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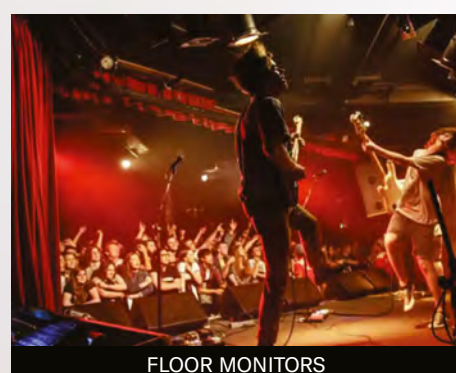
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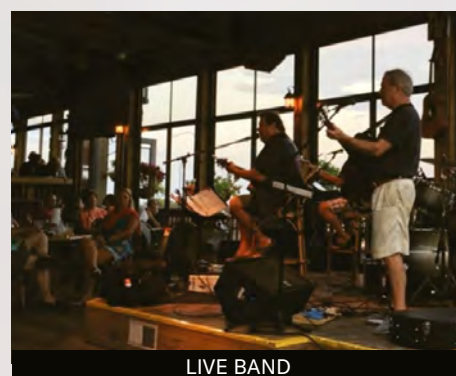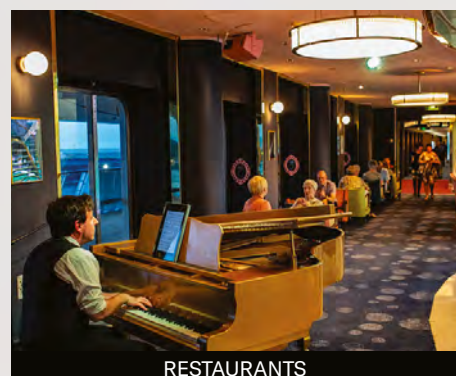Easy-to-use Onboard 2-Channel Mixer

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mea.yamaha.com

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July–August 2023

Editor's Letter

In the eight weeks since the last edition of *Pro AVL MEA*, myself and my colleagues at *Pro AVL Asia* have collectively travelled to no less than eight different countries, predominantly driven by an incredibly hectic summer tradeshow calendar. In MEA, CABSAT and the new Integrate Middle East exhibition jointly took place in May taking me to Dubai, quickly followed by the Saudi Sound & Light Show in Riyadh just a week later. Having not been able to attend its inaugural edition last year, that was a particularly enjoyable experience. To cap everything off, InfoComm then returned to Orlando, Florida in mid-June and defied many people's expectations with an incredibly "normal" outing. It was quite refreshing after such a long period of uncertainty. Show reviews for all of these can be found starting from p44.

But the period kicked off with possibly my most enjoyable trip yet since becoming editor of this magazine, when Hungarian company Maxin10sity invited me to the Petra Light Festival in Jordan, where its historic monuments were lit up in true 21st-century style with a mind-blowing projection mapping showcase. It was an incredible experience and, unsurprisingly, it's the cover story for this issue. You can find the full run-down on pp30–32.

Simon

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1REBEL keeps it consistent

London's 1REBEL recently launched in the UAE, with the opening of its first Dubai branch located in ICD Brookfield, within the cosmopolitan Dubai International Financial Centre area. 1REBEL called on UAE-based distributor and integrator Levels AV during the design and project commercialisation phase, overseen by Turner & Townsend project management. The interior design was taken care of by Allen Architecture Interior Design and APA London. Over 40 EM Acoustics loudspeakers and subwoofers were deployed to supply the soundtrack intrinsic to the workout experience across an area of 930m².

"1REBEL was clear about the level of AV system this project required. Their gyms have an impressive reputation, and part of the appeal is the overall polished look and party atmosphere of the 1REBEL experience. The products installed needed to reflect this. At Levels AV, we knew we needed to deploy our highest-quality products in both the lighting and audio stages of the installation,"

explained Hassan Alwan, Levels AV managing partner.

At the core of every 1REBEL gym are its defined workout zones. The RIDE room is complete with spin bikes in an atmosphere more reminiscent of a nightclub than a gym. Alternatively, the RESHAPE room is dedicated to a mixture of high-intensity exercises, from treadmill sprints to free-weight circuits. An Open Gym area allows gymgoers to make use of a variety of weight and cardio equipment in less structured individual sessions. A reception area and changing rooms complete the facility. Each area required a bespoke audio solution, suitable for a variety of workout scenarios.

"This 1REBEL project required nightclub-quality sound across a variety of zones in what is 1REBEL's first open-plan Dubai gym. We needed high-quality loudspeakers that could be relied on to produce crystal-clear audio across a mixture of music genres," added Alwan. "EM Acoustics was an obvious choice for this project. EM's loudspeakers are powerful for their size

and deliver matchless audio quality, meaning we could ensure smooth, even sound coverage without interfering with the overall modern, industrial aesthetic. The range of flexible rigging and mounting options meant we could get sound where we needed it across all areas of the gym."

Firstly, the RIDE room required a fully immersive AV experience. Alongside high-impact visuals, nightclub-grade sound is provided courtesy of six EMS-81X loudspeakers and S-15 and S-48 subwoofers. Simplified touchscreen AV controls allow for easy access to the system for the trainer, with a triggering system that enables users to cue up and sequence integrated media, light effects and soundtracks together.

For the RESHAPE room, Levels AV opted for six EMS-81X loudspeakers and two S-12 subs. iPad stations were deployed allowing system control via Pixilabs and Avolites. Intended for personal sessions and individual training, the Open Gym area features eight EMS-61 two-way loudspeakers. Ensuring a continuation of

the party atmosphere, not even the changing rooms were overlooked, with four EMS-41 loudspeakers fitted in both the male and female facilities. Consolidating the atmosphere of the entire 1REBEL facility, background audio in the reception area is supplied by two EMS-51 loudspeakers.

Throughout 1REBEL Dubai, all sound and systems are controlled via Xilica, with Linea Research amplifiers driving more than 40 EM Acoustics loudspeakers and subwoofers. Muxlab solutions integrate media and content servers to the displays.

Reflecting on the end result, Alwan said: "The different spaces each required unique solutions, and with EM Acoustics loudspeakers we're confident that the system provides the uncompromised sound quality and complete coverage required for the immersive workout experience users expect from a name such as 1REBEL."

www.emacoustics.co.uk

Royal Opera House Muscat selects Chroma-Q

The Royal Opera House Muscat (ROHM) has carried out an upgrade to its stage lighting system, including the addition of Chroma-Q 26 Color Force II 48 LED battens by Chroma-Q, purchased from AC Entertainment Technologies (AC-ET).

Standing on Muscat's main thoroughfare, Sultan Qaboos Street, ROHM – commissioned by Sultan Qaboos bin Said – is said to be the leading arts and culture centre in the Sultanate of Oman. This ornate building opened its doors on 12 October 2011. Today, showcasing a diverse programme of artistic, cultural and educational content, this venue plays host to classical and operatic performances from around the globe.

Discussing the choice of the Color Force II LED battens, the venue's technical department manager, Donald Cox, said the space required a unit that could provide a decent spread of high-quality light, considering the short distance and

the tight space that they would be used in. "We liked the light output and smooth dimming curve of the Color Force IIs," he said. "The output is

very even, with a good colour spectrum. They're a great replacement to our old tungsten lighting battens, with excellent colour mixing."

Housed in an extruded aluminium body with internal power supply, individual units of the Color Force II LED battens can be controlled via their touchscreen interface. RDM capability is available through either wired or wireless connection. With a schedule of mostly touring performances and productions passing though the venue, the versatility and output characteristics of the Color Force II were a particular benefit to the team.

Asked if the venue's lighting crew were impressed with the new additions, Cox replied: "Very much so – we will be looking at purchasing more in the future."

He added: "AC-ET understood our requirements. We are very happy to have purchased the Color Force II and trust that they will give us many years of service."

www.chroma-q.com

Kigali's Radio O opts for Lawo

Irebe Kabera Jessica using the Lawo RƎLAY solution

RWANDA

In Rwanda, a new radio station is emerging on the region's media landscape: Kigali-based Radio O, the on-air institution of the Authentic Church denomination. With its new Lawo RƎLAY solution, Radio O is implementing a technical setup to turn its facilities into a fully equipped radio broadcast centre with an "innovative distributed approach".

Operating out of a 5,000-capacity church building, the Authentic Church aims to broadcast the message of its services to listeners across the region through additional programmes. After evaluating all options, the leadership team chose Lawo software and standard PC hardware to build its radio station, working with local systems integrator, Mediacity Ads, a Lawo solutions distributor in Rwanda.

"We are excited to be working with Lawo technologies to offer our on-air talent a more flexible and scalable solution that allows them to curate more content, without having to worry about technical inefficiencies," said Rutabara Jean de Dieu, director of Radio O and TV O. "We noticed the Lawo trend in Kigali among the big players and immediately contacted Mediacity to onboard us. This decision was taken to follow our overall strategy for modernising our broadcast and production workflows and migrating to a purely IP-based solution to be able to do more with less technical clutter."

Without a central equipment room, this project – the first of its kind in Africa – follows a novel distributed approach, explained Mediacity's Jesse Kiyingi Maxella, director, and Fred Martin Kiwalabye, IT media systems specialist. "Different buildings will host standard PC technology and conventional IT infrastructure to route signals from an analogue mixing console used at the church's FOH via Lawo's virtual patch bay to Lawo's RƎLAY VRX mixing software. This virtual patch bay provides audio outputs with different sound processing options – all routed via a simple Ethernet cable."

Kiwalabye continued: "With the RƎLAY Virtual Sound Card and Virtual Patch Bay, we can offer our customers a solution that can be quickly deployed to address new opportunities in digital and outdoor broadcast content while reducing the overall infrastructure cost."

L–R: Fred Martin Kiwalabye and Jesse Kiyingi Maxella

The Zion Media project administrator, Espoir Furaha, said: "We are excited to work with Mediacity, an industry leader for broadcast, production and workflow integration."

Evans Mwendwa, aka DJ Spin, head of programming for Radio O and TV O, added: "The new system has made work very easy compared to the analogue setups we had before. The new workflows we established now elevate the quality of our programmes. Working with Lawo is the best decision we have ever made."

www.lawo.com

Powersoft partners with Vega Global

WORLD

Vega and Powersoft team members at InfoComm Asia

Powersoft has announced the signing of an agreement with Vega Global, for the supply of professional amplifiers to expand and strengthen the audio solutions it offers to end customers. The agreement includes a long-term supply in 16 geographical locations in the APAC and MEA regions where Vega Global operates, and Powersoft will provide direct access to its portfolio of amplifiers: Duecanali and Quattrocanali Series, Mezzo Series and UNICA.

With this agreement, Powersoft will be able to better understand customers' needs and explore new audio product opportunities, increasing its presence and visibility in target markets and new areas. And thanks to the distinctive technical features of Powersoft's products, Vega will complement the audio solutions offered to its end customers with a focus on the corporate and hospitality markets.

"Working with a partner like Vega Global represents an opportunity for us to maintain a competitive advantage in the market and ensure the mutual cross-pollination of know-how. This partnership is part of Powersoft's strategic and development path, undertaken by the company to enhance its potential and find new and unique technological solutions to increase its global presence," commented Luca Lastrucci, CEO of Powersoft. "As shown in the 2022 Annual Report, Powersoft is reaping important results in economic terms; growing revenues and margins prompt us to be confident and to keep pursuing our business model."

"We are thrilled to partner with Powersoft and bring their high-quality, professional services to our clients," said Matthew Deayton, deputy CEO of Vega Global. "As a business, we are committed to delivering exceptional customer experiences and adding value to our clients, and we believe this partnership will enable us to do just that. We look forward to building a strong and successful relationship together."

www.powersoft.com
www.vega-global.com

Robe lighting acquires Avolites

WORLD

Robe lighting has acquired Avolites, a company known for its design and manufacture of lighting and video control products.

"This is a great acquisition for Robe," stated Josef Valchar, CEO of Robe lighting. "Avolites has always been at the pinnacle of lighting control with products that complement our lighting fixtures; this will add significant value to sales made throughout the global distribution networks of both companies."

The acquisition of the Avolites business is an important part of Robe's strategic future growth plan. Avolites will remain based in the UK and will continue under the existing leadership team. Robe is said to have a wealth of resources that will assist Avolites in accelerating its ambitious innovation and product development programmes.

"The Avolites leadership team wanted to ensure the best outcome for our employees, customers, suppliers and the brand," commented Avolites MD Paul Wong. "Robe is an ideal home that will enable us to achieve just that, while maintaining our core values. Robe is a great fit for everyone associated with Avolites."

www.avolites.com
www.robe.cz

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d&b joins the United Nations Global Compact initiative

WORLD

d&b Group, and its subsidiaries d&b audiotechnik and d&b solutions, has announced that it has joined the United Nations Global Compact initiative – a voluntary leadership platform for the development, implementation and disclosure of responsible business practices.

As members of the Global Compact initiative, d&b Group and its subsidiaries will have the opportunity to collaborate with other

become key concepts in the business world in recent years, but for us are far more than just buzzwords, they are important guidelines and metrics that we have placed at the heart of our business," commented Amnon Harman, chief executive officer at d&b.

"In line with our commitment to these principles, we are proud to join the UN Global Compact. Voluntary initiatives such as these have produced tremendous positive social and

Amnon Harman seals the deal

companies, civil society organisations and UN agencies, to exchange best practices and to contribute to collective action towards sustainable development.

The UN Global Compact is an initiative that calls on companies to align their operations and strategies with 10 universally accepted principles in the areas of human rights, labour, environment and anti-corruption. By doing so, companies can make a positive impact on society while also supporting the UN goals and issues embodied in the Sustainable Development Goals.

"Corporate Social Responsibility and Environmental Social Governance have

environmental outcomes and have improved the lives of millions of people in the workplace and in communities around the world, and we look forward to sharing the benefits of the programme with our many industry colleagues and customers," he added.

Launched in 2000, the UN Global Compact is the largest corporate sustainability initiative in the world, with more than 15,000 companies and 3,800 non-business signatories based in over 160 countries, as well as more than 69 local networks.

www.dbaudio.com
www.unglobalcompact.org

Della Fame sounds stylish with HH

TURKEY

Home to the Metropol Istanbul Tower, Turkey's highest skyscraper, the Ataşehir district on the Anatolian side of the city is a residential, business and trading centre which has developed a popular social scene. Della Fame is the very latest Italian restaurant to open in Ataşehir. Located in a section of the Metropol Shopping Mall, it is a stylish and spacious venue which offers Italian-inspired Mediterranean cuisine from its open kitchen.

Carefully selected background music and DJ sets complement the guest experience at Della Fame, meaning that exceptional audio was an essential component of the restaurant's ambience. The Della Fame team engaged Istanbul-based professional audio integrator, Pulsarpro, to supply and install a discreet system that would meet the needs of the venue's different spaces. Pulsarpro chose an HH Electronics solution in what was one of the first collaborations between the installer and the UK brand.

Project coordinator Hakan Tamer deployed 10 HH TNi-0801A 8-inch full-range active loudspeakers in conjunction with four TRS-1800 18-inch powered subwoofers for the inside spaces. These installation units, from the HH Tessen and Tensor ranges respectively, combine to comfortably deliver all the necessary

power and quality for background music and evening DJ sets, whilst blending unobtrusively into the décor. Three HH TNi-C8 ceiling speakers have been mounted in the lobby and restroom entrance area, while the garden area has benefitted from 16 TNi-W6 compact wall-mounted speakers.

Tamer commented: "The HH loudspeakers proved to be first-class products in terms of quality, power and consistency of coverage, as well as respecting the visual aesthetic of the venue's unique decoration."

Della Fame business manager, Murat Coşkun, is pleased with the system: "Our mission is to offer a relaxing experience, day and night, for guests who want to take a break from the hustle and bustle of the city. Good music plays a big part in creating the right atmosphere at Della Fame. Our new sound system, with its carefully placed HH speakers, delivers excellent sound quality both during the early lounge hours and later DJ performances."

Ian Wright, global sales director for HH Electronics, added: "Although a relatively new customer for us, Pulsarpro had no hesitation in designing an HH system for this eye-catching venue, and already have a number of other schemes underway in Turkey."

www.hhelectronics.com

ROE Visual MEA office opens in Dubai

MEA

Following the appointment of Khalid Sweidan at the end of last year as vice president of sales in the Middle East and Africa, ROE Visual has officially opened its dedicated MEA office. Sweidan recently welcomed a number of customers, production companies and industry friends to a relaxed gathering to witness the ribbon cutting at the new premises located in Dubai's Jumeirah Business Centre.

"It's wonderful to have a subsidiary now here in Dubai and, following the opening of our offices in the US, Europe, UK and Japan, Dubai is another exciting start for us," explained Grace Kuo, ROE Visual sales director, who travelled over from the manufacturer's head office in Shenzhen. "It allows us to work with our customers more

closely and enjoy better connections locally. We're very excited and looking forward to the challenge of growing this market."

The opening of the Dubai office continues ROE's philosophy of offering local support and service. "The industry is clearly recognising that the Middle East is a booming market, so it's encouraging to see that one of the high-end brands has moved to the region," added Matthew Gordon Holmes, head of video at BeWunder who was present at the event. "It offers the service and support that we need to provide the product at the highest level, and it also means we can now send our modules to them without having to ship them out of the country. That's very much appreciated."

www.roevisual.com

INFiLED opens showroom in Dubai

INFiLED's new Dubai showroom – Experience Center – showcases the company's LED displays, offering customers the chance to experience the technology first-hand. The new 285m² space is in Dubai Studio City, a strategic location that represents the vision of the company and serves as a working space for the Middle East sales and technical team, as well as a showroom with products for both fixed and rental installations.

"We are thrilled to announce the opening of our new showroom in Dubai," said Samer Otaibi, VP sales, INFiLED Middle East. "Due to the rapid growth of our business in the Middle East over the past few years, we had to make the decision to expand our investment in the region. As part of this expansion, we are delighted to announce the opening of a new office that is almost triple the size of our previous one, including an Experience and Service Center. With our new showroom, we

are excited to offer a first-hand experience of the latest and most high-tech display solutions that meet the highest standards of quality."

INFiLED presents its XR and Virtual Production solutions in Dubai by integrating a complete studio set, powered by industry brands such as disguise, Canon, ARRI, Ncam, Brompton, NovaStar, BrightSign, Navori, B Tech and more to create a first-rate technological ecosystem. The studio setup in Dubai is the first installation of a global rollout, with Los Angeles, Shenzhen, Malaysia and Tokyo to follow later this year.

www.infiled.com

RST unleashes the Monster

Resources Stage Technologies, an event production company based in Dubai and Saudi Arabia, has recently acquired over 250m of MTS Monster Truss by Eurotruss.

"With the newly acquired MTS, we felt confident in designing Angham's concert last month to go big," said Robin, CEO of Resources Stage Technologies. "The design had to accommodate a heavy load, particularly with the elaborate décor and numerous fixtures in place. The load and span specifications that Eurotruss worked on are a major leap forward in the field, especially in the Gulf."

The weather can be unpredictable, with sudden gusts of wind or heavy rain, and the MTS allows RST to install sturdy roofs to protect its fixtures.

"This is the first MTS system sold in the Middle East, and one of the first worldwide. Resources Stage Technologies' size of stage installations and their commitment to safety made the MTS system a natural choice for them," said Rami Harfouch, general manager of Procom Middle East. "Their projects are the perfect showcase for the system and we are looking forward to what they will achieve with it."

Procom Middle East, the official distributor of Eurotruss, supplied the Eurotruss MTS system to Resources Stage Technologies.

www.eurotruss.com
www.procom-me.com
www.wide-angle.com

MBC returns to AEQ for more ATRIUMs

National public broadcaster Mauritius Broadcasting Corporation (MBC) has invested

in new AEQ ATRIUM digital audio consoles to match that already in use in Studio A at

its Moka facility. The new consoles will be deployed in Studio C and the broadcaster's

TV News studio. MBC programmes are broadcast in 12 languages, including French,

Creole, English, Hindi, Urdu, Tamil, Chinese and Hakka. MBC currently offers 17 TV channels in Mauritius, four in Rodrigues and two in remote Agaléga, as well as seven radio channels.

Both Studio C and the TV News studio have been installed with 12-fader ATRIUM consoles, including loudness meters and remote control via a tablet with the VirtualAtrium licence.

An important feature of MBC's ATRIUM consoles is that, through specific input and output cards, they have a capacity for interconnection in any current or foreseeable audio format. Furthermore, if any other format is used in the future, AEQ will reportedly be

able to develop the corresponding card for its integration into the consoles.

The setup is completed with an AEQ SYSTEL IP audio-over-IP system to coordinate calls in both studios. SYSTEL IP is a broadcast telephony system with multiconference, which reportedly reduces the cost of communications while improving quality, increasing flexibility and providing integration with the telephone system of each station. SYSTEL IP allows MBC to connect broadcast telephony to current IP-based corporate switchboards, avoiding maintaining exclusive conventional lines for broadcasts.
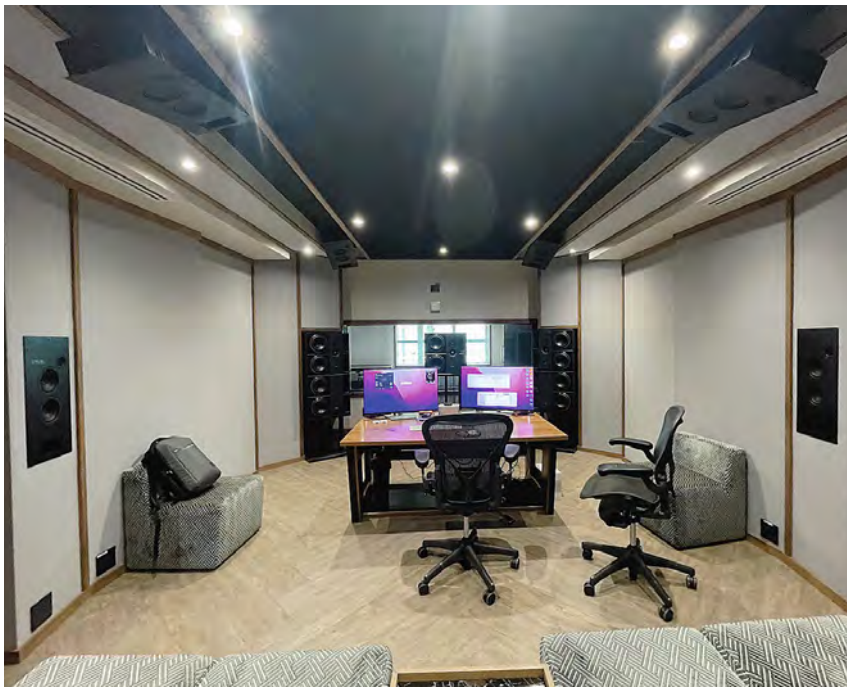
www.aeq.eu

Studio Immersive opens in South Africa with PMC

Studio Immersive, a Dolby Atmos 7.1.4 recording and mixing facility in Johannesburg, has been equipped with a PMC monitoring system in a 7.1.4 formation and Metric Halo conversion.

"We didn't have room for him, so I suggested an alternative – that we both take on the 300m² office suite next to mine, which had been empty since lockdown, and use the space to create

seem to be the choice of many of the musicians, composers and producers that I respect. Jacob has a PMC system in his demo room in Cape Town, so I went to have a listen and it was a no-brainer. They sounded amazing."

The system installed at Studio Immersive consists of PMC8-2 XBD monitors for left and right channels, a PMC8-2 for the centre channel, two PMC8 subs and PMC Ci65 monitors driven by Linea Research 88C03 amplifiers for surround and height.

Studio Immersive has a live room that can house up to 24 musicians at any one time. Alongside the final mixing and music composition work it tackles every day, the facility has also delivered over 300 tracks for Apple Music for artists such as Tresor, Black Coffee, Lojay and the late South African rapper AKA. In addition, it has become one of the first South African sound studios to mix a locally produced Netflix series – *Ludik* – directed by Giant Films' Ian Gabriel in Dolby Atmos.

The key players behind Studio Immersive are Adam Howard, head of audio and music post facility Howard Audio, and Robin Kohl, owner of music recording company Jazzworx. Howard, who is ranked as one of South Africa's top music composers and music supervisors, had been looking to expand his own audio facility when he was approached by Kohl who had sold his own studio and wanted to rent space in Howard's premises.

the best sounding recording studio we possibly could," Howard explained. "Studio Immersive is our lovechild – expensive but very beautiful. Although Howard Audio and Jazzworx remain separate companies, this facility is a natural coming together that allows us to tackle new immersive audio work and larger ensemble recordings."

Originally from the UK, Howard is a classically trained musician who moved to South Africa in 1997 to join the Pretoria State Theatre Orchestra as its principal trumpet player. He set up Howard Audio in the early 2000s and his main facility now has three very busy audio post studios. "When I set up Howard Audio, I built a team of people around me who could look after the equipment and installation side of the business so that I could remain on the creative side, composing music,"

Howard said. "I didn't want anything to get in the way of that. This approach has served me well and I certainly relied on expert advice when it came to building Studio Immersive."

A key person in the design and build of the facility was Jacob van der Westhuizen, CEO of South African equipment distributor Benjamin Pro Audio. It was van der Westhuizen who recommended PMC speakers for the facility. "I have listened to many PMC systems in other studios, including some of the top audio houses in the world," Howard said. "PMC just

Howard explained: "This was an expensive project and the monitoring alone accounted for 25% of the cost. The fact is, though, that they sound amazing. Calibration was done by Jacob and Dolby to the same specification as top producers such as Greg Wells, who also uses PMC. Everything we do in this studio translates so well and because the monitors sound so good I know that I am mixing to the best of my ability. This room allows me to be very confident in all the decisions I make."

www.howardaudio.co.za
www.pmc-speakers.com

Elation revives AV industry connections

Elation Professional's exclusive sales partner in South Africa, The Production Warehouse, recently embarked on a roadshow showcasing a selection of the latest lighting products from Elation's Proteus, Fuze and KL series. The roadshow, which visited Johannesburg and Cape Town, not only provided an opportunity for customers to experience product demonstrations but also aimed to revive relationships in the AV distribution industry after challenges posed by the Covid pandemic.

Marnus Nieuwoudt, owner of The Production Warehouse, said: "Being our first major roadshow post-Covid, it wasn't only about showcasing the latest technology Elation has to offer, it was more about reconnecting and networking with old friends and colleagues while meeting some new customers along the way."

Jonas Stenvinkel, international sales manager at Elation, commented: "The roadshow was busy the entire week, and our

products were very well received. That is a real affirmation of Elation's increased market presence in South Africa and the excellent work that The Production Warehouse is doing."
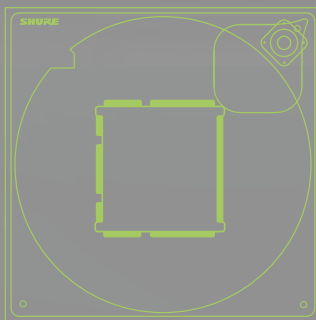
Looking ahead, Nieuwoudt and his team are eager to welcome Elation back for future roadshows. He remarked: "Elation as a brand caters to the creative lighting designer with innovative ideas like SpectraColor and SparkLED, while still being an affordable choice for the rental house owners who have to consider return on investment. This is why Elation is becoming a 'no-brainer' and gaining popularity within the South African market. The roadshow was definitely a success, and we look forward to welcoming Elation back soon for the next one."

www.elationlighting.com
www.productionwarehouse.co.za

Listen Technologies Corporation celebrates 25 years

"At its core, Listen Technologies is about inclusion," said Russ Gentner, founder and advisor, Listen Technologies. "We started Listen Technologies to help people overcome the challenges that make hearing difficult –

it's frustrating to go to an event and not hear what is being said. Those challenges include hearing loss, language, background noise or poor acoustics. We have solutions that make clear audio accessible so everyone can hear and engage in exceptional experiences."

Since its founding in 1998, Listen Technologies has also been committed to delivering a positive experience for employees, partners, vendors and customers. "We strive to be the easiest company to work with," added Gentner. "That starts with our people – the heart of our organisation – and fostering a culture that champions simplicity, customer support and innovation, as well as designing straightforward, elegant solutions that consistently perform."

Listen Technologies has grown from a group of entrepreneurial audio engineers to a global company with a worldwide network of the audio industry manufacturer's

representatives, resellers, integrators, dealers and consultants. Two of Listen Technologies' co-founders were women. Today, women are in leadership roles throughout the organisation and represented in every department, from marketing and R&D to customer service and sales.

"I'm proud to lead Listen Technologies and build upon Russ's vision," said Maile Keone, president and CEO, Listen Technologies. "Our focus on inclusion and delivering great experiences extends beyond product design. It's a mindset that permeates our organisation and is how we show up for each other, our customers, partners and end users. The future is bright for our business and the AV industry."

"Listen Technologies isn't just the name of our organisation, it's also our business model," said Sam Nord, vice president of global sales at Listen Technologies. "We help people hear better by listening to our customers and partners and creating technology and solutions to meet their unique needs."

www.listentech.com

NOA signs deal with Abu Dhabi Media

AV digitising and archiving specialist, NOA, has won a major contract with United Arab Emirates-based public service broadcaster and media company, Abu Dhabi Media. Systems integrator Broadcast Solutions Middle East has been working with NOA to manage the project, which includes the delivery and installation of a complete audio and video archive workflow system in Abu Dhabi and Dubai for the digitisation of the organisation's national radio and television archive including 153,000 audio tapes and 340,000 hours of video.

As part of the agreement, a scalable jobDB workflow management system will be installed as a basis for the facility comprising 16 channels of audio ingest with NOARecord and N7000c audio hardware units on four ingest places as well as 32 channels of video ingest with NOA FrameLector, five BarcodeStation custom script creation stations, five UniversalDialoger scanners and five full-scale MediaButler transcoding processors. In addition, the package includes a carrier positioning system for the required multisite logistic realisation.

The jobDB workflow orchestration system can combine any kind and number of audio and video ingest stations and server-side tools into an effective industrial digitisation facility.

"This project is the largest Archive Transfer Technology installation to take place in the Middle East," explained NOA's managing partner, Jean-Christophe Kummer. "ADM decided to approach this task with a CAPEX investment in mind – not as an outsourced service, since they have all gear, expertise and staff in-house and wanted to maintain control of the assets from a legal point of view. In addition, ADM is relying on us to manage the logistics of all carriers between the archive in Abu Dhabi and the ingest facility in Dubai. We are thrilled to continue our global expansion with this prestigious project and are confident we can assist the organisation in streamlining its large-scale digitisation process with our reliable tracking and quality ingest systems."

www.noa-archive.com

Sound Stylists upgrades to Quantum

Sound Stylists has purchased a Quantum 225 audio mixing console from local distributor DWR Distribution. "We had many SD consoles, but I noticed that everyone was going the Quantum route," explained Kevin Glover, owner of Sound Stylists. "We were fortunate to sell our former consoles to new owners who will get good use out of them, which allowed us to upgrade. When Kyle Robson from DWR said he had 225s coming in, I asked him to put one aside for me." With the live industry worldwide experiencing a shortage in the supply of gear, it made sense to make the investment.

While Sound Stylists has its fair share of international gigs, DiGiCo's dominance on technical

riders was not Glover's main concern. "We try to look after our clients, do the best we can for them and keep them happy," he explained. "It's not that we don't appreciate and get hyped up when we get new gear. If I get to work on the Quantum 225 it will be fun, but we must be practical, and its primary role will be to get the job done well. The beauty from our young operators' point of view will be that they get to work on the latest and greatest, so, hopefully, it's a win-win both ways."

A DMI-Dante card is a feature on the Quantum 225 that aligned with Glover's future business plan. "The way we are moving forward with our audio control line of products is focused around Dante," he noted. "This is the reason for purchasing additional Dante DMI cards, allowing us to tie into a Dante network with other products we own, while still offering the normal DiGiCo racks and MADI solutions." The DMI-Dante card provides 64 input and 64 output channels at both 48kHz and 96kHz. It is provided with primary and secondary Gigabit Ethercon ports

for connection to the Dante network as well as an Ethernet control port.

Technical manager at Sound Stylists, Carel du Plessis, has been with the company for the past six years and is comfortable with switching over to the new digital mixer. "The thought process is the same on all the DiGiCo consoles, so it's just a matter of prepping and making the gig happen," said du Plessis.

www.dwrdistribution.co.za
www.soundstylists.co.za

L–R: Kyle Robson from DWR with Carel du Plessis of Sound Stylists

Christie projectors to power Moroccan cinemas

MOROCCO

Christie has announced that its projectors will be installed at several hundred screens across Morocco as part of a brace of projects carried out by partner Global Entertainment. The government-backed SIN project will see more than 100 screens adorned with Christie projection at cultural centres across the country, on behalf of the Moroccan Ministry of Culture and Communications. A second project will also see more than 100 Christie projectors installed at Cinerji, a new exhibitor, in sites across Morocco.

"Both projects reflect our commitment to providing high-quality and accessible cinema experiences to communities across the region, with a significant cultural impact," said Hakim Chagraoui, founder and CEO of Global Entertainment. "The cinema culture in Morocco is rich and diverse, with a long history of film production and consumption. The country also has a strong appetite for international films and cinema-going is a popular social activity, particularly among younger generations. We chose Christie solutions for our cinema project due to their reputation for quality and reliability, which is what we were looking for to

Brian Claypool (right), EVP, Cinema at Christie signs the partnership certificate with Hakim Chagraoui (left), founder and CEO of Global Entertainment

offer the best experience to our customers. The equipment has met and exceeded our expectations, and we would highly recommend Christie solutions."

Cinerji is set to open its screens at 25 multiplexes in large and medium-sized cities across Morocco, while the SIN project will see screens added all across the country's government-owned cultural buildings. The SIN project should be completed by the end of 2023, and the Cinerji rollout is estimated to be completed in three years. Cinerji cinemas will also feature Christie Vive Audio sound systems. Both projects aim to create a sustainable business model by balancing a premium experience while maintaining affordable prices for cinema-goers.

"It's very exciting to be a part of the development of Moroccan cinema by supplying our projectors," said Adil Zerouali, senior sales director, Christie. "It is clear that there is huge potential for cinema experiences in the region and, with the support of the government as well as private investment, we look forward to seeing the market flourish."

www.christiedigital.com

DAS Audio and K-array crown UFC Gym the champion

UAE

Located in Dubai Silicon Central, UFC Gym describes itself as a cutting-edge fitness facility able to provide its members with an unparalleled championship experience. In order to make all aspects of the venue tick these boxes, the brand's considerations extended to its in-house audio system, which has been recently scaled up with the deployment of DAS Audio, K-array and KGEAR equipment throughout. The project was supported by local distributor Procom.

For the ground floor reception and arm bar, DAS Audio's Q-23-T compact passive column speakers were selected along with Q-8 low-profile subwoofers powered by PA-1500 amplifiers. The staircase, lift zone and PT bar areas were fitted with DAS Audio Arco 24T speakers and KGEAR amplifiers.

In the BJJ zone, a DAS Audio Quantum Q-43-T passive system, Q-10 low-profile subwoofers and PA-1500 power amplifiers were used. The centre zone was equipped with the Q-83-T

system paired with an Artec-S15 bass-reflex subwoofer system and PA-2700 stereo amplifiers.

The GX Studio, also known as the yoga studio, was fitted with KGEAR's GCF8 2.4m ceiling speakers, as well as the GCF8S round subwoofers, powered by the GA201 mini power amplifier. The cycling room or GX Studio 2 was set up with K-array Python KP52 column line array speakers, taking power from a KS1P lightweight passive subwoofer.

Each area inside the gym has been connected to an audio controller via Dante using Blustream DA11ABL and DA11ADE audio encoders, and can be controlled separately or together. The main control rack included Symetrix Prism 8, Xcontrol and Control Server, and sound system management is further assisted with an Arc-Pse remote control and power distribution system.

www.procom-me.com

ENCO enables news radio workflows for Sky News Arabia

MEA

Through its extensive presence across the Middle East and North Africa region, Sky News Arabia broadcasts comprehensive 24/7 regional and international news coverage across its TV, radio and digital platforms. When the broadcaster enhanced its radio offering from a simple audio simulcast to unique, radio-specific content, it selected the DAD automation system from ENCO to enable intuitive audio workflows with its existing Avid iNEWS newsroom computer system.

Arabia resolve third-party workflow and technical issues unrelated to DAD itself. The broadcaster is said to be very satisfied with the results of the integrated DAD and iNEWS solution and continues to add DAD licences at more journalists' desks as its radio news operations have grown.

Suresh Kumar, director of technology at Sky News Arabia, commented: "The process of deploying DAD radio automation and integrating it with our iNEWS newsroom system was done in line with our aim to

As Sky News Arabia was already using the iNEWS system for its TV broadcast, it also wanted to integrate its TV and radio operations through the same NRCS to keep the workflow streamlined and ensure ease of use for its journalists and producers.

ENCO personnel ensured the project was implemented in a timely manner and played an active role in helping Sky News

constantly enhance our technical efficiencies. This seamless integration will enhance our ability to deliver content quickly and efficiently to our audiences through our radio channel, and we were pleased to partner with ENCO who acted as an extension of our own team throughout this project."

www.enco.com

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AtlasIED and Fyne Audio announce strategic collaboration

WORLD

AtlasIED has announced a strategic investment in UK-based loudspeaker manufacturer, Fyne Audio. The partnership combines AtlasIED's expertise in integrated solutions with Fyne Audio's premium transducer technologies to open broader market opportunities for both companies.

"When we started looking at premium solutions for commercial audio, our team knew they wanted to harness the advantages of point source technology and began a collaboration with Fyne Audio," said Matt Czyzewski, EVP of AtlasIED. John Ivey, president of AtlasIED, continued: "Our long-term commitment to the company and

the technology was further demonstrated by making a significant investment in Fyne

L–R: AtlasIED's John Ivey with Fyne Audio's Anji Sosna

Audio, and establishing a collaborative partnership."

"AtlasIED is one of the most respected companies in the industry and has decades of experience delivering commercial audio products and solutions," said Anji Sosna, managing director at Fyne Audio. "As we've observed the evolution of the audio industry, we recognised AtlasIED as the ideal partner for us to reach our goals and create more opportunities for Fyne Audio technology to delight customers in more markets."

www.atlasied.com
www.fyneaudio.com
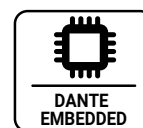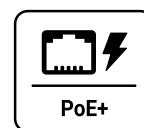
PROLIGHTS lights up Tel Aviv Duhl Center

ISRAEL

The Duhl Center is a cultural institute and auditorium located in Hatikva district, Tel Aviv, and is said to be the second largest in the whole city. The venue was designed and built in 1985 and since then has been an active artistic and cultural site, quickly becoming a landmark of the community. Given the social impact of the space, the venue has been recently upgraded with new lighting technologies, in an effort to make the cultural centre more modern and innovative.

For the lighting system, the Duhl Center has appointed multimedia consultant Harel Tabibi, who has chosen to rely on PROLIGHTS' latest LED

fixtures, and the gear has been supplied by the brand's distributor for Israel, AB Electronics.

The multimedia consultant has enriched the new lighting rig with the PROLIGHTS Astra Wash7Pix LED moving wash light: "The choice was dictated by the extreme versatility that characterises the Astra Wash7Pix," said Tabibi. "The extremely high-efficiency optical system can zoom from 4–56° but, most of all, the small and lightweight body and fast movements make the product extremely suitable for the needs and spaces of an auditorium."

www.prolights.it

Absen joins GPA's Global Partner Program

Absen has joined the GPA Global Partner Program, which will see the manufacturer strengthen its supply chain and provide local contact points for its global customers across 50 countries. The GPA partnership will help support Absen's global coverage and ensure a "strong and prolific" offering of its LED displays to new and existing customers.

"Absen brings over 20 years' experience powering 50,000 installations to the GPA Partner Program," commented Mike Stead, GPA's director, global partnerships. "Through this united partnership, customers have access to understand, influence and benefit from the combined power of China's leading LED manufacturer with the expertise of the world's largest AV integrator."

"We are delighted to be joining the GPA Global Partner Program," said Darren Banks, industry development director for corporate at Absen. "I'm looking forward to expanding our sales reach into new areas through the GPA network of customers and partners. I'm sure it will be a beneficial partnership that will help us deliver on our shared goals."

The move will extend Absen's focus on sustainability and build on its "Absen Green" programme which drives the design, manufacture, distribution, low-energy operation and repairability of its products.
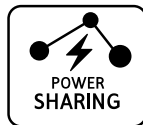
www.absen.com

Magnimage is the right tool for MGG

South African-based rental company MGG recently purchased a Magnimage MIG-680 and MIG-EC90 from DWR Distribution. Freelancer Marothi "Dickey" Morathwe is a FOH AV technician, running both video processors and video playback software and a system tech, responsible for setting up LED screens and projectors.

"I've worked on shows with MGG for over a decade, initially on a full-time basis and now as a freelancer. I started as a casual and I left as a senior video engineer," Morathwe explained. "When MGG's old 2K video processors could no longer handle the technical advancements of the new LED screens, Magnimage was a perfect replacement, able to meet a resolution of up to 4K and offering the flexibility needed,

especially as most LED designs have custom resolutions.

"What I love about the two processors is that they come with multiple independent outputs and options to build custom resolutions," he added. "As an engineer, you need the option to send anything anywhere and Magnimage gives you that."

DWR Distribution's Dylan Jones assists clients with the professional Magnimage range. "I like Dylan so much," said Morathwe. "He's always just a phone call away when you need him, and he always contacts me afterwards to ensure everything is running smoothly. We need a lot more Dylans."

www.dwrdistribution.co.za
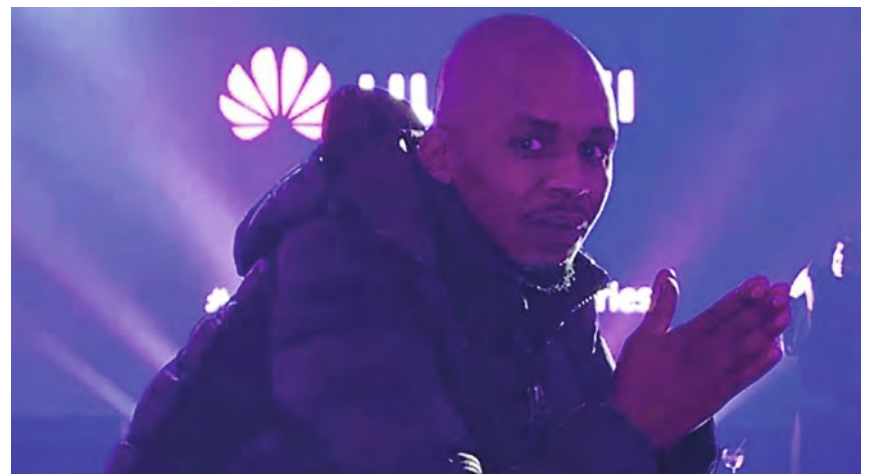
Marothi "Dickey" Morathwe

SAW Namibia moves to Windhoek

NAMIBIA

Stage Audio Works (SAW) Namibia recently moved into new offices in Faraday Street, Windhoek. Leaving behind the old headquarters in Diesel Street, the new facility will help focus and improve operations in the long term while providing a demo space for clients to experience SAW's application-ready solutions. The changeover was carried out in multiple phases to ensure that service to active clients remained unaffected.

The new office offers a streamlined, professional design, whilst retaining the functionality required for SAW Namibia to serve its core markets. Furthermore, clients within the corporate, media and entertainment industries will benefit from hands-on experience with products in the new experience centre. Naturally, the technology deployed at Faraday Street was implemented by SAW Namibia's own integration experts.

"We couldn't be more thrilled with our new headquarters. Our decision to move was motivated by the desire to separate our traditional musical instrument [MI] vertical from our physical showroom. Whilst the showroom played a crucial role in our business's foundation and growth, we recognise that times

have changed," said Joppie Maritz, managing director of the Namibian branch. "We continue to provide excellent service to the MI industry, but we have shifted to an online retail model, which has proven to be a win-win solution for everyone involved. This has enabled us to streamline our showroom experience and showcase our corporate installation and communication solutions more effectively."

The premises consist of four key areas: the showroom, a large meeting room and a smaller meeting room, alongside a general office space. Each area is equipped with technology from SAW's portfolio, such as the Audac sound solution in the showroom and main boardroom. SAW's visual solutions are also represented in the showroom, in the form of four Samsung 55-inch OMN Smart Signage screens, whilst MagicINFO server integration allows for content control and playback.

The larger of the two meeting rooms is designed around a Microsoft Teams Room on Windows (MRToW). Two 55-inch displays provide high-quality video, while the Sennheiser TCC 2 ceiling microphone ensures audio fidelity for all meeting participants. The smaller meeting room is designed around a Microsoft Teams Room on Android (MTRoA) system, which natively offers BYOD capabilities. Participants can share directly to the 65-inch LED screen from their own laptop and utilise other installed technologies in the room. Both meeting rooms include room scheduling touch panels, integrated seamlessly with the rest of the unified communications.

www.mitechdirect.com.na
www.stageaudioworks.com

Audiotonix acquires sonible

WORLD

Audiotonix has announced the acquisition of sonible, a developer of assistive artificial intelligence-based processing solutions for professional audio. Located in Graz, Austria, sonible's assistive mixing plugins are said to have provided a new generation of processing production tools for engineers and audio creatives with "uniquely intuitive" usability and "workflow-enhancing" features at their core.

sonible's product portfolio also includes multichannel amplifiers for audio installations dedicated to science and research, and speaker technology for delivering 3D immersive soundscapes. It will join the growing Audiotonix brand portfolio of audio technology and solutions companies, which includes Allen & Heath, Calrec, DiGiCo, DiGiGrid, Group One, Harrison, KLANG:technologies, Slate Digital, Solid State Logic and Sound Devices.

"The sonible team have spent the last 10 years developing the most advance assistive AI technologies for mixing and audio creation,"

stated James Gordon, CEO of Audiotonix. "Along with investing in their growth and helping the team expand their current market solutions as sonible, we will also look to harness their technology across our other Audiotonix brands."

Ralf Baumgartner, CEO and co-founder sonible, commented: "As a team, our mix of highly skilled engineers and creative individuals have been on a very special journey together, building the underlying technologies and culture that have become the heart of sonible. It's been clear from our initial discussions that Audiotonix share our passion in evolving innovative and disruptive solutions, so I'm sure we have the best environment to continue our journey with the additional knowledge, investment and resources that comes with being part of the Audiotonix team."

www.audiotonix.com
www.sonible.com

The Audiotonix and sonible team

Thomsun opens flagship 10th Yamaha showroom

UAE

Dubai-based distributor Thomsun Trading has opened a new flagship Yamaha Music Store in the city, located on Dubai's Sheikh Zayed Road opposite the Business Bay metro station. The opening marks the 10th store operated by Thomsun locally. Covering both MI and pro audio verticals, the store's ground floor showcases Yamaha's high-end line of grand pianos, upright pianos and wind and brass instruments, and the flagship CFX piano. The first floor features other musical product line-ups such as guitars and drums, in addition to the manufacturer's portfolio of professional audio and newly launched gaming products.

The showroom was officially inaugurated by Yamaha's Jin Sakamoto, managing director of Yamaha Music Gulf, Wataru Ogino, former managing director of Yamaha Music Gulf, and K V Thomas, chairman and

founder of Thomsun. Others present for the occasion included Biju Thomas, director of Thomsun and Davis Varkey, general manager of Thomsun Trading.

Established in 1990, Thomsun Trading has been the exclusive distributor of Yamaha products for many years. "We are very proud to open our 10th Yamaha store, which will showcase a wide range of exclusive Yamaha musical instruments, pro audio products, audiovisual and recording equipment," stated Varkey. "With a commitment to quality, innovation and exceptional customer service, our store is dedicated to providing everything that musicians need to bring their creative vision to life. We invite everyone to come and discover the magic of music with us at our newest location."

www.thomsunmusic.com

Ramat Gan Theatre lights up with Robe

ISRAEL

Beit Zvi School for the Performing Arts is an acting school with an associated theatre located in Ramat Gan city, Tel Aviv. Israel. All the school's production shows staged in the 350-capacity venue, together with other performances organised by the Ramat Gan municipality, are now benefitting from a full lighting upgrade that included the addition of Robe moving and static LED luminaires.

In 2021, sales and installation company Danor Theatre & Studio Systems won the tender to upgrade the lighting system, a contract that saw the supply of new fixtures, dimmers and a lighting console, complete with 20 Robe ParFect 150 RGBWs, six VIVA CMYs and two T1 Profiles.

The theatre team

In the same installation, the over-stage pipes were also renewed with a mixture of manual and electronic winched bars, and the process also finally saw the replacement of two heritage Robe Club Spots which "had been there for at least 14 years and were still working," commented Danor's Erez Hadar. They were among the newer fixtures, with some of the old PCs, Fresnels and other conventionals that were replaced after around 30 years of service.

The T1 Profiles are located on the theatre's front bridge and are used for key lighting and also for specials and any lighting effects needing tight and accurate shuttering. High CRI and the framing system were the main considerations for these lighting positions, and the T1 Profile is a "brilliant" solution, said the theatre's technical manager, Ran Zilberman.

The other Robe lights, moving and static, also had to be LED and great "all-rounders" with plenty of features, good colour mixing, as well as being fast and reliable to deal with the venue's lively show schedule, which can be up to 50 shows a month at peak times. Zilberman commented on the "enormous difference" that the new lights have made to the quality and production values of the shows it can now produce.

The shape of the stage and auditorium can be challenging for lighting – the front of the stage also drops down to accommodate more people, if necessary, "so the adaptability we now have is making a real difference," stated Zilberman.

The school is located just behind the theatre, and its technical manager, Alex Kachkovskiy, echoed Zilberman's comments, adding that it's "great" for the students to have access to new technology to light their shows very imaginatively and dramatically.

www.robe.cz

Getting to grips with the EW-DP

Simon Charles is a sound recordist based in Dubai and a long-time user of Sennheiser products. From microphones to radio systems, Charles has trialled a wide variety of products from the German manufacturer and was one of the first users to take the new EW-DP wireless system out in the wild.

What are your initial impressions of the EW-DP?

I managed to get a set of EW-DP to test out on some projects in Dubai recently and the experience has been fantastic. It's a solid system with great build quality as you would expect from the likes of Sennheiser. The main difference from previous generations is that it's fully digital yet still uses normal UHF frequencies. This means that transmission is quick and easy while getting everything set up is now significantly faster. You can perform an auto-scan, either using the receiver itself or the app that comes with it and be up and running in no time. Simply sync the devices together and away you go.

How has the receiver changed and what new benefits does it offer?

The receiver is the main part of the system and is a different form factor to previous generations – more of a tabletop than clip-on – but the benefit of that is you get full dual antennas. The receiver comes with the same locking 3.5mm jack on the side to take a feed out to cameras or anything with an XLR connection. If you've got cables from previous generations, they can still be used. The receiver also has a headphone output which is great if your camera doesn't have a headphone socket or if you just want to have a direct listen. The addition of a USB-C connector allows everything to be powered three ways. If you're running a camera or just have it placed on a desk, it can be powered directly via USB meaning you don't have to worry about batteries. On the side you've also got a battery socket which

The EW-DP's magnetic plate allows filmmakers to simply and securely stack multiple receivers

accepts either Sennheiser's BA70 lithium-ion rechargeable battery pack, of which there is one included in the box, or normal AA batteries. On the front, the biggest change is the display which is now twice the size. It has a very easy-to-use interface and buttons that are easy to press. There's not an awful lot of options you can adjust, but everything needed is right there. The system also comes with a little magnetic cheese plate that attaches to the bottom of the receiver. You can attach that to either the camera hot shoe and simply snap on or off the receiver as required.

How does the transmitter vary from the previous generation?

The transmitter is a similar form factor, but there's no display as everything is either controlled on the receiver or using the smartphone app. You've got the normal power button (the transmitter runs on the BA70 lithium-ion battery or AAs), a mute switch and a sync button and that's it. The transmitter also uses the same locking 3.5mm jack, so if you've got mics from previous generations or any other different types of mics from Sennheiser, you can use them here. All-in-all, it's very user-friendly.

How is the lack of onboard control made possible?

It's the fully digital transmission that makes possible the lack of onboard controls, because the system utilises some of the transmission bandwidth to control everything instead. Furthermore, the addition of Bluetooth means that you can use the app to change everything, sync everything, scan the frequencies, name the transmitters, name the receivers, etc. Everything can be done on the app.

How beneficial is this when out in the field?

It's very useful just being able to come in on a job, do a quick scan, immediately find a clear frequency, sync the two devices together and go. Then once you've put the transmitter on the person you're interviewing, you can adjust gains via the app without having to go back over to the pack. Particularly at times where the pack is on a belt that's hidden underneath the clothing, it's nice to be able to just get out a phone and see exactly how much battery life you've got to work with down to the minute. If I know I've got 10 minutes left, I don't need to rush talent or be occupied with changing the battery. It's nice to see that bit of information, something which wasn't present in previous generations whatsoever.

If you had to pick one feature that made the most difference to your workflow, what would it be?

I think the main benefit for me personally is being able to make all the adjustments solely from the receiver. You can see the information that you want and can adjust it, and everything is right there. The app is very nice, and certainly will be the preferred option for many users. But you don't always have the opportunity to get your phone out, so being able to see that present on the actual device is fabulous. Moving forward it will continue to be my preferred choice for certain use cases, interviews in particular.

en-ae.sennheiser.com

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ART 9-AX combines a powerful digital mixer with cutting-edge electroacoustic capabilities, a rugged build quality, and advanced features. Several operating modes are included, alone or paired with other speakers and subwoofers, wired or wireless. With a powerful 2100W amplifier, ART 9-AX delivers up to 131 dB SPL max and includes proprietary RCF technologies such as the TRW 100°x60° constant directivity waveguide, FiRPHASE for 0° phase response, and Bass Motion Control for woofer excursion management. Available in three sizes: ART 910-AX, ART 912-AX, and ART 915-AX (10", 12", and 15" woofer).

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Powering Down

Wolfgang Huber ⏻

All images courtesy of Christel Dietmeier, Buehl

A keen conductor and lover of all things music, Wolfgang Huber, PR manager at Lawo, explains to **Libby Stonell** how his hobby revitalises him in order to be the best version of himself

Huber with colleague conductor Werner Falk backstage at the Landesmusikfestival

What's a typical 9–5 day for you in your role as PR manager at Lawo?

After either arriving at the HQ in Rastatt or from my office at home, I grab a coffee and check my emails, according to their importance and urgency. I then read through all the newsletters I receive, as well as articles that I need for my work. I then set up a to-do list, distribute priority points and get started with preparing and writing text for the press, preparing presentations and, sometimes, lectures for students.

How and why did you get into choir conducting?

I have been in various choirs since my teenage years and have always been fascinated by the immediacy of singing, the experience of melody, rhythm and language merging into a unity in that very moment. I was also fascinated by the choir conductors with whom I have had the privilege of working with and their way of communicating music. I asked myself: how do they manage to form a unity – an instrument – out of all the different people, personalities and voices? How does that communication work? The desire to communicate my ideas of choral pieces to people and to work with singers and musicians led me to begin three stages of training to become a choir conductor, which I completed about six years ago.

How do you find the time to conduct amongst your work life?

Music has always been a part of my life from a young age, and I can't imagine living without it. So, it can be an effort to find the time for my choirs – a men's choir and a mixed choir – but I have a *jour fixe* every Thursday with my men's choir for rehearsals as a singer and conductor (fortunately, a colleague and I share the work) in the evening. The role as conductor also requires preparation when working on choir pieces, which must be done whenever I have some spare time, whether that be in the evenings or at weekends.

What is the most memorable experience you've had while conducting? Where has it taken you?

My first time conducting, of course, is one of the most memorable experiences, when I realised that it had all really come together. Other highlights are when I conducted the first time in the ambience of a church, and during a workshop when I had the chance to work with top choirs, to whom I had to prove my competency as a conductor. It is always a challenge to approach a choir with a music piece, explain, teach and keep up spirits, particularly when a successful performance can require weeks of effort. After preparing for a concert or community event for that amount of time, it is pure bliss after the final note, when you realise it's all worked out.

What advice would you give to someone wanting to start conducting?

Much like learning a language, conducting is all about communication, first of all. And you should never forget that you are, in a way, a teacher and a guide, so it's not a bad idea to adapt your personality accordingly.

Why do you think it's so valuable to have a hobby like this outside of work?

It gives you the opportunity to sink yourself fully into a piece of music – even if it is hard work sometimes – and I feel revived by doing so, collecting energy from what I am doing and also helping me become "whole" as a person. In difficult periods of life, for me, "my music pulls me through", as John Miles once sang. It gives me a joy that I can only find in that space, and the energy I gain from working with music and musicians can then be put into my everyday work life.

Theory Professional adds Marc Bertrand

WORLD

New commercial audio brand, Theory Professional, has announced the appointment of former CEO of Adamson Systems Engineering and respected veteran, Marc Bertrand as chief operating officer (COO) for Theory Professional – a division of Theory Audio Design (Theory), and sister company to Pro Audio Technology (PRO).

Bertrand has over 25 years of experience building some of the audio industry's most renowned brands. His resumé includes 15 years at Tannoy North America, eight years at TC Group Americas and over five years at Adamson. Bertrand is regarded by industry associates, partners and past colleagues as a strong leader with a top-down focus on sales and serving customers.

"I couldn't be more delighted to have Marc join the companies as COO," said Paul Hales, CEO of Theory and PRO. "We're excited to have him lead our global sales and operations organisations. Marc's broad experience and unimpeachable track record within the commercial, professional and consumer market

segments fits perfectly with our vision for the Theory and PRO brands. We have big plans for both companies and we are confident we can achieve our strategic objectives with Marc at the helm."

"There are several reasons I was attracted to Theory and PRO," said Bertrand. "I've always gravitated to the ideal of audio performance first and foremost, and this is an unshakeable core value of the companies. Combine that with a well-defined, focused and elegant family of products – designed with passion and an uncompromising execution of fit and finish – and it was a no-brainer for me; they were speaking my language."

Theory Professional plans to address the premium audio niche head-on with a small stable of "highly-refined, yet very high-utility" loudspeakers, subwoofers and amplified loudspeaker controllers.

www.proaudiotechnology.com
www.theoryprofessional.com

● **JOHN CLANCY**
● CHIEF SALES OFFICER

CRESTRON ELECTRONICS

● **TERRY DI ISERNIA**
● CUSTOMER RELATIONS, NORTH AFRICA

ROBE

Julian Young joins Williams AV

AFRICA

Williams AV has announced the appointment of Julian Young as international technical sales manager for Europe and Africa. Young's addition marks another milestone for Williams AV's international sales organisation, following the recent appointment of Norhisham (Nori) Iskhandar as international technical sales manager for APAC and the Middle East in October 2022.

With over 30 years of experience in technical-focused sales in the professional audio industry, Young brings valuable expertise to the team. He is fluent in English, German and French, enabling effective communication with a diverse range of clients. Young served as a director at World Marketing Associates (WMA) for 22 years, representing well-known brands such as Peavey Electronics, Furman, Australian Monitor NEXO, and Williams AV.

Prior to WMA, he held positions at Eastern Acoustic Works (EAW) as the European operations manager and at TCi as the divisional manager.

"Julian's experience in global business and channel marketing, along with his previous experience selling Williams AV products, make him well suited for this role," said Per Persson, VP of international sales and business development. "We are excited to expand our European presence and support the emerging African market with a highly successful sales executive."

"The company has a strong history of being first in innovative solutions for their space and exceptional customer service," Young added. "I'm thrilled to be here and look forward to contributing to the company's continued success."

www.williamsav.com

● **TIMO KOCH**
● CHIEF COMMERCIAL OFFICER, MEDIA

RIEDEL NETWORKS

● **JOE PEAVEY**
● SOFTWARE DEVELOPMENT AND SUPPORT ENGINEER

VISIONARY

● **STEVEN MEDEIROS**
● CEO

VEGA GLOBAL

● **JOSÉ A RIVAS**
● VP, GLOBAL SALES

SHURE

● **ALAIN BOONE**
● SALES MANAGER ME AND AFRICA

NEXO

Koy Neminathan joins Elation

WORLD

Koy Neminathan has joined Elation Professional as director of business development. The industry veteran comes to Elation from console manufacturer Avolites, where he worked for over 23 years in sales and business development, the last decade as sales director. He will work closely with designers to keep them abreast of Elation's line of lighting products while communicating market insight to the company's product team. His extensive experience includes growing and managing a large distributor network, achieved through strong relationship building and an understanding of the needs and requirements of different global markets.

"Koy is a well-respected professional and we are excited to have him join our team as a representative for the Elation brand," stated Marc Librecht, Elation.

"I have closely monitored Elation's progress over the years, from products to personnel, and was impressed how they have done it whilst earning the respect from the market," said Neminathan. "I am looking forward to contributing heavily to grow all of the brands, which sit under the group's umbrella."

www.elationlighting.com

• **AZZAM SALAHAT**
• SALES MANAGER

RTS INTERCOM SYSTEMS

John Maier named CEO of Bose Professional

WORLD

Transom Capital Group has announced the appointment of John Maier as CEO of the newly independent Bose Professional.

"John is an experienced and successful pro audio industry executive and it's great to have him join the team at Bose Professional," said Russ Roenick, managing partner at Transom Capital. "We have known John for over 10 years and watched him grow Blue Microphones from a small microphone company to a global professional and consumer electronics brand. He also transformed Loud Audio from a collection of unconnected brands to the now thriving Mackie."

"I am thrilled to be joining the team at the new Bose Professional," said Maier. "I've been a user, salesman and overall admirer of the business and products since early in my career, and I see a great future ahead. I'm in the ideal position of knowing the brand and market well, while still bringing an outsider's perspective to the business."

Maier spent the past several years as an operating partner for Transom, overseeing businesses such as Mackie. Before that, Maier was the CEO of Blue Microphones.

pro.bose.com

• **ANDREW LOW**
• DIRECTOR OF BUSINESS DEVELOPMENT

FUNKTION-ONE

Palm is handed EMEA sales for EV

EMEA

Bosch has announced the appointment of Fredi Palm as sales business development manager, Europe and Middle East, for the brands Electro-Voice and Dynacord.

Palm brings a wealth of experience gained over the past decades in his previous position as technical sales manager for Electro-Voice and Dynacord in Germany. His expertise lies in professional and commercial audio applications, making him well-equipped to understand and cater to the needs of customers in key vertical markets, including entertainment, sports, hospitality and retail.

Palm's primary objective is to consult with customers to find the best solutions for their projects, working closely with the application design team to develop sound system concepts and designs for customers and conduct training for external channel and distribution partners. Another focus is to maintain professional relationships with key accounts.

www.dynacord.com
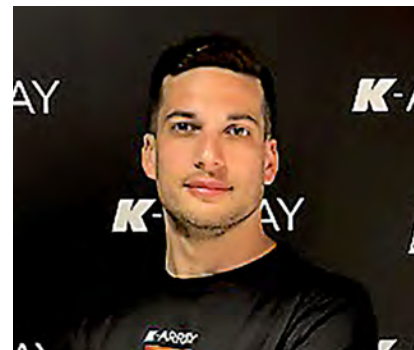www.electrovoice.com

• **PETER BAXTER**
• EMEA SENIOR VP

KRAMER

• **JENNY ISAKSSON**
• DIRECTOR OF CHANNEL DEVELOPMENT

VIZRT GROUP

• **CHRISTIAN ORCIN**
• EMEA TERRITORY MANAGER

D&B AUDIOTECHNIK

• **MICHELE ROSSI**
• SALES MANAGER EMEA

K-ARRAY

• **RAY TANTZEN**
• DIRECTOR OF PRODUCT MANAGEMENT

QSC

DWR is the chosen one for South Africa

SOUTH AFRICA

Neutrik EMEA has appointed Johannesburg-based DWR Distribution to represent the brands NEUTRIK, REAN and CONTRIK throughout South Africa.

"Within the Neutrik Group, we are rolling out a regional structure, one being EMEA, so within that territory there is a renewed focus on Africa, and specifically a good partner in Southern Africa," added Chris Neethling, CSO, Neutrik AG. "In DWR we have found the right partner: one that has an appreciation for the brands within the Neutrik Group, but also the right network, the right structure and the knowledge to be able to be a perfect fit in terms of really promoting the product portfolios of all the brands of the Neutrik Group throughout South Africa and Southern Africa."

DWR Distribution has also been appointed as the official partner in South Africa for ROXX, the lighting brand said to be gaining respect and momentum from top lighting designers.

www.dwrdistribution.co.za
www.neutrikgroup.com
www.roxxlight.com

L–R: Chris Neethling (Neutrik), Duncan Riley (DWR), Robert Izzett (DWR) and Christoph Hellmuth (Neutrik)

Jabra joins hands with FVC for MEA

MEA

Jabra, a provider of audio and video solutions for businesses and consumers, and FVC, a value-added distributor in the Middle East and Africa, have announced a new distribution partnership that will bring Jabra's advanced audio and intelligent video solutions to customers across the region.

The expansion of the relationship throughout MEA is a testament to FVC's rapidly expanding Unified Communications and Collaboration (UCC) business unit.

Nicolas Bliaux, VP/MD, Jabra, said: "FVC as a value-added distributor across MEA, present in multiple countries, is fundamental to achieve this goal in this region. They are well-known for their expertise in the UC and collaboration domains and have a very strong network of AV channels covering the continent."

KS Parag, MD, FVC, added: "Jabra's portfolio of audio and video solutions will enable our customers to communicate and collaborate more effectively in today's digital workplace, and we look forward to working closely with Jabra to help our customers achieve their business objectives."

www.fvc.com
www.jabra.com

PRO LAB partners with Merging Technologies

MIDDLE EAST

PRO LAB has announced its partnership with Merging Technologies, the Swiss-based manufacturer of professional audio and video products. Recently, Merging Technologies and German studio specialist Neumann.Berlin joined hands under the Sennheiser Group. Sennheiser has taken over Merging Technologies entirely, allowing Neumann.Berlin to expand its range of audio solutions.

Rune Jacobsen, international sales manager, Merging Technologies, said: "With Merging now being part of the Sennheiser Group, we have the right structure in place and so we look forward to supporting PRO LAB in the future and to taking our presence in the region to the next level."

Rami Haber, CEO of PRO LAB, explained: "With their end-to-end solutions, from studio or live recording to home listening, mastering, postproduction, broadcast and immersive experiences, Merging are the perfect partner to help us provide our customers in the GCC region with the very best in AV technology."

www.merging.com
www.prolabllc.com
www.sennheiser.com
www.sennheiser-hearing.com

L–R: Steve Badham (EAW), Fouad Fowzi (GSL) and John Dodson (EAW)

GSL Professional made official GCC distributor for EAW

GCC

Expanding its reach into the Middle East, Eastern Acoustic Works (EAW) has announced GSL Professional as its newest distributor in the GGC region as well as Egypt.

"We are thrilled about our partnership with EAW," said president Fouad Fowzi, CEO of GSL Professional. "Together, we will continue to deliver exceptional sound solutions to our clients in the GCC region and Egypt."

GSL offers a dedicated service centre located in Dubai to support clients, handling a variety of maintenance, repair and support services.

Additional support can be found through GSL's product specialists, who offer on-site assistance.

"Welcoming GSL Professional as our newest distributor is an exciting venture for EAW," said TJ Smith, president, EAW. "We look forward to creating a strong and enduring partnership that will bring more opportunity to our GCC customers."

www.eaw.com
www.gslprofessional.com

VV good for Studiomaster

L–R: VV & Sons' Vikesh Thamban with Mike Bufton and Wong Xiang Gui

UAE

UK pro audio developer Studiomaster has appointed audiovisual solutions supplier VV & Sons as its dedicated Middle East distributor.

VV & Sons' current portfolio comprises established AV and lighting brands including Acme, Alfaton, Australian Monitor, Biamp, Clock Audio, Crest Audio, D&R, Furman, LSC Controls, Peavey, Relacart, Speakercraft and Zero88. Divisional manager, Vikesh Thamban, explained the rationale for adding Studiomaster to its stable: "We conducted a thorough review and analysis of various options available in the market. As Studiomaster has not grown to its full potential in our region, we believe that there could be significant growth potential for the brand. Their products align perfectly within our portfolio, so VV & Sons is confident the partnership will be a mutually beneficial one."

Director of global sales, Carlsbro and Studiomaster, at SCC Audio, Mike Bufton, said: "I am impressed with VV & Sons' customer base within the education, house of worship, entertainment and hospitality sectors. We are looking forward to welcoming division manager Vikesh Thamban and his team to our UK headquarters shortly for full training."

www.studiomaster.com
www.vvsonspro.com

Optimal Audio appoints Kwarizmi Engineering for Jordan

JORDAN

Optimal Audio has announced the appointment of Kwarizmi Engineering Systems & Controls as its exclusive distributor in Jordan. Based in Amman, Kwarizmi Engineering specialises in the life safety and security business, supplying products as well as offering technical support, consultation, design and installation services.

Thaer A Ali, executive manager at Kwarizmi, said: "Optimal Audio has produced an ecosystem of products that will be of great benefit to our customers. They have focused on easy installation and operation without sacrificing audio quality and done so at a very competitive price point. We're very proud to have forged this new relationship and will work hard to place Optimal Audio at the forefront of the commercial audio market in Jordan."

Dom Harter, managing director, Optimal Audio, added: "Kwarizmi Engineering is a trusted presence in the Jordanian audio market, with a strongly established customer base. The technical expertise of their team is most impressive, as is their track record in supplying the widest possible range of commercial audio projects across the country."

www.optimal-audio.co.uk

Genelec strengthens MEA distribution network

SOUTHERN AFRICA

Genelec has strengthened its distribution network in the MEA region through the signing of Johannesburg-based ApexPro, who will now handle Genelec's Pro and AV loudspeaker ranges across Southern Africa, covering South Africa, Botswana, Mozambique, Namibia and Zimbabwe. ApexPro will focus on the distribution of Genelec Professional loudspeakers via the dealer channel, while AV Worx – part of the same Prosound Group – will provide value-added distribution by concentrating on supplying solutions to systems integrators.

ApexPro director Mark Malherbe said: "We're confident that our extensive network of broadcast and production professionals, AV integrators and end users in the entertainment,

Justin Acres and Dwaine Schreuder from ApexPro with Genelec's Clifford Pereira (centre)

commercial and education markets will embrace all that Genelec has to offer in the years ahead."

www.apexpro.co.za
www.genelec.com

Masterpiece and Procom cover Neutrik Group

L–R: Christoph Hellmuth and Simon Daniel shake on the new partnership

GCC

Neutrik EMEA GmbH has officially introduced Masterpiece as its exclusive distribution partner for the REAN product portfolio across the GCC region.

"As the Neutrik Group, we have three brands in our portfolio, and we wanted them to be represented equally in the GCC. I know Simon [Daniel] previously from his time with SGTC. He's very well connected here in the region and having visited the Masterpiece showroom, I realised that he was already in effect selling REAN through his relationship with Cordial cables. To make Masterpiece the REAN

distributor was therefore an obvious choice," explained Christoph Hellmuth, RSM MEA and India at Neutrik EMEA.

"As a distributor for Cordial already, I feel confident I can take REAN to a new level in the local market. It's an obvious partnership," added Simon Daniel, general manager at Masterpiece.

Neutrik EMEA has also announced that Procom Middle East will become its official distribution partner for the CONTRIK product portfolio in the GCC region. "As we diversify into power distribution, there is the necessity to find the right partners that do understand the product, the risks involved and who have the necessary skillset and experience," explained Chris Neethling, CSO, Neutrik AG. "That's why in this case, in the Middle East, we have found the right partner in Procom who understands power distribution and who can truly help us to achieve the necessary goals and success in this area."

www.contrik.com
www.masterpieceproav.com
www.procom-me.com
www.rean-connectors.com

GLP comes to ME

MIDDLE EAST

Provision AVL has recently been selected as the new distributor for lighting company German Light Products (GLP), which will see its products distributed throughout the Middle East region. This partnership is expected to offer customers service and support and enhance the availability of GLP's products.

"We are confident that this partnership will be a great success and enable us to provide our customers with access to their latest lighting solutions," said Kevin Boujikian, general manager, Provision AVL.
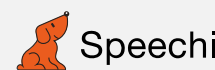
www.glp.de
www.provisionavl.com

L–R: Kevin Boujikian and GLP's Stefan Wagner
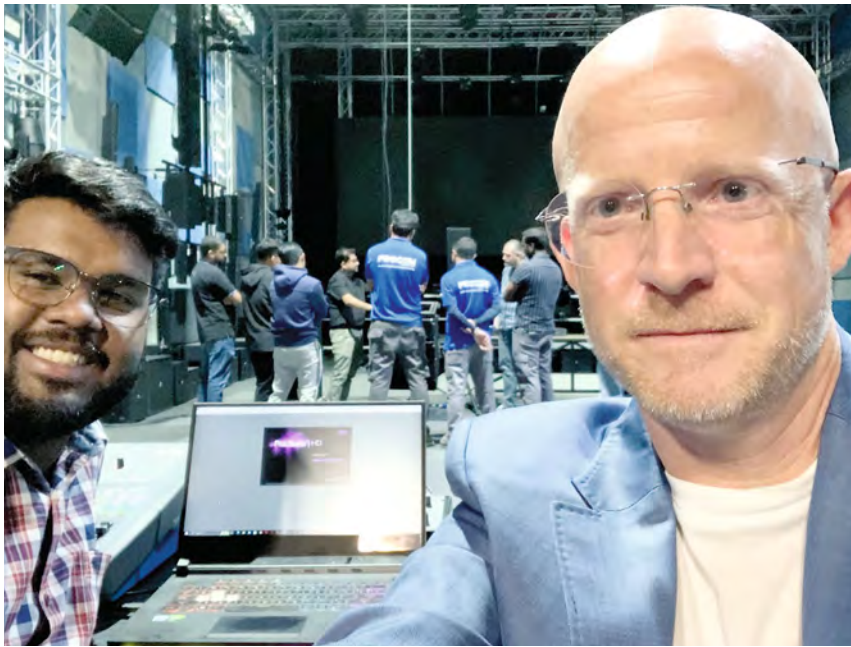
Andrew Ward (right) with a student at Procom ME

Conducting training at Seven Stars Events

Breaking the mould with AcademyOfSoundDxb

Andrew Ward started AcademyOfSoundDxb in 2021 with the desire to give students the practical real-world skillset often lacking in live sound education

Where did the idea for the academy originate?

My career began after certification and work experience. In the UK, this vocational course structure is very common. After years of observations working in the audio department of a creative media institute, I saw that audio students like to spend time using equipment, improve the sound of the productions, increase confidence in sound engineering and were always asking me for work experience. I believe an audio engineering course should accompany work experience.

What was your background in the industry prior to setting up the academy?

After a City & Guilds certificate in 1994 (which I did not finish!), I then began my audio engineering career in the recording studios in London. I started with analogue tape line-ups and large-format consoles. I was lucky to see the last years of analogue and witness the digital age coming in. During the 1990s, London was a fantastic time to work in music and I was fortunate to work alongside great engineers, producers and artists. After 15 years, I became an audio lecturer in Dubai. As a lecturer, I used to frequently bring musicians to record because, in a school setting, it's difficult to learn about real-world scenarios.

What courses does AcademyOfSoundDxb offer?

We specialise in audio and offer live sound engineering, including fixed installation, studio engineering, mastering and EDM music production. Soon broadcast engineering and immersive audio will be introduced to the curriculum as well.

What makes the academy unique?

We are unique because we have dedicated live sound courses. They are designed by sound engineers for sound engineers and taught by engineers, who actually make a living as audio practitioners. All sound engineers pretty much agree that learning from engineers is essential. We have session players coming in to record and live bands that play together – working with live bands is a real test of character and experience, and we make sure our students do it!

What is the typical skill level of students before they come to you?

Students come with differing skill levels from complete new-comer to intermediate. A few students arrive with diplomas and frankly I'm amazed how little they know.

What's missing from the audio education market locally?

Within the events industry, my extensive research and conversations with professionals agree that live sound, fixed installation and broadcast audio education is severely lacking. This is understandable as students need a wide range of equipment, space and, most importantly, event experience. The live event experience cannot be recreated in a classroom or online. Also missing is studio experience of high-pressure situations, where students need to work fast but still deliver a quality output. My former students would always ask for extensions to deadlines – this is not how the real world operates.

What differentiates the academy from other audio curriculums offered locally?

Our students receive extensive studio or equipment time and work experience at events, or in the warehouse, behind the scenes of events. Work experience is a must so that audio students build their network and significantly increase their chances of employment. They must learn how to operate in busy live events. In our field, degrees are less important than practical experience in high-pressure situations. Additionally, it's essential to learn from industry practioners who make a living as sound engineers – it's here that audio students learn the emotional intelligence that's such a big part of our job.

Can you share any past success stories from students that have graduated?

From our first cohort, one graduate is now a respected and employed sound engineer. From our current course, two of our students have already secured 45 days paid work, and they only arrived one month ago!

Given the lack of practical experience delivered by local courses, how is the academy breaking the mould?

Audio education providers tend to be disconnected from the industry. To become accredited, the bureaucracy and administration take the focus away from the industry – this is common across all higher education. It's my dream that the AcademyOfSoundDxb is respected in the industry and that our sound engineering students are trusted and employed in careers that are long and diverse. We do this by firstly having our curriculum reviewed by industry professionals who practise live sound engineering at the highest levels; secondly, with a vocational course structure; thirdly, through work experience and externships that allow relationship building; and, finally, learning from industry professionals.

What partnerships have you established with live sound companies and how do they benefit your students?

Industry partners are the core of our business. For example, Seven Stars Events supports our vision to provide the ultimate live sound education experience and take our students for work experience in the real world. The Fridge accepts our exceptional students for externships at their concert series. Our curriculum has been reviewed by Subsonic events. We also deliver training at Procom Middle East and our students get experience with brands such as K-array, DAS Audio and Adamson, for example. Additionally, Music Majlis supports our students with discounts. Finally, Dalma Electronics is our latest partner and together we provide studio training at its new studio in Al Barsha. This trust from high-level events companies providing event technology solutions is invaluable for our students as they are one step closer to the industry from day one of the course.

What's next for AcademyOfSoundDxb?

I am always looking to expand the student experience and create more partnerships for the betterment of our audio students, especially in work experience and more advanced live sound training. We have new partnerships to be announced soon, and I'm always searching for events companies or equipment providers who share our vision to properly educate the next generation of audio engineers.

www.academyofsounddxb.com

Petra reborn

Projection mapping specialist Maxin10sity was called on to bring the historic face of the Treasury at Petra back to life in novel ways, discovers **Simon Luckhurst**

THERE ARE SOME HISTORICAL LOCATIONS THAT, despite providing the perfect setting for a public showcase, are simply too precious to disturb. This has long been the case for Petra in Jordan, a UNESCO World Heritage Site and one of the new Seven Wonders of the World. Despite welcoming scores of visitors through its gates each day, the site is closely protected by the Petra Development Tourism Authority, which has traditionally been fiercely opposed to any activities that might harm its delicate archaeology.

It was surprising therefore when plans were announced earlier in the year for the first ever Petra Light Festival. An exploration of both sound and light at the historic location, the festival would showcase the ancient city utilising modern projection mapping techniques. With the background being Petra's infamous Treasury, visual artists from Jordan, Hungary, Italy, Spain, Turkey and Indonesia all collaborated to make the event a reality and bring a brand new sight to Petra.

Andrei Snobar from Andrei Visuals

The Maxin10sity team at the Treasury

The realisation of the Petra Light Festival is largely down to the persistent efforts of Andrei Snobar, a Jordanian artist who has long dreamed of working at Petra and drove the project forward since first engaging with the Petra Development Tourism Authority back in 2015. "Projection mapping on the Treasury has been a dream of mine ever since I first started 3D mapping," explains Snobar, owner of Andrei Visuals. "We had the most iconic and significant location here in Jordan yet it was not being utilised whatsoever. I've fantasised about how this monument looked thousands of years ago when it was at its peak, and realised that we could use such technology to showcase the site in a non-intrusive way without touching the archaeology."

Andrei Visuals collaborated with iJordan and RB Event Technology to make the project a reality, working closely with the government, the tourism board and the Petra Development Tourism Authority in order to create a festival that could serve the purpose of highlighting and increasing tourism.

"The idea first originated many years ago," continues Snobar. "We had conceptual drawings back then, but the

project unfortunately never came to life. It's a very difficult place to get into, requiring a lot of approvals and permits. When we restarted the process again more recently, it took us about 1.5–2 years to get to the opening night. It's a highly sensitive location and there were concerns about whether the technology would negatively impact the site. We had to ensure we would protect it as much as possible. I then had to source the team of artists that would be creating the mapping shows and then, of course, organise with the technical suppliers regarding logistics, which were a challenge to say the least."

Given that a trip from the Petra Visitor Centre to the Treasury site spans more than 1.2km through a narrow canyon, this created a huge technical challenge for the RB Events team in getting the necessary equipment to the site. "There's no power available and you're surrounded by these humongous mountains," says RB Event Technology's Emad Rabardi. "Given that this is the first edition of the festival, we tried to keep things very simple so as to not create more logistical hurdles than absolutely necessary."

Situated approximately 30m opposite the face of the Treasury, RB Event Technology erected a 5m-high tower to house the projectors, which consisted of eight Panasonic PT RZ34K 32,000-lumen large venue laser projectors deployed in a 4x2 configuration. Content is fed to them via Dataton's Watchout 6.

"When we were designing the setup, we could have managed the job with just six projectors, but we didn't want to settle," says Rabardi. "The show should be really immersive, you should feel the experience, and so we tried as much as possible to enlarge the image and the pixel size to give as much detail to the content as we could. The projectors were installed onsite in the tower five days before the opening night, but we couldn't keep much equipment on-site because tourists arrive in the morning. We only had a gap of between 6pm–6am to install and then remove everything. It was a logistical nightmare."

Given the high-profile nature of the event, members from Panasonic Connect Middle East were also on hand to provide technical assistance. "The challenge was to come up with a practical but adaptable solution that could give guests an unforgettable and immersive experience," says Francois Yadi, business development manager, senior system engineer at Panasonic Connect Middle East. "RB Events selected Panasonic projectors because of their superior resolution, powerful light output and outstanding reliability, with an extremely compact and light body that

Dataton's Watchout 6 was deployed as the media server for the event

L–R: Emad Rabardi from RB Event Technology with Panasonic Middle East's Francois Yadi

could withstand the dusty and challenging environment. The technical solution synchronised images from the many projectors with the greatest resolution and a brightness of 30,000 lumens, delivering the tremendous scale and detailed material necessary. We supported the event organisers to build an extraordinary environment to provide this successful visual event and, more significantly, to be able to bring it to other nations."

The audio accompaniment for the projection mapping was delivered by a row of six JBL SRX-812 cabinets lining the front lip of the Treasury and managed by a Dynacord PowerMate 1600-3 16-channel mixing console with content fed from a Pioneer CDJ-2000 digital turntable. "We've recently invested in a new portfolio of really great column speakers and had originally planned to deploy them here at Petra," explains Rabardi. "But the client didn't want anything to get in the way of the visuals. Instead, we positioned speakers along the front wall of the Treasury that support the music playback for the projection mapping and they were more than satisfactory for our purposes here. We're very constrained with sound levels and I didn't want something that would be too punchy as it would reflect and reverberate back off the mountains.

"Getting the equipment installed was a nightmare in terms of logistics," adds Rabardi. "We are at a venue where we're not allowed to do or touch anything and there was no power. Even the smallest detail, such as refilling the generator with fuel, becomes complicated and logistically challenging."

With the equipment in place, the success of the event would come down to two main attributes: the quality of the 3D model provided to artists and the quality of the content itself. "We had an old laser scanned model from the Petra Development Tourism Authority, which was created more than 10 years ago. It was a just a low poly mesh," says Snobar. "So we used that as a reference to remodel the whole monument again properly using photogrammetry. Some bits and pieces had since broken off and some of the dimensions were also a bit off, so it took a long time to get a new model with the UV map in place."

To ensure that the projection mapping content was first-class, Snobar sought out some of the world's best known artists for the content creation. Top of the list was Hungarian masterminds Maxin10sity. Founded in 2014 and owned by partners managing director Tamás Vaspöri, art director László Czigány and creative director András Sass, the company is famed for its involvement in many of the

world's best projection mapping projects. Most recently in the Middle East, this has involved the official inauguration of Al-Rayyan Football Stadium in Doha, the Jerusalem Light Festival and Dubai's Al Wasl Dome.

"Maxin10sity is one of the best mapping companies out there and I really love their work," says Snobar. "I did a lot of research to find the right artists for this project, including some that have been very inspirational to me personally, and Maxin10sity was one of the first I approached. All of the artists were really excited to get the chance to work at such a unique location. I also tried to diversify as much as possible with the style of content, so each show has its own identity. Several narrate stories about the monument's archaeology and the Nabatean
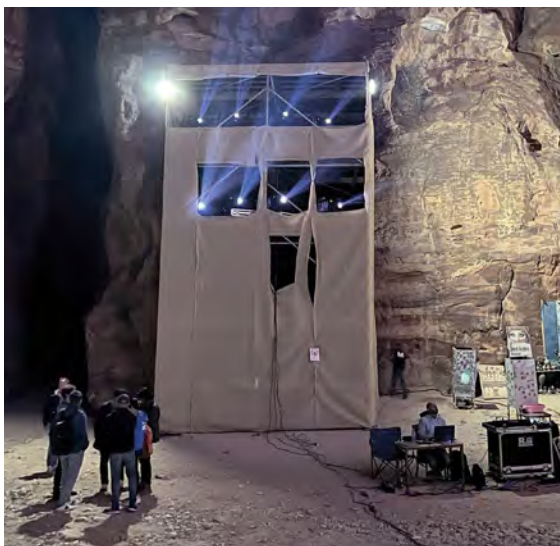
The Panasonic projectors were placed in a 4x2 configuration to cover the entire face of the 3,000-year-old spectacle

people who live here, while others explore the geometry of the building in unique ways. The aim was to create a kind of cultural experience."

"Andrei first got in touch with us in January," recalls Vaspöri. "Our art director László, who created the content on this project, is an expert at making models and creating the right setups for mapping, so we provided assistance early on. We had a meeting with Andrei to discuss technicalities regarding the mapping configuration and then created an Adobe After Effects template that details aspects such as the resolution and t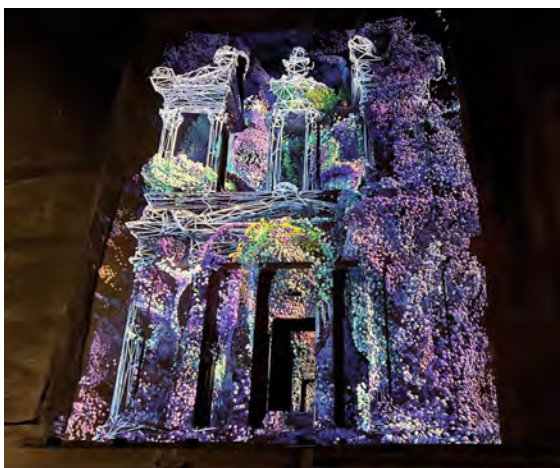he camera location from which you have to render the content in order to achieve the right audience perspective. This is normally a long discussion between us and the technical team, but given that the audience at Petra was just a few metres away from the projectors, it was fairly straightforward in this instance."

Vaspöri, Czigány and Sass all travelled to Petra to assist with preparations and witness their efforts first-hand. The content forming Maxin10sity's segment was all bespoke and tailor-made for the Petra programme. "The difference between just projection and projection mapping is that we are really using the surface and the geometry of the surface to create movement," says Vaspöri. "This creates the feeling that the building has come alive. What you

Setup was carried out the evening before

Guests had to make a 30-minute walk to the remote location of the Treasury to enjoy the festival

see on the screen is typically quite different to what it will actually look like on the building in real life, so a major part of the skill is being able to visualise how the projections will look. László is an expert at this."

Arguably the standout showcase of the festival, Maxin10sity's segment titled *Rebirth*, employed many of the team's favourite tricks to morph the ancient face of the Treasury into novel shapes that would have truly blown the minds of the temple's original creators. The 500 VIP guests present on the opening night "ooh'd and ahh'd" their way through the showcase, clearly blown away by the giant visual spectacle greeting them.

Even for the Maxin10sity team, who you can imagine are quite blasé to such shows given their extensive experience in projection mapping, the Petra Light Festival was something quite special. "It was very unique as you never really get to work in this type of environment where the background is truly, fully dark," notes Vaspöri. "Photos of the mapping almost look like they were created on a computer as they've been projected onto a completely black background. Typically, we are working on famous buildings in city centres where there is a lot of ambient light, so we'd never experienced this before. The result was quite phenomenal."

The Petra Light Festival, which began on 23 April 2023 and ended on 3 May, was witnessed by more than 10,000 visitors according to the head of the Petra Regional Authority. Crucially in its bid to highlight tourism at the site, less than 30% of attendees were native Jordanians and a plethora of international media was present to transmit the spectacle far and wide.

Having worked to bring the festival to life for years, many involved feared such a show would never become a reality at Petra. While it may have been the dream and passion project of Andrei Visuals, it was the hard work of all involved that made the show possible. "We're so honoured to be the first company doing this here at Petra, one of the Seven Wonders of the World," says Rabardi. "It's also one of the very few places on the planet where you can do projection with zero light pollution, and so the result was really quite amazing. We're so happy with how the projections turned out."

www.andreivisuals.com
www.maxin10sity.net
www.panasonic.com
www.petralightfestival.com

On the ground with PRG LLC

Bruce Mac Lean

The fully stocked lighting section

The temporary service department

Production Resource Group, LLC managing director Bruce Mac Lean delves deeper into the company's new full-service operation in Riyadh

The team in Riyadh

When did PRG first start working in KSA and how has the market changed over that period?

We have been operating in Saudi Arabia for the last 25 years or so but have witnessed a major shift in business volumes within the Kingdom starting in 2017. Vision 2030 and the broader social and economic reforms driven by Crown Prince Mohammed bin Salman have impacted the demand for our services significantly. This began with the country attracting international sporting events along with the staging of global touring music artists and spectacle performances from the likes of Cirque du Soleil. Now as the Kingdom has set up its Theatre Commission to promote home grown original and international live performing arts, we see another market segment opening that matches PRG's international profile, and all at a world-class level.

The energy within Saudi Arabia continues as the development of the regional "Seasons" and the broader entertainment tourism sector are likely to drive exponential growth in all market segments geographically. Furthermore, this will be spread across the Giga Projects currently launching across the country in the likes of Diriyah Gate, the Red Sea, Neom and Al Ula, to name but a few. MDLBEAST deserves its own mention as an EDM festival in Riyadh that we've supported since its inception, which welcomed over 500,000 people in its last outing. This is quite incredible and demonstrates the demand that sits within the Kingdom and its ability to attract both talent and tourists from across the globe.

How tricky has it been to do business without a dedicated local warehouse?

Given the incredibly tight lead times and last-minute confirmations for business in Saudi Arabia, not having a local presence and the ability to respond at pace can be challenging. Having a local support facility and a team on the ground (certainly at the scale we have and investment level applied) is a game-changer, making us more efficient and cost-effective for our clients, both within and inbound to the Kingdom.

What services does the local presence allow you to provide that you couldn't previously?

It's all about being efficient at whatever scale the customer is looking to deliver, be that large or small or in any one of the provinces, we are now able to respond at pace and be commercial in that response.

Describe the setup in Riyadh – how does it compare to your Dubai operation?

We have invested in a full-service operation, mirroring our operation in the UAE to ensure we have the ability to scale up and fully support the growing needs of the market. We've made a multi-million-dollar investment in new assets to support the move, particularly our move into new Ayrton products, a fleet of Barco 40K 4K laser projectors, continuing our long-standing investment in L-Acoustics and adding additional hi-res LED

screens from Unilumin to our already impressive stock. The new warehouse is nearly 4,000m² – roughly mirroring our main warehouse's storage capacity in Dubai and it is able to support daily operations via a dedicated team of onsite prep and service technicians.

Is this enough to fully support KSA projects or will there still be equipment sharing within the group?

Given the current growth of this market and sheer scale and technical complexity of the requests we are seeing, we will have to work across the region and within the group to ensure we have capacity. We are continuing to grow our team across both asset management and logistics to ensure we are ahead of the curve in terms of having the right equipment in the right place to support the sheer volume of enquiries, as we are expecting a very busy final half of 2023.

Is it tricky to find local talent? How is PRG helping to develop those skills within the local workforce?

As part of our plan, we see the development of local talent as a key deliverable and an area that requires our focus. We are looking to expand our apprenticeship programmes and hope to work with universities to find and develop new talent. Saudi Arabia has a young and dynamic population so it's important we play our part along with others in our industry to ensure we attract people to work within the events technology sector.

What's next for the team in KSA? Are there plans to open more offices?

We would certainly like to develop our footprint within the Kingdom and feel it's important that we focus our efforts and provide maximum value for our clients. There is significant potential throughout the market so further investment in the future is inevitable and we have the support of the group's board, so we are able to continue to grow at pace and are excited about what the future holds. Vision 2030 and the Giga Projects, coupled with the interest in the broader government and corporate sectors, certainly make for an exciting future and something that we are incredibly proud to be a part of.

www.prg.com/ae

The lounge area

Above the Palm

Above Eleven has opened its doors with a dual-purpose audio system from SIS

WHEN OPENING A NEW ROOFTOP COURTYARD BAR, there are surely not many better locations than the base of Dubai's Palm and looking out towards the sea. Recently opened atop the five-star Marriott Resort at Palm West Beach, Above Eleven looks to wow customers by introducing Soho Hospitality's original Bangkok restaurant concept to Dubai. The venue boasts a large terrace that offers stunning views of the city's skyline, the Arabian Gulf and Ain Dubai, making it a perfect place to escape and enjoy a beverage or two. Inside, the ambiance is relaxed but, like most bars in the city, gets a little more adventurous as the sun goes down and decibel levels rise to suit. Live entertainment inside is offered throughout the week.

Spanning 900m² over three main areas – the dining room, lounge and sushi bar – the interior of Above Eleven features foliage-covered ceilings, Aztec-art-stained mirrors, banana leaf trees and floor-to-ceiling windows that perfectly suit the Peruvian culinary culture cooked up by head chef Luis Gavancho.

With a brief to provide smooth coverage throughout the space along with the necessary audio reinforcement capable of creating this blend of relaxed background music during the day and an energic cocktail of dance music at night, local systems integrator Specialized & Interactive Systems (SIS) opted for a Turbosound-heavy design focused around NuQ82-AN cabinets with power from a selection of Powersoft amplifiers. All equipment for the project was supplied by Dubai-based distributor PRO LAB.

"Our company's involvement in this project was a result of a referral from our esteemed client, Arenco. They were highly impressed by the exceptional quality of our ongoing turnkey ELV (Extra-Low Voltage) project within the same development. As a result, they recommended our services to Marriott. Recognising our expertise and proven track record

The dining room

of delivering outstanding results, Marriott entrusted us with the project," comments Prathish Das, head of AV at SIS. "The client's vision was to create an immersive and attractive atmosphere at the venue, prioritising exceptional sound quality to enhance the overall guest experience. Also, they wanted a comprehensive solution that would utilise the access points for wireless tablets, leveraging the hotel's BGM central audio Dante network. During the day, the system is used for light background music but, during the evenings and weekends, they required something capable of higher SPLs to create more impact for the audience and support the house music that they typically play."

Outside, the venue's enviable balcony is a natural hotspot for guests, and bringing the music out to these areas are 13 compact 2x5-inch Turbosound TCI53-TR passive outdoor cabinets, positioned around the balcony lip and firing inwards to minimise sound leakage to the hotel balconies situated close by. Low end on the balcony comes from a pair of TCS115B 15-inch subwoofers placed at either end.

Stepping inside and into the lounge, a makeshift DJ booth housing a Pioneer DJM-4000 DJ mixer and XDJ-2000MK2 CD turntables greets guests. The booth is fitted with a Symetrix ARC-3 panel controller which connects back to the Symetrix Prism 4x4 processor in the nearby rack room and enables the DJ to directly control levels across the four main audio zones while performing. Sound reinforcement inside in the lounge, sushi bar and dining room comes from 25 carefully placed Turbosound NuQ82-AN 8-inch cabinets hung from the ceiling. Eight TCS115B 15-inch subs extend low end throughout the interior areas, while an 18-inch TCX118B-R is embedded within the DJ booth in the lounge.

Housed along with the Prism processor and powering the NuQ82-ANs are five Powersoft Quattrocanali 4804 DSP+D and two Quattrocanali 2404 DSP and Dante amplifiers, while a two-channel Duecanali 4804 amp with DSP powers the smaller cabinets covering the balcony.

"The equipment chosen for this project stood out due to its exceptional attributes, including advanced technology, durability and seamless integration," adds Das. "These factors made it the ideal choice to meet the project's specific needs. The PRO LAB team provided invaluable support in helping SIS determine the most appropriate brand based on the unique needs of the venue."

"We did some tuning onsite together with SIS and also helped with configuring the Powersoft amplifiers, helping to create presets for the speakers that were not present in the Powersoft library," explains Pavel Shemiakin, head of the pro audio department at PRO LAB. "All the systems here are driven by Powersoft and, thanks to the DSP on board, they provide all the required tools to make final adjustments in terms of the EQ and levels. They are also all controlled via Ethernet connectivity."

The project took quite a long period of time from the initial tender, with the installation of the audio system finally commencing in February 2023. Given that Above Eleven was a brand-new construction, SIS had no obstacles in terms of access and cabling. "During the installation process, we addressed vibration issues at the venue and that was sorted by implementing vibration pads specially designed for the speakers," says Das. "This solution effectively resolved the problem, ensuring optimal sound quality and stability throughout. Lastly, we successfully managed to adhere to tight timelines without compromising on quality and attention to detail, which was a crucial challenge in this project."

The Symetrix Prism serves as the overall controller, managing all of the zones and offering anyone the ability to tweak things directly on the fly to make the system louder or quieter, for example. The management has taken this control one step further by integrating it into a wider Crestron RMC4 control system that also manages environmental aspects of the restaurant, such as the lighting and blinds while offering remote control from an Apple iPad Mini. All of this cabling is run through a Netgear GSM4328PA 24-port managed gigabit network switch with PoE. "Considering that the venue is a bit of a maze and how impractical it is to distribute sound throughout, the solution provided by SIS and Pro LAB achieves brilliantly uniform audio while not being too visually obtrusive for clientele – just what we wanted," says Carla Abelleyra, Above Eleven assistant general manager. "We also really appreciated the fact that everything can be managed from a single tablet as we walk around. It provides an effortless means of controlling everything."
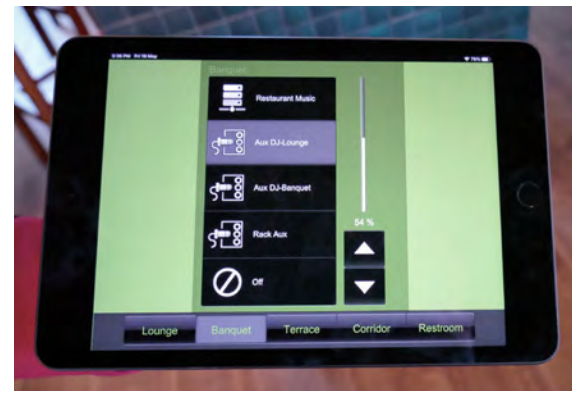
The audio system can be controlled via an iPad Mini

Turbosound TCI53-TRs cover the terrace

"We are immensely proud of the exceptional audio experience we have delivered for this project," shares Das. "The Crestron controller efficiently handles the Symetrix DSP system, Powersoft amplifiers and Turbosound speakers, providing a centralised control solution, enhancing convenience and operational efficiency for the client. I would like to personally express my sincere appreciation displayed by our general manager, Bruce Haigh, as well as our project team Dinesh Sharma (project manager), Sreegesh Sreedharan (commissioning engineer) and Arul Jegan (site engineer), and to extend our heartfelt gratitude to the PRO LAB team for their unwavering support throughout the project."

"Our collaboration with SIS to supply audio equipment for Above Eleven restaurant was an exciting endeavour," adds Rami Haber, CEO of PRO LAB. "We are committed to delivering exceptional sound experiences and we look forward to elevating the dining atmosphere with our cutting-edge technology."

www.abooveelevendubai.com
www.prolabllc.com
www.sisuae.com

Relighting Privilege

Em-Tec gets the privilege of refreshing the lighting design at one of Dubai's hottest nightlife venues

WHILE DUBAI-BASED DISTRIBUTOR AND SYSTEMS integrator Em-Tec is no stranger to audio installations, having outfitted many of the city's most popular hotspots over its more than 15 years of doing business, it's only in recent months that the team has thrown its hand properly into the world of professional lighting, thereby vastly expanding its installation credentials. One of the first establishments to benefit from this newfound expertise is Privilege nightclub, located in the heart of Business Bay, high up on the 75th floor of Dubai's SLS skyscraper.

Having outfitted Privilege with a new Funktion-One sound system upon it first opening in late 2022, the space, and its unique requirements, were already well known to the Em-Tec team. But while the audio inside is now top notch, the lighting system (much of which was a hangover from the venue's previous incarnation) had begun to pale in comparison. When the firm brought freelance lighting designer Alex Douglas on board at the beginning of the year, Privilege was a natural first port of call.

As the signature rooftop venue at SLS, Privilege is recognised by the Guinness World Records as having the highest overflow pool in the world – it features two infinity pools at 325m up that each enjoy panoramic views of the city. Expectations are lofty for this vertiginous nightspot, and it has quickly earned a reputation for being one of the most spectacular nightclubs in the UAE, welcoming high-profile artists through its doors such as Will.I.Am, Akon and Satori.

Designed by Andrew Williams, the Em-Tec audio setup takes the team's tried-and-tested Funktion-One approach, with newly designed Evo2 cabinets positioned in each corner firing towards the middle. Four BR218 double 18-inch subwoofers, one installed under the DJ booth and the others located around the dancefloor's perimeter, deliver the low-end energy. Additional fill in the oddly shaped room comes from a pair of Funktion-One F101 10-inch cabinets, while outside a collection of F81 8-inch speakers finished in white to match the décor, extend coverage to the infinity pool areas.

The updated lighting brief for Em-Tec was to create a "best-in-class club with an exceptional visual experience," explains Douglas, whose previous experience includes stints with Ultra Festival, Diriyah Tennis Cup, L'Oréal, Ibiza Global Radio Festival and the BMW I7 launch. "For the sound, we installed Funktion-One speakers to deliver an unrivalled crystal-clear audio sound and then added additional lighting to their current offering."

The view from the DJ booth

When the venue first opened, the lighting setup consisted of a range of CHAUVET Professional fixtures: 16 Rogue R1 BeamWash, eight Intimidator Hybrid 140SR 19, eight Rogue R1 FX-B, eight Rogue R1 BeamWash, 10 Strike 4, six ColorRado 2 Quad Tour and four Amhaze Whispers. Em-Tec then augmented this with an additional seven Prolights Arena Cob ArenaCob 4FC, five Air 5Fan and an Art-Net Node to network all the lighting fixtures to a new ChamSys MagicQ MQ70 lighting console.

Along with this, the team stripped out the existing static RGB LED fixtures from the venue's central chandelier structure and replaced them with 60 RGB LED Strip B-6021-5SL. These run through 24 DMX512-RDMR6 decoders to a Madrix Luna 8 node which is then controlled by the German manufacturer's software platform. Hanging over the dancefloor, the new multi-coloured chandelier designs form a unique visual centre point for the space, effectively highlighting the surrounding moving lights.

"We'd already completed the audio install and the previous GM really liked our work and how everything was delivered," explains Douglas. "The client already had the specs in mind for the lighting refurbishment, and so we just took things on from there."

Seeing as a lot of the hardware elements were already in place, you'd think that the upgrade would have been fairly straightforward, but gaining access to everything turned out

Em-Tec lighting designer Alex Douglas at Privilege

to be a major challenge, notes Douglas. "We had to carefully prise apart the chandelier structure to rip out the old LEDs and refit it with new addressable strips that would be capable of displaying the multi-coloured wave and ripple patterns that the client desired."

While the LEDs themselves are unremarkable, the key is the Madrix control solution managing the setup. "The configuration now requires a lot more power than before, and so we've installed additional power modules above the ceiling. We then drafted in Donnie de Dios for two days at the end to help map everything out. Given the strange design of the chandelier, this aspect of the job was very complex, and Donnie is an expert at Madrix programming. We could have created something ourselves that was quite simple but it was important that the 'waves' of LEDs tightly matched the geometry of the chandelier in order to get the best effect. Donnie did everything properly, mapping every single LED out, it was an insane level of attention-to-detail. It took a whole two days to complete, running into the early hours of the mornings."

"For the mapping at Privilege I used the CSV Fixture List Import list function on the Madrix software, using CAD drawings

Alex supplied, the node spacing, start and end point of each run and the port configuration of the drivers," explains de Dios. "I then made a layout of the lights in AutoCad and represented them as blocks with attributes. Once the layout was completed, I exported it as a CSV and, based on all the given information (coordinates, type of lights, DMX address, universe number, etc.), I was able to set up the final patch/mapping."

Beyond the installation of the new chandelier LEDs, the team also had to relocate 15 of the existing CHAUVET fixtures to better accommodate the new look. "The GM at the time just wasn't that happy with them," recalls Douglas. "He has managed big clubs in Lebanon previously, so he has a good understanding of lights and how things should look. He knows what works well. We had a long discussion and found ourselves agreeing on nearly everything. It's quite simple to execute your vision when the client actually gets and understands that vision!"

With the more complicated lighting setup came the requirement for Prolights' Art-Net Node and ChamSys MagicQ MQ70 console, both supplied by local distributor Pro Lab together with the new Prolights fixtures overhead. "I made a plan to re-address all of the fixtures throughout the venue and tidy everything up. The previous contractor who installed the lights did not have schematics or patch lines; there were no official plans to work with at all. I therefore had to work out myself where the multiple DMX lines went."

Crucially, this reworking of the backend infrastructure means that should the venue wish to expand the setup once more, new additions can be quickly patched in. "All the splitters are there already and there's lots of scope to add more if desired," says Douglas. "But to be honest, given the size of the space, the client now has more than enough lighting fixtures to provide an immersive club experience on the bars already."

Set to be the first lighting install of many for Em-Tec, the professional service previously enjoyed by the company's audio clients now extends to a new domain. "The client's been really happy with the upgrade. They were already blown away with the new sound system, so the additional lighting is just the icing on the top," concludes Douglas. "They were also very happy with our service and the thorough maintenance that we will provide on an ongoing basis. The ability to seamlessly integrate the ChamSys and Madrix technologies allowed for the creation of stunning visual displays that captivated the guests and has left a lasting impression on the client."

www.book.ennismore.com/hotels/sls-hotels/dubai/privilege
www.emtec.xyz

Getting immersed at BLVD World

Martin Professional Middle East and Venuetech bring exhibits to life at Riyadh's BLVD World

Projection mapping at the Mountain main entrance

A MAJOR FIXTURE ON THE SAUDI CALENDAR, RIYADH Season is a celebration of the capital city and, in a wider context, of Saudi culture and its people. It is one of the many initiatives that forms part of the Kingdom's Vision 2030, a set of social and economic reforms designed to boost economic and tourist activity. Over the years, this vision has led to the creation of city landmarks like Boulevard Riyadh City, Sky Riyadh, Winter Wonderland, Via Riyadh and Riyadh Zoo.

Having been a soaring hit during the previous season, Boulevard Riyadh City was expanded with the addition of BLVD World. Constructed at record pace in late 2022, BLVD World brings the cultures of 10 widely differing countries together at a single location, surrounded by the largest artificial lake in the world. Visitors can immerse themselves in the different cultures through several sub-zones inspired by Morocco, China, Italy, France, India, Spain, America, Japan, Greece and Mexico.

Central to this new addition is the Sphere: nestled within is a 220-seat theatre with a 360° circular screen that showcases five-minute short films of various genres every 30 minutes. The Sphere – the focal point of BLVD World – is a permanent structure that will live on at the makeshift city beyond the current season's festivities.

Sela, a leading events management company based in Saudi Arabia and operating worldwide, has been delivering Riyadh Season since 2019 and, as such, was responsible for designing and specifying audiovisual systems throughout the site. While the majority of the Boulevard city utilises a complex-wide assortment of networked amplifiers and speakers to deliver music and sound effects throughout the various "country" zones, interconnected via Dante and centrally controlled by Sela, the Sphere required something more sophisticated.

Responsible for the audio within the Sphere was Sela's senior audio manager, Mohamed Mahfoudh. "Given the incredibly short timeframe involved, the project was logistically challenging for a variety of reasons," he recalls. "The entire city site went from nothing to completed in just three months. Furthermore, the installation of the audiovisual products had to take place while major elements of the Sphere were still being constructed, before the roof or floor were even installed. It was a big and very challenging space with little time to get everything finished."

Local audiovisual contractor ENPRO was responsible for meeting the AV requirements within the Sphere in addition to several country zones and opted to meet Sela's audio design brief for the Sphere with an in-the-round configuration of Meyer Sound loudspeakers supplied by Venuetech.

"Meyer Sound was already one of our recommended brands for this project, but it also took place at a very challenging time where stock for many products was non-existent," notes Mahfoudh. "The fact that Venuetech was able to supply everything necessary while meeting our strict timeline was a major bonus. But beyond that, the system is very well known and easy to upgrade in the future. After a lot of technical meetings with Alice from Venuetech, we were in agreement with almost everything, and that's why we opted to go with them."

Inside the Sphere

"The project presented a number of challenges," recalls Meyer Sound's Andrea Granata. "Meyer Sound and Venuetech were well prepared from a technical perspective and having significant stock in the region was key. Everyone involved had to do something remarkable to make it happen."

With the outside of the Sphere entirely covered in LED panels and the inside occupied with a large non-perforated 360° projection screen, a 9.1 speaker setup was settled on as the ideal compromise to negotiate the limited availability of mounting points. For the second phase of the project, the existing projection screen is set to be replaced with a perforated version that will enable additional loudspeakers to be placed behind it wherever desired, further increasing immersion.

The setup in the Sphere encompasses nine Meyer Sound Ultra-X20, three Ultra-X40 and four 750-LFC for low-frequency effects, fed and optimised by a Meyer Sound Galaxy 816 processor in a 9.1 configuration capable of producing a variety of different setups as required. The audio is streamed directly from the visual system's media server over the AVB Milan protocol,
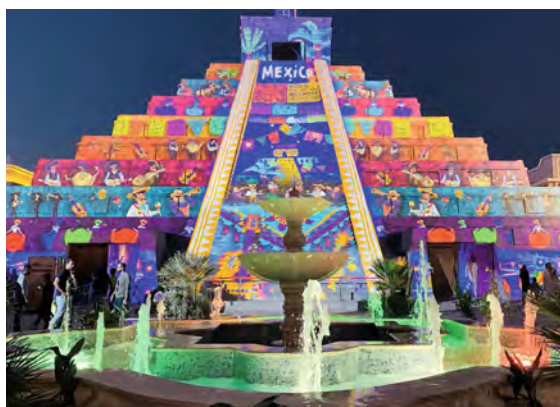
The Aztec pyramids in the Mexico zone

which allows for further future implementation with AVB Milan speaker endpoints via Meyer Sound.

"We worked together with the systems integrator ENPRO, but at the end also liaised directly with Sela given they were so technically proficient," explains Venuetech's Meyer Sound brand manager Alice Macaluso. "After working on several designs, we made the decision to go with the 9.1 speaker configuration for the non-perforated screen and leave the more ambitious spatial audio design for the second phase."

"I was very happy with the work performed by Venuetech and, in particular, Alice's expertise on the project, and as a result we also plan to work with Venuetech again on future projects," added Mahfoudh. "But this is just the start for the Sphere – the second phase will see us expand the audio
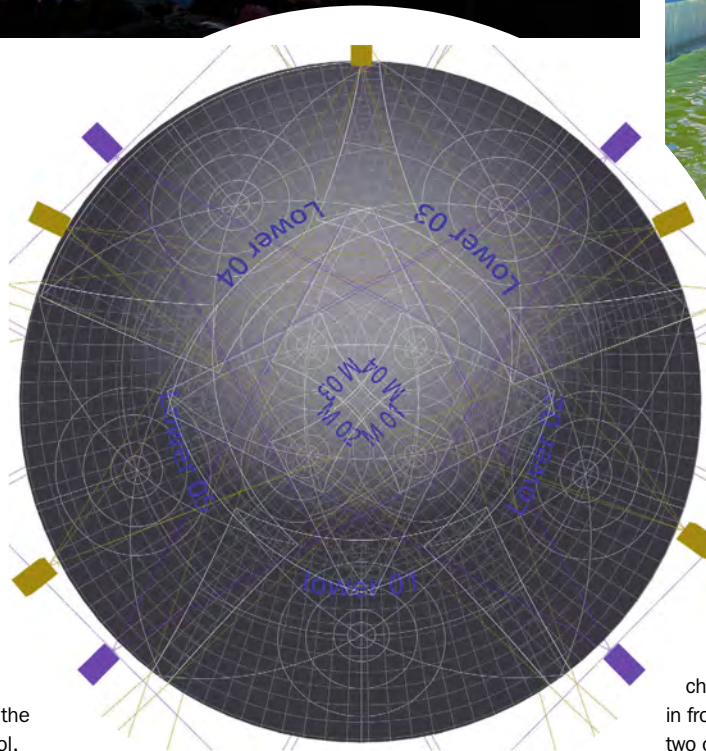
The projector setup inside the dome

system to a fully immersive setup for the next season. We've been very satisfied with the result so far and hope that the update will make that experience even better again."

To meet the visual requirements inside the Sphere, Martin Professional Middle East recommended to ENPRO the use of Barco 4K projectors, with nine UDX-4K40 FLEX 37,500-lumen UHD laser units installed to cover the huge 360° screen. These are fed from the Modulo Pi Media Server running on AVB (with analogue backup for redundancy). The Sphere is roughly 35m high and the projection screen covers the majority of the interior in a planetarium-style setup with the projectors positioned around the perimeter of the screen.

"We recommended Barco to support the films inside the Sphere," explains MPME technical director Ziad Shameseddine. "Once the Sela technical team gave their approval, we moved forward quickly with the equipment supply and fully supported the project. Operations were moving at record pace and the site was going to be opened in a matter of days, so it was incredibly challenging all around."

Beyond the Sphere, there are a number of culturally oriented sub-zones forming BLVD World and, having tackled the Sphere, MPME's remit was expanded to include exterior projection mapping at several other major exhibits – the Mountain main entrance, the Aztec pyramids in the Mexico zone and the Taj Mahal in the India zone.

The Boulevard Mountain main entrance is also a major statement piece being the the first building to greet visitors
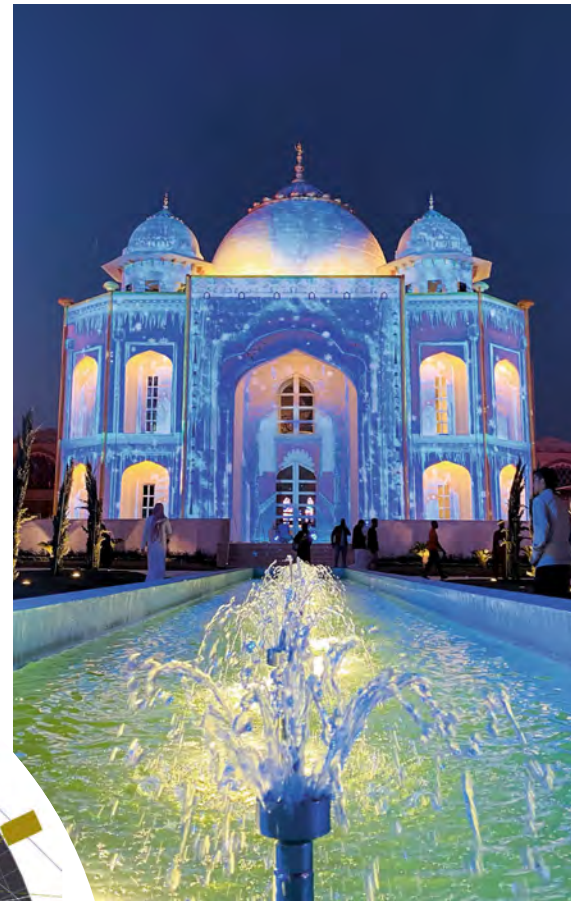
The Taj Mahal

arriving at BLVD World. The projection mapping here is delivered by 12 Barco UDX-W40 FLEX 40,000-lumen projectors in tandem with a Resolume media server.

Similar setups were deployed in the Mexico and India zones. Six UDX-W40 FLEX projectors (with content fed from Resolume servers) each cover the exterior of the Aztec pyramids and the Taj Mahal. Visual storytelling in each was supplied by Sela and related to the culture and heritage of each country.

"The Taj was a beautiful construction and the main challenge here was the position of a big fountain directly in front of the building. To get around it, we constructed two outdoor domes to house the projectors and keep them protected for the elements. We also had to run the network cables and power cables inside the nearby shops, which added to the difficulty. Everything in the India zone was completed in less than five days," notes Shameseddine. "In the Mexico zone, we installed the projectors on top of a restaurant opposite the pyramids. We handled the full projector installation and mapping at each location.

"While the overall project was not the most challenging from a technical perspective, we only became involved with 20 days left until the whole city would be opened to the public," furthers Shameseddine. "There was no room for error whatsoever. To manage the entire installation, from the main entrance to the pyramids, all at the same time was a big challenge. Now we can't wait to see what the next season will bring."

"Being nominated for such a nice project in the heart of Riyadh, our aim was to succeed and that's what we delivered when we partnered with key manufacturers like Meyer Sound, Barco and others," comments Ashraf Hamdan, AV and IT director at ENPRO. "The end result certainly met expectations. Thanks to MPME and Venuetech who assigned their products manager to support us."

The opening of BLVD World was a roaring success that kicked off the most recent Riyadh Season. Sela, as ever, will be looking to go bigger and better again for the upcoming season. Given that BLVD World already has no less than 13 Guinness World Records to its name, you can expect that the next phase of the project will also introduce something new and special to the city.

www.enpro.com.sa
www.martinpro-me.com
www.venuetech.ae

A letter from America

Dan Daley discusses why what's old can always be new again

HEARING OF LEOPARD II MAIN BATTLE TANKS rolling towards Ukraine brought back memories. Not of Stalingrad in 1942, but of Frankfurt in 1992, when the city was the site of the European edition of RepliTech, the once-mighty tradeshow that also straddled San Jose, California, Hong Kong, Beijing and São Paulo. It was nominally focused on media manufacturing, but the real star of that show was the compact disc, once the king of all digital media and which celebrated a somewhat muted anniversary last March, marking 40 years since the first shiny discs were made and released in the US. (The first commercial CD, Billy Joel's *52nd Street*, was manufactured and released in Japan in October 1982.)

When Bruce Springsteen's *Born in the USA* became the first CD to be manufactured in the States at Sony DADC's first optical disc plant in Terre Haute, Indiana, it heralded a revolution that no one could predict. Within a matter of a few years, the CD turned vinyl records and cassette tapes, the media currency of that day, into yesterday's news.

Anyway, back to tanks. To give you a sense of how that business had mushroomed in barely a decade, Krauss-Maffei, one of a handful of high-tech hardware companies that made the disc-manufacturing equipment and which

together comprised the suddenly muscular physical-media industry, also made the Leopard II, and gave some fortunate media members a ride around a test track in one on some occasions. True, it had no turret or cannon at the time, but it certainly trumped any spin in a mere Maybach (which were also plentiful at the time).

Another reflection of the sector's affluence was an article I once wrote for *Tape/Disc Business* which, along with *One to One* and a few other trade publications, comprised the editorial fibre of the industry. The article focused not on any new technical developments or whiz-bang products but rather on the quality of the cuisine offered at various stands at the RepliTech Frankfurt show one particular year in the 1990s, the decade that would become media manufacturing's gilded age. The stands for the largest companies were measured in hundreds of square metres to demonstrate their standing in the cultural pecking order of the business, with top chefs turning out some remarkable cuisine on site. Competition between the Germans and Italians was equally delicious. A regular feature at the San Jose RepliTech was a very large ice sculpture that, like the glittering tech temples Google and Apple would soon

build in the area, underscored Silicon Valley's imminent dominance.

This opulence took place against a backdrop of a music industry that had become rocket-fueled by the CD. It was optical disc's Roaring Twenties, but it was inevitable that there would be a 1929. It came in 2001, when the music sales tanked precipitously with the arrival of Napster and file sharing. By 2003, RepliTech had disappeared, along with several billion dollars' worth of value. CD manufacturing systems costing millions of euros now went for a fraction of that on remnant websites.

Then a remarkable thing happened: the return of vinyl, the very format that the CD had putatively crushed. Vinyl album sales reached 5.5m units during 2022, the 15th consecutive year of growth for the format which, for the first time, overtook the CD, with $1.2 billion in sales, compared to $483 million for CDs.

Formats don't really die. Instead, they wait for cultural moments to reanimate them. Why vinyl, why now? Who knows? A 96kHz/24-bit digital recording is as good as it gets for human ears. Yet media makers continue to scour Eastern Europe for vintage vinyl presses. The lesson? Never say never. It's also why we'll always need tanks.

A letter from Europe

The unlikely reopening of a legendary European recording studio? Phil Ward promises a Miraval

THIS ISN'T SUPPOSED TO HAPPEN. A ONCE-COVETED residential recording studio, which had fallen into predictable decline along with nearly all the other great studios of the West, has been revived and refurbished, almost literally out of the blue. You would be less surprised if they raised the Titanic and put it into regular service between Dover and Calais.

Studio Miraval was the jewel in the crown of European residential recording, a place of almost mystical power that grew in stature as commercial recording reached its peak in the 1980s. Located in the south-east corner of France, within the region known as Provence-Alpes-Côte d'Azur, it had all the old-world allure of the French Riviera combined with new technology, vineyards and a swimming pool. You could spend eternity in heaven and still miss Miraval.

If you remember the Hamlet cigar advertising campaign that used a jazz-piano version of Bach's *Air on the G String*, you'll understand how the player of that piano, French composer Jacques Loussier, could afford to buy this estate and then build a studio on it, firstly for his own use and later, as the concept of residential recording drifted across Europe like cigar smoke, on the open market. First came the rock bands,

like Pink Floyd and AC/DC, soon followed by a procession of '80s icons from The Cure to Wham! via Sade and UB40. As late as 2006, Muse were in there making *Black Holes and Revelations*.

Then, of course, it fell into disuse. The estate's wine production proved to be more interesting than music to new owners Angelina Jolie and Brad Pitt, who were still a couple back in 2011 when they bought it. Like Johnny Depp and Vanessa Paradis, they were an A-list duo with French connections who enjoyed the trappings of the trans-Atlantic lifestyle: the best tables in Parisian restaurants; the finest hideaways in the countryside; ashtrays made from SSL consoles.

To be fair, the winemaking has gone pretty well. By 2020, Jolie and Pitt were marketing their second Provençal vintage, a rosé that they had the decency to call "Studio" in honour of the estate's temporary diversification and all those hours treading the audio grapes to form the Judas Priest album *Painkiller*, among many others. Studio Rosé by Miraval has even garnered high praise among vintners, with one reviewer describing it as having "pale colour, citrus aromas, hints of white flowers and an iodine finish".

Now, to me, that sounds like Vanessa Paradis herself singing *Joe le Taxi*, but I digress. This story is about Angelina and Brad.

It wasn't long after acquiring Miraval that they split up, although they still share ownership of the wine business, and you can't help wondering if there was a difference of opinion about the studio legacy that contributed to the breakup: "Aw, c'mon, Angie, lemme at least have a drum booth…" "No, you can't, it will spoil the grape. And, anyway, you don't even play the drums."

One thing Pitt does have, though, is a genuine thirst for architecture and, by teaming up with record producer Damien Quintard, he has indeed brought the whole campus back to life – complete with a custom console and Dolby Atmos certification. The live room is 320m^2, much as it was, and the new control room is 93m^2. Vintage gear, including synthesisers, has been preserved, and Brad even gets his drum booth – exactly as it was constructed for Jacques Loussier's percussionist Christian Garros, back in *le jour*. So, Angelina gets to drink the wine while Brad smokes the metaphorical cigar and thwacks the metaphorical drums. What a tale of hope and prayer.

CABSAT and Integrate Middle East 2023

With a slightly reduced footprint, it was quality over quantity at CABSAT, while the inaugural Integrate Middle East ended on a high after pre-show uncertainty

CABSAT IS A SHOW STEEPED IN MODERN HISTORY. Traditionally taking place in March, the exhibition occupied the perfect position on the calendar, almost exactly six months from the main European broadcast show, IBC. CABSAT was never a products show, but nevertheless had gained a faithful following of exhibitors that returned year after year. While they were resolute that it was a valuable place to do business with companies from across the region, like many Dubai-based tradeshows, popularity started to wane as the years passed by. Then, like all exhibitions the world over, everything was thrown into disarray with the pandemic.

CABSAT subsequently enjoyed somewhat of a resurgence in 2021, perhaps due to people's pent up frustrations of being locked inside for months on end. When the exhibition rolled around in October 2021, it was one of the first out of the block after Covid restrictions were relaxed. This also coincided with both the opening of the Dubai Expo and GITEX Technology Week. Fast forward to 2022 and that spark among attendees had again begun to fade.

This brings us to 2023 where many of the same core exhibitors returned once more. This time, however, there had been a shake-up in the form of a brand-new AV show aligned to the integration market taking place in tandem at the Dubai World Trade Centre (DWTC) – Integrate Middle East. Before the doors opened, *Pro AVL MEA* was unsure whether this would serve as a distraction for CABSAT, dividing an already small sector for whom companies often serve both markets, or instead provide a greater draw given the wider offering. Having navigated our way through a particularly frustrating badge printing procedure first thing on Day One, we entered the Sheikh Saeed halls to find the two shows grouped together (without demarcation) and occupying Halls 1–3 for CABSAT and, at the far end, the Arena for Integrate.

Over the years, CABSAT has been praised for the quality of the attractions that augment the show floor. The 29th edition of CABSAT showcased emerging trends and technologies in the broadcast and satellite industry, while facilitating thought-provoking discussions and hands-on demonstrations through the well-attended presentations at the Content Congress and SatExpo Summit. The Content Congress discussed the numerous challenges in producing high-quality content and ways to overcome them; meanwhile, the SatExpo Summit highlighted the significance of various groundbreaking technologies such as AI and automation to improve and promote sustainable space operations.

The addition of Integrate Middle East – bringing together the region's professional audiovisual (Pro-AV) and media technology communities – introduced questions to CASBAT's tried-and-tested formula, but after three busy days inside the DWTC, it appeared that these were unfounded. The two shows certainly complemented each other well. Taking a more extreme stance, *Pro AVL MEA* think it's unlikely that Integrate would have achieved as much traction without being aligned with its broadcast brethren.

Integrate Middle East also played host to the Integrate Summit, where a programme of talks delivered by thought leaders and industry experts offered valuable insights on prevalent industry topics for the Pro-AV and media industries, including emerging revenue streams, digital signage, immersive audio and IoT-enabled Pro-AV. While not as heavily attended as some of the sessions at the Content Congress and SatExpo Summit, the Integrate Summit was also considered a success and garnered favourable comments from the presenters that *Pro AVL MEA* spoke to on the show floor.

While there were a few notable exceptions with those distributors and manufacturers choosing not to exhibit at this inaugural outing, the feedback from those who had made the investment was generally highly positive. It was also telling to see a number of key players walking the show and assessing the potential for next year. Attendance picked up dramatically on the second and third day and it appears that the future looks bright for Integrate Middle East 2024. A greatly expanded floorplan is expected when the shows return next May.

"The launch of Integrate Middle East in the UAE by the DWTC has been successful in its aim to create an annual platform that aims to foster thought leadership and drive market development for the Pro-AV and systems integration community in the MENA region. Held in conjunction with CABSAT, the three-day event provided international Pro-AV tech leaders with a wide range of market opportunities to capitalise on, and showcase how their world-class innovations can help transform customer experiences for their clients," commented Massimiliano Pipino, sales manager, Exhibitions Department at the DWTC. "Looking ahead, it's anticipated that Integrate Middle East will now grow and develop each year alongside its goal to provide an unparalleled business event experience for exhibitors and visitors from the MENA region and beyond. As an integral part of the portfolio of the DWTC, it is set to continue delivering exceptional value and fostering valuable connections within the Pro-AV industry."

|	
2023 Dates:	16–18 May
2024 Dates:	21–23 May
Venue:	Dubai World Trade Centre
Total exhibitors:	TBC
Attendance:	CABSAT 8,000; Integrate ME 3,000
Contact:	www.cabsat.com www.integrateme.com

From the show floor

Provision AVL sales manager Paul Hadfield: "The opening hours of the show have gone really well. We were one of the first companies to get behind Integrate when it was announced, and from our side it was not just a continuation of the growth that we've been experiencing here and the brands that we've bought on board recently, such as GLP and ETC, but also a testament to the growth of the industry in this part of the world. One of the great things today is that we haven't just seen footfall from people here in Dubai but from Lebanon, Qatar, Oman and Saudi Arabia. It's been a very positive first day."

Thomsun Trading senior manager, pro audio, Jose dos Santos: "We've been exhibiting at CABSAT for many years and initially wanted to return there. Because we couldn't find a good location, we decided to come to Integrate but it's actually been to our advantage. The goal was to target as many people as possible across both exhibitions. We were a little bit unsure how the Integrate side would go; however, it's been much busier than we expected. Absen's big LED screen has also garnered a lot of attention from the CABSAT market and that has brought a lot of those attendees up past our booth. Usually at local shows the second and third day can be quite quiet, but our booth has been non-stop busy throughout. I've been quite impressed; however, from an organisational perspective, everything was put together a bit last minute."

Absen sales manager Alina Yuan: "Integrate has been very valuable for us. Considering it's the first time, the show has been amazing and very crowded. We took one of the biggest booths at the show and set up a huge 18m x 4m 8K resolution videowall comprised of our 2.6P panels, as well as a 90m² 2.5mm pixel pitch interactive display highlighting our virtual production capabilities – but I think that next year we will go even bigger. I'd like to have even more interactive elements on the booth. The virtual studio has been very popular and the ME market is booming right now for these types of solutions."
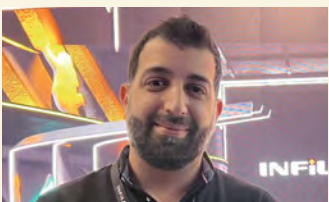
InfiLED VP of sales ME Samer Otaibi: "Integrate has given us the chance to get closer to both our partners, potential customers and even end users, providing a quick and easy platform to demonstrate our solutions. It's been brilliant; an amazing show and we'll definitely be back again next year. It's certainly lived up to our expectations, but now comes the real task of turning this into sales. The majority of the audience is more broadcast-related because of CABSAT being the bigger show but this has worked in our favour. Ideally, we wanted to exhibit at CABSAT but were unable to get a space. So we picked a booth at Integrate that was right on the divide between the two shows."

Masterpiece general manager Simon Daniel: "The opening day was slow and I initially had concerns, but from the second day the show really picked up. We've seen lots of visitors from other GCC countries, and the end result has been quite impressive. We've met a lot of potential new clients. The final day has been exceptionally busy, which is a surprise for an exhibition like this. With a whole year to market the next edition and really let the industry know about Integrate, I think 2024 could be something special. I'm happy."

Christie business development manager – ME, Mahesh Kumar Singh: "I definitely believe it's been worthwhile exhibiting at Integrate. The region has lacked a Pro-AV show for some time, and although we started off this year on an experimental basis like many others, the result has been good. We've met some really high-profile end users along with our channel partners. The make-up of attendees has been broad and we've seen people from Saudi, Oman, Kuwait and all over the Middle East."

Dalma Electronics general manager Tahir D Mohammad: "This was our first time exhibiting at the show and I feel it's been very worthwhile. It's given us the chance to properly showcase our pro audio brands: Warm Audio, which is all about studio recording, and ESI which also caters to the podcasting and broadcasting market, and both brands have garnered a lot of interest. I've been very happy with the turn out."

Mediacast business development manager Jaffer Sadique: "Since everything shut down for the pandemic, I would say that this edition of CABSAT is the first time where everything is properly 'back to normal'. This year has definitely been a lot better than the last few iterations. In terms of the addition of Integrate being co-located alongside CABSAT, this method hasn't always worked out brilliantly for other exhibitions in the past, but I think it's worked out brilliantly. The broadcast and Pro-AV sectors have a lot of crossover and we've been seeing people from both sides. All in all, the show has been a lot better than I expected."

ARRI business development manager, EMEAI, André Rittner: "This is our fourth year exhibiting at CABSAT but this one has been much better than previous years. We've enjoyed a lot of good talks and all of the right players are here, so it's a great platform to build those connections. There's lots of projects going on in the region which has led to some fantastic discussions. We work a lot with companies that are interested in virtual production but they don't always realise the importance of using high-quality professional lights in addition to good LED screens. This is great platform to help build that awareness."

Saudi Light & Sound (SLS) Expo 2023

A world of opportunities came to the fore at the Riyadh International Convention and Exhibition Centre

The show opens

The role of women in the events industry was one of the most popular talks at the SLS Summit

The Robe team on a dedicated booth

NOW IN ITS SECOND YEAR, THE SAUDI LIGHT & SOUND (SLS) Expo kicked off at the Riyadh International Convention and Exhibition Centre (RICEC) on 28 May 2023, welcoming a diverse range of manufacturers, distributors, systems integrators and production companies keen to explore the wealth of future opportunities presented by the fast-developing Kingdom across megaprojects and events such as Neom City, Al-Qiddiya, Amaala, Riyadh Boulevard and MDLBEAST Soundstorm, together with an exploration of emerging AV trends in immersive pro lighting, sound and AV technology.

Hosted by DMG Events and co-located alongside the (traditionally) larger Saudi Entertainment and Attractions (SEA) Expo, SLS occupied Halls 3 and 4 of the RICEC. The two shows collectively housed over 350 exhibitors and welcomed in excess of 10,000 visitors over a three-day period.

Beyond exhibitor booths, the SLS summit was a major aspect of the show and featured a diverse programme of presentations including everything from *Empowering Saudi Talent in the Performing Arts Sector*; *Design Principals and Techniques for Creating Visually Stunning Shows*; *Sound Engineering for Immersive Experiences*; *Projection Mapping Tools and Techniques* and *Current and Future Tools for Interactive Installations*, to *Safety and Security Considerations for Live Events*.

As the only show of its kind currently taking place in the Kingdom, it serves as the ideal platform to meet new local partners catering to this burgeoning market. While still relatively diminutive in size compared to other shows hosted in the wider Middle East, SLS's initial outing in 2022 certainly struck a chord with those that threw their weight behind it.

A small selection of prominent Dubai-based distributors and production companies, including NMK Electronics, Provision AVL, Venuetech and SLS Productions, and those that returned again this year did so with high expectations. So, how did the 2023 edition stack up?

Showcasing its full selection of brands on a massive in-the-round booth immediately opposite the entrance to Hall 4, NMK Electronics was full of praise for 2023. "We first exhibited three years ago at SEA Expo before there even was an SLS show, and when there were no other audio or video companies," said NMK's operation manager Dino Drimakis. "We were the first and then everyone else followed. This year, the exhibition is much bigger. It's a perfect platform to build upon the great projects that are being delivered here and, if you put effort into the market, you'll get a lot back. The show itself is real a success now, and there's been quite a few players that have actually come here to discuss specific things rather than just wandering around. I think it'll only get bigger and better as the years progress. The organisers have been doing a really good job in terms of attracting the right companies."

As one of the main show sponsors, Venuetech was present on its Saudi partner's booth, Delta Waves, again showcasing its full portfolio of brands. The exhibition also served as the first Middle East demonstration of Spanish manufacturer Auravision's flip-chip COB LED technology. Away from the show floor, Meyer Sound's Andrea Granata and Sana Romanos delivered a series of well-attended workshops across the first two days that provided an in-depth exploration of the manufacturer's complete toolset

and its deployment "in the wild". "The show has definitely got bigger in terms of pro AV – last year we were only two or three companies in total, but now we're seeing all the other guys that we know from the GCC," commented Venuetech AV systems architect Ismat Assafiri. "It's really nice to see. The main people we've been talking to are production and rental companies, which is very interesting, but also systems integrators and a lot of end users from the government and hospitality sectors. For exhibitions, I think this is the one to come to in the region."

Having exhibited at the inaugural Integrated Middle East show the week prior, Provision AVL constructed a large booth at the front of Hall 4. Having just taken on distribution in the region for German lighting manufacturer GLP, the distributor was also excited to announce the brand's official introduction to the Saudi market. "The main difference compared to last year I would say is the quality of attendees," noted Provisional AVL general manager Kevin Boujikian. "In terms of quantity, the show is definitely also busier, but the more interesting aspect is that we've seen a lot more quality clients and potential customers. Given that we've just started distribution of GLP and it's the first time the brand has been present at a Saudi show, promoting that has been a major focus for us."

Towards the rear of Hall 4, SLS Productions was educating visitors on the event production capabilities it offers in the Kingdom while also unveiling its new large-scale SSE truss solution. General manager Dave Nazir commented that "the show this year is better attended, the stands are of a higher quality and, in general, it's slightly better organised. It's certainly been a productive time for SLS. We've seen everyone from end users to broadcast people, to leaders who are looking for professional vendors. We are also launching onto the market a brand-new, heavy-duty truss system to be able to cater to some of those events that traditionally haven't been able to take place outside of the Western region, and that's been gaining a lot of attention."

As its first time exhibiting at SLS Expo, Dubai-based distributor GSL Professional was highlighting its new partnership with American loudspeaker manufacturer EAW, alongside its other pro AV brands. GSL general manager Abboud Aljuneidi commented: "Our brands have become very loud here in the market and, as a result, the booth has been constantly busy. We've also just signed an exclusive distribution partnership with EAW for the GCC region, and announcing that at the show has already led to some brilliant new opportunities. All-in-all, we've been very happy and will definitely be back again next year."

Another distributor that was present at the Integrate Middle East show, VUE AV was late to throw its hat into exhibiting at SLS Expo and therefore was consigned to a smaller booth at the back of Hall 4 than it might have liked. Nevertheless, spirits (and foot traffic) on the booth were high throughout. "We left our stand booking quite late and so are not really in an ideal location, but it's been well worth it," said VUE AV partner Simon Smith. "There's been constant good-quality customers from all areas of our market – new people that we would have had no idea existed were we not at this show. The organisers have done a good job of bringing in not just events and entertainment customers, but also quite a lot of corporate for the fixed install market as well. So that's been good and has led to great exposure for us."

The entire NMK clan

7Hertz was championing its d&b and DiGiCo products

Andrea Granata delivers a Meyer Sound seminar in the nearby Lecture Room

Bose's Nittin Dargan with Mostafa A Al Khalaf from aDawliah

As *Pro AVL MEA*'s first time attending the exhibition, we were pleasantly surprised by how the show unfolded across the three days. The aisles remained incredibly busy throughout and there was a buzz and enthusiasm on the show floor that many felt was reminiscent of the glory days once enjoyed at Dubai's PALME Middle East Show many years ago. This did, however, bring some drawbacks. Decibel levels throughout were very high, somewhat stifling the ability to conduct in-depth conversations. Given that the doors didn't open until 3pm each day, by the time they closed at 9pm, there was also little time to recollect and recap on the day's events. Nevertheless, SLS Expo 2023 was undoubtedly a resounding success. Every single exhibitor *Pro AVL MEA* spoke to expressed a desire to return for next year's edition. Perhaps more interestingly, the new dates are joined by an all-new location away from the centre of the city and closer to the airport. Given that SLS and SEA Expos combined completely filled the entirety of the RICEC's Halls 3 and 4, this seems sensible as SLS will no doubt be even bigger and better next year.

2023 Dates:	28–30 May
2024 Dates:	7–9 May
Venue:	Riyadh International Convention and Exhibition Centre
Contact:	www.saudilightandsoundexpo.com

InfoComm Orlando 2023

On its return to Orlando, InfoComm defied expectations with packed aisles in the OCCC's West Hall and a plethora of new products on display

AN INCREDIBLY BUSY TWO MONTHS OF TRADESHOWS across the MEA and APAC regions was capped off by the return of InfoComm to the Orange County Convention Center (OCCC) in Orlando, Florida from 14–16 June 2023. InfoComm traditionally divides its attention between Orlando and Las Vegas on a year-by-year basis and, unsurprisingly, the gambling capital of the world has been the more popular fixture. InfoComm Orlando, perhaps unfairly, has enjoyed a reputation in past times as a bit of a "filler" show, but this was certainly not the case in 2023. Declared by many on the show floor as the first "proper InfoComm" in several years, the show kicked off with the customary ceremonial ribbon-cutting before a swell of eager visitors rushed the show floor, where they appeared to remain for almost the entirety of the exhibition's three days.

Given the success enjoyed at ISE in Barcelona earlier in the year, InfoComm expectations were hopeful, if slightly muted. Noting the supply chain issues that have rocked the industry in recent months, it was unsurprising that many manufacturers were championing their efforts in developing software-based alternatives. Others were proud of the fact that they had engineered their business around such obstacles and so if they did have new hardware to display, they did so en-masse. Gone were the large (and largely empty) booths present in Las Vegas last year, replaced with much more compact and product-focused alternatives. Perhaps this change could also be attributed to the high cost of supporting the show for exhibitors – something noted by several we spoke to while roaming the aisles.

A major sticking point at InfoComm last year was the distance between the LVCC's North Hall and new West Hall. With the show inside the OCCC housed entirely within the West Concourse, and with multiple entrances along its length, navigation was effortless. In addition, the organiser has booth signage down to a tee, backed up with a handy smartphone app capable of providing real-time directions when all else fails.

As was to be expected, the digital signage section of the show floor was dominated by large, very high-resolution displays and ambitious virtual production demonstrations. On the audio side, the proliferation of nearby demos rooms (22 in total) was lauded by many and sessions for all were highly attended. The demo format itself has matured in recent times, with companies noting that it's no longer good enough to simply set up lines of products and play them to guests. As in the wider industry, the argument put forth is about the need to provide an "experience" that can fully immerse listeners in a brand's respective ecosystem.

On the collaboration and conferencing side, the topic has shifted from "accommodating hybrid workers" to "attracting workers back to the office" – the seamlessness of technology reportedly providing one of the more compelling reasons for why they might do so. This disparity of worker locations remains a core focus, however, and the trend towards wider-aspect ratio 21:9 displays capable of providing more immersion in videoconferencing sessions is gaining traction.

At the end of three days, InfoComm 2023 definitely felt bigger and busier than Las Vegas in 2022, so it was somewhat surprising to see the official attendance figures come in at just under 30,000. That may represent a poor vintage compared to the 44,129 who attended Orlando in 2019 but, as many were at pains to point out, InfoComm's strength has and always will be the quality of those that turn up. In this regard, InfoComm 2023 certainly did not disappoint.

2023 Dates:	14–16 June
2024 Dates:	12–14 June
Venue:	Orange County Convention Center
Total exhibitors:	700
Attendance:	29,325
Contact:	www.infocommshow.org

From the show floor

Javier Navarro, DAS Audio: "The best thing about the show has been the number of people we have met. It's not a massive issue, but I would have liked the demo rooms to be a bit closer to the hall. The visitors we've seen have largely been from the US – Central America and Southern America, but not that many from other continents."

George Tennet, Blaze Audio: "It's been amazing – a very nice exhibition and we have had fantastic traffic on our booth. We are launching new speakers and it's been brilliant to see the reaction from the market. We also have a full new setup in the US with a lot of new sales managers across the region, so it's a great chance to meet new people. In general, it's a very well-organised show and easy to get around."

Paul Hales, Theory Professional: "We're launching the brand here for the very first time. You never know quite what you're going to get, but we've had a full house in our demo room every hour and the response has been unanimously positive. We've grown our distribution network significantly just in these last three days, so it's been hugely valuable. I think it's obvious that the pandemic is not affecting the show any longer."

From the show floor

Craig Burross, Robe: "It's nice to see a well-attended show bounce back after the pandemic; it's such an important one for both the national and international market. We've been excited to show our distributors new products that they can finally get their hands on. I really like how the organisers take care of you here. An example is the food court, it is well laid out and the food is exceptional. The organisers are super friendly and very hospitable – keep that up."

Kelly Fair, Lectrosonics: "This is actually, surprisingly, a really good show. It feels like the tradeshow is truly back, even down to the fact that the InfoComm Daily is sat outside my hotel room each morning. We've also had more customers coming onto the booth and they all have really good questions. The atmosphere is quite relaxed versus previous shows. There is more of a European vibe at this with alcohol being served at booths and even one booth baking cookies."

Brad Hintze, Crestron: "This show has been really phenomenal; our booth has been packed with people throughout. We've scanned several thousand people in total. ISE was off the charts in Barcelona this year with record attendance and so we were hopeful this would carry though to InfoComm. Now we need to carry this energy through yet again and expand the audience to include even more end users. Both ISE and InfoComm have started to attract more end users, and I'd love to see that continue."

Rob Fowler, Brompton Technology: "Seeing the show back in full swing and very nearly at complete capacity in these West halls (which are massive) has put a spring in everyone's step. I think there were a lot of questions as to whether in-person events would ever be the same after the pandemic but this has proved that they can be. I've been impressed with the logistics; picking up badges was seamless. Some fun and games with Ubers but it's not bad when you consider the sheer number of people that have to travel to and from this building."

Koy Neminathan, Elation: "I've been pleasantly surprised with the consistent flow of customers that have come to the stand to be honest. Elation has a number of brands under its umbrella, with Obsidian being their control brand and the network products under Netron. We've made a dedicated space right behind the main Elation booth for those solutions and that's worked out very well; sometimes the control and networking products sort of get lost alongside the big fixtures. Having the show at this time of the year is good in many respects, but it's a busy time for many lighting professionals. We get fewer designers coming through because they are normally out on tour."

Mark Wadsworth, Digital Projection: "It's been a lot busier than I expected and there's been a good and very positive vibe. Last year was quite quiet, but it seems like everybody now wants to come back out. People are approaching the booth with actual projects they're looking for kit for, so generally it's been really positive. In terms of visitor make-up, it's still predominantly a US-focused show, with some attendance from South America and Latin America."

The StageOne HQ in Midrand

Peter Berry

The ever-expanding StageOne team

From screen to stage

A household name in its previous guise as TV Audio, StageOne's new identity more accurately reflects its move into the professional market

PERHAPS IT'S A SIGN OF THE TRIALS AND TRIBULATIONS present when doing business in South Africa, but many of the country's more successful AV companies have been honing their business skills for multiple decades in pursuit of that one innovation capable of revolutionising the marketplace.

StageOne owner Peter Berry understands this dilemma intimately. Having first been attracted to the company in its previous guise as TV Audio back in the 1970s, Berry has watched the changing face of the local industry first-hand as popular international brands have finally started to take root domestically. This evolution of the professional AV sector also led TV Audio to deviate from its traditional offering of TV and electronics repair services, ultimately transitioning into the world of pro audio and lighting distribution under the banner of StageOne.

Berry remembers the progression fondly. "We started off as an entirely different kind of business, an electronics component company," he recalls. "As TV Audio, we were selling TV spares for more than 20 years, but as the market changed our repair business got smaller and smaller. This led us to explore the distribution landscape in more detail before progressing into more commercial audio and selling to rental companies, installers and integrators."

Being that it served as the hub of the professional AV market back in the early 2000s, Berry made the journey to London's Plasa exhibition where he encountered sound and lighting supplier, Skytronic. "We were interested in the lower end of the commercial audio space, 100V systems and things like this," he remembers. "We came to an arrangement to distribute their full range of products in South Africa, and that was really the start of our modern journey. They did a hell of a range, including megaphones and full PA systems, but at the lower end of the market."

The relationship developed to such an extent that the company began trading under the Skytronic brand name, operating for more than a decade as its local representative. "This shone a spotlight on us and allowed to us to target more of the installation market, as opposed to events. We slowly started doing products for lighting and, as that took off, the lower end of the event market also began buying from us."

With everyone searching for a new gap in the market coupled with typically lacklustre budgets, competition at the time was rife, recalls Berry. "A lot of guys were importing parts directly and then branding them as their own products. As a result, it was imperative that we offered the right 'name' brands."

In 2010, for commercial reasons, Berry and his team returned to their roots once more under the TV Audio name and started distributing the beamZ lighting brand, which remains one of the strongest brands in its stable today. "As TV Audio, we started bringing in our own products and seeking more and more brands," Berry explains. "Slowly but surely, we built up a new selection perfectly aligned with pro audio and lighting. We also started doing staging and trussing and that really brought a new type of customer base towards us, but yet we remained under the radar. We had our customer base, we focused on that customer base, we gave them service, and just grew and grew by faithfully supplying that base. We never aimed at that high end or those really professional brands."

The industry in South Africa has always been focused around Mediatech Africa, a biennial exhibition held in Johannesburg. "Mediatech is a really good show for the market. I think that was really the start of us looking at the higher-level market. We picked up a lot of customers through the exhibition who were seeking a higher-end product, but couldn't afford the ultra-high-end stuff."

Off the back of a successful Mediatech 2017 show, Berry started looking seriously at better-known international brands, such as Italian manufacturer FBT. "We started distributing their brand in 2018, and this gave us a lot of credibility with more serious players. More recently again, we've taken on British manufacturer Studiomaster." These two pedigree audio brands are joined by a plethora of other AV solutions from the likes of beamZ, Adastra, Fenton,

Roxtone, Vonyx, Alustage, Citronic, MagicFX and Power Dynamics, among others.

However, having a great selection of brands is no good if you can't ship the products. "Through my electronics store days, I quickly realised that if you don't have product on hand, you don't do the business," he explains. "We run on the principle that we try and support whatever a client may need or want. We may not have this exact light fixture, for example, but we've got something very similar which we can supply straight off the shelf. We have four warehouses in an office park next door to each other, all stacked to the roof. I'm hesitant to say it's the largest stock in the country, but we are always extremely well stocked. During Covid, any excess cash we had we also put back into product and that has really paid off." Within the same complex, StageOne also has an extensive in-house service department that allows for the repair of the majority of its products on the spot.

"When things started opening up again last year, we thought that was a good time to change our name and to let people know what we actually do – and StageOne was born," Berry furthers. "However, it was quite daunting to change your name after so many years when everyone in the market knew us as TV Audio." The StageOne name change was announced at a prestigious event held at their Midrand offices which coincided with the company's 40th anniversary.

After the relaunch event, a new marketing team came on board to help curate the new image as StageOne. "The team know the industry intimately as they have been working in it for many years; they know the customer base and know where we need to be placed. We subsequently have become a lot more professional, outwardly, and slowly but surely everything's coming together as StageOne. It's a small market – everyone knows everyone, everyone knows where to get whatever they want. However, since the name change and adopting a new marketing strategy, we're getting a lot of new clients from South Africa and also neighbouring African

The in-house service department

Brent Harris and Thee Jam performing at the StageOne relaunch event

countries. The brand's getting bigger and bigger by the day, but people still call us TV Audio," Berry smiles.

More than 40 years since its inception, StageOne has become a respected, flourishing company and seemingly a model for success in a highly competitive marketplace. "We are

growing and we've never been busier. The corporate market is really where the business is at right now. All of the big public companies and corporations are holding events, and we're in a good position to service this. Furthermore, the return on investment for these smaller event companies is also a lot quicker. I think that's one of the reasons we are so busy. I'm also happy to say that in the last year we've doubled our growth."

With four decades of service under his belt, many in Berry's position would be considering making preparations to step back from the business. "I turned 70 this year and when asked about my plans for retirement, I always emphasise that I have no intention of retiring, and that this is really just the beginning," he says. "Instead of pursuing exponential growth, my vision for the immediate future of the business involves concentrating on our core strengths, streamlining and refining our existing business operations to achieve further excellence."
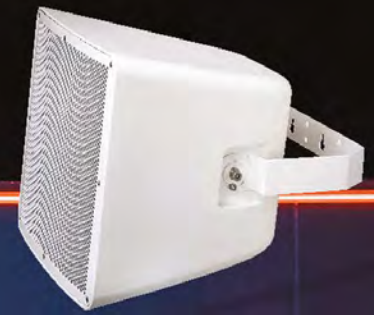
www.stage-one.co.za

Coming of age

British manufacturer EM Acoustics has outgrown its niche reputation as a theatre sound specialist to establish a full loudspeaker range

L–R: Ed Kinsella, Roger Harpum, Greg Clarke and Mike Wheeler

NESTLED IN THE HEART OF SURREY IN THE ENGLISH countryside, EM Acoustics is one of several businesses occupying the Dunsfold Aerodrome, famous in recent times as the location of the *Top Gear* test track. Arriving there in late 2004 when the company was still a relative newcomer on the pro audio scene, EM is the brainchild of school friends Ed Kinsella and Mike Wheeler, who've been pooling their respective skillsets towards the development of loudspeaker technology since the company's founding in 2002. "Ed and I go way back," recalls Wheeler. "We met in 1996, and both grew up about five miles away from where the factory is now based. Both being musicians as well as studying several of the same subjects created a common interest, which also included the technical side of live production."

University split the pair up temporarily, with Wheeler heading off to Imperial College London to study mechanical engineering and Kinsella to St John's College Cambridge, specialising in natural sciences and chemistry. It was during this period that Wheeler's passion for loudspeaker manufacturing emerged. "Turbosound's original factory was only 15 miles from my home, and I was lucky to be able to spend most of my university holidays working there," he explains. "It was a great experience for me, and something of an inspiration. Ed and I kept in touch as we approached our graduations, and the idea of setting up our own operation formed. Looking back, we really didn't know what we were getting into. Through all the youthful enthusiasm there were tough lessons that had to be learnt quickly."

The main roles of the founding duo remain the design and development of new loudspeaker products – with Kinsella looking after the acoustical aspects, and Wheeler focusing on the physical and mechanical – but neither is afraid to get stuck in on the factory floor where necessary. "Ed was once described by a teacher of ours as the 'perfect blend between engineer and mad scientist'," Wheeler jokes. "He has the ability to jump between working on fiendishly complicated mathematics, but then switching in an instant to gritty production matters or dreaming up a new process to make something easier or more efficient." It's no surprise, therefore, that the company's Surrey base features Kinsella's very own mad science lab, complete with trademark chalk blackboards and filled with electrical "toys" and esoteric gizmos. This is the fertile environment where the majority of EM's innovations have been dreamt up.

"While as operations director, Mike looks after most of the day-to-day running of the business," Kinsella continues, "we both take a very active role in the overall growth and development of the company. Our working relationship is what's brought us to

The laboratory where EM's innovations are dreamt up

this point, and together we seem to always be able to pick the right path through any situation."

In the years since setting up shop in Dunsfold, the duo have established comprehensive in-house production capabilities, a dedicated team of passionate workers and an enviable product portfolio that has enjoyed great success in top-tier deployments and installations around the world. Using state-of-the-art automation alongside skilled craftwork, the team handles woodwork and paint processes, circuitry, final assembly and comprehensive testing all within the 2,300m² factory.

Initial commercial success was achieved with what the pair describe as "a redefined, back-to-first-principles approach to passive crossover technology" – a mindset which has enabled the team to deliver impressive performance throughout the audio demand curve, backed up by one-to-one customer support for the life of the product. "We measure, we listen and we critically assess every aspect of every loudspeaker's performance before it becomes a part of your system. This confidence in our production and quality control procedures means we can back our products with a five-year warranty," says Wheeler.

Early product releases found their way onto West End and Broadway shows, corporate rental and a wide range of installations – from schools to big regional and national theatres. The installation of EM's HALO Compact system at the Royal Albert Hall in 2013 was somewhat of a turning point for the company. For a maturing brand, preceding and subsequent success in theatre and other sectors has been impressive to say the least. Some of this can be credited to brand manager Greg Clarke, who officially joined the team in 2019 but had long championed the company's products and technology.

An award-winning sound designer with a particular emphasis on live theatre, Clarke handles brand development and publicity at EM, while assisting with system design and field implementation. His passion for the marque comes through first-hand use on a raft of West End and Broadway shows over the years. "I started using EM not long after the company came into being," he recalls. "Beyond the excellent products, there was something about the team and the way they operated I found very attractive. There was a great ethos to what they were doing, and they were forging ahead in a field that was of much interest to me. A lot of equipment coming onto the market relied on heavy processing, and I was increasingly unconvinced

Inside the spray booth

about the amount of obscure signal handling going on inside amplifiers. By contrast, EM was about getting everything right before the amplifier – the drivers, the cabinets themselves and particularly the passive crossovers."

Two decades on and the company has never wavered in this ethos. "The cabinetry is exemplary, the componentry is the best it can be and the crossovers are exceptional," furthers Clarke. Yet he is keen to point out that the brand is not afraid of exploring new innovations. "We're absolutely embracing new technologies, just not in the pursuit of fixing bad design. Our amplifiers are chock full of DSP, but it's how you use it that matters. One of the amazing things here is the fluidity of R&D, which is down to Ed and Mike's very hands-on approach. Once an idea takes hold, we can deal with that and make it tangible very quickly."

Additional strength to the team came in early 2022 in the form of industry stalwart Roger Harpum, who stepped into the role of

EM Acoustics speakers were deployed throughout 1REBEL

The wooden cabinets are sanded by a robotic arm …

… before being finished off by workers

The full speaker line-up

business development manager. Returning to the industry after a two-year hiatus, and on the back of a long career with several highly respected manufacturers – including 17 years at Meyer Sound – Harpum brings with him a substantial contacts list, backed up by a healthy dose of industry respect.

His first meaningful listening experience of the EM product was at the end of an initial, very successful visit to the factory. He states that "having heard many of the leading brands' point source boxes over the years I knew the benchmark for a great product was extremely high. I think my reaction to the R8s says it all. I was absolutely gobsmacked as to how open and transparent the loudspeaker sounded. It just breathed easy."

For a small company with much success focused on the live and theatre market, the forced shutting of doors around the world in early 2020 dealt a heavy blow. "It was probably around the summer of 2020, things really started getting a bit squeaky," says Wheeler. "The slightly surreal thing was to come out the other side, with everything going flat out – we finished the last financial year 50% up on our best pre-pandemic year."

"Of course, we're not the only ones," adds Kinsella. "There are other companies who have experienced very high levels of growth as the industry bounces back from the pandemic. The interesting thing from our point of view is the blend of business we now have. Our workload and associated order book is far more balanced across different sectors."

On a personal level, the pandemic also had some unexpected benefits. "There was a certain clarity of mind that came from having very little control over events around us," adds Kinsella.

Assembling the final components

"For once, not having to make a decision about what to spend time on was somewhat liberating." This liberation yielded not only significant extension to the Reference Series (adding the R8 and R12 to the original R10), but also "the two finest loudspeakers we have ever developed" – a bold statement indeed, even from a founder of the company. Details of exactly what the duo were referring to are currently firmly sealed, but the mood was clearly excited and buoyant.

For now, "normal" business has resumed. "Coming out of the pandemic, as a company we made some very bold decisions on intelligent stocking," states Wheeler. "Where others have been struggling, we've got lead times of less than 16 weeks on all our loudspeakers. We want to ensure that we can supply,

not because we're trying to grab a bigger market share, but because people desperately need kit right now. Making sure our customers have what they need is fundamental to our ethic."

To service that need, EM now has a varied yet complete product portfolio that includes the flagship Reference Series of precision point source loudspeakers, the HALO line array family, stage monitors and subwoofers, and the EMS Series, covering a wide variety of applications, both installed and portable. The Reference Series in particular has attracted a huge amount of attention, gaining traction with designers, engineers and installers who had previously been unaware of the capabilities of EM kit. Sales have been strong and continue to grow as end users can now confidently specify EM front-to-back.

"Now we've established the full range, we are carefully considering our product development, and there is some really innovative stuff in the pipeline," explains Wheeler. "I already mentioned that the company's grown enormously this year, but that's only been by adding about 20% to our headcount. We've been focused on evolving our processes to become more efficient. The next product will be an addition to the Reference Series, the R5. Component parts are incoming and we're working on the first batch right now."

At 21 years old, EM's subtle maturing of the duo's original vision seems appropriate as it officially comes of age. "Absolutely!' agrees Wheeler. "We've now got the key to the door."

www.emacoustics.co.uk

DiGiCo increases power and speed with the Quantum8^{52}

The Quantum8^{52} is DiGiCo's new console – big on power, but with an eco-friendly heart

DIGICO HAS announced the launch of the next generation of large-format live audio production mixing consoles. As with previous DiGiCo offerings, it has been designed from the ground up. Familiar, yet different, and with improved audio quality via enhanced algorithms, the Quantum8^{52} is said to deliver a massive leap forward in processing power. It is neatly packaged with 1,000 nit LCD screens for full daylight operation and a newly designed worksurface, giving users the confidence that the Quantum8^{52} has been designed not just for now, but for the future.

With that firmly in mind, the Quantum8^{52} also includes a raft of eco credentials. Its lightweight alloy construction reduces weight, which in turn helps mitigate its environmental impact during transportation. It has a reduced operating power, thermal cooling fans along with convection and temperature dependent cooling. Further reducing the environmental footprint is the inclusion of sustainable and recyclable materials.

The Quantum8^{52} features fully redundant processing, with each engine powered by five of the latest 7th-generation FPGAs and next-generation SHARC DSP processors. The input count increases to 384 mono channels, with 192 aux/sub-group busses, plus the familiar L-R/L-C-R/5.1 master busses. It comes with a 64x64 processing matrix, 36 control groups, two solo busses and 64 effects rack slots. There are 48 graphic EQs, 384 nodal processors, 128 Mustard processors and 32 spice racks.

Additional benefits include the Ultimate "Stadius" modular Local I/O, with each of the three cards providing four Stadius mic pres, four Stadius line outputs and two bit-perfect AES I/O. On the back of each engine there are eight single or four redundant BNC MADI ports, word clock, AES sync and video sync inputs, dual USB 2.0 sockets, a SuperSpeed USB 3.0 socket, 4k DisplayPort overview out, a five-port 1Gbps network switch, dual DMI slots, a Waves SoundGrid port and Optocore inputs as standard, with space for an optional second Optocore loop.

The three 21.3-inch daylight bright screens reportedly ensure there will never be a situation where viewing is difficult. There are also three 19.2-inch dedicated meter bridge screens, three dedicated 6.8-inch control screens for bank and layer switching, and 69 1.3-inch worksurface screens, all of which are touch-sensitive for channel selects and solos, providing instant access and control.

www.digico.biz

Lawo powers up

LAWO HAS introduced the mc²36 xp as well as a host of upgrades to its Power Core software-defined DSP mixing engine and I/O gateway. Physically identical to the mc²36 MkII, the Lawo mc²36 xp desk is an addition to Lawo's audio production

mc²36 xp

console range. Supporting up to 256 DSP channels, the mc²36 MkII is without onboard processing and can share the DSP of a Lawo A__UHD Core with up to seven other virtual or physical console surfaces.

Available with 16, 32 and 48 faders, the mc²36 xp comes equipped with the same controls and touchscreens as the mc²56 and mc²96, while its onboard I/O is identical to the mc²36 I/O with 16 mic/line inputs, 16 line outputs, eight AES inputs and outputs, eight GPIOs and a local MADI port (SFP).

The mc²36 xp supports both 48kHz and 96kHz operation, immersive audio mixing and IP standards, including ST 2110, AES67/RAVENNA and ST 2022-7. It is a HOME native and offers production file compatibility with Lawo equipment across the mc² range.

Lawo has also unveiled the newest generation of its Power Core, the Power Core Rev3. The 1U Power Core platform is a scalable licence model which uses RAVENNA/AES67 networking; AoIP facilities built with Power Core can scale from simple on-air suites to bigger broadcast networks with thousands of audio channels.

Additional features in Rev3 include double the number of RAVENNA/AES67 ports with SFP; four ports can be used to expand I/O to as many as 512 RAVENNA/AES67 channels, or to provide LAN segment separations or LAN-WAN gateway applications in large-scale deployments. In addition, bidirectional Unicast RAVENNA/AES67 streams are now supported for wide-area applications, while the front panel benefits from a USB port and an SD memory card slot for easy software maintenance operations.

A GPIO expansion card provides eight GPI + eight GPO, along with two VCA inputs. This brings control features to the family of Power Core expansion cards, which include analogue, mic, AES3 and MADI, a Dante I/O card to interface with pro audio networks and a studio I/O card with two mic/line inputs, two line outputs and two HP outputs.

Power Core Rev3

New DSP capabilities include a loudness leveller, high-granularity EQ with extended "Q", a self-keyed side-chain filter for dynamics processing, de-esser with adjustable trigger frequency and support for up to eight AutoMix groups and 16 VCA groups.

The addition of BMCA-PTP grandmaster failover capability ensures constant master clock synchronisation, while Power Core Rev3 now supports Lawo's eight-slot audio

I/O extender (AIOX). Up to 20 AIOX devices populated with I/O cards can connect to a single Power Core, expanding the system I/O by 1,280 additional channels.

Consisting of scalable, dynamic broadcast and media production apps and microservices, the manufacturer has also introduced its next-generation, server-based processing platform. Designed for ease of configuration, Lawo's HOME Apps operate on standard on-premise, private data centre or public cloud servers and are controlled from the unified user interface of the HOME management platform. Preserving all the

settings for future use, HOME Apps can be spun up and down via HOME. The first four HOME Apps – Multiviewer, UDX Conversion with HDR processing, Stream Transcoder and Graphic Inserter – widen the pool of functionality from which operators can choose for their productions. The current platform supports SMPTE ST 2110 and JPEG XS, in addition to the NDI and SRT protocols.

www.lawo.com

Lavoce blends three further compression driver flavours

LAVOCE ITALIANA has introduced three 1.4-inch exit large-format compression drivers in the form of the DF14.300T, DN14.300TK and DN14.301T models. Continuing the manufacturer's Next Generation design approach, all three incorporate Integral Input Surface (IIS) phase plug technology. Each driver offers 110W AES power handling and exhibits low distortion characteristics with a linear frequency trend to 20kHz, complementing the N14.300T and DN14.30TK Next Generation models.

The DF14.300T includes a ferrite magnet and employs the same IIS phase plug design and a titanium diaphragm assembly used on the DN14.300T neodymium magnet, resulting in a sensitivity of 107.5dB. Together with a 1.2kHz recommended crossover point, the DF14.300T is suited for more competitively priced higher power systems.

DN14.300TK

Serving as an alternative to the one-piece DN14.300T titanium diaphragm version, the DN14.300TK enhances the neodymium 1.4-inch exit by adding a titanium diaphragm with a polyimide surround. The hybrid diaphragm assembly combination promotes a lower resonance. Measuring a 109dB sensitivity, the Italian designer insists that the DN14.300TK offers better control at lower frequencies around the crossover points.

Offering two different diaphragm configurations and performance flavours, the DN14.301T is a one-piece titanium diaphragm and surround version of the DN14.30TK hybrid diaphragm model. Both drivers record a 108dB sensitivity and a 120mm diameter for space-limited two- or three-way systems and line arrays.

www.lavocespeakers.com

NEXT-proaudio redesigns LAs118 for improved low-end output

A NEW version of the NEXT-proaudio LAs118A.v3 (active) and LAs118.v3 (passive) has been introduced by the Portuguese manufacturer that comprises a different internal construction (front-loaded) while its exterior is the same as the previous version.

The newer v3 version has been internally re-engineered – from hybrid-horn to front-loaded – to respond more effectively to lower frequencies. The optimised flare of the tuning port is said to reduce air compression and turbulence, especially at very high acoustic pressure levels. Although the average sensitivity of the new version of the LAs118 is a little lower than previously (approximately –0.4dB), the SPL level in frequencies below 50Hz is on average now 2dB higher. The v3 version will also use the new Power Module DPA2000.v3 which offers new advantages such as reduced fan noise with an internal fan, an increased heatsink efficiency due to

a front panel redesign, a higher humidity immunity due to the internal-only airflow, a USB connection and a higher grade heatsink protection paint. This new design and the dedicated presets were engineered to be compatible with the previous LAs118.

www.nextaudiogroup.com

LAs118

L-Acoustics ushers in future technology with L Series

FOLLOWING AN official launch at the Hollywood Bowl, L-Acoustics has announced the L Series with its patented Progressive Ultra-Dense Line Source (PULS) technology. The L Series comprises two elements that are designed to work together or on their own: the L2 above and the L2D below. One L2 or L2D element provides the same contour as four K2 elements in a format that is 46% smaller and 40% lighter. The audio benefits of the L Series encompass "industry-leading SPL per size, unparalleled consistency over the audience area and improved rejection elsewhere". Designed to reduce truck space and require fewer elements, the loudspeaker is housed in a smaller, lighter footprint for reducing load-in and load-out times.

Each element comprises eight 3-inch high-frequency elements and eight 10-inch low-frequency drivers, complemented by four side-loaded 12-inch drivers with front and back exits. The combination delivers high precision broadband coverage with a choice of cardioid or supercardioid patterns. The L Series also features the French manufacturer's Panflex technology, providing quick access to a choice of four horizontal directivity patterns: 70° or

L Series

110° symmetrical, or 90° asymmetrical on either side. Each L2 element includes four Panflex modules, while the L2D contains two Panflex modules on the top elements, and two fixed L-Fins progressing from 110–140° on the bottom elements.

With no inter-element angles, operating setup times are said to be greatly enhanced with the pin-less auto-lock rigging system and single cable connection. Green credentials of the L Series include 56% less paint, 30% less wood and 60% less steel. Adding to system efficiency, the L Series is driven by the latest LA7.16 high-resolution touring amplified controller, which supports the L2 and L2D with 16 channels of amplification and processing.

Integrating a touchscreen and an encoder wheel to set up initial parameters and a single SC32 connector on the rear for connecting loudspeakers, the LA7.16 powers any L-Acoustics line source array up to the K2. The LA-RAK III touring rack can house three LA7.16 amplified controllers comprising 48 amplification channels and 48 individual DSP channels in a 9U rack. In addition, there are two LS10 switches to support Milan AVB seamless redundancy.

Current amplifier technology is dimensioned to power all channels simultaneously over

LA7.16

extended periods of time. However, in real-world applications, the LA7.16 amplified controller technology reportedly delivers power more efficiently and uses energy more effectively. The LA7.16 uses the L-SMART suite of power management technologies to mix and match any L-Acoustics loudspeaker onto one amplifier. Adopting proprietary predictive and modelling algorithms, L-SMART manages the power supply unit (PSU) and the individual amplification channels. Hardware sensors within the amplifier supply real-time information, which is analysed by the DSP to dynamically match the loudspeaker system's needs. The PSU then provides extremely high short-term peak power, or lower power over longer hold times. The power is delivered intelligently to the advanced Class-D output stages, assuring optimum system performance at all times.

www.l-acoustics.com

Wharfedale Pro stays on track with Isoline-AX

WITH THE development of the Isoline-AX series, Wharfedale Pro has launched an active column audio solution. Serving as upgrades to previous Isoline loudspeakers, the portable Isoline-AX series consists of two models with differing subwoofer sizes and array configurations. Integrating new features, the Isoline-AX510 and Isoline-AX912 consist of interlinking 10- and 12-inch subwoofers respectively that directly couple with standing columns featuring mini-EVO-Fold waveguides mounted onto their high-frequency sections.

The AX510 column incorporates five 3-inch drivers and a single 1-inch compression driver, and the higher-powered AX912 is equipped with nine 3-inch drivers and dual 1-inch compression drivers. The rear panel of the subwoofer incorporates line, microphone, USB-drive and Bluetooth inputs and, as such, reduces the requirement for an external mixer. Providing enhanced control over horizontal coverage, the column can be rotated by ±15%. In addition, two Isoline-AX arrays can be paired wirelessly using TWS technology, for enhanced scalability and sound coverage. High and low EQ knobs offer ±9dB of control.

www.wharfedalepro.com

Isoline-AX510 and -AX912

QSC introduces Intelligent Active Loudspeakers

DESIGNED FOR applications ranging from portable, plug-and-play setups to networked, high-tech AV productions, QSC has developed the intelligent, active L Class loudspeakers. The L Class incorporates high-output amplification, DSP, premium components, extensive system intelligence and an intuitive user interface.

Onboard Dante connects the next-generation L Class to networked AV systems and connected stages. The two-way LA108 8-inch and LA112 12-inch active line array loudspeakers are complemented by the LS118 single 18-inch active subwoofer.

Two-way technical innovations include a QSC LEAF (Length-Equalised Acoustic Flare) waveguide and an ergonomically designed and single operator QSC RapidDeploy rigging system. QSC AWARE (Automatic Wireless Array Recognition) system intelligence provides one-button single box or full array intelligence and optimisation.

The LS118 active subwoofer's onboard DSP further optimises and protects system performance. Two LS118 units can be arrayed in a cardioid arrangement to maximise low-frequency output in front, while minimising unwanted energy around the sides and rear.

DEEP mode provides additional low-frequency extension and driver excursion processing. When deployed with other QSC loudspeakers, QSC Acoustic Linear Phase (ALP) design provides cohesive phase response. Both line array loudspeakers can be deployed using dedicated array frames, ground-stacked or mounted in one of two pole cups using loudspeaker stands or poles of various lengths. The LS118 can be deployed in both horizontal and vertical orientations in a ground-stack configuration or using one of its two pole receptacles. All three models feature daisy-chain connections for analogue and digital audio.

The QSC SysNav (System Navigator) app for Windows and iPadOS can be downloaded for designing, configuring, controlling, monitoring and applying signal processing to individual loudspeakers, full arrays or groupings of both. Additionally, the AIM (Array Installation Modeling) prediction tool visualises array coverage by positioning virtual loudspeakers and arrays in a scaled, graphical model of a space.

www.qsc.com

Genelec unveils the 8381A SAM

AS PART of its 45th anniversary year, Genelec has unveiled the 8381A Smart Active Monitoring system, a flagship, floor-standing Adaptive Point Source design that is said to bring together precision and envelopment with LF control, huge headroom and high-resolution imaging. Designed for high-end music recording, mastering and audiophile listening, the 8381A is a full-range monitoring solution that can reportedly adapt to any acoustic environment. For audio professionals, the 8381A produces accurate full-band mixes that translate consistently to other rooms and playback systems, while audiophiles will experience "every detail and nuance of a musical performance".

As a member of The Main Ones range, the 8381A system is acoustically coaxial right down to bass frequencies, and draws on proven technology developed for Genelec's The Ones family of point source monitors and the W371A Adaptive Woofer System, which can be combined to create a free-standing, full-range monitoring system. However, the 8381A also offers controlled directivity and uncoloured response both on- and off-axis, with an ultra-wide frequency response spanning from 20Hz–35kHz. It comes with almost 6kW of amplifier power and a maximum SPL of 126dB.

At the heart of the 8381A is a proprietary high SPL Minimum Diffraction Coaxial (MDCTM) midrange/tweeter driver. This MDC driver shares a common acoustical axis with the 8381A's four complementary 5-inch dome drivers which are arranged as a midrange transduction system, while the forward-facing 15-inch woofer is said to provide stable directivity, control and coherence.

A pair of high-performance 15-inch woofers employ the LF adaptive technology originally developed in the W371A, which, according to the manufacturer, offer high resolution and supreme levels of low-frequency control – despite the effects of room acoustics. This technology allows the 8381A to tailor performance carefully to the room, offering flatter, smoother in-room response at the listening location, with LF imaging coherent with the full audio range. This flat and neutral LF response minimises acoustic notching, and reduces detrimental reflections and resonances by the walls, ceiling or floor of the room.

As part of Genelec's Smart Active Monitoring family, the 8381A integrates with Genelec's GLM software, which can configure, calibrate and control entire Genelec smart monitoring systems. GLM minimises the listening room's influence on the sound, enabling the user to produce mixes that translate to other systems, whether the format is stereo, surround or high-channel count immersive. GLM also includes the GRADE room report feature, which gives the user a complete analysis of their room and monitoring system performance, providing specific observations and advice on any acoustical issues, helping users and studio designers alike to fine-tune the room's acoustic treatment, adjust monitor and listener positions, and optimise bass management.

www.genelec.com

Martin Audio unveils FlexPoint portable series

MARTIN AUDIO'S FlexPoint portable series targeting the rental market has been released, alongside new SX subwoofer and DX controllers. Described as setting a new benchmark in performance and versatility for compact, standalone loudspeakers, the FlexPoint models feature passive two-way configuration to reduce running costs and amplifier count while promising "the very highest quality sound to match the expectations of prestige venues and top-flight touring artists".

The FlexPoint series comprises five models, with highly flexible deployment covering a range of professional applications, from live sound reinforcement, theatre sound and corporate AV to distributed sound systems and immersive environments. Spanning the miniature FP4 to the more powerful FP15, FlexPoint loudspeakers promise clarity, detail and coverage at all sound levels without affecting sightlines or detracting from venue architecture.

FlexPoint's coaxial point source technology has been pushed further by incorporating a two-stage waveguide within the magnet structure. This maintains wide constant horizontal coverage out to very high frequencies, while the perimeter of the cone acts as the horn mouth, enabling pattern control to a lower frequency. Drivers can also be rotated without the need for any tools, increasing their deployment options and ease-of-use out on the road.

FlexPoint Systems can be used in conjunction with SX series subwoofers to extend low-frequency performance and impact. The SX Series itself has been expanded with two new models. The SX115 is a single 15-inch subwoofer and the SX215

FlexPoint

is a double 15-inch subwoofer – both models allowing for pole-mounting of a FlexPoint system. This means that the SX series now comprises a single and double 10-, 12-, 15- and 18-inch as well as a cardioid 15- and 18-inch and the hybrid horn/reflex-loaded SXH218.

For the optimum sound performance, Martin Audio iKON amplifiers with onboard DSP are recommended for FlexPoint Systems. However, and primarily for larger installations, Martin Audio VIA amplifiers in conjunction with a DX4.0 system controller are compatible. For smaller installations utilising the FP4, FP6 and FP8, a combination of VIA amplifiers and the newly announced DX0.4 or DX0.6 controller are said to be a cost-effective option. The DX0.4 is a two-in/four-out controller, while the DX0.6 is two-in/six-out.

Additionally, the company has announced a major update to DISPLAY 3 3D prediction

SX115 and SX215

software featuring a new sub array tool as well as a host of additional features and workflow improvements. The sub array tool enables the rapid design of ground-deployed linear arrays of subwoofers. In this version, two sub array types are supported with "Broadside Stack" and "Castellated" configurations. For Broadside Stacks, any sub loudspeaker can be selected, while for Castellated scenarios only subs which have cardioid settings available can be utilised. The Beta 5 release also includes an early version of a tool to display the frequency response at any position on a surface, flown deployments of Martin Audio's latest product TORUS 8, a new control in the Loudspeaker Property Inspector to optionally constrain aiming angles to those available for the pin locations in the lift bar, default speaker insertion heights and the inclusion of BlacklineX point source and subwoofer solutions.

www.martin-audio.com

NIMBO Series

Sound to be seen

Unique design   Made in Barcelona   Easier installation

Ready for outdoor applications   Top-notch audio performance

ecler.com/nimbo

1 SOUND adds the LF44 to its Tower Series

THE TOWER LF44 is the latest product to join 1 SOUND's catalogue, furthering the application possibilities of the Tower Series. The LF44 is a low-frequency column array loudspeaker, meant to perform with the Tower LCC44 or LCC84 as a low-frequency extension. The LF44 has the same construction and look as the LCC44; therefore, all the LCC44 accessories are applicable to the LF44. It can be deployed in a flown array with the LCC44 and LCC84 or can be wall mounted independently. The unit consists of four high-powered, low-frequency drivers, and has a bandwidth of 70–200Hz (–6dB preset depending). It uses an independent amp channel with proprietary DSP. Like all other 1 SOUND speakers, the LF44 is IP55 and saltwater resistant with custom colours available. Power is 560W (continuous) or 280W (AES). The speaker provides 8Ω impedance and comes with four NL4 connectors, each allowing for audio inputs and linking.

Designed for medium and large-scale installations and live audio applications, 1 SOUND has also developed the Contour CT212. Capable of delivering a maximum SPL of 145dB, the latest addition to the Contour Series is a horn-loaded, three-way passive loudspeaker. The point source enclosure comprises dual 12-inch cabinets and a 4-inch coaxial with a 2-inch mid-high compression driver. Capable of maintaining constant directivity down to 200Hz with a bass response down to 55Hz (–6dB preset

LF44

dependent), the speaker maintains its directionality in the far field with a controlled 100° x 50° dispersion. Equipped with eight M5 and four M6 rigging points, the Finnish birch enclosure is finished in a UV-resistant polyurea coating in black, white or custom colours and fabrics. Weighing 41.6kg, the IP55-rated and saltwater-resistant CT212 can be flexibly installed courtesy of the 316 stainless steel accessories available.

Contour CT212
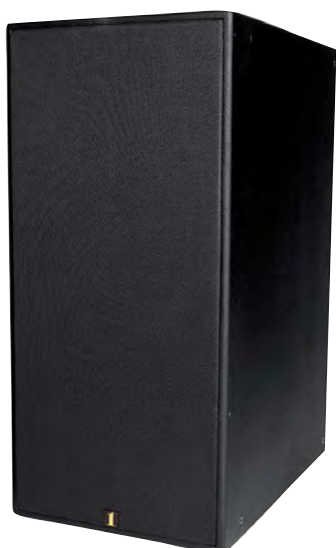
The SUB215 is a fast-responding, deep bass subwoofer with a "clear and punchy" upper bass, capable of producing a maximum SPL of 140dB. The cabinet is equipped with two 15-inch low-frequency drivers with the latest tetracoil technology. It measures 17.8 inches when deployed either horizontally or vertically. The SUB215 can be specified as a completed system using the pole cup accessory which allows users to deploy the CT28 with a 1 SOUND Active Tube or mount any other satellite on top. In addition, it has proprietary rigging points in order to attach a Tower Rigging System, fit for stacking the Tower LCC44 or LCC84 on top. Like all 1 SOUND loudspeakers, the SUB215 is IP55-rated and saltwater-resistant with custom colours and finishes available.

SUB215

www.1-sound.com

DAS Audio scales from LARA to SARA

DAS AUDIO has expanded its flagship ARA series with the addition of the SARA ultra-compact line array system. Capable of delivering a linear performance of 138dB maximum SPL and wide dynamic range, SARA is suited towards medium-sized installations and events.

The SARA's symmetrical design incorporates two customised 8-inch loudspeakers for mid and low frequencies and a compression driver coupled to a 100° horizontal dispersion waveguide for the high frequencies. The internal Class-D four-channel amplifier provides 3,000W RMS of power. Two channels are used in bridge mode to power the compression driver, and the remaining two are used to power the 8-inch woofers. The three-point captive rigging system can be used for both the SARA and SARA-SUB, which can accommodate arrays with 24 SARA and 16 SARA-SUB flown units. Significantly reducing assembly time, the Fast Set Splay (FSS) system allows angles to be adjusted in 1° steps from the stacked position.

In addition to the SARA's features, the ARA series includes a four-band HOS, atmospheric correction, 1,024 taps for DASaim (FIR filters) and a delay of 280m or 823ms per cabinet. The NFC technology used for self-positioning the systems within an array can be configured within the ALMA software and an internal microphone checks the status of all the components. Weighing 34kg and housed in birch plywood, the SARA 100 module justifies its compact criteria with 265mm x 655mm x 515mm dimensions.

Complementing the SARA line array, the SARA-SUB enhances the low-frequency response down to 35Hz (–10dB). The subwoofer integrates 18- and 15-inch neodymium transducers with 4- and 3-inch voice coils respectively. Fixed in a cardioid configuration to reduce rearward radiation and to focus bass energy on the audience results in up to 14dB reduction in the rear dispersion. The SARA-SUB's built-in Class-D amplifier has

SARA

four channels in bridge mode for each of the speakers and includes a switch-mode power supply.

ARA's hardware features and ALMA's software tools combine to offer control and customisation of sound reinforcement systems. With IP communication, the ARA system can be monitored and EQ settings can be configured in real time. Sharing the same tonal balance, coverage, phase and frequency response as the LARA, the SARA can accompany the LARA for delays, side fills and front fills in a venue.

www.dasaudio.com

Oceanway Audio unveils the S15A powered subwoofer

AMERICAN MANUFACTURER Oceanway Audio has taken the wraps of its latest innovation, the S15A subwoofer. Designed by audio innovator, product designer and Grammy award-winning producer Allen Sides, the S15A is said to be perfect for recording and mixing

applications, and suitable for a range of listening environments where low-end loudness with power and definition is key.

With a single 15-inch low-frequency driver capable of handling up to 3,400W, the S15A features an internal 1,200W amplifier, resulting in a "spectacular" bass response with a frequency range of 28–120Hz, capable of handling a maximum of 128dB SPL. On the rear panel, in addition to stereo balanced XLR inputs and outputs, the subwoofer features a full set of controls, including gain, low-frequency adjustments, crossover and delay, making it suitable for integration into almost any audio environment. A trigger input/output is also included in the design to maximise power conservation and other applications.

www.oceanwayaudio.com

EAW builds on Radius line of speakers

FEATURING OPTILOGIC technology, the NTX210L from EAW is said to provide effortless array optimisation to get users up and running faster and with fewer opportunities for error, as each array communicates with surrounding modules using proximity sensors. Resolution 2 software provides system optimisation from anywhere in the venue, plus intuitive room design and prediction in a single, comprehensive application, while the Isophasic waveguide ensures each array provides pristine sound to every seat. The NTX210L additionally boasts 1,600W of power to satisfy large audiences in a medium-format, compact system.

The speaker and its accessories have been designed to support medium and large outdoor events, houses of worship and other live event venues. It has a frequency response of 55Hz–18kHz and has a maximum SPL of 140dB. DynO Dynamic Optimization actively tracks input spectrum and power delivery,

27kg, the KF210 is a suitable option for small crews operating out of medium or large outdoor festivals, corporate events, houses of worship, performing arts centres or theatres. The cabinet houses dual, symmetrically placed 10-inch woofers, delivering 90° horizontal bandwidth, and a 3-inch voice coil compression driver mounted to the manufacturer's patented Isophasic waveguide. Frequency response is 55Hz–18kHz.

The heavy duty polyuria epoxy protects the cabinet's Baltic birch wood construction from visible wear, while its IP55 rating means the KF210 can handle any weather an audience is able to withstand.

EAW has also added accessories to support its AC6 two-way, full-range ADAPTive column loudspeaker, including a pole mount, stacking plate and stinger offerings. Suitable for production companies and partners, the accessories increase loudspeaker portability, allowing

continually maximising output and fidelity at any drive level. Other features include integrated Dante networking (with loop-thru), as well as analogue redundancy capability.

The manufacturer has also unveiled the KF210 two-way dual 10-inch line array cabinet. Offering a max SPL of 141dB, in addition to three-point rigging and built-in weather protection, the KF210 is medium-format passive line array designed to support a wide range of applications in a small package.

Despite its diminutive form, the manufacturer states there has been no sacrifice on output. Weighing approximately

for ease of travel and the expansion of its mounting options. All three accessory options are said to create an enhanced user experience for production companies. Pole mounting and stinger accessories ease mobility of the loudspeaker, enabling users to take the AC6 anywhere on the road for demo tours, live events and more. Additionally, with a stacking plate, two AC6 loudspeakers can now be combined, allowing for the movement of multiple speakers as a single unit.

www.eaw.com

Bosch steps up security

DESIGNED TO provide high-quality sound and flexible integration for video security and public address applications, Bosch has announced the launch of its IP-based horn loudspeakers and amplifier module. The high-output LHN-UC15L-SIP horn (for long-throw applications), the compact LHN-UC15W-SIP horn (for wide-angle coverage) and the AMN-P15-SIP amplifier module support both two-way VoIP communications via SIP as well as pre-recorded/automated messages.

The 15W Class-D amplifier module is designed for direct connection to passive loudspeakers or via line-out to an external amplifier, serving as a bridging device to add VoIP/SIP capability to existing public address systems. The horns are each equipped with a built-in Class-D amplifier also delivering up to 15W and can be integrated directly into existing SIP-capable systems for use as VoIP/SIP endpoints. The horns and the amplifier module both support PoE.

Pre-recorded messages can be instantly activated using camera detection with Intelligent Video Analysis (IVA), while VoIP/SIP capability makes it possible to channel live speech from a central control room – either one-direction or two-way talkback utilising the horn's built-in condenser microphone.

The horns and amplifier module offer a range of features for flexible integration, including remote configuration via a web-based GUI; Bosch Alarm Task Script Language (ATSL) support for direct camera integration; internal storage for pre-recorded messages; third-party integration via easy-to-use HTTPS REST API; GPIO for generic third-party integration; audio line-in to support live speech from other devices, such as the audio line-out of a camera; remote health/self-testing; and onboard DSP.

www.boschsecurity.com

Lynx Pro Audio unveils KR series

DESCRIBED AS an ideal solution for conference and KTV rooms, Lynx Pro Audio has introduced the new KR series, a line of passive two-way loudspeakers specially designed for installations where high volume is required while delivering vocal clarity with low distortion.

The two full-range models belonging to the KR series feature two-way passive 10-inch and 12-inch versions, with a 1-inch driver mounted on a 90° x 60° rotatable horn. Beyond conference and KTV applications, the cabinet is suitable for use in houses of worship, as well as nightclubs.

The double port located at the rear of the enclosure creates increased bass frequency response. When installed close to a wall, this creates a reflection that extends the
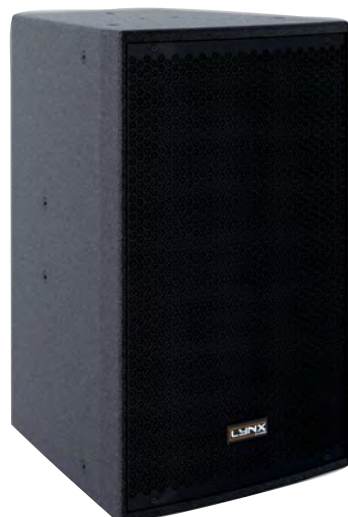
low-frequency response of the system, creating an extra bass boost. The cabinets are constructed from MDF and coated in high-resistant polyurea paint, giving them greater durability. A wide range of dedicated accessories allows the installation of these loudspeakers in all types of setups: ceiling or wall-mounted, on a speaker stand or as a satellite with a subwoofer.

Although the KR series can be used without a processor, the manufacturer recommends that the cabinet presets are applied for maximum optimisation and performance. These presets are available on the full range of ARK processors and on the brand's amplifiers with built-in DSP.

www.lynxproaudio.com

Celestion heads into deep space with PowerProX18

INCORPORATING AN advanced voice coil that has been designed to reduce power compression, Celestion has launched the PowerProX18 subwoofer. The 18-inch subwoofer features an advanced cooling design that reportedly enables its voice coil to run 20°C cooler than comparable drivers in the same class. In addition to reducing heat-related stress on the 4-inch glass-fibre voice coil former and other thermally sensitive parts, there is also a reduction in the temperature-related rise in coil resistance that causes power compression.

Providing additional driver performance and durability, advanced adhesives are used, and the glass fibre-loaded cellulose cone is weatherproofed both on the front and the rear.

With a nominal impedance of 8Ω and 1,200W nominal (AES) power rating, the sensitivity is measured at 97dB (1W@1m in 2π space). The cone's polysiloxane-laminated dual suspension contributes to the Bl (motor force) curve exhibiting an improved cone displacement symmetry, added stability and reduced distortion.

The aluminium demodulation ring reduces the inductance (Le) of the motor circuit (1.61mH @ 1kHz) and a lower power compression. The ring also reduces harmonic distortion as the voice coil and cone move in the gap towards either pole of the magnet.

CF18PPX

Operating within a frequency range of 35–1,000Hz and weighing 13.2kg, the PowerProX18 is suited to large subwoofer applications.

The company has also unveiled the TFX0412 4-inch ferrite magnet coaxial driver, which features a rigid pressed steel chassis and 1.25-inch diameter (LF)/1-inch diameter (HF) copper clad aluminium voice coil. The TFX0412 is described as a very cost-effective addition to the company's well-established series of coaxial units, for applications requiring compact, discreet sound reinforcement such as ceiling speakers and cinema audio.

The TFX0412 features a fully combined LF loudspeaker and HF compression driver which are powered by a common magnet motor assembly, with the same magnet used for both the LF and HF elements. This enables the voice coils and hence the acoustic centres of the two transducers to be brought as close together as possible, delivering improvements in signal coherence and time alignment. With the delivery of both low- and high-frequency signals from the same chassis, the TFX0412 offers a combined frequency response of 90Hz–20kHz (a crossover is required.)

The TFX0412 features a polyimide film HF diaphragm and employs Celestion's next-generation Sound Castle soft clamping assembly which decreases operational stress on the diaphragm. Both HF and LF voice coils are edge wound using copper clad aluminium. Also included is a demodulation ring that minimises the effects of power compression, as well as reducing the harmonic and intermodulation distortion that is commonly associated with voice coil displacement.

In brief, the manufacturer has added its Neo Creamback speaker to its collection of Dynamic Speaker Responses (DSRs) available for use with the company's SpeakerMix Pro plugin. Captured in digital form as DSR, the Neo Creamback was recorded by Celestion engineers using the same techniques as its other IRs and DSRs, with three pro-quality studio microphones: a Shure SM57, a Royer R-121 ribbon mic and a Sennheiser MD421.

TFX0412

www.celestion.com

HH Electronics amplifiers head to the Multi-Zone

WITH THE launch of its MZ Series, HH Electronics has created a range of high-performance, multi-zone install zone amplifiers and wall controllers. At the heart of the range is the Origin multi-core processing platform. Based on 56-bit floating point precision to control input routing, level controls and EQ settings, no digital artefacts are produced, and headroom is enhanced. Zone limiting can be configured for mixing and matching both Hi-Z and Lo-Z speakers. Designed for continuous usage while lowering energy consumption, Origin's Eco power saving reduces power consumption to less than half a watt in standby mode.

Three 1U rack-mountable amplifier models are currently available. The two-zone MZ-140D features two individual 140W RMS Class-D amplifiers; the MZ-140Q is a four-zone, 4x 140W model; and the MZ-280Q is a higher-power, four-zone, 4x 280W amplifier that can be configured to run in either 70V/100V or at minimum 4Ω impedance.

MZ Series

All three amplifiers are equipped with front panel controls for volume, two-band EQ and source select per zone. The five flexible input channels come with a front panel mounted gain trim control and dual combi microphone inputs allow two individual mics to be connected simultaneously, both with auto and manual priority modes. Front "scribble" strips allow the installer to easily identify each zone and input identification. A dedicated fire/emergency input overrides the system when required.

The range also includes a four-zone control pre-amplifier. The MZ-64P is equipped with five input channels for direct audio control. The amplifiers and pre-amp are supported with wall panels to enable remote control over input source and volume. Available in both US/EU formats, the controllers are finished in both black and white.

www.hhelectronics.com

Work Pro's Fantastic Four

SPANISH AV manufacturer Equipson has expanded its Work Pro brand with the introduction of four multipurpose amplifiers. The Synthea Series offers a variety of configurations with a range of different channel and power output options. Their fully integrated DSP can be controlled via TCP/IP, GPIOs and S/PDIF in/out, making it straightforward to link multiple amps in a larger installation. The range also has built-in WAP to provide web-based adjustment of parameters, such as EQ and level, enabling system configuration from any device.

Designed for smaller sound systems, the Synthea 2125 offers two channels with 125W of power per-channel, while the Synthea 2500 also provides two channels but with a higher power output of 250W per-channel.

For sound systems that require multiple speakers, the Synthea 4125 provides four channels of 125W each, or two channels of 250W. The range is completed by the Synthea 4500, which provides four channels of 500W each or two channels of 1,000W for large venues where a high volume and powerful sound are required.

Synthea 2125

www.workpro.es

NEXT Audiocom introduces the A504DSP

PORTUGUESE MANUFACTURER NEXT Audiocom has unveiled the A504DSP which combines a lightweight, 4x 500W (2x 1,000W) amplifier with a powerful DSP engine that can be configured to suit a wide range of tasks, without the need for additional equipment, to drive a wide range of loudspeaker systems. The close integration of processing and amplification allows the DSP to monitor and better adapt to amplifier behaviour, reportedly making dynamics processing far more accurate and effective than that typically achieved with separate components.

The A504DSP has been designed for both touring and installation. The DSP engine is controlled by a built-in OLED screen with an encoder – eliminating the need for outboard loudspeaker processors – or by a PC, and comes with input/output routing, high- and low-pass filters, parametric EQ filters, compressors/limiters, noise gates and alignment delays.

NEXT Audiogroup has released its Audio Configurator, which aims to streamline the process of choosing NEXT Audiocom products for any installation. With its user-

A504DSP

The A504DSP flexibly distributes the total amplifier power in various combinations across four, three or two outputs to drive, for example, four full-range loudspeakers or subwoofers, a high-power subwoofer and two full-range loudspeakers, a high-power subwoofer and a biamplified speaker or a high-power full-range loudspeaker and a high-power subwoofer.

friendly interface, the Audio Configurator eliminates the need for technical expertise, allowing anyone to easily configure and customise the ideal audio system. The tool uses audio packs to generate tailored audio product packs that are optimised for each installation.

www.nextaudiogroup.com

Tasker combines DMX and power

THE DEMAND for products capable of integrating several services into a single cable is on the rise again, particularly combi-cables that are made up of one or more cables and are used for digital audio and DMX protocol with power. This solution can be used in a variety of applications, including wiring active loudspeakers and managing moving heads.

Tasker offers a wide range of products with one or more 2x0.22mm² DMX digital audio cables, starting with the TSK1048, which consists

of a DMX cable and a 3x0.75mm² power supply, and the C283, which is made up of the same DMX cable but with a 3x1.5mm² power supply. The C283 comes in different types of sheaths for a variety of installation types, but the most popular is the extra soft PVC, suitable for short distances.

Building on this, Tasker also manufactures products with two DMX cables plus power supply. The C284 and C290 combine, respectively, a power supply of 3x1.5mm² and 3x2.5mm². Finally, the C294 cable, the largest of the family, is made up of four DMX cables with double shielding, aluminium foil and tinned copper braid and a 3x2.5mm² power cable.

www.tasker.it
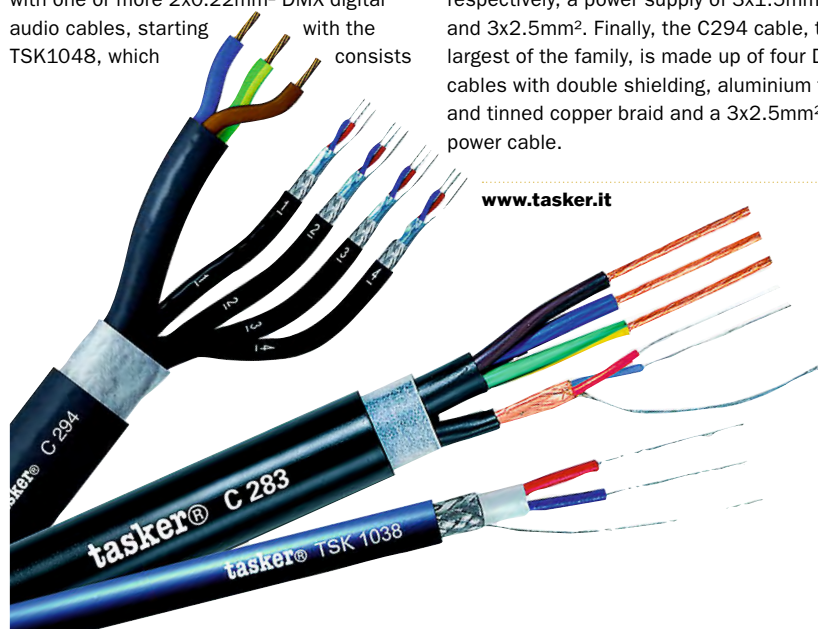
The art of broadcasting

WHEATSTONE HAS introduced the Audioarts Voice1 processor to "bring out that larger-than-life broadcast voice in anyone". Voice1 features peak vocal performance across the entire vocal range, not just male voices, with no undesirable colouration added. Voice1 uses Super Quiet mic preamps and high-quality 24-bit A/D converters. Voice1 is a WheatNet-IP audio network device similar to its four-channel counterpart, the M4IP-USB, with routable I/O and logic control.

Designed to transform highly compressed source music into a more dynamic listener experience, Wheatstone has also released the Audioarts Lion FM/HD audio processor. Measuring a half-rack size in width, the FM/HD audio processor utilises Wheatstone's next-gen multiband AGC and limiting/clipping algorithms. The processor includes stereo enhance, RDS and Wheatstone SystemLink for transporting the entire MPX and HD audio signals, including RDS, to maintain FM/HD alignment across any high-speed data link.

SystemLink is a composite FM megaplexer for today's high-speed data links. At 24-bit resolution, SystemLink

makes it possible to get across the detail necessary for high-quality audio. This 24-bit digital MPX and HD audio megaplexer also uses RIST, the open-source transport protocol, for reliable, real-time audio transport along with error correction at the lowest possible latency. With fibre optic, 5G and other high-speed connections becoming more common, SystemLink is described as an important part of today's studio-to-transmitter link. By packaging the whole MPX payload for transport over high-speed data links from cloud data centres to the transmitter site, SystemLink also forms an important piece of the "audio processing in a cloud" puzzle. It can be used with any audio processor, including Wheatstone's flagship X5 FM/HD audio processor, MP-532 multiprocessor and new Lion FM audio processor. SystemLink is part of the Layers Software Suite as the MPX output of the Layers FM module, which includes multiband processing, PPM watermarking and full RDS capabilities as instances in an onsite server or offsite at cloud data centres.

www.wheatstone.com

KLOTZ OT234YS boasts both low attenuation and flexibility

KLOTZ HAS begun supplying the new PD7 Pro Digital series of cabling which features the high-quality OT234YS low-loss cable for AES/EBU and DMX signals. The double-shielded OT234YS has a large conductor cross-section of 0.34mm² (AWG 22/7), making it suitable for professional applications thanks also to a durable PVC jacket. The connectors available include either XLR 3p. or XLR 5p. plugs by KLOTZ or Neutrik.

According to the manufacturer, the robust yet flexible cable has a particularly low signal attenuation, which is due to the generous conductor cross-section and low capacitance. This makes it ideal for long distances and transmitting digital signals such as AES/EBU and DMX, as well as analogue microphone and line audio signals, easily and stably. Two shields protect against noise.

The cable's black PVC jacket, which has an outer diameter of 6.7mm, is suitable for a temperature range of –20°C to +70°C and gives the cable a pleasant flexibility despite its solid conductor cross-section

and double shielding. Both cable ends are also equipped with transparent heat-shrink sleeves for free labelling. The PD7 Pro Digital cables are available in lengths from 1–50m with the six-fold KLOTZ quality control according to ISO 9001:2015.

www.klotz-ais.com

Sennheiser unleashes Profile USB for plug-and-play users

DEVELOPED SPECIALLY for streamers, podcasters and gamers wishing to fully focus on their content, Sennheiser has launched the Profile USB microphone. The side-address microphone is available as a table stand version and as the Profile Streaming Set with a three-point self-locking boom arm. Consisting of the KE10 condenser capsule, the cardioid pickup pattern of the condenser provides attenuation of sound coming from the rear, ensuring the streamer's voice is in focus.

Front features include a soft touch, together with a no-noise mute button, a gain control for the microphone volume, a mix control to set the balance between the voice and the computer audio, plus a volume control for headphone monitoring. Headphones or earphones can be connected via a 3.5mm socket at the rear of the Profile USB microphone.

LED rings on the Profile signal the operating status. The Profile USB is ready when the LED ring around the gain control is green but, when the same light ring turns yellow, the mic is clipping,

Profile USB

indicating that the mic volume needs to be lowered. When the microphone has been muted, light rings are activated around the mute button and the gain control lights up red.

Powered via USB-C connection, the metal Profile can be tilted for optimum positioning, with the self-locking joint ensuring the mic stays in position. Connectors on the bottom allow the mic to be used with third-party table stands. Ideal for any on-camera applications, the set comes with a three-point, self-locking boom arm and includes integrated cable management.

Having addressed the challenge of bringing spatial immersion to streaming customers with stereo devices, Sennheiser's AMBEO 2-Channel Spatial Audio renderer for live broadcasting has launched. The live renderer transforms standard multichannel surround and immersive formats into two channels of audio in real time. Patented controls, adapted for use in a broadcast environment, allow for fine-tuning of spatialisation settings to maintain mix integrity and dialogue intelligibility.

www.sennheiser.com

How to clip and sound great with RØDE's Wireless ME mics

RØDE'S WIRELESS ME is an ultra-compact wireless microphone system with broadcast-grade omnidirectional microphones built into both the transmitter and receiver for dual-channel recording. The manufacturer says the Wireless ME has been designed to be easy to use; the 44mm x 45.3mm x 18.3mm transmitter and receiver clips are said to connect seamlessly to cameras, smartphones, tablets (iOS and Android) and computers (Mac and Windows). They use RØDE's Series IV 2.4GHz digital transmission to provide recording over a 100m range, and utilise Intelligent GainAssist technology to automatically control audio levels. The company has added the ability to connect an additional transmitter for capturing three microphones simultaneously, and the units work with all social media apps, including Instagram and TikTok.

The Wireless ME is also compatible with RØDE's video and audio apps, including the RØDE Capture iOS camera app for dual-camera video recording, and all RØDE Series IV Wireless Systems. The mics have a frequency range of 20Hz–20kHz, a dynamic range of 100dB and an SPL of 122dB maximum. The Wireless ME has a TRS lavalier microphone input and a 3.5mm TRS USB-C output connection, while the internal rechargeable lithium-ion battery has an operating time of seven hours.

The Streamer X from RØDE Microphones combines a professional audio interface and video capture card in a "compact, easy-to-use" console. It features studio-grade audio inputs for XLR and line-level devices, headsets and RØDE wireless microphones, with an ultra-low noise, high-gain Revolution Preamp and APHEX audio processing. It also offers 4K30/2K60 streaming and up to 2K120/4K60 pass-through for high-quality video in a wide variety of applications, from streaming and gaming, to podcasting and content creation, to business presentations. Two USB-C connections accommodate dual PC setups, and four customisable SMART pads allow for on-the-fly triggering of sound or voice FX and other actions on a computer. It is also fully compatible with RØDE software

solutions, including UNIFY, RØDE Central and RØDE Connect for expanded functionality and flexibility.

The RØDECaster Duo is a compact, all-in-one audio production solution for podcasters, streamers, musicians and content creators. It offers the same feature set as the revolutionary RØDECasterPro II, with the same high-power quad-core audio engine, Revolution Preamps, APHEX audio processing and customisability.

The PodMic USB is a versatile, broadcast-grade dynamic microphone for podcasting, streaming and content creation. It offers the same sound quality and compact yet rugged form factor as the PodMic, but comes with XLR and USB connectivity. Featuring the recently released NT1 5th Generation, the PodMic USB includes a Revolution Preamp and high-quality analogue-to-digital conversion, advanced DSP for adding professional APHEX voice processing to any recording, and compatibility with smartphones and tablets for use on the go.

Firmware updates have also been released for the Wireless GO II and RØDECaster Pro II. The Wireless GO II now features the ability to save on-board recordings as WAV files for easy transfer to a computer on the go and start/stop on-board recordings using the transmitter and receiver power buttons, as well as new camera models added to the camera preset feature. Wireless microphone connectivity has been added to the RØDECaster Pro II. Users will also be able to connect any RØDE Series IV wireless transmitter – including the Wireless GO II and Wireless ME – for recording wireless audio directly to the RØDECaster Pro II.

www.rode.com

Jabra evolves with new hybrid working headsets

JABRA HAS expanded its Evolve2 range with new headsets built for ultra-flexible hybrid working. The Jabra Evolve2 65 Flex, Evolve2 55 and Evolve2 50 are engineered for ultra-flexible hybrid working and intended to enable professionals to take calls and meetings no matter their environment. Additionally, they have optimised sound for professional use and music, so there is no need to switch headsets when it is time for a break.

The Jabra Evolve2 65 Flex has a unique fold-and-go design with a collapsible hinged headband and slimmed-down earcups, and comes with a soft sustainable pouch. Users can reportedly be heard clearly, even in loud locations, thanks to a powerful chipset, advanced digital algorithm and beamforming Jabra ClearVoice microphones. The chipset and noise-cancelling technology delivers hybrid Active Noise Cancellation (ANC) and close-fitting memory foam earcups help seal even more of the surroundings.

The headset has a 360° busylight, a shorter hide-away boom arm and it is certified for all leading virtual meeting platforms, like Microsoft Teams, Google Meet and Zoom. It promises up to 32 hours of music time

and up to 20 hours of talk time with ANC/busylight off.

ANC is the main feature of the wireless Evolve2 55 and cabled Evolve2 50. The headsets are built with ANC that has a unique acoustic chamber design, 28mm custom speakers, a specially designed chipset that powers speech separation and two premium

noise-cancelling microphones. Both products are certified for all leading virtual meeting platforms, like Microsoft Teams, Google Meet and Zoom, all the while providing a comfortable fit with the Jabra Air Comfort technology.

www.jabra.com

The power of eight

THE BP3600 immersive audio microphone is the latest addition from Audio-Technica, a broadcast audio tool capable of capturing stable, three-dimensional sound beds at sporting events, concerts, festivals and movie sets. The microphone houses eight compact capsule assemblies integrated into the body while remaining compact and lightweight enough for single-operator usability and simple setup. According to the manufacturer, this practical broadcasting solution captures realistic sound that will bring the recording location directly to listeners without the need for other extensive equipment.

disconnecting and assembly quick and easy. Also included is a safety strap that can be connected to drop-prevention wires when used above spectators in stadiums, auditoriums or other venues.

The end of the microphone's grip includes a LEMO 2B multi-pin output connector for attaching the included LEMO-to-XLRM (x8) breakout cable, for routing the eight channels to a mixing console or audio interface. LEMO-to-LEMO 2B multi-pin connector extension cables are available separately for use between the microphone and the breakout cable to increase the cable run length. Phantom power (48 VDC) is required for each channel.

BP3600

The BP3600's eight microphone modules extend from the body to form a cube with 15cm between each microphone assembly. Each assembly in the eight-channel, near-coincident array is equipped with a 12mm hypercardioid capsule to produce ideally separated, discrete signals and deliver immersive audio experiences.

When used in a typical 5.1.4 immersive scenario, the four upper microphone channels can be assigned to the upper speaker channels, and the four lower channels can be assigned to the lower speaker channels. This eliminates the need for additional decoding or latency processing during routing.

User-friendliness is enhanced with the main unit's visible colour-coded and numbered channel indicator rings that allow for easy identification of channels. To ensure that onsite setup is simple when time is limited, each microphone assembly features a lock that guarantees precise, repeatable positioning and prevents accidental removal. These connector locks additionally protect the microphone terminals from the elements, including rain, and make

Certified for Zoom Rooms use, Audio-Technica has also added its ATND1061DAN ceiling array to a Q-SYS system that includes the Q-SYS Core 110f processor, AD-C4T ceiling-mount loudspeaker, SPA Series amplifiers and the I/O-USB Bridge peripheral. Designed for use in high-impact spaces ranging from boardrooms to lecture halls, operators can take advantage of the scalable Q-SYS audio, video and control platform in articulate audio quality, rejection of unwanted sounds and the option to trigger camera position presets using real-time positioning data from the ATND1061DAN. The ATND1061DAN ceiling array microphone adds vocal intelligibility and clarity throughout the room, even with multiple talkers courtesy of the Dante network audio outputs. Simplified integration with the Q-SYS Control plugin enables control of an the ATND1061DAN, including the ability to mute, trigger the LED, load presets stored in the main unit and monitor connection status from a Q-SYS network touchscreen controller.

www.audio-technica.com

DPA launches first drum miking kit

DDK4000

WITH THE arrival of the DDK4000, DPA Microphones has released its first drum microphone kit. Consisting of the Danish brand's 4055 kick drum, new 2012 Compact Cardioid and a 2015 Compact Wide Cardioid stereo pair, the kit also incorporates three 4099 CORE instrument mics.

Specifically created for kick drum applications, the 4055 provides a tight, natural, well-defined sound and offers different sounds depending on its placement relative to the kick drum. Owing to its condenser mic capabilities, the 4055 produces a clean reproduction to a maximum SPL of 164dB. The asymmetric design provides easy positioning both inside and outside the kick drum, while the large housing and wind damping foam in front of the capsule, behind the grille, minimises air turbulence pickup in front of the kick drum hole.

The 2012 serves as an all-around, generalist pencil mic for capturing accurate, single-instrument pickup with clarity. According to the manufacturer, characteristics include exceptional transient response and an intricate pickup, together with extended frequency and flat frequency responses for all live stage setups.

Designed for use as an overhead stereo pair on drum kits, the 2015 features uniform, wide

2021 Compact Cardioid

cardioid directionality and a linear frequency response. The stereo pair can be positioned closer to the drum kit than normal and captures the balanced sound of the entire instrument with less bleed from the stage. Both the 2012 and 2015 models are pre-polarised condenser mics, comprising a specifically designed 17mm capsule.

Added to minimise distortion and increase dynamic range, the inclusion of the 4099 CORE instrument mics rounds off the kit. With its discreet size and versatile mounting/clip options, the 4099 CORE operates within a 109dB dynamic range. Inclusive of microphone holders and adapters, the DDK4000 kit comes in a sturdy Peli case. Optional accessories including a stereo boom, gooseneck mount and corresponding shockmounts are also available.

www.dpamicrophones.com

Access all areas with AEQ's TP9116

WITH 16 four-way lever keys and associated RGB displays squeezed into a compact 1U unit, AEQ's TP9116 user panel provides access to AEQ's CrossNET and Conexia intercom matrixes. The TP9116 provides talk and listen functionality and individual volume control for each communication point. Lever keys have two functions per lever and can manage up to 64 destinations or groups.

IP-compliant with connectivity to Dante or AES67, the TP9116's integrated DSP processor

has acoustic echo cancellation to avoid local feedback and automatically levels the voice power or tonality and speech habits of each operator. A three-band PEQ, high- and low-pass filters and a compressor/limiter/expander are also built in. The TP9116 incorporates audio signal generators (tone 1kHz @ −20dBFs, pink noise @ −20dBFs) and a replay function that allows the user to play the last 16s of audio emitted by the speaker/headset.

www.aeq.eu

AX Center – DAD's new studio centrepiece

AX CENTER is a dedicated Thunderbolt modular audio interface from Digital Audio Denmark with dual mic and instrument inputs, dual headphone and monitor outputs, built-in PRO|MON monitor control with speaker EQ and two slots for DAD expansion cards. It comes with 256 Thunderbolt 3 channels, 256 Dante I/O channels, up to 192 MADI I/O channels and 16 ADAT channels, as well as onboard summing and processing.

The AX Center offers a compact 1U interface with built-in DAD AD/DA conversion and mic preamps, as well as flexible DADman routing, monitor control, DSP processing and the option to add more I/O flexibility via two expansion slots.

AX Center is equipped with two elements that allows it to not only be the centrepiece for audio conversion, but also be the central point for monitor control. The first is the PRO|MON section of the complimentary DADman control software, which gives access to a 512x64 channel summing processor, and the second is the built-in SPQ processing that offers 128 channels with a total of 1,024 EQ filters, as well as delay. This makes it a suitable solution for accurate speaker correction in the studio.

The internal routing matrix of the DADman software spans 984x984 channels, allowing any input to be routed to any output, or even duplicating and routing to several different destinations simultaneously. Finally, the Thunder|Core connection has a hardware latency of only nine samples, 32-bit floating point resolution and is capable of handling up to 256 bidirectional channels at 48kHz and 96kHz, 128 channels at 192kHz and 64 channels at 384kHz. It also supports Apple Silicon processors, macOS Big Sur (and up) with a Core Audio driver, as well as Windows 10 (and up) with an ASIO Thunder|Core driver.

www.digitalaudio.dk

Neumann bridges microphones and monitoring

MT 48

IN COLLABORATION with sister company Merging Technologies, the MT 48 distinguishes itself as Neumann's first-ever audio interface for use in studio and home studio applications. Based on the Merging Anubis audio interface, the MT 48 features additional USB and ADAT connectivity, in addition to a user interface. With a dynamic range of 136dB(A) and mic preamps with up to 78dB gain, the MT 48 captures the full sound potential without any bottlenecks. Equipped with four analogue inputs and eight analogue output channels (four stereo outputs), the MT 48 is expandable via ADAT (switchable to S/PDIF) and AES67.

The interface is also equipped with two headphone amplifiers with low output impedance. Onboard DSP effects include EQ, complex dynamics processing and reverb. Additionally, the MT 48's Dual Output Technology allows users to record the pre-FX and post-FX signal simultaneously. Four independent mixers for each stereo output provide monitoring, and a touchscreen interface allows users to change parameters, including mixer levels and pan positions. All monitor mixes and all settings can be adjusted directly on the unit, although a Remote-Control App and browser-based Web Control offer operations from a computer or tablet.

Building upon the success of its predecessor, Neumann has also announced the release of the KH 120 II studio monitor. The second-generation model is stated to offer improvements in all acoustic parameters for deeper bass, higher SPL capability and increased resolution. In addition, its internal DSP engine allows for phase linear crossovers and room correction via the manufacturer's MA 1 Automatic Alignment. The KH 120 II follows the same philosophy as its predecessor, but takes it to the next level: "highest linearity, lowest distortion, no colouration and adaptability to any acoustic environment".

These achievements are made possible by DSP-controlled electronics whose crossovers reportedly avoid the phase distortion caused by analogue filters. The KH 120 II is made to extremely low tolerances of no more than ±0.5dB and, as a result, stereo imaging is described as "razor-sharp".

The new model is also an update in sustainability, as Neumann engineers developed a patent-pending amplifier technology which it says combines superior audio performance with the energy efficiency of Class-D. Although the amplifiers of the KH 120 II deliver up to 145W to the 5.25-inch woofer and 100W to the 1-inch tweeter, they only consume 17W when idle. Auto-standby reduces power consumption to 0.3W when the KH 120 II has not been used for some time, but can be deactivated.

The KH 120 II offers analogue and digital inputs (S/PDIF). It will also be available in an AES67 variant with redundant AES67 audio network ports that are fully compliant with broadcast standards such as ST 2110, ST 2022-7 redundancy and Ravenna. At the same time, the KH 120 II AES67 is compatible with Dante-generated AES67 network streams.

www.neumann.com

KH 120 II

Brompton sees the light

BROMPTON TECHNOLOGY has unveiled its TrueLight receiver card, which enables full calibration of the pixels and control of the light spectrum emitted by an LED panel with a broader spectral output, by utilising extra emitters in addition to the standard RGB format. Driven by the new Tessera G1, the system is said to offer "unparalleled" colour rendering, illuminating individuals and objects with increased realism.

TrueLight leverages Brompton's proprietary Dynamic Calibration technology, performed by the company's Hydra measurement system. The manufacturer believes that this is the only system on the market capable of providing complete spectrally aware calibration for extra emitters to ensure colourimetric precision, full

colour and luminance correction are applied on a per-pixel basis, delivering the image quality necessary for direct-view applications, including reflections. All possible RGBW spectral mixes are fully corrected, maintaining calibration accuracy at all times.

Utilising the full range of Tessera software features, TrueLight takes advantage of PureTone for consistent linearity of both RGB and "W" LED output, ThermaCal for temperature correction of all LED colours, ShutterSync to eliminate on-camera artefacts for RGBW lighting and direct-view applications, and Extended Bit Depth to significantly enhance the dynamic range of RGBW output, amongst others.

www.bromptontech.com

Get wider with Wisycom

WISYCOM'S MTK982 is a dual-wideband, stereo IEM/IFB transmitter designed for a range of live event productions. It reportedly features the widest switching bandwidth available

on any in-ear monitor system (up to 300MHz), enabling users to find the best frequency wherever they are. Its low interference output features wideband intermodulation phase cancellation. Combined with its Direct Digital Synthesis (DDS) signal means the MTK982 offers the highest quality signal available in an IEM/IFB transmitter, according to Wisycom.

The transmitter also features integrated low-energy, long-range Bluetooth remote control. It also has Stationary Wave Ratio sensing on its antenna outputs, while the 470–663MHz frequency range in North

America (470–770MHz in Europe) works in conjunction with the BFLT1 transmitter and BFLR1 receiver to enable the MTK982 to transmit low-latency signals over fibre to remote areas.

The MTK982 can also be remotely controlled and monitored using Wisycom Manager software.

www.wisycom.com

Biamp bundles head to small conferencing rooms

DUE TO the popularity of Biamp bundles for medium and large conference rooms, the manufacturer has begun offering bundles for huddle spaces and small conference rooms.

The bundles help to streamline the buying and installation process by providing a complete system in a box, while enabling end users to leverage one unified hardware system to ensure a great meeting experience every time.

a Devio SCR-10 with a Vidi 250 camera as an entry-level solution, along with options that include Parlé table mics, Parlé ceiling mics or pendant mics featuring Parlé Beamtracking technology to intelligently track and mix conversations from around the room. These systems can also be paired with the Vidi family of 4K conferencing cameras.

For a simplified all-in-one solution, the Parlé VBC 2500a and Parlé ABC

The bundles provide options for either Unified Communication (UC) controlled rooms leveraging Google Meet, Zoom, Microsoft Teams or Bring-Your-Own-Meeting (BYOM) scenarios where meetings can be managed through a user device brought into the meeting space.

The new BYOM solution for small rooms starts with the Devio SCR family of devices for PCs running conferencing platforms including Microsoft Teams, Zoom, Google Meet and Cisco Webex. The devices support a single USB connection to a host computer for audio and video media using DisplayLink USB graphics technology. The BYOM bundles offer a range of options, including the pairing of

2500a will be compatible with Assistive Listening Systems (ALS). Featuring a new dedicated 3.5mm output connector with a mono balanced line level output, the Parlé bars provide a premium audio experience for individuals requiring hearing assistance. To optimise performance at install, the included Biamp Launch software analyses and tunes the acoustic performance of the room with just a touch of a button, including for ALS. The Parlé bar can then be controlled through a bring-your-own laptop, phone, tablet or through a dedicated UC host device.

www.biamp.com

Yamaha unveils DM3 with Dante-compatible and non-Dante versions

WITH BOTH Dante-compatible and non-Dante models available, the DM3 consoles are suitable for a wide range of applications. Offering up to 96kHz sound quality, a fast and simple setup and ease of operation, the chassis measures 320mm x 140mm x 455 mm and weighs 6.5kg.

There are two DM3 mixers in the series – the DM3, which features Dante audio networking for quick and flexible connection to a wide range of compatible audio devices, and the DM3 Standard without Dante. Other than Dante provision, the features on both models are identical – 16 mono, one stereo and two FX Return input mixing channels, plus six Mix Send, two FX Send, one stereo and two matrix output mixing channels.

a USB memory stick and a separate USB connector on the front panel. The Dante-capable DM3 adds further multitrack recording capability using Dante Virtual Soundcard. Meanwhile, the DAW Remote function means a range of DAWs can be controlled from the console. Recordings can then be edited with the bundled Cubase AI software or a different DAW.

DM3 consoles include all the features needed for high-quality streaming. With stereo and matrices, the audio routing allows the creation of separate mixes for onsite and streaming sound.

In terms of fixed installations, both consoles support OSC and MIDI (via USB) general-purpose external control protocols and User Account, User Defined Key and Custom Fader Bank can be used to configure settings for users. The consoles are compatible with Yamaha's ProVisionaire software suite, which allows

Offering low latency and two high-quality processors featuring 18 types of effects, a simple, intuitive user interface is centred around a large, 9-inch screen with multi-touch control. Users can choose from multiple languages for channel names (using the DM3 Editor or DM3 StageMix applications) displayed on a light or dark background, reportedly making the DM3 series easy to use in any space, lighting conditions and by users of different nationalities. The DM3 is also suitable as a sub-mixer for a Dante-compatible main console.

Additional features include custom fader banks, MonitorMix support for personal monitor mixing and an 18-in/18-out USB audio interface. Multitrack recording via USB to Host is supported, while simple two-track recording is also possible using

the creation of bespoke control panels, tailored to the needs of remote control and installation monitoring. Meanwhile, the optional RK-DM3 can be used to mount either unit in 13U of a standard 19-inch equipment rack.

Additional software applications include DM3 Editor, a standalone Windows or Mac application for both online operation and offline setup and editing, and DM3 StageMix, an iPad app that enables remote control of the DM3 Series via a simple, intuitive interface, allowing an engineer to control mix parameters from a performer's position on the stage. Meanwhile, the MonitorMix application for iOS and Android devices puts control of each performer's monitor mix in their hands.

www.yamaha.com/proaudio

Portable power

THE NEUTRIK Group is introducing the CONTRIK range of professional power distribution products. CONTRIK extends the group's product offering with a portfolio of power distribution systems, equipotential

CONTRIK

bonding systems and power cables, specifically designed and specified for portable indoor and all-weather harsh application environments.

Employing automated precision manufacturing processes, together with high-quality components and materials, CONTRIK systems reportedly offer "unsurpassed" levels of quality, safety and reliability, and provide reductions in cabling costs, complexity and man hours. CONTRIK's

multicore solutions are said to further reduce complexity and cable volumes for demanding mobile and outdoor applications, including pre-assembled multicore cables, Power Containers and Power Racks with multicore outputs, and highly protected multicore Turtles for distribution and daisy-chaining.

Carefully designed housing concepts provide high levels of protection, along with ease of handling and transportation. CONTRIK's Easylen housing material offers high levels of flame retardancy, temperature resistance, UV protection, corrosion insensitivity, non-conductivity and protection from mechanical impact (up to IK 10+).

The opticalCON range has also expanded with the introduction of two MTP connectivity systems for point-to-point connections in pro AV and broadcast applications. The single-mode opticalCON MTP 16 and the multimode MTP 48, offer 16 and 48 data channels respectively in a single cable. Said to be

capable of operating in the harshest conditions, these systems provide high data capacity with high reliability, rapid setup and immediate playback.

With circuit-breaking capability and discrete power-in and power-out keying to prevent intermating of power cables, the powerCON NAC3FXXA and NAC3FXXB are IEC/EN/UL/CSA 60320-1 compliant. Its speakON series of audio connectors expand the NLFXX series with four-pole and two-pole cable connectors. Both feature a locking boot for security and a two-compound housing to improve handling.

The latest Neutrik FIBERFOX HMA fibre-optic connector systems provide multimode fibre without the need to handle pigtailed bulkheads by converting an LC patch cable into an expanded beam solution to allow for onsite maintenance and repair. The product range includes briDge connectors and pre-assembled cables, a weatherproofed adaptor box and introduces a foxBRID multimode hermaphroditic connector module and FIBERFOX rotary joint.

MTP 16 and MTP 48

REAN's Power X Series ruggedised power connectors are rated to UL 94V-0 and IP65. Power X Series components are certified according to EN/UL 60320-1, with cable connectors accepted as a component for cord sets according to IEC 60799. Latest product introductions include REAN XLR and Ethernet Z-Series connectors, rated to IP65 and featuring the company's proprietary air tightness for protection from air ingress.

www.neutrikgroup.com

Shure scans the spectrum

THE AXIENT Digital AD600 Digital Spectrum Manager delivers real-time, wide-band spectrum scanning and monitoring from 174MHz to 2.0GHz, spectrum analysis and frequency coordination in a single rack unit. Six antenna connections deliver multiple coverage options, while Dante connectivity provides advanced audio monitoring of the network. The USB port can be used to export, import or save

AD600

backup scans, event logs and other important data. The AD600 features a large, full-colour 6.6-inch front panel

screen, said to make viewing information easy, while real-time scanning and monitoring of RF activities keeps live

information available when it's needed. Guided Coordination menus can be used to plan, RF scan and deploy frequencies to the entire system. Additional tools are available to analyse the spectrum, capture data and perform site RF surveys. Users can also monitor demodulated audio from the network using Dante Browse and listen over Dante features.

www.shure.com

Tascam boxes clever with Dante

BOASTING SEAMLESS integration with Tascam's range of Sonicview mixers and full Dante compatibility, the SB-16D 16-in/16-out Dante-enabled stagebox from Tascam can be deployed directly onstage using its large rubber feet or used as a 3U rack-mounted unit for recording, broadcast or commercial installations.

The SB-16D features 16 XLR mic/line inputs and 16 XLR line outputs, and multiple SB-16D stageboxes can be networked to provide greater I/O capacity. Each input channel has +48V phantom power and an SIG OL LED for input-level monitoring. Each line output is also equipped with SIG OL LEDs.

Multiple stageboxes can be used simultaneously in a Dante network, while two Dante ports equipped with etherCON-compatible Dante connectors enable redundant streams with robust connections. For additional system reliability, a DC power input is provided which allows a redundant power supply to be added.

The SB-16D can be easily integrated with Tascam's Sonicview digital recording and

mixing consoles, and is also controllable from Tascam's IO Control app. In addition to control of mic gain and other parameters, when connected to Tascam's Sonicview mixers, the SB-16D's eight-in/eight-out GPIOs expand to 16-in/16-out GPIOs to facilitate parallel control.

Optimised for audio recording with the company's wide range of products, Tascam's TSQD-128A is a customised media card

SB-16D

designed to reduce the effects of file fragmentation and slow random access that can occur with repeated use. Tascam has worked closely with the media manufacturer to ensure that each 128Gb SD card contains exactly the specified components (control ICs, memory devices, etc.) that have been verified

to work with Tascam products. This is said to reduce the risk of incompatibility and ensure high stability.

Each card is tested and pre-formatted by Tascam and supports the UHS-I (Ultra High Speed) standard, resulting in high-speed performance with a maximum transfer rate of 95MB/s (read) and 85MB/s (write). The TSQD-128A provides a minimum speed of 30MB/s with support for UHS Speed Class 3 and Video Speed Class V30. The manufacturer reports that the card is also suited for use with SDXC-compatible devices from other companies.

In brief, the manufacturer has enhanced the functionality of its Portacapture X8 32-bit float portable audio recorder with a free V1.32 firmware update. While multitrack overdub recording has always existed on the Portacapture X8, Tascam has made this clearer by renaming the Punch I/O function as "Overdub/Punch I/O".

www.tascam.com

Dante Connect brings cloud control to third parties

AUDINATE HAS announced key partnerships in support of Dante Connect, the company's suite of software applications that facilitate cloud-based broadcast production. Dante Connect transports audio to and from production software running in cloud-based virtual machines (VMs) that can be accessed via an internet connection, ingesting audio directly from on-premises devices for processing in cloud services.

Providing 256 channels of audio per VM, Dante Connect is designed for broadcasters seeking to embrace remote production. Dante audio between cloud VMs allows expansion of capabilities and the extension of Dante Connect across multiple instances and regions. Remote monitoring allows producers to check on audio over a lightweight webRTC connection without risk of interruption to source channels.

Key industry partners who have already announced Dante Connect compatibility are Amazon Web Services, Waves, Audiotonix (Solid State Logic and Calrec), Riedel and HHB Communications.

Audinate has also announced an API as part of Dante Domain Manager 1.5. The API
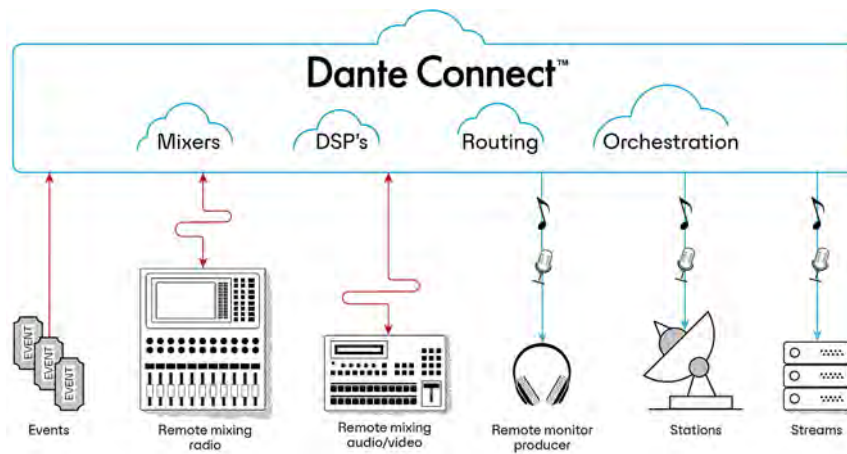
Dante Connect

provides key functionality of Dante Controller and can query Dante domains, devices, channels and status to enable capabilities and integrations for a wide variety of installations.

Built using the GraphQL query language for rapid development with common tools such as Postman, Apollo Studio or Altair, it inherits protections and permissions from the Dante

Domain Manager configuration for secure deployment.

Crestron is showcasing the capabilities of the API with the introduction of a Dante routing plugin for 3-series Crestron control processors. The integration allows users of Crestron control processors to change Dante audio or video channel subscription routes

with a single button press. Dante Domain Manager 1.5 with the new API is a free update for existing users of Dante Domain Manager with active support agreements.

Audinate has announced the availability of transferrable licences for the Dante Virtual Soundcard audio interface software. Dante Virtual Soundcard runs on Windows and macOS computers and provides an audio interface to applications for up to 64 Dante-enabled channels on the connected network. Previously, Dante Virtual Soundcard installations were locked to a single computer as per the licence agreement. The new transferable licence option allows a user to overcome that limit and move their licence from one computer to another with ease. This is especially useful when purchasing new computers, using disk images to deploy machines or if a repair causes significant hardware changes to a computer. The new transferable licence option is available for new purchases and is also offered as an upgrade to existing DVS single machine licences.

www.audinate.com

Optimal Audio enhances WebApp

OPTIMAL AUDIO has announced the release of WebApp 1.1, featuring a BluOS Control API integration to control Bluesound Professional audio devices that feature built-in network-connected streaming and music management controls for use in commercial audio spaces. Optimal Audio's WebApp is the

The integration of Bluesound Professional streaming music devices such as the B100S and B400S provides a scalable solution for venues requiring up to four playback streams. Integrators and end users can configure routines within WebApp to automate streaming preset recall and volume control for a specified time, day and zone, enabling venue staff to focus on their

backbone of its ecosystem of controllers, amplifiers and loudspeakers, providing a systems integrator with the ability to configure an entire system of multiple zones in a venue, while presenting the end user with an "intuitive and simple" interface to control the sound system.

With this latest release, WebApp and Zone firmware enable API controls for Bluesound Professional devices via BluOS from Optimal Audio Zone controllers. The solution supports playback from almost 20 streaming platforms and internet radio stations, including services specifically designed for commercial use.

primary responsibilities. The API integration also allows WebApp to play, pause or skip a track and displays song artwork for an improved end user experience.

In addition to the integration with Bluesound Professional streamers, the latest update includes several useful new features. A Client Configuration Tool has been added to enhance security and simplify the operation of client connections, such as mobiles or tablets. A global setting for "delay units" in system settings and an auto Time Zone/DST adjustment have also been added.

www.optimal-audio.co.uk

Symetrix releases Composer 8.4

SYMETRIX HAS added support for Dante Brooklyn 3 cards, an SSH Lua API for Intelligent Modules and a USB HID conferencing module as part of its Composer 8.4 update. All current Symetrix DSPs now support the Audinate Brooklyn 3 Dante module, with the installed card displayed on the front panel screen. The SSH Lua API for Intelligent Modules allows Intelligent Modules to interface with services requiring authenticated SSH communication. Other features include T-10 Fast Screen switching whereby T-10 switches between Control Screens much faster than in previous versions.

In the BETA version, a new USB Human Interface Device (HID) control for the Radius NX and USB card allows touchscreens and remotes to control and display the status of the most common Universal Conferencing (UC) applications. Currently this only works with Microsoft Teams and Google Meet. Other UC applications will require additional

certification and/or a Composer update for full functionality.

Symetrix has also announced that its product catalogue and specifications are now available to integrators and consultants via the D-Tools platform. The addition of Symetrix processing and control solutions will streamline planning, ordering and deployment of professional AV systems. D-Tools is a concept-to-completion tool where integrators can do everything from the moment they get a phone call until the end of the process when they have to bill the job out. As part of this ecosystem, D-Tools users will now be able to specify Symetrix's full range of AV control solutions from within the software, ensuring they can build the best solution for their clients. The software features more than 300 partners and over 1,000 brands to service the 8,000 companies globally that are using D-Tools.

www.symetrix.co

Forewarned is four-ARMed with Gravity's quartet

STAND SPECIALIST Gravity has announced its VARI-ARM series of stands which allow all three joints of the stand to be locked and released with only one central adjusting screw. The VARI-ARM M14, VARI-ARM M38, VARI-ARM L38 and VARI-ARM L TV provide flexible positioning for a range of equipment, from cameras and monitors, to microphones, pop filters, recorders and smartphones.

Each VARI-ARM model is based on a stable articulated steel arm with three joints that allow equipment to be moved freely and precisely into any desired position. The three joints can be tightened and loosened with just one hand via the centrally mounted adjusting screw. The VARI-ARM M14 has a ¼-inch thread at both

ends that is compatible with most camera monitors as well as every commercially available photo camera and smartphone mount.

Meanwhile, the VARI-ARM M38 is equipped with a ⅜-inch thread and a mounting bracket with a wide clamping range of 15–35mm. Gravity says it is suitable as a mount for heavy broadcast microphones as well as for mounting an SLR camera on tabletops, and comes with a ⅜-inch to ¼-inch adapter. With the same thread and clamp equipment as the M38, the VARI-ARM L38 can be used as a quick-action microphone arm for mounting to desks, microphone stands or other surfaces. Its extended arm length of 415mm makes it suitable for the alignment of microphones in

front of instruments. Finally, the VARI-ARM L TV has two 16mm TV spigot adapters and can be mounted on any truss construction. Unscrewing one of the TV adapters and using

the integrated ¼-inch thread provides more options.

www.gravitystands.com

Datapath gets Active with IP encoding and decoding card

THE ACTIVESQX2 is a PCIe plug-in card that allows IP sources to be decoded for display on videowalls and workstations, and for captured sources to be encoded for delivery to other parts of the ecosystem. Designed for video distribution projects such as large-scale control rooms, NOCs, SOCs and campuses, the ActiveSQX2 is compatible with Datapath's current Vision capture card family and can also

be used alongside the ActiveSQX card for customers wishing to

decode more streams or to add scalable encoding. Combined with Datapath capture and graphics cards, the ActiveSQX2 gives users the ability to decode up to 12 1080p30 streams (H.264 or H.265)

and encode up to eight 1080p30 H.264 streams or three H.265 (1080p30) streams. It allows captured sources to be simultaneously re-distributed across the network to other endpoints which need the same information for display. AES encryption for each stream means it can be used within an Aetria system.

www.datapath.co.uk

Panasonic advances its 4K credentials

DESIGNED FOR broadcasting, entertainment and live event applications, Panasonic has developed the AW-UE160W/K PTZ camera. Finished in pearl white or black, the flagship model combines the flexibility of a PTZ camera for freely setting up in position and the functionality of a system camera commonly used in broadcast. With the simultaneous release of the AW-SFU60, the Japanese brand has added an optional software key to activate SMPTE ST 2110 for the AW-UE160 series.

Promoting a high sensitivity of F14/2,000 lx, equivalent to a studio camera, and the latest generation image processing found in Lumix, the AW-UE160 is equipped with a phase detection autofocus that enables high-speed focusing to capture fast-moving subjects. Featuring a 20x optical zoom and offering a horizontal view range across 75.1°, the AW-UE160 is the first PTZ to support the SMPTE ST 2110 IP transmission standard and wireless transmission with a 5G mobile router via USB tethering. For combined operation with system cameras, it supports a return

input and a rear tally lamp that can also be lit in yellow. In addition, it is equipped with a cropping zoom function that can output multiple angle videos with a single camera and 2x high-speed output (HD) from SDI/HDMI.

Support for a variety of interfaces and protocols (SMPTE ST 2110, high band width NDI, NDI|HX , SRT, FreeD, RTMP/ RTMPS, etc.), the 4.6kg camera can fit into existing systems. Even if output is performed from multiple video terminals, there is no restriction on video output, promoting simulcast operation in 4K. The waveform display function and the horizontal level gauge display function have been added to reduce setting up time and adjusting the video.

AW-UE160W/K

AK-PLV100GSJ

Developed for live cinematic video, Panasonic has added the 4K PL-mount studio camera to its portfolio. Equipped with a large format, super 35mm Imager and PL Lens mount to accommodate cinema lenses for a shallow-depth look, the AK-PLV100GSJ is a fully enabled system camera. Compatible with the AK-HCU250 and AK-UCU600 camera control units, the latest addition can be a companion to existing B4 mount camera systems. To capture cinematic video, the existing camera head can be swapped with the AK-PLV100GSJ.

www.panasonic.com

Move SE brings lower-cost streaming options

Move SE

PTZOPTICS HAS expanded its Move 4K series of PTZ streaming cameras with the Move SE line – a collection of low-cost, high-quality streaming cameras for small to medium-sized houses of worship, schools and businesses. The SE series offers all of the features of the original Move 4K, including auto-tracking, SDI, HDMI and USB connectivity, but with a maximum resolution of 1080p.

Along with the new cameras, the company is also releasing a new Camera Management Platform (CMP) which will add auto-tracking capabilities to the previous Gen2 camera models. The CMP software is available for download on Mac, PC and Linux computers and features tools for

pan, tilt and zoom camera control, colour management and auto-tracking.

The Link 4K is a Dante-enabled, auto-tracking PTZ camera which is available in 12x, 20x and 30x optical zoom models. Dante AV-H brings device interoperability to H.26x endpoints, while every Link 4K camera also features SDI, HDMI, USB and IP output for complete versatility. The Link 4K features 4K at 60fps over HDMI, USB and IP, and provides 1080p 60fps resolution over Dante AV-H and SDI. The cameras can be mounted on wall, ceiling or pole mounts as well as in outdoor enclosures. The Link 4K's automatic video inversion feature senses the camera's orientation to save time on installation and setup.

The Link 4K's built-in auto-tracking can track a specific person up to 90m away, even when other people are in frame, while users can manage auto-tracking from anywhere on the network via PTZOptics' web UI. Link 4K cameras can also be controlled using video production software such as OBS, Livestream Studio, Wirecast, vMix, mimoLive or Tricaster, and PTZOptics supply a range of hardware joystick controllers like the IP joystick, serial joystick and SuperJoy. In addition, the cameras can be controlled remotely using tools such as NDI and Zoom.

www.ptzoptics.com

Sony enhances critical evaluations

DESIGNED FOR critical evaluation, colour grading, live production and postproduction applications, Sony has unveiled a flagship 30.5-inch 4K HDR professional monitor. The BVM-HX3110 features a dual layer anti-reflection LCD panel with Sony proprietary signal processing, supporting a higher peak luminance of up to 4,000cd/m².

In addition to BVM-series characteristics including colour reproduction, picture consistency and precision imaging, the BVM-HX3110 offers brighter specular highlights and introduces an optional fast pixel response mode for reduced motion blur. With a wider viewing angle and a standard IP interface for SMPTE ST 2110 signals, the BVM-HX3110 complements Sony's Networked Live ecosystem.

The monitor's standard toolset incorporates Waveform Monitor/Vector Scope (WF/VS), false colour, focus assist,

closed captioning, 3D LUT processing, and quad and side-by-side viewing modes. In addition to fast pixel response, supplemental benefits include support for JPEG-XS as well as Simple Network Management Protocol (SNMP) through optional licences such as tools for enabling HDR/SDR conversion and a user 3D LUT signal output. The existing BVM-HX310 remains available as a companion model to the BVM-HX3110.

With the MDR-MV1 reference monitor headphones, Sony has combined audio quality with long-lasting wear and reliability. The open back design enables accurate reproduction of a wide sound field, making them a suitable option for mixing and mastering immersive spatial sound, such as 360 Reality Audio, in addition to stereo sound with high-resolution capability.

The MDR-MV1 offers extended spatial sound reproducibility and accurate sound object positioning within a 360° space, plus high-resolution, nuanced sound with a wide frequency range and accurate soundstage. The headphones'

BVM HX3100

uniquely developed driver units provide ultra-wideband playback (5Hz–80kHz) with natural high frequencies. Promoting capture localisation, spaciousness and detailed changes in sound processing, the open

back structure of the headphones reduces internally reflected sounds and eliminates acoustic resonances.

pro.sony

Q-SYS adds to its network video solutions

Q-SYS HAS introduced the NV Series NV-21-HU, a two-in/one-out endpoint with support for HDMI and USB-C. The NV-21-HU is said to simplify installation with a single-cable solution for video distribution, AV bridging and device charging via USB-C. Its compact design and reduced I/O make the NV-21-HU suitable for supporting meeting rooms, learning spaces, hospitality and entertainment installations.

As a software-configurable solution, the NV-21-HU can be defined as an encoder or decoder (in Q-SYS Designer Software), offering the ability to operate with either HDMI or USB-C connectivity. This enables integrators to provide a more flexible system that supports a broader range of devices while eliminating the need for adapters and, in some cases, multiple cables. In addition, integrators can add AV Bridging (with an optional feature licence) to extend the device's functionality to support full UC Platform bridging capabilities.

The NV-21-HU joins the Q-SYS video portfolio alongside the NV-32-H (Core Capable) video endpoint. It features a more compact design providing more options to rightsize the application based on I/O density, form factor or available features providing maximum system design flexibility. As a native Q-SYS device, users will have the added benefit of using the software-based audio, video and control platform to enable drag-and-drop, no-code deployment, reportedly saving time and money in both the programming and installation phases.

Q-SYS Designer software v9.8 has also been released. The Core 110f now supports the ability to run in Peripheral Mode. In this mode, users add the I/O-Core 110f as an inventory peripheral and then configure a separate Q-SYS Core processor to run the design. The Core 110f (v1 and v2) has a new GPIO Property selection of "Optional". Setting GPIO to Optional allows a design to be deployed to Core 110f v1 or v2 hardware without any additional edits or reporting of Missing, Compromised or Fault statuses related to the actual hardware presence of GPIO. When deploying a design to the Core, a pop-up message appears to provide clearer progress and error communication. Users will see the progress of Q-SYS Designer Software discovering the Core, uploading new firmware (if required), deploying the design and reporting any errors during the process. Q-SYS 9.8 also introduces support for the SPA-Qf 60x2 and SPA-Qf 60x4.

Finally, Q-SYS has announced its collaboration with Lenovo to provide a seamless way to purchase and deploy high-impact spaces by bundling Lenovo room compute solutions with Q-SYS audio, video and control. This will be available through Q-SYS channels and partners to better serve the needs of the UC market.

www.qsys.com

NV-21-HU

It's business time for Roland's VR-6HD

DESIGNED AS a compact all-in-one hub for livestreaming, Roland's VR-6HD direct streaming AV mixer is a 28-channel audio mixing console with HDMI connectivity. With core features from Roland's flagship

VR-120HD in a more compact format, the VR-6HD combines switching, audio mixing and LAN/USB streaming encoders into a single unit. Users can connect multiple cameras and computers via six HDMI inputs for different views, and incorporate robotic PTZ cameras to change angles at the touch of a button; the VR-6HD features native support for select Canon, JVC, Panasonic, Sony, PTZOptics, Avonic and VISCA-compatible PTZ LAN cameras. Different brands can be mixed and matched, and up to six PTZ cameras can be operated simultaneously.

Sources can be assigned and switched on the fly, including camera inputs, presentation decks, still images and video clips. Custom feeds for live and online viewers can also be created by assigning composition layers to multiple busses.

The VR-6HD features a video matrix with three HDMI outputs, a USB-C streaming output and an Ethernet streaming output. Routing tools provide the flexibility to feed program displays, monitors, multi-view producer displays and online audiences simultaneously. Roland says the VR-6HD makes livestreaming easy with direct streaming over Ethernet, computer streaming over USB and adaptive bitrate support. The VR-6HD also provides simultaneous SDXC recording for archiving and distribution.

proav.roland.com

Big performance with the modular Carbonite Ultra 60

ROSS VIDEO is promising "big switcher performance in a mid-sized package" following the launch of its Carbonite Ultra 60. The company launched the first edition of Carbonite at NAB in 2011 and, according to Ross, the Carbonite Ultra is the most popular mid-sized production switcher on the market. It says the Carbonite Ultra 60 is bigger, faster and more powerful, and is designed to enable customers looking to undertake more demanding productions to do so without having to spend money on a large switcher.

Based on a software-defined hardware platform, the Carbonite Ultra 60's modular design supports an I/O of up to 60x25 in HD or UHD. The first Carbonite with an internal power supply, its modular 3U frame can be configured as 36x15 and can be expanded as requirements change. It shares the same feature set as the Carbonite Ultra and supports most major formats and frame rates. HDR and WCG support are built in, and audio mixing and processing capabilities are available with an additional licence key. The Carbonite Ultra 60 package features modular I/O boards to leverage the switcher's feature set without buying more I/O than necessary. This modularity also supports future development.

www.rossvideo.com
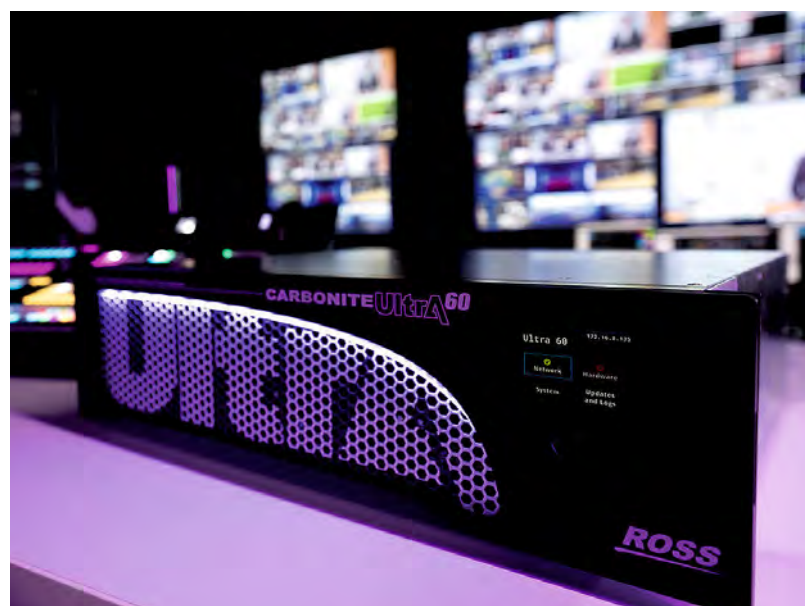
AJA launches Dante AV transmitter/receiver

VIDEO AND broadcast specialist AJA has made a six pack of announcements, with the unveiling of a Dante AV 4K-T and 4K-R converter and firmware upgrades to five separate product lines. The Dante AV 4K-T and 4K-R transmitter/receiver converter was developed through a partnership with Audinate. It leverages the tools of Audinate's Dante IP audio technology to enable transport and control of low-latency 4K/UltraHD/2K/HD/VESA IP video and audio to/from 12G-SDI or HDMI 2.0 devices over a 1GigE Dante network. The converters provide a way to integrate video distribution in a networked facility and incorporate Dante AV Ultra IP video into a variety of environments.

Meanwhile, the company has also unveiled firmware releases for HELO Plus, ColorBox, BRIDGE LIVE, FS-HDR and AJA Diskover Media Edition. v2.0 firmware for HELO Plus introduces two licensable features, including simultaneous multichannel stereo audio streaming/recording and PlayToStream,

which lets users leverage a previously recorded programme for a future streaming event.

ColorBox v2.0 brings a host of customer-requested features to AJA's colour-managed workflow converter, including an add-on licence to expand ColorBox's Colorfront video processing options. The update supports the latest v1.6 BBC HLG LUTs, while an ORION-CONVERT update is now accessible with a gamma compensation function to ensure compatibility between different colour conversion philosophies.

AJA BRIDGE LIVE is AJA's multichannel UltraHD and HD live video solution for remote production, contribution, collaboration, streaming and delivery. The v1.14 update introduces optional perpetual JPEG XS I/O licences alongside RTMP input, support for ST 2022-7 hitless redundancy and input auto-reconfiguration.

www.aja.com

TVU Networks on the road – and in the cloud

EXPANDING ITS suite of multi-camera transmission technologies, TVU Networks has introduced the TVU RPS One. An all-in-one cloud and studio remote production product, the RPS One combines the company's field-tested, multi-camera encoding and transmission functionality with six integrated 5G modems for wireless transmission.

In conjunction with TVU's live cloud production platform or TVU RPS decoders, the RPS One delivers an end-to-end cloud-based or on-prem live video production solution from field capture to distribution. The RPS One's ability to transmit wirelessly to both the cloud and an on-prem decoder simultaneously enables production teams to create distinct programming using the same sources or set up a mirrored production environment for backup purposes.

The RPS One supports six embedded 5G sub-6GHz modems and uses a 5G MIMO

antenna array to provide seamless operation of all six modems simultaneously. Its six 3GPP Release 16 modems provide comprehensive support for 5G SA and NSA modes, as well as compatibility with the most widely used 5G, LTE and 3G bands. Additionally, the RPS One's dual Wi-Fi modules provide connectivity with local devices and multiple available networks concurrently.

The unit has four 3G-SDI inputs that support 1080p/1080i/720p HDR remote production. It supports up to 16 channels of SDI embedded audio and up to eight channels of HDMI embedded audio, and a low-latency single return video feed from an SDI or IP input on any TVU transceiver or TVU cloud service. The RPS One simultaneously aggregates up to 12 data connections, including internal/external cellular, Wi-Fi, Ethernet, IP Microwave and Satellite (Ka/Ku/BGAN/Starlink).

www.tvunetworks.com

Blackmagic releases capture and playback PCIe cards

DECKLINK IP is a family of PCIe cards that capture and playback 10-bit uncompressed, broadcast-quality video directly into 2110 IP-based broadcast systems. The cards support multiple video channels plus each channel can capture and play back at the same time. DeckLink IP provides total IP network security as all video is captured and played back using the DeckLink IP's frame buffers, which act like a video-based firewall, isolating the Ethernet port from anything other than video and audio.

There are three models in the family. DeckLink IP HD features three channels of capture and playback to 2110 IP broadcast systems via a single RJ45-style Ethernet connection. DeckLink IP HD Optical features three channels of capture and playback to 2110 IP broadcast systems via an SFP-based optical fibre Ethernet connection.

It supports livestreaming, talkback and optional internal network storage, as well as a joystick for precise DVE control.

The ATEM 4 M/E Constellation 4K is an Ultra HD model of the ATEM Constellation family with 40 12G-SDI standards-converted inputs with support for standards up to Ultra HD 2160p60. Featuring the same features as the ATEM 4 M/E Constellation HD, the 4K model has 24 12G-SDI aux outputs, 16 upstream ATEM advanced chroma keyers, four downstream keyers, four Ultra HD media players and two SuperSource processors.

The 2110 IP Converter 3x3G is a rackmount converter which converts 3G-SDI devices to 2110 IP broadcast systems. It features 10G Ethernet which means it can support up to three separate 3G-SDI video channels
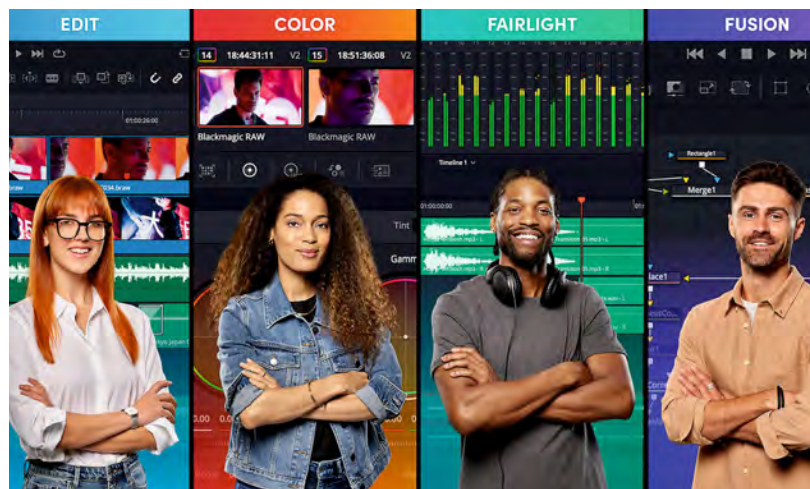
DeckLink IP

DaVinci Resolve 18.5

DeckLink IP/SDI HD allows connection to both 3G-SDI and 2110 IP systems. This model has two capture and playback channels to 2110 IP via RJ45 Ethernet, 3G-SDI and reference out. All models support 720p, 1080i and 1080p video standards up to 1080p60.

The manufacturer has also released the ATEM Television Studio 4K8 live production switcher that combines all the broadcast features of the ATEM Television Studio HD with additional support for Ultra HD standards up to 2160p60. The ATEM Television Studio 4K8 features eight standards-converted 12G-SDI inputs, 10 12G-SDI aux outputs for external recorders and a four-port 10G Ethernet switch.

at the same time. Each channel has independent inputs and outputs, for connecting up to six different SDI devices. It also includes a front panel with a colour LCD for monitoring, menus and diagnostics.

And to finish, DaVinchi Resolve 18.5 has been released, which adds new AI tools, over 150 feature upgrades such as Resolve FX relight, speech to text editing, automatic subtitling, AI audio classification, Universal Scene Description file support and new menus on the Cut page that let customers work faster while allowing more time for being creative.

www.blackmagicdesign.com

disguise launches pixel-perfect video playback solution

DESIGNED SPECIFICALLY for location-based experiences and fixed installations, disguise has revealed a 4K video playback solution with EX 3. Including disguise's Designer software, APIs and the disguise Cloud collaboration toolkit, the EX 3 promotes an end-to-end workflow from concept to delivery, on a single, connected platform.

Featuring three 4K video outputs suitable for both projection and LED displays, each EX 3 is designed to play back video with minimal latency. Additional EX 3 machines can be added and synced together to scale out the video playout or used in a session with other disguise media servers for more complex experiences.

With genlock support, multiple EX 3 machines can be synced together, enabling play back of 4K video at scale, with minimal latency. Using disguise APIs to build additional applications on top of the EX 3, workflows can be customised

EX 3

with tools to schedule content and monitor system health. Videos are sequenced using Designer, before being shared via disguise's Previz app and previewed in the 3D space. All project content is stored and collated in disguise Cloud. The EX 3 can also be used alongside disguise's camera-based projector calibration system, OmniCal, to quickly and accurately align projectors.

To facilitate production for xR and live events, disguise has also developed a tool with ZeroSpace that bridges Spout technology and RenderStream. Integrated into most commercial VJ software, Spout is available as a free plugin for the open-source cross-platform screen casting and streaming app, OBS Studio. This allows sharing of the same GPU video texture with content render engines for uncompressed, zero-latency frame streaming.

The integration of SpoutBridge with disguise is the latest development in the disguise–ZeroSpace relationship. By promoting the distribution of video content over IP networks between disguise machines, it offers 12-bit RGBA colour, ultra-low latency and ease of setup while removing the need to distribute SDI inputs across all physical machines. Users need to configure their Spout application on a disguise rx render node to target the RenderStream bridge.

Aimed at installations and events with large LED displays that require a simpler method to distribute live and interactive visuals across displays, the solution minimises cabling and enables resolutions and colour depths beyond HDMI and SDI. Visualists can control large LED screens and take advantage of cluster rendering with video-over-IP.

www.disguise.one

Crestron connects Teams with BYOD

CRESTRON AND Microsoft are aiming to encourage BYOD (Bring Your Own Device) meetings to even more spaces. The Crestron AirMedia Connect Adaptor enables users to wirelessly present and conference on any connected display, in any meeting space, with dedicated Microsoft Teams bundles.

Although it also works with other platforms, the AirMedia Connect Adaptor is the only dongle optimised by Microsoft for wireless collaboration, eliminating the requirement for an additional app to present and conference, both expanding and simplifying BYOD meeting solutions.
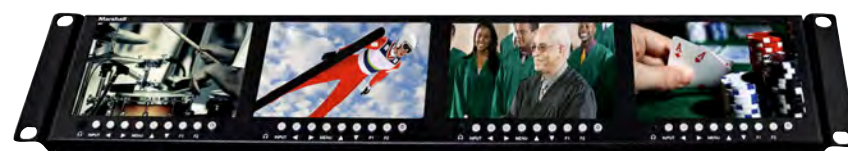
When used for wireless presentation, the plug-and-play AirMedia Connect Adaptor provides content transmission up to

4K/30p, as well as content encryption for full network protection. The adaptor plugs into the local device's USB-C connector and users can present or conference with no need to install additional software or adjust user access.

AirMedia collaboration integrates natively with other Crestron room technologies, such as occupancy sensors, touchscreens to manage schedules and controls, and the Crestron DigitalMedia platform to enable wired presentation and content distribution.

As with all Crestron devices, provisioning and managing AirMedia devices can be done remotely through the Crestron XiO Cloud Management System.

www.crestron.com

Further Marshall cameras brought to market

INCORPORATING LOW-LATENCY NDI|HX3 streaming in addition to IP (HEVC) encoding with SRT, Marshall Electronics has launched the CV570/CV574 miniature and CV370/CV374 compact cameras. Featuring resolutions of up to 1920x1080 (progressive), 1920x1080i (interlaced) and 1280x720p, the CV570-ND3 miniature and CV370-ND3 compact NDI|HX3 cameras both contain a Sony HD sensor. Housed in a lightweight aluminium alloy with rear I/O protection wings, the cameras include interchangeable lenses, multiple broadcast frame rates and remote adjustability.

CV574-ND3

The CV574-ND3 miniature and CV374-ND3 compact NDI|HX3 cameras both contain the same features with a Sony 4K (UHD) sensor. All four cameras can be set to NDI|HX3, NDI|HX2 in addition to standard IP with H.265 and SRT settings, with a simultaneous HDMI output for traditional processing or switching equipment. The CV570 (HD) and CV574 (UHD) use a miniature M12 lens mount, whereas the CV370

The touchscreen interface offers self-help dialogues, preferred settings, saved features and intelligent menu and sub-menu layouts. The fine-tune finger dials enable precise adjustments for white balance, red/blue gain, gamma, black level, brightness, exposure, iris, shutter, resolution and frame rate. Pre-programmed with control protocols for all Marshall cameras, the CV-RCP-V2 can be converted to fibre using common fibre media converters for much longer distances. Multiple cameras can be set up with one global preset or multiple presets saved on the RCP unit or external USB memory sticks.

Marshall's range of monitor solutions has been extended with the ML-454-V2. The two-rack Quad 4.5-inch screen video monitor features a brighter LCD display. Designed for fly-packs, control rooms, routing rooms and other video system applications, the LCD display distinguishes itself with looping video inputs.

The company has also announced its next generation of POV cameras developed around

ML-454-V2

(HD) and CV374 (UHD) use a slightly larger aluminium alloy body with a CS/C lens mount for longer throws and focal length lenses.

The Californian brand has also added a multi-camera control touchscreen RCP in the form of the CV-RCP-V2. Featuring a 5-inch TFT LCD touchscreen (800x480) with adjustment knobs, up to seven different cameras can be configured remotely from a truck or control booth. A three-pin XLR cable connection allows for cable runs of distances up to 300m.

highly optimised Sony sensors. The CV226 All-Weather Lipstick camera, now the CV228, is the first model to make the upgrade and features 3G-SDI, remote adjust/match and swappable lenses. The camera also has the ability to receive firmware updates in the field. The company says that additional models making the switch to the new design include the CV503 to the CV504, the CV506 to the CV508 and the CV344 to the CV348.

www.marshall-usa.com

Ayrton raises its Profile

AT JUST 28.5kg, Ayrton's lightweight Rivale Profile is the latest addition to the company's Classical IP65 3 Series. Punching above its weight with a 160mm frontal lens and a 450W high-efficiency LED module, Ayrton says its high-definition progressive CMY colour-mixing system provides a perfect reproduction of pastel colours. A variable deep red channel optimises the colour rendering index at low levels and offers a progressive red with a high level of saturation. A progressive CTO and a seven-position colour wheel complete the palette of tools dedicated to colour.

Calibrated at 6,500K with a luminous flux of 27,000 lumens, the Rivale Profile can produce a beam of 4° with a 13:1 zoom ratio and a zoom range of 4–52°. Other features include seven rotating gobos, eight fixed gobos, a framing section that allows the precise positioning of each shutter blade on 100% of the surface with a rotation of ±90°, an iris diaphragm, a monochromatic effect wheel, two combinable rotating prisms and two frost filters.

Rivale Profile

Ayrton has also introduced another lightweight fixture in the Argo 6, a weather-sealed effects luminaire available in two variants. A combination of using composite alloys, reducing thickness of parts, an optimised cooling system, simplified lens guidance and integration of low-density optical components, mean Ayrton has been able to reduce overall weight by 20%. Available as Wash or FX versions, the Argo 6 is equipped with 19 LEDs of 40W with RGB+W additive colour synthesis that can deliver a light output of 13,000 lumens. The Argo 6 can obtain a highly intense beam with a zoom ratio of 14:1 and a wide zoom range from 4–56°.

The Argo 6 Wash provides individual control of LEDs, and its library of pre-programmed colours allows quick creation of subtle, dense and contrasting swaths of light. The Argo 6 FX offers continuous rotation of the pan and tilt movement. The Argo 6 FX is also equipped with LiquidEffect, Ayrton's high-definition effects system which generates complex graphic effects. Both the Argo 6

Argo 6

Wash and Argo 6 FX can be used alone or in combination with the main LED matrix and are part of Ayrton's Multi Sources IP65 6 Series.

www.ayrton.eu

Cameo's OTOS SP6 and OTOS B5 are turning heads

EXPANDING ITS OTOS Series of lightweight, IP65-capable moving heads, Cameo has added two specialist models with the OTOS SP6 Spot Profile and the OTOS B5 Beam. The OTOS SP6 is an IP65 spot profile moving head with a 600W LED light source and an illuminance of 75,800 lx at a beam angle of 7°. With a 130mm front lens, the optical system offers a zoom range from 7–50°. Weighing 34kg, Cameo says its IP65-rated housing means the OTOS SP6 is suitable for outdoor use in the live, event, theatre and TV sectors.

The OTOS SP6 also has two gobo wheels, a five-facet prism and an integrated four-fold iris slider system with individual angulation and ±45° rotation.

It also features two frost filters and a variable iris diaphragm. It works with CMY colour mixing and includes an additional colour wheel with six dichroic filters + open for saturated, powerful colours, while the linear CTO correction allows for variable adjustment of the colour temperature in the range from 2,600K to 7,000K. Its adjustable PWM frequency (650Hz–25kHz) also means the OTOS SP6 is suitable for flicker-free use with film and TV cameras.

Weighing in at 33kg, the OTOS B5 is a beam moving head based on a 480W discharge lamp with a service life of 3,000 hours. It delivers an illuminance of 511,000 lx @ 15m and its 205mm front

OTOS B5

lens enables it to produce precise 1° beams that prevail even in dense lighting designs. Like the OTS SP6, its IP65-rated housing allows it to be used in all adverse weather conditions.

The effects section of the OTOS B5 includes a static gobo wheel with 19 gobos + open, as well as three rotating and indexable prisms on two levels to create a variety of mid-air effects. Users can draw from the full range of shades thanks to its integrated CMY colour mixing and the additional colour wheel with 14 dichroic filters for particularly saturated colours.

www.cameolight.com

Claypaky spotlights four premieres

ITALIAN LIGHTING specialist Claypaky has announced four arrivals to its growing catalogue. With dense, solid beams of light, the Skylos fits a custom 300W white light laser source to provide an extremely parallel, uniform beam from a 300mm front lens. Designed to be more versatile than a classic searchlight, its beam has no visible hotspots and the beam angle can be adjusted from 0.5–5°. With a lightweight and compact IP66-rated body, the unit can be rigged on trussing for use on tours and is capable of working in extreme weather conditions and in environments with high marine salinity and a high risk of corrosion. Its internal heating system means it can work at temperatures as low as –40°C.

Also IP66-rated, the Arolla Aqua is Claypaky's top-of-the-range, weather-resistant light which fits a white 900W (7,000K) LED light source and is capable of a 40,000-lumen output. Its zoom can be adjusted over a linear 5.5–50° range (9:1) and Claypaky claims that its

Skylos

exclusive "Go-Bright" technology means there is no light loss or colour shift when gobos are inserted into the beam.

The Sharpy-X-Spot is a simplified Sharpy-X-Frame model which fits a 550W arc lamp to produce deep, vivid, uniform colours. An optional beam shaper module turns the Sharpy-X-Spot into a fully fledged Sharpy-X-Frame, and the module is automatically recognised by the product firmware.

Buddylight

Finally, the Buddylight is a followspot system that follows performers and speakers automatically. The Buddylight can be used either in an Art-Net or DMX network or in standalone mode.

www.claypaky.it

ETC's LED upgrade is easy on the environment

ETC IS providing an RGBA LED retrofit to its Source Four ellipsoidal fixture, which the company says is as good for the environment as it is for the pocket. The company's Source 4WRD Color II LED engine allows users to upcycle any existing ETC incandescent Source Four fixture to an RGBA LED fixture. This non-destructive retrofit reduces waste by maintaining the majority of the Source Four incandescent fixtures in the field.

devices for quicker configuration. With the template file feature, starting from a known point is as simple as starting a new show. Output protocol settings have also been brought into Eos and expanded to support configurations for dynamic and static systems, laying the groundwork for future system expansion.

Updates include fixture-, device- and session-level adjustment settings, as well as expansions in ETC's built-in Augment3d
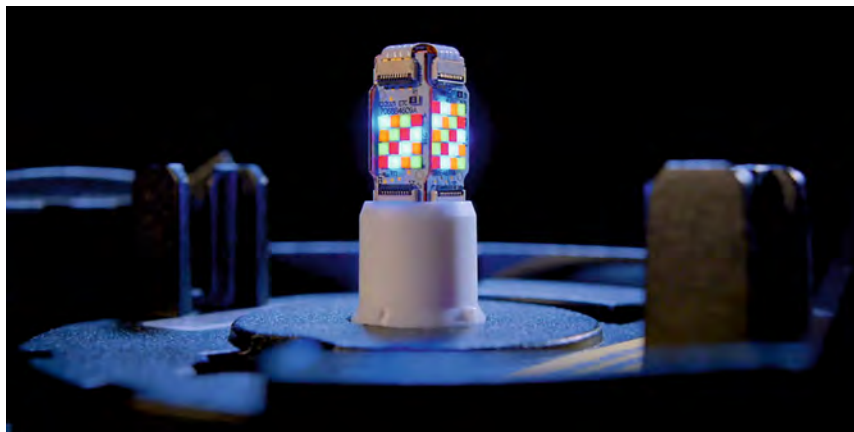

Source 4WRD Color II

Compared to the previous generation of Source 4WRD Color, the engine uses a quarter of the power. Meanwhile, the addition of the snap-in reflector and the brighter red emitter provide an intensity increase of 36% in warm whites, while ETC claims it dramatically improves colour rendering performance.

It can be a full spot profile, a full PAR or full PARNel fixture, and has 12 built-in colour presets and five built-in sequences. It maintains Source Four features such as shutter cuts, pattern projection, field peak-to-flat adjustment and a library of Source Four lens tubes.

programming environment. Augment3d now includes a Zones feature which provides the ability to define regions in the 3D model space and automatically affect fixture behaviour when they intersect with the zone. This functionality extends to attaching a Zone to a moveable element to allow it to affect the behaviour of static fixtures as well as movers.

Colour control has also received upgrades with the ability to set configurations for fixtures. As users build LED fixtures, Eos dynamically generates a gamut to provide
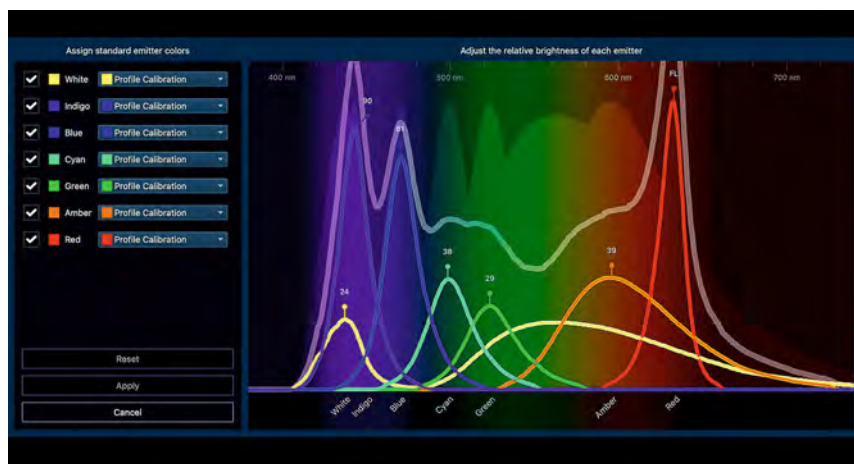
Eos v3.2

Real-time updates are now possible with ETC's v3.2 software update to its flagship Eos lighting control family. As modern lighting systems encompass more controllers and devices, access to network configuration controls are paramount, and Eos v3.2 brings key settings from the shell into the Eos application itself, allowing them to be saved in the show file and adjusted in real time, without leaving the session or stopping output.

Device settings are also now stored in profiles within the show file, allowing users to bind

use of the colour tools with any fixture. The software also adds native and virtual CIE XY controls via the colour tools and command line to keep users up to date on any communication path the fixtures may use.

Eos v3.2 also introduces implementation for Vectorworks and the ability to import glTF from other drafting suites. Other features include macro search, cue alerts and focus palettes that follow Augment3d objects.

www.etcconnect.com

v1.9 boosts MA Lighting performance

MA LIGHTING has introduced a raft of new features as part of its v1.9 software upgrade for its grandMA3 lighting control platform. Compatible with the entire

actions in pools, a 3D selection grid tool, relative XYZ, break in cues, CMY colour readout and improvements to show file handling. The software also

range of grandMA3 devices, as well as on Windows and Mac computers, the software offers the same functionality across all platforms and show files work seamlessly across all consoles and computers.

Functionalities included in v1.9 include a SpeedMaster layer for phasers,

provides workflow improvements and optimisation in network and multi-user environments. Free training on all updates is available on the MA Lighting website.

www.malighting.com

GLP's X5 runs to x5 products

X5 Bar 1000

GERMAN LIGHT Products (GLP) has expanded its X5 range to five products, with the launch of three X5 extensions. The X5 Bar 1000, X5 IP Bar 1000 and the X5 IP Maxx all share the X5's features and can be combined with each other to achieve greater consistency in terms of colours and white light.

GLP's X5 IP Bar 1000 is IP65-certified and its linear LED tilt bar is equipped with 18 40W RGBL LEDs. It offers a large zoom range and the iQ.Gamut colour calibration algorithm, while its square lens design enables light curtains in the narrowest zoom range of only 5° and an even and homogeneous colour distribution in the wash up to 70°. The identically equipped sister model, the X5 Bar 1000, is for indoor use only. The X5 IP Maxx has 37 LEDs in an X5 specification.

Meanwhile, the X5 iQ.Gamut colour algorithm has also been added to GLP's IP65-certified FUSION X-PAR 18 Z, which

FUSION X-PAR 18 Z

is based on the X-PAR 12 Z launched last year. The model benefits from a more powerful 180W LED engine in an almost identical form factor.

www.glp.de

AI's impact on live production

About the author

MARK BREAKSPEAR HAS been in the AV industry for over 15 years and joined Interprefy in April 2022. The past 14 months have seen him supporting AV companies around the world that are benefitting from remote simultaneous interpretation and live captioning solutions. He is also heavily involved with onsite event requests due to his knowledge of integrating Interprefy's technology with live installations.

Interprefy provides professional language interpretation and AI-translated speech and live captions

WITH THE RECENT POPULARITY OF LARGE LANGUAGE models (LLMs), attention has quickly shifted to how the technology can benefit commercial applications. As one of the first companies to deploy a live AI translation solution supporting live events, Interprefy is uniquely positioned to offer its vision of the future.

What is Aivia? How did the solution come about?

Aivia stands for Artificial Intelligence Voice Interpretation Assistant, and it's our AI-powered event translator, which can translate live content from 45 languages into 73 languages and even more captioning languages. In recent years, the world has become more connected than ever. RSI [remote simultaneous interpretation] technology has made the process more affordable and flexible, opening up a variety of new use cases, such as online meetings, webinars and even internal company events. At the same time, it's still out of scope for many organisations and events with smaller budgets. On our mission to remove language barriers and democratising access to real-time translation solutions, we developed a solution that is a great fit for those scenarios, where interpretation was out of scope, without compromising on quality.

What are the benefits of an AI translation platform like Interprefy Aivia?

We've already catered to a number of partners seeking multilingual captions during an event that didn't have the budget for professional interpreters (which can be quite expensive) but still wanted to provide language services of some kind to their clients. We deployed our speech-to-text engines then, on top of that, added AI translation of that text into other languages. Using their own phones, or any of our other delivery methods, people can follow live captions in a variety of different languages as the event is happening and without any interpreter being involved. It enables significantly more people to benefit from language services, even if they can't find the budget for professional interpreters. Now, with Interprefy Aivia in its current form, clients can get access to speech-to-speech translation in real time, and even in combination with other languages using professional interpreters.

Why would a company choose to go with AI over human translation systems?

One example where this technology suits clients perfectly is events with large numbers of parallel sessions. Some

Aivia provides speech-to-speech translation in real time

international congresses can have 20 or more simultaneous sessions and providing a team of interpreters for each one would drastically increase the budget required. Interprefy Aivia allows for real scalability that doesn't break the bank. When highest accuracy is mission-critical or there are legal requirements to use interpreters, organisations can't afford to take any risks in the quality of interpretation. In these cases, AI is not an option. This includes diplomatic sessions, highly technical sessions, regulatory sessions and legal proceedings.

How do you ensure accuracy with AI translation?

Different engines have different qualities, but they all rely on clear audio in. Poor audio in equals poor captions out. Beyond the requirement for good, quality inputs, we greatly improve the system's accuracy via a glossary of anticipated terms in the backend. Before an event, the client will provide us with us all the speaker names, acronyms, company names and specific event-related terminology. Even if you're translating into, say, Japanese or a language where the alphabet and polygraphy is completely different, the platform will generate the correct output while still providing the feasibility to add in terms that should not be translated.

How much of this technology is being driven by platforms like ChatGPT?

We've had the Interprefy Aivia solution in development for a few years now, but certainly the drive in [ChatGPT developer] OpenAI's solutions has made everything much more feasible. Even though we don't utilise their tech currently, there's been a massive uptick recently in the capabilities of AI which we've been able to piggyback off. We developed the platform and then we benchmark different AI engines in a process where we can use multiple engines in the same event based on which ones perform best in that particular language combination. In this respect, we're engine-agnostic, and we can chop and change as the various technologies continue to evolve in capabilities.

Should human interpreters be worried?

In many cases, AI translation is not a suitable substitute for professional interpretation. AI translation and professional interpretation both have their unique strengths and we advise every client to carefully consider which solution best fits their event needs, content, target audience and budget. There are also whole sectors of the market that could never previously afford live interpretation whatsoever. Now they can. Rather than replacing the humans, it's more a case of opening up new avenues to a wider audience who would not have had this opportunity before.

How do you expect this market for AI translation to further develop and mature in the future?

We hope that providing a solution that gives more organisers access to language services will increase the demand for simultaneous interpretation globally, whether using AI or professional interpreters. However, the gap between the proportion of events that need professional interpreters and the ones that can be serviced with this rapidly developing AI technology is constantly shifting as the technology improves. Given the drastic improvements made in the last 12 months, I'm excited to see where it takes us in the future.

www.interprefy.com

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