Pro AVL Asia

20 YEARS AGO TODAY
Blank Canvas celebrates two decades of independent publishing

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BETTER-SOUNDING WORLD

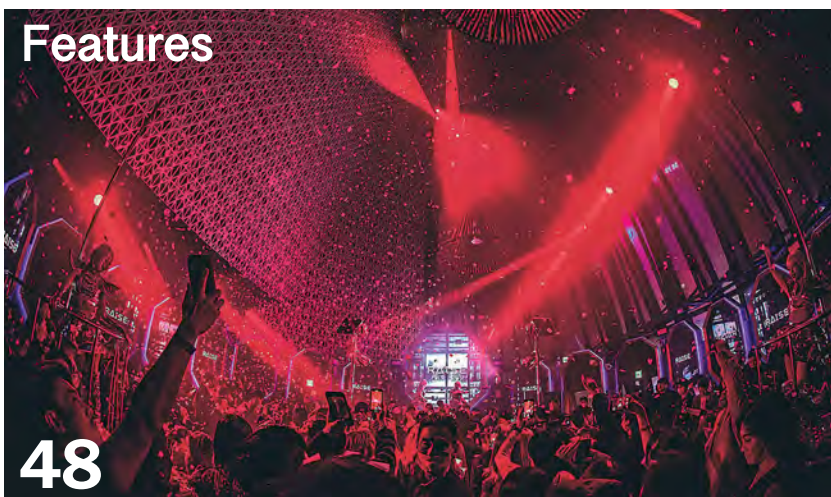Audioversity offers training programs that can help anyone who works with audio deliver better sound for enhanced impact and communication in a broad range of applications. Refine your craft through a comprehensive selection of seminars, webinars, and self-training materials designed to build skills quickly and effectively.

Audioversity

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Welcome

This month we're celebrating 20 years of Blank Canvas Publishing. Although I've only been here for half that time, my working relationship with Richard and Sue predates even the last two decades, and we've had fun digging out some ancient photos, many of which weren't fair to inflict upon our gentle readers. Some have, however, made it into the company profile on p64, written by another former colleague from days of old, Phil Ward. We hope you enjoy his objective, insightful and often amusing account as much as we did.

As well as revisiting the past two decades, we're marking this milestone with some new feature categories that reflect the age we live and work in. A topical issue that's increasingly and rightfully preoccupying all industries is sustainability, and we have the first in-depth look at innovative companies which are improving carbon footprints in their particular field. First up is Australian distributor TAG, already known for its community project, TAG Cares, which recently launched the inspiring Planet | TAG initiative (p68).

Also debuting in this issue is our *Industry Innovators* series, in which we'll spotlight keen, diverse talent coming up through the ranks and making an impression on our industry. In the first of these to appear in print, Electro-Acoustics Systems' executive director Lam Tze Tze tells us about her time spent studying, travelling and working overseas before returning to help run the family systems integration business in Singapore (p70). Know any innovators? Please tell us!

Caroline Moss

Editor

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Follow us on social media @ProAVLCentral

CONTACTS

CODA Audio's SPACE HUB unleashes new spaces

WORLD

Svetly Alexandrov hopes to set a new standard of immersive sound

Following the launch of its SPACE HUB immersive processor at the recent Tonmeistertagung exhibition in Düsseldorf, CODA Audio has announced the creation of new dedicated Immersive Audio facilities at the company's headquarters in Hannover. The new demo rooms, the "Auditorium" and the "White Room", will allow CODA to communicate the technology and philosophy of SPACE HUB, designed to allow visitors a hands-on experience of the technology. The new spaces complement CODA's existing "Showroom" which is used for the demonstration of conventional systems.

"We're excited about the development of the new facilities. The demos which took place at the exhibition were well-attended and the reaction was very enthusiastic, with a general feeling amongst those in attendance that our approach to immersive sound was setting a new standard," commented CODA Audio managing director, Svetly Alexandrov. He continued: "The creation of our new facilities will allow audio professionals to bring their own content for testing, and gain a comprehensive insight into the workflow and the way object-based mixing works in 3D."

The rooms are equipped with 3D setups comprising CODA Audio HOPS8 loudspeakers on several levels, SCV-F sensor-controlled subwoofers and the pivotal SPACE HUB immersive processor. A second SPACE HUB serves as a backup unit to demonstrate redundant system configuration. In addition to content feeds from various DAW programmes, the native SPACE HUB control software, a mixing console with SPACE HUB remote control interface and an iPad with touch-surface-optimised OSC control, are available. A tracking system will follow shortly.

Alexandrov looks forward to welcoming visitors: "Our motto is 'Hearing is Believing', and we're certain that anyone who visits our Immersive Audio facilities will know exactly what we mean when they hear what we have to offer. As well as an incomparable listening experience, we aim to educate and inform our visitors about every aspect of the technology at work and make clear the possibilities it can open up in so many applications."

www.codaaudio.com

DiGiCo and d&b partner on Soundscape integration

WORLD

d&b audiotechnik and DiGiCo have announced a new partnership that will see a dedicated Soundscape User Interface fully integrated into the surface of all DiGiCo SD and Quantum consoles, thereby allowing front-of-house engineers to control Soundscape object parameters on the DS100 Signal Engine directly on the consoles.

"By partnering with DiGiCo, we are ensuring that Soundscape is accessible to FOH engineers in their preferred mixing and automation environment," said Georg Stummer, product manager, d&b audiotechnik. "This integration will allow Soundscape to become an intuitive part of their creative workflow and design repertoire. It is important to us that we take the object-based capabilities of our high-performance immersive toolkit as close as possible to creatives and their existing production environment. Soundscape is defining the way spatial audio is used for live productions."

The partnership made it possible to replace the generic OSC control for the DS100 on

DiGiCo consoles with a Soundscape control interface, integrating new features like free assignment of DS100 sound objects and different mapping areas for each channel strip of the console. All parameters and assignments of the Soundscape User Interface can be stored and recalled with the console Snapshot memory.

Furthermore, this integration can be expanded for bidirectional communication between the console and DS100, via the d&b software bridge (Remote Protocol Bridge) while also supporting setup with two DS100s, by controlling two DS100s in sync within a redundancy setup or up to 128 sound objects on two different DS100s from one console.

"At DiGiCo we recognise that immersive sound technology is gaining rapid industry acceptance and represents an exciting future for our industry. We want to ensure that FOH engineers and sound designers can access this technology at their fingertips as a normal part of their workflow," said Austin Freshwater, MD at DiGiCo. "We are proud to partner with d&b to provide a seamless and efficient way to integrate Soundscape into show programming and operation with our consoles."

www.dbaudio.com
www.digico.biz

Sennheiser Group to focus on professional audio

With its three business units – Pro Audio, Business Communication and Neumann.Berlin – the Sennheiser Group aims to achieve sustainable growth and further expand its strong global position as a provider of professional audio solutions. Having fully transferred the Consumer Electronics business to leading hearing solutions provider Sonova Holding AG, the audio specialist will once again for the first time in 50 years be fully focused on the professional business. Both brands will operate together under the Sennheiser brand umbrella for which a long-term licence agreement has been agreed.

"In the future, we will focus our resources and financial strength on our Pro Audio, Business Communication and Neumann business units," explained co-CEO, Daniel Sennheiser. "Here, we plan to grow at an above-average rate, further expand our position in the global market and successively extend our business areas."

Co-CEO Andreas Sennheiser further emphasised Sennheiser Group's goals for the future: "We are looking forward to working even more closely with our customers in the professional sector and being even closer to the market. As a family-owned company, we want to grow sustainably through our own efforts and, to achieve this, we are investing significantly in our three business units."

In the Pro Audio unit, the German brand plans to continue to exceed the high expectations of its customers in the live and broadcast business with reliable audio solutions and first-class sound quality. The range will be expanded with complementary software solutions for optimal workflows. Sennheiser sees growth

Co-CEOs Daniel and Andreas Sennheiser

opportunities particularly in the fast-growing markets for semi-professional applications, such as audio-for-video.

In the Business Communication unit, Sennheiser will greatly expand its portfolio of audio solutions for universities and corporate meeting rooms in the coming years. The goal is to be present in most of the world's lecture halls and meeting rooms and to offer customers solutions that are audibly better and easier to use, while addressing the challenges of hybrid working and learning.

Neumann.Berlin remains a renowned brand for studio-quality audio solutions. This segment is to be expanded with a strong focus on digital workflows and extended software and service solutions. Growth opportunities have been identified from new customer requirements in mobile working, streaming and immersive audio.

**www.sennheiser.com**

disguise acquires Polygon Labs

disguise has announced its acquisition of broadcast data and content visualisation solutions platform, Polygon Labs. This marks another milestone in disguise's move towards cloud-based production that it hopes will enhance its workflow to better address user needs in the fast-growing media production and broadcast markets.

By adding Polygon Labs to its workflow, disguise will build integrations that enable xR studios to have access to a wider range of broadcast workflows which empower remote production and cloud-based collaboration. Users of both disguise and Polygon Labs will be able to benefit from data-driven graphics workflows running fully native Unreal Engine, as well as extended design and production capability for graphics.

"This is a key turning point for both our user communities, partners and customers, and a huge step in our direction towards cloud and new media production workflows. Our work with Polygon Labs will unlock a whole new level of productivity and connectivity for all our users," said disguise CEO, Fernando Kufer.

"Joining forces with disguise will take us into the next chapter of accelerating our journey towards graphics production workflows in the cloud. Our shared vision and passion for delivering the most engaging visual experiences will help us empower our users with a much more comprehensive solution to deliver the world's most engaging storytelling graphics," said Grigory Mindlin, CEO at Polygon Labs.

www.disguise.one
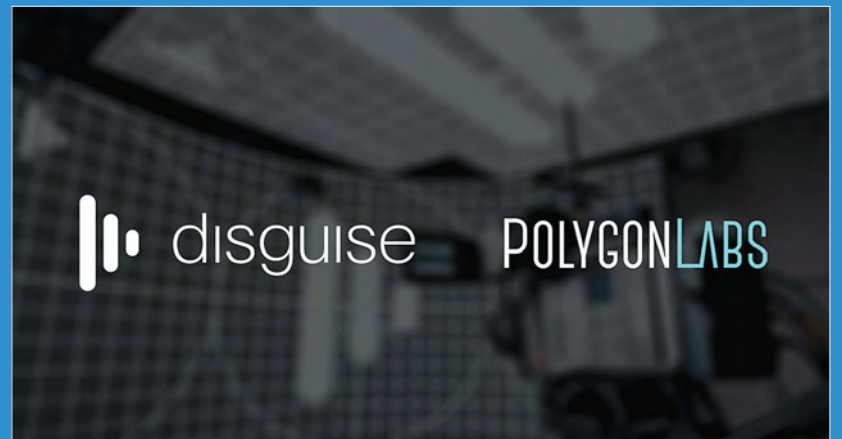
Scaled-up L-ISA demo held in Singapore

After successfully utilising its L-ISA Auditoria demo suite and showroom at its premises since 2020, Singaporean L-Acoustics authorised distributor Concept Systems Technologies (CST) decided the time was right for taking things to the next level. "While our L-ISA Auditoria continues to serve us well, the available space next to our office is limited," explained CST's project and sales director, Gerald Fong. "We wanted to demonstrate the capabilities and performance of L-Acoustics' immersive hyperreal sound technology in a larger, more real-life setup and to a larger industry crowd."

A ballroom at Marina Bay Sands in Singapore was chosen, where a frontal scene system comprising seven pairs of A series constant curvature cabinets was hung across the venue's width. For surround, seven Syva colinear source columns were placed along the back and side walls of the room, naturally all driven by the recently updated L-ISA Processor II and powered by LA amplified controllers. Two pairs of KS28 subwoofers were available on demand, as well as serving duty for two left/right stacks consisting of four K3 line array modules each.

The two demo sessions were attended by a total of around 120 audio professionals representing local consultants, system
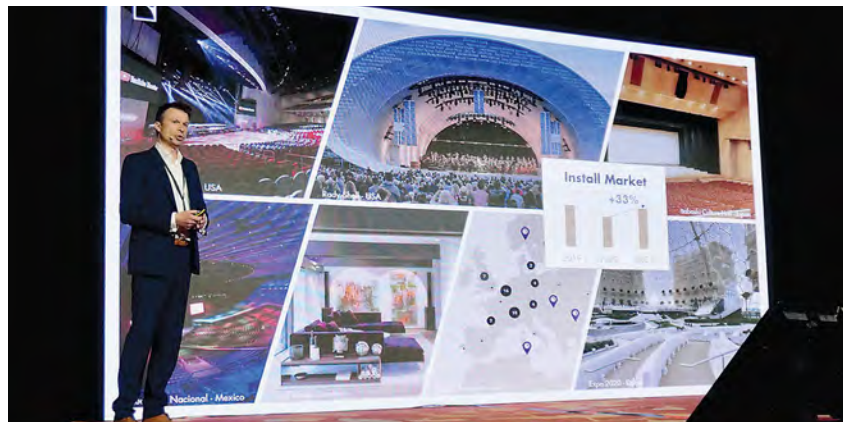
L-Acoustics' David Cooper reviewing trends in recent sales figures

integrators, venues such as performing arts, entertainment, education and houses of worship, as well as rental system providers. Strong support was given by the entire team of L-Acoustics APAC who, after an introduction by CST's project and sales director Jimmy Lim, took over all following presentations.

Both L-Acoustics APAC CEO Tim Zhou, as well as sales director David Cooper expressed their gratitude for the progress of normalisation in spite of Covid-19 – as Cooper put it, "it's amazing to be back in a room full of people

after a quite tough two years for all of us. While overall global revenue was greatly impacted in 2020 and 2021, for the Asia Pacific market, sales remained almost exactly the same as in 2019 because our installation business in the region grew during the pandemic. Live entertainment is definitely back. The industry in America and Europe is recovering quickly, and it's definitely coming your way very soon, too."

Describing L-Acoustics' outlook, Cooper added: "Our sales as of the first quarter plus order backlog are already exceeding the best ever

year in our history. We knew 2022 was going to be a big year for L-Acoustics globally, and so we hired around 150 additional people since July last year to meet the expected increase in demand. By mid-2020, we will have doubled our production capacity from last year."

"I believe in the pro audio industry everyone has their own roles and responsibilities, and partnership is critical," Zhou said. "We as a manufacturer need to focus on making the best products and providing futureproof technologies, while distributors are responsible for helping us to bring these products to our customers, to do installations, to service them. With these different responsibilities, for us the answer is very clear: we value our distributors and all of you as our partners, and your work, so in APAC we will not go direct."

"Think globally, act locally," he continued. "You'll be seeing more Asian people in our team, more Asian elements in our strategy, here locally in Singapore and across the APAC region."

www.concept-systems.com.sg
www.l-acoustics.com
www.l-isa-immersive.com

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Crestron raises the bar with 1 Beyond

WORLD

Crestron has announced its planned acquisition of the intelligent video technology developed by 1 Beyond. The integration of this technology will strengthen the Crestron ecosystem and core competency in videoconferencing, AV, control and automation for collaboration rooms of all sizes, styles and purposes.

"To enable productive and effective hybrid meetings, the modern workplace requires technology that provides an equitable experience between the in-room participants and the remote participants," said Crestron president and CEO, Dan Feldstein. "Intelligent video should be pervasive in the workplace, expanding the benefits from the large unique spaces to more mainstream collaboration rooms and, by integrating 1 Beyond products into our portfolio, Crestron is uniquely positioned to make that a reality."

Dan Feldstein, Crestron president and CEO

1 Beyond CTO, Rony Sebok

With this technology acquisition, Crestron will add a comprehensive line of automated camera tracking and intelligent video offerings to cover a wide range of collaboration rooms and deliver a complete room experience.

Over the course of its 20-year history, 1 Beyond co-founders, current CEO Terry Cullen and CTO Rony Sebok, developed an engineering-driven company known for automated camera tracking solutions that drive and enable intelligent video features, including presenter tracking, group tracking, dual camera tracking and ePTZ auto tracking.

1 Beyond technology excels in rooms of all sizes, especially in rooms that pose particular challenges, such as lecture halls, high-value meeting spaces, multi-use spaces and divisible rooms for higher-ed, corporate and government customers. Collaboration spaces are now required to enable the streaming of a hybrid discussion with a single tap of a button. Video is an important component in driving the full AV experience and this investment builds on Crestron's legacy of equipping customers with the right solutions as their needs evolve.

"1 Beyond developed an innovation engine including uniquely designed intelligent cameras and automated video systems that will complement and strengthen Crestron's core hardware and software technologies in AV, control, lighting and UC," said Sebok, who will be joining Crestron as director of intelligent video.

www.1beyond.com
www.crestron.com

Sugandar House of Sound & Light joins Adamson E-Series network

INDIA

Bangalore's Sugandar House of Sound & Light has joined the Adamson E-Series network with the purchase of 12 E12 three-way line array enclosures and 16 E119 subwoofers, along with seven Lab Gruppen 20,000W PLM20K44 amplifiers.

"Our firm prides itself on keeping its ear to the ground in order to keep abreast of current trends and developments," said Shiva Kumar of Sugandar. "We are constantly looking to improve our operational system and maintain the highest international benchmarks. Adamson helps us attain that vision of becoming the solutions provider of choice for all major events in the city. The E-Series is a great-sounding system with high-fidelity, phase coherence and clarity. It offers a lot of punch, is easy to use and looks great! We're thrilled to join the Adamson Network and provide our clients the latest, international-standard equipment."

Since 1958, Sugandar has evolved from a small sound and lighting company to offering a range of services encompassing audio, lighting, video, structures, power and rigging.

www.adamsonsystems.com

The team at Sugandar House of Sound & Light with Karan Nagpal (right)

ROE Visual and disguise open xR Stage Tokyo VFX showroom

ROE Visual and disguise have collaborated to open the virtual production showroom, xR Stage Tokyo, at ROE Visual Japan's premises in Hatchobori. This offers visitors the opportunity to experience virtual production technology and in-camera VFX within an LED production wall.

In-camera VFX uses real-time compositing of CG backgrounds on an LED wall, a method used in films, TV commercials and music videos which is expanding into livestreaming and corporate online presentations. disguise's xR workflow powers LED stages in over 300 locations in over 45 countries, many of which are made up of ROE Visual LED panels.

xR Stage Tokyo combines ROE Visual's high-definition BP2V2 and BM4 LED panels and disguise's vx 4 media playback server and rx II real-time render node. The disguise hardware and Designer software powers video content playback and real-time graphics content onto the LED panels, creating virtual environments visible in-camera to immerse actors into the scene.

"disguise is proud to partner with ROE Visual in the opening of this new showroom," said Tsuyoshi Mitera, disguise's head of Japan. "With disguise's expansion into Japan with new locations in Yokohama and a growing number of partners like Hibino's VFX Studio, and Ark Ventures among others, we are seeing huge possibilities for virtual production in Japan. The new showroom will allow many to see the game-changing technology for themselves and will hopefully inspire a world of creative possibility."

With the opening of ROE Visual's Japan office in January 2022, the company aims to develop the Japanese market further and offer support and services to local customers, while xR Stage Tokyo further establishes the partnership between ROE Visual and disguise, which dates back to 2017.

"ROE Visual is delighted to work together with disguise to discover the future of virtual production," commented Grace Kuo, sales director of ROE Visual. "Collaborating on this new showroom has been a thrilling experience for us. Following the increasing market influence in Japan, ROE Visual has established

long-term relationships with renowned partners in the industry, supporting them in virtual production with reliable LED products. We believe that xR Stage Tokyo enables more immersive experiences, creating unique content for audiences."

www.disguise.one/jp
www.roevisual.com/jp

Riedel partners with Skyroads, SailGP and the FIA

Riedel Communications is collaborating with SailGP Technologies and Skyroads to deliver new and more immersive imagery as well as a substantially reduced CO_2 footprint at major public events. Announced during SailGP's Season 2 Grand Final in San Francisco, Riedel and Skyroads AG are entering into a strategic alliance to deliver a US$20m order of SKYBOT-CAM systems, which combine high payload drones with professional broadcast gyro stabilised camera systems with live video, audio and data downlinks.

Riedel will be the global partner of the SKYBOT-CAM system for major events and sport series, and, with Skyroads, they are building a joint product to further push the boundaries of sustainability and technical innovation for sports broadcasting. Riedel will serve as an integrator, utilising its existing communication infrastructure for the purpose of the Skyroads flight guarding system.

Achim Kostron, chief commercial officer, Skyroads said: "Our SKYBOT-CAM system is an excellent way to implement early applications of our later aviation-type, certified self-flying system. We are delighted to embark on this project with the most respected partners in their field, Riedel and SailGP."

SKYBOT-CAM will be introduced at SailGP, which will be the first global event in the world to use the new technology. SailGP will

SailGP Grand Final

facilitate and support the test operation of this innovative system and, after a first, exclusive implementation at SailGP in 2024, the SKYBOT-CAM will become available for all public events. The technology will be used with SailGP's augmented reality LiveLineFX.

"Today's professional airborne broadcast camera systems are mainly helicopter based and require enormous organisational, technical and budgetary effort for a

photographic platform that, although creating high-quality pictures, is unsustainable in the long run," stated Warren Jones, chief technology officer at SailGP. "SailGP Technologies stands for innovation in sustainable sports as part of its 'Better Sport – Better Future' strategy, and it is partnerships with forward-thinking companies like Riedel and Skyroads that allow us to achieve this."

"I'm delighted to announce that we are joining forces with Skyroads and SailGP Technologies to take sustainability and safety to a new level and provide even more spectacular images from the pinnacle of sail racing," said Riedel Group CEO and founder, Thomas Riedel. "This strategic partnership reflects our commitment and vision to enhance innovation in order to create future-oriented formats, focusing both on environmental and safety aspects at the same time."

Riedel Communications has also announced that it has been named the official supplier of motor sports telecommunications for the Fédération Internationale de l'Automobile (FIA). After a two-decade relationship, Riedel will supply the FIA with hardware and software technologies to take safety, sustainability and innovation across all global FIA championship series to the next level.

Peter Bayer, FIA secretary general for sport and FIA F1 executive director, said: "The FIA's decision to name Riedel as an official supplier of its motor sports communication is a result of a trusted relationship over two decades. It illustrates our shared commitment to use the most advanced technologies, with the safety and sustainability requirements that we have for all our championships."

www.riedel.net

HP to acquire Poly

HP has announced a definitive agreement to acquire Poly, in an all-cash transaction for US$40 per share, implying a total enterprise value of $3.3b, inclusive of Poly's net debt. The acquisition accelerates HP's strategy to create a more growth-oriented portfolio, aims to further strengthen its industry opportunity in hybrid work solutions and positions the company for long-term sustainable growth and value creation.

"The rise of the hybrid office creates a once-in-a-generation opportunity to redefine the way work gets done," said Enrique Lores, president and CEO of HP. "Combining HP and Poly creates a leading portfolio of hybrid work solutions across large and growing markets. Poly's

strong technology, complementary go-to-market and talented team will help to drive long-term profitable growth as we continue building a stronger HP."

Dave Shull, Poly CEO and president, added: "I am thrilled about the opportunity this represents for Poly, our employees, partners and customers. The combination gives us an opportunity to dramatically scale, reaching new markets and channels, supercharging our innovation with a like-minded partner."

The transaction is expected to close by the end of 2022.

www.hp.com
www.poly.com

Linea Research joins Focusrite Group

Focusrite has announced the acquisition of Linea Research Holdings, the UK-based designer and manufacturer of professional amplifiers, controllers and software. Linea Research is the ninth brand to join Focusrite Group, including Focusrite, Novation, Ampify, ADAM Audio, Martin Audio, Optimal Audio, Focusrite Pro and Sequential.

Linea Research was formed in 2003 by a team of experienced professional audio specialists, and it designs, develops, manufactures and markets professional audio equipment globally. Its products include a range of amplifiers, including the Martin Audio M Series, together with Digital Signal Processors, audio networking and software products. Two of the original founders, Davey Smalley, commercial director, and Ben Ver, engineering director, will continue to lead the business post-acquisition.

Focusrite's subsidiary Martin Audio is a customer of Linea Research – with its technology behind the iKON amplifier series that powers Wavefront Precision line arrays seen on live tours and at festivals such as British Summer Time in Hyde Park.

The acquisition strengthens the supply of amplifier modules for Martin Audio and will enable greater integration of loudspeaker and amplifier technology with Martin Audio products. However, it is also the intention to continue to develop the sales of Linea Research

products through third-party distribution and to OEM loudspeaker customers. By extending the group's business into new products and markets, which complement its existing offerings, the acquisition is strategically aligned with the group's aims of growing the core customer base, expanding into new markets and increasing lifetime value for customers.

Tim Carroll, CEO, Focusrite, said: "We know the Linea Research team well, given that Martin Audio is a major Linea Research customer. This will lead to many synergies and is expected to improve gross margin for both Martin Audio and the wider group. We are all excited about the opportunities and possibilities that lie ahead with the collective expertise of the Linea Research and Focusrite Group R&D and sales teams."

In a joint statement, Smalley and Ver commented: "Having seen the support and growth of the brands within the group, we believe this provides us with a secure foundation to further our R&D efforts and product portfolio, strengthening the Linea Research brand while continuing partnerships with our longstanding OEM partners. This can only be a good thing for our customers, end users and very much our staff."

www.focusriteplc.com
www.linea-research.co.uk

AES creates new loudspeaker measurement

WORLD

The Audio Engineering Society has announced the adoption of brand-new standard for loudspeaker measurement, AES75-2022. Predictive evaluation of loudspeaker performance based on published specifications has traditionally been challenging due to inconsistencies in both measurement procedures and in how measured parameters are reported. Attempting to remove these obstacles, AES75 is the result of extensive work by the AES Standards Committee's SC-04-03-A Task Group, co-chaired by Merlijn van Veen (senior technical support and education specialist at Meyer Sound) and Roger Schwenke, PhD (Meyer Sound senior scientist and innovation steward).

"The work of the drafting group was deliberate and thoughtful as they carefully refined the standard," stated AES Standards chair, Bruce Olson. "AES75 will no doubt join the most impactful standards that the society has published in its long history of providing the audio industry with critical tools for analysing the performance of audio equipment and ensuring interoperability."

Roger Schwenke

"Until now, reading an SPL number on a datasheet often inspired more questions than answers regarding test signals used and procedures for measurement," furthered Schwenke. "Most important to the end user is how the loudspeaker will

Merlijn van Veen

perform with typical audio signals and whether the numbers can be compared apples-to-apples with numbers from one datasheet to another. AES75 addresses these issues by providing a detailed procedure as well as a specific test signal,

M-Noise, whose RMS and peak levels as functions of frequency have been shown to better represent typical programme material."

Schwenke added: "AES75 is designed to be independently verifiable, using analysers and microphones typically used by audio professionals. By being independently verifiable, it provides system specifiers and users a much more enforceable metric to use in quotes and architectural specs."

The M-Noise test signal is based on Meyer Sound's analysis of music spanning all genres. The procedures documented in AES75 provide measurement of maximum linear sound levels by incrementally increasing playback levels until the magnitude or coherence of a loudspeaker's acoustic reproduction of the M-Noise test signal reaches an unacceptable state. The AES75 test procedures cover performance measurements of both self-powered and externally powered loudspeakers.

www.aes.org

Gun Lake Investments supports Hall Technologies

WORLD

Hall Technologies has announced that it has received an additional equity investment by Gun Lake Investments (GLI) to support the company as it pursues a rapid organic growth plan centred around product expansion. Having made an initial investment back in 2018, GLI has now increased its majority share of the business while assuming management control of Hall Technologies.

"GLI is known for building relationships leading to investment opportunities that turn into success stories. They see our potential and are giving us the resources we need to expand our presence in the professional audio/visual industry. GLI's CEO, Monica King, will assume the role of chairwoman for Hall Technologies. We are thrilled to have her aboard as we embark on this

expansion, as she adds a depth of experience and diversity to our leadership team," said Jason Schwartz, CEO of Hall Technologies. "Our engineers, sales and support staff are innovative, collaborative and connected to designing solutions that reimagine the way people live, work and play."

"We are ecstatic to take an even more active role alongside the great team at Hall Technologies as they continue to expand and excel in the high-growth professional AV market," King said. "We think there's tremendous opportunity in their core markets – including healthcare, corporate IT and education – building upon their outstanding reputation and brand."

www.gunlakeinvestments.com
www.halltechav.com

SDVoE Alliance launches Japanese website

JAPAN

The SDVoE (Software Defined Video over Ethernet) Alliance, a nonprofit consortium of technology providers collaborating to standardise the adoption of Ethernet to transport AV signals, has launched a Japanese version of its website. The site brings resources, specifications and

"We continue to invest in growing our presence in the Japanese market," said Justin Kennington, president of the SDVoE Alliance. "We have many SDVoE Alliance members headquartered in Japan, and the technology is quickly gaining in popularity in this cutting-edge market. It's important for us, as a global alliance, to provide our

membership benefits that have been translated to support the SDVoE Alliance's growing presence in the Japanese market.

In addition to industry articles, design and case studies, event information and news, the website includes a product catalogue to provide a comprehensive database featuring search, comparison and project-list tools. Users will have access to Japanese translations of the SDVoE Academy, a resource designed to provide integrators with the skills necessary to take advantage of the latest AV signal management technology.

members with the necessary resources to support their growing needs. We want to acknowledge two founding members, NETGEAR and Semtech, for the time and resources they have provided in supporting the SDVoE Alliance's new Japanese website."

The SDVoE Alliance has grown to include over 50 members shipping more than 700 interoperable products such as transmitters, receivers, transceivers, network switches, projectors, displays and infrastructure products.

www.sdvoe.org
www.sdvoe.org/ja

The Qixin team

HH Electronics comes to China via Qixin

CHINA

Prolight + Sound Guangzhou has provided the perfect opportunity for HH Electronics to announce its partnership with distributor, Qixin, which will see HH products be made available to China, more specifically in Hong Kong.

Having appointed Singapore-based Generation AV to look after its sales strategies two years ago, British Headstock Group's HH Electronics has been focusing on furthering its reach in the Asia Pacific region as well as the Middle East and Africa. David McKinney, MD at Generation AV, said: "Partnering with Qixin has widened the exposure and reach of HH in China. With Qixin's excellent technical and support team, we are confident HH customers will have a great HH experience across China. Big thanks to Daniel, Aeolus and the Qixin team for the launch of our new partnership at PL&S Guangzhou. We're off to a great start."

Ian Wright at Headstock Group said: "We are excited to be working with Qixin as our exclusive HH Electronics partner for the

China and Hong Kong markets. Their sales team is incredibly experienced with solid relationships with dealers and system integrators across the country, developed over many years. They have a clear understanding of what their customer's needs are in regard to both product and the service required to support them.

"Qixin's technical team's qualifications and market understanding are at a very high standard, and this has been invaluable as we work together to develop suitable products for both local and export markets. I am extremely confident that Daniel, Aeolus and the Qixin team can establish HH as a leading brand there. All of us at the Headstock Group wish them well with this new venture."

Edison Haung, general manager of Qixin, said: "We are so excited to be HH's new distributor for China. HH has 50 years of experience in sound technology, especially in materials and structures."

www.hhelectronics.com

NST Audio builds Australian network with GT

AUSTRALIA

Group Technologies Australasia has been appointed the new exclusive Australian distributor of audio networking brand, NST Audio. Founded in 2014 by audio design engineer Dan Cartman, UK-based NST Audio manufactures a growing range of network solutions for live sound and fixed installation.

Over the past eight years, NST Audio has made a measurable impact on the international networked audio market. In addition to its Australia-wide retail partnerships, Group Technologies is also a supplier of systems integration hardware within the install sector, offering solutions for venues, corporate, restaurants, education and more. The addition of NST Audio to its range will allow for a more comprehensive, installation-focused product availability for integrators throughout Australia.

"Keeping in line with our core principles of distributing class-leading professional audio brands, our partnership with NST made perfect sense. In addition to their outstanding performance, the overall design and exceptional reliability make NST's offerings a compelling choice for installers requiring a high-quality backend processor for their installations. We are very excited about growing the brand in the

Australian market and making these products readily available," said Anthony Touma, general manager, Group Technologies.

With GT's current catalogue already including bulk cable, power distribution, ceiling speakers and an array of other solutions aimed at accessibility and order consolidation for sector professionals, GT hopes that the inclusion of NST Audio to the Group Technologies dossier reclassifies its audio transport offerings from strong to extensive.

"Group Technologies have proven themselves as an established name in the Australian market and we are thrilled to announce our new partnership with them. They have demonstrated an aptitude for technical support and a detailed customer base. GT distribute a fantastic portfolio of manufacturers, and we are excited to be counted among them. GT are already supplying many of the markets we specialise in, and we are looking forward to the future opportunities that this will bring," said Dan Cartman, managing director, NST Audio.

www.grouptechnologies.com.au
www.nstaudio.com

Adam Hall Group appoints SeeHear.Live as Singapore distributor

SINGAPORE

Adam Hall Group has appointed SeeHear.Live (SHL) as its exclusive distributor in Singapore. SHL is one of the leading dealers for professional audio and video equipment in the country and provides exclusive distribution of the Adam Hall brands LD Systems, Gravity and Palmer.

Founded in 2017, SHL offers customers from the live event, fixed installation and studio sectors a large range of products and services. The online retailer's comprehensive offering also includes technical project consulting and a comprehensive after-sales service.

"It's a pleasure to work with the Adam Hall Group. The demand for quality AV products in Singapore is growing steadily," said Eric Heng, manager at SeeHear.Live. "By distributing LD

L–R: Glenn Lin and Eric Heng

Systems, Gravity and Palmer in Singapore, we can offer our professional customers a wide range of premium solutions for their projects."

Glenn Lin, Adam Hall Group business development manager, Asia Pacific, said: "With SHL, we have an experienced and broad-based distribution partner in a market that is extremely important for us. As an online retailer for pro audio equipment, SHL supports us in positioning the LD Systems, Gravity and Palmer brands even more internationally. We look forward to future cooperation and more reference projects in Singapore."

www.adamhall.com
www.gravitystands.com
www.ld-systems.com
www.palmer-germany.com

PCI celebrates 30 years of QSC distribution

L–R: Mishka Chen and Shaolei Liu

CHINA

QSC has announced that Beijing Oriental Prime Connections Film/TV Technology (PCI) is celebrating its 30th anniversary as a QSC distributor. PCI was appointed as a distributor in China by QSC founders – Pat Quilter, Barry Andrews and John Andrews – back in 1992. Originally only selling amplifiers, PCI offers customers in China the full QSC and Q-SYS product portfolio to serve various vertical markets.

"It is indeed exciting to have PCI celebrate its 30th year as a QSC distributor in China," said William Chan, managing director, North Asia, QSC. "Since then, the China market has evolved and grown significantly. PCI has done an excellent job in helping QSC to grow its market

share in China and has exhibited a strong passion and dedication to the QSC brand. We would like to extend our heartfelt thanks for their outstanding commitment and look forward to continuing our strong partnership for many years to come."

"We are really excited to have collaborated with QSC for 30 years," added Shaolei Liu and Mishka Chen, owners of PCI. "QSC has continuously brought new product developments to market that are second to none. We are excited and eager to see what the future holds for both QSC and PCI in China."

www.qsc.com

Analog Way launches V2 Indonesia

INDONESIA

Analog Way has announced the signing of a distribution agreement with V2 Indonesia, a subsidiary of PT M Cash Integrasi Tbk. The distributor is a digital tech company and provider of audiovisual

innovative technologies with high-end customers in the rental and staging, broadcast and house of worship markets. Let's take on the future together!"

solutions for a variety of installation projects within corporate and government sectors, media and communications, consumer electronics and rental events. Headquartered in Jakarta, V2 has offices in both Surabaya and Bali.

"We are proud to work with Analog Way who shares the same vision of innovation and leadership in the AV digital ecosystem," said Rudi Hidayat, CEO of V2 Indonesia. "We aim at developing with Analog Way the implementation of

"Analog Way has always been the preferred choice for our customers in houses of worship and rental and staging," said Guy de Souza, Analog Way's vice president for Asia. "As we look to strengthen our representation in Indonesia, we believe V2 Indonesia is the right partner to grow these verticals with us."

www.analogway.com
www.v2indonesia.com

Mahajak Trio Electronic to distribute Stem Ecosystem in Malaysia

MALAYSIA

Shure has launched the Stem Ecosystem in Malaysia. The audio-conferencing products will be distributed by newly appointed distributor Mahajak Trio Electronic (MTE). Virtual meetings have become essential for businesses globally and are expected to continue in importance as hybrid work arrangements result in less travel. Stem Ecosystem solutions promote the mixing and matching of devices to create the desired audio pickup in any collaboration space from small collaborative spaces to large enterprises.

The current portfolio includes wall and table speakerphones, a ceiling microphone that syncs with networked loudspeakers and dedicated control systems forming a complete audio package.

"The solution is suitable for organisations of any size seeking a straightforward and customisable experience that can help users save cost through its effortless, no-programming approach," commented

Shure director of sales, Southeast Asia, Eric Ong. "Shure can offer a more diverse array of audio-conferencing solutions for a wider variety of customers. This is in line with our Southeast Asia growth strategy to bring quality audio to the work environment. With Malaysia being an important market with strong growth potential for professional audio-conferencing solutions, we are happy to appoint MTE as our distributor for Stem

Ecosystem. We believe that having MTE as our distributor will expand our reach and make Stem Ecosystem even more accessible to the Malaysian market."

Incorporated in 2010, MTE distributes a comprehensive range of professional audio equipment in addition to providing consultancy services, technical advice, training and repair services. "We are absolutely excited about Stem Ecosystem," added MTE executive director, Edwin Lau. "Our coming onboard and working together with Shure at this time couldn't be more perfect. The pandemic has created a huge vacuum for upgrades in audio-conferencing solutions where businesses are eagerly searching for flexible, plug-and-play options. As most enterprises are transforming away from the old rigid office design, we are confident that Stem Ecosystem is the ideal and effortless solution moving forwards. SMEs will be particularly delighted to have a solution that doesn't require heavy capital outlay and technical resources to set it up."

www.mahajaktrio.com
www.shure.com

Calrec exclusively partners with D2N Technology Solutions

L–R: Jason Owen with Calrec's regional sales manager, Robert Davidson

AUSTRALIA

Calrec has reached an agreement with D2N Technology Solutions to be its exclusive technology partner and distributor in Australia. Calrec's regional sales manager, Robert Davidson, explained: "With D2N the reasons for partnership were clear; they understand the importance of customer communication, service and support which Calrec also values highly. In addition, their enterprising sales and marketing strategies have impressed because they, like us, understand that even a specialist industry like broadcast needs a proactive approach considering the rapidly changing technology landscape. The core values of D2N's business very much align with Calrec's."

Jason Owen, managing director at D2N Technology Solutions, said of the distribution deal: "Calrec's presence is truly global with customers in every market across the world and their engineering quality is excellent. Audio mixers today do a lot more than just

take signals in and send them back out. Now companies like Calrec must cater for local and remote sources, virtualised product and integrate seamlessly into IP workflows. Innovation and change are facts of life in a business like this and Calrec handle those better than anyone else."

D2N is now selling and supporting Calrec's entire range of mixers and IO devices; something Owen sees as an enormous plus for the Australian market. "Our ability to understand and support our customers is a real strength for us. We share that 'show must go on' mindset with Calrec and that is exactly what Calrec's customer base expects. We also have excellent connections with the vendors that have synergy with Calrec, so we can deliver a far more comprehensive package than most."

www.calrec.com
www.d2n.com.au

Sonance, James Loudspeaker and IPORT come to Asia

APAC

With immediate effect, Generation AV has been appointed as the representative agency for Sonance, James Loudspeaker and IPORT in Asia. Founded by renowned ex-Biamp and Harman personality David McKinney, Generation AV was established in 2019 to better serve the Asia Pacific market for the professional AV industry.

"David McKinney and his team will be a great asset to our customers in Asia, serving both the commercial and residential markets," explained Sonance VP international sales, Kent Sheldon. "As we were looking for a way to become closer to our customers in Asia, and to be able to provide better support, Generation AV was the obvious choice. Their understanding of the unique market dynamics and their reputation for providing the highest levels of customer service makes them an exciting addition to our team."

The Generation AV professional portfolio comprises HH Electronics, iMAG Systems, LEA Professional, Martin Audio and Optimal Audio. With the assembly of a residential AV portfolio, the Singapore-based business will assume sales strategy, account management and technical support duties for the Sonance, James Loudspeaker and IPORT brands in the Asian market.

"We are very pleased to be adding Sonance, James Loudspeaker and

David McKinney

IPORT to Generation AV's portfolio," commented McKinney. "From a product, technology and design perspective they have been leading the game in both the residential custom install market and in the commercial channel. We see great opportunity for all three brands and look forward to expanding the customer network in Asia. The Invisible Series has already experienced much success across various parts and the Connect Pro Series from IPORT is gathering a lot of attention."

www.generationav.net
www.iportproducts.com
www.jamesloudspeaker.com
www.sonance.com

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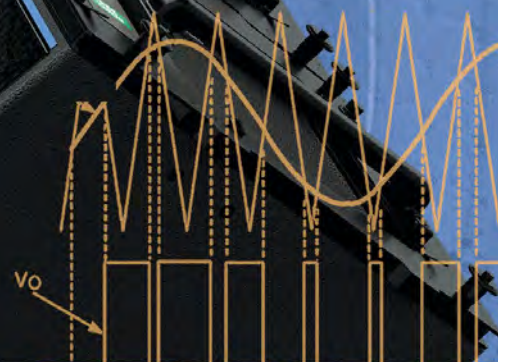
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Changing of the guard as Hideaki Onishi becomes CEO at Christie

WORLD

Hideaki Onishi has been named as the new chairman and CEO at Christie, replacing existing chairman and CEO Kazuhisa Kamiyama. Onishi has more than 30 years of management experience gained at various positions within Christie's Japanese parent group, Ushio Inc, while Kamiyama will return to Japan to take up a role at Ushio's Tokyo-based headquarters.

"It's a great honour to lead Christie," Onishi commented on the new role. "Christie has a proud legacy of continued innovation, in its products, manufacturing and in its ever-evolving business models. I aim to bring strong

leadership and to honour principles of respect, transparency and integrity. Kazuhisa's work was pivotal in navigating Christie through the many challenges faced in both the industry and the wider economy in recent years. I look forward to holding open conversations with all levels of the Christie team globally to learn more."

Onishi has amassed a broad and extensive range of experience in various roles at Ushio. Highlights include being entrusted with guiding the manufacture and sales of the printed circuit board (PCB) exposure machines that Ushio gained in its 2012 acquisition of ADTEC

Engineering. The next five years saw the business reach a position of strength, which culminated in his appointment as president of Ushio Asia Pacific in 2016.

Kamiyama concluded: "I would like to thank everyone at Christie for their hard work and dedication. Together, we have overcome unprecedented adversity and prepared the company for a prosperous future. I leave knowing the company is in good hands with Hideaki, and I look forward to seeing continued success for Christie."

New chairman and CEO, Hideaki Onishi

www.christiedigital.com

Shure makes Sharma its South Asia senior manager

SOUTH ASIA

Shure Incorporated has announced that Ravi Sharma has been appointed to senior manager for South Asia. In this role, Sharma will manage and develop the business channels across India and the rest of South Asia. With 15 years of experience in the industry, he previously worked for Bose Professional India as well as Yamaha Music India.

Sharma will also be responsible for leading the go-to-market team who are instrumental in releasing new products

Ravi Sharma

and creating demand for solutions from Shure across several markets. He will identify and execute sales and marketing strategies to address the growth potential in India and the region of South Asia.

"We are delighted to have Ravi on the team. He will help us drive the next phase of our Market Development presence in the region. With his strong experience in the industry and being based in India, he will be closer to the market to identify and act on opportunities together with

the existing team in place," said Chicco Hiranandani, director of Shure for MEA and South Asia.

"I am very excited to be appointed as senior manager, and I can already count on an exceptional team and channel partners to help us achieve our goals, in step with the constantly changing needs of our customers and today's rapidly transforming markets," commented Sharma.

www.shure.com

Ana Domínguez and Rodrigo Crespo join FENIX Stage

WORLD

Ana Domínguez, management and control administrative, has joined FENIX Stage as the new lead of the logistics department. She will deal with both national and international shipments, looking strategically for the most competitive route based on the speed, safety and cost of all transport options.

"After more than 15 years working as an administrative and team leader in internationally well-known groups of companies, I have realised how important it is to deal with customers and their products in a customised way. The efficiency and fast resolution in which we can provide a solution to their needs has a direct effect on the purchase experience and the opinion they have of our brand," Domínguez said.

"I am very happy to be part of the FENIX Stage team. It is a competitive and very professional company that has an excellent relationship with customers, which is something I value. I have joined at a time when the logistics industry is uncertain and changing, so the position requires flexibility, an open mind, resolution and speed in negotiations and taking decisions. It is without doubt a very good opportunity to continue growing and developing my skills."

Ana Domínguez

Rodrigo Crespo, a mechanical engineer with a Masters in Design and CAD, has also joined

Rodrigo Crespo

the team but in the technical department within the R&D area. He will participate in

the development of new products, as well as improving the existing ones.

"Working in an environment with professional people with experience in the industry, as well as product knowledge, is an amazing opportunity for my learning and professional career. FENIX Stage is an ambitious company with big challenges and objectives that involve a continuous process of improvement and creation of new projects. This is a working environment in which I've found the motivation and energy to give the best version of myself."

www.fenixstage.com

Harpum gets down to business with EM Acoustics

WORLD

British loudspeaker company EM Acoustics has announced the appointment of Roger Harpum to the position of business development manager. A well-known figure in the professional audio world, Harpum brings nearly 30 years of experience and an abundance of knowledge to the role.

"A chance conversation with an industry friend in December stirred something in me and I decided to make contact with Mike Wheeler in January," explained Harpum. "Following further communication, an eye-opening factory tour and two very productive meetings, we all felt that the synergy between us was worth investing in.

"Joining EM at this stage in their journey is incredibly exciting and having spent time listening to the range of products I have absolutely no doubt that a move to the next level is well under way," he continued. "In Mike and Ed the industry has two visionaries who have built a successful company from the ground up over the last 20 years, and their products reflect their vision. I can't tell you what it means to stand in front of a product and be genuinely impressed rather than indifferent, or worse,

L–R: Ed Kinsella, technical director; Roger Harpum, business development manager; Greg Clarke, system design and client liaison; and Mike Wheeler, operations director

disappointed. There's nothing that disappoints within the EM range – on the contrary, it's all impressive if not downright breath-taking. I can't wait to get out there and start introducing EM Acoustics to a wider market."

"The timing was perfect for all of us," said Wheeler. "We've navigated the pandemic and come out front-footed and confident in our approach, and our product range has had some very significant recent additions like the Reference Series.

This means that we are able to offer complete, front-to-back, high-quality solutions for all of our target applications. The market perception of EM Acoustics has already changed significantly, and we think Roger is ideally placed to help us continue that trend."

After nearly two years away from the industry, Harpum said he was ready for his next challenge. "The break has been a wonderful experience that has allowed me to pursue all sorts of other interests. I feel thoroughly invigorated and ready to play a major role in the company's growth."

Wheeler concluded: "Roger is an ideal fit for us – we connected immediately, and it was clear that we shared the same values and work ethic. That's hugely important to us at EM, and I have no doubt that Roger will be a great ambassador for us in the field. We're thoroughly looking forward to working with him, and we're sure the industry is glad to see him back too!"

www.emacoustics.co.uk

Subash to take India by storm

INDIA

Harman Professional Solutions has announced that Amar G Subash will lead business for India, while continuing in his role of vice president and general manager, Asia Pacific. Subash reports to Jaime Albors, senior vice president, global sales.

In his expanded role, Subash will lead the India team in serving the region's customers with comprehensive integrated systems, including solutions for corporate, education, government, hospitality, large venues, tour sound and lighting, cinema, broadcast, retail and ecommerce. By leading teams across Harman Professional offices in Singapore, Japan, Korea, Australia and now India, Subash will bring the organisation closer to channel partners and end customers, and chart a course for further expansion in Asia Pacific territories.

"Amar's exemplary record and global experience has been lauded across Harman and also externally amongst our channel partners and end customers. With the example

Amar G Subash

that he has set by leading the APAC region, we are confident that he will strengthen our India business further. We are hopeful to see some upward momentum in growth and achieving more success in the region," concluded Albors.

"I look forward to elevating experiences of our stakeholders while taking the game a notch higher," said Subash of his appointment.

pro.harman.com

Jez leads the way as regional channel manager

SOUTHEAST ASIA

Jez Lim

Analog Way has announced that Jez Lim has joined the company as regional channel manager for Southeast Asia. "I have worked with Jez in the past and I am looking forward to working with her again to build the Analog Way brand in Southeast Asia," said Guy de Souza, Analog Way's vice president for Asia. "I am sure the experience she brings with her from the display industry will definitely contribute to our success."

At Analog Way, Lim will be responsible for developing sales in Southeast Asia, with a primary focus on Singapore and Malaysia. Before joining Analog Way, she was responsible for display projects and sales at Leyard and Planar for global key accounts in Southeast Asia and for opening and developing new sales channels.

www.analogway.com

Pike joins The P.A. People

AUSTRALIA

The P.A. People has appointed Tim Pike to its Venue Engineering team in the role of state manager. "Tim will be based out of our new Queensland office on the Gold Coast," said Peter Grisard, manager – Venue Engineering. "Tim's appointment alongside the creation of a local presence in Southeast Queensland are the first steps in extending our commitment to the servicing of performing arts centres, theatres and venues on a national basis."

Having worked in theatrical engineering for the majority of his working life, Pike started off with Ray Calcutt in 1999, before eventually becoming the services manager for Jands in 2014. Pike said: "In conjunction with the existing service team based in Sydney and a strong network of field technicians located across the East Coast, The P.A. People are now well positioned to expand their contract maintenance and breakdown services to stage machinery and venues."

"This is also a great opportunity for The P.A. People to further support our events clients and projects outside of Sydney," said Nicky Dodds,

Tim Pike

manager, event communications. "Having a local base to help support our existing clientele will be invaluable, as well as creating the opportunity to expand our offering for our new Venue Engineering customers in Queensland."

www.papeople.com.au

All generational change at MA Lighting Technology

WORLD

MA Lighting Technology has announced that Michael Adenau has handed over the management of the company, heralding a generational change. His successors are Gerhard Krude, already a long-time MD, and newly appointed managing director, Alexander Schneider.

Schneider has been with the company for a number of years and was instrumental in the development of the latest console

L–R: Krude, Schneider and Adenau

generation, grandMA3. Adenau will remain with the company as a shareholder, also providing advice and support to his colleagues. MA Lighting will focus on its continuity and will keep on concentrating on the development of professional hardware and software for the lighting industry.

www.malighting.com

Kramer appoints APAC president Marc Rémond

APAC

Marc Rémond

Marc Rémond has been appointed Kramer APAC president. This move is a key step to support rapid growth in the company and strengthen its relationships with customers in the territory. Kramer will make its Singapore offices its new APAC regional HQ.

"Building on Kramer's strong performance, we are now strengthening our leadership team and laying a strong foundation to support exponential growth," said Gilad Yron, CEO, Kramer Electronics. "This is an instrumental element in building a scalable organisation that excels in providing solutions that meaningfully power the physical-digital world. As we shift our centre of gravity towards the customer, having senior executives in the regions where our customers are will deepen our market intimacy and increase our responsiveness to customer needs."

Rémond has 23 years of experience in selling and marketing IT and communications solutions and services to enterprise, government and educational institutions, establishing himself as a renowned international business executive and entrepreneur. With his previous roles based at Barco and Poly, he has extensive experience in the AV and collaboration field.

Marc Issan, Kramer VP of sales, added: "I am very pleased to welcome Marc to our executive team. We are all looking forward to working with him to accelerate the buildup of our regional operations and steer Kramer to a new level of growth."

www.kramerav.com

Adamson names Sallaberry as head of education

APAC

Adamson Systems Engineering has selected Carlos Sallaberry as its new head of education and application engineering for APAC. A seasoned professional, Sallaberry has held previous mix engineer and systems tech roles at Creative Technology, Eighth Day Sound, LD Systems and Clair Brothers, and also worked at Sony Music International where he was A&R coordinator for the organisation's Latin division.

Ben Millson, MD of Adamson, APAC, said: "With the tremendous growth we've had in APAC, and to continue to support that growth and increasing customer base, we needed to bring in a high-calibre, very experienced individual – someone who can confidently deal with potentially demanding live show situations, and deliver training and support at a high level, while having a full understanding of what our customers go through on a daily basis from years of his own experience in the same field."

Sallaberry added: "I am really excited to take this important step in my career. I am pleased to join a team that is focused on offering systems that provide cutting-edge

Carlos Sallaberry

innovations to its user base. I look forward to providing ongoing local support and broadening Adamson's training and technical assistance programmes in the APAC region. And I am excited to add my contributions to the great team that I work with globally with Adamson."

www.adamsonsystems.com

Dalis 860 LED cyclorama lights aid NTT's "purely vocal feast"

TAIWAN

Robert Juliat has announced that 36 of its Dalis 860 cyclorama lights, complete with mini yoke and Quickrig systems, have been supplied to the National Taichung Theater (NTT) in Taiwan by DLHG. The NTT has three main venues: the 2,007-seat Grand Theater, the 794-seat Playhouse and the 200-seat Black Box theatre. The main location for the Dalis 860 fixtures is the Grand Theater, which hosts a broad programme of musicals, opera, ballet, modern dance and drama. The Dalis 860 cyclorama fixtures have been installed in truss and groundrow positions to light the venue's impressive 18m x 10m (WxH) cyclorama with a smooth and even coverage.

"The mini yoke and Quickrig system make it easy for us to transfer the Dalis units to our other venues as required," said the venue's head of lighting, Simon Hsieh.

No stranger to Robert Juliat products, having invested in RJ Cin'k 350LF Fresnels and Digitour 6S dimmers in the past, Hsieh and his team were introduced to Dalis by Jackson

Yu of DLHG. "The NTT team was looking for an LED product with good colour mixing and rendering, and multifunctional control via DMX and Ethernet protocols," said Yu. "The Dalis 860 ticked all those boxes as well as being an award-winning fixture by a well-known and respected brand."

The NTT took delivery of the Dalis 860 units in 2020 but was unable to put them to immediate use due to closures enforced during the pandemic. Now the venue has reopened, the technicians have had the opportunity to use the Dalis fully and are said to be very impressed. "The colour mixing and colour

saturation of the Dalis 860 are really amazing," said Hsieh. "We also like its brightness, the versatility of the optics and its adaptability, which enables us to floor mount or rig it. The engineering quality is robust and reliable, and we have the flexibility of being able to daisy-chain the Ethernet to DMX control."

One of the first productions to use the new Dalis cyclorama lighting was the NTT New Year's Eve concert in the Grand Theater. Publicised as "a purely vocal feast", the audience was treated to a festive, musical evening featuring award-winning acapella vocalists who showcased a wide variety of music pieces and styles from around the world.

The lighting designer for the event, Cheng-Wei Teng, produced a spectacular lighting design worthy of such a celebration to which he brought his trademark pixel lighting effect. He rigged one row of 12 Dalis 860 units behind the venue's projection screen from where he rear-projected cyclorama colour and pixel effects from the groundrow position and used a second row of 12 units to colour the haze circulating in mid-air.

Teng said: "I was impressed with the power of the Dalis 860. The colour mixing is good, but the powerful brightness and the fullness of the saturation is amazing."

www.robertjuliat.com

The Indian Music Experience Museum chooses QSC

INDIA

The Indian Music Experience Museum (IME), supported by Brigade Group, has chosen QSC to fully equip its performance theatre with a TouchMix-16 Compact Digital Mixer, K.2 Series active loudspeakers as mains and CP Series compact powered loudspeakers for stage monitors. The upgrade is in line with the IME's philosophy to help performance artists enjoy the process of creating music and making it accessible and inclusive for all.

Musicians are able to perform and record compositions in this soundproof theatre space, which is available for both half- and full-day rentals. The multipurpose theatre, which can accommodate up to 100 audience members, is ideally suited for performances, classical musical concerts and unplugged sessions.

"With a well-equipped yet intimate performance theatre, we look forward to supporting independent musicians by providing a space for creating music and sharing with a community of music lovers," said Manasi Prasad, director of the IME.

Indian Music Experience Museum

"The IME has already become a hub of music in the city and, with the installation of the powerful sound system from QSC, we hope to

further grow Bangalore's preeminent position as the live music destination of the country."

"The IME Performance Theatre is a critical application area where the performance artists require a flawless, clear and consistent audio," explained Raghunandan Rao, assistant manager, sales, QSC. "The Intrinsic Correction feature and DMT technology in the QSC loudspeakers provide even distribution of critical high, mid and low frequencies in the performance hall which helped provide the desired output coverage. In addition, the TouchMix digital mixer makes effortless achievement in expected output levels/EQs as per the artists' and mix engineers' requirements."

Speaking about the partnership, Rajesh Mittal, managing director, QSC, said: "QSC encourages the artist community and works towards providing them with solutions and support to empower them to

confidently create impactful connections and memorable experiences. The new IME installation is a great example of that same vision."

Among the first to use the space was the metal band Inner Sanctum, who recorded a performance for the TouchMix Sessions online video series. Reflecting on their experience, Chintan, lead guitarist of the band, said: "It was an absolute pleasure working with QSC and the Indian Music Experience on the TouchMix Sessions. QSC is a company we've respected ever since our inception because their products elevate our sound and bring out the much-needed clarity in metal music. This, coupled with the amazing IME museum, made for the ideal venue. I can't wait to do this again."

www.indianmusicexperience.org
www.qsc.com

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Robe lights NZ sporting awards ceremony

NEW ZEALAND

The 2022 Halberg Awards celebrating the country's sporting excellence have been held at the Spark Arena in Auckland with a seated audience of 100, one-tenth of the usual capacity due to a recently imposed Covid red alert.

The set, lighting and visuals were designed by LD Jason Steel together with Simon Garrett of Big Picture. The company delivered lighting and visual equipment including nearly 100 Robe fixtures, having recently purchased a quantity of Esprites, MegaPointes and Tarrantulas from local distributor, Jands.

A 25m cross-shaped LED video surface dominated the diamond-shaped stage, which featured wings and a large central runway. With only 16 tables in the arena, lighting and visuals played a major role in enhancing the energy of the show and translating it onto camera for viewers of the Sky TV broadcast.

The Esprites were positioned on two chevron-shaped trusses above the stage, alternated with LEDWash 600s and used for multiple tasks, from primary key lighting on performers to washing the stage to illuminating two large banners down the room. They also created gobo effects, breakup washes and animations above the tables.

"The light output is great; it's strikingly flat and even, which meant we could save time on programming all the front washes and specials," explained Garrett. "They are very bright for the size, and we found we could cover the entire stage with only six lights. They were also great for picking out the banners and other core set elements needing accurate shuttering. They are great workhorse fixtures that are also nice and quiet."

Also deployed were 12 Robe Tarrantula LED wash beams, six BMFL Blades, 24 MegaPointes, 16 LEDBeam 100s and 16 LEDWash 600s, programmed by Steel on a grandMA3 lighting console. The MegaPointes were positioned on the floor in two offstage L-R banks and a row across the back, used
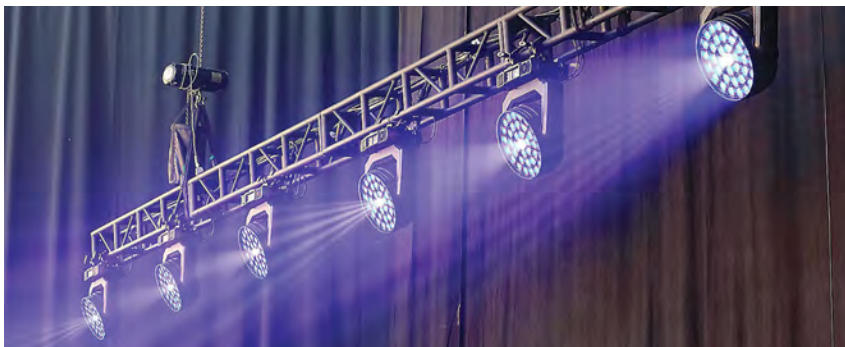
Halberg Awards 2022

for power effects and beam work. The two angled banks of MegaPointes were each augmented by a row of little LEDBeam 100s further onstage, mirroring the exact angle.

The Tarrantulas on the back overhead truss, together with the Esprites, MegaPointes and LEDWash 600s, formed the backbone of the rig with the six BMFL Blades on the back upstage truss providing additional back light. Other lights on the rig included 80 LED pixel battens which supported the clean digital look created by the LED cross and the space around it.

The event is named after Olympic champion Sir Murray Halberg and raises funds for the Halberg Foundation charity which enhances the lives of physically disabled New Zealanders by enabling them to participate in sport and recreation.

www.robe.cz

MyEvent brings university graduates together with Magewell

Melbourne-based MyEvent Productions, a company providing live event technical solutions to clients across eastern Australia, took on its largest livestreaming project to date, streaming more than 20 simultaneous feeds for RMIT University's recent graduation event. MyEvent Productions chose Ultra Encode universal livestreaming encoders from Magewell to provide the reliability it required.

With RMIT a highly ranked university focusing on technology, design and enterprise, the

The control room

graduation event included students from more than 200 countries and the client emphasised the importance of graduates and their family and friends sharing the moment – albeit worldwide. "We were tasked with getting livestreams of feeds from all 21 presentation stages out to the world," explained Duncan Underwood, livestreaming and production manager at MyEvent Productions. "The most we had ever done before was four simultaneous livestreams, so we had to bring in additional products."

MyEvent had previously used Magewell solutions on a smaller-scale project for point-to-point delivery of SRT streams. This experience, along with recommendations from industry peers, led Underwood to choose Ultra Encode for the RMIT event. "I'm always talking to other professionals about their experiences, and the Magewell name keeps coming up as a trusty product," he recalled. "So even though the Ultra Encode product itself is fairly new, I had no hesitation in buying multiple units for this project."

MyEvent now owns 17 Ultra Encode units, provided by Corsair Solutions, and hired additional Ultra Encode devices from another production company to round out its needs for this project.
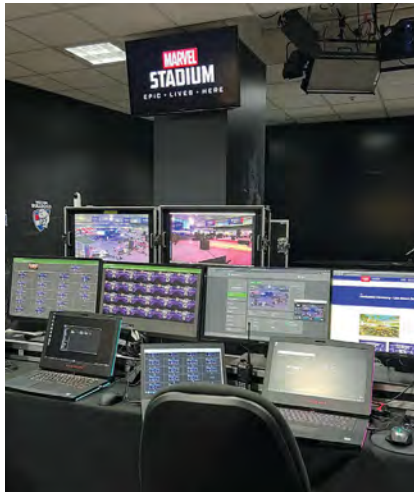
RMIT University's graduation

During the graduation event, multiple vision switchers combined live camera feeds and PowerPoint presentations from each stage. SDI outputs from each switcher were routed to the Ultra Encode devices, which encoded them into high-quality, live H.264 streams for viewing through RMIT's multiple YouTube channels.

MyEvent also took advantage of the Magewell Cloud management software to centrally monitor the status of the Ultra Encode units and access individual devices' web-based dashboards. "Magewell Cloud is an exciting development for us," noted Underwood. "It was

very useful for the RMIT event, which required us to closely monitor the infrastructure for so many devices and streams."

He continued: "Nobody else in the market is doing what Magewell is doing with the feature set and price point of Ultra Encode, making them an easy choice," he said. "While we bought them specifically for the RMIT project, they're so flexible that there's lots more we can do with them, and they're now our go-to solution."

www.magewell.com
www.myevent.io

Chiayi City Music Hall fit for the future with ETC

TAIWAN

Taiwan's Chiayi City Cultural Center has called on CINE Vision to provide a sustainable, environmentally friendly and versatile lighting solution that is fit for the future. CINE Vision selected a variety of ETC products for an upgrade to the venue's music hall, including Source Four LED Series 3 with the Lustr X8 array and CYC adapters as well as High End Systems' SolaPix series fixtures.

The centre covers more than 5,000m² and contains three buildings including a museum, a library and said music hall, which seats 943 people. Zack Lee,

the venue manager, commented: "The performance organisers are impressed by the beautiful lighting effect on the cyclorama brought by Series 3. The full-colour Lustr X8 array added with Deep Red creates a vivid and nuanced colour which feels like using traditional tungsten with gel."

The National Taiwan Symphony Orchestra and the Ming Hwa Yuan Arts and Culture Group have performed in the music hall since the upgrade.

www.cinevision.com.tw
www.etcconnect.com

Martin Audio returns to Woodside Inn

Woodside Inn has several outlets in Mumbai

INDIA

Mumbai's Bandra Woodside Inn outlet has received a substantial sound system upgrade from integrators Zoodio Pro. The newly installed system comprises Martin Audio Blackline X10 for the main PA,

supported by a Blackline X115 subwoofer, which Zoodio owner Dylan Hilton says offers tremendous output from a compact speaker. CDD6s have been added as infill for the rest of the dining area and the smoking zone.

Located in the Mumbai suburb of Bandra, Woodside Inn specialises in craft beers and inventive cuisine in the true gastropub tradition. Since it is an all-day operation, the venue management wanted ambient music to be broadcast during the day, with a livelier nighttime trade – playing retro, old-school rock and pop to crowds of up to 150. Provision has been made with BlacklineX for a small band to perform, and it will also be a perfect match for the DJ nights they plan to have in the future. As for the source feed, a digital jukebox plays throughout the day.

"Since we have previously worked with Blackline X10s, we were confident that this would again be a viable option," explained Hilton. "For the bottom end, we made use of a Blackline X115, as portability was the driving factor and the owners didn't want to sacrifice any space. In the seating area, our primary focus was for vocal clarity, even at lower volume levels, while still managing to capture the evening vibe. CDDs seemed to be the best option for this."

Zoodio was first approached by Woodside Inn owners Neighbourhood Hospitality back in 2011. "They needed a new sound system for their outlet in Andheri and we recommended Martin Audio's AQ8s," recalled Hilton. "The response they received from the crowd back then, and the reliability the system provided, then helped us win more of their projects. We upgraded the system in another project at Woodside Inn Colaba, Mumbai, as well as the new Woodside Inn in Lower Parel. Martin Audio became the go-to brand for them."

The Bandra unit now continues the tradition. Having installed the upper level with Martin Audio, Zoodio is working on getting the lower level upgraded to the same standard. "The system just sounds amazing, and we are really happy with the vocal clarity and the confidence the providers have given in terms of reliability," concluded general manager, Dolphy Sequeira.

www.martin-audio.com

DiGiCo in pole position at supercar event

CHINA

A networked DiGiCo system was at the heart of a mixed reality AV programme in Hangzhou during the Super 818 Car Carnival Night. The system, provided and operated by a technical design team from DiGiCo distributor Racpro, simultaneously managed extensive optical fibre runs, multiple-act FOH and monitors, AV and broadcast.

Staged in Hangzhou's 80,000m² Olympic Sports Centre, the event was created by auto internet services provider, Bitauto App, and broadcast giant, Zhejiang Satellite TV. The gala presentation alternated between two areas of the stadium: a performance stage featuring leading Chinese artists and an interactive car zone. The artist roster was a large-scale production with high channel count requirements to handle artists including The9, Into1, Cai Xukun, Guan Xiaotong, Gina, Li Chen, Shen Tang, Kid Wang Linkai, Hard Candy Girls 303 and Ouyang Nana. Meanwhile, an interactive supercar showcase featured a 360° multi-level track coupled with immersive cross-

screen technology using mixed and extended reality sequencing dynamic landscapes, including mountains, seas and urban streets.

"In my opinion, DiGiCo is the only solution provider that could cover all of the bases on a show of this magnitude," said Zhou Fengxin, technical director of Racpro and

sound designer for the gala. "I can't think of another system that could manage long-haul optical fibre, advanced AV practices, simultaneous festival-level FOH and monitors and broadcast."

The hub of the audio system was a series of DiGiCo mixing consoles connected over an

Optocore fibre loop managing multiple long-distance runs. Two DiGiCo SD5 consoles were deployed for FOH and monitor audio for the artists, while an SD8 handled AV requirements for the car showcase, along with three SD-Racks. DiGiCo's Quantum 7 console was also used for OB duties for national broadcaster, Zhejiang Satellite TV.

"Due to Covid restrictions at the time, the audience was kept to an exclusive guest list: unusual for such a large stadium," concluded Fengxin. "However, we spent 11 days working hard on the production and did not compromise on any aspect, with a full rig to provide a normal live environment for the artists and the VIP guest list. As expected, the DiGiCo consoles were amazingly easy to operate in a pressurised live environment, and were unfailingly trustworthy throughout the evening. We were really happy with the result."

www.digico.biz
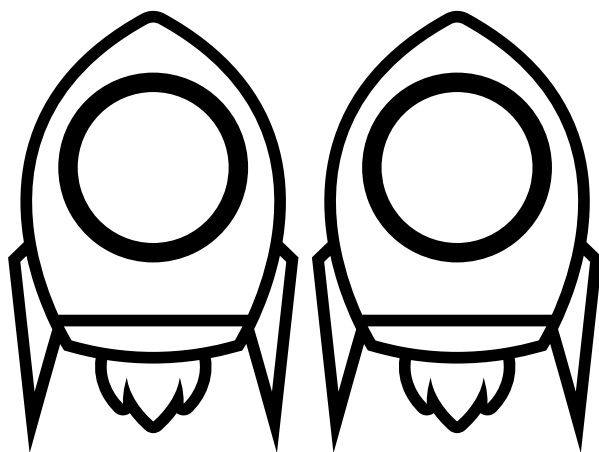
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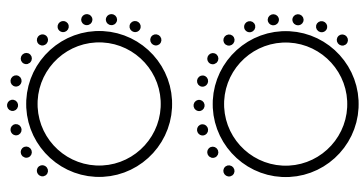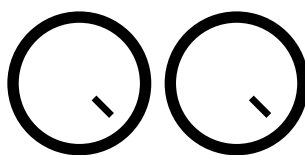
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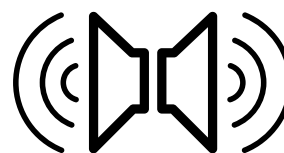
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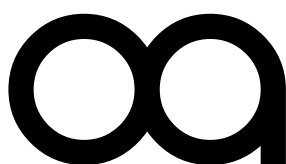
Optimal Audio

optimal-audio.co.uk

The main recording studio
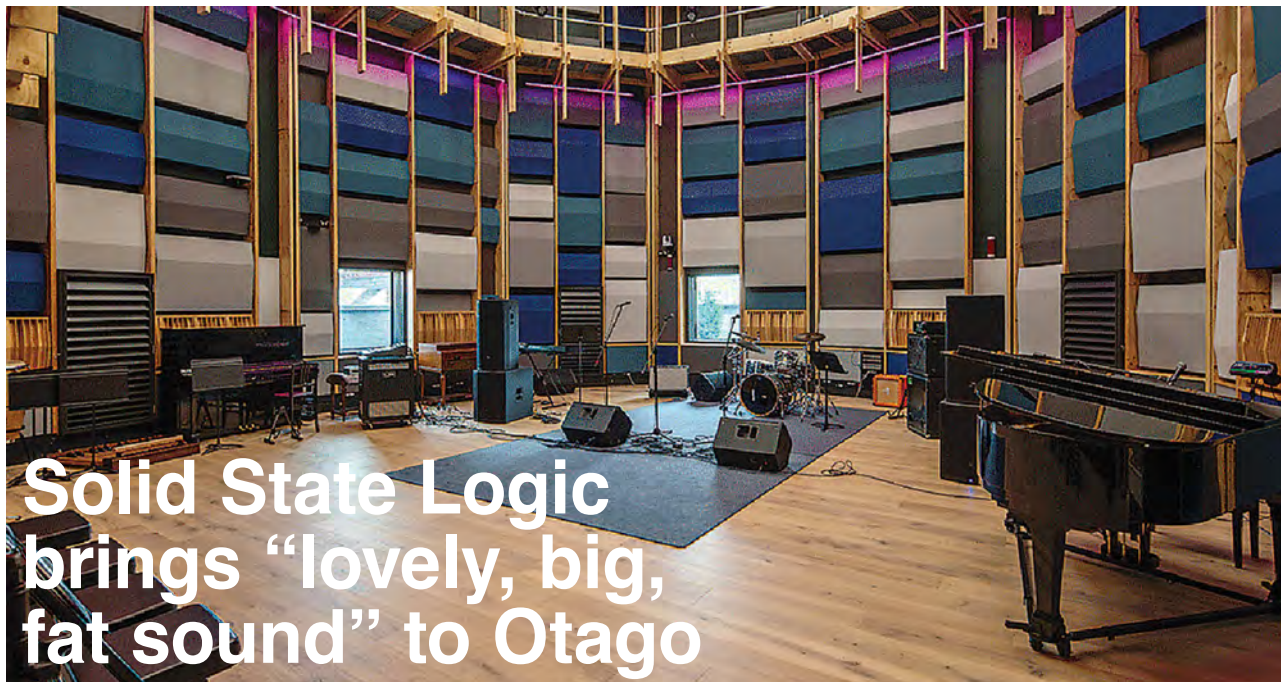
Solid State Logic brings "lovely, big, fat sound" to Otago

NEW ZEALAND

New Zealand's University of Otago has opened a new School of Performing Arts building – Te Korokoro o te Tūī – a purpose-built, two-storey complex that features a Solid State Logic Duality δelta SuperAnalogue mixing console, supplied by Amber Technology NZ, in the main recording studio. As well as supporting the school's teaching curriculum, the studio accommodates national and regional music projects and encourages community engagement through workshops and other events.

"The reputation of the Duality precedes it, both in terms of the package – the workflow and how it sits in the room – as well as how it sounds," said Stephen Stedman, studio manager and music technician at the studios. "We had a really good look at what other educators are doing around the world, where they want a real-world
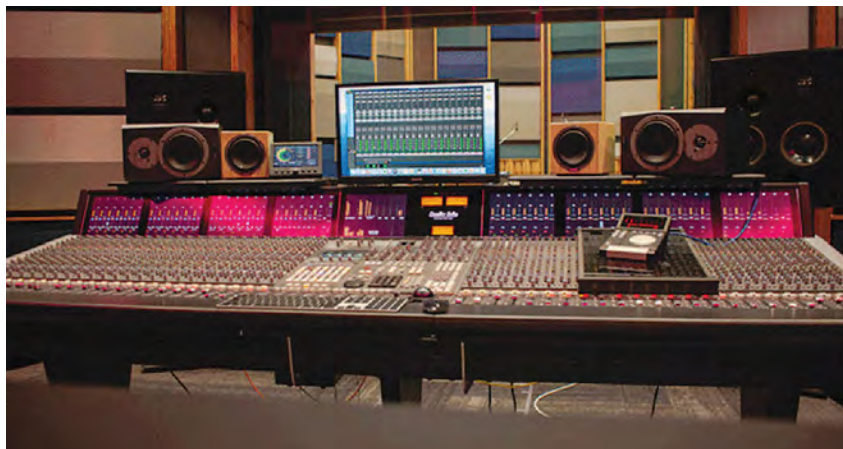
The control room

professional studio console. Duality is highly regarded and in some of the best facilities in the world, so what we are

teaching to students is relevant and aligned to what they might encounter in the outside world. We definitely wanted an analogue

workflow. And we wanted something that would demonstrate to students how a large-format console works, how it's laid out and why so many of the software applications that they use in-the-box are built the way they are built and why the plugins look the way they look. They can take that real-world experience and the in-the-box stuff starts to make more sense for them."

Additionally, Stedman said the school wanted to increase engagement with the New Zealand music industry: "So we wanted a console that would be attractive to producers, musicians and publishers, and agencies like the Australasian Performing Right Association and the NZ Music Commission."

"When we track on the Duality, we get that lovely, big, fat sound coming off it. You can wind in some harmonic distortion if you want to, but it also has a clarity, so it's got the best of both worlds. It's really musical – that's the quality that I experience with it," Stedman reported.

The new control room overlooks a two-storey live space as well as two isolation booths, one with an amp locker. Connector panels in the space feed 128 mic lines to the control room, 48 of them normalled into the Duality. "We've got a camera above the Duality so we can throw an image of the console up on the big screen for lectures or laboratory work. We've got cameras all through the building, so we can livestream. And we can route audio all over the building over a Dante network," Stedman noted.

Beyond teaching students, the university hosts various events to engage the community at the facility. "If we have the Australasian Performing Right Association people here doing a series of workshops, then the outside community can come and participate, and our students can be involved as well," Stedman said. "It's all about helping people make connections."

www.solidstatelogic.com

LEA solution connects Auckland charity to its community

NEW ZEALAND

A newly built community centre in Auckland has called on local integrator Audio Connect to provide an audio system, consisting of LEA Professional products. Established by national charity ISSO (International Swaminarayan Satsang Organisation), the centre has been built to accommodate the organisation's rapidly growing numbers. The facility will provide vital resources to the ISSO group, allowing them to cater to the needs of the local community through health and wellness and music classes, weddings, large events and seminars.

Raj Morar, manager at Audio Connect, worked with local distributor Jansen to source its audio equipment solutions. Jansen representatives recommended the LEA Professional Connect Series amplifiers as a solution for the challenges this installation presented. For Morar, a project like this may have been relatively straightforward a few years ago but now, with Covid and the battles of local lockdowns, time was of the essence. "Being able to access the amplifiers and address all six zones from our phones via Wi-Fi, made the whole process a lot easier and quicker, ensuring we met our deadlines," commented Morar.

This two-storey centre uses five LEA Professional amplifiers in total – a Connect Series 168D, three Connect 354 and one Connect 704 – all configured to drive a mix of 150 in-ceiling and surface-mount Martin audio speakers. As the installation continued during the lockdown in New Zealand, the team was

The facility will host a range of community events

able to use the LEA Professional Cloud platform to program the system offsite so, when they were finally allowed to return, they weren't under the same time pressure.

All LEA Professional amplifiers leverage the built-in Amazon Web Services (AWS) IoT Core. This cloud platform allows integrators to control and monitor critical operational data points for maintaining system health securely and remotely. Individual amplifiers or entire amp systems can be accessed and controlled

from anywhere in the world, without the need to VPN into a Local Area Network.

The client expressed a need for the venue to be futureproof. With plans to potentially run up to five events at one time, ISSO needed the ability to matrix everything for any possible scenario. "Giving the user the flexibility to be able to do whatever they want to do with the system was challenging," said Morar. "We needed to ensure it would accommodate all their future needs and give them the channel configuration for any scenario.

For this, the LEA technology, including the Smart Power Bridge, was fantastic.

"The connectivity and flexibility of the LEA amplifiers allowed us to make this all work," added Morar. "And as soon as we turned on the system and heard the sound quality, we and our customers were all blown away. We now routinely use LEA amplifiers on all our installs – LEA has definitely earned their spot as our amplifier manufacturer of choice."

www.leaprofessional.com

Audiocenter upgrade at Thai-Singapore School

THAILAND

The auditorium at Thai-Singapore International School has been outfitted with a brand-new Audiocenter sound system by Audio Knack. Recent events have led several educational establishments to upgrade and enhance their school halls with proper audiovisual equipment and professional acoustics. Thanks to a generous budget from a variety of sources, the school approached Audio Knack for the upgrade, which worked closely with supplier Gomy Electronics throughout the process.

Flown above the stage, the new FOH system consists of an Audiocenter horizontal line array system of 12 VHLA12-MKII line array modules – four per side – arrayed to cover the length of the hall consistently. An additional

pair of VHLA12-MKIIs on either side serve as delay hangs.

"At 770W AES and a max SPL of 133dB per unit, the new setup is more than powerful enough for the hall, and leaves plenty of headroom," noted Mr Boonlon from Gomy Electronics. "With a horizontal dispersion angle of 120° and vertical arraying, we made sure the sound is not only loud enough if needed but also covers the hall very consistently."

To handle the lower frequencies, six 18-inch K-LA218 subs have been installed under the stage in a line configuration. Compartments were created under the stage just to house the cabinets, so that they remain completely hidden from the audience perspective. For foldback on the stage, four Audiocenter WM212-DSP

dual 12-inch active stage monitors have been supplied for placement around the stage lip. System design and tuning was handled jointly by Audio Knack and Gomy Electronics.

"This Audiocenter system was perfect for Thai-Singapore International School, as it

surpasses all their technical specifications and audio quality requirements while remaining well within their modest budget," concluded Boonlon.

www.audiocenter.net

United Cinemas upgrades its Warriewood venue with Harman

AUSTRALIA

United Cinemas in Warriewood, Sydney, required an audio system capable of delivering clear, intelligible sound and balanced coverage to every seat in its main space – the Grand Theatre. The multiplex cinema aims to offer a premium movie-watching experience, including leather recliners with built-in phone chargers, as well as food and beverages. The facility acquired a selection of JBL Professional and Crown cinema audio solutions to achieve a fully fledged experience.

"We wanted to enhance the listening experience of the 650-plus capacity Grand Cinema Theatre," said Roy Mustaca, chairman, United Cinemas. "We selected JBL and Crown solutions for their simple-yet-effective configuration and routing capabilities. Crown's built-in speaker presets played a significant role in ensuring proper frequency response, crossover points and limiter settings."

JBL cinema loudspeakers make up the foundation of the audio system, with the installation team deploying JBL 5732 three-way speakers behind the screen for maximum output and minimum distortion in the main left, left-centre, centre, right-centre

and right channels. JBL 9310 and 9300 surround speakers, AM5215 front ceiling surround speakers and AM7215 loudspeakers were chosen for the wide left and right surround channels. Additionally, the team installed JBL 4642A and ASB6125 subwoofers to deliver low frequencies in the stage and surround LFE channels. The entire system is powered and routed by Crown DriveCore Series networked amplifiers for 7.1 channel and Dolby Atmos soundtracks.

"Our technical team worked closely with Harman application engineers to design a custom JBL audio solution that successfully delivers crystal-clear sound quality and balanced coverage," said Sam Mustaca, CEO, United Cinemas. "We are delighted with the remarkable job and would like to extend our gratitude to everyone involved in the project. Continuing our partnership with Harman, we plan to convert the Grand Theatre into a live performance venue in the near future, using BSS signal processors."

pro.harman.com

Astro adopts Atmos monitoring system

MALAYSIA

Having celebrated its 25th anniversary last year, All-Asian Satellite Television and Radio Operator (Astro) has installed its first Dolby Atmos monitoring system into its All-Asia Broadcast Centre in Kuala Lumpur. The satellite television and IPTV provider monopolises sports broadcasting in Malaysia and Brunei, for which most major sports events are transmitted to the main broadcast channels.

The UEFA Euro 2020 football games in 2021 were broadcast in UHD 4K format through a Dolby Atmos immersive sound system for the first time. Following the games, a Dolby Atmos monitoring system was cited for future incoming UHD 4K sport content. As a distributor of Wohler, JAA.S was requested to assist the broadcaster provide a solution. Equipped with a Dolby Atmos decoder option for immersive sound monitoring, JAA.S proposed a Wohler iAM-12G-SDI video and audio monitor. Incorporating two 4K/12G-SDI inputs on BNC, the upgraded version including Dolby D, Dolby D+ and Dolby E enables decoding of Atmos content from either SDI or AES3.

"We provided an iAM-12G-SDI as a demonstration unit prior to UEFA 2020," commented JAA Systems Sdn Bhd senior sales engineer, Kaartigaiyan. "It was the earliest monitoring system to be equipped with Dolby Atmos. The multichannel multi-source audio-video monitor is easy to operate, yet it is powerful enough to provide high-quality monitoring of 12G, IP-ST 2110, 2022-6 signals. The proof of concept proved to be a success, and the compact monitor ticked all the boxes for Astro's many requirements."

In addition to the iAM-12G-SDI, Astro also acquired three iVAM1-3 16-channel monitors with Dolby for their Media Suite studio monitoring. "Wohler is honoured that Astro has become the first broadcaster in Malaysia to adopt and purchase iAM-12G-SDI units with Dolby Atmos monitoring," added Wohler Technologies' APAC sales manager, Mohamad Azam. "The powerful and flexible iAM series is futureproofed to support Astro in their development of Dolby Atmos immersive audio."

www.jaasys.com
www.wohler.com

Broadcast engineer Shasikumar Nandakumaran

Reality show cast hits the road with TVU Networks

TVU Networks has announced that the cast of HaHaHaHaHa, the first travelling reality show in China, relied on TVU One mobile transmitters to conduct interviews and deliver live broadcasts on their journey across China. In the show, the 5HA Tour Group, comprised of Chinese film and television stars Deng Chao, Chen He and Lu Han, go on 10 journeys filled with surprises and challenges. They must earn accommodation, transportation expenses and everything they need on the road by completing tasks and games determined by the film crew.

In the 10th episode, the team arrives at Qingshan Village in Yuhang District, Hangzhou. People in the village had just finished the autumn harvest and were planning a post-festival party. The challenge for this episode was for the 5HA Tour to conduct multiple live broadcasts of the party, interviewing, filming and hosting the live report on their own, without help from the crew.

Due to Qingshan Village being a rather mountainous area, there was a risk of poor and fluctuating signal coverage. It was essential that the live broadcast equipment maintain stable transmission in a weak network environment, be easy to

The cast had to film themselves

use for non-professionals and be rugged enough to withstand extreme weather

and constant travel. The TVU One mobile transmitter was selected to ensure a

stable delivery of the live broadcast. Signals from three locations in the village were transmitted back to the TVU Receiver in the producer's temporary studio and production centre from the three TVU One transmitters in the field. At the same time, using TVU One's VoIP call function, the "reporters" on location maintained an interactive connection with show hosts Chen He and Li Dan at the makeshift studio. The show was broadcast on the iQiyi and Tencent platforms, receiving hundreds of millions of views and enabling the audience to enjoy the antics of the 5HA Tour Group.

"We're delighted that our technology was part of such an innovative, live programme," said Paul Shen, CEO, TVU Networks. "For the non-professional 5HA reporters to deliver and produce their own live interviews and interact with show anchors through the VoIP function, the technology had to be very easy to use. Through this experience, the 5HA reporters have inadvertently become our biggest spokespersons for TVU One – pushing it to centre stage from its usual spot behind the scenes."

www.tvunetworks.com

Sanskrit University goes hybrid with TriCaster

INDIA

India's Sanskrit University has upgraded its video equipment with NewTek's TriCaster to create a hybrid education offering that has not only made learning easier throughout the pandemic, but also offers courses online and worldwide. Students are able to access and re-watch lectures on-demand any time and in any location.

The Sanskrit University in New Delhi

Created in 2020 by an Act of Parliament, the New Delhi-based university's history dates to its establishment as a Vidyapeetha in 1962, with its main objective being to promote and spread the use of the Sanskrit language.

As with academic institutions around the world, it increasingly utilises video technology to help teach its students in a hybrid environment and has established a dynamic online presence that has enabled it to broaden its reach and bring Sanskrit studies to students far beyond its campus.

"The upgrade of our facility has helped us during the pandemic to conduct online classes, examination and evaluate the papers," commented Alka Rai, finance officer and registrar at Sanskrit University. "All the teaching, learning, examination and evaluation were completed in time."

www.newtek.com

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The Crystal Lounge finds a gem in NEXO

MALAYSIA

Located just outside Kuala Lumpur, the Crystal Lounge is a venue that showcases the Bawal Exclusive range of luxury headscarves – well known for their Swarovski

crystal embellishments. The lounge needed a high-quality audio system to play its curated music playlist, ensuring even coverage as part of the decadent experience.

In keeping with the luxe minimalist feel, the client felt it was important for the audio system's presence to be felt sonically at Crystal Lounge, with visual impact kept to a minimum. The owners turned to Kuala Lumpur-based Concept Associates, who concluded that NEXO's ultra-compact ID14 would fulfil the venue's

requirements. Part of the ID Series' appeal was its use in prestigious retail installations, meaning that the equipment was available in a range of custom colours with several

mounting options. The standard white boxes suited the colour scheme at the Crystal Lounge. Low-frequency response is provided by the IDS108 subwoofer, which is hidden from view.

Commenting on the installation, Royce Lee at Concept Audio said: "The ID14 is perfect for high-end retail spaces like the Crystal Lounge. It's almost invisible in the space, and it sounds amazing."

www.conceptaudio.com.my
www.nexo-sa.com

Thai TV5 upgrades to Playbox Neo HD with eMAM

THAILAND

Thai TV5, one of Thailand's longest- established, free-to-air television broadcasters, has chosen a PlayBox Neo playout system to replace legacy equipment at its studio HQ in Bangkok. The project was supervised by PlayBox Neo partner PS & Sons, based in the same city, and includes fully integrated eMAM. Now in its 64th year of operation, Thai TV5 is owned and managed by the Royal Thai Army, broadcasting news and variety programmes in 1080i HD across Thailand's digital terrestrial network via direct-to-home satellite.

"Thai TV5's legacy third-party system had become impractical and costly to maintain," commented David Srikalra, managing director at PS & Sons. "We recommended PlayBox Neo on the basis of its successful operation at many broadcast networks and playout facility companies around the world. PlayBox Neo's Channel-in-a-Box approach is a very logical system to install and integrates easily with third-party devices. The PlayBox Neo solution we proposed and commissioned is inherently space-efficient and can be expanded whenever required to accommodate additional channels or greater production flexibility. The user interface itself is highly intuitive, easy to learn and designed to remain

eye-friendly during long working sessions thanks to its low-glare background. PlayBox Neo also offers excellent support from initial planning, system integration and staff training through each system's proven long working life."

"We are very gratified to have been chosen as a partner in this very high-profile project," said Nut Deesamer, director of PlayBox Neo's Thailand branch. "David Srikalra and his colleagues together with the Thai TV5 operations team specified the features and

facilities they needed to allow the network to function with high efficiency and flexibility. The solution we recommended and delivered includes three Neo-20 Channel-in-a-Box playout servers based on our latest AirBox Neo-20 architecture, with built-in automated content and playlist transfer tools plus two Capture Suites, all under control from our new Multi Playout Manager. They are deployed in the main control room used by the HD channel."

"As Thai TV5 is one of Thailand's highest-profile broadcasters, the system is configured to function as main and backup with the additional protection of a cool spare," added PlayBox Neo Asia Pacific GM, Desmon Goh. "Our servers and software are closely integrated with eMAM from initial ingest, quality control, graphics and scheduling, right through to pre-transmission storage."

"The media asset management solution chosen for Thai TV is based on our eMAM Enterprise platform," detailed eMAM VP of business development, Chuck Buelow. "eMAM gives operators the tools they need to locate and preview content managed from an unlimited number of locations, including local storage, cloud storage and archive systems."

www.playboxneo.com

Ritsumeikan University shifts to hybrid learning with Bose

JAPAN

Students were eager for a hybrid learning environment

One of Japan's leading global universities, Ritsumeikan University, has adopted Bose's Videobar VB1 all-in-one USB conferencing device to ensure the needs of its 35,000 students are met both in and out of the classroom.

Kengo Kurashina, who works in the Information Infrastructure Section of the Information Systems Department at Ritsumeikan University, said: "In April 2020, a state of emergency was declared due to the global pandemic and, as a result, online classes were mainly one-way during the spring semester," describing how lessons were made available for students to watch. "However, there were many requests from students and teachers for two-way communication."

Spread across four campuses in Kyoto and other locations, the Osaka Ibaraki Campus is the newest location. The university building was designed with a variety of spaces, including a common area with a Japanese tatami raised-mat floor for group conversations and discussions and classrooms that can be opened without a boundary wall to the hallway. Realising the need for technology to support a more collaborative experience, the university explored the options available and selected equipment that provided combined audio and video capabilities for the small classrooms.

"We moved quickly to install the remote distribution equipment in all 620 classrooms," Kurashina explained. By the autumn 2020 semester, the university began conducting hybrid classes with both face-to-face and remote students attending at the same time. For classes held in medium-sized classrooms, the university realised it needed technology that combined microphone performance to capture audio throughout the space; a camera that could capture the entire classroom from a wider angle; and high-performance loudspeakers that could deliver clear audio to the entire classroom. The Bose Videobar VB1 met these needs.

"When we installed the Bose VB1 in a medium-sized classroom, the audio was transmitted clearly to the students who were participating remotely," Kurashina described. "And the VB1's high-quality microphone performance was handy in situations where students were socially distanced throughout the classroom."

Setting the VB1's exclusion zones effectively reduced the ambient room noise from the ventilation fan, which was naturally louder due to its increased use in support of the university's commitment to student health and safety. Used in classrooms with 20–30 students, the VB1 is ideal for hybrid classes, supporting the university's commitment to teach students on and off campus. The single-cable, USB conferencing device with its all-in-one camera, beam-steering microphones and loudspeaker is mounted on a tripod stand so that it can be moved freely to any position and height as needed for each class.

"With cameras and microphones in each classroom, we can easily record discussions and archive them as memoranda or minutes," added Kurashina. "In that sense, it's much more cost-effective than buying fixed cameras and recording equipment. The simplicity of the software and its ability to be intuitively customised to suit each environment – including the ability to see where the microphones are focused and the ease of setting exclusion zones – is a major attraction of the Bose VB1."

pro.bose.com

L-Acoustics' Kiva chosen for Hirakata concert halls

JAPAN

The Hirakata Performing and Visual Arts Centre in Osaka Prefecture has opened with L-Acoustics Kiva II systems in its two halls: the 1,468-seat Kansai Idai Main Hall and the 325-seat Kansai Idai Small Hall, both named after the nearby Kansai Medical University. The Main Hall stages events from music performances and plays to industry-specific conferences, and the 836-capacity first floor can act as a medium-sized hall when needed. The Small Hall also hosts theatre and music performances. The L-Acoustics systems were chosen by systems integrator Yamaha Sound Systems and supplied by L-Acoustics certified provider, Bestec Audio.

The Small Hall features hangs of five Kiva IIs and one SB15m subwoofer per side, with a centre proscenium array of six Kiva IIs. Two X8s provide stage monitoring, with four LA4X amplified controllers powering the system. The centre also has a mobile system of 12 Kara IIs, two SB18 subwoofers and four LA12X amplified controllers, shared between the two halls.

"We realised how accurate Soundvision is when we found no difference between the simulation and the post-installation results," continued Tamura. "The theatre's technical team will also be able to tap into these resources if they need to make any adjustments further down the road."

and can execute performances without technical difficulty. I am very impressed with the sound in both halls. I am sure that many more performers and visitors will be pleasantly greeted with world-

class sound in our facilities."

www.l-acoustics.com
www.yamaha-ss.co.jp

The 1,468-seat Kansai Idai Main Hall

"L-Acoustics speakers feature well-controlled directivity to provide clear sound across the audience area," explained Mr Tamura of Yamaha Sound Systems, which installed the Main Hall with L-R hangs of seven L-Acoustics Kiva II cabinets topped by one SB15m subwoofer per side. A centre proscenium array consists of nine Kiva IIs, while an X8 enclosure provides in-fill on each side of the hall. Further X8 coaxials cover second-floor balcony seats on both sides of the hall, with five X12 enclosures rigged as rear-fill for the third-floor seats. Two X8s and two X12s are used for stage monitoring, while eight LA4X amplified controllers drive the whole system.

The systems are being operated by Osaka Kyoritz Co. "With L-Acoustics' Soundvision, my team can determine the optimal angle between speakers, allowing us to easily use the mobile Kara system in different situations," said a spokesperson from the company's sound management office. "Our frequency response calculations using AutoFilter can be imported into LA Network Manager and then rapidly deployed. No detailed speaker tuning is required with these small adjustments, ensuring even more efficient coverage."

Added Mr Inoue from the Hirakata City Facility Maintenance Office: "I have already heard from performers that the systems sound great

NINE Network expands its Lawo collection

AUSTRALIA

Professional Audio & Television (PAT) has announced that it has supplied a Lawo mc²36 MKII 32-fader production console to the NINE Network for its 1 Denison Street ST2110 IP broadcast facility in North Sydney. The console was chosen for its SMPTE2110-30 capabilities, after a detailed evaluation at PAT's demo facility in the same city, where one of the very first mc²36 MKII consoles arrived fresh off its German production line late last year.

"This is the first Lawo mc² console based on Lawo's native IP control called HOME, an intuitive, easy-to-use web GUI which simplifies the AoIP experience for the user," outlines PAT's managing director, Patrick Salloch. "We are delighted and honoured that NINE have chosen Lawo technology again to expand

NINE Network's new setup

on their already impressive Lawo video processing, multiviewer and control solutions at 1D Street. To have been able to provide an mc² console to this world-class facility is certainly the icing on the cake for us."

"The NINE Network has a longstanding relationship with Lawo and PAT and it made perfect sense to consider Lawo's mc² audio solutions when expanding our audio production facilities in 1 Denison Street. The Lawo mc²36 MKII met all of our technical requirements and is the right choice for our ST2110 facility," said NINE Network's broadcast CTO, David Bowers.

www.lawo.com
www.nine.com.au
www.proaudiotv.com.au

V6 Production streams sports across Thailand with LiveU

THAILAND

Thai production company, V6 Production, has adopted LiveU's livestreaming and REMI remote production solution to provide live coverage from a series of live sports events, including the Thailand Super Series, Thai Boxing, Buriram Marathon and Midnight Marathon. Onsite support and equipment are provided by LiveU's local partner, DSC Thailand.

V6 Production was looking for a live video solution that could ensure transmission signal reliability over a large area and optimise its production costs via a simple REMI setup. After testing different solutions, V6 selected LiveU's REMI solution, combining LiveU's LU800 multi-cam 5G production-level system, with its LU300 units, to form a production workflow. Production is handled

centrally at V6's Bangkok production studio with only minimal people required onsite, with video streams being transmitted remotely to the OB switcher for recording, and direct to customers' broadcast and streaming platforms.

Vichit Yodburee, managing director, V6 Production, said: "LiveU technology proves that there is no limit to creativity when it comes to sports productions. LiveU provides signal reliability in crowded areas and over a long distance, together with the highest video quality, even when the camera is moving at high speeds. We can capture the action from multiple angles, getting up close to the athletes and drivers – even inside the cars – generating video views from anywhere for a unique viewing experience.

This enables us to offer greater value to our customers, providing a more creative and professional live production, while saving costs using the REMI workflow."

Yaal Eshel, general manager at LiveU Asia, said: "V6 brings so much creativity to live sports productions, using our technology

in innovative ways to cover fast-moving sports events. The cost-efficiencies around REMI workflows are clear and we see these workflows increasingly used for events throughout the region."

www.liveu.tv

Fintech company pulls a fast one on Covid-19

With its large conference and training room laying idle in its Singapore headquarters due to Covid-19, fintech company iFast Corporation made the move to transform the space into a high-end TV studio and production facility for its B2B streaming operation, iFast TV. The programme regularly imparts time-sensitive financial news to a network of over 520 companies and 10,000 agents and partners worldwide.

provides the video feed to a 5m LED wall in a more conventional studio space. Both virtual spaces and physical walls can incorporate video, graphics and videoconferencing from multiple platforms such as Zoom and Microsoft Teams and at multiple resolutions.

The installation features zero legacy SDI equipment or cabling used in the entire facility. To accomplish this, Ideal deployed the world's first NDI-

iFast TV studio

The company selected to oversee the installation was APAC technology integrator, Ideal Systems, which took the decision to base the new facilities on an NDI infrastructure. The result is a 140m² IP-based, end-to-end 4K studio that provides broadcast-quality content while being optimised to be operated by non-broadcast professionals.

At the heart of the new iFast TV studio is a NewTek TriCaster 2 Elite, where power and flexibility have enabled many of the operational functions of the studio to be condensed into the unit for effortless operation. This includes virtual sets, which allow iFAST unlimited flexibility in terms of creating different looks for different shows in an 8m x 3m chromakey space, while it also

native teleprompter and the world's first NDI-native studio monitors from Telescript. It also used the Live Story Creator functionality in the TriCaster 2 Elite for the teleprompter, which allows users to write a script in Microsoft Word and use Word's comments to trigger actions on the TriCaster as the presenter reads from the teleprompter. As a result, picture and picture graphics and even switching can be fully automated live by the script, making the production operator's job easier and helping ensure that iFast can create a broadcast-quality product that helps it stay connected with its customers, wherever they are in the world.

www.ifastcorp.com
www.newtek.com

Chawla Movies chooses DiGiCo

INDIA

Having shown itself to be one of India's most innovative businesses in the audio rental industry, Delhi's Chawla Movies has sought out new avenues over the past year, recently adding a DiGiCo SD10 to its inventory.

"Last year was a challenge for everyone, but we decided to take our time to work out how we could do things that were considered and meaningful," said Ajay Chawla, managing director, Chawla Movies. "We are still a relatively young company and in a competitive marketplace. We already had two DiGiCo SD9s, and we knew that we had to increase our inventory, adding maximum functionality and flexibility with systems that are powerful and applicable to a varied client base. DiGiCo was once again the obvious choice when looking at additional consoles.

"Maximum capability and functionality were key points for us, as we never want

to find our equipment unable to meet the demands of the client. We believe the SD10 and SDRack are one of the best all-round packages available to the industry, offering the right balance of sound quality, versatility and control, whether deployed at FOH or monitors. Hi-Tech Audio Systems, DiGiCo's distributor for India, has been instrumental in providing us with the right solutions and has now supplied us the SD10."

Amit Kapur spearheads the audio team and is the systems engineer at Chawla Movies. "I have been using DiGiCo for around eight years now," he said. "It's always been my desk of choice. My job is to make my artists sound great, and for the audience and management not to even think about the tech side of things. There is no scope for failure. I need to have 100% confidence that the gear will work every day. The way the SD10 is set

DiGiCo training

out is similar to the way my head works. The workflow is so intuitive and, once you know the little tips and tricks to speed yourself up, you can fly through the setup.

"What I love about the SD10 is it has it all: huge sonic quality and an easy-to-use, intuitive, fully functional user interface. That's why I think it's the best solution for us as a facility and for me as a mix engineer. Being able to customise the SD10's layers for each artist at rehearsal, and then being able to quickly call those up during the show, is what makes all the difference."

Vanshaj Sharma, Hi-Tech Audio Systems' DiGiCo application engineer, provided product training at Chawla Movies' warehouse. "The training we had at Chawla Movies' studio was a little different and spread out over two days," said Sharma. "The first day we covered a

lot of the basics for their onsite team to ensure they could set up the console for any event. We spent the second day trying different combinations of their DiGiCo consoles, all used in the same system. It was a very interesting, in-depth training session, and we all had a great time experimenting and learning."

"Rental companies like Chawla Movies are go-getters who never compromise, even in the face of adversity," concluded Rajan Gupta, director of Hi-Tech Audio Systems. "That's why their clients appreciate them so much. We are proud to partner with companies like Chawla Movies who have shown faith in our brands and have inspired the rental industry to stay strong and motivated."

www.digico.biz
www.hitechaudiosystems.com

L–R: Amit Kapur, Vanshaj Sharma and Ajay Chawla

Christie lights up the Red Fort in celebration of India's independence

INDIA

Christie laser projectors have been deployed for a spectacular projection mapping show at the historic Red Fort in Old Delhi, a 17th-century monument and a UNESCO World Heritage Site, to commemorate 75 years of India's independence.

Titled *Matrubhumi* or motherland in Hindi, the 30-minute visual spectacle made its debut on 25 March as one of the major highlights of the Red Fort Festival, which showcases India's rich history and a kaleidoscopic diversity in art, heritage and culture. For this performance, the Lahori Gate and its surrounding walls are illuminated by 19 Christie D20WU-HS 1DLP laser projectors installed and commissioned by Christie's longstanding partner, MSS World. The show's mesmerising contents were designed by Knownsense Studios, which specialises in content creation for 3D projection mapping displays.
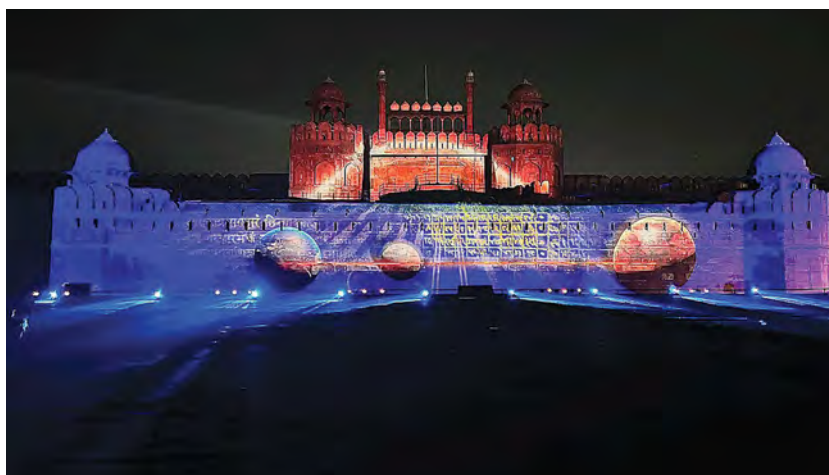
The illuminations celebrate 75 years of independence

"The Red Fort is a world-famous landmark and its main entrance – Lahori Gate – is of great significance as this is the spot where the Indian national flag was raised for the

first time, in August 1947, to proclaim our country's independence," said Pratik Wadhwa, chief executive officer, MSS World. "It is therefore an honour for us to

be involved in this remarkable projection mapping show and we have pulled out all the stops to deliver a highly engaging and fascinating multi-sensorial experience."

"The Christie D20WU-HS projectors are housed in projection towers overlooking the Lahori Gate and surrounding walls. Its compact, lightweight and omnidirectional capabilities provided us with a lot of installation flexibility, reducing the onsite complexities. As a result, we were able to confidently deliver this one-of-its-kind, large-scale visual and cultural spectacle on time for the show's inauguration," Wadhwa added.

The show received such an overwhelming response from the public that the organisers of the Red Fort Festival have since announced that *Matrubhumi* will become a permanent fixture at the venue for the next two years.
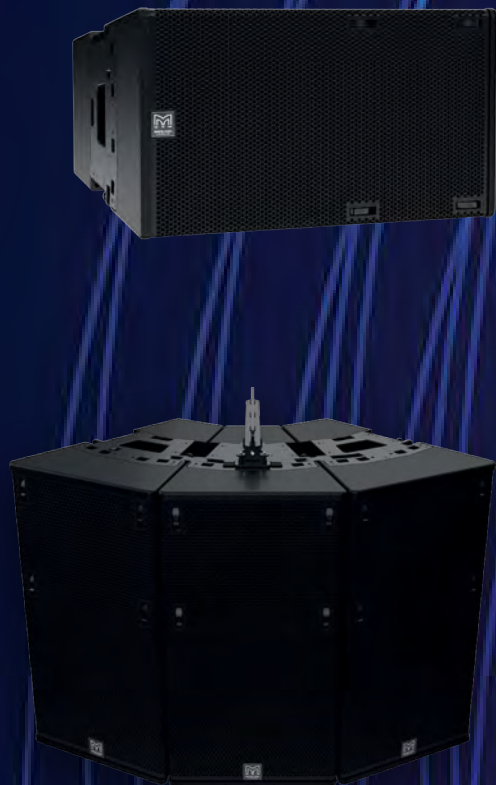
www.christiedigital.com

Versatility as well as intimacy for Tokyo Garden Theatre

JAPAN

Japan's Tokyo Garden Theatre is located in the city's waterfront area within a major new development that also includes a retail centre, hotel, spa facilities and housing complex. In a country where most theatres and halls operate on weekends only, the Tokyo Garden Theatre is designed for stage events every day of the week, where shows can load in and out quickly, thanks to its NEXO sound system.

"At my previous job, I was in charge of establishing Sendai PIT, a small live club in the city of Sendai," explained Katsushi Kamuki from the theatre's operation department. "We used NEXO speakers there, and I felt that their bold and powerful sound would be well-suited for the sound at Tokyo Garden Theatre. So, I took everyone involved in making the decision to Sendai PIT for a test listen before deciding to use NEXO."

Two hangs of NEXO STM M28 and B112 are rigged either side of the stage as the main speakers, with adjacent hangs of GEO M10 and MSUB15 subs as out-fills. STM S118 subwoofers are located under the stage and PS15-R2s are used as

front-fills. Small clusters of STM M28s are installed on the ceiling as delays, and NEXO's compact ID24s are used to extend coverage under the balconies. Amplification and processing come from a bank of NEXO's four-channel, networkable NXAMP4X4MK2 powered controllers, and

Yamaha RIVAGE PM7 digital consoles are used for FOH and monitor mixing.

Commenting on behalf of the Theatre Operation department at Sumitomo Fudosan Retail Management, general manager Hiroyuki Honda said: "On weekdays, we aim to be like a large live

music club that you can visit at your leisure and, on weekends, a hall that major artists can include in their arena tours. We wanted to cut down on setup time by preparing permanent equipment that performers can use as much as possible. Performers use our permanent speakers even more than we expected. I believe that this percentage will increase even more in the future."

Despite a capacity of 8,000 seats, the venue is relatively intimate, with a maximum viewing distance of just 54m. Kamuki concluded: "Performers have praised the fact they feel so close to the audience while performing. One artist came to the hall prior to their performance and said it looked amazing."

www.nexo-sa.com

The theatre has a capacity of 8,000 seats

Kolly Williams
Oahu, Hawaii

Helberth Mohry
Sao Paulo, Brazil

Marco "Fato" Vargas
Dominican Republic

Mike Stater
Atlanta, GA

Jan Lukas Miell
Germany

PD Sound
Anyang, Henan

Gordon Moore
President
Lectrosonics

Fabian AManne
Argentina

Matthew Cameron
Vancouver, BC

Raheem
Toronto, Canada

Nik Castanon
San Diego, CA

EditShare aids Hong Kong university

HONG KONG

EditShare has announced that Hong Kong Metropolitan University has expanded its investment in the company, installing Flow media management and EFS shared storage as the core content platform for its Nursing Simulation programme.

EditShare's integration with the programme's SimCapture, which is used to record and assess student performance, provides a centralised repository and archive that educators can easily access and share learning outcomes and proof of performance. The workflow was designed and deployed by EditShare's channel partner, Viewcon.

"Video is one of the core components of our high-quality training and education. It helps us track trends, improve learning and document methods and time spent on practical training," said Wilson Yau, AV technology manager, Hong Kong Metropolitan University.

Prior to the installation of EditShare, Hong Kong Metropolitan University stored the files on standard storage, using Windows Explorer to search and locate videos. Yau continued: "For audits and official records, our university keeps its videos for seven years which equate to hundreds of thousands of video files. EditShare worked well in our AV Production Studio and we knew it would automate many of the manual processes that come with storing and sharing video at this scale."

The workflow features EFS tiered storage with integrated production, nearline and archive capabilities. Flow serves as the control layer, automatically migrating video content, including simulation records, from the SimCapture to EFS. Metadata is automatically added to the video and includes key information such as teacher, student and session notes. Staff can log into the web-based Flow dashboard, search videos on a number of angles, add further notes, share and playback practical sessions.

Yau explained: "Prior to EditShare, staff would manually put all this information into the file and then drag and drop it into the storage. There are roughly 140 files recorded per day, so this task was incredibly time-consuming, tedious and prone to human error. EditShare was able to build a custom workflow that automated all the manual tasks, ensuring these were accurately documented and available for viewing moments after they were made."

EditShare's chief revenue officer, Said Bacho, commented: "EditShare has deep expertise in the education market. Our systems are used by educational institutions all over the world, which speaks volumes of its agility to adapt to specialised environments like Hong Kong Metropolitan University's Nursing Simulation programme."

www.editshare.com

Makee Studio launches service for corporate entities

TAIWAN

With the pandemic further amplifying demands for virtual content, the founders of Makee Studio have recognised an opportunity to establish the first studio-as-a-service offering in Taipei, for corporate entities. Today, Makee Studio provides production facilities, professional technology and experienced talent to help clients produce high-end content and better-communicated brand messaging through audio and visual media.

"In the last two years, we've witnessed increasing demand for virtual and hybrid events with live and on-demand video segments," shared Louis Lu, GM at Makee Studio. "Our studio has helped some of the largest events in Asia transition to hybrid and fully virtual formats. At 2021 Computex Taipei, one of the biggest computer exhibitions in Taiwan, we filmed and livestreamed more than 30 live event segments at Makee. The InnoVEX startup

pitch contest for the ICT industry, AWS Accelerator Demo Days, and Semicon Taiwan have also produced content for online events at our studio."

The facilities feature VIP guest areas for clients that are separate from the main control room, an LED wall, an AR stage and additional areas designated for
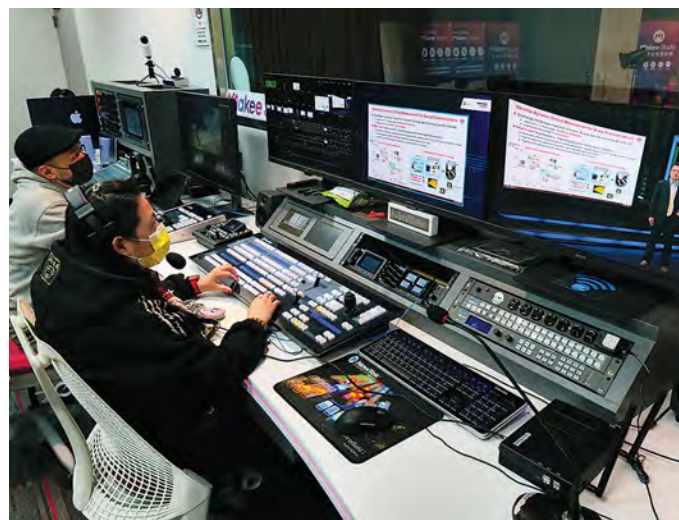
crew. To avoid cable clutter in the halls and guest areas, the team have installed eight wall-mounted boxes dispersed throughout the studio that house SDI and NDI cabling. This allows the crew to move PTZ cameras to film in any location around the facility and connect to the internal system by plugging into the SDI cables. The cables lead to two AJA KUMO 1616 compact 16x16 routers, with one receiving incoming SDI inputs and one transmitting outputs. A single AJA KUMO CP control panel enables the team to monitor, configure and control both routers remotely or from a central location.

"We started out capturing recordings in Apple ProRes 444

or 422, but soon realised that H.264 files were sufficient for our clients' needs. Most projects are uploaded to websites or YouTube, so H.264 compression is ideal," stated Lu. "Ki Pro GO is now our main recording device, which offers the stamina and reliability to capture content all day. While typical broadcast stations might record a show for an hour a day, we're shooting for 8–10 hours per day, which Ki Pro GO handles with ease. During production, we'll switch between each of the four USB drives, which we back up to our computers and conveniently hand off to our clients at the end of the day. They're always impressed with how quickly we're able to share files."

To help clients produce the most visually engaging content possible, Makee Studio recently built an LED wall to shoot real-time backgrounds using Unreal Engine. Lu said: "For the workflow, we're currently using AJA's Io 4K Plus for SDI signal input and HDMI signal output for live previews while we're setting up the LED wall. We view the previews on an external monitor prior to filming,

which has saved our team a lot of money."

Looking ahead to the future, Lu expects to see continued demand for hybrid events with a virtual component, even after pandemic restrictions fully subside. Shows have reported as much as a 600% increase in the number of attendees for virtual events, due to increased accessibility for global audiences. Lu concluded: "We're helping brands rethink the way they work by providing new opportunities to communicate and connect with target audiences through high-end video content, and AJA solutions have been integral to making that possible."

www.makee.net

Delhi's LED Solutions invests in Allen & Heath

INDIA

Delhi-based rental company LED Solutions has invested in an Allen & Heath dLive system comprising a 36-fader S7000 surface and DM32 MixRack, plus GX4816 and DX168 audio expanders, supplied by Allen & Heath's Indian distributor, Sun Infonet.

"dLive has gained popularity across the world and has become the choice of many sound engineers," said Vikrant Jain, owner of LED Solutions. "The demand for dLive in India has now made it essential for us to have this console in our rental inventory."

The DM32 is built around Allen & Heath's 160x64 XCVI FPGA engine which provides 128 input processing channels and 0.7ms latency, all at 96kHz with variable bit-depth. The DM32 offers 32 mic/line inputs and 16 line outputs, which can be augmented via audio expanders such as the DX168 and GX4816. The DX168 provides 16 XLR inputs and eight XLR outputs in a stagebox format, while the GX4816 adds 48 XLR inputs and 16 XLR outputs to a system in a 5U footprint.

Sun Infonet's post-sales support to LED Solutions included training by senior applications engineer, Kallol Nath. "dLive has proven to be a game-changer with a winning combination of features and workflow," he commented. "And, with the onboard DEEP processing, the team at LED get all the processing they need without any requirement for external hardware."

The LED Solutions team

Engineers Chaitanya Jain, Ayush Ratan and Sandeep Kumar all expressed satisfaction with the new arrival. "You can quickly create your own workflow and easily modify show files for different events, and the LED lighting integrated into the surface makes your work enjoyable," said Jain.

Ratan added: "I love being able to monitor battery levels of Shure and Sennheiser wireless systems from the surface."

"LED Solutions already had top-class AV equipment in their inventory but adding this dLive system expands their horizons even further and delivers incredible ROI," said Nath. "The team were very excited by the training and deeply interested in the features of the system, and we wish them all the luck to excel in their upcoming events."

www.allen-heath.com

Canberra's EET invests further in Robe

AUSTRALIA

Canberra-based rental and production company, Elite Event Technology (EET), has made a new investment in 16 Robe MegaPointe moving lights for general stock, which join the 16 it already owned, having purchased them in 2018.

"MegaPointe is a go-to lighting fixture for so many entertainment and corporate event scenarios," commented EET's Darren Russell. "It is highly versatile, so we knew it was a solid investment with a good ROI, and that the kit will be busy all the time. It's a great all-purpose fixture with an amazing output for the size and weight."

EET has several other Robe products in its rental inventory, including Spiiders, Pointes, BMFL Spots and BMFL WashBeams, Spikies, LEDBeam 100s, LEDWash 600s and LEDWash 300+, MiniMe, MMX Spot, DLX Spot and 600E Spot units. Russell was an early adopter and started purchasing Robe products around 15 years ago when the brand was still emerging.

EET's new MegaPointes immediately went out on several music events, including the 2022 SummerSalt Festival at Stage 88 in the Commonwealth Park in Canberra. The entire lighting rig – apart from blinders – was Robe for both these events, underlining EET's commitment to the company and its products.

www.eetechnology.com.au
www.robe.cz

LaON equips IVEX studio in Gwangmyeong

KOREA

The IVEX studio at U-Planet, a large-scale complex in the Gwangmyeong KTX station area, is a future-oriented, immersive, multi-space online and offline platform for various digital media content creation experiences. There is a creative studio, XR Lab, open studio and lounge within the facility, as well as the "Hi-per hall", which is now fully equipped with an ultra-wide LED vision and sound system, as well as a LaON Genie wired and wireless intercom system.

Managed by SBS A&T, IVEX studio has held several events so far, including the final match of "LoL World 2021", an esports audition produced by Riot Games and SBS, World e-Sports Challenge 2021.

The client selected Genie for its critical wired and wireless communications between the PD, FD, cameramen and other engineering staff. The control room installation includes a Genie BS1000 base station and three GDP4 desk stations, as well as seven BP850 wireless beltpacks which have also been used in the hall.

www.dhav.co.kr
www.ivexstudio.com
www.laon-tech.com

Ultra-wide LED vision screen

Fane Pro Audio consolidates Chinese presence

Nightclub demo room

CHINA

British manufacturer Fane Pro Audio has opened an experience centre in Guangzhou, demonstrating its commitment to and confidence in the APAC market. "Our world-first experience centre in Guangzhou has the objective of bringing Fane Pro Audio ever closer to our clients and providing a base for operations in Asia," said Mark Barnes, managing director of Fane Pro Audio. "Visitors have the opportunity to listen to our range of products in a variety of environments and can also conduct business meetings and close deals while onsite."

The 1,000m² experience centre includes a listening environment including a KTV lounge, large nightclub, a party room, and a government and enterprises room. It is jointly operated by Asian distributor, Concord, which has worked with Fane since 2017.

"Our partnership with Concord could not be stronger or more successful," continued Barnes. "The regular interface between our teams means that we share a 'single vision' mentality and operate as one entity to deliver optimal Fane audio solutions to the Chinese and Asian markets. During the pandemic,

Chinese clients have shown greater interest in party room products and Fane Pro Audio has released a new series of products to meet this demand. We have a number of product releases planned to meet anticipated demand, not only in China but also pan-Asia."

Fane Pro Audio also added a speaker production line in China in 2021 which joins the production facility in the UK, alleviating supply chain issues being experienced globally. "By sharing manufacturing between the UK and China, we enjoy the best of both worlds," said Barnes. "Our strategy was farsighted in view of the problems associated with the pandemic, which have thrown global logistic networks into turmoil and greatly exacerbated problems

associated with lead times and forecast planning inherent in imported product. We recognise the importance of the Chinese pro audio market and the wider opportunities throughout APAC, which can be serviced from an operational base in China rather than solely from the UK, which suffers from the problem of distance."

Barnes is confident of the post-pandemic market, believing the time is right to plan for the future, in which the new experience centre plays a major role. "Audio professionals have a great opportunity to consider something new and fresh, challenging the ideas of the past," he said.

www.faneproaudio.com
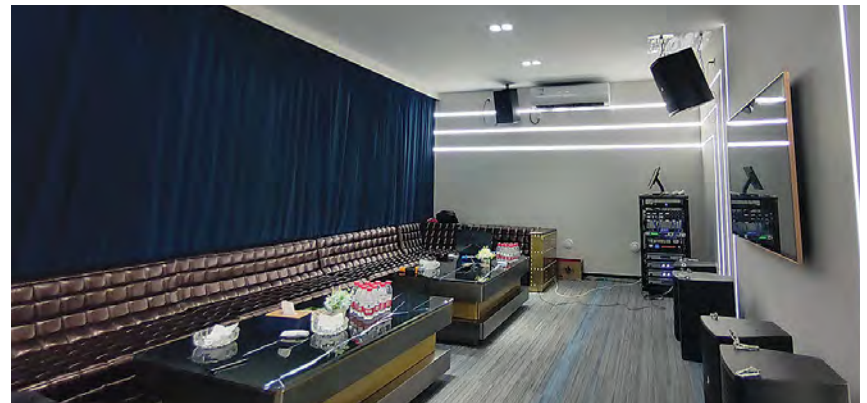
KTV lounge

Works in progress

A working community theatre in New Zealand's Bay of Plenty has become the first venue in the country to install a Yamaha Rivage PM5 system, reports **Richard Lawn**

LOCATED IN THE HEART OF TAURANGA, THE Baycourt Community and Arts Centre has entertained and inspired audiences ranging from school children to opera fanatics since 1983. The venue's technical manager Dale Henderson has been an almost constant fixture at the venue since commencing his career as a technician there three years after its inauguration. In addition to showcasing a diverse range of local, national and international talent at the main Addison Theatre, Henderson has also made it his duty to oversee advances in AV and lighting technology.

Having mixed the audio for *Les Misérables* in 1995 on two consoles, one being a Yamaha ProMix 01 console using 16 wireless mic channels, Henderson has become increasingly drawn to the Japanese brand. Over the next two decades, Baycourt upgraded the ProMix 01 programmable mixer with higher specification Yamaha digital consoles including the 01V-96, the M7CL-48 and the M7CL48-ES. Last year, Henderson recommended that the Yamaha M7CL should be replaced as it had exceeded the end of its projected life cycle, having served the theatre for 13 years.

Baycourt's 588-seat Addison Theatre

Most touring acts that perform at the 588-seat Addison Theatre provide their own operators, so Henderson generally mixes for the local operatic society or for schools in the neighbourhood. "We had two M7CLs at FOH position for mixing the operatic society and the larger musicals," explains Henderson. "One M7CL handled the 30-plus channels of wireless microphones and the other received direct mic inputs from the band or orchestra onstage. I've operated a number of consoles over my career but, in terms of reliability, ease of use and intuitive features, I'm drawn to Yamaha."

The recently launched Yamaha Rivage PM5 was one of four new consoles selected for the procurement process on behalf of Tauranga Council's appointed RFP (Request for Proposals) committee. In addition to Henderson, the panel was made up of technical operations coordinator Jordan Bailey and external consultant and systems engineer Bjarne Hemmingson, who had returned to New Zealand from the US during the pandemic. All three took part in a blind score assessment, independently marking weighted attributes for criteria including the number of faders, screens and layout, with the PM5 receiving the highest

score. "The 12-fader configuration over three bays is ideal for our needs," Henderson continues. "One PM5 is more than enough to fulfil both mixing requirements simultaneously, ensuring that we only need one operator. The reduced depth of the surface brings the controls within easy reach, although I can also make fine adjustments on dynamic meters located beside each fader. The three 15-inch capacitive touchscreen displays that offer a condensed selected channel section is extremely intuitive."

Fitted with an HY144-D digital I/O card, the Rivage PM5 offers direct compatibility with Yamaha's TWINLANe and Audinate's Dante protocols over Gigabit Ethernet connections. "Plugging in

and three Rio I/O racks. In addition to ordering the first PM5 Rivage system in the country, Baycourt also took delivery of a small format QL1 digital control surface for smaller dance school performances. "After any major performance, we store the PM5 in a flightcase to save on wear and tear, so the QL1 should provide added longevity for the PM5," Henderson explains.

The theatre's loudspeaker system was renewed in 2018 with an Adamson IS Series line array selected following the RFP committee's subjective assessment. "The brief stipulated a number of criteria, such as suitability for both musical theatre and touring bands, clarity, warmth and even coverage throughout

the entire venue," recalls Intec Systems' Mike Hughes. "From our previous experience with Adamson and the IS-Series products, we knew those criteria would be met and exceeded."

Intec Systems utilised Adamson's Blueprint AV simulation software during the design process. "The tender requested EASE simulations, but Blueprint is an excellent tool for adjusting angles and monitoring results," continues Hughes. Adamson distributor Direct Imports supplied the system consisting of eight IS7 cabinets and two IS118 subwoofers flown on each side, with two more IS118 subwoofers groundstacked under each array.

Ensuring clear sightlines to all seats, the IS7 arrays are flown outside the theatre's proscenium arch, allowing the rotatable wing panels to work without obstruction. "The audio is smooth and pristine throughout the entire venue, without the peaks and differences in tone we'd experienced previously," added Henderson. "It's a pleasure having a system that provides sufficient bass throughout the theatre, without disrupting the adjacent performance and public spaces."

Dual D 80:4L and single D 20:4L Lab Gruppen amplifiers power the system, with digital signal parameters set within the Lake processing software. "We prefer not to use IEMs, so we deploy up to eight EM Acoustics M-C12 passive speakers as wedge monitors onstage for the performers," he continues.

Henderson has also finished an upgrade of the theatre's moving lighting rig, adding some Ayrton Eurus fixtures, the first multi-function profile luminaire launched under the manufacturer's new Slim-21 programme for miniaturising fixtures and reducing their weight.

Bringing the Yamaha story at Baycourt Community and Arts Centre full circle, the Rivage PM5 system was due to debut on another production of *Les Misérables* that should have opened in January. Inevitably, the season was cancelled just before opening night – yet another casualty of the pandemic. However, operator Gareth Wallis was able to try it out during the two-week rehearsal period. "The Rivage PM5 was a joy to use and made operating such a complex show seamless," he reflects. "I particularly appreciated the ability to have backup radio mics routed in live at the push of a single button, and multiple EQ presets on each channel was an absolutely time saver."

Now due to make a debut at the *National Jazz Festival Tauranga* in June, followed by *We Will Rock You* in September, Baycourt's new Yamaha Rivage PM5 system will finally be able to have its moment in the spotlight.
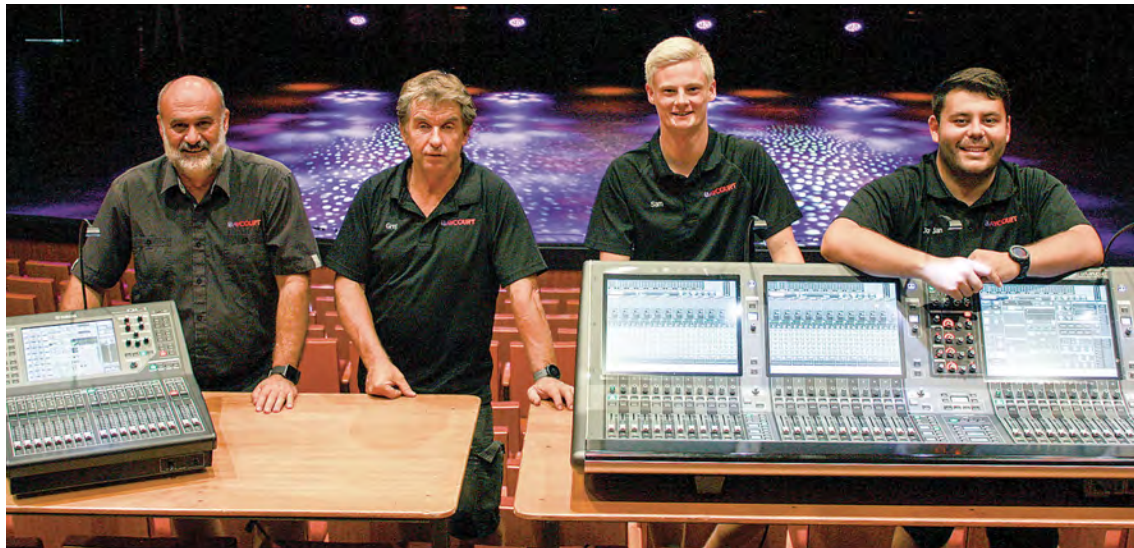
L–R: Baycourt Theatre's Dale Henderson, Greg Wakefield, Sam Wakerley and Jordan Bailey

copper terminations was very time-consuming and laboursome," says Henderson. "With the PM5 setup, I can position the Rio 3224 rack close to the mic inputs before connecting one Cat6 cable to the console for full network system monitoring and management. In addition, the integration of our existing Shure ULX-D wireless mic system into the Yamaha GUI is proving to be a real bonus. From one of the console's touchscreens, I can detect connected wireless transmitters and receivers, map each system to the desired input channel and monitor parameters such as battery status, RF and audio signal level."

Supplied by Yamaha Pro Audio distributor MusicWorks, the Yamaha Rivage PM5 system was installed by Auckland-based Intec Systems, which specialises in the design and installation of audio, lighting and video systems. The ecosystem combines a CS-R5 control surface, a DSP-RX signal processing engine
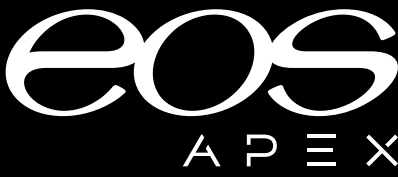
The Yamaha Rivage PM5 was debuted on rehearsals for *Les Misérables*

www.adamsonsystems.com
www.baycourt.co.nz
www.musicworks.co.nz
www.yamaha.com/2/proaudio

The 27m windows seen from outside the club

Bespoke Void Tri Motion and Airten V3 speakers in chrome

Raising the roof

A new nightclub has opened in Tokyo, promising a VIP experience for locals, celebrities and tourists alike. **Libby Stonell** reports from Raise

LOCATED ON THE SIXTH FLOOR OF THE GLASS-fronted Tokyu Plaza skyscraper, Raise looks out over the city's glistening Ginza district. Owned by Japanese venue operator Lounge Operation, the 800-capacity, 740m² venue displays a strong style throughout. In keeping with its futuristic theme is an audio system of bespoke Void speakers in chrome, which have been chosen for their aesthetic as well as their acoustic properties. The system was supplied by long-term Japanese distributor, East Audio.

"The high-end audio installation at Raise is the first time we have specified Void Acoustics for a Lounge Operation venue," explains East Audio director, Tocci Satoru. "The company's general manager is a Void fan and was keen to see the brand deployed throughout the club, not only because of the audio excellence, but because of the design aesthetic of all Void products."

The club has 27m-high, floor-to-ceiling frontage which overlooks the high-rise Tokyo cityscape. While visually stunning, this threw up a few challenges when it came to designing the sound system. These were overcome by judicious use of Void's technology and the overall system design.

Chrome Tri Motion and Airten V3 speakers have been installed around the dancefloor, while a number of Venu V2 and Stasys 118 subwoofers are deployed throughout the venue to reinforce the bottom end. The system also includes the first Japanese installation of the Arcline 218 subwoofer, while a Venu 215 V2 subwoofer has been installed behind the DJ podium in the Royal VIP area, embedded behind the VIP sofa to enhance the guest experience in this privileged zone. DJ monitoring is provided by an ArcM12 system, and the installation – powered by Bias D1, Bias Q1 and Bias Q2 amplifiers – is completed by Cirrus 6.1 ceiling speakers. "We aimed to create an even sound space by eliminating blind spots, and we made meticulous adjustments to address cancellation," says Saturo.

One of the biggest challenges the team faced was down to the unique architecture of the club. Within the venue there were no interior walls from which to hang fixtures, and so the entire sound system needed to be strategically mounted using specially fabricated structures.

"The inability to hang speakers was a major constraint to the sound design," says Satoru. "The glass is polyhedral and has no parallel surfaces, so there are no standing waves from reflections. Acoustically, the room is not as bad as one might expect. The ceiling, however, has a height of 27m and the glass is shaped to tilt inwards as it goes up, so the sound pressure of the bass is not reduced, even as it travels up through the building. To reduce noise spill, we improved the absorption to

minimise the transmission of the sub on the floor and used a Forward Directivity Isolator (FDI) system. FDI suppresses resonance by surrounding the array with a unique structure to prevent sound leakage, while at the same time improving the impulse response and directivity. This results in a tighter bass and a more natural sound."

As design and installation took place during the pandemic, Void advised East Audio remotely, which presented its own set of challenges. "Having no option to travel to Japan, our advice and input was mostly over email and WhatsApp," comments Sean Iskhander, Singapore-based APAC sales manager for Void. "We had to ensure we were giving as much support to the team at East Audio as we could in order to fulfil the project. Being thorough in our responses and advice and with a keen attention to detail was key."

All things considered, Satoru is pleased with the outcome of the project. "As well as the beautiful aesthetics of the speakers, the sound quality is outstanding," he says. "It is a luxurious club, and the sound quality is equally luxurious and of an extremely high definition. And this has most certainly been acknowledged by many of the clubbers who have been lucky enough to get their hands on a highly sought-after ticket to Raise."

The final word, however, must go to the client, and Taro Fujita, general manager for Raise Tokyo, declares himself equally pleased with the results. "Raise is a club located in an exclusive neighbourhood where Tokyo's VIPs and celebrities gather," he says. "We are pleased that the sound quality and aesthetics of Void's speakers complement our high-end club perfectly. The Void system accommodates the wide variety of musical genres played by the DJs at our club."

www.voidacoustics.com

Raising the game

Bartons Sound Systems has equipped New Zealand's largest sports stadium with a QSC Q-SYS network, enabling multichannel sound, SPL monitoring and a fully digital audio path

FOR MORE THAN 100 YEARS, EDEN PARK HAS BEEN home to New Zealand sport; in particular, rugby and cricket. Located in central Auckland, the stadium has a seating capacity of just under 50,000 and creates an atmosphere in which to experience live sport unlike anywhere else in the country. In addition to sporting events, Eden Park can facilitate functions, conferences, live events and venue hire, catering for tens of thousands of guests at a time.

Also based in Auckland, Bartons Sound Systems has a long history of working with the stadium and its owner, Eden Park Trust. In 1992, the company installed the first site-wide PA system in Eden Park for the inaugural Cricket World Cup, which New Zealand co-hosted with Australia. Despite New Zealand not winning the World Cup that year, it was a more favourable event for Bartons. "Since then, we have built new PA systems as old grandstands have been demolished and rebuilt," says Bartons senior director, Robert Waddell.

Eden Park has for the most part been rebuilt since that tournament, with the largest development, the south stand, completed in 2010 in time for the 2011 Rugby World Cup. Alongside the building redevelopment, Bartons has designed and built new PA systems to match the architectural features and to keep Eden Park equipped with the latest audio technology.

By 2021, the hardware installed by Bartons a decade earlier was approaching the end of its useful life, particularly as it relied on proprietary fibre interconnections. The entire stadium sound system network needed to be upgraded, providing for gameday commentary, background music and announcements to all seats. This was an ideal opportunity to bring improvements to the sound quality and resilience of the event sound system, as well as provide for immersive multichannel sound which would herald new creative possibilities for events such as opening ceremonies and concerts.

The new system needed to provide routing and processing at scale, with flexible analogue and digital inputs and bring your own device (BYOD) control for venue hirers. The aim was to provide the best live experience possible, creating over 80 channels – or "surround zones" – of audio, allowing clients to place sounds almost anywhere in the stadium, with easily accessed Dante input points to patch into. Another important requirement was to provide transparent limiting as the stadium is in a residential neighbourhood.

The new hardware is based on the Q-SYS ecosystem supplied by local distributor NSL and built on Netgear AV line switching. "We chose Q-SYS as it allows for scalability as well as providing excellent user interface and control options," explains Bartons managing director, Tony Wehner.

A redundant system consisting of two QSC Q-SYS Core 510i digital processing cores for control and audio processing form the backbone of the stadium upgrade. A third QSC Q-SYS Core 510i running in frame mode and installed with a DN64 Dante 64x64 bridge card provides a dedicated Dante clocking domain for show audio, segregated from the venue's audio network. Four CIML4 four-channel mic/line analogue cards have also been incorporated into the system to maximise flexibility and resilience. Twelve IO-8Flex channel expanders integrate with existing amplifiers, while the west stand has been equipped with two new QSC CX-Q 4K4 amplifiers.

One of the main challenges Barton faced was installing the new system around existing hardware. "We needed to migrate system tuning from the legacy system to the new," explains Wehner. "We wanted to ensure the new system was fully operational before decommissioning the old."

The north and sound stands are installed with Electro-Voice point source elements that have served the stadium for many years; these have been integrated into the new network. The north stand system consists of 16 Electro-Voice X-Array Xi-2153/64 speakers with eight Electro-Voice X-Array X-Cn downfill speakers powered by Dynacord Power H Series amplification. The south stand is also installed with Electro-Voice elements: 38 EVF-1152 cabinets with seven FRX+181 subwoofers, powered by 12 Electro-Voice DSA 8410 amps with an IRIS remote monitoring module as well as Dynacord CPS Series amplification. The east stand, currently being redeveloped, has an Electro-Voice ZX5 system powered by Dynacord CPS Series amps, while the west stand is fitted with a combination of Electro-Voice Sx300PI and JBL AWC62 all-weather speakers. An Electro-Voice N8000 IRIS-Net loudspeaker management system has been replaced in the upgrade with the new Q-SYS processing.

Most of the ancillary areas are installed with Electro-Voice Sx300PIX, ZX5 and ZX3 full-range speakers which have also been integrated into the network, along with an existing Bosch Praesideo public address voice alarm (PAVA) system, for which Bartons provided compatibility by writing a Q-SYS plugin which uses the Praesideo open interface API.

Bartons delivered this complex and extensive project within budget and on schedule, completing it in early 2022 prior to the Omicron outbreak in New Zealand. The install team worked in a small, isolated bubble with appropriate PPE, under the country's Red (highest risk) traffic light setting. The company continues to provide ongoing support via a remote management solution and onsite technical staff.

Following the upgrade, Eden Park now has the capacity to route networked digital audio from the mixing console all the way to the amplifier racks. Multiple Dante audio sources from mobile and wired network devices can be panned and placed anywhere in the stadium, using the TouchOSC (Open Source Control) creative control platform, which Bartons used to develop a bespoke immersive panning user interface and automation recorder. The OSC protocol can be used for real-time network control of electronic musical instruments, computers and other multimedia devices and, in this instance, the stadium PA. The TouchOSC interface sits alongside the custom-designed Q-SYS user interface which displays a system overview, showing metering and hardware status as well as muting and gain control of individual stands and zones. The interface is accessible from the video room, the sound room and wirelessly anywhere in the stadium. Panning of the inputs around the stadium can be achieved by show playback software such as QLab console automation to produce immersive audio.

Meanwhile, SPLs can be wirelessly monitored. A dedicated Junger Easy Loudness Dante/AES67 limiter restricts output to a maximum of 60dB LA10 (10 minutes) at the nearest residential boundary, meeting Eden Park's strict noise level requirements. Sound operators can monitor sound levels and the amount of limiting being applied on PCs in the video room and sound room, as well as from a browser on devices connected to the Eden Park staff Wi-Fi network.

"The new system improves the signal-to-noise ratio and fidelity by providing a digital audio path all the way from the sound source to the amplifiers," says Wehner. "Reporting has been improved as the system is actively monitored and sends notifications on specified alerts. We loved building on our longstanding relationship with Eden Park using our knowledge, creativity and the Q-SYS platform."

Adds Eden Park CEO Nick Sautner: "We are grateful to Bartons for their expertise and skill. They offered a creative solution to meet our needs, including a feature we believe is a first for sports stadiums: multichannel immersive sound."

www.bartonsound.co.nz
www.nsl.co.nz
www.qsc.com

High contrast projection was needed when displaying old black and white photos alongside colourful images

Delighting Korea

A new Korean art exhibition is using Christie projectors to convey a sense of the nation's cultural traditions. **Caroline Moss** reports from Seongnam

CREATED BY MEDIA PRODUCTION COMPANY DESIGN Silverfish, *2022 Delight Seongnam* is currently running at the Seongnam Cube Art Museum. The exhibition combines art and technology to showcase Seongnam – a satellite city to the southeast of Seoul – throughout its past and present history and into the future. Each zone showcases various aspects of culture and daily life in the city through the use of technologies such as digital projection and media walls.

"As a media design company, we pay much attention to contemporary digital culture and trends, based on continuous research on how the current generation experiences and consumes images," explains Gyoung-tae Hong, CEO of Design Silverfish. "We had previously organised a media exhibition, *Delight Seoul*, based on our accumulated knowhow over many years. It was held in early 2021 and conducted through media interpretation of various stories and characteristics of Seoul." Similarly, *Delight Seongnam* draws upon the history and imagined future of the city to submerge visitors in media interpretations of its own stories and characteristics.

Christie – whose collaboration with Design Silverfish goes back to the 2012 Yeosu Expo international fair in Korea with the title *The Living Ocean and Coast* – has supplied projectors for two of the themed spaces, *An Olden Tale* and *Seongnam Story*.

One of the show's highlights, *Seongnam Story* conveys a message of hope for the future in an exhibit that connects Seongnam and Korea through dynamic imagery of the past, present and future. Three Christie D20WU-HS projectors are being used to display colourful, lifelike images that convey the energy and passion of the city and its residents. A collage of historic black and white photos is being displayed alongside these colourful visuals, and this part of *Delight Seongnam* called for particularly high contrast when displaying the black and white images. "The Christie HS Series laser projectors, which feature 2,000,000:1 full on/off contrast ratio, were able to provide the sharp and detailed visuals that we wanted to present, according to our original vision," says Hong.

A further three Christie D20WU-HS projectors are being used for *An Olden Tale*, which was composed in collaboration with children's writer and illustrator Kye Myung-jin. Here, the Christie projectors are being used to display content onto three surfaces to create a highly immersive audience experience that reimagines a traditional fairy tale in a mixed

Christie BoldColor technology helped bring the animated visuals to life

media environment. The D20WU-HS projectors are equipped with Christie BoldColor technology, which enhances the colour accuracy with the aim of creating natural-looking images. According to Hong: "This has certainly helped to make the animated visuals more lifelike, especially during the scenes that showed the world under the sea."

Christie's local partner, SNC Alliance, carried out the projection design for the exhibition, as well as installing the technology and providing technical support.

"In my opinion, Christie projectors are capable of delivering beautiful visuals," continues Hong. "Colour reproduction is also more accurate and detailed than similar products of the same class. Design Silverfish has been using Christie projectors for most of our media productions. These include the recent *Delight Seoul* exhibition and the ongoing *Curious 12 Tales* exhibition taking place at the Insa Central Museum in Seoul."

Design Silverfish also uses Dataton Watchout media players for exhibits that require blending or video show control, as well as BrightSign media players for simple video looping and uncomplicated productions.

Delight Seongnam features five more zones: *The Myth*, a journey into Seongnam's past which summons up 12 guardian spirits; *Corridor of Light* which presents a moon gradually brightening through the fog; *Welcome to Delight*, a display of lanterns which change colour; *Dynamic Seongnam* showing the fast pace of the city; and *Authentic Street* which portrays the changing seasons.

Audio for each of the seven zones has been kept deliberately simple to minimise interference between the different areas, as the exhibition combines a wide variety of concepts within a small gallery space. Each zone has therefore been installed with two Bose 161 multipurpose speakers and a small amplifier.

www.christiedigital.com
www.silverfish.co.kr

Goa's Sunburn Holi 2022 festival was a welcome return to live events

Back to live

As the Indian live sector rebuilds, **Caroline Moss** finds out how the ever-resourceful Reynold's Sound & Lighting Services has managed to ride out the Covid storm

REYNOLD'S, ONE OF INDIA'S LONGEST-ESTABLISHED audio companies, has been around for more than a century, its flexible approach adapting to changing market conditions. So it comes as no surprise that, despite Covid having flattened the events sector on the subcontinent for the past two years, the company has again been finding ways to diversify and move forwards.

Reynold's launched in 1908, at the height of colonial rule, when Joaquim Remedios opened a music shop in Calcutta selling violins and pianos. He went on to purchase the franchise of a US company that was closing down during the depression. The British-sounding name of the new company – J Reynold's and Co – went down well with his colonial clients, and business flourished.

Over the years, subsequent generations of the Remedios family have continued to diversify and thrive. J Reynold's became one of the first companies to manufacture guitars in India, at its peak producing around 500 acoustic and 200 electric guitars a month under the Reynold's brand name. In 1981 Joaquim's grandson, Felix Remedios, chose Bangalore as a good place for a new MI store and launched Reynold's Inc, investing in small audio systems for rental and manufacturing the company's own speakers, which were ferried to weddings and parties in a cycle rickshaw. A deal with Hong Kong music retailer Tom Lee in 1984 led to the import of Peavey column speakers and mixers; a lighting division was added in the 1990s; and, by the turn of the century, Remedios had raised the funds for a Meyer Sound self-powered system, which he thought ideally suited to the Indian market. This allowed the company to bid for international tours, and the client list grew to include Guns N' Roses, Metallica, Bryan Adams, Black Eyed Peas, Aerosmith, the Scorpions, Iron Maiden, Enrique Ingesias, Foreigner and Sting, together with Indian stars such as A R Rahman, Sonu Nigam, Shaan and Anoushka and Pandit Ravi Shankar. In tandem, the market for large-scale corporate events, conferences, product launches, film premieres and religious festivals proliferated.

Pre-pandemic, the company's rental arm, Reynold's Sound & Lighting Services (RSLS), and sales division, Reynold's Inc, were operating in various locations around the country. "In the initial stages of the pandemic, our rental business went down by 90%, with the sales business dropping by around 20% initially," explains Remedios. "In rental we diversified into online and virtual events, while our online sales shot up hugely as business became very brisk on online platforms."

Reynold's managing director, Felix Remedios

A painful decision to reduce rental staff at RSLS' head office in Bangalore and its subsidiary in Hyderabad to a total of 65 and 20, respectively, had to be taken early in the pandemic due to the almost total loss of rental business. This constituted around 50% of previous staffing levels at each location, although the team is now slowly rebuilding.

"For larger events, those staff who were laid off who'd been with us the longest have been taken back on a contract basis," continues Remedios. "We're currently building our teams back up, prioritising previously serving staff and also bringing in new people and training them on the job."

The company negotiated rental deals with its landlords and deferred payment for the rental and sales companies, while the purchase of new equipment – apart from what was required for virtual and online events – was put on hold. The bulk of the rental inventory which, as well as Meyer Sound, encompasses d&b audiotechnik and Audio Focus PA systems and Yamaha, Avid, Allen & Heath and DiGiCo consoles, as well as processing, backline gear and microphones, was retained and mothballed. However, the downtime provided an opportunity to learn a lot about virtual and online events, which Remedios admits wouldn't have happened without the pandemic. "We attended several virtual event platform demos to get an idea of how they worked, which was a good learning experience," he says. "We eventually partnered with a tech company to set up our own virtual events platform, Tango."

The company installed a virtual DJ studio for online streaming during lockdowns

Investment was made in hardware and software, and Reynold's set up a small greenscreen studio for training and smaller events in its warehouse, together with a virtual DJ studio for streaming online sets. Most larger shoots took place at clients' premises. "One good development was the transition to offering hybrid services for live work, where we would offer clients streaming facilities and hosting space on our own dedicated website so they could invite guests to log in and view live events," he says. "However, with the restart of live events from November 2021, we felt that with the competition from smaller players who were offering online services very cheaply, it made sense to focus on the live events market."

Sales division Reynold's Inc has fared well, thanks to the trend during lockdowns of purchasing musical equipment for use at home. This allowed the company to retain most of its sales staff at the head office in Bangalore, as well as branches in Hyderabad and Chennai. The sales team currently stands at around 40 across all three locations. "We restructured to focus more on our online business," explains Remedios. "While we were already doing online sales, we carried out a lot of work to improve our webstore and focus on the online sales part of the business, which was what really did well due to the numerous lockdowns."

This strategy certainly paid off. While business was initially down by around 20%, the company's online sales ultimately shot up by 400–500% as the focus shifted. In addition to its own webstore, Reynold's Inc also operates through online retail platforms including Flipkart and Amazon, selling a range of musical instruments, music production software and home recording equipment.

Live work is now slowly picking up in India. "At first it was for social events such as marriages and family functions, but now we're seeing a lot of enquiries for corporate work," says Remedios. "Live events play a big part in weddings and corporate work, so slowly but steadily this is building back up again." There are also enquiries about larger-scale concerts for Indian artists, although international touring is yet to take off again. "If the situation stabilises with Covid, we are sure that international touring – both in and outside of India – will pick up, as people really want to go out and enjoy themselves after being cooped up for two years." March's Sunburn Holi 2022 festival in Goa marked a return to something resembling a pre-Covid event, with a crowd of over 2,500 and international DJs.

Weddings and corporate work have been the first to pick up for Reynold's

Reynold's' diversification didn't end with establishing a new way to handle sales and live work, however. "The pandemic has taught us not to put all our eggs in one basket, and to this end we've invested some resources in constructing a 4,500m^2 building at the KIADB industrial estate near the Bangalore International Airport to lease out commercially," says Remedios. Reynold's has also set up a projects division to handle installations, recently winning contracts to supply and fit AV systems at the Dalai Lama's upcoming archive centre in Dharamsala and AV installations for two auditoriums in the northeast of India.

For a company that has gone from selling musical instruments in the colonial era, to peddling home-made speaker cabinets in a cycle rickshaw, to providing full production for international acts, the secret of Reynold's success has always lain in diversification. The new skills and resources gained during the pandemic, painful as this era has been, has once again proved this veteran company's resilience.

www.reynoldonline.com

Ace in the hole

Studio design specialist WSDG has completed a facility in Guangzhou that specialises in classical recordings for students as well as commercial projects. **Caroline Moss** reports from Ace Studios

L–R: Yang Xu, Yang Zijie, Víctor Cañellas with the Steinway concert grand

SET IN THE RECENTLY COMPLETED HAIZHU BAY ART Park building in Guangzhou, Ace Studios was conceived by a group of professors from the prestigious Xinghai Conservatory of Music, which has been training musicians for almost 100 years, and is reputed to be one of the best places in China to study classical piano. They aimed to create a studio capable of providing students and professionals alike with optimum acoustics and technology for classical as well as popular music sessions. One of the main criteria was to create a live room suited to classical piano recordings that would do justice to a major investment: a new Steinway & Sons D-274 concert grand.

"I wanted to build a studio because my father [Yang Xuan, musical director of Ace] works in music production," explains Yang Zijie. "I started learning piano at the age of four and studied for bachelor's and post-graduate degrees at the piano department of Xinghai Conservatory of Music. The idea of building a professional studio in South China came after a discussion with one of my former classmates."

This was Li Yang, who had studied at the Xinghai Conservatory, and whose wife, Wang Yue, was a friend of TC Zhou, the owner of Studio 21A in Beijing. Through Zhou, the team got to hear about the international design group WSDG, which had worked on Studio 21A. WSDG seemed an obvious choice for Ace Studios too; the company's other credits in China include the Zheijiang Conservatory of Music in Hangzhou as well as 55TEC Studios, also in Beijing. A meeting was arranged with WSDG China representative, Víctor Cañellas, who sent case studies of concert halls, opera houses and studios the company had completed around the world.

"We were a strong team in terms of technical knowledge, but I knew that acoustic design is also very important for a studio," continues Yang Zijie. "Wang Yue sent us photos of Studio 21A and I loved the design immediately. Maybe it's because I'm a woman, but I pay attention to appearance when I invest in something, and I made up my mind to add WSDG's design services to my budget."

Image courtesy of Is That Real Visuals

Control Room A is installed with an Avid C-24 control surface and Adam Audio monitoring

Yang Zijie and her father – a well-known music producer and composer who has worked in the music industry for more than 40 years and is also a guest professor at Guangzhou University – are full of praise for the WSDG team they worked with: art director Silvia Molho, project engineer Sergio Molho and senior architect Mariana Varon, as well as Guangzhou-based Cañellas.

"WSDG has a much more professional approach than the domestic acoustic designers, who pay more attention to interior design and make compromises easily when it comes to acoustics," says Yang Xuan. "You can't change WSDG's design, not even the position of a screw, as the acoustics would then be different. The positioning of the air-conditioning ducts changed quite a lot during construction and, as this would definitely have affected the acoustics, the entire acoustic environment needed to be redesigned. WSDG gave us more drawings to make

Image courtesy of Is That Real Visuals

The smaller Control Room B

Image courtesy of Is That Real Visuals

The Steinway D-274 concert grand takes pride of place in the live room

Image courtesy of Is That Real Visuals

Ace Studios has a separate vocal booth

some adjustments and Victor supervised closely during the construction process."

The end results were well worth it. "The acoustic design is world-class, especially when it comes to reflection and isolation," he continues. "Whether we're recording piano, wind instruments or string instruments, we don't need to add any effects, maybe just a little reverberation and EQ to the source. I am most impressed by the low frequencies, which are very tight, and the different voices of the instruments are very distinct. For example, if you record a piano and a violin together, the piano sound is so big it might obscure the violin. But here you can hear the violin naturally and clearly, and you can hear different instruments distinctly if you put several together. We recorded a saxophone group of more than 40 people, which was very good; you can imagine that if so many people were playing sax and the acoustics weren't good, you wouldn't be able to hear what they were playing. With that many people you'd normally need double the space we have here, but it's so good to be able to record wind instruments in such a small environment."

Constructed in a 120m² commercial unit, acoustic isolation was particularly important due to the studio's proximity to neighbouring companies in the building. Ace Studios consists of the all-important 49m² live room, home to the nine-foot Steinway. The 18m² Control Room A, which has an 8m² vocal booth, is equipped with an Avid C|24 control surface, an Apple Mac Pro running Pro Tools, a TC Electronic 6000 multi-effects processor, Adam Audio S3X-H midfield monitors, a Grace Design M801 mic preamp and a range of microphones from Schoeps, DPA and Neumann. In addition, the smaller Control Room B offers another Pro Tools workstation, a PreSonus Monitor Station V2 and Genelec M040 monitors, and there is also a 27m² lounge.

"To design a small space like this is more difficult than designing a larger space," says Cañellas. "Controlling low frequencies in a small room is one of the most difficult things for an acoustic designer because the low-frequency wave is longer than the room itself." To control the low frequencies, WSDG deployed NIRO, its non-cuboid iterative room optimisation acoustic modelling software for small rooms, which can automatically optimise critical listening rooms of any size or shape.

Timing was another major consideration. "They needed to finish before the end of the year, so it was very hurried," continues Cañellas. Communication between Guangzhou and the international WSDG team was crucial, and a lot of correspondence went back and forth as changes were submitted and approved. In the end, following a 12-week design process, the build was completed in just 70 days, with the entire process overseen by WSDG founding partner, John Storyk. "To build this complex studio to the highest standard in

that time was a challenge that demanded efficient interaction between the experienced builder Mr Guo, the client and the design team involved in the approval of materials and the construction supervision," attests Cañellas, pointing to the fluid communication that made this possible. "Ace Studios was a project where velocity and superior quality merged the technical and aesthetic requirements of the client within their local context. They really appreciated the efficient communication with Silvia Molho, who handled the technical aspects of interior design. Sometimes the client has no experience with interior design and is not familiar with the drawings, so it can be difficult to make decisions. Our global team is very experienced in communicating with clients, educating them and offering advice."

Cañellas anticipates that Ace is the start of a new demand for high-end recording studios across the country. "I think that we will see more and more world-class studios in China that focus

on classical music, because the standard of musicians is also very high, and they need more spaces like this," he says.

Meanwhile, Yang Zijie's instinct to position Ace primarily as a studio for classical music has been justified. "Many children from the middle schools affiliated to Xinghai Conservatory of Music, whether they are from the orchestral or piano department, are coming here to record their work in order to attend international competitions," she says. "If students want to apply to study abroad, they will also come here to record. They tell us that the acoustics are very good and the recordings sound different to what they are used to. The questions we get asked the most are about the piano and the acoustics, so both WSDG's design and the Steinway piano are really helping us a lot.

"My father was against me investing in a studio at first because most studios are used for the owner's work, and many projects can be done 'in-the-box' today. But if we wanted to work with universities and conservatories, we needed a place to expand our business. We've already collaborated with Xinghai Conservatory of Music and Guangzhou University, which have put some of their most important recordings here."

This included some recordings from Xinghai conservatory's original opera, *Xinghai, Xinghai*, which were used to apply for national arts funding. The studio has also diversified into filming live videos, mainly for students needing livestreamed recordings as part of remote examinations, as well as videos of concert performances. "You can't rely on camera or phone recordings, these need professional mics, recording equipment and engineers," she says. "Though this work isn't done in the studio, the musicians have already worked here and built trust with us. To have a studio like this brings much more than I thought it would."

Her father agrees. "We work with some music creators, and we can compose all types of music according to the client's requirements," he says. "We cooperate with governments from different cities on their music for large-scale events and galas, and we also work with corporates who need specific music for their videos. I have just signed a five-album deal to work with some upcoming artists which we will focus on in the coming months, with all recording and mixing done here, and we're planning some live interaction with singers online too. This is very different from our recordings for education and competitions and, for the moment, the two types of work are roughly half-and-half."

Ace Studios was born out of the professors' desire to create improved recording facilities for classical students. It's early days yet, but already the studio is providing its owners with more possibilities than they ever imagined.

www.wsdg.com

A letter from America

As tradeshows gear up again, **Dan Daley** wonders whether a smaller, more relaxed format is here to stay

I STOPPED BY THE AES SPRING TRAINING EVENT IN Nashville in late February. It was cold, as it's supposed to be: right around +1°C, as is seasonal. It was also the first day after three straight wet days that dumped a half-foot of rain on the area; something that compelled those at Soundcheck, the city's preeminent rehearsal facility where the event was being held and which was severely flooded during catastrophic rainfall a dozen years ago, to keep a wary eye on rain gauges.

But despite the weather, the ambience was light and certifiably cheery. It wasn't just that people were once again gathering around gear – DiGiCo and SSL displayed their desks while Yamaha and Shure conducted training modules across the hall and a dozen-plus others demoed their wares. And it wasn't just that the masks were finally off – the Centres for Disease Control had just that day issued new guidance that allowed nearly three-quarters of Americans to keep their chin warmers completely off in most circumstances indoors. Rather, it was the sense that perhaps this is how it might be going forwards: smaller, more focused get-togethers that were as collegial as they

were competitive. I was asked as much about local barbecue recommendations as for coverage of this or that bit of kit. Someone mentioned that it reminded him of when the AES Show took place at the Waldorf Astoria ballroom in New York in the 1980s: a tighter, more familiar group of like-minded folks in a classy midtown Manhattan setting looking forward to martinis afterwards, jackets slung and ties loosened, the Mad Men of pro audio. Martinis, as you may have noticed, are back, as are Manhattans and Old Fashioneds: vintage cocktails to match the nostalgic demand for plugins that do what valves used to.

No one seemed to miss the sprawling, hectic tradeshows that had come to dominate calendars and marketing strategies. Rather, the talk was of how much more intimate table-top gatherings have been lately, such as the recent Cavlo one-day event in Las Vegas and the Texas Association of Broadcasters two-day golf-cum-expo outing last year. No one mourned the very recently displaced IBC Show, and some downright dissed NAMM and [InfoComm organiser] AVIXA for rescheduling their expos so chronologically close to each other this year.

Smaller, cosier trade events might be more apropos of not only the post-Covid era but also the broader pro audio zeitgeist; one that has seen the rise of new definitions of personal music production, done now on apps on a mobile phone even as the participants might be a continent apart. And with 60,000 new tracks *a day* going live on Spotify, who'd have time to do three days at a NAMM or AES show anyway? Not that they'd miss the training they'd get there – that's been moved almost completely to YouTube.

This is not to say that we don't need to gather like we used to. Perhaps we need it more than ever now, but not for the same reasons. Two-plus years of virtual get-togethers has left us starved for social interaction, just not necessarily for commerce more than companionship, and at scales our rusty social skills can accommodate. So the 200 people at one mini show and the 750 at another, and the 30 or 40 who come by a half-day pop-up will be how the world will figure itself out as we go along. The day of the monster tradeshow may have gone the way of the battleship studio console, at least for now. And that will be just fine, too. Who knows? We may just start dressing for dinner once again.

A letter from Europe

Phil Ward looks back over 100 years of BBC broadcasting

THE BBC HAS NOW BEEN BROADCASTING FOR A century. That's 100 years of microphones, message manipulation and *The Magic Roundabout*. In fact, the surreal French animation of that name could be the perfect description of broadcasting in general, given its daily circulation of dizzying images and sounds, so ingrained in our consciousness by now that we scarcely notice the bizarre collisions of context that it spews out at will. One of the main contributions of its technological evolution, to be fair, is simply to have speeded up its rotation.

What we really mean by broadcasting is wireless communication, because there was media before it, such as newspapers in your hand and messaging services over copper. The increasing ubiquity of receivers for its invisible waves was largely responsible for its popularity and impact, and it's perfectly symmetrical that its current reach should come home to roost as wirelessly as it started. For a long time, the internet needed wires, like telegraph. No longer.

To pretend that any type of broadcast can exist outside of politics is as naïve as imagining that social media can operate beyond bigotry. Professional broadcasters may be extremely sophisticated and well attuned to reporting

standards but cannot escape the centuries of history that go into one minute of content. Right now, the EU has blacked out the Russian-influenced news channel *Russia Today*, and the regulator Ofcom is considering pulling the same plug in the UK. But spend 20 minutes doing a direct comparison of its techniques of bias with the exact equivalent on CNN or Sky, and you simply won't know what to believe. Every edit can be reversed, to become its mirror opposite.

Like a newspaper, broadcasting is an expression of its territory. Perfectly understandable, and that's why the BBC's virtual exhibition to mark the anniversary is as British as those gift stalls on London's Oxford Street, where a biscuit tin needs a picture of Big Ben, and a pencil needs a novelty fur cap in the shape of a Coldstream Guards bearskin. Yes, this is dressed-up British for the wallets of other nationals, but that's what makes it like the concentrated solution of broadcast: instant shorthand for matters far too labyrinthine and deeply rooted for folk who are shopping for souvenirs, or watching television, to have time for.

The exhibition is basically a website, with souvenir objects scanned and annotated, audio clips, photographs and

graphics. Attempts are made to link BBC output with the zeitgeist. Mainly, if history happens in front of the cameras, it becomes "broadcast history" too.

Occasionally, the medium becomes the historical message: the first TV ident, a silver graphic like a robot hummingbird; the first BBC website, from 1997, which today resembles a board game; Ceefax, the text news feed, its pixels apparently cut from potato; and the various cameras, microphones, projectors and transmitters to have ushered in each new era of colour, or stereo, or OB, or video recording. Oh, and iconic stuff like football commentator John Motson's sheepskin coat.

It makes you wonder which objects would qualify if other European broadcasters mounted similar exhibitions. Would Italy's national broadcaster, RAI, include the Popemobile? Would ORF have Julie Andrews' wimple from *The Sound of Music*? And, surely, the last country in Europe to get a TV station – Liechtenstein's 1FLTV – would merely have to exhibit a Neutrik XLR. Maybe the All-Russia State Television and Radio Broadcasting Company could… no, hang on. Don't go there. One hundred years of instant exposure to millions, it seems, has in some cases taught nothing.

Prolight + Sound Guangzhou

Sue Su reports from the 20th edition of Prolight + Sound Guangzhou (PLSG) which reflected the current surge of Covid-19 affecting China

PLSG 2022 SPANNED 140,000M² ACROSS 14 HALLS, with 1,041 exhibitors (down 300 on 2021) and 52 seminars and training courses held concurrently. Two themes emerged: the ongoing effects of the pandemic in China, which saw attendance reduced by over a third, and the global supply chain shortage. Due to rising Covid cases in China, proof of a negative PCR test within 48 hours of entry was required. Most exhibitors believed that despite the drop in visitors, there was still strong demand in the market.

Hall 5.2 accommodated two of the largest booths, **Harman** and Longjoin Group. Harman's 720m² booth, occupying the hall entrance, presented the group's professional audio, video, lighting and control solutions, while professional singers attracted a large audience. **JBL**'s VLA-C outdoor line array, a new product designed for sports venues, was highlighted.

Longjoin was showing **KV2**, **Alto** and **Sennheiser**'s EW-D wireless microphones on its booth, alongside two brands it's taken on: **Rane** and **TOA**. The group also represents **Peavey**, present on a separate booth. "Visitor quantities may not be as good as in previous years, but we have met many old friends," said Jason Shi, chief representative of KV2 in China. "The impact of the pandemic on the installation and club markets is still large, while supply chain issues are plaguing the world. Many components, especially chips, are very difficult to purchase. We have made great efforts in procurement and done a lot of preparation."

Coda Audio's distributor Tempo Audiovisual was prominently displaying the N-Ray line array system. **Bosch** was showing **Electro-Voice** and **Dynacord**, focusing on EV's three-way MTS point source speaker. "In recent years, stadium construction has peaked," said Yang Hua, manager, Prosound China. "We have completed eight venues for Hangzhou Asian Games, including the main Hangzhou Olympic Sports Expo Center."

Jusheng Audio-Visual presented many brands including **TW Audio**, **Seeburg, Harvey**, **RAM Audio**, **Phonic**, **AKG**, **Midas**, JBL and **Martin Audio**. "The number of visitors was better than we expected, especially on the second day," said Stanly Yau, general manager of Jusheng. "Visitors have come from all the provinces except those suffering from a severe pandemic outbreak. Our business has returned to pre-pandemic levels; the

live sound market has been greatly affected, but conference and some fixed installations are better than before. The supply chain problem is ongoing but, fortunately, we have many brands on hand and can use different products to supplement deliveries. We've also launched our own domestic brand which can help to shorten delivery times."

ST Audio was displaying **EM Acoustics**, **XTA**, **MC²**, **ARX** and **Radian** products. Opposite, EAD revealed a new logo and Chinese name, showing brands including **Xilica**, **Alcons**, **Altair** and **Ashly**. **Audiocenter** exhibited Artist one-stop audio solutions, intelligent integrated amplifiers, the PC82 portable column system and Butterfly pocket line array system.

Guangzhou Qixin, recently appointed **HH Electronics** distributor for mainland China and Hong Kong, was debuting new products from the brand. Opposite, the **hi end plus** team had just returned from the closing ceremony of the Winter Olympics. In addition to the Sennheiser Digital 6000/9000, EW G4-300/500 and IEM series, the 400m² booth exhibited new products from its own hi end plus brand, and there was also a Winter Olympics immersive audio experience area.

At the entrance of Hall 4.2, **Audinate** had built a complete Dante solution together with **Genelec**, **Tico**, **Shure**, **Relacart** and **Yamaha**. The first Dante AV camera from **Bolin** was shown for the first time in China. Onsite Dante-certified training also attracted a large audience. Audinate had another booth for OEM products in the hall. "The traffic was better than I expected," said Steven Cai, marketing manager, APAC. "There were quite a lot of visitors on the first and second days, and our onsite courses were almost full." Added Jack Wu, sales director of Genelec: "There's definitely less traffic than last year, with more visitors coming from southern China, but the questions being asked and the understanding of the industry are better than in previous years."

The main exhibitors in Hall 4.2 hadn't changed much from previous years. Yamaha brought a range of pro audio products including the Rivage PM console series, loudspeakers including the just-launched VKE series designed for fixed installation, RUio16-D interface, commercial installation products and Steinberg studio solutions. Yamaha also exhibited the CIS commercial solution at distributor CRT's booth opposite and

Adecia remote conferencing technology at Audinate's training area outside Hall 4.2.

EZpro showcased **Allen & Heath**, **EAW**, **Pan Acoustics**, **Symetrix**, **Powersoft**, **IPS** and the **Astro Spatial Audio** immersive system. The newest additions to Powersoft's T Series, the T902 and T904, were shown for the first time in China. "With the global supply chain still unstable, we are making adjustments to solutions," said Ji Xiang, senior director, marketing at EZpro. "The most important thing is to ensure end users don't experience any change when using them, which requires us to make some tweaks to existing solutions."

DMT was showing the **SSL** Live mixer family, including the newly launched L450 and L650 models, alongside the X205 from **dBTechnologies**, a small line array for building immersive systems. Also on the DMT booth, **DPA** showcased the d:facto, d:dicate and d:vote mic series, while **Clair Brothers** exhibited the CO-10, CP218-II+ speakers for the first time in China. "We hope that continued participation in tradeshows will drive confidence in the industry," said Raymond Wen, deputy general manager of DMT. "People are turning to fixed installation projects like halls and smaller

DMT's Paul Men with the SSL Live range

Shure's Deng Nan reported a strong demand for mics during the pandemic

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applications, so many manufacturers have developed suitable products. The MI market remains relatively good."

Opposite DMT, **d&b** Greater China launched the XSL, the smallest member of the SL-Series. "We are strengthening our promotion of Soundscape this year," said Li Qi, business development manager of d&b Greater China. "The touring market is most affected by the pandemic; in the second half of last year several concerts had to be cancelled right at the last moment."

The **DAS Audio** booth featuring Beijing 2022 Winter Olympics mascots Bing Dwen Dwen and Shuey Rhon Rhon drew people keen to take selfies. ACE returned to PLSG, bringing the new **zactrack** automated follow spot system, as well as **MA Lighting**'s latest grandMA3 onPC command wing XT, JBL, **Soundcraft** and Sennheiser TCC2. NDT Group was featuring **Avid**, **ARRI** and **Tascam**.

QSC released 15 new products a week before the show, which unfortunately did not arrive in time. Distributor PCI divided the booth to show theme park and conferencing solutions, alongside Sennheiser, **FBT**, **Kramer** and PCI's own waterproof coaxial three-way speaker, KEMU.

Phoenix Audio staff wore purple t-shirts to reflect the colour of distributed brands, **Full Fat Audio** and **Funktion-One**, showing FFA 8004G3 and F48X digital processors and various flexible combinations of Funktion-One alongside **Van Damme** cables and **TiMax** immersive solutions. "Fewer people allows more effective communication," said director Chris Zhang. "The pandemic has had a great impact on the club market, but brands like Van Damme and TiMax have brought us new customers. We are spending a lot of time explaining the global supply chain issue to our customers, and many companies will inevitably be affected. Communication and mutual understanding at this time is really necessary."

Real Music was present with loudspeaker brands **Adamson** and **Next-proaudio**, and the company has also become a dealer for Allen & Heath Avantis mixers and Powersoft T Series amplifiers. Etrend was showing **Audiofocus**, **Audix**, **Ecler** and **Lenovo**, for which it is now distributing sound reinforcement and conferencing products. Audix's new small-diaphragm A127 microphone also made its debut in China. Guangzhou Guidance, one of Martin Audio's two agents in China, also took on **Optimal Audio** last year. "Last year, many people started learning about Optimal Audio, and we also signed several dealers," said general manager Rico Xu.

At the entrance of Hall 3.2 were the booths of Artsound and **Taiden**, with Artsound exhibiting the Allen & Heath ZEDi series, **K-array**, **beyerdynamic** and **Brahler** conference systems. Following the release of the **KGEAR** sub-brand last year, K-array announced its entry into the lighting field and launched KSCAPE with its first architectural lighting product, RAIL.

Taiden focused on its new high-end digital conference system alongside systems for paperless conferencing, digital infrared wireless conferencing, intelligent minutes, hybrid conferencing and smart teaching. **Mipro**'s booth featured the new MA

Rico Xu from Guangzhou Guidance said the market is learning about Optimal Audio

The Phoenix Audio team was kitted out in purple

The Yamaha team in Hall 4.2

Li Qi explained that d&b is strengthening its Soundscape promotion in China

Jason Shi from KV2 was meeting many old friends at PLSG

Sennheiser's David Fan said the pandemic has led to the rapid development of self-media

SAE's Bill Lee on the booth, which had relocated to the entrance of Hall 2.2

portable PA series, wireless audio systems, personal PA systems, musical instrument wireless transmission systems and antenna systems.

Sennheiser, which announced a new sales strategy last year, exhibited in its own right this year rather than through resellers. The booth was divided into three areas: professional audio, business communication and **Neumann**, with new products including EW-D microphones, HD 400 PRO monitoring headphones, MKE 400 microphone, TC ISP intelligent speaker and the Neumann Miniature Clip Mic (MCM) system. "Sennheiser has launched some personal, easy-to-use products with good sound quality, aiming to bring the technology used in some of our professional products to the masses," said Sennheiser senior sales manager, David Fan. "The pandemic has led to the rapid development of self-media, and everyone's demand for audio and video equipment has become higher and higher."

Shure attended the show with distributor, Raylong, which was one of the booths that attracted the most visitors, promoting a better understanding of Shure products by clearly setting out product evolution, film and television production, home studios, conference systems and other applications. Raylong also livestreamed invited industry experts and teachers covering film and television production, 5G spectrum changes, sports events and other topics. Deng Nan, Shure's director, Greater China and South Korea, pro audio, commented: "There has been a strong demand for microphones during the pandemic, especially at the beginning when the global sales of wired microphones surged. The global supply chain problem not only affects the AV industry but also other industries. Shure is doing its best to make adjustments, including optimising production and R&D."

Audio-Technica divided the booth into six areas, showing products including 3000 Digital Series, 3000N Series,

System10 Pro and ATUC Series Conference Systems, as well as products from **Wisycom**, **Hirosys** and **Switchcraft**.

Domestic brand **HM Audio** in Hall 3.2 brought nine new products to the show, including mixing consoles, audio matrixes and amplifiers. "The quality of visitors are still relatively high, and many of them came with the intention of doing business," said Tang Xiaoming, general manager of HM Audio.

Tico attended the show for the first time, bringing brands including **Biamp**, **Panasonic**, **Renkus-Heinz** and **CAH**. "We've cooperated with Audinate to display products on their booth for the past two years," said Harley Tao, Biamp's sales manager. "Since **Community** and **Apart** have become Biamp's brands, we think PLSG is a major show for us. After being acquired by Biamp, both brands have become more involved in the conference market, which has opened up new opportunities for us."

The **SAE** and **Verity** booth moved to the entrance of Hall 2.2, showing amplifier brands including **Soundstandard**, **Soundard** and **AES**. Verity presented speaker models including Monster, IWAC210 together with distributor Haona Audio. "Exports are slowly recovering, and demand in Vietnam, India, Egypt and Europe is rising," said managing director Bill Lee. "We have a large number of orders but, due to supply chain constraints, the price of many products needs to increase significantly. Although China has a domestic chip supply, production capacity is not enough, and many are allocated to emerging industries such as renewable energy vehicles. As an intermediate manufacturer, we have to bear double pressure from the supply chain and customers."

Domestic speaker manufacturer **Lingjie Enterprise** brought new products to the show. "We used to do more wholesale and retail, but now we've got more and more involved in projects, have a better knowledge of where our products go and interact more with our customers," said Lingjie Enterprises marketing director, Zhang Jie.

PSLG is due to return in the spring of 2023.

2022 Dates:	25–28 February
2023 Dates:	TBC
Venue:	China Import and Export Fair, Guangzhou
Total exhibitors:	1,041
Attendance:	52,699
Contact:	www.prolight-sound-guangzhou.hk.messefrankfurt.com

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Colouring in

Phil Ward, author of regular Blank Canvas comment piece, *A Letter from Europe*, and other freelance assignments, paints a two-decade picture on a familiar canvas

THERE IS A SYNDROME IN BUSINESS, BUT IT doesn't have a name. It occurs when disillusioned and stressed-out employees leave an organisation and start up afresh. For some it's a complete change, like sales executives becoming basket weavers instead of basket cases. Others take what they did, walk out and do it better. This is how Richard Lawn established *Pro Audio Asia* magazine, 20 years ago this month.

The Yorkshire sales

Richard left the Yorkshire seaside town of Scarborough in 1986, a place where the North of England stares at the North Sea, and Europe beyond it, like someone trying to pick a fight in a pub. He never looked back, but he still wears his roots with pride and indeed exports them around the world, often in cans and teabags. Overseas associates love this, and none more so than the many Chinese, Singaporean, Malaysian, Korean and Vietnamese industry professionals who beam with recognition when Richard strides into the room. It's a look I have seen many times over.

Richard rocking with guitarist Steve Stevens at NAMM 2013

That's because 10 years after heading south in search of fame and fortune, Richard joined my team at *Pro Sound News Europe* in London, where I was editor and Europe was our oyster. He worked here in the advertising department alongside lifelong friend Sue Gould, and between them they turned a European pro audio market that was initially cool to the overtures of a British trade magazine into a floodgate of support. The Channel Tunnel had opened, and Richard and Sue drove the business right through it as profits soared.

One result of delivering prosperity to a publishing corporation is that they want more. So, *Pro Sound News Asia* debuted in 1997, an offshoot of *PSN Europe*'s success. Richard immediately grasped its potential, and so began his quarter-century love affair with the East.

Personally, my version of The Syndrome was very simple. All I had to do was stop commuting, so by the time the internet could crawl I was ready to test it to breaking point. I went freelance, which basically means you can give yourself the sack, curse yourself resentfully in a bar for a day and then give yourself one more chance. This you can do over and over again. Richard was a lot more resourceful than I could ever be. In April 2002 he founded *Pro Audio Asia* with business partner and editor Tim Goodyer, who had recently left the same corporation for the
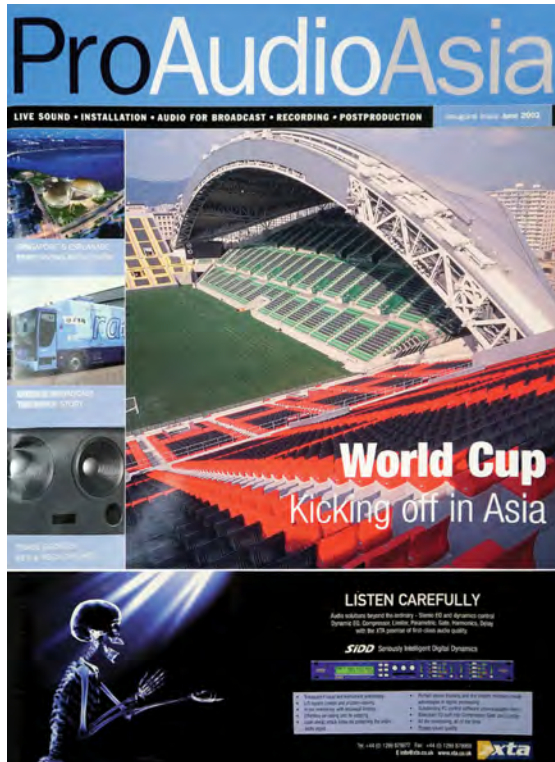
Launch issue of *Pro Audio Asia*, June 2002

same reasons, and by June 2002 they were able to circulate the first edition at the Broadcast Asia trade show in Singapore. Reaction was swift.

"We pulled a magazine together from nothing in five weeks," Richard recounts, "which was quite an achievement. We had to find a production company, compile a circulation list, set up the office and accounts… and the hardest bit was telephony and computing. I had no experience of that. It was all ISDN back in those days."

Carte blanche

A company called "Blank Canvas" was registered, somewhat pointedly. "We wanted to strip away all the politics, the red tape, the unnecessary pressure of a large organisation," continues Richard. "We wanted to get back to the core of publishing: finding the right readers; giving them the information they needed; supporting them in their businesses. Editorially, we set the benchmark of the BBC World Service and that type of quality, specifically for the Asian market."

Support from the industry was immediate, with several major brands contributing data and contacts to ensure that the right avenues into the market were identified, befriended and served. This is the lifeblood of a trade title: meaningful relationships with the genuine players who participate in the movement of the right technical and creative solutions into the right hands.

"There was an inordinate amount of goodwill towards Richard and Tim when they did this," says Sue, who rejoined her erstwhile colleagues from *Pro Sound News Asia* and *Studio Sound* in 2005 following maternity leave. "That was a huge help in those early years. I'll always remember the late Rob Lingfield of Martin Audio wasting no time in committing advertising budget to the magazine, as did Guy Lewis at XTA and Karl Brunvoll at Renkus-Heinz."

To a large extent, this was a legacy of support from *Pro Sound News Asia* which, due to questionable management decisions, had abruptly ceased publication in late 2001. "After 9/11, everyone was very nervous," points out Caroline Moss, the current editor

of *Pro AVL Asia* and one of the founding editors of the original *Pro Sound News Asia*. "In my final editorial when *PSN Asia* closed in December 2001, I contrasted the upbeat resilience of the recent AES Convention – which actually took place in New York less than three months after the attack – with 'other decisions' that 'aren't so positive'. I was of course talking about the decision by the publishing company to suspend the production of *PSN Asia*, still with 'every hope' that it would only be temporary. Sadly, it wasn't."

"I was told by one executive," Richard smiles wryly, "that if I was so keen to pursue the Asian market, I should start up myself 'above a chip shop in Barnsley'. That was the line in the sand."

Fat free

No chip shops were needed, in Barnsley or anywhere else. The rebirth of the publication, in the hands of those who built its reputation as opposed to those who wasted it, was therefore nothing less than a relief for a market growing accustomed to the trustworthy access it provided to a complex region. Where it might have seemed that a golden opportunity had been lost, the courage and determination

***PAA*'s first editor Tim Goodyer and production manager Raymond Boey in Singapore, 2003**

Richard catches up with InfoComm Asia's executive director, Richard Tan

of Richard and Tim to reopen established channels was a godsend.

"We had spent over four years building our contacts in Asia," recalls Caroline, "and we were just about to go monthly, up from 10 issues a year. It was all looking good, and the many companies that were now hugely active in Asia were beginning to depend on us for a medium with dependable sources and the highest standards. They saw us at the tradeshows, they saw us out there visiting the facilities and they were quite shocked when it was taken away."

"I felt very passionately about Asia as a market for pro audio," adds Richard, "as well as entertainment technology generally, and I wanted to put all my resources into it. Don't forget that *Pro Sound News Asia* was still only one title in a broad portfolio, and I had to combine getting up at five in the morning to push into that territory with all my other responsibilities in Europe and the US."

Travel guide

The time difference remains the biggest hurdle to overcome in the logistics of East–West business-to-business communications, and in the age before Zoom, telephone and email were the only conduits for discussion. Except for one. Straight away, Richard made a commitment to another solution: his passport.

Travel was a privilege not shared lightly by corporate publishing, as if the expense of it could not be justified. Well, Richard exploded that myth too, as week after week of arduous journeys deep into Vietnamese, or Chinese, or Malaysian markets began to pay off, the dedication of the team fully appreciated by grateful companies virtually ignored in the West. So effective was this campaign that US and European brands began to rely on Blank Canvas for their own information, often several steps behind in fact-gathering.

Caroline and Sue relax over dubious cocktails on a late 1990's trip

Howard Jones is captured on video by Sue on the Genelec stand at the Tonmeister show

Richard with API Audio's Larry Droppa at an AES New York convention

"They still do," points out Caroline, and Sue adds: "More often than not, I'll share a link with a manufacturer to some of our information, and they'll say they had no idea that projects featuring their brands had happened! The first time they hear it is often from us. I think that also represents how Richard ripped up the rule book. It's always been about being there in front of people, regardless of whether they were advertisers or not. As long as something is newsworthy, we'll talk about it."

Caroline and Sue became the de facto Indian correspondents, the away team most attuned to the subcontinent's idiosyncracies. "Each region across Asia has its own culture," says Caroline, "all of which demand a different approach. Respect for these customs is essential, and there is no substitute for being on the ground in a territory and letting people see that you are serious, and you are going to return year after year to maintain a personal dialogue. That's how you win trust."

A Chinese edition of *Pro Audio Asia* duly followed in 2004, deepening the relationship with this critical territory. That summer, a careful programme of diversification began when the winning formula was taken to another less-trodden region, in the guise of *Pro Audio Middle East*, now under the guidance of editor, Simon Luckhurst. Then came *Worship Audio Asia* in July 2006, which itself marked a key turning point for the company when it was rebranded as *Worship AVL Asia* three years later. The addition of video and lighting to the previously audio-only editorial mix reflected the growing integration of entertainment technology and helped to increase subscriptions not only in Asia but further afield: soon, *Pro Audio Middle East* became *Pro Audio MEA*, and Africa was on the radar.

Globetrotters

As publishing frequency increased and the internet matured into a workable media platform, *Worship AVL Asia* then did something subtle but hugely revealing. In 2016, the word "Asia" was dropped from the title as the global worship market revealed its true identity: a dispersed community of like-minded people, from Sydney to LA, with a shared interest. The same description can be applied to all those in pro audio, video and lighting, whatever the application, and by now Blank Canvas was one of the pioneering business-to-business portals able to reach an instant worldwide audience by digital means.

"We always went to the leading tradeshows worldwide, like NAMM, InfoComm and Frankfurt," Richard says. "At first it was to get the news first-hand and distribute it in magazine form to people who wouldn't get it by any other means, with the internet still developing. By default, we established an equal presence in Europe and the US, so the evolution to email newsletters, web forums and then social media was completely natural. It's definitely worked in our favour."

Video has played an increasingly important role for Blank Canvas; here, Richard interviews RCF's Arturo Vicari

Caroline interviews beyerdynamic's Michael Knopf at InfoComm India 2019

Following the lead set by the *Worship* title, the Asia and MEA pro audio magazines acquired the *Pro AVL* suffix in 2017. It was now a standardised portfolio, including discrete digital platforms for all three. This sets the framework for all of digital multimedia's tableaux, and to date the innovation setting the fastest pace is video production, launched in 2018. The hiring of young and talented videographer Chris Yardley, construction of a greenscreen studio at the Blank Canvas headquarters and investment in video equipment has endowed these previously uncharted waters with a slick professionality. For the new

Simon in discussion with Joshua Rush from Audinate at ISE

vertical media, feeding news-hungry professionals many thousands of miles away, it's ideal.

The question bubbling in the wok today is how far face-to-face interaction will recover after the pandemic. Zoom and Teams have been a godsend, but can they replace the foundations on which the *Pro AVL* and *Worship* family was built? "There's a huge amount we can do that we couldn't before," reflects Caroline, "even a new kind of journalism as we have learned to gather everything remotely. It has surprised us how effective it is. But when you travel, you come back with loads of features in the bag; the photographs, the interviews and everything you need. First-hand experience is always best."

"We do want to get back out there in person," adds Richard, with one eye on his empty Duty Free cabinet. "But we'll do it more efficiently. We're not getting any younger…"

"Unique content is the backbone of what we do," Sue concludes. "It's what we see through our own connections. That's what has made, and kept, our reputation."

I think we should call that syndrome "blank canvas" syndrome. After two decades of witnessing at first-hand how it should be done, I can't think of a better way of honouring Richard Lawn's achievements.

The team heads west for NAMM 2020; L–R: Richard, Sue, Chris and Simon

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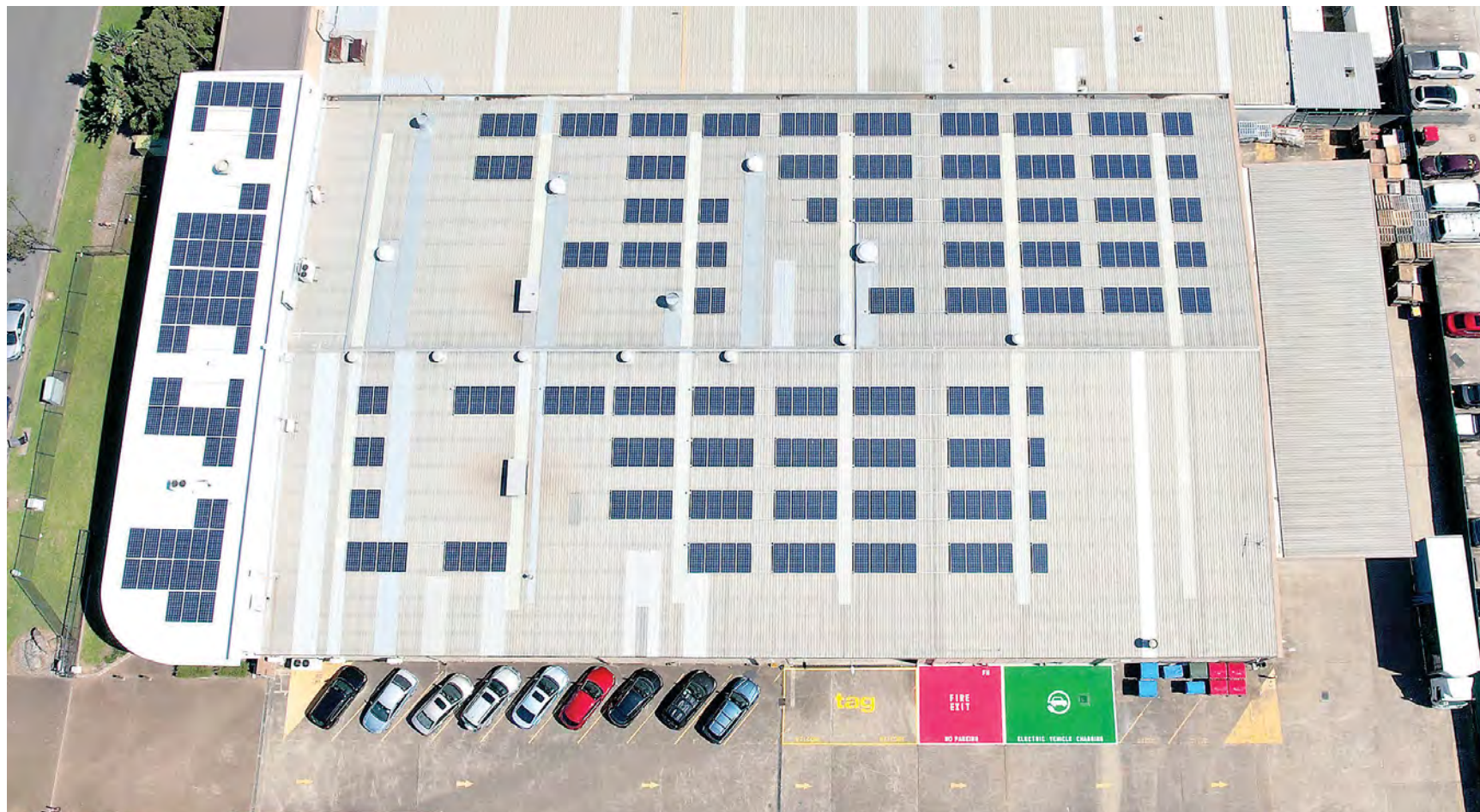- Variable-D minimizes proximity effect

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Calling Planet Earth

TAG is aiming for 100% solar power at its Kings Park warehouse

The acquisition of a new logistics centre by Australian distributor TAG is allowing the company to ramp up its long-term sustainability programme. **Caroline Moss** finds out more

L–R: TAG directors Tony Russo and Maxwell Twartz planting trees for the Miyawaki forest

TAG IS WELL-KNOWN FOR ITS PHILANTHROPIC initiatives, and we've covered several TAG Cares projects that contribute to the local community in *Pro AVL Asia*. With striking modesty, the company has always insisted on taking a backseat, preferring to place the projects and communities themselves at the centre of any publicity. However, the latest initiative – Planet | TAG – puts its efforts on a global scale, consolidating TAG's ongoing goal of increased sustainability.

In early 2021, TAG purchased a warehouse at Sydney's Kings Park to serve as its logistics centre, having previously operated out of three different locations. Ownership of the property is giving TAG the freedom to implement its vision of sustainability which can be broken down into five main categories: power, incoming freight, waste streams, inputs and greening the environment.

TAG's long-term vision is to be 100% solar powered and off-grid, with the ability to store power once a cleaner alternative to lithium batteries becomes a reality. To this end, the warehouse is fitted with 300 325W solar panels, forming a 100kW ABB inverter system. This is currently generating power for machinery including warehouse vehicles: five forklifts, two WAV pickers, a floor sweeper and a floor scrubber. An EV charging station has been installed for electric vehicles, and an EV delivery truck manufactured locally in Melbourne is due to arrive in July. "It's an 8t SEA Electric/Hino collaboration pantech with 180km range for local Sydney deliveries and represents an eye-watering investment," comments CFO, Craig Durrant.

By late 2019, TAG had committed to using sea freight as a priority over airfreight, increasing it to 90% of total shipments. "Sea freight is unquestionably much more environmentally friendly than airfreight," asserts Josh Buckingham, TAG's supply chief. "For a typical shipment of one ton over 5,000km, around 75kg of CO_2e gas is emitted when transported by sea and around 3,300kg when transported by air, CO_2e being the carbon dioxide equivalent in terms of impact from greenhouse gas emissions."

Sea freight doesn't make sense in certain circumstances, however. "Although sea freight is cheaper per kilo, for small shipments of below $1m^3$, the much higher handling costs and port charges incurred on a sea freight shipment often means airfreight ends up being cheaper," continues Buckingham. "Plus, airfreight is heaps faster, so for high value/low volume products, the reduced funding time – having your money tied up for two months rather than, say, two weeks – can be significant. In addition, when sales volumes are very varied from month to month and the product has different colours, finishes and sizes, carrying zero stock and airfreighting everything to order can be very attractive to a distributor."

To maintain consistent product availability, TAG made a series of tough decisions around product range rationalisations, increased local inventory, bulked-up shipment sizes and, to maintain a full pipeline of stock in transit, started ordering 4–8 months ahead. It goes without saying that this plan was severely challenged by the arrival of Covid, but TAG has stuck as closely as possible to its sea freight strategy, only using airfreight for very small or critical supplies. "For the last 12 months we're at 98.75% sea freight with plenty of inventory on hand and ironing out some kinks so we can do even better," explains Buckingham.

During 2021, TAG estimated that along with the approximately 900 tons of products entering its warehouse, there were a variety of by-product waste streams. "Often, this 'waste' just gets consolidated into comingled bins that end up on a sad downward spiral to landfill," says TAG director, Anthony Russo. "We wanted to minimise that, so we set about identifying the waste streams and looking for reuse and recycling opportunities for each."

The company is now separating waste into cardboard and paper; soft plastics and pallet wrap; pallets made variously of timber, plastic, cardboard and metal; and pallet strapping. While there is no denying the usefulness of pallet wrap – being light, strong and cheap – to secure product on every pallet on every shipment, the stark fact remains that it is resolutely single use only. "If you're in the logistics business it's really, really hard to be without it and you're going to be dealing with a lot of it," says Russo. "Comingled in waste bins, it's basically off to be landfill but it can be recycled and, because it is a feed-stock for other products, it has value, but this can only be released if the product can be transported efficiently. This is a 'cost of truck movement vs value of goods being moved' argument and, in the case of pallet wrap, it's dead unless it's compressed and bailed."

Enter the Bramidan B5 baler, a miraculous machine that compresses pallet wrap to around 5% of its former bulk and neatly bales it. "When we've got five or six bales, our recycling partner Wanless picks it up and actually pays us a small amount for it!" continues Russo. "We're not in it for the money, but when money changes hands it means it has value – no one pays money for something and then throws it away."

When Wanless – an aggregator – has accumulated several hundred bales, they are sold on to traders who in turn sell them to manufacturers of plastic goods such as car bumpers, park furniture and wheelie bins.

The Rongda cardboard recycler produces packaging material from shredded cardboard

The Zerma GX300/600 granulates hard plastics, rubber, silicone and other waste material

An EV charging station has been provided

Wherever possible, larger cardboard cartons are being used for outgoing despatches. "'Reuse' is near the very top of the waste hierarchy," Russo continues, adding that this reduces the requirement for new cartons and therefore the overall quantity that gets recycled or wasted.

For internal box packaging, bubble wrap has been eradicated following the purchase of a Rongda cardboard box recycler which produces packaging material from the shredded cardboard for cushioned protection or void filling and, like every machine in the warehouse, is powered by the solar array. The rest of the wastepaper and cardboard is sent to the Bramidan baler which compresses it for pickup by Wanless.

For its own outbound pallets, TAG is constantly searching for viable alternatives to pallet wrap and aiming for minimisation at all times. The company has invested in two Lantech Q-300 automatic wrapping machines. This uses one of the thinnest wraps available – 25micron – which stretches up to 300%, meaning that a 100m roll of pallet wrap can extend to 300m.

The pallets themselves can sometimes be reused. "Virtually all the pallets we receive on our incoming shipments are the single trip, disposal, cheap and cheerful type," says warehouse chief, Shane Linfoot. "Where possible, and if the pallets are in good condition and structurally strong, we reuse them for our own outbound despatches. We also offer them free of charge to companies in our neighbourhood who use them for their own outbound despatches and take most of the balance. Where pallets are in poor condition, are broken or unusable, they are picked up by Wanless, which aggregates and recycles where possible." An estimated 90% of TAG's pallets are reused, with around 10% consigned to Wanless.

The current situation isn't so rosy for pallet strapping as no local recycling channel exists, leaving landfill as the only option. Until recycling becomes available, TAG is focusing on reducing landfill waste to the smallest volume possible, and this is where the new Zerma GX300/600 industrial granulator comes in. "This beast makes short work of things like pallet strapping and pallet corners from the warehouse, as well as hard plastics, rubber, silicone, unrepairable headphones and turntables, so it's also a part of our e-waste [electronic waste] programme," explains TAG director, Maxwell Twartz. "By granulating these waste streams we're able to reduce volume by about 80% and, as well as less waste volume, that also means 80% less truck movement. It's still waste going to landfill but until recycling streams become commercially available it's the least-worst solution, and hopefully over time we can make the granulator redundant."

While it hasn't proved possible to totally eradicate plastic packing tape at this stage either, the purchase of a Better Packages 555 paper tape dispenser has made a big contribution, with an unexpected side effect. The machine dispenses strips of paper tape cut to the exact size and, according to Twartz: "When you use it, you feel a strange sense of calmness and peace. It also means less plastic and

that's a goal in itself – using paper rather than plastic sealing tape on cardboard cartons makes perfect sense when those cartons get to the recycling stage."

The dispenser, debuted on 300 Onward&Upward Allen & Heath Come Back Packs – a collection of local products sent to sound engineers returning to work – is now on permanent sealing duties at TAG's Stanmore service centre, and a second has just been purchased for the Kings Park logistics centre.

When it comes to greening and planting, the move to Kings Park has provided TAG with a 175m² parcel of land to grow a Miyawaki forest. Pioneered by Japanese botanist Akira

The miraculous Bramidan B5 plastic wrap baler

Miyawaki, this creates a dense, native forest in a small space which is self-sustaining and supports local biodiversity. Three or four plants are placed in each square metre, so the trees grow up quickly rather than out slowly. More than 3,000 Miyawaki forests have been successfully created worldwide, the density providing up to 30 times better carbon dioxide absorption than a monoculture plantation.

In November 2021, a team from TAG planted a Miyawaki Forest with 300 native plants: canopy trees, medium-height trees, shrubs and ground cover. The trees, indigenous to western Sydney, were sourced from IndigiGrow, an Aboriginal-owed and -staffed nursery. A citrus grove of 15 orange, lemon, lime, olive and pomegranate trees has also been planted.

True to modest form, TAG is keen to emphasise that this is only the first phase; just one waypoint on a journey of planned systems and investment that will never really end. The company is moving into phase two, which includes tackling e-waste by repairing, reusing and repurposing, as well as separating and finding the most responsible disposal channels for the component materials. If this is just the start of TAG's sustainability journey, the road ahead – in all likelihood a challenging one – promises to be interesting and extremely worthwhile.

www.tag.com.au

Back to the roots

EAS executive director, Lam Tze Tze

Caroline Moss talks to Lam Tze Tze, executive director at Singaporean multimedia systems integrator, Electro-Acoustics Systems (EAS)

THE ISSUE OF ATTRACTING MORE WOMEN INTO THE AV industry through awareness, education and equal opportunities gains more and more currency with each passing year. But for a few, it's simply in the blood. The only child of EAS CEO and founder Lam Tong Loy, who incorporated the business in December 1982, and Lam Ping Yee, who handles finance for the company, Lam Tze Tze was exposed to the industry as a young girl, accompanying her parents to the office as well as to meetings and tradeshows around the world.

"I became so used to seeing the technology," recalls Lam, who today oversees strategy and business development, corporate affairs and overall management at EAS. "When you're little, people like to explain things to you, so being in that environment very early on I got to know about the different technologies, how things were changing, everything to do with AV. Because of that, I didn't have to be taught it; I got a good idea of what all the technology was and what it did."

But it was only after leaving this familiar world for 17 years to strike out alone that Lam returned to the family business in 2017. "My family intentionally wanted me to go away to school and university and gain work experience outside," she continues. "Some people are given no choice, but I was lucky that I had the opportunity to gain experience in other areas."

Lam spent seven years studying in the UK, first at Cheltenham Ladies' College, then for an economics degree at the University of Bristol followed by a master's degree in international management with a focus on China at London's SOAS (School of Oriental and African Studies). "We learned a lot about cultural context, which is very important when it comes to management," she says of her master's. "It's not just about managing people."

Next up was a 10-year stint in Hong Kong working in telecommunications and biotechnology. When Lam made the decision to return to Singapore and join the family business, one of the welcome changes she noticed was that a lot more women had entered the industry. "Looking back, most of the engineers were men, but now there are more women coming into AV," she says. "Whether or not they move up into more senior roles, it's a bit too soon to tell, but I don't think this is just an AV issue. I see professionals in different industries talking about the same thing. In our company we have women in every department. But a lot of people – not just women – don't realise this is such a big industry with so many jobs, and it will still take time for that awareness to build."

She offers the convergence of AV and IT as an example: "To a layperson, AV still tends to be seen as just setting up sound systems, or installation of AV equipment. We were the first professional AV and broadcast company in Asia providing integrated solutions and distributing reputable brands, and one of the first companies to introduce new technologies such as networked AV. This was totally unheard of back then, and even now it will take more education so people can understand the type of work and opportunities that are available."

Lam's study of cultural context underpins her strong belief that cultural understanding and local knowledge are vital ingredients for EAS' work across Southeast Asia. Headquartered in Singapore, the company has regional offices as well as partners in different locations. "Who we work with will depend on where the project's client is based," explains Lam. "Quite often they will be in Singapore working on a project elsewhere, and they'll bring us onboard to design it, all the way from initial concept to installation to project completion. Because of the work involved, it's sometimes better to team

with local companies; systems integration can be quite a localised business."

A cultural appreciation also applies within the company. "There has to be a set of shared values, professional standards and the ability to think along the same lines. From our side, it's important to check in with employees to know how they are feeling and provide a sense of belonging. I maintain an open-door policy and make a point of having a call or face-to-face chat with our staff regularly."

It goes without saying the past two years have thrown up challenges that were unimaginable when Lam returned home. EAS, deemed to be a company providing an essential service during Singapore's circuit breakers so clients could continue with critical projects and services, transitioned quickly to the new world. "Our staff were able to continue working onsite, while those who could started working from home," she recalls. "We ensured they were equipped with everything that they needed to work and then got used to seeing everyone onscreen rather than in person. When restrictions eased, a lot of people were ready to return to the office. We managed to retain all our staff, didn't cut salaries and took the opportunity to recruit new staff to prepare for the rebound of the economy."

While work certainly didn't dry up during Covid, particularly for refurbishments and upgrades during downtime, Lam explains that budgetary concerns became commonplace. "This was expected because clients' revenue was, in some cases, down to zero. Some of the upgrades were done on a much smaller scale, or in phases, but always very cost-conscious."

But as Singapore starts to drop restrictions and reopen to overseas travel, another hurdle has appeared. "The problem now is the supply chain," Lam says. "Manufacturers are having difficulty in supplying and are having to increase prices. Unfortunately, some projects can be delayed for up to a year or two. We are buying in a lot of things early; we have to be agile and forward-thinking and make sure we have the warehousing available for these goods. If you don't account for rising prices, it's not a healthy place to be, and we have seen companies that have had to close, maybe taking others with them. There is a fair amount of undercutting – projects are way below the value that they should be, considering how

EAS installed Renkus-Heinz Iconyx speakers at Changi Airport's Jewel Rain Vortex, the world's biggest indoor waterfall

A Meyer Sound Constellation system installed by EAS at the Singapore Conference Hall, home to the Singapore Chinese Orchestra

An immersive show at Resorts World Sentosa, courtesy of EAS

much prices have increased. If everyone is undercutting just to get turnover, something has to give. We're not the kind of company that wants to undercut or sacrifice quality just to get the work and we've had to stick to our guns on prices and standards."

A recent personal development for Lam has been her appointment to the AVIXA board in January. "It's a good thing the board recognises that diversity needs to be represented, and I am very grateful for the opportunity," she says. She also sits on the board of Women in Sustainability and Environment (WISE) alongside a group of professional women from different industries throughout Singapore.

As EAS gets ready to celebrate its 40th anniversary at the end of the year, Lam reflects on the strong foundation the company has built over the years. "Our financial prudence has placed us in a comfortable position to invest for the future," she says. "We will continue to pursue innovation and push technological boundaries. Our values will not change: to maintain high professional standards, from design to project execution, as well as maintenance services and requiring our staff to maintain a high level of integrity and ethics as well as a sense of responsibility to the community and society as a whole.

"Our founding team trusted their instincts, giving 110% to introducing new technologies and implementing best-in-class solutions. That formula has worked well for us and will continue to reap rewards in a sustainable and fruitful way."

www.easpl.com.sg

Primed to pounce

Having taken the wraps of a brand-new line array created in the midst of the pandemic and during downtime in live events, Meyer Sound senior product manager **Andy Davies** highlights how it prepares the Californian manufacturer as the live scene returns to strength

Meyer Sound senior product manager Andy Davies

Why did you choose to launch a flagship line array during the pandemic?

We are always looking at the needs of the market and have been collecting data and input on what these are for large-format products. We were already working on the technology to deliver a new product focusing on the key areas of size, weight, performance and emerging technologies. As we saw a portion of the industry reopen, we were told very clearly that there would be a lot of pent-up demand for live events and a desire to go back to work with the right tools and in the right way.

How has the market changed during the pandemic?

One of the industry trends before the pandemic was that fewer artists were going on long tours in the same size or style of venue. Often venue capacities would change dramatically through a touring run, or headline shows would be mixed in with festival appearances. This was already making it hard to place large-format systems on long, continuous runs of work. The pandemic has accelerated this. As different territories have opened in different ways and at different times, we have seen a greater and greater need for flexible solutions that work across a large range of venue shapes and sizes.

How does Panther help customers adapt to the new normal?

Panther gives users the ability to deliver audio for the highest power applications in a package that fits into everyday deployment options. The opportunity to use your rental fleet for large and small shows is a compelling business proposition. For performing arts installs, Panther brings the performance required by the world's most demanding acts into a size and weight format that fits comfortably into modern architectural designs. These business cases are global and clearly seen to us in the Asian market.

How do you see the trend of AoIP developing in both live sound and installation?

Panther has a Milan-certified input, and there is no doubt that the benefits of AoIP are spreading through the industry. The opportunity to use standardised cabling and access more data and functionality is being grabbed firmly by manufacturers and end users. In the installation world, we recognise a desire to use AC and IP cabling for all applications where possible, and it's great to be able to bring a large-format array solution into that world.

Why have you favoured Milan over other AoIP solutions?

We have been committed to the AVB project from its inception as we recognised the potential for an open-source, time-sensitive network to truly replace analogue connections in the audio world. With what we do, it is vital we can guarantee that all our devices are working together seamlessly. AVB technology, with the Milan implementation, is the only AoIP solution that guarantees the audio delivery performance required for high-performance line arrays. This is one of the core reasons Meyer Sound and other leading line array companies have adopted only this standard for high-performance system deployment. Being able to lead the further development of Milan alongside other manufacturers has been a fantastic opportunity for Meyer Sound to help push the industry forwards and we look forward to the growth in products using Milan that we will see in 2022.

How have you been able achieve greater output from a smaller cabinet?

One of the core advantages of a self-powered system is the efficiency we can gain by fully optimising the electronics and drivers to work perfectly together without the variables

The self-powered Panther cabinet is available in three coverage patterns and outputs up to 150dB

of long loudspeaker cables or multiple cabinets on each amp channel. We knew that a new generation of drivers could handle more power, but we needed to provide that in an electronics package that would fit into a compact enclosure and meet the weight requirements.

How do improvements in power efficiency translate into real-world cost savings?

The efficiency of Panther saves users money in multiple ways. The most obvious is reduced electrical costs at the venue, but this is only one aspect. A more compact, efficient enclosure means lower fuel costs to transport to the site. It also requires less overall rigging infrastructure, further reducing transportation costs. It's difficult to put numbers on exact savings as electricity and fuel vary widely in cost around the world. A typical arena system using Panther compared to a previous-generation system is significantly lighter in the truck.

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Spatial goes global with new licensing model

Immersive audio and software service provider Spatial has announced the release of its new audio platform

FLEDGLING IMMERSIVE audio company Spatial has launched Global Open Access to its immersive audio server and creator tools. Anyone in the world can now get started creating sound objects and soundscapes with licence-based access to fully develop and deploy Spatial scenes.

For commercial use, Spatial is now offering a US$10,000/year subscription licence which includes access to its full platform and library of shared soundscapes, making the previously gated software available to retail, hospitality, museums, estates, venues, hospitals, theme parks and more. For creative uses, the company is offering Backstage Pass, a free licence that allows creators to design immersive 3D audio environments with Spatial Studio, the company's macOS authoring tool; and Spatial Reality, the real-time performance engine that runs the audio simulation in real-world physical spaces.

The Spatial platform comprises several components. The Spatial Reality engine is built on an object-driven platform to render believable soundscapes in real time. Using object-based audio and acoustic physics, Spatial simulates characteristics such as size, position, distance and speed in the real world and can deliver 24/7 dynamic soundscapes in any space. Soundscapes can respond to movement, music, temperature and other inputs that trigger actions. Similarly, it can inform and trigger actions with video, lighting, control systems and other outputs. Designed to have entropy and randomness, these experiences will never sound the same twice, opening up the potential to create responsive, immersive experiences optimised for specific audiences.
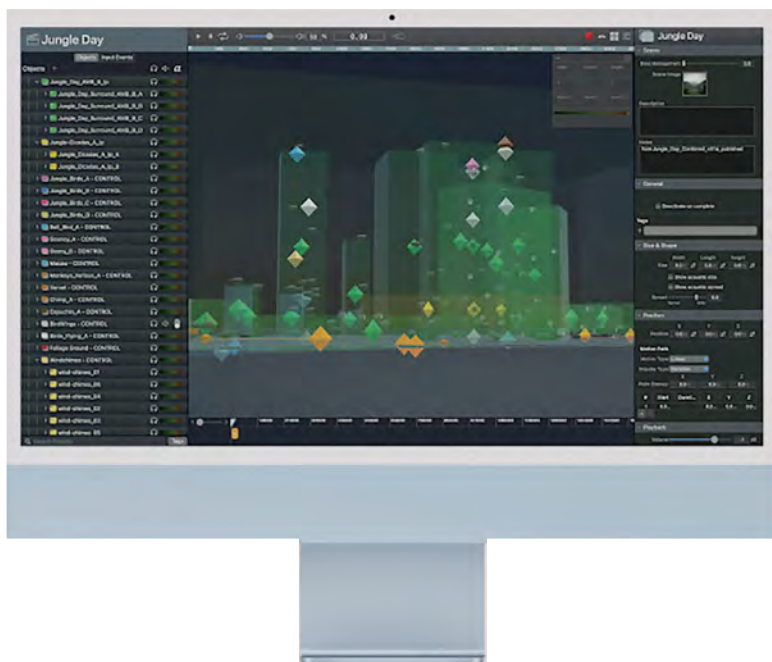
Spatial Studio is the macOS real-time editing environment for designing soundscapes and lets users orchestrate sounds with movement, relation and reactions to cues inside a space. Creators can fine-tune object position, size, motion and behaviours on a 3D canvas, while listening to real-time previews. Spatial Control runs on iOS devices for real-time control and interaction of the spaces. Scene and space controls are woven with detailed user roles and permissions, providing the access and management expected of a business-critical service experience. Spatial Control also provides tools for easy setup, tuning and customisation of the spaces.

After a year of feedback from sound designers, engineers and technology partners around the world, Spatial has introduced feature improvements that make it easier to design, create and deploy the 3D sound experiences. These include improved rendering and support for scalable high performance, with Spatial Reality now able to support up to 64 channels of audio on a single Mac Mini. A number of additional tools have also been released to facilitate initial setup as well as ongoing management, starting with hands-on account management through a web admin view, and improved, privacy-shielded analytics to better understand the use of Spatial and make improvements going forwards. Also improved are logging, warnings and troubleshooting for enterprise-level stability.

www.spatialinc.com

A–Z CONTENTS

Amate Audio delivers more from less

SAID TO be the latest and most powerful iteration of its coaxial-based, dual-purpose designs, the X14FD from Amate Audio is its latest Xcellence series self-powered active system intended to serve as a front of house PA and stage monitor system. Its 14-inch coaxial driver is said to combine the LF response of a conventional 15-inch but with mid-band resolution of a 12-inch, resulting in an "extraordinary output signal from a diminutive package". The use of a single driver also enables the design of an enclosure with a greatly reduced form factor relative to its power and frequency range. Additionally, the system incorporates Amate's uprated Active+ digital power and control platform with high-order FIR filtering and Dante audio networking.

The asymmetric X14FD cabinet can be hung, flown, stacked or pole mounted in FOH, front and side-fill PA applications, or floor-standing on its horizontal axis, deployed as a stage monitor. Portability and handling are aided with top and bottom flush carry handles. Integrated rigging points and pole-mount socket facilitate rigging or stacking of the cabinet, which boasts a "tour-proof" construction of reinforced Baltic plywood and weather-resistant polyurea coating with integrated protective rubber profiles.

Onboard power and control from the Active+ electronics include 1,500W Class-D biamplification and DSP system management, with LCD colour touchscreen operation and monitoring. Active+ offers a suite of tools to set up and tune the loudspeaker system in a fraction of the time required for conventional active systems. Features include high-order FIR filtering, fully phase coherent PEQ adjustment and absolute phase alignment of common cabinet couplings, independent dual limiting (RMS thermal and peak) on each power channel, high-order crossovers, delays

X14FD and X18T sub

of up to 300ms/100m and EcoMode power settings (including auto input signal detection).

Included system presets, extensively researched by the Spanish manufacturer's engineering team, optimise control parameters for configurations with other Xcellence series loudspeaker systems in commonly occurring applications. Additional parameter adjustments are storable in PIN-protected user settings. Dante audio networking and full Ethernet remote control, via the company's DSP Studio 3 software, are facilitated via dual Ethernet ports. Wi-Fi remote control is possible with the CWK-D Wireless Communication Kit.

www.amateaudio.com

A focus on install

BELGIAN LOUDSPEAKER manufacturer Audiofocus has created installation versions of its point source, constant curvature, line array, subwoofer and stage monitor speaker designs to meet customer demands. The range includes 19 installation-specific loudspeakers, from the compact VENU 8ix point source enclosures through to the manufacturer's most powerful S 21i subwoofers.

As part of the development process, touring features such as grab handles and rigging systems have

been removed or simplified to make the new variants more cost-efficient without compromising on audio performance. Further aesthetic changes enable the speakers to blend discreetly into installed environments. Both passive and biamplified options are offered for the majority of the new models, resulting in a solution ready for deployment in nightclubs, theatres, stadiums and houses of worship.

www.audiofocus.eu

Audac caresses the ears with the Vexo Touch

CONSISTING OF three models, Audac has announced the availability of its Vexo loudspeaker series in both passive and active versions. The two-way models combine 10-, 12- and 15-inch low-frequency woofers with a 1.7-inch voice coil HF compression driver paired to a rotatable 90° x 70° horn. The Belgian pro audio manufacturer has also made optional 70V/100V line transformer modules available for the passive variants.

Vexo series

The Vexo110, Vexo112 and Vexo115 models achieve programme power handling of 300W, 400W and 500W RMS respectively. When not in use, the active versions automatically go into an energy-saving standby mode, therefore bypassing the requirement to power down after each use. Housed in 12mm plywood, the cabinets are protected from impact by a polyurethane DuraCoat protective layer and a powder coated steel grille with acoustic foam.

Flexibility of installation features include a 35mm pole adapter, multiple rigging points and holes for mounting with brackets and accessories. The availability of a U-Bracket promotes horizontal and vertical

configurations to be loaded via the rear USB slot. Loudspeaker management control, including input selection, output volume, EQ and presets, is maintained over Audac Touch software control. With the insertion of an ANI44XT interface into a Vexo cabinet, TouchLink compatibility is provided with the creation of virtual zones linking multiple Vexo loudspeakers.

Incorporating a completely reinvented device list with all the networked devices within an installation, Audac Touch has received a v2.7 software update. For heavily populated lists, device discovery now splits into an overview and a discovery page, for which the latter automatically searches for devices on the network and provides an overview of all devices for adding or omitting. On the saved page, an overview of all the devices added to an account can be viewed. When adding or editing a device, changes can be saved to the database so that every device using the Touch account can access it. With the introduction of a search bar at the top of the saved page, device discovery is made easier by inserting the device name or address and IP or MAC address.

For making more organised lists, linked devices that can be controlled using the IP of
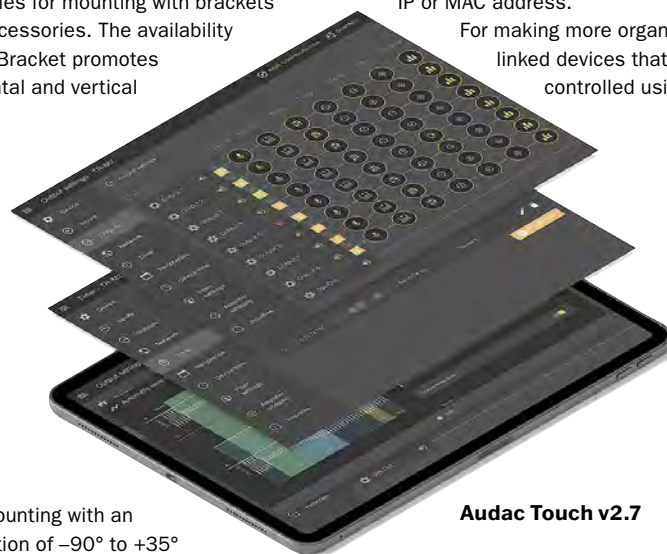
Audac Touch v2.7

wall mounting with an inclination of −90° to +35° and an optional MBK bracket allows the Vexo cabinets to be fixed to ceilings.

The active Vexo models are equipped with a wide range of inputs, including an ANI44XT Dante audio network interface for integrating into any Dante-enabled AV network. The three active versions also feature WaveDynamics allowing any preset for full-range, satellite and custom

another device can be grouped. Probing is used when a device needs to be replaced with a new one, by listing all devices with the same device type so that the Audac Touch database can be updated without having to manually change everything. With the mapping feature, a desired device can be mapped in the settings of the dashboard.

www.audac.eu

Galaxy Audio goes mobile with the Traveler TQ8X

THE TWO-WAY Traveler TQ8X speaker from Galaxy Audio marries an 8-inch woofer and a wide-dispersion HF horn with a 1-inch compression driver. Designed to provide remote portability, the battery-powered loudspeaker incorporates 150W amplification, integrated mixer for control of all audio sources, a three-band EQ, a Bluetooth media player and a 16-channel selectable UHF wireless mic option. A voice priority feature automatically reduces the music source when the presenter speaks into any connected microphone.

The rear of the cabinet integrates two wired mic/line inputs to complement a music system, including a USB connector for MP3 files, a separate USB power output, L-R connections and Bluetooth compatibility for use with a phone or smart device source. The TQ8X can be configured with compatible Galaxy Trek GTU mic options, including handheld, lavalier and headset with bodypack. Capable of accepting up to two wireless transmitters simultaneously,

the dual-channel receiver can either be USB powered or recharged via the TQ8X USB power port. The TQ8X may be AC powered or operated from its internal battery for up to 24 hours of continuous use. A standard pole socket allows stand mounting and a carrying handle furthers its portability credentials.

www.galaxyaudio.com

Biamp adds X Factor to latest Desono speakers

AS A direct replacement for the Desono D Series, Biamp has created the Desono DX line of high-output surface-mount and ceiling loudspeakers with matching coaxial, HF compression drivers. Integrating several D Series' features including shallow back cans, the DX models are characterised by uniform voicing and ease-of-installation features aided by an additional line of accessories.

Designed to be CCEA-compliant in accordance with local regulations and sporting an edgeless, magnetic grille design, the Desono DX ceiling loudspeakers match other Desono ceiling models. Reinforced SpringLock Clamps with coarse threaded screws allow clamping onto thin surfaces and eliminate metal drop stop

tabs or mounting clamps. The range of accessories has been increased to address a variety of installation variables, including black edgeless and high humidity/corrosion-resistant grilles, 48-inch tile rails, installation trim rings and construction brackets.

The updated loudspeakers complement the Desono EX units launched in 2021. Designed for interior and exterior use, Desono DX polymer enclosures come with marine-grade aluminium grilles. Each DX surface-mount speaker includes a CMX ClickMount pan-tilt mounting bracket or an optional U-Bracket for mounting.

www.biamp.com

Genelec introduces 4410 Smart IP loudspeaker and Controller app

4410 Smart IP

GENELEC HAS expanded its Smart IP family of installation loudspeaker systems with the introduction of the super compact 4410 loudspeaker and a new Smart IP Controller app. The 4410 joins the existing 4420 and 4430 Smart IP models to cater for a wider range of applications and room sizes, while the free Controller app provides end users with control of key loudspeaker system functions, including mute, volume control and power on/off, plus overall zone control.

Measuring 181mm high, the active two-way 4410 is suited to smaller spaces, yet its proprietary internal power supply helps to produce 100dB of short-term SPL. The 4410 supports up to eight audio channels in a stream with sample rates of 32–96kHz and 16–24-bit resolution, and delivers a frequency response of 67Hz–40kHz via internal Class-D amplification stages driving a 3-inch woofer and ¾-inch metal dome tweeter.

Created in conjunction with industrial designer Harri Koskinen, the 4410's Minimum Diffraction Enclosure is fashioned from recycled aluminium and utilises Genelec's Directivity Control Waveguide to ensure precision and clarity both on and off axis. The 4410 is available in black or white finishes, and a wide range of accessories ensures that it can be mounted in almost any location.

As well as receiving both power and audio-over-IP, the speaker's single rear panel RJ45 connector also allows access to Genelec's Smart IP Manager – a downloadable software tool running on Windows 10 that allows installers to configure rooms, zones, loudspeakers and audio channels, and includes device discovery, a room equalisation tool set, system organisation and status monitoring.

Once the installer has used Smart IP Manager to configure and optimise the system, the end

user can then download the free Smart IP Controller app onto their smartphone or tablet (iOS or Android) for control of mute, volume control and power on/off. The Controller app will automatically discover the loudspeakers on the network and offers a clean and intuitive user interface. Access to some or all of the zones created during configuration can then be assigned to the app, so that the appropriate levels of access can be granted to each end user.

In other news, Genelec has made its Aural ID software technology available as a DAW plugin format. In addition to providing extra features and flexible purchasing models, the Aural ID plugin is said to deliver a reliable and personalised headphone listening experience, from stereo to immersive.

www.genelec.com

Smart IP Controller
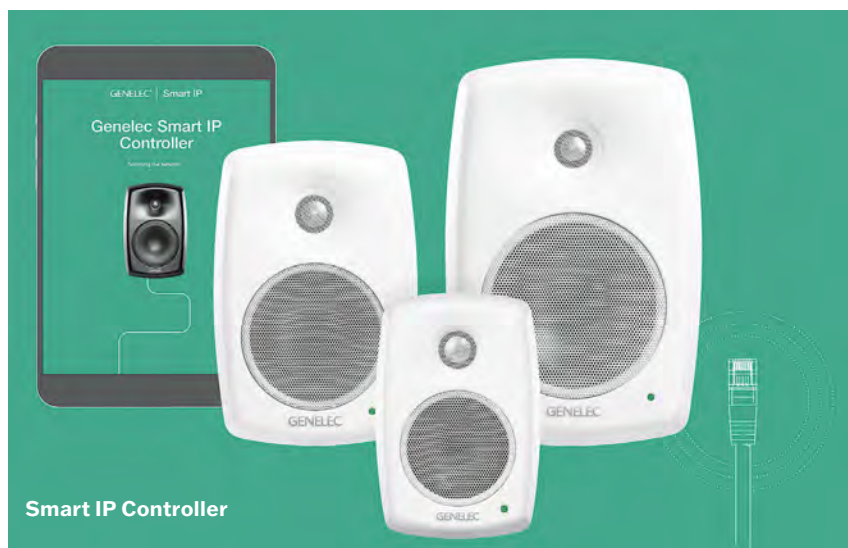
Optimal Audio's Up 60 completes ceiling speaker range

OPTIMAL AUDIO has added the Up 60 to its portfolio of multi-zone audio solutions, a 6-inch two-way, passive, full-range ceiling speaker. Delivering a consistent conical 110° coverage pattern, the speaker pairs a 6-inch low-frequency driver with a 0.7-inch metal dome tweeter and is supplied without

a back can for ceilings with a minimum cavity depth. The Up 60 cabinet is suitable for both high-quality speech and music reproduction in a wide range of cost-conscious commercial environments, from hotels and concourses to retail outlets, bars and restaurants.

Each Up 60 can be run on a series of 70V or 100V taps or at low impedance. There's also a 16Ω setting that allows up to four units to be connected to each amplifier channel at low impedance for a more efficient installation.

www.optimal-audio.co.uk

The stage beckons for KV2's latest three-way monitor

AIMED FOR large-scale stage monitoring applications, the three-way ESM312 is the latest addition to KV2 Audio's range of full-range, high-output, passive stage monitors.

The Czech manufacturer's most powerful stage monitor to date delivers 133dB sustained output and 136dB peak with a very high dynamic range. The dual 12-inch front-loaded, bass-reflex woofers incorporate sophisticated voice coil technology and a neodymium magnetic motor structure for lower distortion, added force and increased frequency response linearity down to 40Hz (−3dB). Attached to a 90° x 40° (HxV) horn, the 6-inch midrange woofer addresses the vocal range and a 1-inch compression driver with a geometry phase plug and neodymium magnetic structure provides extended frequency response to 20kHz.

Housed in a compact 398mm x 585mm x 553mm Baltic birch cabinet, the ESM312 provides a low-profile monitoring solution. Weighing 42kg, the wedge-shaped design incorporates recessed handles on each side panel and rear-mounted flip-out stands allow for 35° or 45° angles as required. Finished in a wear-resistant polymer coating, a custom designed acoustic fabric protects the inside of the grille against liquid spillage.

www.kv2audio.com
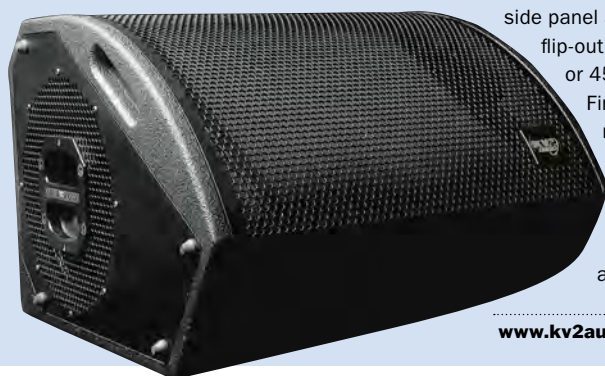
Pan Acoustics adds to AMT series

PAN ACOUSTICS has released a new addition to its Air Motion Transformer series for installed and live/theatre applications. Spanning 1.5m in length, the P 12-AMT is a two-way line source speaker comprising 12 3.5-inch drivers paired with the Mundorf AMT 3.5-inch tweeter. According to the German manufacturer, it's capable of providing consistent audio reinforcement up to distances of 20m and is suitable for both music and speech applications.

When paired with the manufacturer's 12-inch P SW-112 subwoofer, a full system capable of meeting live sound requirements can also be achieved. The system features a passive design and can be operated without DSP equalisation thanks to its complex crossover design. In terms of specifications, the cabinet has a 75Hz–24kHz frequency response with a 1,200W peak power output. At the rear of the cabinet is a five-pin connector. Optional mounting accessories – wall, ceiling and stand brackets – can be affixed to the side grooves and rear groove using a sliding block.

www.pan-acoustics.de

Panther pounces on long-throw competitors

DESIGNED TO meet the evolving needs of large-scale touring and installed systems, Meyer Sound has unveiled Panther, its flagship linear line array solution. Panther promises an acoustic signature closely resembling the much bigger and heavier Leo line array, but with the compact cabinet footprint of the manufacturer's Lyon array.

The American manufacturer explains that due to both tighter safety regulations and the desire for more visually focused production scenarios, the need to squeeze more performance from a smaller cabinet is greater than ever. Panther meets this need by delivering stadium levels of performance from a box that weighs just 68kg. Substantial savings on current draw compared to the previous generation flagship line array loudspeaker can also be achieved.

The Panther family consists of three cabinets with different horizontal coverage patterns – the 95° Panther-M, 110° Panther-W and 80° Panther-L – which house a new long-throw horn. Combined with a new LF port design, Panther has a maximum peak output of more than 150dB SPL.

A dual analogue/Milan AVB network input module means that the system offers flexible signal distribution options, while each cabinet comes as standard with an IP55 weather protection rating. The integrated electronics module incorporates a four-channel Class-D amplifier coupled to a power supply boasting power factor correction and higher voltage rails. Panther also features new, longer-excursion, 12-inch low-frequency cone drivers and 3-inch compression drivers. Each unit incorporates advanced magnet structures using newly developed materials for higher flux density, despite substantial weight reduction.

www.meyersound.com
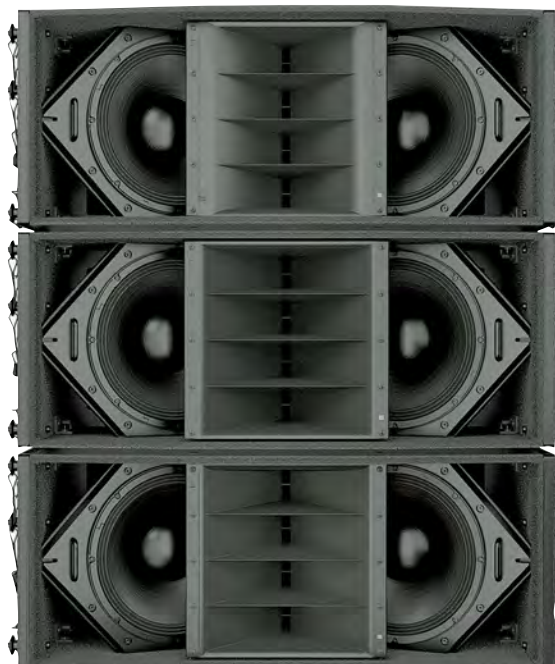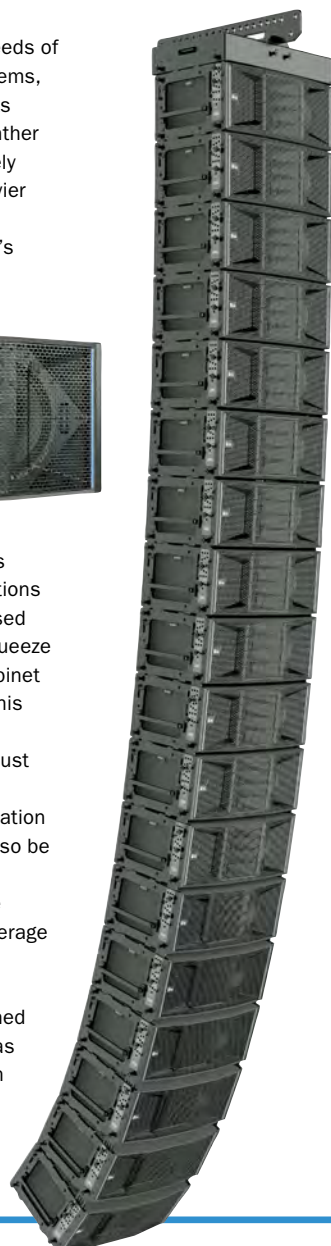
Sennheiser introduces Intelligent Speaker for Microsoft Teams

WITH AN aim to improve collaboration and learning for mid-sized Microsoft Teams Rooms, Sennheiser has released the TeamConnect Intelligent Speaker. Certified for Microsoft Teams, the omnidirectional speaker covers a 3.5m radius with seven integrated beamforming microphones for up to 10 people either remotely or in the room. Through the Intelligent Speaker, Microsoft Teams provides an automatic meeting transcript in real time, identifying the individual people speaking by name when they have enrolled their voices.

Developed for remote and hard-of-hearing participants, intelligent solutions including integrated Cortana voice recognition software and automatic meeting notes create a more focused and inclusive meeting experience. Ease of installation and flexibility is enhanced with multiple mounting options, long cables and a variety of country-specific power plug adapters.

www.sennheiser.com
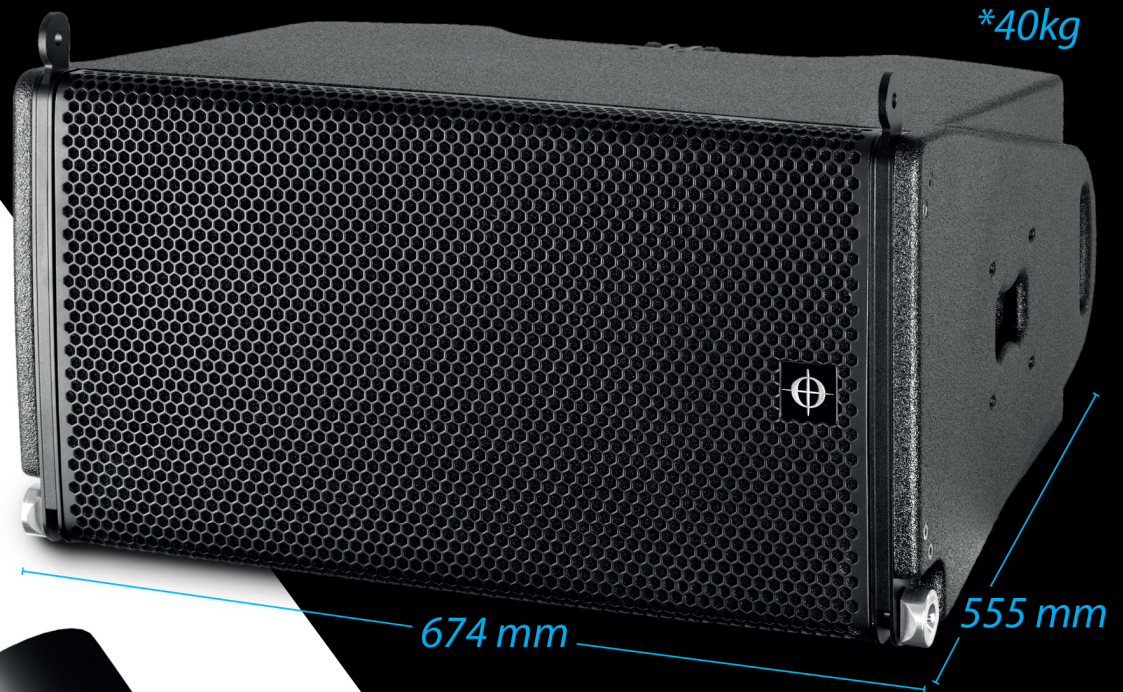
PK's Trinity gets new look and sound

DISTINGUISHED BY an all-black aesthetic, PK Sound has launched the next generation of its robot line array system. According to the manufacturer, Trinity Black is loaded with PK's revamped v4 presets which offer significant acoustic enhancements over previous iterations.

Offering an SPL up to 149.3dB, Trinity Black can be precisely controlled with variable coverage in both the vertical and horizontal planes to provide system operators with maximum flexibility in making coverage adjustments after the array has been flown. The system's patented Coherent Midrange Integrator (CMI) Waveguide combines mid and high frequencies, coupled with low-frequency apertures for controlled directivity. It offers variable adjustability from 50°–120° both symmetrically and asymmetrically for precisely tapered arrays that can reportedly significantly expand stereo imaging, avoid challenging

obstacles and drastically reduce noise pollution. Meanwhile, vertical angles are set and adjusted remotely with 0.1° accuracy.

Horn-loaded 12-inch transducers manage low-frequency response, while the mid-frequency band is supported by four 6.5-inch midrange transducers affixed to the CMI Waveguide. Two dual-diaphragm high-frequency transducers, coupled directly to an integrated planar waveguide, work to reduce distortion across the high-frequency band. A 6,000W Class-D amplifier maximises the system headroom.

Additionally, IR sensors and inclinometers allow the module to recognise its position and angle within the system, improving accuracy and safety. Finally, a combination of FIR and IIR filters are applied to ensure smooth frequency response across the listening area.

www.polarkinetic.com

Ashly completes dynamic range passive subwoofer line

WITH 150W power handling at 8Ω, the SP-8.1P passive subwoofer forms the latest addition to Ashly Audio's compact subwoofer line. Boasting an 8-inch low-frequency driver with ferrite magnet, front loaded into a bass reflex and a 0.6-inch reinforced plywood enclosure, the SP-8.1P has a sensitivity of 95dB (1W@1m) and a frequency response of 43Hz–180Hz (–10dB).

The subwoofer's DSP voice presets provide frequency response tailoring, as well as delay and crossover settings with Ashly's IS and AW series speakers when used with AquaControl and Protea-equipped processors. For maximum effect, the manufacturer suggests pairing the subwoofer with its nXp 400 or higher or Pêma 4125, 4250, 8125 and 8250 amplifiers. The cabinet is available with a textured paint finish in both black or white to match a variety of installations.

With recessed handles on either side and rubber feet on the bottom and sides, transporting and stacking the sound system is simple. For greater

flexibility, the subwoofer can be hung with the SP-8.1P's 10mm threaded bolt holes along the top, sides and rear to accommodate optional hanging eye-bolts.

www.ashly.com

Q-SYS to the Core

**WITH THE** introduction of the AcousticDesign Direct Weather Landscape (AD-DWL) family of loudspeakers, QSC has created an impact-resistant enclosure that does not compromise sound quality. Displaying the same sonic characteristics as other AD Series speakers, the AD-DWL.180 (180° directional coverage) and the AD-DWL.360 (360° directional coverage) loudspeakers can be augmented in the lower frequencies by a companion AD-DWL.SUB subwoofer.

Designed to manage meetings with a fully programmable RGB LED light ring, the Californian developer has introduced the NM-T1 tabletop PoE network microphone to the Q-SYS NM Series. Featuring beamforming technology with four software-configurable zones and up to 360° coverage, noise is minimised and intelligibility refined. The fully programmable RGB LED light ring provides a visual indication of microphone mute status. For touchless operation, it includes an integrated proximity sensor that is activated with a hand wave over the microphone. All processing on the NM-T1 is centralised on the Q-SYS Core processor, which will provide additional enhancements via software in the future.

Created primarily for modern collaboration spaces, three enclosures make up the NL Series of loudspeakers from Q-SYS. As the first QSC soundbar, the Q-SYS NL-SB42 is a 4-inch, two-way network PoE soundbar for front-of-room audio in either horizontal or vertical orientations. Created for open-ceiling installations, the Q-SYS NL-P4 is a 4-inch full-range, pendant-mount PoE network

AD-DWL

loudspeaker and the Q-SYS NL-C4 is a 4-inch ceiling-mount model for blind-mount finished ceiling applications.

As native Q-SYS products work seamlessly together, the NM Series microphone, NL Series soundbar

NM and NL Series

and TSC Series Gen 3 touchscreen controllers can adopt Q-SYS Call Sync technology. This automatically syncs mute state, call controls and LED status indicators across compatible Q-SYS products, major UC platforms

and calling systems (VoIP/POTS), enabling a simplified collaboration experience.

Comprising the QIO-ML4 (four mic/line inputs), QIO-L4o (four line outputs) and QIO-ML2x2 (two mic/line inputs and two line outputs), the three rack- or surface-mounted Audio I/O models are equipped with mic/line-level inputs with +48 VDC phantom power and/or line outputs together with microphone detection on inputs to enable monitoring, usage statistics and failure notifications.

The QIO-IR1x4, QIO-S4 and QIO-GP8x8 Control I/O models add IR, serial or GPIO connectivity to integrate control over a wide variety of devices into any Q-SYS system. Up to four Q-SYS QIO devices can be daisy-chained on a single network run to consume fewer network ports and expand future I/O without adding network cables. Alternatively, the QIO Series is also PoE capable, providing single cable connectivity when devices are not daisy-chained.

In brief, Q-SYS Scaling licences allow integrators and IT administrators to expand DSP processing power and application-specific features on the Q-SYS Core Nano and Core 8 Flex. The Q-SYS Collaboration Bundle Scaling Licence for the Q-SYS Core Nano and Core 8 Flex increases Q-SYS capabilities in meeting spaces, while the Q-SYS Commercial AV Bundle Scaling Licence for the Q-SYS Core Nano and Core 8 Flex is tailored for BGM and paging applications where medium- and larger-sized Core processors are required.

www.qsc.com

Peavey puts portability first with P Series

BOASTING THE ability to stream music from mobile devices or computers, Peavey Electronics has debuted the P Series of all-in-one portable PA systems. The P1BT and P2BT, with 180W and 200W of power respectively, offer built-in, professional-grade Bluetooth capability and combine either two or three 6.5-inch woofers in a column array with a 1-inch high-frequency compression driver.

Each array offers a rear-facing, three-channel mixer with dedicated two-band equaliser and volume controls. Channels 1 and 2 offer both XLR and line-level inputs, while Channel 3 brings Bluetooth

P1BT

connectivity as well as RCA and ⅛-inch aux inputs. Each unit also includes a master volume knob, a ¼-inch external subwoofer connection and the ability to sync to other units via XLR.

Intended to be easily taken on the road and used by musicians, the P Series models have been designed with weight and durability in mind. Each column array measures just over 25cm deep and 23cm wide. The larger P2 speaker measures 76cm tall and weighs in at 15kg, compared to the P1 at 58cm and 11.1kg.

www.peavey.com

P2BT

Void releases Bias Q3 amplifier

VOID HAS added to its Bias family with the Bias Q3 DSP touring amplifier. The unit addresses the need for a more traditional type of amplifier in the Bias range, suited for small- and medium-sized installations and short-term mobile deployment.

"The new Bias V3 offers another level of diversity to our amplifier range and we are thrilled to introduce it to market,"

commented Callum Bowran, applications and support manager at Void Acoustics.

"It has been designed with versatility in mind and is perfect for a breadth of

applications, including tours and festivals, as well as music venues, clubs and bars. It is also incredibly user-friendly."

With four channels and touchscreen front panel control, the Bias Q3 offers total integration with the Armonía Pro Audio Suite, enabling extended control on smartphones and tablets.

www.voidacoustics.com

PreSonus heads out on the road

BILLED AS its smallest, lightest and most portable audio interface to date, the PreSonus AudioBox Go has been designed for recording both on-the-go and in home studios. The bus-powered interface connects via USB-C directly to iOS and Android devices, as well as desktop and laptop computers, requiring no drivers or special applications.

Boasting 24-bit/96kHz resolution recording, the AudioBox Go has a combo mic/line input that can be used to connect microphones or synths and integrates the manufacturer's proprietary XMAX-L preamp design. A second instrument input is provided to track guitar or bass simultaneously. A pair of balanced TRS, ¼-inch outputs can feed studio monitors, while a high-powered headphone output provides zero-latency monitoring. The

microphone. Like the PD-70, the Revelator Dynamic is designed to capture the human voice cleanly and clearly by eliminating breathiness, unwanted reverberance and ambient room noise. This reportedly allows the Revelator Dynamic to be used in virtually any space, allowing home recordists to set up their studio just about anywhere.

Following in the footsteps of the Revelator io24 audio interface, the Revelator io44 fits into the palm of the hand. The four-in/two-out audio interface is bus-powered via its USB-C compatible jack and can serve as the heart of an ultra-mobile recording studio as well as the core of a streaming rig. The Revelator io44 features a combo mic/instrument input with the sound of PreSonus' XMAX-L mic preamp, as well as an ⅛-inch line-level stereo input for

AudioBox Go

device ships with a licence for the manufacturer's Studio One Prime software.

PreSonus has added two products to its Revelator portfolio. As with other Revelator products, the Revelator Dynamic USB vocal microphone and Revelator io44 audio interface combine studio-grade audio recording quality with onboard processing and a simple software-controlled mixer that can blend sound from multiple applications for monitoring and livestreaming.

Like its sibling, the Revelator USB large diaphragm condenser microphone, the Revelator Dynamic mic offers easy-to-use presets that let recording vocalists customise their sound and create a polished mix for studio recording, livestreaming and podcasting. The Revelator Dynamic uses the same custom-built dynamic microphone capsule found in the PreSonus PD-70 broadcast

DJ mixers and mobile devices, making it suitable for electronic musicians, guitarists and streamers. A high-powered, ⅛-inch stereo headphone output works with regular headphones and TRRS gaming headsets (mic in, stereo out). Balanced ¼-inch stereo main outputs are provided to connect to professional studio monitors.

Revelator USB microphones and audio interfaces are said to offer extensive onboard signal processing, with the same Fat Channel EQ, compressor, gate and limiter algorithms found in PreSonus' StudioLive Series III mixers, plus reverb and voice effects such as delay and vocoder. PreSonus' UC Surface software for macOS and Windows provides access to the processor settings, allowing users to create their own unique sound and save them as presets for instant access.

www.presonus.com

Roland delivers on-the-go streaming with AeroCaster

A TRIO of products have been released by Roland to facilitate simplistic livestreaming. Combined, the three units essentially form a stripped back AV control room for ad-hoc livestreamed deployments. The centrepiece of this new modular setup is the AeroCaster VRC-01 hardware control surface and audio interface, which pairs with the AeroCaster Live app for iPad and the AeroCaster Camera app for iOS and Android mobile devices. The AeroCastor system is joined by the UVC-02 Web Presentation Dock and CGM-30 Gooseneck Microphone, which introduce high-quality audio and video feeds into a livestreaming setup.

The AeroCaster is described as an easy-to-use system that enables the creation of wireless multi-camera streaming setups using mobile phones. It lets users switch wireless camera feeds directly from smartphones and tablets, plus screen shares from computers and mobile devices. The system supports up to four wireless devices at once, along with the camera on the host iPad. Additional Roland technology can be called upon for adding graphics, titles, video clips, photos and more. Operation is said to be intuitive, with a direct streaming connection to YouTube, Facebook Live, Twitch and custom RTMP channels over Wi-Fi or 4G/5G cellular networks.

With web conferencing platforms becoming a regular part of life, the UVC-02 Web Presentation Dock helps users bridge the gap from built-in cameras to professional video feeds,

providing a simple solution to level up virtual presentations with better quality by incorporating external audiovisual gear and greater control.

The desktop device provides connections for a high-quality HDMI camera, professional microphone and other audio sources and sends them directly to computer-based meeting and streaming platforms via a single USB cable. The device itself includes a panel of hands-on knobs and switches, providing quick hardware control of levels, audio and

Zenology FX 1.5

video muting and sound effects. The new CGM-30 Gooseneck Microphone plugs directly into the XLR input on the UVC-02, eliminating the need for an external mic and stand. It also works with the Roland VR-1HD AV Streaming Mixer and any other product with a phantom-powered XLR microphone input.

In brief, Roland has released Zenology FX 1.5, giving users access to new effects presets optimised for synth and keyboard sounds.

proav.roland.com

An ANDIAMO evolution

DIRECTOUT HAS released the third generation of its ANDIAMO series with newly designed AD/DA converters, as well as network-based audio and remote control.

With a higher channel count compared to the third-generation ANDIAMO, the device provides

up to 288 inputs and 288 outputs with an internal routing matrix and failover redundancy using EARS. The device features eight summing busses, input and output gains and TRIM, hardware monitoring for PSU status and temperature, and redundant power supplies. Network remote control is available via globcon and the device comes with optional support for the Ravenna, Dante or SoundGrid network audio formats.

www.directout.eu

High-performance streaming

KRAMER HAS released its KDS-7 line, a range of encoders and decoders. The units support 4K video sources, including USB-C, and enable simple and fast deployment. They can be scaled to suit any size network AV installation, all over a 1G network.

The KDS-SW2-EN7 is an auto-switch encoder with one USB-C and HDMI input, one HDMI output and

KDS-SW2-EN7

Dante embedding and de-embedding, while the KDS-EN7 encoder and KDS-DEC7 decoder are an advanced transmitter and receiver respectively for streaming 4K@60Hz (4:2:0) video signals via Ethernet over copper cable. The KDS-EN7 encodes and streams over an IP network from an HDMI input, while the KDS-DEC7 decodes streams over an IP network to an HDMI output. Both transmit the USB, IR, RS-232 or CEC signal over an IP network.

All three units come with a searchable OSD menu for KM and are fully configurable for KVM roaming. They can be used for large-scale videowalls and boast an instantaneous

switching time of 1s. They have been designed for large-scale deployments and are highly scalable with 999 channels built in for support.

The KDS-7-MNGR Manager is the solution for configuration and management of KDS-7 deployments within the same network. Users can install the unit into the same local network as the extenders (encoders and decoders) to easily define and configure channel routing selections (including video, audio and a variety of control interface types) using the embedded web pages. Additionally, this unit supports controlling and configuring the matrix, videowall and KVM modes of connected KDS-7 devices as well as device grouping and group operations. The settings of all connected encoder/decoder units, including IP configuration, compatibility settings and extender status, are clearly displayed and easily updated.

www.kramerav.com

Wohler adds more AoIP options to eight-channel monitors

WOHLER'S IAM-AUDIO1-8 and iAM-Audio2-8 form a line of multi-input, eight-channel audio monitoring solutions that are slated to provide several improvements over the manufacturer's existing AMP-S8 series. Both units retain 3G-SDI and analogue inputs, as well as optional AES3 inputs. Dolby decoding options for both SDI and AES3 are available, as are options for MADI, audio-over-IP and the audio essences of ST-2110 and 2022-6, which were unavailable on the retired AMP1 and 2 S8s, D8s and E8s.

Audio-over-IP, in either Dante or Ravenna formats, can be added via an option card, while primary and secondary RJ-45 Ethernet ports on the card enable hitless (redundant) 2022-7 monitoring. Also available is an analogue option card offering a further eight balanced inputs and outputs on DB-25 connectors, as well as a TOSLINK (SPDIF) connector.

Other improvements include reducing the unit depth from 355mm to 140mm, adding loudness measurement as a standard feature and including network capabilities to manage the unit remotely and remotely view meters or other monitoring information.

www.wohler.com

UNiKA introduces Pro Stage Series DIs

THE PRO Stage Series from UNiKA Audio is a new line of DI boxes that, in addition to being rugged enough for both studio and heavy stage use, also boast high signal quality. The Stage Series models completely forego active electronics in order to prioritise the essential task of providing unadulterated conversion of unbalanced signals into balanced ones, thereby allowing for trouble-free transmission over long distances.

The series comprises two-channel (SDI-2) and single-channel (SDI-1) direct boxes, as well as a two-channel isolator (ISO-2). With their passive designs, the boxes work without power supplies, while the signal path (based on a high-quality transformer) reportedly achieves a signal-to-noise ratio of almost 130dB.

Combo connectors accept inputs via jack or XLR plugs and an additional jack output carries the unaltered input signal for passing onto an amplifier, for example. The balanced connection to a mixing console or preamplifiers is made via XLR outputs on the back of the device. The single-channel SDI-1 and the two-channel SDI-2 are built identically. The input level can be attenuated by 20dB or 40dB to protect subsequent components of the signal chain from overload. The attenuation even allows the direct boxes to be used between amplifier and speakers. The ground lift switch on the back eliminates ground loops.

The ISO-2 line isolator box provides a fast, sonically neutral way to separate the signal path, creating a professional solution

for eliminating ground loops and hum noise between balanced devices such as submixers, amp racks, recorders and vintage gear. The ISO-2 outputs are realised as XLR. Both channels feature individual ground lift

switches, while channel two can also be reversed in its polarity to deal with phase problems.

www.unikapro.com

Talent gets control of Type R

A NEW GPIO Box and Talent Panel have joined Calrec's Type R platform for radio broadcast. The Talent Panel is a slimline unit that allows guests to switch between multiple sources via an integrated high-resolution TFT screen as well as adjust headphone volume with a dedicated rotary control. Four switches allow for the panel to be customised for individual use with common functions such as talkback and cough switches. The Talent Panel can be mounted into furniture and, with connections over Cat5, it can act as an AoIP endpoint

Type R fader group

and be quickly configured. Multiple devices can be added wherever they are required.

The GPIO Box for Type R is a 1U device which delivers an additional 32 GPOs and 32 GPIs for interfacing with external systems such as playout, phone systems and codecs. Functionality can be added onto physical buttons on Type R fader panels, soft panels or web UIs, and configured via Calrec's user-friendly Connect application.

www.calrec.com

AEQ ditches the matrix

SUPPORTING UP to 28 user terminals in desktop, rack, wired and wireless beltpack and PC formats, AEQ's XPEAK is a matrix-less intercom system designed for remote production. All terminals interconnect with maximum operational flexibility and without the need for a matrix.

XPEAK interconnectivity is described as simple, even if the devices are on different locations – the devices just need to have access to a WAN or the internet. When switched on, if a user panel is configured to work remotely, it will search and find the rest of the system's user panels within the network and be ready to work in a few seconds.

XPEAK's wired user terminals have Bluetooth and USB connections, suitable for all types of headsets (headphone/microphone combinations) along with smartphones and PCs. Stationary user terminals have eight keys

AEQ XPEAK Intercom System with xplorer

and the beltpacks have four keys. The keys are arranged on two pages, doubling the number of users or user groups each panel can interact with.

If the units aren't being used in an XPEAK system, they can work as user panels or

terminals in large systems with AEQ's Conexia or Crossnet matrix. They can also be integrated into the manufacturer's Easynet Party-Line Systems.

www.aeq.com

Next Audiocom unveils compact M1 mixer

PORTUGUESE MANUFACTURER NEXT Audiocom has introduced the M1 digital stereo mixer, an ultra-compact, four-channel mixer with Bluetooth connectivity. Intended to serve both as a traditional mixer or a USB audio interface, the M1 incorporates 99 effects, +48V phantom power, a high-pass filter, EQ (bass, mid and treble), Hi-Z and line inputs, and direct play and recording capabilities from or to an attached USB drive.

The device is USB-powered, enabling power through a power bank or even a battery-powered speaker with power bank function, such as the NEXT Audiocom MV6 or MV3. Its resistant, robust structure and light weight (less than 600g) enable the device to be used in a range of diverse situations, whether for voice or instrument control in live or recorded sound, or for the creation of a portable audio system.

Integrated DSP provides several dedicated presets for different situations, and includes Ambience, Bathroom, Room, Plate, Spring, Hall, Warehouse, Cathedral, Gated Reverb, Chorus, Chorus Reverb, Phaser, Phaser Reverb, Flanger, Flanger Reverb, Rotary and Delay.

www.nextaudiocom.com

One-stop recording and mixing

BILLED AS a game-changer for modern audio production, Tascam has released the Mixcast 4 for podcast creation, livestreaming, event production and voice-overs. It mixes and records up to four mic inputs, internal audio and music, and external audio input from a phone or PC. The Mixcast 4 comes with an internal 14-track recorder written to an SD card and offers "a complete audio production

environment, from pre-production to project completion".

The Tascam Podcast Editor extends the Mixcast 4's workflow through an interface that guides users through their production. Podcast Editor offers simple and practical editing of audio content, track arming, as well as easy configuration and assignment of sound effects and background music to the sound pads.

There's no need for expert knowledge on DAW software as the Podcast Editor also offers graphics that will help users record audio easily using the Mixcast 4. Tascam Podcast Editor is designed specifically for the Mixcast 4 and is said to seamlessly integrate together for "a total production environment".

In addition to physical faders, touchpads and knobs, the Mixcast 4 features a 5-inch colour touchscreen for easy use and access to everything when it's needed. The auto-mixing function automatically adjusts optimal levels and sets mic priority without the need for configuration. The Mixcast 4 comes with fully customisable sound pads. In addition to preset sound effects, users can flexibly assign new sounds or even pre-recorded mic sounds that have been recorded on the unit. The Mixcast 4 sound pads also allow for easy and on-time voice effects, such as voice transformation and reverb.

www.tascam.com

DHD.audio drives to the Core

WITH THE launch of the DX2, DHD.audio has created a desktop mixing console for use wherever space is at a premium, such as newsroom desks, podcast studios, voiceover suites and video editing booths. Incorporating the same assistive mixing functions as other DHD consoles, including motorised faders, automix and auto level gain, the DX2 can be integrated with DHD processing cores to form a complete ecosystem. Fully compatible with all current DHD cores running version 10 firmware, the four-fader console comes with an optional six-fader expansion unit. The 3.5mm output jack at the rear of the console can be used as an input to connect a smartphone for live telephone interviews.

The German manufacturer's range of audio production processing cores integrate elements including control surfaces, routing and external-device interfacing into a standalone or distributed system. The latest XC3 and XD3 cores provide full support for automated

workflows and product virtualisation intra-site, as well as multi-site, IP-based device control and audio-over-IP signal distribution.

Comprising two dual-core DSP modules, the XC3 IP core is designed for use in on-air studios. The 1U unit supports up to 48 stereo faders, 72 stereo busses and 16 channels of

AES67 IP audio. IPx expansion modules can be added to accommodate 128 channels of AES67/Ravenna IP audio I/O and up to 512 Dante channels. A companion module, the new XC3 Concentrator, allows interconnection of multiple DHD IPx modules, control surfaces and I/O modules.

Incorporating support for demanding networked operations such as DHD web apps, DHD's XD3 IP core can be interfaced with large mixing and routing systems. Up to 96 stereo faders, 126 stereo busses and 24 Gigabit Ethernet audio ports are supported by the XD3 router and IP core combination. The unit allows fully redundant configuration and can accommodate an optional router.

www.dhd-audio.com

Barix tackles phone-based paging for legacy analogue intercoms

BARIX HAS bridged the gap between smartphones and existing analogue paging installations while also bringing mobile, zone-based paging to its IC Paging platform. The Paging Gateway M400 lets users send paging announcements from Android or iOS mobile phones or from any computer on the local network – performed through a web browser and without the need for a dedicated app.

For simplicity, a user can drop a browser shortcut button onto their phone's home screen and then page with a simple click. Line-level, analogue audio output from the Paging Gateway M400 hardware can be routed to existing paging and PA amplifiers, while password-protected access ensures only authorised users can page.

Beyond the benefits of the device for analogue-based systems, the hardware can also extend Barix's IC Paging platform, an IP-based paging and two-way intercom solution for delivering high-quality audio over existing IT infrastructure without a server or matrix. Once again, paging is performed via a web browser. The user selects the desired zones to be paged into and IC Paging automatically routes the announcements to the right speakers or zone amplifiers.

Barix has also unveiled the newest addition to its line-up of IP audio decoders

Paging Gateway M400

and amplifiers for applications that range from emergency notifications to paging and background music. The Exstreamer MPA400 supports a wide range of codecs and delivers an audio output of up to 40W for 2–8Ω analogue speakers, enabling integration of existing speakers into audio-over-IP systems.

The MPA400 can decode audio streams delivered via HTTP or RTP protocols in codec formats, including PCM, AACplus, MP3, Opus, G.711 and G.722. Pre-recorded audio files can also be stored in the unit's

internal memory for triggered playback. Native support for Singlewire Informacast and Intrado Revolution systems allows Exstreamer MPA400 devices to integrate connected speakers as endpoints for the popular, enterprise-class mass notification solutions. SIP support (including Secure SIP) enables compatibility with VoIP phone systems and direct addressing of each MPA400 device. Multi-level source stream prioritisation – configured through the device's built-in web interface – enables important messages such as

emergency notifications or urgent pages to automatically override background music and other audio.

Alternatively, the Exstreamer MPA400 can be configured as a dedicated AES67 receiver/decoder, providing interoperability with Dante-compatible devices and AES67-based audio-over-IP networks. Support for multiple PoE standards enables input audio streams and power for the Exstreamer

Exstreamer MPA400

MPA400 to be carried over a single cable. Up to 40W RMS output at 4Ω is available when powered by IEEE 802.3bt (PoE++ or 4PPoE) or an external power supply, while 20W RMS is available with IEEE 802.3at (PoE+) or 10W RMS output with IEEE 802.3af (PoE).

www.barix.com

MXV-0808-H2L is a storm in a switcher

WYRESTORM HAS released the MXV-0808-H2L HDBaseT 8x8 light matrix switcher as an addition to the Matrix Solution series. The MXV-0808-H2L is aimed at lighter footprint

and HDR to 35m, pairing HDBaseT and WyreStorm's variable light compression technologies.

The MXV-0808-H2L has eight Class-B HDBaseT zone outputs with PoH and

installations yet maintains the same key features as an HDBaseT switcher that are usually needed for an AV installation. Geared towards high bandwidth video distribution, users will get all the highlights from the MXV platform without the added cost of audio distribution in applications where it isn't needed, such as residential, retail stores or digital signage. The H2L offers transmission of HDMI content up to 4K/60 4:4:4

two mirrored HDMI outputs, enabling the transfer of power in conjunction with data signals over a single Ethernet cable, further reducing installation costs. It also features CEC and RS-232 routing, two mirrored HDMI outputs in addition to the audio breakout ports, low power-saving mode during downtime, distribution and signal zone control, and embedded web UI.

www.wyrestorm.com

API extends its MC credentials in DAW workflows

WITH THE MC531, Automated Processes Inc (API) has designed a standalone version of the monitoring functionality built into the centre section of its analogue consoles. Specifically created to include fully featured monitor control for DAW workflows, the MC531 can integrate seamlessly into any audio production environment where functionality, ease of use

MC531

and an accurate reference of each audio source is required.

Drawing inspiration from the monitor control modules of all API consoles, the MC531 features a Main and two Alternate stereo outputs, the latter having individual trims for speaker level matching. Programmable subwoofer integration allows the user to link the Sub with the Main and either of the Alternate outputs. With a total of seven selectable stereo input sources – three analogue line-level inputs, AES, USB plus 3.5mm and Bluetooth – the MC531 meets the monitoring requirements of most studio setups. Two independent

headphone outputs and a built-in talkback mic complement the feature set.

API has also debuted a two-channel microphone preamp that fills the gap between its best-selling four-channel 2124V and the individual preamps that can be used on a lunchbox or 500V chassis. The 3122V uses the same circuit design found in the 3124V, 3124MV, 312, 512V and 512c mic preamps, providing two channels of signature API analogue sound.

In addition to the familiar API combination of 2520 Op Amps and proprietary output transformers, the 3122V also includes front and rear panel XLR and ¼-inch inputs (selectable on the faceplate), a fixed-frequency high-pass filter, GAIN and the popular Variable Output Level control, as well as 48V, POL and PAD. Rounding out the feature set are a 3:1 Output Transformer Tap and two analogue VU meters with a separate peak LED.

www.apiaudio.com

3122V

Zaxcom debuts world's smallest eight-channel mic receiver

ZAXCOM'S RX-8 is an MRX receiver interface module for sound bags and sound carts that offers optional Dante and Power over Ethernet (PoE) capabilities. The RX-8 receives audio from up to eight separate transmitters and contains a built-in MicPlexer with antenna distribution and front-end filter (for eliminating interference

for receiver selection and toggling through the menus. The device is powered via a standard 12V Hirose connector. With Dante, the RX-8 can be powered via the 12V input or remotely via PoE. There's also a 12V power output that supplies up to 1 amp for external receivers and transmitters when receiving PoE.

from unwanted RF). The American manufacturer claims that it is the smallest eight-channel radio mic receiver system on the market worldwide.

The RX-8's optional Dante interface with PoE facilitates remote location use and control. When the receiver module is placed at a remote location on-set, operators can send up to 16 channels of audio over Dante back to the sound cart, eight originating from the RX-8 itself and eight more via four AES pairs connected to the DB25 input. The device also allows audio to be sent back to the set from the sound cart for IFB feeds and jam timecode slates.

The RX-8 has OLED displays with menus for each receiver pair and tactile push buttons

Additional features include a built-in frequency scanner and Auto-Pick software to scan the RF spectrum and choose the best receiver frequencies. Using ZaxNet, when paired with an IFB300 or TRXCL4, the RX-8 can re-frequency transmitters to match it with a button press. Additionally, 100% digital modulation enables full audio encryption. All Zaxcom Digital Recording Wireless transmitters have built-in recording capabilities where audio is simultaneously transmitted and recorded to a removable microSD card using MARF (Mobile Audio Recording Format) to eliminate file corruption due to a dead battery or early card removal.

www.zaxcom.com

Model 5204 intercom station puts focus on Dante

THE STUDIO Technologies Model 5204 is a two line input, portable, general-purpose audio intercom station supporting Dante. It has been designed to serve as a user interface for a variety of applications, including on-air and production television, live events, theatres, industrial, aerospace, HOWs and corporate AV.

The device allows the establishment of four independent talk and listen channels with just a headset and a Dante connection. Party-line intercom applications can be created using standard IP networks along with a Dante-enabled audio processing device, such as the Model 5421 or Model 5422A Dante intercom audio engine. A range of resources allows production personnel to incorporate the Model 5304 locally or as part of a remote application.

The Model 5304 is supported by the STcontroller software application, which

allows for a range of operating features to be configured. Versions of STcontroller are available free of charge for use with Windows and macOS operating systems. Single- and dual-ear broadcast headsets are directly supported. A low-noise, wide dynamic range microphone preamplifier supports both dynamic and electret microphones.

Additionally, an analogue dynamics controller circuit ensures microphone audio quality and minimises the chance of signal overload. A single PoE connection supplies the Model 5304 with both power and network data. Housed in a lightweight ½U aluminium enclosure, the unit accommodates optional mounting kits that allow one or two units to be mounted in a 1U rack space.

www.studio-tech.com

Key Digital collaborates with TOA

KEY DIGITAL has announced its LeCAMbio Conferencing Systems, a line of integrated corporate conferencing solutions for small- and medium-sized rooms, developed in partnership with TOA Electronics. LeCAMbio systems link microphone beam-steering technology in a separately purchased TOA LENUBIO soundbar with Key Digital's PTZ camera, automatically delivering simultaneous voice and camera tracking of active users, improving conference focus while eliminating operational distractions for the host. Four different LeCAMbio systems are available, offering a range of solutions to meet the needs of a variety of conference room sizes.

The systems each include the Key Digital KD-CAMUSB PTZ camera with automation based on voice-tracking capabilities of TOA Electronics' proprietary LENUBIO AM-CF1, which houses a seven-microphone array with active stereo speakers (available in white or black). Key Digital's KD-CX800 control interface is the final core hardware component, allowing IR and RS-232 system control via IP routing. Connectivity to a host computer is handled with a single USB

connection. The systems generate 1080p Full HD video with up to 10x optical zoom via the KD-CAMUSB with automatic beam-steering audio capture per the AM-CF1's microphone array. In the LeCAMbio system, LENUBIO's voice-tracking data is converted to the camera's PTZ information, providing both voice and camera steering to an active participant via Key Digital's Compass

Control Pro control software for iOS. Compass Control Pro is a simple-to-use, programming-free, plug-and-play solution for control and signal management under one platform, especially useful when working with multiple brand subsystems.

The AM-CF1's automatic echo cancellation, noise reduction and other built-in DSP functions optimise audio fidelity, to

reportedly ensure consistent high-quality transmission in both directions. Front-mounted LEDs on the soundbar indicate the detected voice direction and distance. Touchscreen system control is handled via iOS (Compass Control Pro on iPad), and manual camera control is also available via the free KDCam software for Windows computers. Additionally, further AV and room devices can be easily integrated into the system's signal flow.

The LeCAMbio System 1 ("Good") supports up to 5m of USB/HDMI cable length from the display. System 2 ("Better") scales up to 50m via the use of the KD-XUSB2 USB 2.0 extender kit. System 3 ("Best 1") incorporates the KD-X100MRX HDBaseT receiver and KD-X4x1WUTx or KD-X3x1WUTx HDBaseT transmitter to scale up to 100m of cabling extension. System 4 ("Best 2") also offers 100m with HDBaseT consolidation and in-rack connectivity for additional sources and other system components with the addition of the KD-UPS52U presentation switch.

www.keydigital.com

Yamaha's VSP-2 ensures no unwanted eavesdropping

BOASTING THE ability to be quickly retrofitted into any office environment, Yamaha's new VSP-2 Speech Privacy System employs several Yamaha audio technologies to reduce human speech intelligibility and ensure that unwanted parties can't overhear conferences and important meetings. The solution

masker; and four types of sound effects audio that are added to unobtrusively distract others from unwanted conversation.

From the control unit, users can power the system on and off, select their preferred sound effect audio (guitar, piano, music box and digital device) and

Rack Pro solution. Measuring 180mm x 125mm x 42mm, the low-latency RUio16-D operates seamlessly with VST Rack Pro software when connected via USB to a Windows PC or Apple Mac computer. By expanding the range of sound creation options in live sound scenarios, streaming and other digital

visual monitoring tools including the Cloner, MultibandEnvelopeShaper and SuperVision.

Providing 16 Dante I/Os, a mic preamp and two inputs and outputs for analogue audio with phantom power, the RUio16-D serves as an interface for acoustic

VSP-2

comprises the VSP-CU2 control unit, which offers user-selectable sound types and volume levels and is capable of supporting two, four or eight VSP-SP2 speakers.

The system can be installed around huddle spaces, open conversation areas and in front of and between small- and medium-sized rooms. The solution layers in three key features for optimal sound masking: Info-Masking technology developed to cover the human voice in unwanted areas with a sound level that's 8dB less than conventional systems; environmental audio with four types of sound that is mixed to the speech sound

environmental sound (forest, brook, urban clatter and air conditioner) and set the performance and volume level for a personalised room environment.

The VSP-SP2 is said to be simple to mount to the ceiling or wall using the included mounting hardware and speaker cable (non-plenum rated). Furthering the ease of installation and setup, the back of the control unit features a speaker switch (two, four or eight) and four EQ options based on the configuration of the speakers.

In other news, VST3 plugin functionality can be added to any Dante-based audio system with Yamaha's RUio16-D/VST

audio applications, the VST3 can also be used with analogue mixing consoles.

In addition to managing custom presets by rack, effect and scene, the PC/Mac user interface of the VST Rack Pro provides ease-of-use operations, such as allowing performers to use the same plugins when recording. The VST Rack Pro is bundled with more than 30 Yamaha and Steinberg plugins, including hardware emulations of classic compressors and EQs using Yamaha Virtual Circuitry Modeling (VCM) and REV-X reverbs. Bundled Steinberg plugins include sound-shapers like Quadrafuzz v2, the REVerence sampling reverb and VST Amp Rack, together with

measurements. It also features an independent gain control with pad switch for each analogue input, switched monitor/Dante/USB output level controls and a headphone output with volume control.

In brief, Yamaha's Adecia ceiling solution can now be integrated with 1Beyond's Automate VX voice-activated camera switching system to provide accurate speaker-tracking functionality. The resulting solution uses a web-based room design software that requires zero programming and can be used in corporate, university and government meeting spaces.

uc.yamaha.com

Crestron adds wireless conferencing to AirMedia

CRESTRON HAS announced the addition of wireless conferencing features to its AirMedia solution, increasing the speed, ease and flexibility with which teams can connect and collaborate. For organisations that are using multiple videoconferencing platforms, wireless conferencing allows employees to take advantage of the cameras and microphones in the room from any personal device on any platform. In addition, for organisations standardised on Microsoft Teams or Zoom Rooms platforms, wireless conferencing also brings interoperability for joining external calls or equipping guest users to join calls hosted through another provider.

According to the manufacturer, wireless conferencing enables organisations to integrate videoconferencing into any space, independent of room constraints or the need to run wires. The AirMedia solution bundles content distribution, presentation and wireless conferencing together with the added benefit of being quickly deployed, scaled and upgraded through the Crestron XiO Cloud platform.

www.crestron.com
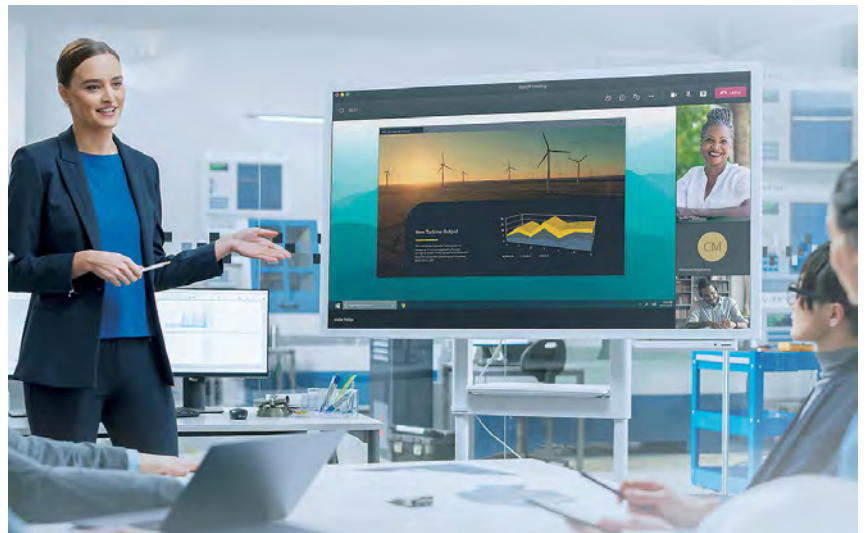
Fohhn's Integrato combines discretion with power

FURTHERING ITS credentials as an audio developer for meeting rooms and collaborative spaces, Fohhn Audio has introduced the Integrato IGS-4 passive subwoofer. Designed to be an aesthetic alternative to a floor-standing bulky subwoofer, the flat enclosure can be mounted onto walls or ceilings. Measuring 495mm x 495mm x 108mm (WxHxD), the IGS-4 can be hidden from view when dropped into the ceiling or positioned behind media furniture.

Incorporating four 4-inch long-excursion woofers together with four passive radiators, the 200W nominal power-rated IGS-4 can be powered by one or two amplifier channels. Capable of producing a maximum SPL of 112dB with a low-end cut-off frequency of 45Hz, the 10.5kg multiplex birch plywood cabinet is available in a standard white or black finish. Four keyhole points promote wall mounting with inclusive screws or ceiling mounting using a separately ordered kit (CSK-1). The German brand recommends the use of Fohhn system amplifiers with the correct speaker presets.

www.fohhn.com
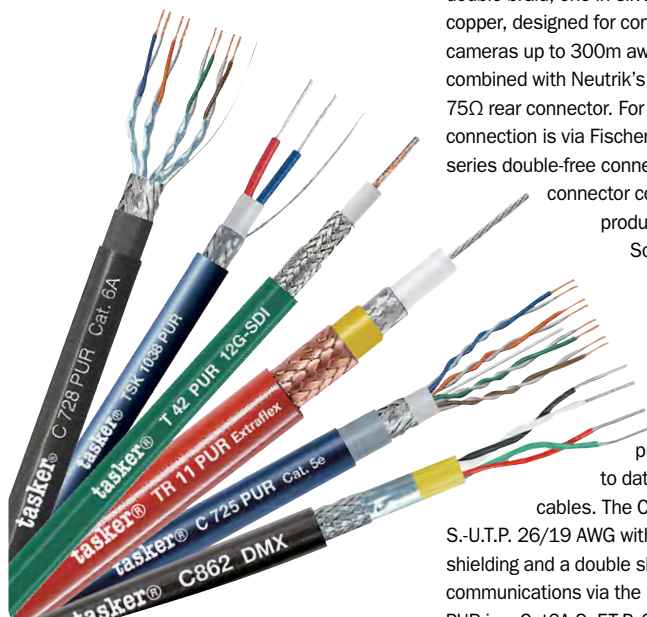
Heavy-duty cabling

TASKER HAS added to its range of assembled products with a series of ready-to-use, pre-made PUR sheath cables that are already on the drum. For DMX applications for audio and lighting, the TSK1038 PUR is a single pair DMX with a 2x0.35mm² section and braided tinned copper shielding, while the C862 is a double, 2x2x0.35mm² cable with the addition of Kevlar traction inner elements, giving it double the strength and resistance. Both can be combined with three- and five-pin Neutrik XLR NC3M/FXX-B and NC5M/FXX-B free connectors and the Schill GTRM cable drum series, or one NC3MD-LX-B panel connector and one free connector, combined with the Schill GTS0 cable drum series.

For video broadcasting, the T42 PUR is a coaxial HD-SDI with a stranded conductor and tinned copper double braid, allowing for 12G-SDI signal transmission up to 70m or 3G-SDI up to 100m. The TR11 PUR Extraflex is a triaxial cable with a stranded silver-plated copper conductor and double braid, one in silver and the other in red copper, designed for connecting professional cameras up to 300m away. The T42 PUR can be combined with Neutrik's TWIST NBNC75BWU13 75Ω rear connector. For the TR11 PUR Extraflex, connection is via Fischer Connectors' 1051 series double-free connectors and free/panel connector combinations. Both products are assembled with Schill GTS0 (free/free connector combination) and GTRM (free/panel connector combination) series cable drums.

The final three products are dedicated to data transmission via LAN cables. The C725 PUR is a Cat5e S.-U.T.P. 26/19 AWG with total braided shielding and a double sheath, suitable for communications via the Dante protocol. The C728 PUR is a Cat6A S.-F.T.P. 24/7 AWG with single shielded pairs with aluminium foil, a tinned copper braid and double sheath, and has been designed for video transmission over the HDBaseT protocol. Finally, the C726 PUR is a Cat7 F.T.P. 26/7 AWG with single shielded pairs with aluminium foil and a tinned copper braid, typically used for the high connection speeds required in data centres. All three can be combined with Neutrik's NE8MC-B, NE8FDP-B and NE8MX6-B EtherCON connectors, mounted on Schill's GTMFK series with a lockable door to protect the connectors.

www.tasker.it

Audio-Technica brings beamforming into the boardroom

BEAMFORMING OF up to 32 distinct audio coverage zones is possible with Audio-Technica's recently released ceiling array microphone. The Dante-enabled ATND1061 offers six individual output channels to cover a wide variety of room sizes and meeting types and can be flush- or surface-mounted in a drop ceiling or mounted in open architecture spaces via a standard VESA mount.

Output Channel 1 can be configured with 16 user-defined coverage zones, within which a meeting participant may be seated or moving. The beam will track and keep the microphone focused on the speaker's voice, minimising room noise. Only one of the 16 coverage zones can be open at a time, with the microphone automatically selecting the zone with the strongest signal identified as speech. The manufacturer's voice activity detection (VAD) technology lets the microphone discern between a voice and unwanted noises such as paper shuffling. Zones can be configured to ensure coverage of priority participants in known locations, or unplanned and non-priority parties.

Room configuration, zone setup and other settings are handled through the Digital Microphone Manager software application. For integrations without external DSP, the ATND1061 features onboard processing, including automix, acoustic echo cancellation (AEC), noise reduction, automatic gain control (AGC) and a four-band EQ.

The array has two network ports which can be configured according to installation requirements. In Single Cable Mode, Dante audio and microphone control data are sent together over a single standard category cable. In Split Mode, Dante audio and microphone control data are sent separately over two cables.

www.audio-technica.com

/ ATND1061 Beamforming Ceiling Array Microphone

A Mic for All Meetings

The ATND1061 Beamforming Ceiling Array Microphone is a state-of-the-art, professional conferencing solution for meetings of any size – from boardrooms to classrooms. Up to **6 output channels** and **32 user-defined pickup zones** capture every person speaking in a room with clear, natural audio that reduces distracting environmental sounds.

ONLY 8.98"
(228 mm)

FLUSH MOUNT

SURFACE MOUNT

VESA MOUNT

⌂Dante™

Dante™ is a trademark of Audinate Pty Ltd.

audio-technica

Audix Shortgun takes aim at the boardroom

THE AUDIX M45 Shortgun is a miniaturised shotgun condenser ceiling microphone that the American manufacturer claims is able to cover an area of up to 45m² with "remarkable sensitivity and exceptionally audible sound". It's intended for use in corporate or educational classroom-style setups, boardrooms and conference rooms, as well as larger lecture venues and hospitals.

The M45 is versatile thanks to a low-profile, swivel-and-pivot base for mic positioning. The capsule is optimised for vocal intelligibility and offers a sensitivity of 98mV/Pa at 1kHz, in addition to a maximum SPL of more than 124dB, an integrated preamp and immunity from RF interference.

It can be installed in the ceiling in a 1.5-inch hole with no additional tools required. Microphone level signal and LED control is over an RJ45 connection. An adapter is also included to convert from RJ45 to an eight-conductor pluggable terminal block. For those using Dante, the optional DN4 Enhanced Onramp for Dante can be purchased, supporting up to four devices and including LED logic control.

www.audixusa.com

Audio Test Kitchen creates Mojave-specific ATK Player

A PARTNERSHIP between Audio Test Kitchen (ATK) and Mojave Audio has led to the release of a Mojave-specific ATK Player. The Player allows customers to virtually test out each microphone in Mojave's portfolio, as well as compare them to each other using the same sound clips.

Each microphone in the Mojave line-up is integrated into the player with access to specs, frequency comparison visuals and a listening guide designed to take customers through their various strengths and recommend use cases. Users can load up to three microphone profiles at once and compare them with the provided sound clips. Blind Mode can also be engaged to randomise choices, encouraging customers to choose what is best for their needs purely based on sound alone.

www.audiotestkitchen.com
www.mojaveaudio.com

ClearOne's Dialog 10 brings professional audio to USB wireless conferencing

WITH WEBCASTING and cloud-based collaboration becoming ever more prolific by the day, ClearOne has released a single-channel wireless USB microphone system that allows the user free movement in any space up to approximately 230m² while offering professional-quality audio. The system comes in several formats depending on the preferred setting – handheld, boundary and gooseneck, or beltpack paired with a lanyard, headset or lavalier

microphone – and is suitable for use in livestreaming, studio demonstrations, classroom presentations and conferencing.

The Dialog 10 USB boasts simplistic connectivity via a single USB Type-C cable that removes the need for an external power source or additional audio cables, while frequency-hopping, spread-spectrum technology allows the system to be used worldwide without frequency licence restrictions. An auto-scan feature finds

open channels optimal reception, while standards-based FIPS 197 AES-128 encryption ensures a secure link for wireless audio transmission.

www.clearone.com

Brompton extends Tessera features with v3.3 update

PROFESSIONAL WORKFLOWS have been further streamlined and the performance of LED panels optimised with Brompton Technology's latest Tessera software.

As part of v3.3, Operating Modes enable a single panel type to contain multiple Operating Modes with slightly different panel configurations. Different Operating Modes can prioritise different aspects of visual performance, such as maximum frame rate, low brightness performance, bit depth or effective refresh rate. Once activated, switch panels can be switched between Operating Modes via the processor, depending on the event or project.

PureTone has been extended to allow each individual batch of panels to be measured separately to generate a PureTone profile specific to that batch. To create a profile, a PureTone profiling kit is required, which incorporates a sensitive colorimeter. A single LED panel is measured within a dark room to generate the profile, which can then be used with all the panels in that batch.

Avoiding the requirement for a colour space conversion in the source device, the Tessera SX40 and S8 now come with a preset to support the ACES AP1 colour space as used by ACEScg. ACES AP1 is automatically recognised over HDMI 2.0 or manually on the processor.

In collaboration with Mo-Sys, the UK developer has added support for the StarTracker camera tracking system when using Brompton's Tessera R2 or R2+ together with Tessera SX40 or S8 LED processors and Frame Remapping. The backwards-compatible Tessera R2+ receiver card contains the same SO-DIMM form factor as the R2, ensuring operation with all existing R2-based panel designs. The markers are overlaid on the video content being displayed, with Tessera's Frame Remapping feature used to only display the markers on output frames. The markers are automatically generated, with the ability to configure the colour and size of the markers from within the processor UI.

www.bromptontech.com

PlayBox Neo enhances Multi Playout Manager

MAJOR ENHANCEMENTS to PlayBox Neo's Multi Playout Manager (MPM) broadcast playout monitoring and control system have been introduced, including a totally new user interface and integrated playout preview.

The MPM allows multiple AirBox Neo-20 channels to be operated via IP remotely from any network-connected location, anywhere in the world. Control features accessible within MPM include on-the-fly playlist changes, manual triggering of events, user-configurable presets for pushbutton access to logos, IP router control and subsidiary tools such as graphics and text control. User management permissions can be assigned at various levels from viewer to administrator. A built-in, web-based playlist editor allows users to create future playlists.

MPM also provides support for custom metadata from AirBox Neo-20 and includes a library module for fast access to the manufacturer's Media Asset Management (MAM). Media files can be moved from library to playlist or processed into multiple folders with customised metadata settings, such as category and folder colour. A supervisor can also custom-brand the MPM user interface with an organisation's or channel's logo.

www.playboxneo.com
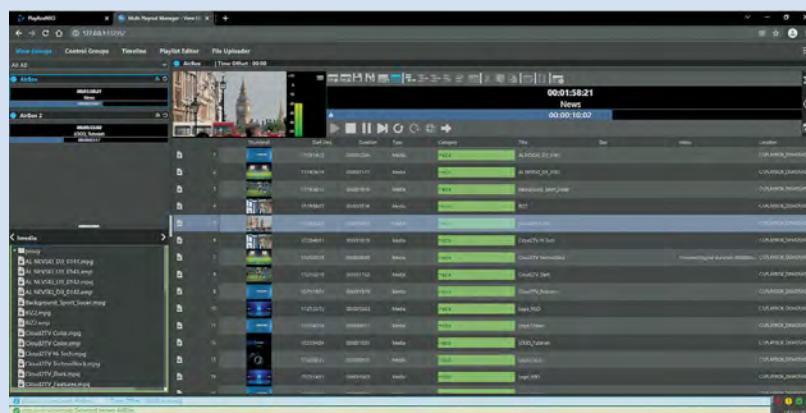
Adamson releases Load Library 5.3
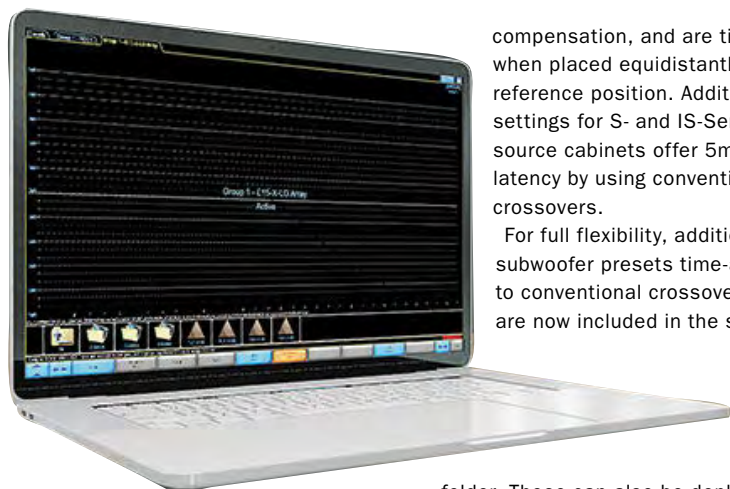
compensation, and are time-aligned when placed equidistantly to the reference position. Additional settings for S- and IS-Series point source cabinets offer 5ms less latency by using conventional crossovers.

For full flexibility, additional subwoofer presets time-aligned to conventional crossover presets are now included in the subs

OPTIMISING THE ease of use of both linear phase and conventional crossover settings by introducing a uniform preset naming scheme, Adamson Systems Engineering has released Adamson Load Library 5.3 for Lake Processor.

In the new software, default settings for E-, S- and IS-Series cabinets use linear phase crossovers with subwoofer presets using corresponding latency

folder. These can also be deployed when subwoofers are positioned further back from the reference position to avoid applying additional delay to line arrays or point sources. Conventional Crossover and corresponding subwoofer settings are marked with "CC" in the preset name.

Adamson Load Library 5.3 is included in the new Lake Controller v7.0.7 release.

www.adamsonsystems.com

APG introduces Live Manager 1.8.9
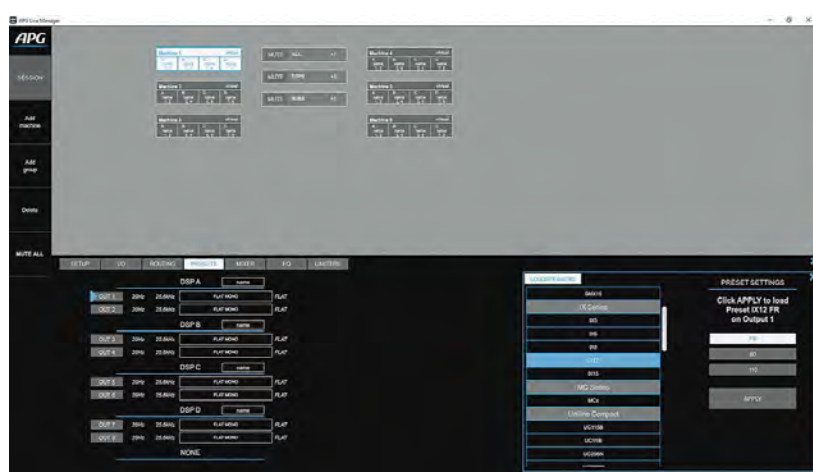
APG Live Manager 1.8.9

APG'S LIVE Manager 1.8.9 update introduces new presets for both its own control software as well as Powersoft's ArmoníaPlus platform. Developed in response to feedback from partners, customers and users, Live Manager 1.8.9 is said to greatly increase APG remote control and monitoring software capabilities. The addition of a new bank of APG presets for ArmoníaPlus will aid users of Powersoft's fixed install amplifiers with DSP, while new plug-and-play system presets will simplify the deployment of APG speaker systems.

These include presets for newly launched products, including the iX Series of fixed-installation loudspeakers, the iS range of subwoofers and the new UC118i sub, as well as for cornerstones of APG's Uniline Compact range (such as the UC206N, UC206W and UC115B) and Uniline range (UL115B and UL118B). This makes APG's DMS48 processors and DA amplifiers

compatible with a wider range of products and technologies than previously.

Optimisations to the gain chain, meanwhile, enable Live Manager users to achieve a high sound level with typical console settings. Improvements include a new amplification gain of +32dB, digital/analogue conversion alignment of 0dBu = −24dBFS and a nominal operating level of 0dBu (with 8dB headroom) for all APG speakers.

These new features, along with other improvements such as standardised crossover frequencies (for faster and easier system setup) and the optimisation of speaker protection parameters (for better sound quality at high volumes), are said to help simplify the deployment of APG systems in both fixed-install and live environments.

www.apg.audio

Merging brings Dolby Atmos production to all

UPDATES FOR both Merging Technology's Pyramix and Ovation platforms have been made available, with Pyramix 14 introducing improved support for Dolby Atmos and Ovation 10 integrating a 3D rendering engine, real-time control of object, bus and scene-based audio and enhanced third-party support.

In order to keep the full capabilities of a Dolby Atmos renderer in Pyramix 14 –

route manually. Pyramix can keep the existing ADM file tracks configuration – for assembling an album made of songs following the same structure – or remove any unused channels for optimisation. As a result, Dolby Atmos ADM has been added to the list of exportable formats.

Existing content can now also be repacked into Dolby Atmos as any bus can be fed with any type of immersive content. For users that

Dolby Atmos ADM Master export window

including binaural monitoring and large speaker sets – while preserving CPU, Pyramix 14 configures the Dolby Atmos Renderer with a single click of a button. It can also automatically discover any Atmos Renderers on the network and connect to it.

The quick rise in volume of Dolby Atmos content being produced has created a need for "proper mastering" that is catered to in Pyramix 14 with the ability to import Dolby Atmos ADM files. The platform can build a mixer matching the ADM file and connect it to a renderer for playback. When loading multiple ADM files into a project, Pyramix can automatically map beds and objects to existing mixer busses or leave for users to

want to retain as much spatial resolution as possible from their existing channel-based master, the Dolby Atmos Hybrid Busses let any format be sent to the Dolby Atmos Renderer by having some channels mapped as objects.

Ovation 10 also has several important new additions. Standouts include the integration of a 3D rendering engine that can be customised to match venue dimensions and speaker locations, third-party 3D engine support for Flux Spat Revolution and Dolby Atmos, and real-time control and rendering of up to 384 venue speakers for object, bus and scene-based audio.

www.merging.com

Equipson addresses the public

CALCULATING THE correct number of Public Address loudspeakers needed to provide the best audio coverage in a given space can be very time-consuming, especially if the space in question is not uniform. To address this issue, Equipson has created an Acoustic Simulator for its own product range that is designed to help AV installers accurately calculate the number of loudspeakers and amplifiers they need to achieve optimum results.

The web-based tool makes its calculations by referencing a comprehensive database of Equipson loudspeakers and amplifiers. Filters are provided so that installers can choose the product with the right characteristics for their project. Once a choice has been made, all the installer needs to do is enter the dimensions of the space and let the software work out how many loudspeakers are needed. It will also identify which amplifiers should be chosen to meet the project's power requirements and it will tell the installer where


to position the loudspeakers within the space to achieve the best acoustic results.

Once the correct number and type of products have been identified, installers can also link the Acoustic Simulator results to their account to create a shopping list. There is also an option to download the simulator's results as a PDF file.

www.equipson.es

CrewCom v1.10 introduces five-fold density increase
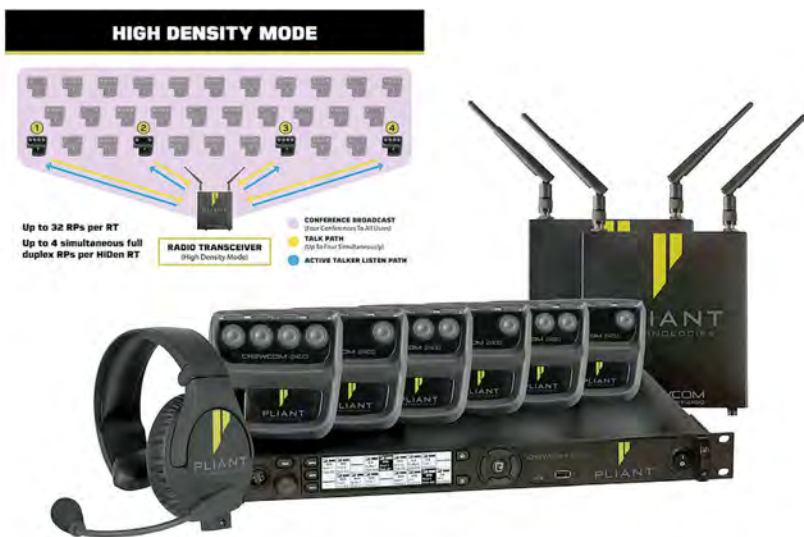
THE LATEST v1.10 update for Pliant Technology's CrewCom wireless intercom introduces several interesting features. Topping the list of user requests has been the addition of a High Density Mode that reportedly allows user densities to increase five-fold. Version 1.10 also introduces a new Auto Configuration function, which is described as making the out-of-the-box experience "a breeze".

With High Density Mode selected, the system can support up to 32 Radio Packs (RPs) on a single Radio Transceiver (RT) while allowing any of the RPs to communicate using four available full-duplex talk paths. Users will have the flexibility to simultaneously deploy "Normal" mode-enabled RPs and RTs alongside High Density mode-enabled hardware, providing adaptability for application-specific setups.

The Auto Configuration function displays a series of menus that walk the user through the setup process. If more customisation is required or a larger system with more than three RTs needs to be deployed, the CrewWare application can be used to create a tailored system configuration specific to the use.

Further feature improvements in v1.10 include external sync indication on both the CU and in CrewWare, auto system reboot when changing applicable system setup parameters, remote microphone kill and a new RP Summary menu added to the CU. The new CrewCom v1.10 firmware upgrade, which includes the new features and updates, is free of charge and is now available for direct download from the Pliant Technologies website.

www.plianttechnologies.com

Solid State Logic looks back to the 1980s

SOLID STATE Logic's latest plugin bundle introduces X-Delay for the very first time. The effects plugin helps users cover the spectrum between vintage tape and vintage digital delay sounds. By tweaking its modulation, saturation, diffusion and de-essing settings, the plugin is capable of moving between stark, crisp delays and darker, dirtier soundscapes.

Inspired by legendary and iconic hardware delay units from the 1980s, the plugin is available in several formats, including VST2, VST3, AAX and AU, and complements the recently released SSL X-Echo. Fully controlled via an easy-to-use interface, X-Delay offers a combination of audio effects achievable from up to four independently syncable taps – from saturated slapback vocal delays, to vast

stereo soundscapes. It's also augmented by global effects such as built-in modulation, SSL's signature analogue saturation and a reverb offering multiple diffusion effects.

www.solidstatelogic.com

Sonic universe

EVENTIDE'S ANTHOLOGY XII plugin bundle combines 33 essential music production mainstays in one package for DAW users to inspire creativity and provide problem-solving solutions to sound production issues. The bundle spans five decades of Eventide's history, from its latest offerings (such as SplitEQ and Physion) to mainstays such as the H910, H949 and H3000 Harmonizer, Instant Phaser, Instant Flanger, Omnipressor and SP2016 reverbs. Also included are tools like Tony Visconti's Tverb, the CrushStation overdrive/distortion command centre and the Octavox eight-voice diatonic pitch shift Harmonizer, as well as the sound manipulation of Blackhole and Undulator.

Sounds can be thickened and layered with signature pitch effects like Crystals and MicroPitch, while singular delay multi-effects like UltraTap and Undulator are said to provide creative depth control. Smooth track sweetening is offered through TriceraChorus and Quadravox, while the distortion multi-effects CrushStation and MangledVerb offer sonic "heft and grit". More than 4,500 presets, including artist presets, are included across all of Anthology XII's plugins. Sweepable transition effects can also be designed through the addition of the H9 series plugins' RIBBON slider.

Eventide has also announced the first upgrade to its SplitEQ plugin. Version 1.0.12 adds user-requested features such as Dark and Colorblind Accessible themes, the ability to flip the direction of its Transient and Tonal handle tabs, and mouse wheel control of Q on the displayed EQ plot, as well as other small bug fixes and improvements.

www.eventideaudio.com

NDI|HX 3 standard combines added quality with lower latency

WITH THE availability of the NDI|HX 3, the latest version of NDI enhances video quality with reduced latency. Reportedly using a fraction of the bandwidth of NDI high bandwidth, NDI|HX 3 is an option for developers wishing to add flexibility without needing to change or upgrade hardware. NDI|HX 3 combines low-latency transmission with reduced bandwidth, while maintaining the visually lossless standards to deliver broadcast-quality video without the need to upgrade equipment.

www.ndi.tv

Multiple devices in the cloud

MAGEWELL CLOUD is a multi-device management software which can be deployed on an on-premises server or cloud-hosting platform and provides centralised configuration and control of multiple Magewell streaming and IP conversion solutions.

Magewell hopes that the new software will make it easy for integrators, administrators and IT staff to manage multiple Magewell IP encoders and decoders across multiple sites through an intuitive, browser-based interface. Its feature set can also be controlled programmatically via HTTP-based APIs, providing systems integrators and third-party developers with deployment flexibility and integration possibilities. Magewell Cloud can also be used to enable technical personnel to remotely manage devices on behalf of less-experienced users.

The software supports all current Magewell streaming and IP conversion hardware, including Ultra Stream livestreaming and recording
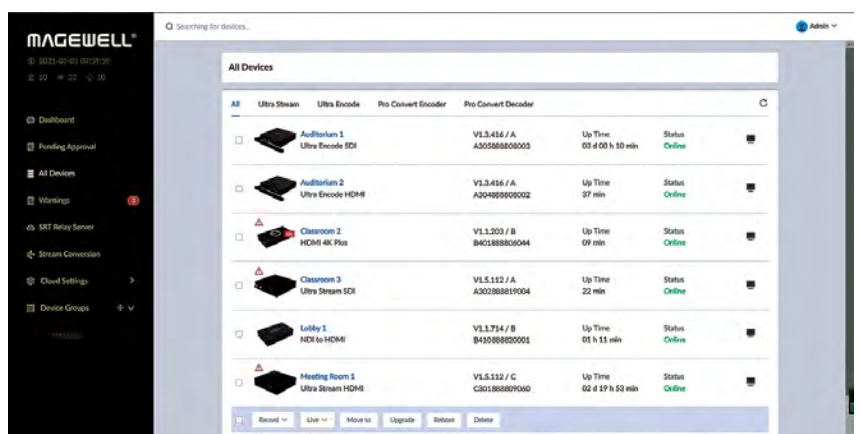
appliances; Ultra Encode universal live media encoders; and Pro Convert encoders and decoders for bridging traditional video signals with IP media networks using NDI technology and other popular protocols. Users can remotely configure device parameters, monitor device status, trigger operational functions – such as starting or stopping encoding – and perform batch firmware upgrades across multiple units of the same model.

The core Magewell Cloud software is available free of charge for managing up to 20 Magewell hardware devices. Two additional versions of Magewell Cloud – supporting up to 50 or 150 devices respectively – will be available for purchase as perpetual licences and also add SRT relay and protocol conversion functionality for the corresponding number of streams.

www.magewell.com

HuddleCamHD simplifies camera tracking for everyday users

AS THE name suggests, HuddleCamHD's latest SimplTrack Lite is a plug-and-play auto tracking camera intended to take the hassle out of camera tracking. According to the manufacturer, users can simply unbox the camera, plug it into a USB 2.0 connection and start recording or streaming with motion tracking – no additional software or setup is required.

With 20x optical zoom, the SimplTrack Lite's 1080p camera can be positioned up to 16m away from the subject. With a 59.5° field of view and 270° of rotation, those being recorded are free to move about the tracking area.

The camera can also be configured with specific preset tracking zones via a one-time setup process. Preset zones keep the camera centred on specific areas, such as whiteboards or conference tables.

Featuring Power over Ethernet (PoE), along with multiple mounting configurations, the SimplTrack Lite can adapt to any indoor setting.

Users that are looking for more control can enable Manual Mode via IP or use the included RS232 cable to operate the camera with the included IR remote, a PTZ camera joystick controller or camera control apps.

The camera is compatible with most videoconferencing, lecture capture and learning management systems and can be integrated with practically any existing hardware due to its range of included output options – NDI|HX, USB, IP, SDI and HDMI. The unit sports a 3.5mm audio jack for an external mic, and it can also capture audio using a computer's built-in microphone when connected via USB.

www.huddlecamhd.com

Tessera One brings all-in-one graphics package to arenas and stadiums

DEVELOPED SPECIFICALLY to enable sports and entertainment venues to drive prerendered and real-time rendered graphics on any resolution LED display at limitless pixel resolutions, Ross Video has unveiled XPression Tessera One, an all-in-one solution capable of providing more than six million broadcast-quality pixels to displays. Tessera One is a complete LED content management system that features customisable XPression graphic templates and DashBoard Control Panels to provide an intuitive control interface that anyone can use.

For sporting events, customers can either choose to create their own graphics or take advantage of Tessera One's library of pre-built and customisable graphics templates for many popular sports. The device occupies a 1U chassis delivering up to three 1080p HD outputs, which can be mapped to fill over six million LED pixels. It also utilises low-latency video input processing of three frames latency. This means that a video input signal passed through Tessera One with graphics composited over it won't distract the fans in the stands, as what they see onscreen will appear at the same time as it does on the playing surface or stage.

XPression Tessera One

From showing live event video with scoring to driving ribbon boards to additional fan engagement auxiliary displays, Tessera One offers the same feature set as a traditional Tessera system in an all-in-one package. It also provides licensing for XPression INcoder and DataLinq. INcoder enables users to import video files using a watch folder-based workflow, while DataLinq makes it easier for less experienced users to display scores or data in real time.

In other news, Ross Video is catering to the growing trend in VS/AR and XR virtual production environments with new updates for its Voyager graphics rendering system and Lucid Studio control solution. Launched in 2019, Voyager is Ross' photo-realistic graphics rendering system based on the Unreal Engine from Epic Games. The latest version, 4.27, aims to simplify and accelerate system setup by including new configuration tools to calibrate camera lenses and LED videowalls, as well as improved configuration of RossTalk and DataLinq and support for embedded audio out on video outputs. Additionally, the inclusion of Epic's nDisplay technology allows people to seamlessly synchronise multiple LED displays for XR productions.

Lucid Studio is Ross' primary control interface for VS/AR and XR virtual LED studio applications. The updated version 6.3 introduces an enhanced web browser that improves performance and enables third-party web UI to be part of Lucid's control panel. An improved web API (using SSL for encrypted communication) provides secure integration with third parties. Enhanced integration with mobile devices has enabled the possibility for event control from a mobile phone or tablet. This latest version also includes support for the Elgato Streamdeck device.

www.rossvideo.com

Media server veterans form Hive

UK-BASED COMPANY Hive Media Control has formed to "disrupt the market" with a range of media playback and control systems. The company is founded by industry heavyweights Dave Green, Trey Harrison and Mark Calvert, who together have delivered video systems for global projects including the London Olympics, the Tokyo Olympics, Dubai World Expo and the National Museum of Qatar.

Hive's debut product offering consists of a line of four hardware video media players intended to simplify both cost and complexity. Known as Player_1, _2, _3 and _4, they deliver HD, 4K, 4K SDI and 8K SDI, respectively. The SDI models also support genlock from a reference sync source.

Player_1

Hive supports up to 8K H265/HEVC, H264, the Notch LC codec and Avolites AiM codec. In addition, the team has designed the platform to utilise a web browser user interface which allows the user to operate the system from a phone, tablet, laptop or any device with a modern web browser.

www.hive.run

Hardware upgrade for Modulo Pi media servers

FRENCH MANUFACTURER Modulo Pi has announced a new hardware revision for its Modulo Player and Modulo Kinetic series of media servers, boosting their performance and capabilities. The new hardware includes a series of improvements such as greatly increased RAM, doubled bandwidth with PCIE 4.0, fast NVMe disks and additional slots for optional live input boards. The revision also comes with new server motherboards, as well as a new generation processor and GPU. The hardware specifications depend on the media server model.

www.modulo-pi.com

ROE Visual LEDs look forward to the return of live events

AS LIVE events return, ROE Visual has launched several LED-based products. Designed for outdoor touring, Black Quartz panels are now available in a 3.9mm pixel pitch. Incorporating a folding bracing truss, the Black Quartz LED panels are wind-load resistant and can reportedly be used in up to 20m/sec wind speeds. Using Black LEDs provides the panels with a high contrast ratio and wide colour gamut. High-performance processing cards also include functionalities such as natural true colour, low latency, module calibration, edge correction, HDR10 and high grey scales on low brightness.

Used for live and hybrid events, broadcast and XR stages, ROE's Black Marble LED floor has been in high demand, leading to the creation of the Black Marble BM2 – a 2.8mm pixel pitch variant with a matte, non-reflective finish.

At the top end of the manufacturer's product portfolio in terms of visual quality is the Ruby Series, with RB1.5 and RB1.9b variants

Black Quartz

recently introduced, offering visual performance in a fine pixel pitch. Sporting advanced driver ICs and LEDs with a large colour space, Ruby panels are fully HDR adaptive. The RB1.5 has a 1.5mm pixel pitch and offers 800 nits brightness, while the RB1.9b has a 1.95mm pixel pitch outputting 1,500 nits. Common cathode technology is said to significantly reduce the panel temperature, resulting in more efficient heat-dissipation, reduced colour differences, higher brightness and reduced power consumption by 20–25%.

Designed for interior and exterior installations without the need for customised products, the Opal LED platform uses adaptable 300x300mm LED modules

and comes in various frame dimensions. Sustainable common cathode technology and a four-in-one LED reportedly guarantee supreme visual display. All LED displays in the stand are powered by the HELIOS LED

Ruby RB1.9b

processing platform, while the content for the whole stand runs from a disguise media server.

www.roevisual.com

VuWall's PAK takes the strain off networked videowall setups

VUWALL HAS launched PAK, a modular solution for deploying and managing videowalls in AV-over-IP environments. The solution is a networked, multi-decode node that can operate as a standalone device or be stitched with other nodes to build an IP-based videowall that is infinitely scalable. According to the manufacturer, it simplifies videowall project deployments by reducing the number of connections and eliminating a single point of failure, thereby reducing project risk and offering improved reliability.

Designed for multiroom visualisation, situational awareness, control rooms and corporate workspaces, the PAK device features four HDp60 outputs or one 4Kp60 output and multiformat decoding up to 32 HD streams per device, including H.264, MPEG2, MPEG4, NDI, PNG, JPEG and VNC/remote desktops or virtualised browsers. PAK is managed by the company's TRx 3.1 software platform. The device itself operates with low power consumption and is small enough to be mounted behind monitors, saving rack space and reducing extended video cable runs.

www.vuwall.com

NewTek unveils first NDI|HX 3 integrated PTZ

NEWTEK HAS unveiled the first PTZ IP-based camera with integrated support for NDI|HX 3, which offers users improved latency and low bandwidth transmission over a single cable.

The manufacturer states that it has worked closely with NDI to build the PTZ3 camera "from the ground up". Enhanced audio connectivity includes the addition of a professional mini-XLR mic input connection together with a line-level mini-jack. Once on the NDI network, the PTZ3 audio can be routed, mixed, enhanced and distributed to a range

of other NDI-compatible devices and software. The camera can be added into any workflow with a single Ethernet cable for HD video transfer to 1080/60p, audio, PTZ presets and control, tally and PoE.

Users can remotely control the camera from any device via NDI. When combined with the NDI Studio Monitor, users can operate the camera through commonly available control devices, reducing the cost of entry into camera control systems. The unit ships with ceiling and wall mounts and is available in black or white.

www.newtek.com

Broadcast Solutions looks to mesh networking for high-quality wireless video

HIGH-QUALITY WIRELESS video transmission has been made possible with meshLINK from Broadcast Solutions. The platform combines UHD HEVC video encoding with full duplex IP and mesh networking to deliver high-quality transmission with low latency down to 45ms in HD and 75ms in 4K, in addition to 100Mbit maximum data throughput and 1–4 HD encoding channels per frequency.

meshLINK is a true duplex IP-based wireless system, allowing a wide range of functions during live broadcasts, live production, news gathering or event coverage, like RCP and telemetry integration.

Further on, intercom, return video, prompter and other functions can also be integrated as in any other IP-based application.

In a basic configuration, it can be seen as a Tx/Rx wireless point-to-point product, with the fundamental difference being that it allows bidirectional IP traffic and complete monitoring of the link. In this configuration, meshLINK works with a radio and encoder on the Tx side, combined
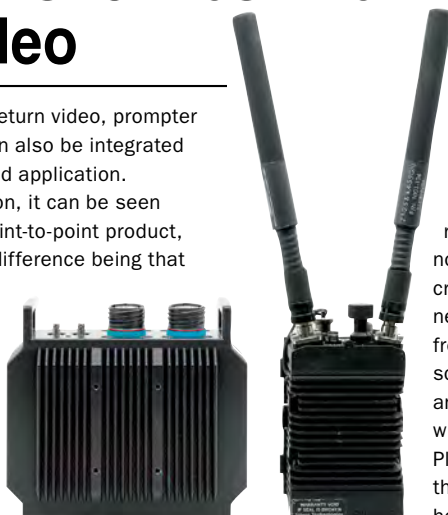
with a radio and decoder on the Rx side.

Adding more radios (dubbed nodes) to the system creates a mesh network, a single-frequency, highly scalable, self-forming and self-healing wireless network. Placing nodes on the fly allows ad hoc transmissions

from virtually any position. Using the mesh functionality, a radio is a transmitter, receiver and repeater simultaneously, adding flexibility to the system and uninterrupted signal transport.

Signal routing is automatically and dynamically selected for optimal performance. In addition, data can be entered and retrieved at every node in the network. In case one Tx/Rx line is blocked, all other nodes in the mesh can take over the delivery of the signal by acting as a relay.

www.broadcast-solutions.de
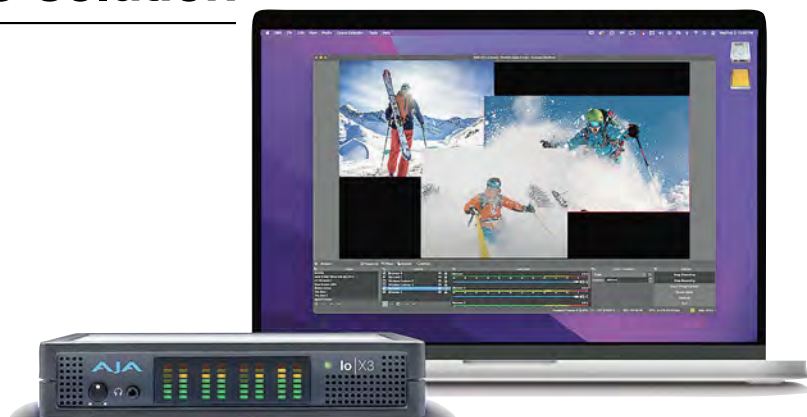
AJA streamlines with Io X3 video I/O solution

DESIGNED TO streamline HDR or SDR 2K/HD capture and output via 3G-SDI and HDMI, AJA Video Systems has released the Io X3 portable video and audio I/O device. The compact Io X3 streamlines HDR I/O up to 2K/HD 60p on compatible Thunderbolt 3-equipped Mac or PC hosts running pro AV applications.

Designed for single-, dual- and multichannel SDI workflows, the Io X3 is a capture and output device designed for a range of production environments, including high-end colour grading, audio mixing, on-set monitoring, playback, remote editorial and VFX. It incorporates four independent inputs for workflows with OBS and Wirecast and supports simultaneous MultiView monitoring for displaying up to four inputs for streaming workflows on a single HDMI reference monitor.

The 1U rack-mountable device features eight switchable analogue audio ports in addition to a 3.5mm audio input for headphone monitoring. Analogue audio ports are switchable between input and output for flexibly swapping between eight input or output channels or split connectivity between four inputs and four outputs. Up to 16 channels of embedded audio are included on each SDI port and eight channels on HDMI.

Coinciding with the launch of the Io X3, AJA has made desktop software v16.2 for all KONA, Io and T-TAP Pro products available. The update includes the latest macOS support, OBS Studio compatibility, enhanced LUT functionality, a newly developed codec and expanded multichannel audio. Available for multi- or single-channel capture and switching up to 4K/UltraHD 30p and 2K/HD 60p, the v16.2 software enhances 4K/UHD colour workflows courtesy of the 12-bit, 4:4:4 RGB firmware for KONA 5 and Corvid 44 12G. With the included AJA Control Room software, workflow options are expanded through added H.264 and H.265 capture and playback up to 2K/HD 60p. Deep memory buffer capabilities for Control Room maintain steady playback should storage or network bottlenecks interrupt the flow of data from storage to the video output host.

Developers of 8K workflows requiring 22.2 audio mastering can incorporate AJA technologies into product design and development courtesy of AJA's SDK v16.2. Available via Open Source, SDK v16.2 introduces 64/32 audio channel support with KONA 5, Corvid 44 12G, Corvid 88 and Corvid 44 for input and output of up to 64 audio channels across multiple SDI links.

The manufacturer has also released a free Mini-Config v2.26.3 software update, enhancing its Mini-Converter line with new functionality for select models. The release boasts basic HDR metadata pass-through for the Hi5-12G, Hi5-4K-Plus, HA5-12G, HA5-4K, 4K2HD and 12GM; dual-link capabilities for the 12GM; and Dolby audio support for the Hi5-12G and Hi5-4K-Plus.

www.aja.com

Io X3

Barco's fixed install G Series gains two brighter models

TWO DLP laser phosphorus single-chip projectors have joined Barco's G Series to build on the G60s introduced back in 2019. The new G62 projectors are intended to complement this existing platform with variants that offer higher brightness and dynamic contrast suitable for museums, tourist sites, theme parks, meeting and board rooms and auditoriums. The G62-W9 offers a 9,000-lumen WUXGA output while the G62-W11 increases this to 11,000 lumens.

Offering higher bandwidth and upgraded input support – HDMI 2.0 and 3D SYNC –

the new additions are now compatible with 4K input sources and provide HD 3D stereo capabilities. The G2 models will also be available in both black and a fully white chassis, and can be paired with familiar G Series short-throw lenses.

The G62s bring enhanced and OSD embedded warping and blending capabilities, making them suited for use in combination with other projectors in a multichannel setup. An improved interface is said to offer more user-friendly operation and efficient workflows.

www.barco.com

Christie expands GS Series with two new models

TWO MODELS have joined Christie's GS series of 1DLP projectors. Outputting 9,000 ISO lumens and 10,600 ISO lumens respectively, the DWU880-GS and DWU1100-GS projectors have been designed for use in meeting rooms, education spaces, museums and houses of worship.

The projectors feature laser illumination capable of delivering 20,000 hours of consistent illumination to 50% brightness, with no need for lamp or filter replacements. Christie Twist warping and blending tools are built in, enabling alignment onto irregular screens for multiprojector blending. With Christie Mystique Lite, an optional camera-based alignment software that works with an inexpensive webcam, up to three horizontal projectors can be automatically stacked and aligned on a flat screen or surface. Mystique Lite

is available for download at no additional cost and can be upgraded to other tiers of Mystique software, to warp, stack and blend larger projection arrays on a more complex screen or surface.

The models also support HD 3D content via sync in/out, picture-in-picture or picture-by-picture for videoconferencing, and DICOM mode for medical imagery. For installation flexibility, GS Series includes DVI, HDMI, HDBaseT and 3G-SDI inputs.

www.christiedigital.com

DWU1100-GS

Vidami foot pedal gains Bluetooth connectivity

VIDAMI HAS developed a wireless control pedal that can be used to perform on-the-fly video and audio editing. The Vidami Blue can connect to both computers and iOS mobile devices via Bluetooth and is compatible with all major DAW platforms, allowing users to record, loop or set markers using five foot switches and without having to fumble around with computer controls.

The Vidami Blue features the same Video Mode functionality as the original Vidami unit,

with the ability to loop, slow down and control playback of videos on more than 35 compatible online video learning platforms. The additional Bluetooth connectivity gives players the ability to use Video Mode with their iPhone or iPad on Safari iOS 15 and Vidami's iOS Safari extension. It can also be paired with Mac and PC desktop computers using Vidami's Chrome and Safari browser extensions.

The next generation "Blue" footswitch also adds two modes: DAW Mode and Page

Turning/Tab Mode. In DAW Mode, players can record, loop, add tracks and set markers on workstations running GarageBand, Logic Pro, Reaper, Pro Tools, Studio One, Cubase and Ableton Live. Described as a natural extension to Video Mode, Page Turning/Tab Mode enables players to turn pages, scroll tabs/lyrics and use other functions on their preferred digital sheet music apps and tab sites.

www.vidami.com

Claypaky adds to Sharpy range

TAKING THE best attributes of its siblings, the Sharpy X Frame integrates a four-focal plane shutter system in a lightweight, compact fixture. The unit's source is a 550W arc lamp that makes the fixture extremely bright and produces deep and vivid uniform colours (including an unmatched deep red). Not limited to beam effects, the Sharpy X Frame can also be used as a spot, profile or wash.

Sharpy X Frame

Smaller in size to other units that use a 550W arc lamp, the Sharpy X Frame comes with a rotating gobo wheel with eight rotating gobos, a static gobo wheel, four- and eight-facet rotating prisms, linear frost, a colour system featuring CMY, CTO and a separated colour wheel, and six beam reducers starting at 0.5°. It also features a zoom range from 2–52° and is fitted with a 160mm front lens and Claypaky optics for producing sharp images and collimated beams.

The Italian manufacturer has also unveiled a series of LED fixtures which it proclaims drastically increases the performance levels over previous models. The series kicks off with the launch of the Sinfonya Profile 600, a low-noise moving head lighting fixture for theatre use that can be used both on lighting rigs but also sits equally well in the small niches around the stage frame.

The fixture boasts several standout features. Achieved by redesigning the cooling system alongside the removal of the base fan, Tonedown ensures that even at full output, the unit noise is just 27dB. Accuframe is a new framing system using just two focal planes as opposed to the traditional four, reportedly saving time in programming and when refocusing.

Sinfonya Profile 600

It's said to be "40 times more precise" than traditional framing systems.

The enhanced performance of a new proprietary Optical system has enabled the manufacturer to increase the aspect ratio to 1:12, resulting in a true 5–60° beam angle onstage. New firmware governing the multicolour engine also enables more precise colour control. Using the Calibration feature in conjunction

with the Claypaky CloudIO software lets users align any fixtures onstage for a performance to the same light output and colour temperature levels. Older fixtures can have their colour sampled and measured before being imported using the "digital filter option" and replicated in Sinfonya for better consistency onstage.

www.claypaky.it

ADJ branches out

PACKED WITH all the features needed to distribute a DMX signal, ADJ Lighting's D4 Branch RM is a four-way DMX splitter and booster suitable for both touring and permanent installations. It features DMX input and thru connections in addition to four independent DMX outputs that are electronically isolated from each other to ensure uninterrupted data. Both three- and five-pin sockets are included, allowing integration into any DMX-512 system and flexibility for rental applications. Signal amplifiers inside the unit boost each of the four outputs, making the solution suitable for large projects where long data runs are required. In addition, a Link Out/Terminate button and signal LEDs for each of the four outputs have been included to aid with troubleshooting.

The 19-inch rack-mount design requires only 1U of space. It measures 482mm x 139.8mm x 44mm and weighs 2.4kg. Power is supplied by a trailing cable on the rear of the unit, while a convenient on/off switch is located on the front panel.

www.adj.com

Advatek adds more power to PixLite T8-S

THE THIRD generation of Advatek Lighting's long-range lighting controller, the PixLite T8-S Mk3, has gained a power boost following customer requests. Manufactured in Australia, at the heart of the Mk3 controller is a new state-of-the-art processor which runs on all-new firmware. This has enabled several standout features: gamma correction for pixels at all resolutions, much improved refresh rates, the ability for low-resolution pixels to appear higher in resolution through dithering and the addition of record, playback, triggering and live device control.

Each individual receiver unit can service up to 12 universes, allowing for the address of up to 16,320 individual RGB pixels from each controller. The PixLite T8-S Mk3 can send data up to 300m to receivers and supports over 50 pixel protocols, transmitting up to 96 universes of data in total. The third-generation controller also features a microSD card slot for recording and can be configured using any web browser or the Advatek Assistant 3 software.

www.advateklights.com

TS-8 front and rear

Cameo's IP67-rated wash light heads outdoors

THE ZENIT W600i is the latest addition to the Adam Hall Group's portfolio of Cameo lighting solutions. Intended for use in architectural lighting scenarios, the Zenit W600i wash light is an IP67-certified version of the original Zenit W600 model and boasts a "generous" lighting output at up to 21,000 lumens from a total of 40 15W RGBW LEDs. To accompany the fixture's release, Cameo has introduced an extended five-year warranty on all of its installation products.

The Zenit W600i's IP67 rating ensures protection against temporary immersion, making the fixture suitable for marine applications with its C5-M certification. DMX and RDM control are managed over a network, as the unit dispenses with plugin DMX sockets in favour of waterproof PG cable glands. The Zenit display remote control can be connected using the supplied cable to enable full onsite control when configuring Zenit installation devices.

The fixture can be combined with a variety of specially developed accessories that further protect it against external influences and increase installation flexibility, including symmetrical and asymmetrical diffusion filters (25°, 45°, 100°, 60° x 10°) and full and half anti-glare shields.

www.cameolight.com

Elation searches for Excalibur

THE NEWEST member of Elation's Proteus range of IP65 automated fixtures has been designed to create aerial light columns, sweeping beams, throws of CMY colour and prismatic/air FX which reportedly rival existing Xenon searchlights. The Excalibur is a beam moving head fixture suitable for outdoor special events, large-scale shows or any situation where a massive beam or very powerful prism and flower effects are required.

The fixture produces up to 200,000 lux at 20m (7,500 lux at 100m), while the extremely narrow 0.8° beam reportedly ensures the fixture is visible at great distances. The intense beam projects from an ultra-wide 260mm front lens as a massive column of solid light.

A wide array of gobos (eight interchangeable plus a 17-position static wheel) and prism overlays (four- and eight-facet) allow for a large variety of dynamic sky animations that are said to draw attention to any event. The upcoming integrated sky animation system allows the Excalibur to operate aerial shows without needing an external DMX controller.

The Excalibur offers full CMY colour-mixing plus 14 dichroic colours, including CTO and UV. Beam control through a precise internal focus lens is said to provide crisp projection without optical errors. Dual variable frosts allow for softening of the beam when required and a remote-controlled Expander lens widens the beam to approximately 3.5°.

The Philips Platinum 500 FLEX (550W) lamp is dimmable via the internal ballast, which not only dims the lamp electronically but offers a Hibernation Mode that reduces power to the lamp when not in use, resulting in lower power consumption. The lower internal heat extends both the life of the lamp and all the fixture's internal components. The Excalibur supports DMX, RDM, Art-Net and sACN protocols.

www.elationlighting.com

Not taking a stand

Jeff Rosica, CEO and president of Avid, tells **Caroline Moss** why the company won't be exhibiting at major tradeshows during 2022

To cancel a whole year of tradeshows is a bold move when many other companies are hoping for a return to the show floor. What's behind this decision?

It might seem bold to pause exhibitions at large tradeshows but, first and foremost for Avid, this was a decision to keep our people and the media and entertainment community safe. We've been firm on serving this objective since Covid-19 first hit the world and our industry – all other considerations have remained secondary. As long as the pandemic continues to subside, our people will be at the NAB show and other large events, just in much smaller numbers so we can ensure we're keeping a responsible handle on their safety. So, while we won't have exhibition space in 2022, we'll be hosting meetings for the convenience of our customers and partners in small groups.

Is this something that might have happened without Covid?

Yes, even when you take Covid-19 out of the equation, an evolution in the way our industry connects and learns about technical innovation remains necessary. Audio and video products need to be heard and seen in person, so there's no question that some measure of exhibition presence at large tradeshows will play an important role in how a company like Avid goes to market. Going forward however, events will never match the measurable value that companies can achieve through digital programmes, virtual gatherings and heightened attention to making sure our customers receive the maximum benefit from more personalised engagements with us.

Do you think that, historically, there have been too many tradeshows?

The tradeshow landscape has always had its peaks and valleys. Eventually, our industry's needs always resolve the congestion of too many events that don't deliver on a unique value proposition and tangible results. The intense disruption of the pandemic has hastened this natural cycle. The big takeaway now is that numerous companies have learned to fulfil their business objectives without tradeshows. So that puts the burden on

Avid CEO and president, Jeff Rosica

tradeshow organisers to rethink how they can put their brand and reach to work in more effective ways. This is a tight-knit community, so we want to help them to map out a better future. Working together, vendors and show organisers can rethink to create events that cater to the distinct interests of media within their region and closer to where they operate, giving them the advantage of far more productive time on the road to learn from peers, and less time away from the job.

What (if anything) would tempt you back to a major tradeshow? What values might they have that can't be replicated on other platforms?

Avid's product innovation engine has been running at full tilt throughout the pandemic and will continue to pick up the pace. Plus, our people love nothing more than being with the community. So we are extremely motivated to return to big venues and deliver hands-on experiences for customers and partners through careful investment, but events must ensure safe engagement and very

healthy pre-Covid attendance numbers. Avid's exhibition booths will gradually return to large shows and, fortunately, these days it's much easier to demonstrate our products without moving lots of people and lots of gear. Expect smaller footprints overall. That's investment we can apply to other activities with show organisers that help our customers and partners.

Avid has traditionally dominated tradeshow halls with large stands providing separate areas for different market segments and international staff in attendance. If you exhibit in the future, what will your participation look like?

We'll be watching what happens with event attendance and best practices throughout 2022 before planning our return. While our exhibitions will always match the interests and needs of the audience – whether large or small, international or highly localised – we're likely to dial down our typical investment in booth space and staffing in order to dial up thought leadership, education and other ways to connect with the community. Thanks to the role we play in media, we're learning a lot every day and make a huge effort to pass this along to the community through webinars, papers, training, podcasts and more. We make a wealth of information available and we know that the community appreciates it, so we want to give them more.

Is this hiatus a good opportunity to look at the sustainability of tradeshow participation in terms of international product shipment, airmiles spent travelling to shows and waste created by temporary stands?

Yes. I'm encouraged that our industry's mindset has moved sustainability into the foreground. Individual vendors are committing to reducing their own impact and tradeshows are just one promising area where we can deliver a big change. Plus, public companies like Avid are driving hard towards environmental, social and governance (ESG) compliance and transparency, which is a great way to put the requirement for change front and centre of everything we do. I'm thrilled that more Avid employees are taking the initiative on their own to raise questions about how we can do better. Collectively across our industry, there are some inspiring initiatives afoot that are challenging everyone to move faster, like the Albert organisation that's helping our TV and film production customers to reduce waste.

Tell us about the market presence you're creating in the absence of doing tradeshows. Is this a new way of doing business, or an interim measure?

Of my 35 years in media technology, the past two have been the most intense period of rethinking and reinventing how we market, communicate and collaborate. We've learned that nothing brings more value than thinking and acting locally and sustaining a personal conversation wherever possible. Avid's deeper investment in digital marketing, virtual events and educational programming are making it increasingly easy to stay in front of customers and partners. Also, we're enthusiastically gearing up for a world tour to bring our latest innovations and ideas to the media and entertainment community in major cities. We really can't wait to get back out there. Before summer, we'll be announcing dates and locations for our events in Europe, Asia and the Americas for video and audio creators at all levels of experience.

www.avid.com

Avid has traditionally taken large booth space at shows like NAMM

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