

The listening material included two playback tracks and live performances by a guitarist and singer. All three systems were well-received and scored nearly identically, but ultimately Outline's Scala-90 was selected on merit. Outline were also able to deliver their products on time during a period when the global supply chain was still compromised.



Services are captured for live streaming and recorded for later viewing by Wesley Methodist Church.

The new sound system design at Wesley Hall includes three principal loudspeaker locations, each comprising three Outline Scala-90 constant curvature array modules. Although the enclosures are mounted horizontally, the Scala-90's modest dimensions means that each array measures only 0.7m vertically and so sightlines are unaffected.

Two clusters of Outline SUB-118 subwoofers (in cardioid mode) are also flown from the ceiling, providing ample, controlled low-frequency extension for the space and the only other loudspeakers required are four compact Outline Vegas 8CX units for fills and delays. The entire system is powered by one Outline GTA Quattro Dante four-channel amplifier and one GTA Otto Dante eight-channel amplifier.

Outline

Vanco Announces 4K Wireless Extender and Multiview Matrix



Vanco International LLC has introduced two new products from their Evolution line designed to simplify 4K video signal delivery while preserving quality and user experience. This fall, Vanco will begin shipping a wireless 4K extender and a 4X2 4K video matrix with built-in Multiview.



The EV4KWHDMI 4K Wireless HDMI Extender

EV4KWHDMI 4K Wireless HDMI Extender

Vanco's first fully wireless 4K HDMI extender delivers 4K@60Hz 4:4:4 video up to 154 feet (50m), traversing walls and floors as easily as WiFi. The EV4KWHDMI offers plug-and-play wireless signal transmission, with multiple wireless channels to avoid interference

with other devices. It features IR control signal passthrough, allowing the user to control the HDMI source remotely from the display.

For distributed systems and other complex applications, the EV4KWHDMI features a signal loopout on the transmitter, allowing local monitoring or cascading the signal to additional AV distribution devices.

"The EV4KWHDMI offers freedom and reliability for 4K HDMI signal delivery," says Brandon White, Director of New Product Development for Vanco. "Now, in contexts where it's infeasible to run cables through the walls, integrators have a plug-and-play alternative they can count on."





The EVMX42MV 4K 4x2 HDMI Matrix with Multiview

EVMX42MV 4K 4x2 HDMI Matrix with Multiview

The EVMX42MV 4x2 HDMI Matrix delivers signals from up to four HDMI sources to two displays, with seamless switching and eight different built-in display modes. Users can display one, two, three, or all

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four sources at once, allowing integrators to easily configure display setups for digital signage, sports bars, collaboration spaces, and more.

The EVMX42MV delivers 4K at 60Hz 4:4:4 HDML signals with HDR and features analog and digital audio de-embedding for each output. Control is highly flexible: the EVMX42MV offers IR, RS-232, and IP control, as well as third-party drivers for RTI, Control4, and Creston.

"4K resolutions are now the rule rather than the exception for both commercial and residential applications," says White. "These new Evolution products make it easy and affordable to deliver full 4K experiences that clients will love."

Vanco

#MX SERIES



mww.novastar.tech zachary@novastar.tech





The MX30 is an all-in-one LED display controller in the brand-new control system COEX series of NovaStar. This controller integrates video processing and video control into one box and offers rich video input connectors (HDMI 2.0, HDMI 1.4, DP 1.1 and 3G-SDI), 10x Ethernet output ports and 2x 10G optical ports. It can also work with the brand-new software VMP (Vision Management Platform) to provide a better operation and control experience.







Layers



HDR10 -Optima HLG



Two Working Modes



Frame Rate Adaptive



Low Latency



Third-party Protocols Supported

Adamson Updates Blueprint AV Software







Adamson has released Blueprint AVTM version 1.3.3, an update with support for new loudspeakers and current OS Version Mac support.

The complete range of IS Series loudspeakers is now available for design and simulation with Blueprint AV. The new coaxial point source, the recently announced IS7c joins the IS5c and IS213, which were added last year. The latest version also improves the Mac installer experience and fully supports macOS Ventura and Apple Silicon computers.

Blueprint AV has been the fundamental system design and simulation solution for Adamson's Product family since 2013. Recently, Blueprint AV functionality has been added to Adamson's recently released ArrayIntelligence software, which adds control and

monitoring of Adamson's CS-Series loudspeaker range and associated rack units such as the Gateway and Bridge. System designers and installers can use either Blueprint AV or ArrayIntelligence to accurately and efficiently design their systems and streamline their deployment.

Business development strategist Pieter van Hoogdalem says, "Blueprint AV functionality continues to be the software bedrock for Adamson system design. We continue to support the standalone application with version 1.3.3 and will continue to invest in the Blueprint functionality within ArrayIntelligence."

Adamson/Blueprint AV

Christie Introduces New RGB Pure Laser Projectors for Stunning Visual Experiences



Christie is pleased to introduce two new RGB pure laser projectors: the **M 4K15 RGB** and **M 4K+15 RGB**. Part of our award-winning **M 4K RGB Series**, they deliver 15,750 lumens and are designed for the most demanding applications, including staging and live events, projection mapping spectacles, and theme park attractions.

Christie has simplified installation and operation by delivering full brightness at 120V or 220V, omnidirectional rigging capabilities, and TruLife+ electronics, which eliminates the hassle and cost of removable options cards. At 83.8 lbs (38.1 kg), the M 4K15 RGB and M 4K+15 RGB are the lightest 3DLP projectors in their class.

The new projectors are compatible with legacy M, J, and Crimson Series lenses and M Series rigging frames for additional cost savings.

With RGB pure laser illumination, the new projectors produce vibrant, bright, and true-to-life visuals that

approach 98 per cent of the Rec.2020 colour gamut, while operating at a quiet 43 dBA to ensure that the focus remains on the screen.

The M 4K15 RGB offers a 2700:1 contrast ratio and 4K UHD (3840x2160) resolution, while the M 4K+15 RGB offers a contrast ratio of 2200:1 and 4K UHD+(3840x2400) resolution. For applications that require higher frame rates, optional Mirage and Mirage Pro upgrades deliver 4K at 120 Hz and HD resolution up to 480 Hz.

The M 4K15 RGB and M 4K+15 RGB are available for order now.

Christie

BenQ Announces the Industry's First Wireless Presentation, Video Conferencing, and Room Microphone Button System



BenQ, an internationally renowned provider of visual display solutions, is doubling down on making it easy to conduct and present in-person and hybrid meetings with the **InstaShow VS20** wireless presentation and video conferencing system. The InstaShow VS20 is the first wireless meeting solution to combine wireless presentation, wireless conferencing, and microphone technology in an all-in-one button that is intuitive to use, boosts audio, and doesn't pose security risks to data or network. Ideal for medium to large-size conferencing rooms, the InstaShow VS20 facilitates hybrid meetings with affordable efficiency and clarity.

"There are six vital areas that make video conferences productive: speed and ease to get the meeting started, the ability to present from any device, security, clarity of the audio and video, and platform and room

integration," said Bob Wudeck, senior director of business development at BenQ. "InstaShow VS20 checks all the boxes, both for presenters and for IT. No other system comes close to how quick and easy it is to get meetings started and with a flexible and adaptable audio solution. It's the ultimate BYOM system every meeting room is missing."

InstaShow VS20 Starts With Frustration-Free, Clear Meetings

The BenQ InstaShow WPS family ensures through its app-free, network-free design, users don't waste any time getting meetings started. In six seconds, the new InstaShow VS20 all-in-one button connects to anything — laptops, mobile devices, cameras, media

players, game consoles, Linux devices, and more — utilizing USB-C or HDMI connection. Just plug it in and with a tap of a button, present. Plus, as more meeting rooms transition to interactive displays, the InstaShow VS20 enables users to control their device directly from interactive displays of any make or model with the solution's Touchback control feature.

BenQ is obsessed with the details. The company is known for its leadership in exacting colour accuracy, as proven by its medical-grade, Pantone-certified gaming displays and monitors. BenQ has taken this leadership and applied it to the InstaShow family to ensure that all content — not just charts and graphs — is presented in 4K UHD for the pixel density that delivers crisp, clear content without network dependency. In addition, users don't have to

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worry about security issues or blank screens since the InstaShow VS20 is the only WPS that is fully compatible with HDCP-encrypted content via HDMI.

InstaShow VS20 is the ultimate BYOM system

BenQ's InstaShow VS20 is compatible with all video conferencing platforms, integrates with room systems, and delivers a high-performance VC experience. The InstaShow Host receiver provides all the connectivity needed for full room integration of displays, video bars, speakers, cameras, and room microphones. To take the guesswork out of room setup, which wastes valuable meeting time, the VC Assist app allows the meeting host to quickly adjust the room setup from a local meeting to a hybrid one in seconds.

InstaShow VS20 improves audio

All meetings require good audio. An industry first, the InstaShow VS20 makes use of its hardware-based button design to provide an onboard omnidirectional wireless microphone. This presents an exclusive wireless cascade microphone solution with audio coverage that is perfectly scaled to the number of meeting participants in the room, so it's suited for rooms as small as huddle spaces to as large as lecture halls with up to 32 paired microphones. Each wireless microphone can be individually muted at the unit and with acoustic echo cancellation (AEC) it removes echoes and reverberation that can prevent clear audio. The four-way voice reception design picks up all voices within a 15-foot radius.

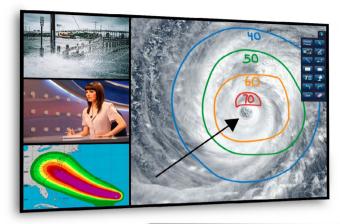
InstaShow VS20 Stays at the forefront of cybersecurity best practices

Security of information, data, and the network are critical. InstaShow WPS product portfolio is the only solution to ensure that sensitive information, data, or the network are not exposed. During use, hackers can't access information being shared. The

product family also does not require connection to cloud-based servers for updates that can pose risks and require units to be locked up when not in use. InstaShow is certified to meet CVSS 3.0 information security standards by an independent ISO27001/ ISO17025-qualified laboratory. WPA2 authentication with AES 128-bit security encryption ensure that any intellectual property remains private and safe from tampering or unintended disclosure, guaranteeing that presentations are absolutely secure. Powered by MTK Technologies' router-level chipset, InstaShow creates ideal high-speed Wi-Fi zones to handle multiband and fast media traffic with internal isolation of connection channels. With these best practices, organizations can comfortably leave InstaShow buttons in the room and not worry about hackers intercepting traffic. Plus, it's easy for IT and tech staff to oversee and manage InstaShow units, since it's supported by BenQ's centralized management, which can be used to remotely monitor all BenQ solutions in the building or across a campus.

BenQ/InstaShow VS20

Extron Releases New 4K/60 Multi-Window Processors with Annotation





Extron's MGP 641 xi multi-window processor.

Extron announced they are now taking orders for the new MGP 641 xi multi-window processors for scaling and presenting up to four 4K/60 source signals on a single canvas. Extron's exclusive Vector 4K scaling engine ensures downscaled and upscaled content is presented with unequalled image quality. In addition to four HDMI inputs that support data rates up to 18 Gbps, the HDCP 2.3-compliant processors include an HDMI background input for presenting live, non-scaled content behind the source windows. The MGP 641 xi SDI model supports four 12G-SDI as well as four HDMI sources. An HDMI output accommodates a local display, while the DTP3 output drives a remote display located up to 330 feet (100 meters) away with identical content.

To emphasize your talking points, easily annotate over live content enabled with an optional LinkLicense. Annotations can include free-hand drawing, shapes, lines, and pointer arrows, each in selectable colours. The multi-window processors provide customizable window layouts, video and logo keying, window

transition effects, as well as source and output rotation. Two-channel embedded audio can be extracted or passed to the video output. Providing enhanced content presentation with on-screen annotation and more, the MGP 641 xi processors are ideal for high-end environments and live events.

The MGP 641 xi is ideal for presenting multiple HDMI sources on a single display, and the MGP 641 xi SDI model includes four 12G-SDI inputs for additional system flexibility. Its powerful scaling engine, rack-mountable form factor, and wide variety of presentation and transition effects all combine to create a flexible signal processing solution for corporate boardrooms, training rooms, and live environments such as public auditoriums. It is equally effective in mission-critical venues that require display of live information, from a situation room or control room to cascading multiple MGP 641 xi units in a command centre.

Extron

Crest Audio Unveils Enhanced ClimateGuard Series Speakers for

Crest Audio, a subsidiary of Peavey Electronics, launches the new ClimateGuard series speakers. The ClimateGuard series offers enhanced weather-resistant features, ensuring optimal sonic performance even in the most demanding climates. With their IP56 rating, the ClimateGuard series composite speakers are fully waterproof, dust-protected, and capable

of withstanding high heat and extreme sun exposure, resulting in extended longevity. Offering exceptional audio quality - Nature has never sounded better.

Crafted from an advanced composite material, the ClimateGuard series enclosures have remarkable dimensional stability even in wet conditions and remain impervious to contamination, while keeping the resonant properties of wood. The Black Hammerhead

polyurea finish adds an extra layer of protection, akin to high-grade truck-bed liner, effectively sealing the waterproof composite cabinet panels. On the front, a stainless-steel moisture-repellent grille, equipped with a hydrophobic water-repellent cloth, ensures dual-layer performance without compromising the speaker's sound quality. The back features a gland nut entry into the water-sealed input cup plate, guaranteeing zero leakage where the speaker cable enters.

A peek inside the ClimateGuard series reveals a conformal coated crossover assembly, where all components and the PCB are mounted with a layer of plastic coating to insulate against moisture.

The speakers and optional 70/100 V transformer connections employ waterproof automotive grade connectors. The advanced technology composite fibre panels boast a resilient construction, including a fibreglass-resin sheet skin on both sides and a foamed resin core, safeguarding against rot or degradation caused by time or exposure to the elements.

Additionally, the water-resistant woofers feature a water-repellent dust cap that can endure prolonged direct contact with water.

The ClimateGuard series speakers are available in four two-way, full-range configurations, along with a flyable subwoofer. The compact CG 108 combines a 75° x 75° horn with an 8" weatherproof woofer in a compact and durable enclosure. The CG 208 system is a two-way speaker system made up of two 8" water-resistant woofers and a 1.4" titanium diaphragm compression

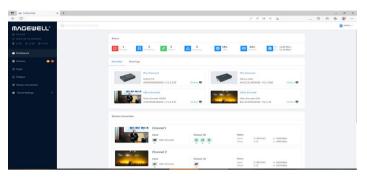
driver mounted on a waveguide. The CG 112 boasts a 12" Black Widow woofer, while the CG 115 is equipped with a 15" Black Widow woofer. Both complemented by an RX 22 Neo 2" titanium diaphragm compression driver and a rotatable Quadratic-Throat Waveguide horn, both available in 60° x 40° and 105° x 60° Coverage patterns. Finally, the CG 212S subwoofer houses two 12" weather-proof woofers. Installing the ClimateGuard series speakers is a breeze, thanks to the user-friendly ClimateGuard Pole Mounting System, offering customizable angle adjustments and supporting installations in various locations.



Exceptional Performance in Extreme Weather Conditions

Peavey

Magewell Releases Control Hub Device and Stream Management Software



Magewell Control Hub Dashboard.

Magewell has announced the immediate general availability of **Control Hub**, the company's second-generation centralised device and stream management software. The successor to the established **Magewell Cloud** platform, **Control Hub** provides centralised configuration and control of multiple Magewell streaming and IP conversion solutions. Administrators, IT staff and systems integrators can easily manage encoders and decoders across multiple locations through an intuitive, browser-based interface. An HTTP-based API is also available for third-party integration.

The **Control Hub** software can be deployed onpremises or in the cloud and supports Magewell
hardware products including **Ultra Stream** and **Ultra Encode** live media encoders; **Pro Convert** NDI
encoders and decoders; the **Pro Convert Audio DX**IP audio converter; and the **USB Fusion** capture and
mixing device. Users can remotely configure device
parameters, monitor device status, trigger operational
functions – such as starting or stopping encoding
– and perform batch firmware upgrades across
multiple units of the same model.Control Hub can
also convert streams between multiple protocols with
an exceptionally flexible stream routing architecture.
Users can easily define 'channels' that map an input to

one or more output protocols and destinations. Control Hub converts between RTMP, SRT (in caller or listener mode), RTSP and transport streams (delivered over UDP or RTP).

Three tiers of the full Control Hub software are available for purchase as perpetual licences to meet customers' specific needs for the number of managed devices, stream conversion channels and stream conversion outputs. Control Hub Basic offers management of up to 20 Magewell hardware devices and supports up to 5 stream conversion channels comprising a total of up to 20 outputs. For largerscale deployments, Control Hub Plus supports up to 50 Magewell devices, 25 streaming channels and up to 50 total converted output streams, while Control **Hub Pro** supports 150 devices, 50 channels and 150 total conversion outputs. A Lite version is also available for customers or integrators requiring device management (up to 20 devices per licence) but who do not need stream conversion. Multiple Control Hub Lite licences can be combined to manage a greater number of devices in increments of 20. A 14-day trial version of Control Hub is also available for evaluation purposes.

Existing customers who purchased Magewell Cloud MC 50 or Magewell Cloud MC 150 licences can redeem a code for a free upgrade to Control Hub Plus or Control Hub Pro, respectively. The Control Hub software is delivered as a Docker container and can be deployed on public cloud infrastructure or the customers' own server.

Magewell

G&D Presents New Security Feature: 2-factor Authentication



G&D offers new 2FA security feature to minimize the risk of cyberattacks and to ensure that only authorized users have access to critical data systems

Reliable IT infrastructures are nowadays the basis for operating processes in almost all economic and social sectors. Disruptions to the infrastructure can, at worst, lead to a shutdown of operations and severe economic consequences or dangers to public safety. At the same time, with increasing digitalization and networking, the target area for cyberattacks is growing. In view of these dangers, it is crucial to protect control rooms and IT systems appropriately.

KVM manufacturer Guntermann & Drunck (G&D) now implements an effective security feature to minimize the risk of cyberattacks and to ensure that only authorized users have access: 2-factor authentication (2FA).

Twofold security of KVM systems

2-factor authentication for KVM systems provides access control to critical data and systems. It thus offers a higher standard of security, ensuring that only authorized users can access the systems. This additional security level contributes to protecting sensitive data and significantly reducing the risk of cyberthreats.

Until now, user authentication for KVM systems involved a password query. The optional 2FA introduces a second, ownership-based factor that provides an additional level of security. A Time-Based-One-Time-Password (TOTP) is used for this, a password that is valid for a limited time and can only be used once.

Apps, tokens, and directory services - 2FA options

2FA can be implemented either through authenticator apps or hardware tokens, depending on the user's individual requirements and preferences. The user can select between using the device's internal authentication server or an external directory service such as LDAP, Active Directory, Radius, or TACACS+. The option of 2-factor authentication for KVM systems represents a further step towards a safer and more secure environment for critical infrastructures. Businesses and organizations that rely on the highest security standards will benefit from this additional security mechanism.

In matrix installations, the feature ensures increased security by providing an optional additional layer of security for access to critical data and systems. In extender applications, in which 2FA is included by default, this feature also brings significant benefits. Introduced to the public for the first time at ISE 2023 for KVM-over-IP systems, the feature is now being incorporated into all G&D products with a network connection. Existing customers will therefore also receive the extended system options as usual with the next firmware release.

Guntermann & Drunck GmbH

Decoding Asia's Thriving Professional AV Landscape

A triumphant tale of growth and innovation despite all odds

by Elton Noronha



A report released by AVIXA in 2018 stated that the global pro AV market was poised to hit the USD 230 billion mark by 2023, with Asia touted to reign as the largest contributor at a whopping 36%. The IOTA (Industry Outlook and Trends Analys) report was produced for AVIXA by IHS Markit, a noted insights and intelligence firm; and the research methodology was based on combining supply-side market sizing with demand-side market requirements, which were then aligned with macroeconomic factors and inputs.

The advent of 2020 with the global pandemic, however, created an unprecedented situation where the industry

was forced to work with a new set of challenges. The unusual set of circumstances certainly contributed to the momentary pause in growth; but at the same time, also paved the way for quicker adoption of pro AV technologies across a wider potential set of users in the years to come. AVIXA too affirmed that a lot of the pro AV products and services that were already trending upward in 2018 – servers, digital signage, security, conferencing, collaboration, etc – picked up more steam because of the pandemic's impact.

Moving in to 2022; the IOTA published by AVIXA in the month of July re-evaluated the global pro AV market after taking into account the effects of the pandemic.

And it was noted that the industry was poised to end the year at USD 263 billion, with a forecasted CAGR of 5.9% from 2022 to 2027. The report noted high growth in venues, media, and hospitality, etc, all of which benefitted from more stable investment; with sectors like government, energy, and transportation being hailed as game-changers - citing the fact that the transportation market is expected to grow from \$11.8 billion to \$18.3 billion (6.8% CAGR) globally from 2022 to 2027. Furthermore, it stated that the fastest growing markets for pro AV (like APAC) are being viewed by many as 'recession resistant', with the APAC region remaining a mainstay for digital signages, as the segment is forecasted to grow from \$14.3 billion to \$20.1 billion (7% CAGR) from 2022 to 2027. During his presentation at InfoComm Asia in Bangkok in May 2023, Dave Labuskes, a professional holding multiple notable certifications (CTS, CAE, RCDD), who serves as the CEO of AVIXA, highlighted these remarkable trends in the professional Audio-Visual (pro AV) market, as he drew attention to the fact that the revenues and growth in this industry surpassed the GDP of several countries. And remarkably, the Asia-Pacific (APAC) region stood out with the most robust revenue growth, projecting a 6.6% CAGR during the 2022 to 2027 period.

In addition to AVIXA, several other independent researchers like the Data Bridge Market Research have also affirmed the APAC region to be the largest contributor to the growth of the global pro AV market in the years to come. They state that in additiona to digital signages, products segments like display components, cameras, audio components, control devices, automation solutions, room schedulers, whiteboards, etc; and other accessories that support the coalescence of a comprehensive pro AV system have all witnessed a considerable upswing in adoption since 2021, with a minimum increase of at least

12% being witnessed across each product category. Furthermore, the increasing confluence between artificial intelligence, telecommunication platforms and professional AV systems – all of which are most useful in conferencing and collaboration – has been hailed as another major contributor to the growth of the pro AV industry in the region; with such systems now being vital to business processes such as initiating meetings, making video calls, and sharing real-time data when deployed securely.

An Industry Redefined

With APAC heralded as a key growth region for the global professional AV market, industry insiders are confident that the market will continue to propel over the forecast period due to rapid technological advancements in audio and display technology, rapid adoption of cloud solutions, the advent of the internet of things and smart buildings, and the rapid adoption of artificial intelligence. And these trends could be attributed to the industry's gradual recovery from the impact of COVID-19 and the stabilization of ongoing projects.



Speaking on the topic,
Christopher Lim, general
manager of ESCO informs,
"The enterprise market's
growth I would say is
growing well in South East
Asia despite its own set
of challenges in the tech

and financial sectors. The positive thing though is the fact that companies now know how important it is to have a good and dependable professional AV infrastructure in order to support the ever-growing remote workforce. Plus, the education and the government business will always be there and I think these are the 2 verticals that are investing in a bigger

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and more meaningful way. For example, classrooms are now being hybridized and this wasn't a requirement pre COVID. In fact, hybrid spaces in general are on the rise, and manufacturers are either going the propriety route or collaborating with other vendors to design full solutions - each of which comes with their own merits depending on the size and offerings of the manufacturer. The incorporation of UC and control into standard AV systems is something that happens often now, and you tend to see fewer "pure" AV tenders" due to the changing requirements of the end users. All in all, the AV/UC industry appears to have recovered post COVID somewhat, but from here on out it's not going to be a straightforward and sustained recovery. Personally, we feel it is going to be choppy a few years."

ESCO was founded in Singapore over three decades ago, and the company specializes in delivering comprehensive technology solutions and services within the domains of professional audio-visual and information communication solutions. With a formidable presence across Asia, the company has established offices in key locations, including China, Hong Kong, India, Indonesia, South Korea, Malaysia, Myanmar, the Philippines, Sri Lanka, Taiwan, Thailand, and Vietnam. This extensive regional footprint solidifies its position as a significant player in the industry. And in a noteworthy development, ESCO was acquired in 2021, by the Nikkei-listed Techno Horizon Group.

In the same stride, **Global Vision Multimedia (GVM)** is a well-respected and trusted end-to-end provider of multimedia delivery solutions for audiovisual, broadcast media, information technology and other related fields that utilize multimedia technologies. The company has played a crucial role in designing



and commissioning
key projects during and
after the pandemic, and
its official rep **Brian**Ikhsan, country manager,
Indonesia shares more on
GVM's observations of the
impact of the pandemic

on the industry, saying "GVM did experience a surge in projects post COVID as we adapted to the changing business landscape. Factors like remote work, digital transformation, and shifting consumer behaviour were all noted to drive these new initiatives and projects. Hybrid office setups for flexible work arrangements, adopting hybrid work models, combining remote and in-office work are all some of key reasons why the corporate sector has invested a greater deal of time, effort and finances into equipping their facilities with state-of-the-art pro AV technologies. In fact, having a world-class video conference system has pretty much become mandatory in every meeting room. That's how much of an impact the changes brought in by the pandemic has had. Also, currently we're noticing that healthcare and pharmaceuticals enterprise, in addition to hospitality, are turning out to be the most thriving segments at the moment."

In September 2016, GVM inaugurated its inaugural office in Singapore; while concurrently expanding its reach by establishing offices in Hong Kong and Japan during the same year. As of today, the company has further extended its presence with offices in Indonesia, Thailand, and Malaysia.

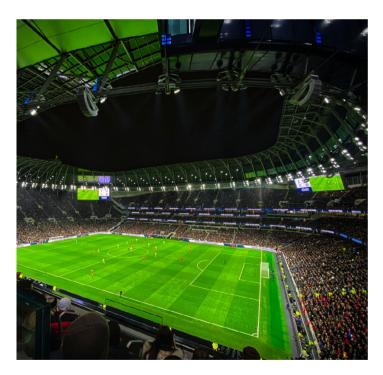
Key Drivers

In their report AVIXA informs that there were notable signs of recovery in 2022 across segments like Corporate, Media & Entertainment, Venues & Events, Education, Government, and Military – all of which

exhibited a higher rate of acceleration, while other segments also exhibited growth but at a comparatively modest pace.

Entertainment

As the world stepped out from their homes after the relaxation of safety norms, entertainment and retail venues across Asia witnessed an extraordinary spike in business. The demand for high-quality audio and visual experiences in large venues such as stadiums, arenas, concert halls, theaters and even nightlife destinations, has been noted to drive the adoption of advanced AV technologies; with products such as large-scale displays, immersive sound systems, advanced lighting solutions and automation control systems being adopted more willingly in order to enhance overall audience experience.



In response, manufacturers have introduced advanced lighting fixtures, intelligent lighting controls and visual effects technologies to enhance the visual experience. LED lighting solutions, moving lights, video walls, projection mapping and interactive lighting systems enable dynamic lighting designs, synchronized

effects and immersive visual displays. The same can be noted for manufacturers of professional audio equipment, many of whom have introduced products, technologies and systems that allow for easier and more effortless adjustment to the room dynamics while also seamlessly integrating with the existing technical infrastructure. Also, with the rise of live streaming and broadcasting, manufacturers have developed AV solutions and platforms that facilitate seamless capture, production and distribution of live content. This includes multi-camera setups, video switchers, streaming encoders and remote production solutions – all of which have enabled the delivery of high-quality live streams and enhance the overall engagement value.

Corporate

On the other hand; the corporate realm, which relied heavily on professional AV solutions to mitigate several operational challenges during the pandemic, have now found themselves to be increasingly reliant on better and more advanced professional AV systems. The general consensus of pro AV experts in the region noted that the role and contribution of comprehensive pro AV systems in enhancing workflows and improving connectivity and coordination between stakeholders in different locations is no longer being viewed as a luxury, but instead, a necessity.

The widespread adoption of remote work and telecommuting during the pandemic created a surge in demand for AV equipment and solutions that support remote communication and collaboration; which prompted businesses to invest in video conferencing systems, audio peripherals and professional-grade cameras and microphones to enable high-quality communication. The Pro AV market witnessed increased sales of these products, as well as software solutions that enhance virtual collaboration and

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productivity – all of which continue to be deployed on a regular basis to this day.

A report suggests that the adoption of high-resolution LED displays and interactive touchscreens for boardrooms and meeting spaces witnessed an increase of over 27% in 2020 over 2019; and this figure continued to rise steadily over 2021 and 2022to facilitate effective communication and decision-making. Furthermore, products such as professional audio-conferencing systems, PTZ cameras, and a wide variety of automation systems, have all witnessed a tremendous surge in purchases for corporate establishments between 2020 and 2022; with a minimum growth of 18% recorded in each of the aforementioned product categories.

Digital Signages

The use of digital signage systems to enhance communication has grown manifold across industries such as retail, corporate, entertainment and more. The growing popularity of interactive digital signage systems has been noted to assist businesses and establishments across application segments like corporate offices, stadiums, retail, transportation, exhibition halls, and other public places; with better assimilation of content by viewers.



The application purposes here include way-finding, general information / help desk kiosks, ticketing, retail sales self-checkouts, and of course, advertising; and manufacturers have developed comprehensive content management systems specifically tailored for digital signage deployments; in that, these CMS platforms offer intuitive interfaces, remote content management capabilities, scheduling features and real-time updates. By simplifying content creation, management and distribution, CMS solutions enable businesses to easily update and customize their digital signage content, leading to more dynamic and targeted messaging.

Furthermore, manufacturers have introduced cloud-based solutions that allow remote content management, real-time analytics and scalability.

Cloud-based digital signage solutions offer flexibility, ease of deployment, centralized control and the ability to manage multiple displays from a single platform.

These developments have made digital signage more accessible, cost-effective and adaptable for businesses of all sizes.

Education

Significant growth in the education industry combined with rapid urbanisation, has proven to be one of the key factors driving the market's positive outlook. Pro AV solutions such as multi-touch high-definition (HD) screens, smart whiteboards, discreet audio systems, instant data sharing platforms, and more; came to be widely used in smart learning systems in schools, universities, and other academic institutions. Teachers as well as students are noted have had an improved in-class experience as these systems are said to have enhanced real-time blended teaching and learning, while also augmenting visualisation and creativity.

For instance, in February 2022, around 40 digital anganwadis (primary schools) have come up in

districts of Nagpur, India; each of which are equipped with digital screens, projectors, and sound systems to support audiovisual methods of imparting education to the students.

Healthcare

Professional AV technologies found themselves playing a vital role Healthcare industry during the pandemic; wherein doctors mainly provided consultation and diagnosis to patients online over video conferencing. While this definitely enabled quick response and recovery of affected patients, it also prompted healthcare establishments to invest in world-class professional AV equipment like high performance LED screens and LED videowalls, ultrahigh-definition PTZ cameras, and more; especially as healthcare professionals increasingly found themselves in urgent and critical situations where complex surgeries needed to be performed under the remote guidance of specialist surgeons located elsewhere.

Complexity and Technical Expertise

Effectively designing and deploying professional AV systems that bring together several different products and technologies to work as a cohesive solution demands specific technical skills and knowledge.

And therefore, this situation has presented skilled AV professionals with several work opportunities that have allowed them to leverage their technical expertise and deliver comprehensive, optimized custom solutions tailored to meeting unique project needs.

Mitigating Restraints & Challenges

While the region may display an encouraging rate of growth and impressive revenue figures, one cannot deny that all of it comes with its own set of challenges and restraints that need to be navigated.

For example, the increasing need for high capital investment, combined with a lower adoption rate among small and medium-sized businesses, have been major market restraints for pro AV (audio-visual) growth; with one of the biggest and most pressing challenge being a lack of skilled professionals, a short replacement cycle, and one-on-one learning. And not to forget, the immense pressure on the supply chain that seems to prevail to this day.

These however, are accompanied by several other nuanced situations that AV professionals across Asia are forced to mitigate, as Brian informs, "Rapid technological advancements, while great, also prove to be a challenge in the AV industry, as everything evolves quickly with new technologies and standards, thereby making it challenging for manufacturers and integrators to keep up with demands. Also, supply chain disruption still continues to be one of the most pressing challenges that we face. Our strategy to mitigate this involves keeping adequate stocks of equipment to provide timely backup whenever the need arises. At the same time, we also offer SLAs (Service Level Agreement) such as routine maintenance, training, and on-site support; all of which are aimed to increase reliability, optimize performance, and of course to maximized RoI (Return of Investment) to our client. Another aspect of providing better service to our clients is to be closer to them; and geographically speaking, we currently operate in several countries across SEA such as Indonesia, Singapore, Malaysia, Philippines, and Thailand, with an established plan to expand to Vietnam by the end of this year. We also plan to get into IT, AI, and software services with a view to offer a more holistic value proposition to our clients."

ESCO too affirms that the company has had to quickly adapt with the changing scenario, while adopting certain novel approached to dealing with challenges

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encountered on a regular basis. As Christopher explains, "Many organisations stick to what they are used to and focus on building a bill of materials. But post implementation they neglect end user training and in turn, user adoption is very weak. There has to be a thought process into what the organisation wants and specific use cases developed for each of the respective spaces. We try to act as that consultative voice that develops a bespoke solution specifically tailored to meet each client's need. It is a long and arduous process but if you do it right, the rewards are very high. Yes, supply chain issues do prove to be a challenge; but having a knowledgeable design team allows you to find different combinations of products that can offer a similar outcome. The key is to have an open mind and invest in training. Ultimately, the objective from an SI's perspective is to create stickiness, create margins and provide added value to our clients. And from that perspective AVaaS (AV as a Service) is more than just an instalment plan. Rather it is always bundled together with a comprehensive maintenance offering with specific SLA's tied in. At the same time, it also helps when you have a platform to monitor all of the hardware installed so that you can pre-empt issues and optimise manpower. In doing so, the benefit to the customer is that the entire project becomes an affordable operational expense and whatever they equip is fully supported."

In a bid to maintain a more qualitative engagement with their clients and partners, ESCO reveals that they have been investing in markets outside of Singapore even in very challenging economic circumstances, with most of the company's offices being fully staffed (end to end) in order to minimise reliance on subcontractors. "It's one thing to win projects, but you always have to deliver properly. We have also invested in a very comprehensive Program Management strategy and our retention rate of our regional clients is extremely high. Of course, our association with

GPA has allowed us global reach and insight which has been very valuable for us. And we continue to stay focused on the enterprise markets regionally and globally, simply because it is the most scalable."

The AVoIP / SDVoE Revolution

Over the course of the past few years, technologies like AVoIP (Audio Video over Internet Protocol) and SDVoE (Software Defined Video over Ethernet) have become a key component within the professional AV solutions domain; with SDVoE leveraging the Ethernet to bring AV into the realms of IT thereby negating the need for matrixes, switches and cabling, while AVoIP transmits audio, video, and control signals over any IP infrastructure such as a WAN, LAN, or 5G wireless which means that standard network equipment like existing CAT5e cabling can be used to switch and transmit video and audio signals, thereby avoiding disruptions and additional costs.

The APAC region has been noted to be leading the market for widespread adoption of these revolutionary technologies; and solution providers seem to agree on the upwards trajectory of this trend. As Brian asserts, "These technologies offer several advantages, including flexibility, scalability, and high-quality audio and video distribution, It also simplifies cabling woes and supports centralized control, thereby making it attractive for large-scale installations."

Christopher too is in agreement, as he mentions, "The larger the project the more economical AVoIP becomes and the overall solution is easier to manage. Clients don't necessarily come out and demand for provisions like AVoIP – it's just the way that the industry has progressed that the technology has become more viable."



Ricky Tan, ZeeVee's regional sales manager, Southeast Asia and Taiwan, too affirms that the overall market for technologies like AVoIP is trending upwards now, with the company noting

the interest for such provisions within large-scale and small-scale projects alike, has increased to over 40% this year, as compared to a more modest 20% last year. ZeeVee is a leading global developer of digital technology and products for distributing audio-video content from any source or multiple sources to any number of displays; and also a member of the SDVoE Alliance which is a nonprofit consortium of technology providers collaborating to standardize the adoption of Ethernet to transport AV signals in professional AV environments and to create an ecosystem around SDVoE technology allowing software to define AV applications.

"We are seeing more consultant designs which are AVoIP-based, as opposed to HDBase-T or other older technologies. And we're seeing that across the board – regardless of whether customers are seeking 1 or 10 gig solutions. This is not just a pandemic rebound; rather it's more where customers are starting to accept that AVoIP might be a better option in terms of future-proofing their implementations and expanding them over time. We're starting to see more projects coming out with these requirements, especially since AVoIP can now address applications in smaller meeting spaces. Therefore, we expect to see an even more rapid dominance of the technology over legacy matrix systems!"

Having said this, Ricky does confess that in his opinion, AV matrix built on HDBase-T technology will continue to have its place, especially since some integrators and even consultants are more comfortable with traditional or legacy solutions; all of which boils down to the fact that they're not as well-educated enough on AVoIP and therefore reluctant to change course. And according to him, the answer to this conundrum is a thorough and widespread sweep of quality knowledge dissemination among AV professionals in the region. He confirms that in this regard, ZeeVee has affirmed its commitment to the Asian market by placing a heavier emphasis on various aspects of educating the market and building awareness.

Ricky reveals, "Our strategy encompasses various forms of education – including trade shows, webinars, success stories. And our focus will be on educating the market holistically - not just talking about 'our stuff', but on how the technology has been utilized with great success here in Southeast Asia and globally. We also aim to bring a more enlightened view to the industry; in that, we are leading the real conversation which actually addresses the pros and cons of compressed and uncompressed network architecture verses the marketing speak of 1 gig versus 10 gig. It's more about what your need is, the application and whether you need an uncompressed 4K SDVoE signal distribution system or whether compressed 4K is satisfactory for your particular application. I believe this approach seems to be resonating better in this market than it has in the U.S. and in Europe!"

ZeeVee reports a number of 'interesting' installations with a partner in Malaysia and several installs over in Australia, as they cite the corporate or enterprise market, inclusive of government, to be the strongest vertical when it comes to the adoption of AVoIP and SDVoE technologies; with higher education running in at a close second. The third vertical that shows great promise, according to the company, is medical.



ZeeVee AVoIP encoders/decoders powering a Singapore training facility where specialized optical equipment transmits live images with near zero latency to displays around the room. The organization's demo center has multiple cameras and input sources used to transmit from the center to various rooms scattered throughout the facility.

According to Ricky, a key reason for this success is the fact that ZeeVee makes it easy for interested parties to have a hands-on experience and evaluation of the company's technological offerings. As he shares, "In our large and spread-out market, integrators, consultants and end-users want to see the technology working with their own eyes. That makes it critical to get out of the office and to demonstrate our solutions. Once our partners see how easy it is for them to install and use AVoIP, they become believers and begin specifying or installing systems as new situations present themselves. For ZeeVee, that means participating in regional trade shows such as the Pro Integration AV show in Singapore, InfoComm Asia in Thailand and ISE in Barcelona, visiting large enterprises and getting demonstration kits into the hands of integrators."

ZeeVee assert that they have been delivering their SDVoE and AVoIP products right through the pandemic with strong stock on hand to this day. Through clever product planning and building extra stock of our products, ZeeVee's team was able to sidestep most of the negative impact of supply chain shortages. It is also revealed that in many cases the company has been able to 'flip' projects based on competitive products with extraordinary long wait times. And once integrators have experienced the ease of installation, simplicity of use and performance characteristics of ZeeVee's solutions, they have returned as repeat customers.

Ricky explains the reasons behind this, stating, "We bring an additional advantage to the market here since our AVoIP solutions are capable of more than just video distribution and include video processing and canvassing for LED walls. We are able to remove boxes from that whole design which both saves money and quickens completion of projects. We've

developed a reputation for designing and shipping high quality products backed by a strong customer-centric service and support team."

Future Beckoning for the Asian AV Market

Even though the AV industry has had to wade through innumerable challenges in supply chain, labour shortages and increases in operating costs; users' willingness to adopt newer technologies coupled with solution providers' enthusiasm for delivering more comprehensive systems that offer enhanced user experiences have been key to reinforcing the growth of the industry within the Asian market. And Brian believes that this growth will continue to be accelerated and driven by the increasing acceptance of aspects such as AI, VR and AR within the professional AV solutions domain.

Having said that, it is important to note that various independent markets within Asia continue to grow at different speeds. Christopher points to the fact that some developing markets like Indonesia, Philippines and Vietnam hold tremendous potential and will start to fulfil this potential over the next few years, whereas other markets like Singapore and Hong Kong are already mature but hold tactical value from a regional perspective.

On the other hand, companies like ZeeVee, who emerge as a leader in the AVoIP market in the US and have made significant investment in building their European footprint, have now turned their attention to Southeast Asia and neighbouring countries. Relying on their experience, ability, resources and bandwidth to provide additional focus to this region, the company have made significant investments into growing their business as well as educating the market about various technologies with the aim of reassuring their

customer base in this region that they're an active participant that looks to make a positive difference within the region.

Referencing the details shared above, and in addition to encouraging growth trends and several professional AV players having found efficient work-arounds to the multitude of challenges that may restrict the growth of the industry in the region; it seems safe to say that the Asian market is poised to be recognized as a true leader when it comes to the industry's economy globally, while also being a hub for trends that can redefine the way professional AV is adopted and consumed the world over.

ESCO

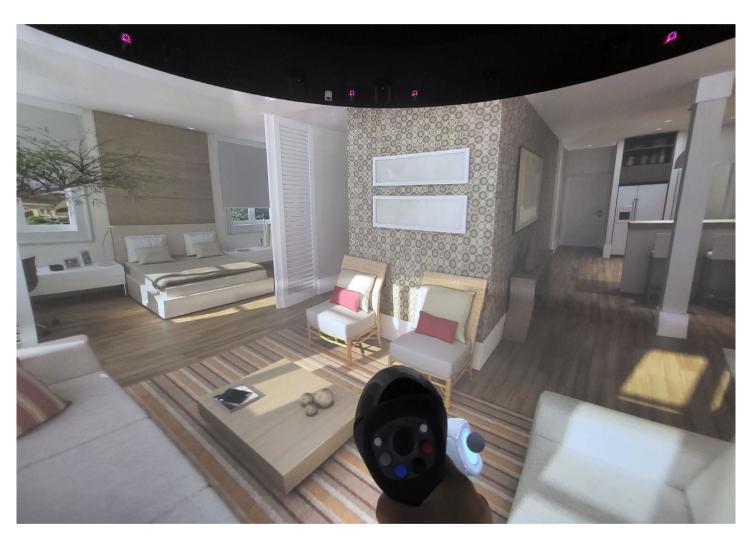
Global Vision Multimedia

ZeeVee

SOUTH KOREA

VIOSO Configures Cylindrical CAVE for Korea Institute of Science and Technology Information

To ensure truly immersive visualisation, integrator VizWave relied on VIOSO for its latest high-profile scientific project



Seamless projection of image in the CAVE.

FACTFILE

Project Name: KISTI CAVE

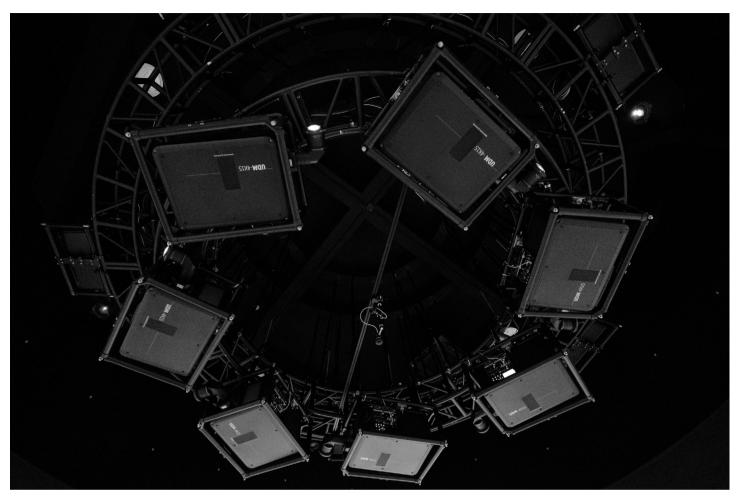
Project Location: Daejon, South Korea

Project Segment: Government

Systems Designers and Integrators: VizWave

AV Highlight: The use of VIOSO 6 SIM and the VIOSO 6 SIM with a 185-degree fisheye lens and 12MP sensor allowed the calculation of perfect geometry maps and optimal blend zones.

Key AV Brands: Barco UDM-4K15 projectors, VIOSO 6 SIM software, VIOSO Hi-Res Fulldome camera calibration kit and Dataton WATCHOUT



13 units of Barco UDM-4K15 projectors project immersive stereoscopic images on the curved walls and floor. Picture shows part of the projectors.

VIOSO's industry-leading auto-calibration technology was used to create a state-of-the-art, seamlessly curved 3D visualisation theatre in the unique cylindrical headquarters of the Korea Institute of Science and Technology Information (KISTI) in Daejeon.

The new space – a challenging, corner-free take on a classic virtual-reality CAVE (cave automatic virtual environment) – is powered by a freely hanging projector rig mounted on the 5.6m-high ceiling, from which 13 Barco UDM-4K15 projectors, running dual inputs, are able to project immersive stereoscopic images on the curved walls and floor of the 9m-diameter room.

Located on the campus of KISTI's National Supercomputing Center, the VR/AR visualisation space was constructed by Seoul-based VizWave, led by managing director Hyunjoo Yun, who drew on her previous experience constructing similar systems (CAVEs, powerwalls, HoloStages, etc.) for other universities and scientific institutions across South Korea. VizWave is also responsible for the maintenance of the projection room on a long-term basis.

The sale of the VIOSO system to VizWave was managed by Norbert Schmiedeberg, managing director of ITI-Image Group in Sydney (via its former Korean joint venture, Turnstone Distribution), which has a long history of selling VIOSO products and services.



The system included the VIOSO 6 SIM software, with VIOSO's patented, camera-based automatic warping and blending technology, and a single VIOSO Fulldome Camera Calibration Kit.

Also on site, alongside Yun and Schmiedeberg, were Julia We from Turnstone Korea and VIOSO's simulation expert Jürgen Krahmann, making the KISTI install a true team effort.

For the immersive space at KISTI, the decision was made to equip the VIOSO Fulldome Kit with a fisheye lens for calibration, explains technical product manager Krahmann. The main purpose was to minimise the appearance of squared-off corners in the projection – a common issue in most projection environments but deemed unacceptable in the rounded core of the KISTI building, which has a very tight, curved transition from the wall to the floor (described by Yun as an "upside-down dome"), making the use of a fisheye lens essential to create a more seamless and immersive experience.

The need to avoid the visibility of the corners also dictated the dimensions of the 9 m \times 3.5 m projection set-up, Krahmann adds.

"The set-up of the projectors was the first real challenge," Krahmann recalls, "because initially there were multiple overlaps, which are rather inconvenient for a space like this as it will destroy the black levels. Every projector emits some light, even if the output is black, so that was the first thing we needed to change."

Using VIOSO 6 SIM and the VIOSO 6 SIM with a 185-degree fisheye lens and 12MP sensor, which covered the entire projection surface, Krahmann was able to get enough resolution to measure the position of all projector pixels on screen across the curvature, despite quadruple overlap and bright surfaces in the cylindrical room. This allowed the calculation of perfect geometry maps and optimal blend zones. The successful calibration was then imported into Dataton WATCHOUT, MiddleVR and WorldViz Vizard. A 10.2-channel audio system and a user tracking system with 12 cameras complete the installation.

VIOSO 6 SIM and the VIOSO 6 SIM with a 185-degree fisheye lens and 12MP sensor help ensure optimal blending and seam-less projection.

With its new visualisation room, KISTI aims to boost the scientific and engineering role played by virtualreality technology by connecting the VR visualisation systems to the centre's high-performance computer equipment, such as its fifth supercomputer, 'Nurion', and the 'Neuron' GPU cluster.

KISTI vice-president Minsu Joh, who built and operated the institute's first-generation CAVE in the early 2000s, explains that in addition to KISTI staff, the VR/AR theatre is also open for use by private researchers: "The new virtual environment has been expanded to support both VR and AR technologies. We plan to continue to support not only researchers in various majors, but also small and medium-sized domestic companies, to utilise this CAVE system infrastructure."

With the installation complete, Krahmann reflects on the KISTI project with satisfaction, recalling the important role played by VIOSO's technology in achieving the impressive final result.

"Our company may be one of the very few, if not the only one, capable of providing such a unique service," he says. "The prospect of being at the forefront of this industry is both exciting and humbling and we are glad we could contribute to such an amazing project."

All photos copyright Norbert Schmiedeberg.

VIOSO

INDIA

XIMB Auditorium Sounds Anew with Audio Sophistication

Sun Infonet equips Eastern India's biggest academic auditorium with state-of-the-art AV

by Ram Bhavanashi



FACTFILE

Project Name: Xavier Institute of Management Bhubaneshwar Auditorium

Project Location: Bhubaneswar, Odisha, India

Project Segment: Education

Audio Consultant: Hudson

Systems Integrator: Sun Infonet

AV Highlight: The semi-circle auditorium seating posed a potential challenge. That the typical design of the audience area required a 180-degree-coverage, besides reaching out to multiple levels of seating, it was quite some serious work to be able to reach every single seat with uniformly pristine audio, which the Sun Infonet team managed to accomplish.

Key AV Brands: Meyer Sound, Shure, and Allen&Heath.

Xavier Institute of Management Bhubaneshwar – one of the most acclaimed business schools in the country – recently made a record of sorts, structurally, when it invested in the biggest auditorium in Eastern India. A massive 4500-seat capacity facility that it is the venue is biggest in the region not just by structure, but also texture as it features a befittingly state-of-the-art audio architecture, weaved in by New Delhi-based audio solutions major Sun Infonet, with a combo of multinational brands.

An SI ASIA account of the prestigious venue, and install.

The Xavier Institute of Management Bhubaneshwar (XIMB) prides a prestigious place in the Indian academic ranks not just by its foundation but also by its standing on the country's higher education contours. Founded in 1987 in the Odisha capital as a joint-initiative between the Government of Odisha, and the Society of Jesus – commonly regarded as the Jesuits – the institution got accorded the status of University by a special act in 2013, making it the first Jesuit University in the country.

Located at Nijigada-Kurki, on the Sundarpada Jatani Road near Jatani town on the outskirts of Bhubaneswar the University prides many a laurel in academic excellence with over 50 colleges and many more institutions under its aegis. It has been part of the exclusive Super League of top-10 B-Schools Top-10 in India- the highest tier rated by All India Management Association (AIMA).

While it was ranked 10th in the prestigious
Dare2Compete – India's Top 10 Competitive B-Schools
2022 it was also ranked 1st in Orissa Education World
B-schools ranking 2020–21. The institution regularly
carries out highly qualified research and development
activities in collaboration with various government
departments.

Owing to its growing academic activity as well as requirements, the institution felt it needed a dedicated facility where it could conduct various activities like symposiums, cultural festivals, and other academic programmes. The intended facility was envisioned to be blend of both modern design and state of the art technology infrastructure even as it reflects





the university's vision to inspire quality academics grooming compassionate and resilient leaders to lead organizations for a just, equitable and sustainable society.

In line with its objective, the XIMB management took a major initiative to create what came to be regarded as the biggest auditorium in the Eastern India. Also, the newly created auditorium is unique in more ways than one. Not just for physical shell structure, but also internal texture, and AV infrastructure, and more. For,

- A massive octagonal ensemble that it is, the facility has been designed to seat as many as
 4,500 audiences in two tiers – in addition to smaller enclosures – with over 100 feet wide stage at the facing wall
- It connects different levels with ramps and staircases with multiple entry and exits for easy movement of

people integrating public convenience facilities and safety set-ups as well

- It is characterized by one of the best acoustic initiatives as such space of such a large audience size needed a very special treatment of acoustics, and sound reinforcement measures
- Understandably, it also required a massive, and scalable AV infrastructure to be able to cater to the diverse activities intended by the management

New Delhi-based audio major and systems integrator Sun Infonet landed this prestigious project almost three years ago; however, the pandemic-induced situations, and other sundry issues took time, and the auditorium was completed and commissioned in February this year.

The integration team from Sun Infonet – lead by S Jayakaran – working in close collaboration with the XIM audio consultant Hudson worked out on the

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prestigious installation that it was. While it meant several rounds of online interactions during the COVID times, the easing out of pandemic necessitated inperson interactions and ratifications towards making in incredible audio configuration.

The install featured a spectrum of audio brands that essentially included Meyer Sound, Shure, and Allen&Heath, besides others.

"Having known Meyer Sound as a brand for over 20 years and the true audio it gives, I'm happy to incorporate that true audio in one of India's largest Meyer Sound installations," Hudson said about his excitement on the install.

For the main PA system, the team installed as many as eight Leopard linear line array modules and three 900 LFC control elements on each side of the stage. In addition to this, they also configured four Ultra X20 compact loudspeakers as stage fills to cover the VIP area.

"The LEOPARD system provides a high quality and unparalleled sound throughout the venue," asserts Andrew Poh of Meyer Sound. "We are glad that the audience is happy with Meyer Sound system," he said about the reported experiences of the audiences in the venue. "This wouldn't be such a success without the support from Sun Infonet," he commended.

That the stage, with over 100 feet width, and for the scalability of large number of artistes performing at one time, it required some special configuration. To be able to address this requirement, as many as six MJF 208 stage monitors were also provided.

In addition to this, to be able to have even coverage throughout the auditorium, seven units of Ultra X20 were used as fills in upper and lower balconies. All of these fills were tasked to be managed by two units of Galileo Galaxy Network Platform.

Further, for handling over 48 channel inputs from across the stage, and multiple outputs, the install design team chose to rope in Allen & Heath's Avantis system, along with GX4816 Audio Rack to play the perfect console to run the varied spectrum of events. With low latency and deep processing ready along with 96 KHz audio, the Avantis is taken to handle all of these inputs and outputs like a breeze in this facility.



"Once I understood the challenges and the significance of the auditorium, my motto was to take a 'no-compromise' stand, and do my best to get the intended audio experience at the venue,"

said **Sun Infonet's senior product manager Jayakaran B,** who was involved in the project install from day one.
"That uncompromised stance made us weave in the audio ambience that is there to experience today- for a real audio-visual treat."

According to him, the very shape of semi-circle auditorium seating posed a very potential challenge. That the typical design of the audience area required a 180-degree-coverage, besides reaching out to multiple levels of seating, it was quite some serious work to be able to reach every single seat with uniformly pristine audio.

More, the management wanted a system that can cater to varied types of events and address to a large spectrum of applications.

"Fortunately, we have a wide band of high quality solution providers with proven technology and

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reputation," he said, "Sun Infonet also has a design team that is skilled to handle challenging jobs and quickly evolve a suitable solution."



Shure microphone.

For capturing the speech/voices of the presenters on stage, and elsewhere in the auditorium, a multitude of Shure SLX-D wireless systems was roped in with combination of SM58 and Beta 58 capsules throughout the Auditorium, and control rooms. They are meant for the main presenter, audience, anchors, performers. All Shure systems are networked to be able to be checked and controlled through the Shure Wireless Workbench application.

The entire system has been designed to cover the entire facility, enabling easy communication between members of audiences and guest speakers during panel discussions, and allowing interaction between the stage and control rooms during performances.

Augmenting the architecture of wireless microphones, an array of wired microphones were also deployed from Shure like KSM, Beta, SM to address various stage performances. While an MX series gooseneck microphone sat on the podium stand to address the audience, a range of SRH840 series professional monitoring headphones have also been added in the inventory for the monitoring of the events from main control room.

The client is apparently happy. Fr. George Fernandes, XIM University Chief Administrative Officer, expressed his joy on the day of inauguration. "The moment we had multiples of appreciation of the audio at the inauguration of the facility, we realised we have invested into the best system we can have. Thanks to Hudson for the recommendation, and Sun Infonet for their wonderful and never-ending support."

Sun Infonet Meyer Sound

Shure Allen&Heath







