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BEYOND THE SCOREBOARD: WHY PROFESSIONAL AV TECHNOLOGY IS THE NEW MVP OF SPORTS



INTERVIEW:
Gilad Yron, CEO, Kramer

NEWS:
QSC, LLC to be Acquired by
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INSTALLATION:
Christie Delivers Mesmerising
Visual Experiences at
Museum HEI

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CONTENTS

Volume 23 Issue 11: NOVEMBER 2024



64 INSTALLATION: Christie Delivers Mesmerising Visual Experiences at Museum HEI

INTERVIEW

06 Gilad Yron, CEO, Kramer

10 Hanqing Deng, Vice President, Absen

12 NEWS

42 SOLUTIONS UPDATE

FEATURE

54 BEYOND THE SCOREBOARD: Why Professional AV Technology is the New MVP of Sports

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"We believe that we have state-of-the-art solutions and respect and admire our technology. We, however, also respect and admire the customer more than our technology, and we know that the customer has the right to choose and make their own decisions, and we are not going to limit them from making their decision. We are designing our systems to work with third-party devices and be open"

Gilad Yron, CEO, Kramer

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To read more go to Feature on page **06**





Thomas Richard Prakasam
Publisher/Editorial Director
thomas@spinworkz.com

From 2019 to 2024, the adoption of professional AV technologies in sports has seen remarkable growth, becoming integral to enhancing audience experiences at major events. Research highlights significant increases in the uptake of pro audio (17.7%), advanced lighting (12.6%), and LED screens (19.5%), alongside control and automation systems (11.7%) that facilitate seamless venue operations. This expansion reflects the industry's momentum, with sports applications growing from 3.6% of the global pro AV market's revenue in 2019 to 5.4% in 2022, and projected to reach 7.3% by 2024. As demand for immersive fan experiences rises, AV technologies in sports are set to play an even larger role, potentially contributing nearly 9.6% of industry revenue by 2026. Our Feature article provides an insight as to the opportunities in this space.



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



FEATURES EDITOR
Elton Noronha
elton@spinworkz.com



ADMIN & CIRCULATION
Julie Tan
admin@spinworkz.com



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



DESIGN & LAYOUT
Hazel Gundaya

PUBLISHED BY

Spinworkz Pte Ltd
71 Bukit Batok Crescent
#06-13 Prestige Centre
Singapore 658071
Tel: (65) 63162716

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Kramer: Breaking Barriers to Create Best Experiences

*SI Asia had the privilege of speaking with **Gilad Yron, CEO of Kramer**, about how the company is transforming the future of audio-visual (AV) and unified communications and collaboration (UCC) through its Build, Buy, Partner strategy. With recent acquisitions and a focus on bridging the physical and digital worlds, Kramer continues to lead the AV industry's evolution, delivering exceptional experiences for its partners, distributors, and end-users.*

With Ashton Bentley's and ZeeVee's recent acquisitions, Kramer has significantly expanded its UCC capabilities, aligning with the growing convergence of AV and IT. Could you share the strategic vision behind these acquisitions?

Let me share the broader perspective. For Kramer, acquisitions are not an objective but a means to achieve our goals. So, when assessing and evaluating our strategy, we continually assess the **Build, Buy, Partner Strategy**. Build, as it implies, relates to Kramer building its own solutions with its own resources. For every dollar we make, we set aside 15cts (USD) for R&D, which is a fundamental and instrumental part of our strategy, as it gives us an edge. On the Partner aspect, we always seek to expand partnerships as we acknowledge that not everything needs to be developed by ourselves.

A good example is our cross-certification with Sony, Logitech, Jabra, Netgear, and others. Again, this is a critical component of our strategy. Then there is Buy, one of the tools in our toolbox that enables us to execute our



multiple stages strategy execution. We look at our overall strategy, and if buying makes sense, we then look to acquire the company. Why do we need to rebuild something if something already out there fits our strategy and will enhance our offering to the market when combined with our solutions?

This is not an either-or situation. So when we execute our strategy, we use everything. We develop by ourselves, we partner, and we acquire.

The Enterprise/UCC space is critical. We acknowledge that we were missing some aspects – for example – during COVID with

had no UCC solution. So, the first thing we did quickly was to partner and cooperate with others. This is where the cross-certification came in. The second aspect was the BYOD segment. So, we built a complete portfolio of video bars, speakerphones, and fantastic cameras for the BYOD segment. Alongside the infrastructure layer that obviously is the Kramer heritage, we provided cost-effective and perfect fit solutions for the BYOD space. It is not the entire space, but it is substantial enough.

We still felt that there was a void in the market. Companies are looking at the physical aspects of the UCC space, and then there are companies like Zoom, Microsoft and Google that are from the digital space and are not connected to each other. Our vision was to connect the physical and digital layers, which we termed “**Physi-Digi**”. We launched **Quicklaunch**, which provides a holistic solution connecting the physical and digital aspects for a seamless and fluid experience for all involved in a hybrid work environment. Two years later, Quicklaunch is fully integrated into our Panta Rhei ecosystem, furthering our mission to bridge the gap between physical and digital worlds and create new ways for people to connect with AV technology.

Our next phase was to enter the certified high-end collaboration space. We decided to have a strategic partnership with **AudioCodes**, one of the most prestigious Microsoft partners.

Audiocodes brought a deep relationship with and understanding of the Microsoft environment, whereas we brought our 43 years of deep understanding of the audio-visual segment. Together, we are able to introduce solutions that elevate the user experience in the

UCC space. For now, we are offering solutions based on legacy development, and in parallel, we are starting to develop new offerings that will hit the market in the next couple of years. This is a long-term strategy for us.

We always aim to provide intuitive end-to-end audio-visual experiences. Not just providing part of the solution but understanding the customers’ needs and providing head-to-toe solutions. Our Tag line states Audio Visual Solutions and Experiences. Experiences are not about devices or features. Customers care about the best experience and not what is behind the scenes. They truly do not care about these black boxes. Their concern is that the systems work and offer the best experience for all involved.

Software companies like Microsoft and Zoom are very focused on the end customers and the end-user’s experience. Microsoft’s Signature Room, for example, is a holistic design that includes furniture, lighting, and sound as part of the overall experience. We, I must admit, come more from the technology perspective. This is when we started our discussions with Ashton Bentley. The acquisition puts us in a unique position in the market. How can we provide the best-optimised experience? How can we create this experience in a consistent and scalable manner? This is what Ashton Bentley brings into the space. This is not about devices; as a customer, you will find an intuitive end-to-end audio-visual experience. That experience will be consistent no matter where you are in the world. This is based on more than 100 years of accumulative experience of Ashton Bentley and Kramer.



The same business philosophy was applied when it came to acquiring **ZeeVee**. We analysed the market more in terms of technological trends and where it is heading, and it was clear to us that AV can no longer be a standalone solution – it cannot be an isolated island. COVID accelerated this premise. COVID compressed the market evolution by 5 to 10 years. It was clear to us that there was a strong tectonic move that would converge IT and AV. The business model has changed, the expertise, the offerings, the standards, and many other elements have changed, and we have identified that AV over IP technology will be a critical technology.

In 2021, when we sort of started our next chapter, Kramer brought to the market an okay offering in the AV over IP space – not a state-of-the-art offering, but today, sitting here; I can tell you that no other companies are providing the level of AV over IP solutions that we have. This was a three-and-a-half-year journey. We shifted resources to make better AVoIP solutions. We planted the seeds in 2021 and the market impact started in 2023 throughout 2024. So we came up with a completely new portfolio – the KDS-7, KDS-17 and KDS-100 – a massive development.

We acquired ZeeVee to complete the AVoIP experience. ZeeVee is one of the most prestigious and well-known names in this market, bringing 20 years of experience. ZeeVee came from a streaming background and they have a profound and intimate understanding of how to manage video over network. They are one of the founding members of SDVoE! The knowledge and know-how brought to the space by ZeeVee is unparalleled. So now, when we combine the deep technological product and

market understanding from ZeeVee alongside Kramer's developments, we have the perfect match that can accelerate strategies set in 2021 and take it to the next level.

With our Build, Partner, and Buy Strategy, I can confidently say that we have brought a unique offering and unbeatable technology to the enterprise and UC space. Our AVoIP solutions are the widest, offering high quality and product functionality as well as truly the best value in the market—a complete solution for a better experience.

Kramer now offers a comprehensive UCC solution, including monitoring, room scheduling, control panels, and speaker systems. How does Kramer accommodate clients who prefer to integrate third-party solutions alongside Kramer's offerings?

Fantastic question. We have seven design principles for R&D. They all need to be ticked, but not necessarily for all the products. For example, one of the principles is sustainability, where we look at PoE-based solutions and recycled materials. Another is that everything needs to be connected. There needs to be an extremely good reason for us to release a product that is not network connected. To answer your question, we also adhere to the principle of Open by Design. This is critical. We believe that we have state-of-the-art solutions and respect and admire our technology. We, however, also respect and admire the customer more than our technology, and we know that the customer has the right to choose and make their own decisions, and we are not going to limit them from making their decision. We are designing our systems to work with third-party devices and be open. We are releasing

public APIs for the market. This is one of our fundamental design principles. You can see this principle in our Panta Rhei, which, in my humble opinion, is the most advanced AV system in the market. It is an agnostic on premises and cloud system that can work with third-party solutions. We support any web-based product. We will continue to enrich the capabilities of Panta Rhei to meet its full potential.

Do you believe AV solutions still need to gain full acceptance from IT managers or have we already overcome those hurdles?

There were many barriers and walls between IT and AV. Some of these barriers were built by the AV community to keep it isolated from IT, and of course, the IT industry also resisted bringing new technology into its network. However, I see a huge shift. When I visit and meet consultants, they state that their design now incorporates AVoIP by default.

We have crossed the tipping point. Even the reluctance to have a cloud-based solution is going down. Almost 99% of organisations are already in the cloud, especially in the private sector. Defence and other government sectors are slower to adapt due to security concerns. There are very, very rigid and rigorous demands regarding security. We are fortunate because our Executive VP of Product and Technology was from the Telecom industry and had a rich understanding of software and security. We have always put a premium on security with our solutions, and with higher adoption, especially of cloud solutions, we will continue to push the limits to ensure security. Again, we will only have been able to release Panta Rhei while ensuring security as it goes deep into the IT infrastructure.

Artificial Intelligence (AI) is a significant topic across industries. Can you share insights into Kramer's AI strategy and how it plans to incorporate AI into the AV space?

AI is the biggest revolution in our life. The adoption of AI in our industry today is minimal. It is not the AI capabilities but the fact that there is a missing infrastructure layer that is key for every AI: data. In the end, AI is a large language model based on billions of data points. We need to make sure that we start to collect and aggregate data. The most significant barrier for our industry is the disconnected black boxes that send no data. We will have to move from these isolated, disconnected devices to a network of devices that can send and collect data. Then, we will be able to bring AI algorithms and the power of AI into space. Again, we are doing this with Panta Rhei, which offers data monitoring, analytics and insights. The data becomes information that helps with your analytics and business, and AI will come when you move from analytics into insights.

Providing a Unified One-Stop Experience

Kramer's strategy is to offer a fully integrated solution from our different offices regardless of the solution's origin. Our integration partners and distributors will have full access to our entire portfolio, where we offer the same brand, same programme and same support. It will take time, but we are working on it. Our ambition is to provide a unified one-stop experience to our partners to take the hassles of working with multiple companies, which is part of our overall strategy.

Kramer

Absen to Continue to Push Green Initiatives and Innovative Solutions

Absen has been making waves globally with its innovative LED solutions and commitment to sustainability. Known for delivering exceptional performance across a wide range of applications, Absen's customized displays are recognized for their versatility and impact. Last year, SI Asia explored Absen's product innovations, global expansion, and green initiatives in an exclusive interview. In this issue, we reconnect with Hanqing Deng, Vice President at Absen, to discuss the company's strides in sustainability, the evolution of their product portfolio, and the future direction of Absen's global efforts.

In our previous conversation, Absen shared its vision for the future of LED displays, particularly highlighting DOOH (Digital Out-of-Home) and the company's focus on green initiatives—specifically, lower power consumption and longer product lifespans. Could you provide an update on the progress made in these areas?

Absen has always attached great importance to green environmental protection, following the concept of green environmental protection in the material selection of products, and all production meets the requirements of ROHS certification. The every-saving and long-life requirements for our outdoor products are important trends for Absen. The upcoming Axx25 new product will save 30% more energy than traditional products and have a product life of over 10 years.



Last year, Absen mentioned that MicroLED technology would likely revolutionize the LED display market, particularly in sub-P1.0 pixel pitch displays, within 3-5 years. You also emphasized that your MicroLED series was positioned as the next big step in display technology. Could you share what advancements have been made since then?

As expected, MicroLED products are increasing their penetration into the traditional SMD product market. Especially for products in sub 1.0 pixel pitch displays, the penetration rate of these products is expected to reach 80%. Absen will continue to increase research and product development in MicroLED technology to meet the needs of more scenarios and users.



Mastering Dynamics with Micro LED Technology The Ultra HD KLCOB1.2 LED screen, featuring Absen's advanced flip-chip technology, establishes a centralized information control command center at the Hubei Yihug Command Center. This high-resolution display ensures the rapid delivery of critical information, enabling monitors to respond swiftly to all dynamic updates. The result is a seamless flow of information that enhances operational efficiency and situational awareness.

Absen also spoke about its commitment to the Virtual Production market, with the R&D team working relentlessly to create products tailored for this sector. What developments have taken place on that front?

The Virtual Production market is a very professional display market, and Absen has developed the PR series RGBW products in terms of solutions, which can provide higher CRI and meet the lighting requirements of scene site. Simultaneously supplemented with products between different pixel points.

What's Next? Looking ahead, how does Absen plan to push the boundaries of LED technology? What innovations can we expect to see in the near future?

In the future, Absen will continue to follow the concept of green environmental protection and develop more energy-efficient and power-

saving products. At the same time, we have also deployed multiple technologies in professional display and intelligent interaction, and we will provide better display quality and more convenient operation experience.

Market Focus: Lastly, what are Absen's biggest markets at present, and which regions or segments do you see as having untapped potential for growth?

Currently, Absen's largest markets are international markets, such as Europe, America, Asia, Africa, and Latin America, which will release even greater market demand in the future after the world experiences more stability. Furthermore, from the perspective of segmented markets, there will be greater growth in the 2C consumer market.

Absen

HH Audio Announces New Distribution Partnership with Sound Factory for the GCC

MENA: HH Audio, part of the UK Headstock Group of companies officially announced the appointment of **Sound Factory FZCO**, based in the UAE, as an official HH distribution partner in the GCC including the Middle East, CIS and parts of Northern Africa.

When asked what it meant to be appointed as an official HH partner, Sound Factory's BD manager Fara Azari stated: "At Sound Factory, we're excited to kick off this new partnership with the HH brand. Their history, strong reputation for quality, and customer focus align perfectly with our values, and we're

confident this will lead to growth and success in the territories we've been entrusted with. We truly appreciate the opportunity to team up and are eager to explore what's ahead for HH Audio. Here's to a successful and rewarding partnership as we work together to take the brand forward.

Ian Wright, Headstock's Director of Global Sales added: "I am very happy to be working with Sound Factory. Our brand fits in beautifully with the solid portfolio of brands they already have, in addition to an experienced, well-connected team who understand all aspects of the Audio business in this region. I am extremely confident that Sound Factory can do a fantastic job of introducing the HH brand in their market and will work hard to develop HH as a leading player there."

HH Audio has been making, designing and engineering high quality audio products in the UK since 1968. Its goal is to continue the development of relevant, high quality and value-for-money products to suit several vertical markets within the audio industry into 2025 and beyond.



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Sonance Welcomes Industry Veteran, Morten Jorgensen, as V.P. of Professional Audio

INTERNATIONAL: Sonance, a leader in architectural audio solutions known primarily for residential applications, proudly announces the addition of Morten Jorgensen as Vice President of Professional Audio. This strategic hire demonstrates Sonance's commitment to investing in and expanding its presence in the global professional audio sector.

"At Sonance, we are assembling a talented team to drive our vision of integrating seamless audio solutions across diverse environments. Morten's extensive experience and industry expertise will be instrumental in elevating our professional audio division," said Mike Sonntag, Chief Revenue Officer - Commercial at Sonance. "We are thrilled to welcome Morten to the Sonance family. His deep knowledge and passion for innovation align perfectly with our vision of delivering cutting-edge solutions to our customers."

Morten Jorgensen brings over three decades of experience in the professional audio industry, including extensive global business leadership, to his new role at Sonance. During his impressive 30-year career at Bose Professional, Morten developed deep expertise in research, product development, marketing, and engineering, and helped establish



Bose Professional as a premier supplier of professionally installed audio solutions globally. Most recently, he led global sales for the professional division. His diverse background positions him well to drive growth and enhance Sonance's professional offerings.

"I am excited to join Sonance and work with a talented team dedicated to shaping the future of professional audio," said Morten Jorgensen. "Together, we will push boundaries to continue to deliver outstanding audio solutions."

This appointment reflects Sonance's ongoing expansion and dedication to maintaining leadership in both residential and professional audio markets.

Sonance

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Unilumin's Commitment to Sustainability Recognised with Dual Carbon Footprint Certification

GLOBAL: Unilumin Group, a pioneer in LED application services, and its subsidiary LAMPRO have achieved a significant milestone by receiving the Intertek Green Leaf Mark for product carbon footprint, awarded by Intertek, a globally renowned quality and safety service provider. In addition, Unilumin was granted a product carbon footprint certificate jointly issued by Intertek and the Beijing Saidi Certification Center.

Intertek, the global leader in quality assurance services, has over 1,000 laboratories and offices in more than 100 countries, ensuring comprehensive quality and safety standards. The China Software Testing Center-Saidi Certification, affiliated with the Ministry of Industry and Information Technology, is a front-runner in national quality standards for civilian and military sectors. Their combined expertise validates Unilumin's commitment to excellence and sustainable development.

This dual certification highlights Unilumin Group's commitment to sustainable development and reinforces its leadership in the

low-carbon transition within the professional display industry. The rigorous certification process assessed Unilumin's extensive range of LED display products, including the Upanel II, UminiW, LRS, RN, LRS, and BNXII series. Each product demonstrated adherence to stringent carbon emission standards throughout its lifecycle, showcasing its energy-saving and carbon-reduction capabilities.

Understanding the term "carbon footprint" is crucial in this context. It refers to the total carbon emissions produced during a product's entire lifecycle, from the extraction of raw materials and manufacturing processes to logistics and delivery to end-users. With global awareness of carbon footprints growing, Unilumin's achievements resonate strongly with businesses seeking sustainable solutions.

Notably, the UminiW LED display utilises advanced RGB flip-chip technology to enhance light source efficiency. This technology enables the display to maintain high brightness levels with significantly lower power consumption compared to conventional models. Its innovative common cathode design drives the red, green, and blue light-emitting chips separately, that further reduce energy usage. The UminiW's impressive maximum power consumption of just 30W (P1.8) exemplifies its reputation for exceptional energy efficiency.

The growing emphasis on sustainability across global industries has led international clients like Apple to prioritise net-zero emissions and carbon neutrality in their supply chains. To align with these goals, suppliers are increasingly required to disclose carbon footprint data for their products. Furthermore, policies like the European Union's Carbon Border Adjustment



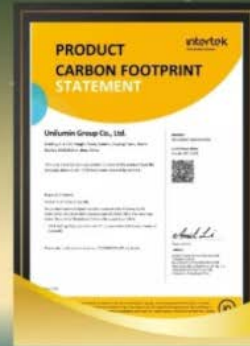
CHOOSE UNILUMIN EMBRACE A SUSTAINABLE FUTURE

Unilumin solidifies its action in going green



2023

The **FIRST** enterprise in the LED display industry that obtains **TÜV SÜD Low Carbon Certification**



2024

Unilumin displays obtained **Intertek Green Leaf Certification**

Mechanism, which came into effect in October 2023, now mandate carbon footprint reporting for products imported into the region. This regulation plays a critical role in determining future carbon tax calculations, encouraging manufacturers to adopt greener practices.

Unilumin's LED displays not only meet these rigorous energy efficiencies and carbon reduction criteria but also support users in achieving cost savings and environmental protection goals. These products are ideally suited for businesses committed to integrating sustainability into their operational strategies. With a solid foundation of over two decades of experience, Unilumin Group has consistently led the way in establishing a transparent and green supply chain that encompasses every

stage of its product lifecycle. This dedication has already earned Unilumin several notable accolades, including being named the "Carbon Neutrality Commitment Demonstration Unit" by the Ministry of Industry and Information Technology.

On April 24, 2023, Unilumin also became the first company in the LED display industry to receive the TUV SUD LED display carbon label, setting a new standard for sustainability. With this latest dual certification, Unilumin continues to drive the low-carbon transition within the sector, aiming to implement innovative, energy-saving technologies globally while providing high-quality LED display solutions to an ever-expanding audience.

Unilumin

Optimal Audio Unveils 24/7 Training Hub with the Launch of the Optimal Audio Academy

GLOBAL: Optimal Audio has launched its new training platform, the Optimal Audio Academy, marking a significant step in the brand's mission to deliver 'Commercial Audio, Done Differently'. This virtual training academy is designed to offer system integrators and installers around-the-clock access to certification-based courses that are both flexible and easy to navigate.

The Optimal Audio Academy provides a range of modular courses that align with the brand's ethos, equipping users with the skills needed to maximise the potential of the Optimal

Audio portfolio and its WebApp. With its straightforward interface, the academy aims to simplify system setup and control, facilitating seamless and efficient installations for commercial audio environments.

The Optimal Audio ecosystem is renowned for its streamlined product lineup, perfectly suited for multi-zoned commercial installations such as retail and hospitality venues. At the heart of this ecosystem lies the WebApp, which significantly reduces the complexity of customisable installation parameters, delivering an intuitive experience akin to that of a smart home device. The academy's courses are designed to help installers unlock the full potential of this powerful tool, ensuring fast and functional installations.

Currently, the academy offers three levels of training, tailored to guide installers through every aspect of the Optimal Audio ecosystem. Level One is an introductory course that covers the foundational elements of the brand, its products, and their applications, laying the groundwork for more advanced training. Level Two provides a deeper dive into the Zone





series and WebApp, and focuses on enhancing installation capabilities, particularly in small to medium-sized multi-zone projects, improving the efficiency and deliverability of audio solutions. And finally, Level Three, which is set to be released in the near future, is touted to be the advanced course that promises to elevate participants to the status of Optimal Audio Aficionado, with comprehensive training that will refine their skills in designing and executing sophisticated installations.

Certification is awarded upon successful completion of each course level, with a pass mark of 75% or higher. This structured approach not only builds confidence but also equips installers with the knowledge to deliver Optimal

Audio solutions that are efficient, reliable, and tailored to the needs of their clients.

One of the academy's key benefits is its focus on practical learning, guiding participants through standard installation scenarios to ensure a smooth and trouble-free experience on-site. The courses also spark creative thinking, encouraging installers to consider value-added features that can enhance their clients' audio systems beyond the basics.

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Powersoft Amplifiers Turn Up the Power at Hilton Kuala Lumpur Hotel

Malaysia: The Hilton Kuala Lumpur hotel's grand and junior ballroom, as well as its meeting room, have replaced their existing audio system with a state-of-the-art, cost-saving new set-up powered by Powersoft's Mezzo, Duecanali and Quattrocanali amplifiers

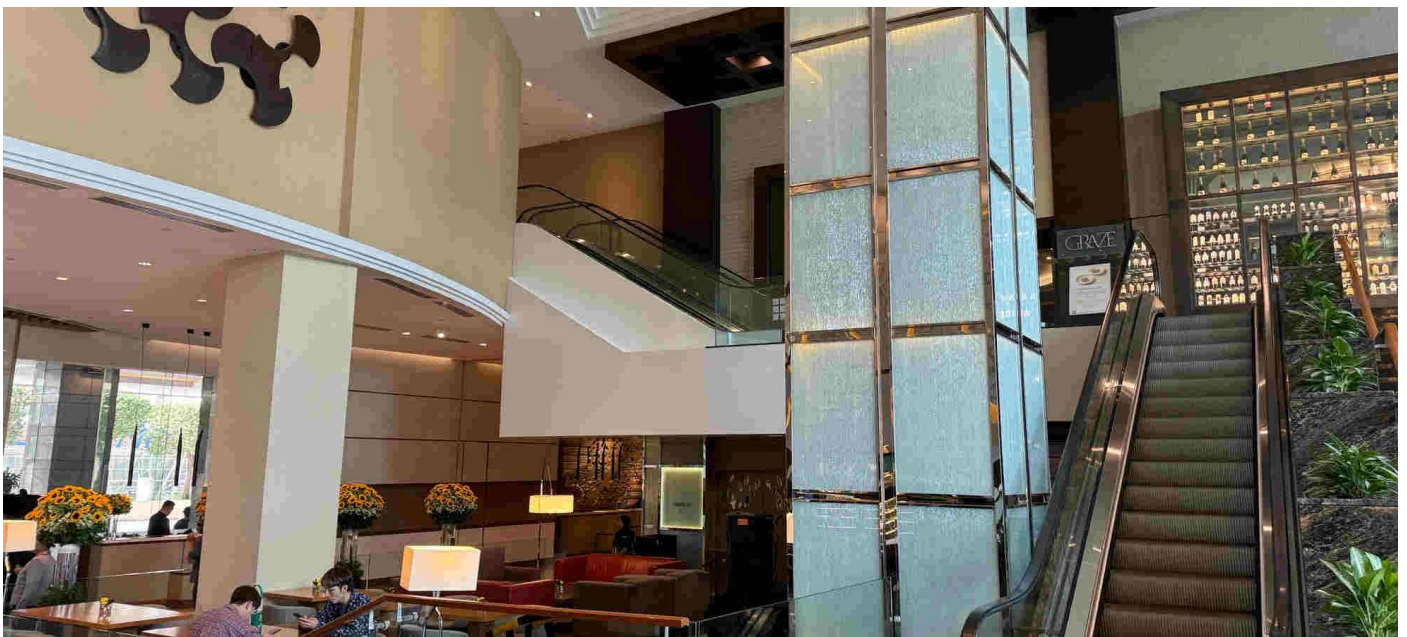
The award-winning hotel, located in the Malaysian capital's transportation hub in the vibrant Kuala Lumpur Sentral area, wanted to refresh the sound system in order to have high-quality and clear sounding audio in its newly renovated function spaces.

After winning the tender, Concept Audio chose Powersoft's Mezzo, Duecanali and Quattrocanali amplifiers to play a central role

in the audio overhaul, selected to meet the diverse requirements of each venue within the hotel. "We chose Powersoft due to the amplifier flexibility and enhanced efficiency, as well as the seamless integration they provide," says Castrit Lim Lit Seong, managing director of Concept Audio.

Seong and his team revamped multiple areas of the Hilton hotel, including the 565m² Grand Ballroom, the Junior Ballroom and the meeting rooms, with a focus on delivering clear and crisp audio quality. "The integration within the rooms was done separately," he explains. "We relied on three Powersoft's Duecanali 1604 DSP+D, one Quattrocanali 1204 DSP+D and Duecanali 804 DSP+D, to power the Grand Ballroom." Powersoft's Duecanali and Quattrocanali series amplifiers offer a remarkably low power consumption and heat dissipation in a compact, lightweight unit, making it perfect for medium-scale installation where system flexibility is a must.

In the Junior Ballroom, used for team building activities or small gatherings, Seong and his





team installed three Mezzo 602 AD. The Hilton's meeting room is powered by one Mezzo 322 AD. Powersoft's Mezzo series offer reliability and the same build quality in a half-rack-unit form factor, and AD versions of Mezzo add audio networking capabilities with Dante/AES67 and an internal Gigabit Ethernet switch with a second port so that multiple products can share the same network.

Accompanying the Powersoft amplifiers in the Grand Ballroom are 18 Tannoy CMS 1201DCT, 16 Tannoy CMS 503IC, six Tannoy CMS 503ICT and four Tannoy CVS 4 ceiling speakers. In the Junior Ballroom, Concept Audio also installed 12 Tannoy CMS 803DC BM and 10 Tannoy CMS 503ICT ceiling speakers. Mezzo powers ten Tannoy CMS 803DC BM ceiling speakers in the meeting room.

According to Seong, the amplifiers platforms' flexible output capabilities enabled a reduction

in the number of units required, resulting in a substation cost savings for the client. "Mezzo amplifiers offer the versatility to seamlessly convert analogue inputs to network audio, eliminating the necessity for additional network audio input hardware," he explains. This streamlined approach not only enhances efficiency but also simplifies the installation process, ensuring a seamless and high-quality sound experience for all users.

The installation process was smooth, with Powersoft amplifiers easily integrating with the ceiling speakers in various rooms within the hotel. Seong adds that the team faced no significant challenges, underscoring the reliability of Powersoft amplifiers. "The newly installed system is easy to control, stable and has allowed for the hotel to save on equipment costs," he says.

Seong concludes by saying that the end user is thrilled with the easy-to-control and stable amplifiers: "The customer is happy about the new installation. They aimed to achieve a superior sound quality and are delighted with the end result. Powersoft amplifiers have proved to be the ideal choice for the Hilton Kuala Lumpur hotel."

C Channel Christian Church Enhances Remote Worship Experience with Absen LED Display

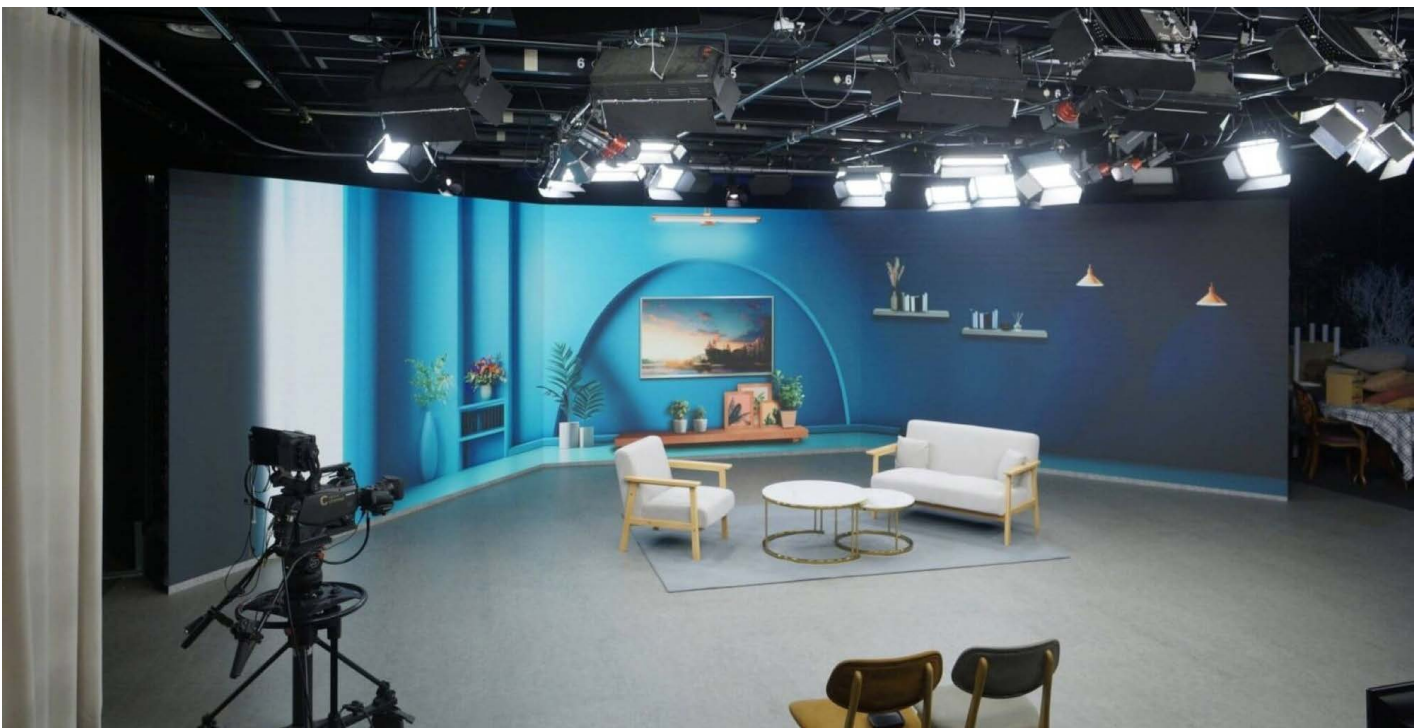
SOUTH KOREA: C Channel, a Christian church based in the Gangdong district of Seoul, has recently enhanced its broadcast capabilities by investing in a cutting-edge LED display from globally reputed manufacturer Absen. The church, which regularly broadcasts worship-related programmes for its congregation, made the upgrade to elevate the visual experience of its online worship services.

The decision to replace the previous LED screen stemmed from several factors. The church felt that its existing display was too small and lacked adequate colour quality. Furthermore,

the broadcast team encountered frequent technical issues, disrupting the seamless flow of worship services. The screen's limited size and its integration into a wooden set design also prompted C Channel to consider a modern overhaul. Their vision was to create a more dynamic backdrop that would wrap around the set, showcasing digital imagery that enhances the worship environment.

To meet these objectives, C Channel installed an Absen HC II 1.8 pixel-pitch display, measuring 12,000mm x 2,700mm (WxH). The decision was influenced by Absen's strong industry reputation and the quality of its LED solutions. The upgrade also involved a detailed evaluation of the project's requirements, taking into account factors such as the screen's impact on the set design, cost-efficiency, and compliance with safety standards for the installation of conduits and power wiring.

Zhu Jinhua, Sales Manager at Absen Korea, noted the project's complexities, stating,





“Challenges during the project included the need for customised installation solutions, installing LED displays in special scenarios, and overcoming power supply and maintenance issues. During this process, continuous collaboration with the systems integration company and feedback from the church leaders were essential to ensure their satisfaction with the final result. Therefore, during the project, we had close cooperation and clear communication with all parties to ensure a smooth installation process and ultimately achieve customer satisfaction.”

Highlighting Absen’s commitment to innovation, Zhu added, “In order to respond to the rapid development of the market in a timely manner, at Absen, we must constantly strive to do a

good job with products and services. With Absen’s five product lines, every project goal can be successfully achieved, and every customer is well served. We will continue to focus on providing value for customers. We welcome more industry friends to visit Absen to see our LED products, manufacturing, and production.” C Channel’s investment in Absen’s display technology marks a significant step in modernising its broadcast setup, ensuring a more immersive worship experience for its congregation. This upgrade not only improves the visual quality of their broadcasts but also aligns with the church’s aim to create a more engaging and contemporary environment for its viewers.

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The interface supports EDID Lock and ESD Protection, ensuring stable and seamless video playback with hot-swapping capabilities that prevent screen flicker or disruption.



New Marvel Exhibition Makes its World Premiere with 70 Genelec Smart IP Loudspeakers

New Zealand: Produced by Semmel Exhibitions, Marvel: Earth's Mightiest Exhibition, offers a fresh perspective on Marvel's rich 80+ year history. With its world premiere taking place in Wellington, New Zealand, the exhibition gives a behind-the-scenes glimpse into the creation of some of popular culture's most iconic stories and characters – enhanced by an immersive soundscape from **Genelec**

The audio for the project was a collaboration between Sebastian M. Purfürst of Berlin-based LEM Studios and acoustic scenographer, Markus 'Hossi' Hossack. Commissioned to realise the artistic and technical concept of the immersive sound installation, they developed a soundscape that guides guests into the world of Marvel.

"As composers, media artists and engineers, we like to call the development of the sonic layers of the exhibition experience 'acoustic scenography', which comprises the actual musical narration, ambient moments, sound effects, voice-overs, and documentary layers," said Purfürst. "The whole exhibition follows a common musical timeline, and, depending on the dramatic presentation of the rooms, we



Marvel: Earth's Mightiest exhibition in Wellington New Zealand.

balance out the intensities and complexities of these acoustic elements."

Marvel: Earth's Mightiest Exhibition covers a 2,000 sq metre space with eleven themed galleries and a shop. It contains 60 pieces of original comic art, both vintage and modern, as well as the only known page to survive from the original Amazing Spider-Man script. It explores the relationship between the extraordinary and ordinary, shedding light on how these stories resonate with millions of fans around the world.

Marvel's history is told through rare artefacts, multimedia displays and immersive technology that takes visitors on an unforgettable journey, with Purfürst and Hossack choosing 70 Genelec 4430 Smart IP networked loudspeakers for the exhibition. "We utilised a complex matrix of loudspeakers spread across the exhibition space, with a central processing unit that feeds all acoustic events based on the Dolby Atmos standard," explains Hossack.

"The biggest challenge we faced before deploying Genelec's Smart IP loudspeakers were the complex routings. We would have needed a lot more cabling, for power, audio, networking and so on. With the Smart IP solution, everything was much easier – from rigging and cabling to



routing. The loudspeakers were also the perfect size and integrated into the space seamlessly.”

The Marvel Universe provided Purfürst and Hossack with endless inspiration for musical ideas and sound design. The audio elements bring the characters to life – the Captain America statue, which is frozen in ice, crackles and emits eerie ambient drones. The surreal multiverse of Doctor Strange has otherworldly, spinning wormhole-like sonic particle streams, while the dark back alleyways of New York City play out fragments of urban beats.

“This was such a fun project to work on, but once we had finished our studio production, we faced some complex on-site challenges,” explains Hossack. “Reverberations and reflections caused problems, as well as sound spilling between galleries. We were also faced with very tight deadlines for set-up and on-site mixing. Additionally, the creation of a high-fidelity listening experience coupled with highly detailed audio events and the dramatic concept of the exhibition was also a challenge.

“The possibilities presented to us by Genelec’s Smart IP loudspeakers meant that we were

able to resolve all these issues with relative ease. Thanks to Smart IP, build time was cut in half – since just one ethernet cable delivers power, audio and sophisticated loudspeaker management.

“We also found Smart IP Manager to be an incredibly useful tool. The software is a big bonus, enabling quick and easy adjustment of the loudspeaker output to the acoustic characteristics of each space. It allows us quick and easy access to all sorts of parameters, which means that we can finely tune the response of each loudspeaker as well as the system as a whole.”

Marvel: Earth’s Mightiest Exhibition has now finished its run in New Zealand, with new venues set to be announced in the coming months. Combining expertly designed immersive audio with never-seen-before artefacts, the exhibition is a walkable comic book that’s a must-see for any adoring Marvel fans. Genelec’s Smart IP models offer the ideal audio solution, transporting visitors to the centre of the cinematic universe.

Biamp Expands Zoom Rooms Offerings with Certification of Conferencing Bundles and Audio Processors

Global: **Biamp**, a leading supplier of professional audiovisual solutions, recently announced that its complete line of medium and large room conferencing bundles has received Zoom Rooms certification. Featuring the advanced TesiraFORTÉ and Devio audio processors, these bundles offer businesses a comprehensive solution for high-quality audio in their Zoom Rooms.

In addition, all five models of Biamp TesiraFORTÉ X and Devio SCX audio processors – the TesiraFORTÉ X 400, 800, or 1600 and the Devio SCX 400 and 800 – are now certified for Zoom Rooms as standalone processors when used with Parlé Beamtracking ceiling or tabletop microphones, offering multiple channels of AEC for further flexibility and customisation in medium and large conference spaces.

"We are thrilled to be able to offer our customers eight certified Zoom Room bundles, which we believe is the most comprehensive range in the market," said Joe Andrulis, Executive Vice President of Corporate Development at Biamp. "Our TesiraFORTÉ X and Devio SCX



Biamp Devio SCX 400



Biamp TesiraForteX 400

audio processors are at the core of these solutions, providing excellent performance and high-quality video meetings for participants in the room or on the far end, along with full confidence that they will integrate seamlessly with Zoom Rooms of all sizes."

Medium and large room conferencing bundles from Biamp contain either a TesiraFORTÉ X 400 or a Devio SCX 400 processor, as well as Parlé Beamtracking microphones, which track conversations from around the room—enabling remote participants to feel just as present as those in person—and are available in tabletop or ceiling models. They also include Desono™ C-IC6 ceiling loudspeakers, Biamp's PoE-powered amplifiers, and all necessary mounting accessories and category cabling to complete the installation in medium or large meeting spaces.

The newly certified Zoom Rooms bundles offer customers the advantages of a complete Biamp solution, including integrated Acoustic Echo Cancellation and cutting-edge AI noise reduction to suppress distracting sounds, as well as Biamp Launch automated system deployment and configuration. Biamp Launch identifies and configures every device in the



system, performs a tuning cycle, measures acoustic characteristics of the room, applies recommended signal processing, echo cancellation, speaker tuning, noise reduction, and Zoom Rooms settings, then generates a dashboard highlighting performance settings before-and-after optimisation.

Installers also benefit from Biamp innovation that extends far beyond superior audio,

including minimal cable requirements with zero termination, zero network setup, automated EQ, and more. Biamp bundles are thoughtfully designed for plug-and-play installation, resulting in significant time savings for integrators, and an exceptionally consistent, high-quality audio experience for users across all conferencing spaces within a building.

Genelec Opens New Seoul Experience Centre

South Korea: Genelec, a world leader in professional loudspeaker solutions, has added Seoul to its growing global network of Experience Centres. Visitors to the new Seoul Experience Centre will receive expert advice on Genelec technology, and enjoy an exceptionally high quality critical listening environment, from stereo to immersive. The Seoul location joins other existing Genelec Experience Centres across Europe, The Americas and Asia – all of which share the same mission of helping customers to understand and experience the finest in sound reproduction.

Located in the city's Jongro area, the Seoul Experience Centre is a collaboration between Genelec and its local distribution partner SAMA Sound. Offering a wide selection of solutions from Genelec's Professional Audio, Installed Sound and Home Audio ranges, the Centre

is hosted by SAMA Sound's Genelec Product Manager Wonjoo Lee and tech specialist Jaehyuk Han, who are on hand to offer personal demonstrations and advice to customers who pre-book appointments.

The Seoul location is divided into 3 distinct zones. The Immersive Room is designed to allow visitors to experience Genelec's UNIO monitoring ecosystem, with a 9320A Reference Controller acting as a hub for both 7.1.4 in-room loudspeaker and personal headphone monitoring. The in-room Smart Active Monitoring system comprises a combination of 8351B three-way coaxial monitors and W371A woofer systems in the LCR positions, 8351Bs in the surround and height positions, and a pair of 7370A subwoofers – all configured and calibrated via GLM loudspeaker manager software. With the ability to instantly switch between in-room and personal headphone monitoring, this room showcases how UNIO acts as a seamless bridge between the two, with excellent translation in both directions.

By contrast, the Demonstration Room offers a range of stereo systems for both professionals



and audiophiles. A selection of Genelec professional studio monitors can be auditioned, with and without subwoofers, while Home Audio enthusiasts can experience the 6040R floor-standers and the entire range of G series loudspeakers and F series subwoofers.

Finally, the Smart IP Zone allows integrators, consultants and users alike to evaluate Genelec's Smart IP family of PoE installation loudspeakers. Operating via a single CAT cable which delivers audio, power and loudspeaker management, Smart IP is now a key part of Genelec's Installed Sound offering. Combining exceptional sound quality and networked convenience, Smart IP's scalability, flexibility and speed of installation is leading to its deployment in an increasing number of prestigious global installations.

Looking forward to his role as host of the new Centre, SAMA Sound's Wonjoo Lee said: "At SAMA Sound, we are thrilled to announce the opening of the Seoul Experience Centre. This space, created with significant support from Genelec, is designed to offer visitors an

exceptional audio experience. Here, audiophiles and professionals alike can immerse themselves in Genelec's innovative technology and discover new dimensions of sound.

Moving forward, SAMA Sound and Genelec will continue to collaborate closely to deliver even more advanced audio experiences, and we invite all our customers to stay tuned for future announcements."

Genelec Business Development Director Ken Kimura adds: "The Seoul Experience Centre offers local customers the perfect opportunity to audition our solutions in a controlled, high quality listening environment, and get expert personal advice in a relaxed atmosphere. As well as showcasing models from all market segments, our Experience Centres provide a unique opportunity for professional customers to experience our new UNIO ecosystem working across stereo and immersive formats. We firmly believe that our Experience Centres are continuing to bring us closer to our global customers, through education and the appreciation of exquisite audio performance."



Q-SYS Promotes Christopher Jaynes to CTO and QSC Appoints Jason Shangkuan as CDO

Global: QSC, LLC announced the promotion of Christopher Jaynes to Chief Technology Officer (CTO) of its cloud-manageable audio, video and control Platform, Q-SYS and the appointment of Jason Shangkuan as Chief Digital Officer (CDO).

As CTO, Christopher Jaynes will lead all aspects of Research & Development (R&D), overseeing software, hardware, mechanical, test, and systems engineering to ensure cohesive product outcomes for customers. Since joining Q-SYS in 2023 as SVP of Software Technologies, Jaynes has driven improvements in software quality, AI research, and technology delivery, positioning the company for continued growth.

Jason Shangkuan joins QSC as CDO, bringing over a decade of experience at McKinsey & Company as a leader in its digital and AI practice. He led digital transformations for leading technology companies to deliver business growth. In his new role, he will drive the company's digital transformation efforts, modernise its data infrastructure, and unlock growth with AI.



"We are thrilled to have Chris and Jason in these critical leadership roles," says Jatan Shah, President, QSC. "Their leadership will help us capitalise on the opportunities to build a high-quality product development organisation that can scale with our business."

"As Q-SYS continues to grow as a software-led platform that's deeply integrated our hardware technologies, it is critical that software, hardware, and our program management teams, operate in an integrated and cohesive manner to deliver both reliable and amazing product outcomes for our customers," says Jaynes. "I am excited to lead this talented team and drive our R&D efforts to new heights."

"Joining Q-SYS at this pivotal moment is an incredible opportunity," says Shangkuan. "I look forward to unlocking new business value and AI-enabled customer solutions, continuing our business model transformation towards software and cloud solutions, and partnering closely with business leaders to deliver exceptional digital experiences."

Lightware and Genelec Announce Integration to Optimise Audio Control in Corporate AV Systems

Global: Lightware Visual Engineering, a leading manufacturer of connectivity solutions for the professional integrated systems market and a pioneer in signal management, has announced an innovative technology collaboration with Genelec, the industry leader in active loudspeaker technology, integrating the Lightware Automated Room Automation (LARA) platform with Genelec's Smart IP PoE loudspeaker family.

By enabling system integrators and AV professionals to easily integrate Genelec Smart IP loudspeakers and subwoofers with Lightware products, users benefit from precise control over essential audio functions such as power management, volume control and mute functions. The solution is particularly valuable in corporate environments where audio quality and ease of use are paramount and eliminates the need for third-party control systems.

The new driver not only simplifies the setup and configuration process but also allows for real-time monitoring of loudspeaker status, providing critical information such as firmware version, zone ID, heartbeat and more. Additionally, it enables the loading and configuration of



custom acoustic profiles, ensuring optimal audio performance in any environment. For easy troubleshooting, the identification function allows users to locate specific loudspeakers in a multi-loudspeaker setup by triggering a 20-second LED blink.

The collaboration between Lightware and Genelec is based on shared values and a longstanding commitment to quality, innovation and customer satisfaction. Both companies are known for their track record of developing premium technology and providing exceptional customer support.

"Genelec's position as the industry standard in professional loudspeaker solutions aligns perfectly with Lightware's mission to deliver best-in-class AV connectivity," said Gergely Vida, Lightware's CEO, "This technology integration delivers a complete solution that meets the highest standards of audio quality and control in professional environments."

"By integrating our Smart IP loudspeakers with Lightware's LARA platform, we're creating a powerful ecosystem that optimises the user experience in professional environments," said Kati Pajukallio, Genelec's AV Business Manager. "It also underlines our shared commitment to innovation and solutions that deliver the highest levels of performance and control."



Indore's Culinary Scene Amplified as Yazu At The Dome and NOTCH Opt for Martin Audio + British Acoustics

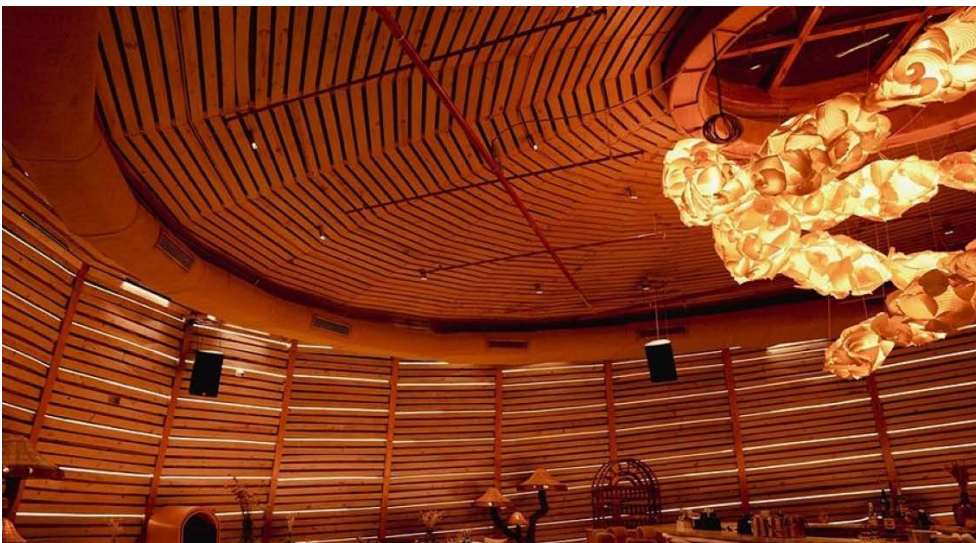
INDIA: Indore's culinary scene has recently welcomed two new premier dining destinations—Yazu At The Dome and NOTCH—both of which have invested in the 'winning pro audio combination' of Martin Audio and British Acoustics. These installations have been expertly designed and commissioned by Audiocratz Sound & Light Solutions, underscoring their commitment to delivering exceptional audio experiences that elevate the ambiance of these unique venues.

Yazu At The Dome, renowned for its eclectic flavours and innovative approach to Asian

cuisine, has opened a new outlet in Indore, building on its already successful chain of establishments. The restaurant aims to blend its sophisticated culinary offerings with an elegant and contemporary atmosphere, creating an immersive dining experience that stands out in the heart of Indore.

Given its open layout and need for consistent audio performance across various zones, Yazu At The Dome required a sound system capable of delivering crystal-clear sound with excellent coverage for both background music and more lively entertainment. Audiocratz Sound & Light Solutions rose to the challenge, providing a solution that balances audio quality with the restaurant's sleek aesthetic.

"The Martin Audio and British Acoustics systems were the ideal choice for Yazu At The Dome, delivering both precision and power. The loudspeakers, combined with the Blackline subwoofers and British Acoustics amplifiers, provided us with the flexibility and control needed to cater to the different acoustic demands of the venue. The result is an audio experience that elevates the entire space,



Yazu At The Dome





NOTCH

ensuring that every corner of the restaurant is covered with pristine sound,” shares Vinayak Luthra, System Integrator at Audiocratz Sound & Light Solutions.

The setup at Yazu At The Dome features Martin Audio’s CDD15 passive coaxial differential dispersion loudspeakers, chosen for their precise audio coverage and high-quality sound. These loudspeakers are complemented by the powerful Blackline X218 dual 18” passive subwoofers, delivering a robust low-frequency response essential for a full-bodied audio experience. Additional units of the Blackline X8 portable loudspeakers are strategically positioned to ensure a consistent soundscape throughout the venue. Driving this comprehensive setup is a suite of British Acoustics amplifiers—2XL, 2XM, and 2XS models—ensuring ample power and clarity. The Delta 48X digital standalone audio processing system further refines the audio distribution, allowing for precise control and flexibility to suit different acoustic needs.

“We are thrilled with the impact that the new audio system has had on our venue. The sound quality is exceptional, with a perfect balance

of clarity and power that complements the ambiance we’ve created at Yazu At The Dome. Our guests have repeatedly mentioned how much they enjoy the enhanced experience, whether they’re here for a quiet meal or a lively gathering,” says Sanjay Pahwa, Director of Yazu At The Dome, Indore.

On the other hand, NOTCH, a vibrant new cafe and restaurant, is also making waves in Indore as an emerging hotspot for social gatherings. With a modern, bohemian design and a lively ambiance, NOTCH aims to create a versatile experience that caters to a wide range of events—from casual brunches to high-energy parties. The venue needed a sound system that not only complemented its aesthetic but also adapted seamlessly to its varied event requirements.

“The choice of our audio products for the Notch installation was strategic and effective. The performance of the sound system has been outstanding, with clear and immersive audio that aligns perfectly with Notch’s sophisticated atmosphere. The impact of these products has been highly positive, showcasing their capability to deliver exceptional sound quality in



a demanding environment,” commented Vinayak Luthra, System Integrator at Audiocratz Sound & Light Solutions.

To meet the dynamic demands of NOTCH, Audiocratz Sound & Light Solutions installed a range of carefully selected Martin Audio and British Acoustics products. The setup features Martin Audio’s Blackline X118S subwoofer, known for its powerful bass that lays a solid foundation for the venue’s audio experience. This is paired with Blackline X12 and X8 loudspeakers, delivering full-range sound that covers all frequencies with clarity and depth, whether for an intimate gathering or a bustling party. The audio setup is powered by British Acoustics’ reliable 2XM, 2XS, and 2XL amplifiers, while the Delta 48X audio processing system provides advanced control, allowing the venue staff to adjust settings to match the specific requirements of each event.

“Since the installation of the new sound system, NOTCH has experienced a transformation in the overall atmosphere of the restrobar. The quality of sound is exceptional, creating a vibrant and engaging environment that complements

our modern design. The upgrade has made a noticeable difference in how our guests enjoy their time at NOTCH, and we couldn’t be happier with the results,” enthused Avinash Mandloi, Director of NOTCH, Indore.

In retrospect, it must be acknowledged that Audiocratz Sound & Light Solutions’ involvement in both projects has been a significant factor in the seamless integration of these advanced audio systems. Their expertise in designing and commissioning bespoke audio solutions that cater to the specific needs of each venue has resulted in soundscapes that not only enhance the dining experience but also set the stage for memorable moments.

The strategic choice of Martin Audio’s robust speakers and subwoofers, paired with the powerful amplifiers and processors from British Acoustics, reflects a thoughtful approach to audio design that prioritises both performance and aesthetic alignment. These installations showcase Audiocratz’s ability to deliver versatile audio solutions that meet the evolving needs of contemporary dining and entertainment venues.

Audiocratz Sound & Light

Yamaha Fosters Seamless Sound for Spiritual Growth at Da Nang's Hoa Khanh Church

VIENTNAM: The Hoa Khanh Church in the coastal city of Da Nang in central Vietnam, has long been a beacon of spiritual guidance and community for its multi-ethnic congregation. Proclaiming the gospel and teachings of Jesus Christ to people of Da Nang – the church has consistently served its parishioners who share in common a deep faith in prayer, as they actively practice these teachings within their daily lives.

As part of its commitment to offering a meaningful worship experience, the church

recently embarked on an ambitious project to overhaul the PA system in its main congregation hall, in an attempt to ensure that the message of faith is delivered with unmistakable clarity and conviction. And to seek help in achieving this objective, the church authorities turned to Hanoi-based systems integrator Quy Thành Music who were tasked with specifying and installing the new audio system, and ensuring that the sound harmonised with the architecture and sanctity of church.

After careful deliberation on the church's budgetary requisites, and following an exhaustive analysis of the congregation hall; the design and installation team suggested a simple yet effective system to transform the church's audio experience. From the outset, the design and integration team took note of the unique set of challenges that prevailed at the church site. The church space, with its acoustical complexities and spatial constraints, required an audio solution that could overcome these hurdles while delivering an immersive, crystal-





clear sound experience. To achieve this, the team carried out an in-depth analysis of the hall, ensuring that every nuance of the space was accounted for. The reports from the analysis, coupled with the team's expertise, allowed them to narrow down on a specific set of innovative products and technologies from Yamaha pro audio that not only met but exceeded the church's expectations.

At the heart of the new audio architecture at the Hoa Khanh Church is the Yamaha VXS8 loudspeakers that are tailored to meet the needs of install projects where space and budgets prove to be key operational considerations. Multiple units of the VXS8 speakers have been installed along the flank walls of the church spanning the main congregation hall, the under-balcony areas as well as the balcony section.

The team informs that every element of the loudspeaker system design was carefully considered to ensure that all attendees, regardless of where they are seated, enjoy the same high-quality sonic experience. And according to the team, reports from the acoustical analysis of the space proved to be invaluable, as it provided them with key information about the optimal height and rig points for the loudspeakers to be installed.

Following the installation of the speakers, the team conducted a detailed calibration of the entire system which, in turn, has allowed the design and integration team to deliver a seamless transition of sound as it moves across different sections of the hall. In turn, the congregation is treated to a truly consistent



and sublime audio experience irrespective of whether they're seated near the altar or towards the back of the hall.

"Our parishioners now enjoy a truly consistent, crystal-clear and captivating sound experience that has undoubtedly enhanced our worship services" remarked a member of the congregation at Hoa Khanh Church.

Driving the amazing performance delivered by the VXS8 loudspeakers are the PX8 dual-channel class D power amplifiers from Yamaha with built-in PA management processing that not only provides clean and uninterrupted power to the loudspeakers, but also allows for a good level of control over loudspeaker processing functions. At the same time, a single unit of the DM3 ultra compact digital mixing console from Yamaha empowers the church's technical staff with further control to adjust the quality of the soundscape with complete ease, ensuring that parishioners always enjoy a well-balanced aural atmosphere.

Quy Thành Music

Yamaha Pro Audio

HH Audio Selected for New Government Centre in Vietnam

V **VIETNAM:** Vietnam's third largest city Hai Phong is a major port in the northeast of the country. Recent development of the North CamRiver New Urban Area in the city has seen the establishment of a number of new facilities, not least of which is the eye-catching Administrative and Political Centre. Recently completed at a cost equivalent to 107 million USD, the centre's two basement levels and nine above ground floors house the Municipal Party Committee and People's Council, as well as the offices of government departments and judicial agencies.



The HH Audio systems in the Main Theatre.

An important feature of the Centre is its Main Theatre which is used for a wide range of presentations and events. High quality audio was an essential requirement for this facility, as well as for the Centre's conference room. Audio experts DL Pro Company Ltd (part of the

AVTED Group) designed, supplied and installed HH Audio systems for both spaces, with the main space benefitting from HH's TNA line array - perfect for this kind of medium-sized application.



The HH Audio systems at the Conference Room.



The theatre system comprises 4 x TNA-2051 (2 x 5" passive speaker) and 2 x TNA1200S (12" passive subwoofer) flown per side, with a further 2 x TNA-2051 as centre fills (on stage) and a single TNA-1800S (18" passive subwoofer) per side. The system is powered by HH M-1500D amplifiers, with stage monitoring comprising 4 x HH TRM-1201 active stage monitors.

For the smaller conference room, DL Pro installed a main front of house system comprising a single TRE-1501 (15" full-range active loudspeaker) and a TRS-1800 (18" active

subwoofer) per side, supplemented by a number of wall-mounted TRE-1201 (12" active speaker) as sidefills.

Ian Wright, Global Sales Director for HH Electronics comments, "DL Pro are doing fantastic work in Vietnam with our systems across a variety of applications. We're very proud that HH Audio was chosen for this particularly prestigious setting. Projects of this type invariably demand high quality audio from a very competitive package, something that the TNA line array was developed to provide."

HH Electronics

QSC, LLC to be Acquired by Acuity Brands

INTERNATIONAL: QSC, LLC a market leader in the design, engineering, and manufacturing, of audio, video and control solutions that are designed to create impactful experiences, today announced that they have reached a definitive agreement to be acquired by **Acuity Brands, Inc**

"Bringing QSC together with Acuity underscores the critical role AV technology plays in live, hybrid, and virtual experiences," said Joe Pham, Chairman and Chief Executive Officer of QSC. "Our two organisations are aligned on a long-term mission and core values that drive our mutual passion for innovation, customer satisfaction, and employee well-being." QSC will become part of Acuity's Intelligent



Acuity Announces
the Acquisition
of **QSC**



Spaces Group to execute our joint vision of making spaces smarter, safer, and greener with disruptive technologies that leverage data interoperability.

"From our roots in pro audio to our Q-SYS platform solutions, our talented teams are well-positioned to bring our mission to life for our customers, ecosystem partners, and our system integrators who serve them," said Jatan Shah, President of QSC. "With Acuity's Intelligent Spaces Group, our rich landscape of data will deliver dynamic and engaging experiences that captivate and inspire."

ISE 2025: Registration Now Open



INTERNATIONAL: Registration is now open for **Integrated Systems Europe (ISE)**, the world-renowned annual tech show for the systems integration and audiovisual industry. Returning to the Fira de Barcelona Gran Vía from 4 -7 February, the ISE team is promising the most dynamic and engaging show yet, with a host of new initiatives and features, an expanded and more easily accessible content programme, as well as the unveiling of Hall 8.1 accessed via the conveniently located North Access point.

Mike Blackman, Managing Director of Integrated Systems Events, shared his excitement: “ISE 2025 will be our most ambitious, inspiring and motivating edition to date. ISE is the global destination to get your connection restored with the industry – through virtually impossible experiences, unrivalled networking opportunities, and state-of-the-art technology, as well as even more chances for career and personal development.

With the show floor already 20 percent bigger, the addition of exciting new features, and our world-class content programme that digs deep into the most significant megatrends shaping our industry, ISE 2025 will be the place for people wanting to keep pace with and advance the industry of tomorrow.”

From Tech Zones and show floor features, keynote speakers and incredible AV installations, ISE is a hotbed of inspiration, situated in the creative, technology hub of Barcelona. As well as enjoying an eye-popping array of technologies on the show floor, visitors can explore how this technology is applied in real-life projects throughout the city, with ISE’s impressive collection of Tech Tours.

ISE brings the global AV and systems integration industry together. At ISE 2025 there will be unparalleled networking opportunities to connect with peers, industry leaders, and potential partners. From dedicated networking events to informal meetups, ISE is the place to make those invaluable connections that drive



your business forward. See, hear and get hands on with tomorrow's tech today. Across seven dedicated Tech Zones, including Audio, AV Broadcast, Digital Signage & DOOH, Lighting & Staging, Multi-Technology, Residential & Smart Building, and Unified Communications & Education Technology, leading brands will give attendees the opportunity to experience the boundaries of possibility and then push beyond.

ISE 2024 saw more than 1,400 exhibitors and attracted 73,891 unique verified attendees from 162 countries. A total of 363 expert speakers shared their knowledge and insights and the 2025 edition of ISE is set to break those record numbers again.

This year's content programme has been expanded to include a wider range of topics and sessions, offering deeper insights into the megatrends that matter – including AI, Audio, Cybersecurity, Retail, Sustainability and more. Attendees can also look forward to new ways of learning with the introduction of ISE Tracks. The ISE 2025 content programme will feature six Summits and five Track Streams that pick up on the megatrends.

From Tuesday to Thursday, visitors can take part in Track sessions on a specific topic. On the registration website, search for your preferred Track. Buy your preferred Track via a Day Pass and attend any Track session on the same day, or buy a Three-Day Pass and attend any Track on Tuesday, Wednesday and Thursday.

New for ISE 2025

Nestled in the heart of Congress Square, **Innovation Park** is set to be an essential

destination for industry leaders and forward-thinking startups alike. This vibrant initiative offers a unique opportunity for emerging businesses to present groundbreaking ideas and forge meaningful connections with key players in the industry. Featuring a dedicated Pitching Stage, curated by the renowned venture capital experts at Plug & Play, Innovation Park will host dynamic pitch sessions across all four days of the show. This is an indispensable chance to engage with the future of innovation and explore collaboration opportunities that can shape the industry landscape.

For the 2025 edition, ISE will expand into **Hall 8.1** featuring cutting-edge technology and innovative solutions from leading exhibitors, providing attendees with a comprehensive view of the future of AV and systems integration.

Featuring three entrances, the opening of Fira de Barcelona's **North Access** will enhance accessibility of the venue and facilitate faster access to halls 4-8 and the Audio Demo Rooms. This improvement reflects ISE's commitment to providing a seamless and enjoyable experience for all attendees.

Register Today

Registration for ISE 2025 is now open. Early registration is advised to ensure plenty of time to arrange any necessary visas.

Readers of SI Asia can use invitation code **systemsintasia** for the free pass to the exhibition. Register at this link.

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Large South Korean Bank Benefits from Datapath Solution

SOUTH KOREA: South Korea AV distributor ONEED and Datapath processing has helped to solve high-definition display concerns at one of South Korea's largest banks with a future-proof video processing solution.

Woori Bank is a Korean multinational bank headquartered in Seoul. With its origins stretching back to 1899, the bank offers services in consumer banking, corporate banking, investment banking and private equity. One of the four largest domestic banks in the country, Woori Bank operates mainly in South Korea, but also via several overseas branches.

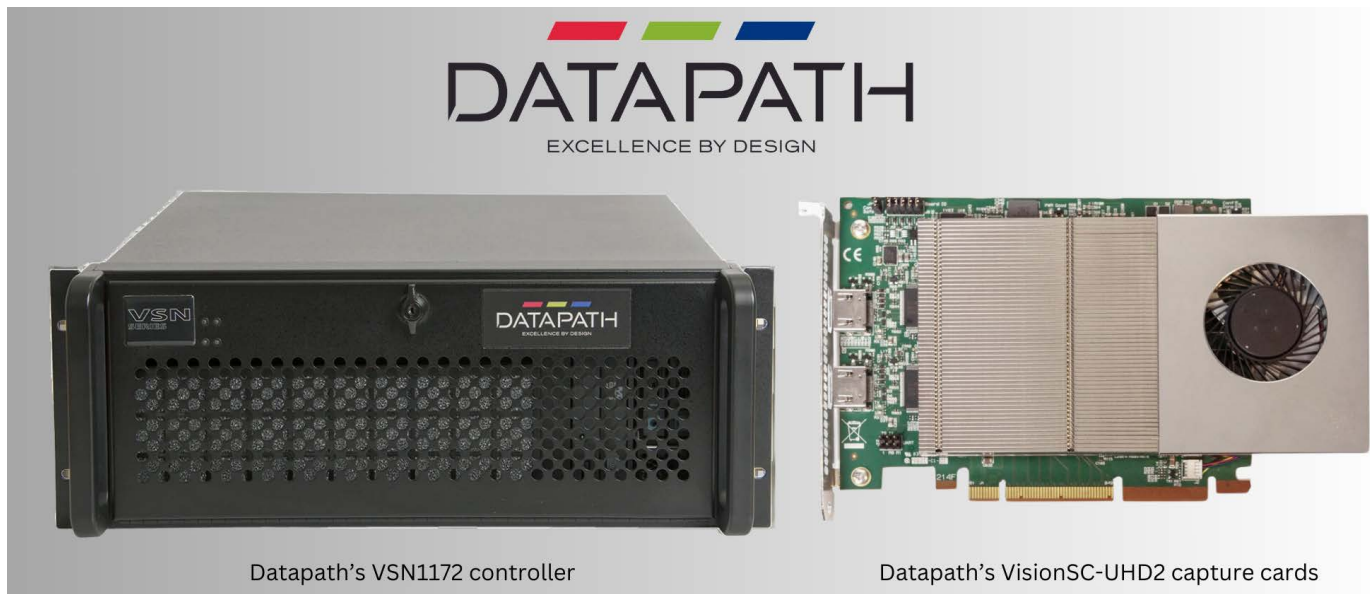
The company's 468-seat multi-purpose hall at their Seoul headquarters has been renovated

to include an AV system that meets the needs of the meetings, conventions, weddings and other events it hosts, with a large 12.5m x 4.3m, 1.5mm pixel pitch LED display dominating a viewing stage.

Being a large LED display canvas, the challenge was to ensure there were no issues with tearing/output synchronization, as there are no natural bezel borders.

With the requirement to use multiple video sources and scale content as required, Datapath worked closely with South Korea distributor ONEED, along with AV integration specialist Seah Networks, to offer hardware and software that would allow for total content creativity of high-resolution content. The upgrade would enable the 8320 x 2880 display surface to showcase creative presentations like never before, along with seamless changing and management of sources ensuring zero image loss or reduced framerate.





Datapath's VSN1172 controller

Datapath's VisionSC-UHD2 capture cards

With the system requiring at least six 4K@60fps inputs and six 4K@60 outputs, and with a requirement of 32GB memory, a revised solution was utilized to ensure the system was prepared for many years of creative, ultra-high resolution use.

Sangjun Yoo, Sales Engineer at ONEED, commented: "We know that Datapath have a proven history in advanced video processing technology and they are our default manufacturer for tackling these multi-source challenges with LED displays. By working with Datapath, we could offer a solution that has all the power and flexibility that Woori Bank required."

"Furthermore, specifying a video wall controller, input / output cards and management software from a single manufacturer with Datapath's experience provides optimum system stability, along with the peace of mind should any technical support be required.

The winning bid consisted of a VSN1172 controller, equipped with 3 x Image2K graphics cards each providing two 4K@60fps signals,

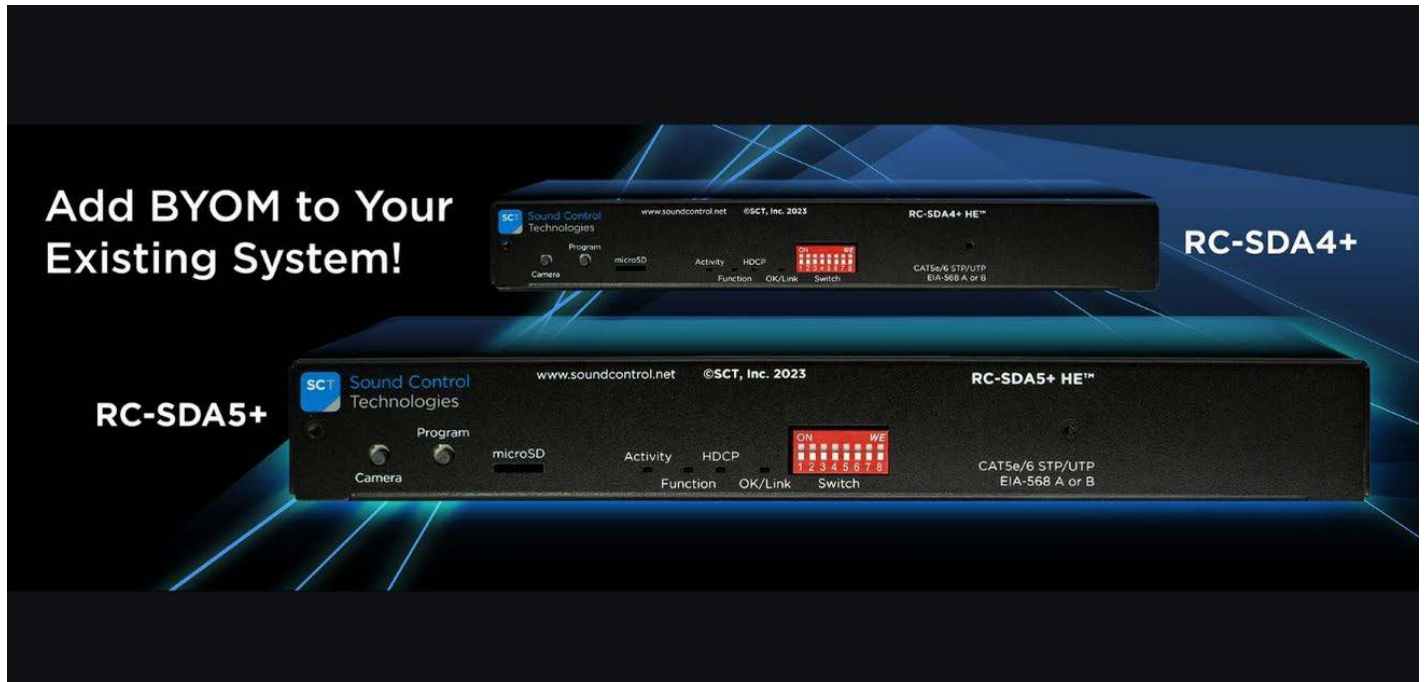
along with a trio of Datapath's VisionSC-UHD2 capture cards – each providing two HDMI 2.0 capture channels at 4K@60fps with 4:4:4 chroma sampling. The use of Datapath's Image and Vision cards ensured full HDCP support was met. Total control of content comes from Datapath's multi-award-winning WallControl 10 Pro software.

Now fully installed, the project is running seamlessly and without issue, to the credit of Seah Network's installation team. Woori Bank commented that the system now provides "High performance for various purposes, including meetings, conventions and even weddings."

Michael Austin, Director of Channel Management for APAC at Datapath, concludes: "Our gratitude goes to ONEED for allowing Datapath to support them with their Woori Bank project. We are delighted to have assisted them with creating this powerful Datapath solution, which enables the Bank to offer a new, creative video dimension to events, functions and presentations.

Datapath

New RC-SDA4+ and RC-SDA5+ Modules Enable BYOM/BYOD Upgrades for Existing RC4 and RC5 Installations



Sound Control Technologies (SCT), the leader in camera integration solutions, recently announced the launch of the RC-SDA4+ and RC-SDA5+ modules. When paired with RC4 or RC5 CE (camera end) modules, these head-end units convert video, control, and audio to USB3, enabling seamless compatibility with Zoom, Microsoft Teams, and other soft codec platforms.

Powered by SCTLINK technology, they deliver 12V DC power, video, and RS-232 control for PTZ cameras over a single CAT cable, extending up to 100 meters for optimal performance and installation flexibility.

"To celebrate the 10th anniversary of the original RC4 and RC5 extension kits, we're offering an upgrade: swap your head-end modules for the new RC-SDA4+ or RC-SDA5+ modules and receive an additional 3-year warranty on your existing RC4 and RC5 head-end units," says President, CEO and Co-founder, David Neaderland.

"Now you can have BYOM/BYOD functionality without having to replace your entire system. Plus, you can return your old head-end units, and we'll handle their proper disposal through a certified e-recycling facility," he added.



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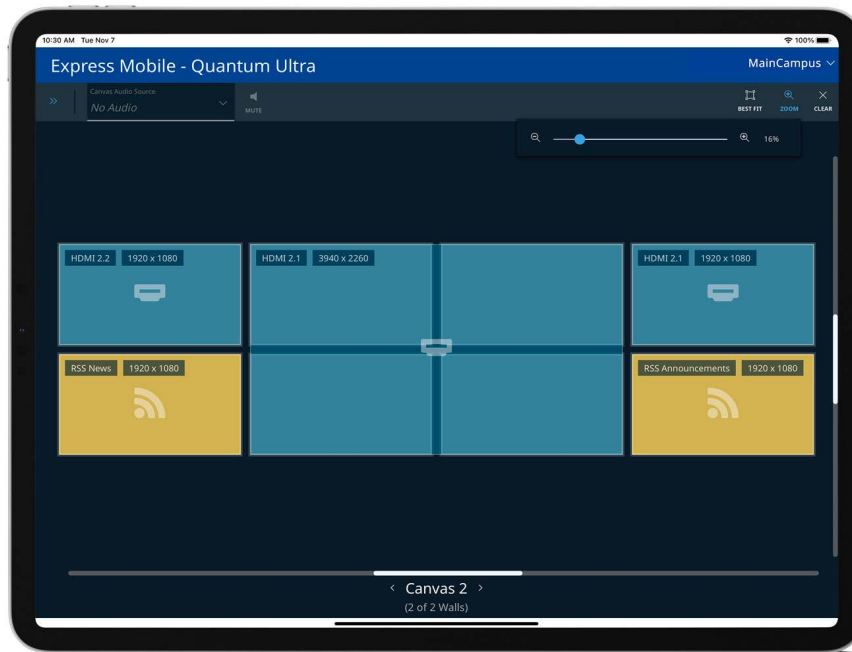
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Extron Releases Enhanced Videowall Mobile App for Quantum Ultra with Powerful New Features



Extron announced the immediate availability of major enhancements to its EMS Express Mobile Software - Quantum Ultra. Videowall control is even easier with this latest update to the software, which now supports up to 20 canvases, user roles, user canvas access, source assignment by canvas, and more. This intuitive application for iOS, Android, and Windows platforms leverages familiar touch controls like pinch and zoom, drag and drop, tap, and swipe for easy wireless control of a Quantum Ultra videowall. Its powerful features combined with the user-friendly interface and new enhanced capabilities, such as remote videowall operation within an Extron FOX installation and more flexibility with multiple canvases, make EMS-Quantum Ultra an ideal solution for single- or multi-point user control of a videowall.

New Features

- * Flexible Canvas area for content placement – The on-screen representation of the videowall can be independent of the overall output resolution. This is beneficial when the active videowall area is a subset of the total output resolution. Any unused Canvas area is hidden from view.
- * Support for Quantum IN4FOX3 and Quantum OUT4FOX3 cards - Compatible with Quantum Ultra II videowall processors; a firmware update to support these cards is required.
- * Up to 50 login accounts with Admin, Designer, or User Permission Levels
- * Manage up to 20 videowalls with varying resolutions and screen arrangements - Up to 20

canvasses can be easily controlled from a single Quantum Ultra or Quantum Ultra II system.

* Canvas Access Permission - Allows Login accounts to have designated access to one or more canvasses in a project file, up to a maximum of 20 canvasses, as specified by an Administrator in VCS.

* Source Access Permission - Allows Canvasses to have access only to designated sources, as specified by an Administrator in VCS.

“EMS-Quantum Ultra offers professional videowall control functionality to users, providing intuitive access to a wide selection of features that enhance system operation as well as content presentation,” says Casey Hall, Chief Marketing Officer for Extron. “Now, powerful

new capabilities combined with the user-friendly interface and full range of established features make EMS-Quantum Ultra perfect for putting control of one or more videowalls in the palm of their hand.”

EMS-Quantum Ultra can be used in a variety of control scenarios. It can act as a single, exclusive point of control for one or more videowalls. As a multi-point control solution, up to 10 mobile devices can operate the videowalls. It can also be a supplemental point of control used in conjunction with Extron’s VCS and a control system. Initial Quantum Ultra or Quantum Ultra Connect setup is performed using VCS. A LinkLicense upgrade for the Quantum Ultra is required to enable communication between the software and the processor.

Datapath Announces New Aetria Hardware and Software Developments

Datapath, world-leading engineers of visual solutions, has announced additional functionality and capability to its Aetria solution with a wealth of new hardware and software innovations.

Aetria – Datapath’s unique solution for secure multi-point video management and control – has introduced the VisionSC-A2 capture card to its range for a more streamlined image capture process. Available now, this newly engineered capture card extends the Aligo AVoIP solution by providing cost-effective capture of Aligo

streams from an Aetria network, directly into a workstation or video wall controller.

With two 10G channels on each card, the VisionSC-A2 provides high-density capture that meets today’s needs for displaying ever-increasing data volumes, whether on a multi-screen operator workstation, or a shared large-scale video wall surface. Each channel can capture a single 4K or up to four HD streams, allowing a single VisionSC-A2 card to capture two visually lossless 4K streams, a single



4K and up to four HD streams, or up to eight separate HD streams.

The new card will help for a more streamlined approach to image capture, with savings on previous solutions, as John Storey, R&D Director at Datapath explains: “Previously, capture of Aligo streams into a system was achieved using technology such as an Aligo RX100 receiver connected to a VisionSC-UHD2 capture card. With the VisionSC-A2, data is transferred directly from the capture port into the host system over PCI Express, providing a more cost-effective, simpler solution.”

VisionSC-A2 inherits all the benefits of the VisionSC range of capture cards, including capture up to 4K at 60 frames per second, 10-bit color transfer, and HDCP compliance. It also gains access to the powerful scaling engine, allowing the capture engine and the graphics to work in harmony - maximising any limited bandwidth availability.

Easing the path for system upgrades, the VisionSC-A2 can be used in Datapath video wall controllers in the same way as other Datapath capture cards. Multiple cards can be installed into a single system for scalable capture of Aligo streams for display anywhere on the video wall. Supported in the latest generation of Datapath’s video wall controllers, the VisionSC-A2 can be used in the multi-award-winning VSN V3, VSN400N, or VSNMini 300 (when configured for use as a video wall controller).

Dedicated Operator Workstation

Launched as a video wall controller earlier this year, Datapath’s VSNMini 300 can now be pre-configured for use as a dedicated operator workstation PC. It offers up to four 4K outputs and can easily be configured with Datapath capture cards to provide a sleek, compact solution for control room operators.

Suited for operator workstation installation, the modern system is configurable with Intel® i5, i7, or i9 processors, providing scalable processing power for today's large video volume installations. When configured as part of an Aetria solution, it allows operators to easily monitor and control multiple remote sources alongside local applications such as email clients, web browsers, and messaging, all from a familiar Windows 11 environment.

Direct Video Wall Management

Now added to all versions of Aetria Workstation, the newly integrated Wall Manager allows operators to control any connected video wall directly from the Aetria Workstation interface.

As versatile as it is simple to operate, the Wall Manager interface opens above any open sources on the operators' desktop to allow quick interaction with the video wall, whether opening and positioning a single source or opening a new layout with multiple sources across the whole wall.

Command Center Additions

Adding to Aetria's benefits, and to assist with optimum system operations, Aetria Command Center now provides a central dashboard for administrators to view the status and health of their Aetria Network Manager appliance, or both Aetria Network Managers when configured as a redundant pair.

Furthermore, Aetria users can now pan and zoom sources displayed on a video wall in Aetria Command Center. With a simple right-click on the source in the Aetria Command Center interface, the source opens in a new interface where it can be moved and scaled as the user requires. As changes are made, they are reflected live on the video wall. The benefits of this addition in a Command-and-Control environment are clear, with operators able to view closer detail of any source at the click of a button.

Aetria Touch Updates

Following the launch of the Aetria Touch control panel, the 10-inch interface has now been updated to include the following:

- UI Translations, including English, French, German, Spanish, Italian, Polish, Portuguese, Russian, Turkish, Arabic, Chinese, Japanese, and Korean.
- Automatic source list decluttering – sources that can't be used are automatically hidden from view.
- Ability to add/remove banners, borders, and OSD assets
- User-specified favorites
- Saving of video wall content into a new layout

tvONE Ships New Video Processing Technology CALICO PRO



tvONE, a leader in video processing, signal distribution, and media playback solutions, is proud to announce the shipment of its award-winning video processing solution, CALICO PRO.

Designed from the ground up, CALICO PRO is the ultimate solution for a wide range of video processing applications and delivers specific new features for easier and faster installation of complex Direct View LED walls. In addition, extensive projector edge blends and displays can be included in the set-up, and content can be added from any source across all outputs. CALICO PRO's flexibility makes it suitable for diverse markets, including Corporate, Live Events, Stadiums & Arenas, Higher Education, Public Venues, Broadcast, and Control Rooms.

CALICO PRO is built upon tvONE's latest patented fifth generation 4K/8K, 10-bit video processing engine, delivering unparalleled performance and versatility, all housed within a high bandwidth 2RU hardware platform. CALICO PRO's core hardware represents a significant leap forward, using brand new video processing technology, and

boasts an ultra-powerful design, capable of delivering hundreds of video layers across four huge, real-world design canvases. A single CALICO PRO canvas can deliver a Direct View LED solution up to 64,000 pixels wide and up to 64,000 pixels high across multiple outputs, great for huge arena LED ribbons.

CALICO PRO ensures impeccable, ultra-low-latency performance across all LED and display setups, and thanks to its exclusive 10-bit video processing technology, provides superior colour depth for flawless visuals.

CALICO PRO includes the CALICO Studio set-up and control software, packed full of new tools for flexible and simple LED setup. Advanced features include Output Mapper, which can separate and reposition pieces of an LED display in a real-world view, source cropping, allowing easy manipulation of multiple crops from the same or separate sources, and full output flexibility. Other advanced features include an enhanced labelling engine, free source and output rotation, keying, dissolves and many more.

AVer Announces NDI as Standard in All Pro AV Cameras



AVer Information Inc., has announced that NDI will now be a standard across all AVer Pro AV cameras. Starting November 1, 2024, NDI functionality will be automatically enabled through a simple firmware update with no action required from customers. Existing customers with non-NDI models* can also receive a free upgrade after November 1, 2024, to unlock NDI benefits. Best of all, this enhancement comes at no additional cost — pricing remains unchanged, continuing to deliver exceptional value with AVer Pro AV solutions.

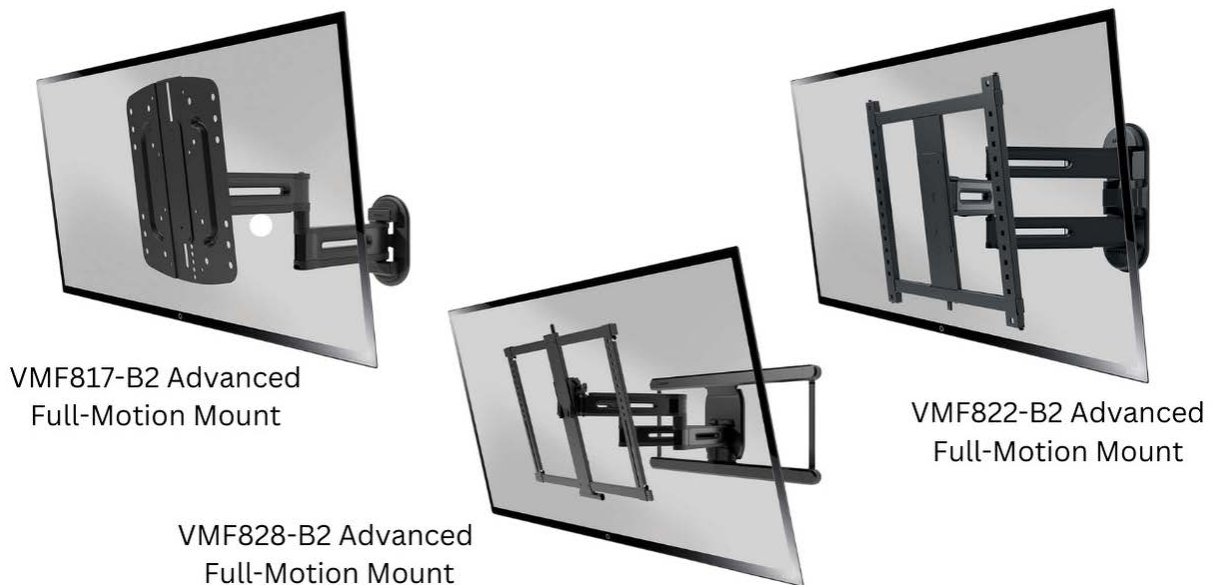
“We’re thrilled to bring the power of NDI to our entire lineup of Pro AV cameras,” said Aalap Patel, Director of Product, Pro AV/K-12, AVer Information Inc. USA. “By integrating NDI, we’re delivering an even more seamless experience for our users, enabling them to produce top-quality content across diverse environments with greater flexibility and ease. We believe NDI is the future of video production, and we are proud to make it a standard feature in our products without additional cost to our customers.”

NDI (Network Device Interface) has revolutionized video production by using existing network infrastructure, allowing devices to connect seamlessly and integrate with a broad range of applications. With NDI, users can create high-quality content and expand network resources with ease. NDI, available in AVer's Pro AV cameras, delivers high-quality, low-latency video while minimizing bandwidth requirements, meaning users can enjoy top-tier video performance without investing in additional bandwidth or specialized equipment. NDI connectivity allows users to set up quickly and easily without needing extra cables or inputs/outputs.

“AVer’s decision to adopt NDI as a standard across their lineup speaks volumes about the value NDI brings to the community,” said Charles Dobson, Business Development for NDI.

For existing customers who have already purchased non-NDI models, AVer is offering a free firmware upgrade, enabling NDI functionality at no additional cost. This automatic integration will come standard on all future AVer products through a simple firmware update, with no action required from customers. AVer is committed to making it easier for customers to take advantage of NDI’s powerful video streaming and connectivity features. By incorporating NDI into all of its Pro AV cameras without raising prices or requiring special equipment, AVer empowers creators and professionals to generate high-quality content effortlessly.

SANUS Announces New Advanced Full Motion Mount Models



SANUS, an industry leader in mounts and accessories for TVs and smart devices, have announced its latest Advanced Full-Motion 4D + SHIFT mounts. Available in small, medium, and large sizes to fit 19-inch to 90-inch TVs, these mounts introduce SANUS' cutting-edge 4D + SHIFT technology, providing post-installation vertical height adjustment of up to four inches for 19-inch to 43-inch TVs (VSF817-B2), six inches for 32-inch to 65-inch TVs (VMF822-B2), or eight inches for 42-inch to 90-inch TVs (VLF828-B2).

"Any integrator or discerning homeowner knows just an inch of adjustment can mean perfection, but it can be frustrating and time-consuming to achieve," said Philip Wessberg, SANUS Senior Product Manager. "Our new SANUS mounts featuring SHIFT technology solve this challenge. If a TV doesn't happen to end up in the desired position or is accidentally mismeasured during installation, the SHIFT feature allows for easy

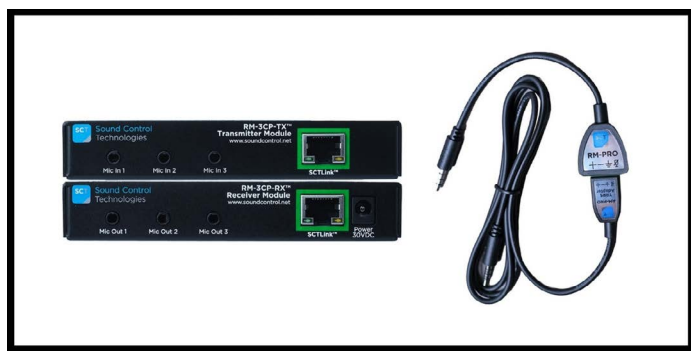
TV height adjustment, either up or down, ensuring that the TV is perfectly positioned where the homeowner wants it. With its simple and intuitive design, the Advanced Full-Motion Mount ensures a clear and hassle-free installation in just three easy steps."

This flexibility is particularly useful for mounting TVs above mantles, on TV consoles, or around pre-existing wall outlets. The SHIFT capability also allows for future adjustments, accommodating additions like soundbars or seasonal decorations. The SHIFT height adjusting feature is easily performed with the simple twist of the SHIFT handle (Model VLF828) that is hidden behind the TV and lowered when needed for adjustments. The SHIFT handle can also assist with moving large TVs. As large TVs may be too big to grip on both sides, installers or homeowners can simply deploy the SHIFT handle and use it to assist with moving the TV into the desired position effortlessly.

Beneath the mount's stylish exterior is an ultra-strong, solid steel frame that provides maximum support and security. With a lower profile depth than traditional full-motion mounts, the Advanced Full-Motion Mounts position TVs closer to the wall, creating a more streamlined look. The mounts also feature FollowThru, SANUS' signature through-arm cable management feature, which allows cables to be routed through the arms of the TV mount for a clean, organised look for any home entertainment system. The mounts also feature FluidMotion, allowing the mounted TV to be extended, tilted, and swiveled with ease, regardless of its weight or thickness.

With Virtual Axis™, glare and reflections caused by lights or windows are easily reduced by simply tilting the display up or down with the touch of a finger. If the TV requires any additional leveling once installed, ProSet™ allows for micro-adjustments. The mounts also include Steady Set™ functionality to ensure the TV will stay exactly where the viewer wants it – no drifting, shifting, or unwanted movement. The Advanced Full-Motion 4D + SHIFT TV Wall Mounts not only enhance the visual appeal of the installation but also provide the functionality needed for a seamless and professional result.

SCT Unveils RM-3CP and RM-3CP-PRO Microphone Extension Systems



Sound Control Technologies (SCT), an industry leader for camera integration solutions, introduces the RM-3CP and RM-3CP-PRO microphone extension systems for extending up to three Cisco Mic 20/Mic 60 and Table-J/ Table-E microphones from the Cisco Codec Plus, Codec Pro, Codec EQ, Room Bar and Room Bar Pro using standard CAT cable up to 100 meters.

“Our dealer base has been asking for a solution to extend Cisco table mics and codecs,” explains President, CEO and Co-founder, David Neaderland. “At SCT, we're always trying to tackle the tough challenges - simplifying complex cabling and pushing beyond traditional limitations to offer integrators cost-effective, time-saving solutions. Now, they can enjoy exceptional audio at the conference table without compromising quality, regardless of mic/codec placement.”

The RM-3CP natively supports up to three TRRS Table-J or Mic 20 microphones, while the RM-3CP-PRO supports up to three Table-E or Mic 60 microphones. Codec-specific cables and power supplies are included in each kit.

SurgeX Launches Defender Series+ in EMEA and APAC



AMETEK SurgeX has launched its Defender Series+ line of power protection products to the EMEA and APAC markets. The Defender Series+ line delivers comprehensive, cost-effective mains protection and conditioning for everyday applications, and now features the cloud-connected power quality analytics, fleet management, and risk prevention capabilities found within the SurgeX CONNECT platform.

“The Defender Series of products has been a staple of our line-up, with our Multi-Stage surge suppression technology delivering uninterrupted operation in thousands of installations around the world,” says Justin Peyton, Director of Sales EMEA and APAC, AMETEK SurgeX. “Its affordable price point means that efficient power protection is within reach for more projects. Now with SurgeX CONNECT compatibility, the new Defender Series+ line gives integrators an advanced feature set, allowing them to monitor and manage a fleet of installations remotely, improve their service offering, and save time and money by reducing expensive service call outs.”

Installed in AV and IT equipment racks, the IP-controlled Defender Series+ features remote turn on/off, power cycling, and sequencing, as well as advanced scheduling AutoPing and threshold triggered events. When a fault is detected, predefined actions are triggered automatically, streamlining workflow and minimising downtime. Designed to protect high value technology and tackle the increasingly complex, processing-heavy AV systems of today, the Defender Series+ is also compatible with popular third-party control systems for integration in residential and commercial applications. Its advanced power filtration technology delivers pristine power to equipment to help maintain peak performance for every project.

The Defender Series+ joins SurgeX’s Protect + Connect product line. All Protect + Connect products are compatible with SurgeX CONNECT, a cloud-based solution that allows for monitoring and managing an entire fleet of compatible SurgeX devices in a single, centralised dashboard. This integration brings transparency and flexibility to remote power management, saving time and money for both end users and integrators.

The Defender Series+ line of products is available now via SurgeX’s network of distributors throughout EMEA and APAC.

Visionary Introduces AES67 Support Across 5-Series AV-over-IP Product Line with New Firmware Update



AES67

Visionary has announced a new firmware update for its 5 Series PacketAV Matrix endpoints, now featuring native AES67 support across the entire product line. The addition of AES67, along with other key features, further strengthens the performance and flexibility of Visionary's PacketAV Matrix Series for professional AV installations.

The addition of native AES67 audio support is a significant enhancement, enabling seamless integration with a wide range of audio systems that use this industry-standard protocol. AES67 facilitates high-quality, low-latency audio transmission in networked environments, ensuring full interoperability between Visionary's 5 Series endpoints and a broad array of AES67-compliant devices. With this enhanced flexibility, Visionary customers can create even more adaptable and future-proof AV infrastructures.

Beyond AES67 integration, the new firmware removes the need for jumbo frames, streamlining network configurations and enabling wider interoperability. By no longer

requiring jumbo frames, Visionary's 5 Series endpoints work seamlessly on networks with devices that are incompatible with or do not support jumbo frames. Additionally, the new firmware update introduces a significant improvement in latency performance. The 5 Series PacketAV Matrix endpoints now achieve sub-frame latency, with as little as ~2 milliseconds of delay.

Another highlight of this release is the introduction of support for Extreme Networks' Fabric Attach capability, which automates critical aspects of network configuration, such as VLAN setup, security policies and quality of service. This feature reduces the potential for configuration errors, speeds up deployment times and simplifies the management of large-scale AV systems.

"We are proud to bring AES67 support to our entire 5 Series product line," said Scott Freshman, Chief Operating Officer for Visionary. "This update, along with the removal of jumbo frame requirements, integration with Extreme Networks' Fabric Attach, and the introduction of sub-frame latency, reflects our commitment to providing cutting-edge, flexible solutions that simplify AV installation and improve performance across diverse environments."

The new firmware is now available for immediate download for all Visionary 5 Series endpoints.

BEYOND THE SCOREBOARD: Why Professional AV Technology is the New MVP of Sports

Exploring the Pro AV playbook where game-changing technologies continue to redefine fan experiences, athlete care, and more

by Elton Noronha



Between 2019 and 2024, the adoption of professional AV technologies in sports applications has shown a significant upward trajectory. Numerous independent research suggests that professional AV technologies have become increasingly integral to the very fabric of sporting applications during this time period – largely driven by the demand for immersive audience experiences in major sporting events. According to one report, the pro audio segment witnessed a rise in uptake of over 17.7%, while the adoption of advanced lighting technologies and LED screens

witnessed a surge of approximately 12.6% and 19.5% respectively, since 2019. Control and automation technologies – critical for managing multiple aspects of sporting event venues and productions – have also grown by an impressive 11.7%, as more venues shift towards smart and automated systems for seamless operations. And at the same time, innovations in video and content delivery solutions, including bundled software and hardware systems, also enjoyed widespread acceptance, thereby accelerating the presence of professional AV within sports.

In terms of overall contribution, sporting applications accounted for approximately 5.4% of the global professional AV industry's revenue in 2022, a jump from about 3.6% in 2019. This number is expected to continue growing, with projections indicating that the figures for 2024 could demonstrate sporting applications contributing up to 7.3% of the global pro AV industry's revenue. The rapid integration of advanced AV solutions in new and existing sports venues, coupled with the rise in demand for high-quality fan experiences, are key drivers of this growth; and analysts forecast that sporting applications could make up for almost 9.6% of the overall global revenue of the professional AV industry by 2026.

Based on these details alone – wouldn't you agree that the world of sports today is a far cry from its humble origins?

With the surge in global fan engagement and the digital revolution, professional sports have evolved into a high-tech spectacle that's supported by a booming convergence of cutting-edge AV technologies. These advancements have not only reshaped how live sports are played and consumed; but have also extended their reach into the realms of sports medicine and rehabilitation.

Gone are the days when stadiums were just concrete structures housing a few loudspeakers. Today, they are immersive experiences—amphitheatres of sound, light, and dynamic displays, where every goal, tackle, or slam dunk reverberates across a sea of spectators, both in the stands and around the globe. The advent of professional AV technologies—ranging from colossal LED

displays to hyper-precise sound systems and intelligent lighting—has transformed traditional sporting venues into technological powerhouses. This shift is not only about entertaining fans but also about creating an engaging, multi-sensory experience that elevates the sport itself.

But the tech surge doesn't stop at the physical playing field. Even behind the scenes, professional AV technologies are playing a critical role in sports medicine and rehabilitation. In high-stakes environments where peak performance and quick recovery are paramount, immersive technologies like VR, AR, motion-capture systems and more, are becoming indispensable tools for improving performance, assessing injuries, and aiding athletes' recoveries.

In the following article, we dive deep into how these technologies are shaping the future of sports – from awe-inspiring stadiums to cutting-edge solutions in sports healthcare, we explore the full spectrum of AV's impact.

Pro AV on the Field

Stepping into a modern sports stadium is no longer just about catching the game; it's about being part of an immersive experience that merges adrenaline-fueled action with high-end technology. Today's sports arenas have evolved into epicentres of entertainment, where professional AV technologies—spanning audio, video, lighting, and control systems—combine to create a sensory experience like no other. Fans no longer just witness the game; they feel it, interact with it, and even control elements of their experience. From the booming roar of

the crowd enhanced by state-of-the-art sound systems to larger-than-life LED videowalls, today's sporting events are technological marvels designed to captivate and engage on an unprecedented scale.

More Than Just Noise



Bose ArenaMatch loudspeakers powered by Powersoft X4 amplifiers at the Chonburi Stadium in Thailand.

Ever noticed how the roar of the crowd seems to surge with every bone-crunching tackle or last-minute goal? That's not by accident—it's all down to high-performance stadium sound systems that can immerse thousands of fans in an audio experience so rich, you'd swear you were part of the game. Some of the most popular systems found in elite venues today come from brands like Bose Professional, Meyer Sound, L-Acoustics, d&b audiotechnik, and more – all of which have become the go-to for stadiums that want to crank up the experience.

Take **Bose Professional** with its **ArenaMatch loudspeaker systems**. Designed specifically for outdoor stadiums, the **Bose ArenaMatch series** offers modular, arrayable loudspeakers that provide unmatched clarity and power. With their weather-resistant build, customisable

configuration, and impressive DelatQ technology – these loudspeakers promise perfect coverage across large venues, whether you're seated right next to the action or up in the bleachers. The result? Crisp, high-impact audio that heightens the thrill of live sports.

Similarly, globally acclaimed brands like **L Acoustics**, **d&b Audiotechnik**, **Meyer Sound**, **Nexo** and many others have all invested heavily in designing loudspeaker systems that provide ultra-precise sound control, with clean, distortion-free output at high SPLs (sound pressure levels) to ensure that every seat in the house gets crystal-clear audio. The secret here is not just volume, but clarity—whether it's a referee blowing a whistle or the announcer hyping the crowd, these systems ensure that every nuance comes through, even above the din of tens of thousands of screaming fans. And there's no denying the fact that stadiums across the world rely on these audio powerhouses to deliver consistent sound coverage across vast distances.



A Stage for Sporting Drama

While the game provides the thrill and sound captures the essence of a live sporting event; it's the lighting that sets the stage for those goosebump-inducing moments. Think of the dynamic light shows that precede kick-offs, or the dazzling effects synced with each touchdown or goal. High-performance stadium lighting is no longer just about visibility; it's about creating a spectacle.

Robe's BMFL range, Claypaky's Scenius Unico, Ayrton's MagicBlade-R, among several others, are examples of innovative products with advanced colour mixing and superior beam-shaping capabilities, that are favourites for lighting designers tasked with transforming ordinary venues into arenas of drama. Lighting systems like these are known for their powerful output, wide zoom range, and a host of other industry leading features that allow lighting operators to sculpt the atmosphere from the quiet suspense of a penalty shot to the high-energy climax of a last-second win. Very often, such lighting systems are synchronised with the venue's AV system to offer an all-encompassing show, where audio and visual elements work together to tell the story of the game; while ensuring that no two events feel the same – thereby keeping the audience engaged and the atmosphere fresh.

Visual Spectacles That Wow

Sports have always been about big moments, and for sports fans, seeing is believing. As we sit in 2024, these 'moments' are supersized—thanks to the enormous LED displays and videowalls that dominate arenas and stadiums



Absen's small-pitch indoor LED screens at the Hangzhou Asian Games 3x3 Basketball Court in Deqing.

around the globe. These high-resolution displays allow fans to catch every detail of the game, from close-up replays to live statistics. And let's be honest—who doesn't love seeing their own reaction on the big screen during a pivotal moment in the match?

For example, brands like **Daktronics**, with their **DVX and HDFV LED displays**, don't just show replays; they're immersive, larger-than-life canvases that magnify every goal, touchdown, or home run in stunning clarity. In the same stride, advanced technologies like **Samsung's 'Infinity Screen'** or **Absen's A Series, AW Series, Polaris Series**, and more, are next-generation videowalls equipped with high brightness and contrast ratios that make them perfect for sporting events where the sheer scale of the display can make even the most intense action feel cinematic. Fans no longer just watch the game; they experience it in ultra-HD, with every bead of sweat or blade of grass rendered in stunning detail. And when it comes to interactivity, these screens take things to another level. With integrated social

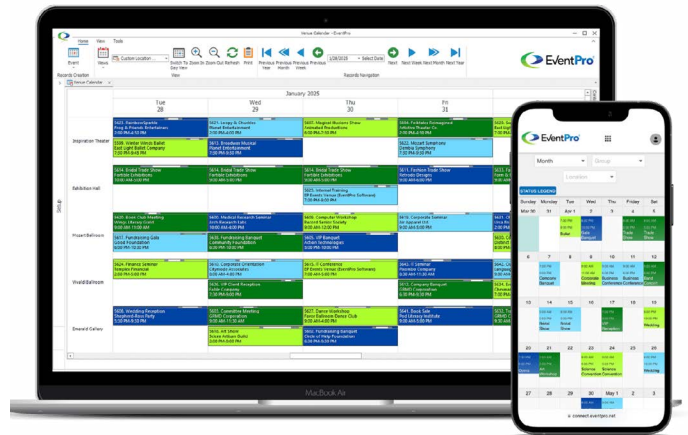


media feeds and audience polling during live events, fans are no longer passive viewers. Instead, they're actively participating, cheering on their teams or reacting to live stats and game updates in real-time.

Good quality image capture is equally imperative – and products like advanced **PTZ (pan-tilt-zoom) camera systems** provide flexible, broadcast-quality video that can be streamed both in-house and to global audiences via network platforms. These cameras capture every angle, from the coach's reactions on the sidelines to the electric energy of the fans in the stands; and products like Panasonic's **AW-UE150**, for example, are particularly popular in multi-use venues due to its 4K capabilities and ultra-wide shooting range, providing dynamic shots that enhance both live broadcasts and in-house displays.

That being said; the real magic, however, happens behind the scenes with the video control technologies that ensure all of these massive displays and broadcasts run smoothly. For example, solutions from **ROSS Video**, whose suite of products include the likes **DASHBOARD**, **XPRESSION**, **ULTRIX ACUITY** and more – provide seamless integration of live graphics, replays, and broadcast-quality video, ensuring that fans in the stadium and those watching from home experience the event in all its high-definition glory. Technologies such as these are a favourite for venues looking to deliver a polished, broadcast-level production, managing everything from in-house visuals to televised feeds.

Smarter Venues: Resource Management and Control



Event Pro arena and stadium management software.

While all this tech powers the fan experience, there's a lot going on behind the scenes to keep everything running smoothly. Managing tens of thousands of fans, staff, and game day operations requires precision, and this is where sophisticated management software comes in.

For example, **EventPro** is a key player in the arena and stadium management software space. Its platform integrates event scheduling, resource management, and staff coordination into one easy-to-use system. For stadiums hosting multiple events—sports, concerts, or even conferences—EventPro ensures that everything from ticketing to catering to inventory and staff management – all run seamlessly. It's like having a digital conductor, orchestrating the entire event day experience behind the scenes.

Meanwhile, **CleanConnect** is a game-changer for stadium maintenance and cleanliness. This software allows stadium operators to manage cleaning schedules, monitor real-time cleanliness levels, and monitor and track safety protocols, incident reports, and emergency

response plans in real-time, among other capabilities. Platforms such as these also offer powerful data analytics on key facility management aspects that enable high-traffic venues to make data-driven decisions for optimized process-flows and more effective resource allocation.

On the hardware front, systems like **Crestron's DM NVX AV-over-IP** solution allow venues to control all their AV operations from one place, as it offers video, audio, USB, and control on a single platform, while affording the capability to reliably distribute anything across your entire network in real time and at the highest quality and security standards. Think lighting, audio, videowalls, digital signage and more. This not only simplifies resource management but also optimises the venue's energy use, which can be a significant concern in large-scale operations.

On the whole, AVoIP technology plays a key role in this mix – as AVoIP enabled devices not only allow for high-quality, low-latency AV signals to be transmitted over standard IP networks, but also dramatically improves the AV architecture's capability in terms of scalability and flexibility. For example, in situations where multiple cameras, audience displays, and broadcast systems must all communicate in real-time, AVoIP systems like **WyreStorm's NetworkHD 400 Series** ensure seamless video distribution without compromising on quality or speed thanks to its ability to deliver ultra-low latency output.

For security, crowd management, and operational control – advanced and cost-efficient IP-connected public address and voice alarm system like **Bosch's Praesensa**, are a

popular choice. Using a smart-power concept and integrated redundancies, the Praesensa system's Its ability to handle large-scale public address requirements, integrate with fire safety systems, and provide zoned audio management means that even in high-capacity events, the venue can ensure seamless communication across all departments, safeguarding both the fan experience and security protocols.

Then there are systems like **Q-SYS by QSC** that give venue operators total control over the audio, video, and environmental aspects of the stadium, ensuring everything runs like a well-oiled machine. Platforms such as these enable smooth communication between different departments within the venue—security, concessions, and broadcast teams—all from a centralised control hub. This level of coordination is essential for crowd management, especially during high-pressure moments when tens of thousands of fans are on their feet.

And as sports continue to evolve with an impressive suite of hardware and software technologies, we're seeing the increasingly widespread adoption of communication enablers like 5G integration, which promises faster data speeds and richer fan interactions. Live stats, replays, and instant commentary are now being delivered directly to fans' phones with zero lag, creating a second-screen experience that's in perfect sync with the live action.

Then there's the rise of **Augmented Reality (AR) and Virtual Reality (VR)** in live sports, promising fans unprecedented ways to engage with the game. Whether it's through AR glasses



that overlay stats on the field in real-time or VR experiences that place fans courtside from their living room, the line between live and virtual is becoming increasingly blurred. Alongside, several brands have strategically employed AR and VR technologies for their activation and audience-engagement activities at sporting venues – with such offerings aimed to further enhance the entertainment experience while building a stronger personal connect with sports fans.

Sport Healthcare

Sports healthcare, which encompasses **performance tracking, sports medicine** and **sports rehabilitation**, has experienced a remarkable transformation in recent years thanks to technological advancements. While the core mission remains the same—preventing injury, improving recovery, and enhancing athletic performance—how these goals are achieved has changed dramatically. Professional AV technologies have found themselves to play a surprisingly significant role in ensuring that sports healthcare professionals can deliver precise, real-time care and that athletes receive world-class treatment and training.

Athlete Monitoring

The future of performance in sports is driven by **data**—lots of it. Advanced athlete monitoring technologies track everything from heart rate to muscle fatigue, offering insights into not only an athlete's current condition but also predictive analytics to prevent injuries before they happen. Technologies, such as **real-time video monitoring**, are used to study an athlete's form during training or recovery.



*Catapult Sports real-time data analysis.
Photo copyright Catapult Sports.*

On the other hand, **wearable technologies** like **smart bands** and **GPS trackers**, which relay data to visual dashboards, are also becoming commonplace. Systems like **Catapult Sports** offer real-time data analysis on player workload, fatigue, and injury risk among others, which allows sports medicine professionals to alter training regimens, modify game-day strategies, and recommend preventative treatments, thereby reducing the risk of injury to athletes. In the same stride, **Artificial intelligence (AI)** also plays a crucial role in assessing this data, with systems like **Orreco** using AI to combine physiological data with blood biomarkers, thereby allowing for prediction of injury risks with more accuracy.

All of the aforementioned solutions invariably include capturing athlete movement via a slew of state-of-the-art AV technologies such as high-performance PTZ cameras, motion sensors, and more; and displaying real-time metrics and critical data via ultra-high-definition connected **LED screens** and **interactive video walls** from companies like **LG, Barco, Christie** etc. Such an arrangement provides a dynamic way for physicians and trainers to analyse

biomechanical movements down to minute while clearly visualising and analysing large sets of data; which in turn helps them make informed, data-driven decisions in a fast-paced environment.

Intelligent Automation Streamlining Sports Healthcare

Intelligent automation, a game changer in general healthcare, is fast finding its place in sports medicine as well. **AI-driven automation systems** now handle routine but critical tasks such as scheduling, monitoring recovery protocols, and even analysing complex medical data. In the fast-paced world of professional sports, where every second counts, automation helps medical teams stay on top of things by streamlining processes that would otherwise take up valuable time.

For instance, tools like **Athos** smart performance workout gear, offer intelligent muscle monitoring, which shows how athletes' muscles work in real time via AV platforms. High-resolution **LED displays** present this information in easy-to-understand formats, helping both athletes and medical professionals make real-time adjustments. Moreover, automation systems can be integrated with **telemedicine platforms**, providing injured athletes access to remote consultations and live feedback. Using high-quality video conferencing solutions like those from **Cisco Webex** or **Zoom Rooms**, sports medicine professionals can interact with athletes from anywhere, using professional AV systems to display X-rays, MRIs, and diagnostic information in real time.

Intelligent automation in sports healthcare isn't just limited to monitoring athletes—it also involves the use of **robotics** in surgeries, especially in minimally invasive procedures. For example, the **Da Vinci Surgical System** is a robotic platform that allows surgeons to perform complex surgeries with greater precision. These surgeries are often monitored and broadcast through professional AV systems, providing a detailed view for medical teams. AV technologies ensure these robotic systems are coordinated with cameras and video walls that deliver high-definition visuals during surgery.

Sports Rehabilitation



Hawk-Eye used to capture high-speed footage of athletes performing specific movements. Photo copyright Hawk-Eye.

In sports rehabilitation, **professional AV technologies** and **intelligent automation** are central to modern recovery techniques. The recovery process often involves months of rehabilitation exercises, training, and careful monitoring, all of which can be significantly enhanced through advanced technology.

Specific to this, one of the key areas where AV technologies shine is in **movement analysis**



and feedback systems. These systems use cameras, such as **Hawk-Eye** and **Vicon**, to capture high-speed footage of athletes performing specific movements. This footage is then relayed to **interactive touchscreens** or **projection systems**, where the rehab professional can break down movements frame by frame. With systems like these, athletes can receive immediate visual feedback on their movements, allowing them to adjust their form in real time.

Another innovative tool that's gaining traction in sports rehabilitation is **virtual reality (VR)**, wherein platforms like **RehabVR** and **MindMaze** place athletes in virtual environments where they can practice controlled movements, simulate competition scenarios, and engage in balance and coordination exercises. These systems use **motion tracking cameras** and **immersive 3D displays** to ensure the athlete's movements are accurately captured and presented, providing real-time feedback through **head-mounted displays (HMDs)**.

This integration of VR into rehabilitation programmes has shown immense promise, especially for athletes recovering from **neurological injuries** such as concussions. Virtual environments can simulate the challenges athletes face in actual games, helping them prepare mentally and physically for their return to play. The experience is often paired with **biofeedback** systems that monitor physiological responses, all visualised on professional-grade displays to ensure progress is being tracked accurately.

Sound and Light Therapy

Light therapy and **sound therapy** are also emerging as popular technologies in sports rehabilitation. **Low-Level Laser Therapy (LLLT)**, for example, uses laser light to accelerate tissue repair and reduce inflammation, making it a valuable tool for injured athletes. These therapies rely on advanced **LED light systems** from companies like **Philips**. On the sound therapy front, **ultrasound** (ultrasonic) **machines** are used to provide deep tissue stimulation, helping to reduce muscle tension and accelerate healing.

In such scenarios too, **Audio-visual feedback systems** are often integrated into rehabilitation centres, allowing therapists to control the intensity and focus of these treatments with precision. The integration of **smart AV systems** allows for the control of these devices via **touchscreens** and **automated software platforms**, streamlining the therapy process for both patients and medical professionals.

Cognitive Rehabilitation

Athletes recovering from serious injuries often require not only physical rehabilitation but also **cognitive therapy**. Cognitive rehabilitation aims to restore functions such as memory, focus, and decision-making, which are critical for peak athletic performance. Modern cognitive rehab programmes incorporate **interactive video platforms**, **AV tools**, and **virtual environments** to challenge athletes mentally in ways that mirror game-day situations.

For example, AV systems are used to simulate in-game scenarios, where athletes are required to make quick decisions while under pressure. **Interactive video walls** and **smart displays** powered by systems like **Extron**, **Barco** and more can create dynamic scenarios, immersing athletes in competitive situations while providing real-time feedback. This type of cognitive rehabilitation has proven beneficial not only for athletes returning from concussions but also for those who need to regain mental sharpness following long injury layoffs.

AV Solutions for Long-Term Health Management

The importance of long-term health management for athletes cannot be understated, and AV technologies play a role in this, too. **Telehealth platforms** powered by professional AV systems, such as Amwell or Teladoc, allow athletes to stay connected with their medical teams even after they've left the rehabilitation centre. These platforms ensure that athletes continue to receive guidance, monitor their progress, and adjust their recovery programmes as needed. High-definition **video conferencing tools** and **interactive dashboards** make it possible for physicians, trainers, and even nutritionists to maintain a collaborative approach to long-term athlete health, ensuring sustained success on and off the field.

AI, Automation, and Precision AV

Looking ahead, the future of sports medicine and rehabilitation will likely see even more **AI-driven solutions** and **automation systems** that provide precise, real-time data to aid in athlete care. **Augmented reality (AR)** could also play

a role in rehabilitation, allowing athletes to see real-time overlays of their movements to ensure perfect form during exercises. **Machine learning algorithms** could be used to personalise recovery protocols, adapting to each athlete's unique physiology and injury history.

The Future: Convergence of Technology and Innovation

As we look to the future, it's clear that the marriage of **professional AV technologies** with **live sporting events**, **e-sports**, and **sports healthcare** has not only enhanced the spectator experience but also revolutionised how athletes train, perform, and recover. The evolution of technology—from stadium sound and LED displays to AVoIP in virtual gaming arenas, and **AI-driven athlete monitoring systems**—has created a new landscape where precision, immersion, and innovation drive success both on and off the field.

And as technology and sports continue to evolve together, one thing remains certain: the future will bring ever-more exciting possibilities for athletes, fans, and professionals in the industry.

SOUTH KOREA

Christie Delivers Mesmerising Visual Experiences at Museum HEI

Christie's HS Series laser projectors and Pandoras Box power immersive visual experiences at the museum



Christie D13WU2-HS laser projectors deliver beautiful projections of famous artworks in HEI Square gallery.

Christie's high-performance **HS Series** 1DLP laser projectors, **Pandoras Box Software** and **Widget Designer** are delivering mesmerizing visual experiences at **Museum HEI**, the largest media art museum in Seoul and Gyeonggi Province.

Situated in the Paju Tongildongsan Tourist Special Zone, Museum HEI serves as a cornerstone of Korea's new Hallyu culture

belt, offering immersive, high-tech media art installations. Inspired by the Finnish greeting 'Hei,' meaning 'hello,' the museum is designed to lead visitors through a unique immersive art experience. The current exhibition, "Beautiful Moments in Life," showcases over 20 media art displays that highlight the beauty of nature and renowned works by European painters.

Among them are two thematic galleries, HEI Square and HEI Theatre, which use more than



FACTFILE

Project Name: Museum HEI Square and Theatre Thematic Galleries

Project Location: Seoul, South Korea

Project Segment: Museum

Project Systems Integrator: Star Networks and Creum

Key AV Brands: Christie HS Series, Pandoras Box software and Widget Designer

20 **Christie 4K22-HS** and **D13WU2-HS** laser projectors to bring creative art pieces to life with clarity and vibrancy. This remarkable visual experience is made possible by Christie's trusted partners **Star Networks** and **Creum**, both of whom bring extensive experience in delivering large-scale projection mapping projects across various applications.

"We are thrilled to collaborate with Christie and Creum to deliver an extraordinary visual experience at Museum HEI," says S.W. Ham, General Manager, Star Networks. "Christie's HS Series laser projectors and Pandoras Box have provided the perfect combination of brightness, colour accuracy, and versatility to bring these immersive media art installations to life. It's exciting to see how projection technology can transform a space and create unforgettable moments for visitors, and we're proud to be part of such an innovative project."

Paul Lee, Sales Manager for Korea, Enterprise, Christie, adds, "We're witnessing a significant rise in the popularity of immersive experiences in museums across Korea, as visitors of all ages increasingly seek engaging ways to

connect with art and culture. Our HS Series projectors and Pandoras Box have emerged as the preferred solutions for these installations, delivering bright, colourful visuals in a compact form factor. We are proud to provide technology that enhances visitor experiences and sets new standards in digital art and entertainment."

The HEI Square gallery features four breathtaking thematic displays that transcend time and space—Flower Hill, Under the Sea, Great Fall, and Cony's Canvas—brought to life with six Christie 4K22-HS laser projectors. Visitors are fully immersed in vibrant landscapes, captivating underwater scenes, and dynamic art through vivid, true-to-life imagery.

In the HEI Theatre gallery, 15 Christie D13WU2-HS laser projectors display stunning imagery for Renoir's Moment and The Nature thematic displays, where art and nature blend seamlessly with radiant colours. The awe-inspiring visuals in both galleries are driven by Pandoras Box Software and Widget Designer, allowing for precise media and show control that ensures a flawless and immersive experience for visitors.

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