NEW WORKPLACE REQUIREMENTS

Tech Talk: Building an Open Standard for an AV over IP Future

Spotlight: BAP Technology Consultants

Voice Box: Steerable Sound for Wider Applications

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82 ON OUR WEB
We are ready to see the industry’s first physical exhibitions, mainly taking place in China. **Prolight + Sound Guangzhou** is scheduled to take place from August 21 – 24, followed by **LED China Shenzhen** from September 1 – 3, **LED China Shanghai** from 17 to 19 September and **InfoComm China Beijing** from 28 to 30 September. China which was the epicentre of the COVID-19 virus, worked hard to control the infection and though there are still cases, the situation seems to be very well under control. The Chinese, I believe, will actively support these exhibitions by participating and visiting. I am sure there is much anticipation as to how it all turns out.

The recent AV Industry Outlook and Trends Analysis (IOTA) produced by AVIXA, as expected, shows a decline in AV revenue across the globe. Pick up is expected in 2021 with the pre-COVID-19 level forecasted revenues coming back online in 2022. It has been a challenging time for many in the industry, from distributors to manufacturers. Despite that, it is great to see that manufacturers are continuing to invest in R&D to create updates or new technologies. This can be evidenced by the number of new solutions we have covered in our Solutions Update pages in this issue.

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LG’S Immense LED Digital Signage Project is Turning Heads in Busy Gangnam

KOREA: Whether at home, in a shopping mall or out on the street, big screens always attract a lot of attention. A prime example of this comes from LG Electronics’ Business Solutions Company, which recently installed its new extra-large, high-definition LED digital signage on one of Seoul’s most bustling streets in Gangnam.

Running through the center of the iconic district, Teheran-ro (“ro” meaning “street” in Korean) is often referred to as Korea’s version of Times Square due to the abundance of state-of-the-art screens displaying advertisements of every brand imaginable. Designated as a free outdoor advertisement zone by the Government of Korea, the street acts as something of a public arena where major entertainment houses, clothing brands and corporations vie for the attention of the estimated 100,000 pedestrians who traverse its sidewalks every day of the week.

LG’s eye-catching LED digital signage solution is hard to miss. Two strikingly vibrant 10,000 nit displays – 21.8 meters tall by 12 meters wide – are embedded in a structure that measures an imposing 26 meters in height. The custom-built dual-sided display featuring pixels only 8.3mm apart is located in front of one of the most well-known landmarks on Teheran-ro, the Grand InterContinental Seoul Parnas Hotel.

LG’s customized sign is a freestanding double-sided billboard, a rarity even in a city as fast to adopt new technology as Seoul. LG oversaw the entire project from start to finish, including the design and construction of the entire structure. And consistent with LG’s many other display products such as TVs, monitors and laptops, LG’s Gangnam LED digital signage features extremely small bezels so that passersby see only the stunning images displayed on the screen.

With the company’s outstanding display technology in the heart of famous Gangnam, LG’s immense commercial signage project is definitely hard to miss and hard to take one’s eyes off of.

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Chulalongkorn University Goes New School with Sony’s Optical Disc Archive System

**THAILAND**: In 2016, Chulalongkorn University, Thailand’s oldest higher institute of learning, turned to Sony to help with its ever-growing demand for managing and storing its academic resources, which covered everything from learning activities, classroom and lecture capture to audio/video capture of life in the university.

Four years on, the success of its migration to Sony’s Optical Disc Archive solutions speaks for itself. The task of managing this enormous endeavour was entrusted to the Office of Academic Resources, which was set up in 1978.

“When we first started, we used mostly tape data and used a timeline method to ensure consistency,” Dr. Banphot Srosri Acting Director of Multimedia Information Service Division Office of Academic Resources, Chulalongkorn University explained. “When digital become more commonplace, we were faced with a new problem – how do we archive and manage the ever-increasing volume of data? We found the answer in Sony’s Optical Disc Archive solutions.”

Whether it’s an institute of learning, national broadcaster or production house, there is a long-term need to overcome archiving challenges with a flexible, affordable and intuitive platform.

Dr. Srosri and his team identified Sony’s proprietary Mediabackbone NavigatorX (NVX) as the answer to the university’s pressing needs. “From the onset we knew that we needed the gold standard in content and archiving management.” One of the NVX’s main selling points was its ability to manage high resolution data efficiently.

“As the university creates a huge amount of audio and video content that needed to be shared quickly between students and teachers and vice versa, it is important that our media management tool is able to handle high volumes and more importantly, it is easy to use,” Dr. Srosri highlighted.

Dr. Srosri and his team were also impressed with the NVX’s open platform system. This meant the university could easily upload almost any file format for video, audio, graphics or documents and it provides an unprecedented level of Metadata management.

To optimize the NVX’s full potential, the university teamed it up with Sony Optical Disc Archive (ODA). Using a revolutionary disc-based storage system, the ODA is built to perform under extreme conditions, it is scalable and like the NVX also future-proof.

Ideal for smaller and medium-sized environments, the other key selling point of the NVX is its ability to improve productivity with its automated workflow – from ingest, catalogue and editing to review, approvals, distribution and archive.

Both the NVX and ODA can seamlessly integrate with the university’s existing array of Sony equipment including cameras and camcorders.

“When we started reviewing media management solutions, two words were key – affordability and expandability. Sony scored in both areas. What we also liked about the NVX and ODA was the ease of use from its implementation to daily usage. Of course, it helped that we were investing in a platform that could run for the next 100 years. We have invested in the future,”Dr. Srosri concluded.

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*Source: FutureSource Consulting, 3 years of 12,000 hours, whichever is earlier. *Compared against similarly-priced leading 1-chip DLP” business and education projectors based on NPD data from July 2011 through June 2012 (available at www.npd.com). *Colour brightness (colour light output) measured in accordance with IEC61566. Actual colour brightness will vary depending on actual usage conditions. *“3LCD” is a registered trademark of Seiko Epson Corporation. *“DLP” is a registered trademark of Texas Instruments, Inc. and its use here does not imply any affiliation with or endorsement by them.
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Brompton Technology Expands Operation in China

CHINA: Leading LED processor manufacturer, Brompton Technology, has expanded its operation in China, moving to larger offices and hiring three new members of staff to further support its customers in the territory. The expansion follows the development of Brompton’s highly acclaimed HDR technology and the successful roll out of its new Hydra measurement system, which unlocks the power of Dynamic Calibration, the enabling technology for Brompton HDR.

The new office is adjacent to Brompton’s previous facility in High Tech Industrial Park, Nanshan, in the modern metropolis of Shenzhen, Guangdong Province. This facility is double the size, allowing space to calibrate and test prototype panels on site. New Calibration Support Engineers, Alex Guo and John Lee, both have an extensive understanding of the LED screen industry and are ideally placed to assist Brompton customers in China with Dynamic Calibration. Helping to run the office is new Office Assistant, Noora Xu, who has valuable experience in international trade and purchasing and takes over the role from Summer Zhang.

“The decision to increase both our office space and staff was made pre lockdown,” says Elijah Ebo, Brompton’s General Manager (Asia). “The incredible interest in Brompton HDR and panel recalibration, following its launch at the end of last year, had meant we were getting busier and busier, so we needed additional calibration specialists. They are very hard to find. We had to search for the right people and were very lucky to find them.”

Whilst the intervening months have been understandably quiet, Brompton’s China team has used the time constructively, with Guo and Lee now fully trained on Hydra, and Xu fully immersed in Brompton’s processes.

The proactive approach from both existing and new team members meant that, once the Hydra cameras were available, Gou and Lee already had an in-depth knowledge of the system. Meanwhile Summer Zhang, thanks to her professional development during her time with Brompton, has been promoted to the role of Project Manager.

“It’s always important to choose the right people,” concludes Ebo. “Whilst this this has been a difficult time for everyone, knowing we have a strong team in China while travel is restricted has been invaluable. It means that we are in a great position to be able to continue to provide the support Brompton is known for and to respond to our customers’ current and future needs.”

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CLSPL Uses Downtime to Expand Offerings

SINGAPORE: Control Logic Systems (CLSPL) has ventured into the video-conferencing space by taking on distribution for Neets AV Control Systems for Singapore, Indonesia, Philippines, Vietnam, Myanmar and Brunei. Neets offers paperless E-ink digital display for wall-mounted control, Sound Bar as well as Touch Panel control. Besides, Neets has introduced Solvo – an intelligent AV systems hubs for video-enabled huddle rooms.

“We were already in discussion with Neets at ISE. We foresaw that video-conferencing would be a growing market. Of course, the COVID-19 pandemic has accelerated the growth of VC. The Solvo hub offers easy connection of your choice of video conferencing equipment to create a powerful automated system with CEC technology. It just needs a single USB connection from your laptop to the hub, which then automatically turns on/off all the connected devices. Our objective is to offer a simple and fuss-free one button start for your video conferencing needs.”

CLSPL has come up with a package for Small and Medium Enterprises for their video conferencing needs. “We have combined the Solvo Hub with the Neets Sound Bar and a LED display and a video conferencing camera – all integrated into a mobile system. The user just needs to connect his laptop to the hub, and everything comes into play, making it easy and convenient. Most importantly, it is a cost-effective system.”

To complement Pro-Audio requirements, CLSPL is also now offering EBST Co., Ltd’s all-in-one microphone and speaker as well as a portable UV-based microphone head sterilizer. EBST is a Korean manufacturer.

The Micker Pro all-in-one microphone and speaker features a 10W dual-speaker that provides a convenient and stable quality of sound with no directional loss. It also offers howling suppressor technology, 3-level volume adjustment and even a buzzer to attract attention. Charging is made convenient with an internal charging circuit connected via USB-C to the charger. Offering good grip the rigid material provides excellent durability.

David Seow of CLSPL comments, “This is a great product that is easy to use with zero set-up time. We envision it being used for gatherings in churches, schools, community spaces and fire drills. The sound coverage can reach around 20 to 25m in an open space, and it provides excellent quality for the purposes it is intended to serve.”

Complementing the Micker Pro is the portable UVS UV Sterilizer. Tests indicate that the sterilizer offers 99.9% sterilization. “It is a simple to use product that is easily chargeable through the UCB-C connection. You put it onto the microphone head, switch it on and let it do its job. Indicators keep you informed of the status of the sterilization process. It goes hand in hand with the Micker Pro though it is not just for the Micker Pro and can be used for sterilizing any microphone head.”

www.clspl.com
DISTANCE MEETINGS MADE EASY WITH DICENTIS WIRELESS CONFERENCE SYSTEM

With the current COVID-19 situation, there is a challenge to meet and maintain the requirements for physical distancing. Seating arrangements for meetings must comply with physical distancing guidelines; decentralized meetings with all participants joining remotely is not always possible as physical attendance is often required and it is not always efficient.

DICENTIS Wireless Conference Systems provides the perfect solution for these needs. It optimizes speech intelligibility and meeting efficiency, while providing maximum flexibility in system set-up to apply physical distancing and the easy interfacing with third-party online communication platforms for remote participation.

For more information, contact us at +65 6571 2808, apr.buildingtechnologies@bosch.com or visit www.boschsecurity.com
Touchless User Interface Market Will Exhibit Significant CAGR

INTERNATIONAL: In the recently published “Touchless Human-Machine-Interface HMI Technologies, Supply Chain and Market Forecast 2020 Report, 3rd edition” Touch Display Research Inc., a market research and consulting firm, analyzed all the touchless human-machine interaction (HMI) sensor technologies and market applications. The touchless HMI market will exhibit significant CAGR from 2019-2030. This report profiles over 390 touchless sensor suppliers, system integrators, and brand companies working on touchless control.

Figure 1. From touch to touchless human-machine-interface


Touchless Human-machine-interaction Provides Many Benefits:

* Hygiene/cleanliness. Hand-free operation for hospitals, bathroom, kitchen etc. People are hyper-cautious in public areas now due to the COVID-19 pandemic.
* Safety. Voice-control in automotive could keep drivers hands on the wheel, eyes on the road.
* Security. Home/building automation uses motion and infrared sensor to detect person at night.
* Power/resourcing saving. And many other benefits.

“Touchless control is in high demand. COVID-19 has made people adverse to touch surfaces that could transmit the disease, especially in public areas. With many regions reopening their economy, the development of touchless interfaces is accelerating. Your company’s strategic planning in the next six months could decide your success or lack of it for the next several years, and this report could empower your business planning,” said Dr. Jennifer Colegrove, CEO and Principal Analyst at Touch Display Research and author of the reports.

There are over a dozen touchless HMI technologies, and Touch Display Research put them into 9 categories. See the table here. The newly published Touchless HMI 2020 report found that the touchless human-machine-interface technologies have attracted over 390 companies working on touchless sensor, touchless software, and system integration. Voice command and camera-based gesture have the most companies: Voice command has 110 companies and camera-based gesture has 69 companies working on them.

Figure 2. Touchless Human-Machine-Interface technologies attracted over 390 companies

<table>
<thead>
<tr>
<th>Touchless HMI technologies</th>
<th>Companies in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camera-based gesture</td>
<td>69</td>
</tr>
<tr>
<td>Eye tracking</td>
<td>12</td>
</tr>
<tr>
<td>Ultrasound or radar based gesture</td>
<td>13</td>
</tr>
<tr>
<td>Voice recognition</td>
<td>110</td>
</tr>
<tr>
<td>Photodiode sensor</td>
<td>16</td>
</tr>
<tr>
<td>Proximity touch screen</td>
<td>8</td>
</tr>
<tr>
<td>Motion sensor fusion</td>
<td>53</td>
</tr>
<tr>
<td>Short-range wireless</td>
<td>37</td>
</tr>
<tr>
<td>Other touchless tech</td>
<td>38</td>
</tr>
</tbody>
</table>


Touchless technologies can be used in dozens of applications, we organized them into seven categories, see the table here:

Figure 3. Touchless Human-Machine-Interface in 7 application categories

<table>
<thead>
<tr>
<th>Touchless Applications</th>
<th>Source: TDR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive</td>
<td></td>
</tr>
<tr>
<td>2AR, VR, XR and game console</td>
<td></td>
</tr>
<tr>
<td>3Home automation/TV/smart speakers</td>
<td></td>
</tr>
<tr>
<td>4Mobile phone/tablet</td>
<td></td>
</tr>
<tr>
<td>5NB/desktop monitor/PCs</td>
<td></td>
</tr>
<tr>
<td>6Wearable (non HMD)</td>
<td></td>
</tr>
<tr>
<td>7Out-of-home touchless</td>
<td></td>
</tr>
</tbody>
</table>


Touchless HMI will enjoy accelerated growth in the next 10 years. The touchless HMI market provided billions of dollars opportunities for semiconductor companies, OEM/ODMs, proximity touch suppliers and software companies.

Table of contents and report sample are available upon request. Please email: jc@TouchDisplayResearch.com

The report is available to be purchased from Touch Display Research

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Broadcasting & Archiving in both SDR & HDR?
Singapore Turf Club Upgrades to Shure Digital Wireless Microphone Systems

SINGAPORE: The Singapore Turf Club (STC) is the only horse-racing club in Singapore that features quality horse racing as sports entertainment at the Singapore Racecourse on most Friday evenings and Sunday afternoons throughout the year. The club also boasts a rich culture and history of over 177 years, having been founded in 1842.

Sitting on 133 ha of land in Kranji and with a magnificent five-story Grandstand that accommodates up to 30,000 racegoers and boasting a seating capacity of about 13,000, the overall experience of spectators is integral to the successful operations of the club. The key requirement from Singapore Turf Club was to have a reliable system that would provide ease of operations and flawless connection during a live broadcast. Bearing this in mind, the operator decided to upgrade their digital wireless microphone systems late last year.

Established systems integrator, Electronics & Engineering Pte Ltd (E&E) was responsible for the supply and integration of the wireless microphone systems. The Shure Axient Digital wireless microphone system was recommended as it features Quadversity mode that assigns four different antennas for greater coverage and signal quality. Frequency Diversity enables audio transmission from a single source onto two independent radio frequencies and actively detects & avoids interference by switching channels in real time. Coupled with the AD610 that provides wireless ShowLink connection between all linked transmitters and receivers, flawless connection is further reinforced. ShowLink technology offers unprecedented remote control and monitoring for easy coordination of clean, usable frequencies.

The Shure Wireless System allows interviews to be conducted in multiple areas. The system serves a 5 square kilometre range of coverage at key broadcasting points from the Turf Track, Prize Ring, Grandstand, Horsewalk, Parade Ring areas, including the Weighing Room and Champagne Room along the Horsewalk.

“The Singapore Turf Club wanted to invest in technology that has intelligent capabilities to avoid interference and audio drop outs which they were facing with their previous system.” said Gerald Chew, Business Unit Head, (Sales & Distribution) at Electronics & Engineering Pte Ltd. “The new wireless system needed to be stable, robust and reliable,” he continued.

There are eight channels of Shure ADX2/SM58 running on Quadversity. The Shure AXT600 Spectrum Manager consistently scans and deploys the next best frequency in real-time during operations. This gives the technical crew better mobility and ease of mind, especially during the live shows.

Shure Axient Digital has a flat frequency response and accurate transient response including AES-256 encryption, and an impressive 2ms latency from the mic transducer to the analogue output. With Wireless Workbench software that helps monitor RF performance, remote adjustments to transmitter and receiver, Wireless Workbench allows remote monitoring and manages the system without interrupting the production. Frequency calculation and analysis for supported devices allows the user to coordinate the entire show from one application.

The additional benefit for the facility personnel is the comprehensive interface provided with the system that manages every aspect of performance, including battery life, signal strength, and RF interference.

“If something happens to cause concern, such as low battery life, the user can quickly locate the precise bodypack or microphone that needs recharging. The ability to monitor the battery and RF status gives continued confidence throughout the show’s run,” continued Gerald Chew.

E&E also supplied the Shure wireless PSM900 in-ear monitoring system which helps interviewers receive information and instructions from the broadcast room.

www.enepl.com.sg
New Study from Shure Provides Deeper Look at the Future of Conferencing

"As we continuously try to learn more about the needs of the industry, this survey provides great insight about how today’s companies are looking to prepare for tomorrow’s business needs."

The survey included feedback from IT and business professionals in a wide range of industries including healthcare, banking, financial services, manufacturing, retail, technology, transportation, energy, agriculture and real estate.

The findings paint a picture of the importance of technology – especially audio – in providing effective virtual meetings:

* 87 percent of IT and business professionals surveyed said that virtual meetings were critical and/or very important
* 86 percent confirm that virtual meetings are growing in importance
* Three out of four IT professionals said their businesses plan to allocate bigger budgets in the next year to better accommodate virtual meetings

"Not having the right equipment can negatively impact several factors for businesses – workplace efficiency, cost savings and even morale," said Merrick.

**Productivity**
Respondents said that technical difficulties during virtual meetings caused several issues for the workforce. The top problems listed include the need to re-schedule meetings, miscommunication resulting in reworking projects and decreased employee satisfaction.

**Employee Frustrations**
Even when virtual meetings are able to take place without “technical issues”, the in-room sound technology can be a factor. Among the top frustrations, respondents listed background noise, echoes, only hearing partial pieces of speech and side conversations. Overall, poor audio quality is a leading cause of meeting room problems based on the findings.

**Impact on IT Resources**
When technical issues occur, it means IT staff, already stretched in many businesses, is called upon to respond quickly. The survey found that 68 percent of executives elevate meeting room issues to IT at least weekly. Overall, 82 percent of business professionals surveyed have experienced a negative impact of poor audio quality, with lost time and productivity leading the list.

**Benefits of Flawless Audio**
According to business professionals, the biggest factor in improving virtual meetings is providing flawless audio, with a whopping 81 percent saying this is the main culprit. They believe that these improvements would lead to better productivity (65 percent), less time spent in meetings (61 percent) and higher employee engagement (56 percent).

Driven by these findings from the study, the Effortless.Shure.Com portal aims to enable a more seamless transition into the age of virtual meetings by providing complimentary access to resources and tips for effective conference room set-ups, white papers on building the best audio, and overviews of products.

“Shure has a distinguished history as the trusted provider of audio equipment and solutions for the world’s biggest stages which has hosted world leaders and music legends in their time,” said Eric Ong, Director, Sales at Shure Southeast Asia. “Now, we are not only bringing that quality to boardrooms and meeting rooms in Southeast Asia but also sharing our knowledge and tips on the portal so that users across the board can seamlessly and effortlessly set up, operate, and manage our systems.”

For more findings and analyses, visit Effortless.Shure.Com

---

**GLOBAL:** Shure, a global provider of audio conferencing equipment and solutions, has launched a dedicated portal to help businesses improve their conferencing capabilities. The portal, Effortless.Shure.Com, explores the considerations and advantages of a robust audio conferencing infrastructure in the age of virtual collaboration derived from a study commissioned by Shure and in partnership with Illuminas, a leader in technology industry market research.

The study involved 401 business professionals and IT decision-makers and provided some surprising numbers about the future of conferencing and included eye-opening insights in the following categories:

- Benefits of Flawless Audio in Conferencing
- Perception Gaps Between Executives and Staff on Conferencing Quality
- Employee Frustrations with Virtual Meetings
- Impact on Workplace Productivity and IT Resources
- Future Technology Investment to Support Virtual Meetings
- Importance of Audio vs. Video

One of the most interesting findings is that only 36 percent of the business professionals surveyed believe that their organizations currently have the right technology to support virtual meetings. Three out of five felt their employers had the basic technology in place but need to make improvements.

"With the continued growth of global business and remote employees, virtual meetings are more important than ever," said Chris Merrick, Director, Marketing Global Systems at Shure.
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AVIXA Forecasts Global Pro AV Industry Will Decline to $239 Billion in 2020 with Growth to Resume in 2021

GLOBAL: The global pro AV industry reached a peak of $259 billion in 2019. Due to the global pandemic, the industry is expected to decline to $239 billion in 2020, according to the new 2020 AV Industry Outlook and Trends Analysis (IOTA) produced by AVIXA, the Audiovisual and Integrated Experience Association. IOTA shows the industry recovering back its pre-COVID levels in 2022 before growing to $315 billion in 2025. This represents a 5.8% five-year compound annual growth rate (CAGR) and will drive industry revenue $56 billion beyond its 2019 level.

The 2020 IOTA explores the global trends within the pro-AV industry, providing an overview of AVIXA’s current five-year forecasts of revenues for products and services along with the predominant trends driving these forecasts.

“The COVID-19 pandemic has broadly impacted the near and longer-term outlooks for economic growth and business activity. Those who have followed AVIXA’s previous forecasts will note the new estimates represent a significant downward revision,” said Sean Wargo, Senior Director of Market Intelligence, AVIXA. “Regions and industries are being impacted at different degrees and are on different timetables for recovery. For example, Asia-Pacific will weather 2020 better than others, because it was the first to be impacted by COVID-19 and the first to re-open its economies.”

APAC will have the strongest growth of all regions, with a 7.4 percent CAGR from 2020 through 2025 — compared to 4.7 percent for the Americas and 4.5 percent for EMEA. In 2025, APAC pro AV revenue will amount to $126 billion, compared to $108 billion for the Americas and $81 billion for EMEA.

The corporate market continues to be the single largest application area for pro AV products and services, capturing $52 billion in revenues globally in 2020. While a much smaller revenue opportunity, at just $7.3 billion, the energy and utility business will generate much higher growth, with revenue rising at a CAGR of 10.4% from 2020 through 2025 thanks to investments in smart grid and sustainable energy sources.

Conferencing and collaboration solutions, which form the crux of meeting spaces in corporate or other markets, remain the largest solution area, generating $38 billion globally in 2020. As employees return to work in a limited capacity, AVIXA analysts anticipate even more need for collaboration among on-premise and remote workers.

The fastest-growing solution is security/surveillance/life safety, with an 11.4 percent CAGR. Government and military, education, and corporate are three industries that will generate the most demand for this solution area, due in part to pandemic response. City surveillance is also a significant market for security cameras. Typically, this requires significant storage and server systems to support the camera infrastructure.

Among product segments, streaming media, storage, and distribution (SMSD) is projected to be the single largest component of pro AV revenues, generating $68.5 billion in 2020. SMSD includes all the generic and specialty servers and storage used to manage AV content in the back end. Even more impressive than the size is the growth, which at 9.6 percent, is one of the highest of the categories.

The IOTA report is produced by AVIXA in conjunction with Omdia (formerly IHS Markit), a global research firm with specialty across a number of underlying supply chain markets, many of which overlap with the principal components of the pro-AV industry. This specialization provides connections with manufacturers, distributors, integrators, and larger end-user firms that provide and consume pro AV products and solutions. This translates into sources of data that are modelled in conjunction with key macroeconomic data to generate the forecasts shown herein.

To learn more about the 2020 AV Industry Outlook and Trends Analysis (IOTA), visit the link below. Regional IOTA reports for the Americas, Asia-Pacific, and EMEA will be released in July and August.

www.avixa.org/IOTA
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The Professional AudioVisual (AV) industry is changing at breakneck speed. New technology is enabling ever more creative solutions. The Internet of Things, artificial intelligence, extended reality and 5G are poised to transform the AV user experience. Now more than ever, AV professionals must keep pace with the technological evolution to stand out in this highly-competitive industry.

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**Lightware Reorganization in Asia Sees Lightware China Taking Up Bigger Responsibility**

**CHINA**: As a result of Lightware’s reorganization process in Asia, Charles Wang and his team at Lightware China are taking over to directly serve partners and customers in mainland China and in Taiwan exclusively from their new office in Beijing, and they can also be contacted for projects in Macau and Hong Kong.

Charles has been closely cooperating with the recently closed Lightware Asia office in Hong Kong over the past years, allowing him to gain comprehensive knowledge of Lightware products, and also to establish great relationships with key partners of the local market. Lightware has stated that Charles experience and resourcefulness, combined with his unique understanding of product promotion and sales in the Chinese market guarantees that any local AV project is in safe hands.

He is supported by a great team of industry professionals, who together hold more than 25 years of combined experience within the field of AV technology.

“We are proud to welcome Charles Wang and the whole Lightware China Team in our family! With the opening of our new office, we are strengthening our presence in the Asian market which has strategical importance for us. With Charles and his team on board, we immediately provide the right experience and knowledge for our Chinese customers,” commented Krisztian Taivainen Head of Global Sales.

“Thanks to their dedication and continuous efforts, Lightware’s devices are steadily replacing our competitors’ equipment in many applications all across China,” said Krisztian. He adds, “Their recent project with Zhongwang Group, the world’s leading R&D manufacturer is a great example of this pioneering expansion, where more than 80 meeting rooms have been served by various Lightware devices.”

“We are confident that Charles and his team at Lightware China will not only continue our on-going development in the Chinese market but will also thrive to ensure every partner and project is served with the highest level of professionalism and diligence associated with the Lightware brand,” said Krisztian.

Lightware China can be contacted via support.china@lightware.com

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**Exertis ProAV Australia Appointed to Distribute Joan Meeting Room Booking System**

**AUSTRALIA**: Strengthening its existing North American distribution agreement with Stampede, Joan, the simplest, most energy-efficient and completely cable-free solution that helps to reserve and manage meeting rooms, has announced the appointment of Exertis ProAV Australia, part of Exertis ProAV and Stampede, to serve as its distribution partner in Australia and New Zealand.

“The appointment of Exertis ProAV Australia to represent Joan in Australia and New Zealand signals the expansion of a very successful relationship that began two years ago in North America,” Rok Zalar, CEO of Visionect, the developer of Joan, said today.

“The combined power and reach of Stampede and Exertis ProAV Australia will help us to bring the benefits of Joan to an entirely new audience of consumer and commercial customers.” According to Exertis ProAV Australia President & CEO Kevin Kelly, “Joan is so much more than a device. It is a complete scheduling and meeting management solution that helps to create efficient meetings and facilitates focused work. "We are excited to bring Joan to our resellers and their end-user customers throughout Australia and New Zealand. Joan is without a doubt the most advanced, energy efficient meeting room scheduler available on the market today. Our in-region customers have been looking for an environmentally friendly, easy-to-install wireless solution and Joan is precisely that.”

www.exertisaustralia.com
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AVkraft and QSC Help Spread the Message at Sacred Heart Forane Church

**INDIA:** The migration of St. Thomas Christians from the old Syro-Malabar Diocese in Central Kerala is a unique event in the history of the Catholic church in India. While in other places the church grew by conversion, here it was by migration. Sacred Heart Forane Church is a Syro-Malabar Roman Catholic church situated in Thiruvambady, Thamarassery - south-west India. The migration started in the year 1942 and the church was established in the year 1944. Its Gothic style architecture caters to around 750 people on average per mass time. After more than six decades, the church was recently subjected to an altar renovation to offer a better experience for the congregation.

Part of the works saw the installation of a new audio system. Parish priest, Father Jose Oliakkatil approached AVkraft with a project brief that specified the need for a solution that would complement sermons to be heard throughout the sanctuary. He was especially looking for a solution that is able to deliver clear, understandable speech no matter where worshippers choose to sit.

The biggest challenge for AVkraft was overcoming the problems posed by the two lines of pillars which are a huge obstruction in achieving seamless coverage. To provide consistent coverage to all in the congregation, Mathew George, Technical Consultant of AVkraft designed the solution and divided the chapel into eight specific zones, two as FOH and three on the left and three on the right, with a speaker dedicated to each zone. Each of the 8 zones has a QSC CP12 and QSC K12.2 active speakers promising superior experience. “QSC CP12 and QSC K12.2 were the clear choices because they deliver remarkable audio performance, providing outstanding fidelity and high-energy output for worshippers,” said Mathew.

In addition to the QSC K12.2 and QSC CP12, one QSC CP8 is angled inwards and used as an onstage monitor for the Priests at the altar. The audio system also included the Church’s re-purposed Yamaha MG24XU digital mixer along with AKG D5s, and Sennheiser E845 microphones.

The enhanced experience achieved by the audio solution implemented at the Sacred Heart Forane Church was well appreciated and a couple of months after the installation work, AVkraft has now been asked to design and supply a PA system for St Joseph’s church Pullorampara. “It’s an open testimony of the work we have carried out for the Sacred Heart Forane Church installation,” comments Mr George.

Concluding the new experience Father Jose Oliakkatil says, “Our new sound system is fantastic. Every word is heard clearly, even from the very edge by the west door as well!”

Avkraft has been designing and building audiovisual system for auditorium, schools, mosques, churches and many other related business all around north Kerala. https://www.facebook.com/AVkraft/

AVkraft team members with the priests, including Father Jose Oliakkatil (fourth from left)
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20 November (Friday) 10am – 6pm
21 November (Saturday) 10am – 4pm

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Kramer Schoolroom Solutions Offer Engaging, Future-proof and IT-Friendly AV Package

Kramer Electronics, has released its Kramer Schoolroom Solutions campaign to help education facilities easily specify technology which injects flexibility, handsfree connectivity and secure networks into multiple classroom environments.

Designed for K-12 school administrators, IT managers and integrators worldwide to easily navigate between solutions offering various learning needs, Kramer Schoolroom Solutions are engineered to adapt to rapid change across classroom styles with new technologies and products at a cost-effective price.

As concerns grow over equipment hygiene, Kramer Schoolroom Solutions provide a conveniently quick and secure way to encourage BYOD connectivity and automated hands-free classrooms. These latest tools also support hybrid learning, actively promoting class participation, reducing teacher set-up time and offering a variety of connectivity options.

The accurate reproduction of teaching materials is crucial to supporting lessons. Kramer’s systems support automated scaling and switching of content from BYOD devices to ensure picture quality matches the display technology resolution. In addition, the systems support live streaming to all major video platforms and carry video signals up to 4K.

For IT departments that require more off-site management, the solutions promote remote servicing and reduce the amount of unnecessary service calls. Its user-proof automation and networked capabilities provide a full overview of the campus site system and supports a “grow-as-you-go” technology vision, with backward compatibility with existing systems.

Providing a range of solutions to cater for different environments, each solution comes with professional quality audio. Kramer also offers complete security coverage across its products and solutions for added reassurance, complying with ISO 27001 certification.

www.kramerAV.com

Matrox Expands HDCP Support to Further Simplify Video Wall Designs

Matrox has released enhanced High-bandwidth Digital Content Protection (HDCP) support to simplify the integration of copy-protected sources in video wall designs. Available via the Matrox Mura 3.04 driver, this new development enables OEMs and system integrators to pair Matrox Mura IPX capture cards and Matrox D-Series multi-display boards to seamlessly capture and display multiple 4K HDCP sources across multi-4K video walls. HDCP-compliant platforms offer unique deployment opportunities to showcase premium, high-value AV content for a wide range of display wall applications in control rooms, government facilities, digital signage environments, broadcast studios, and more.

HDCP is a security feature designed to protect digital entertainment content by transmitting HDCP-encrypted signals between authorized transmitters and receivers. Matrox-based video wall controllers ensure reliable, secure, and uninterrupted signal delivery between multiple sources—including set-top boxes, Blu-ray Disc and media players, video game consoles, and more—and multiple displays. Video wall designers are also now equipped to meet any multi-channel requirement by combining multiple Mura IPX and D-Series cards with QuadHead2Go multi-monitor controllers to support a myriad of 4K HDCP sources across an ultra-large video wall of up to 64 Full HD screens.

The Matrox Mura 3.04 driver is available now.

www.matrox.com/graphics
Datapath Ensures Users Take Command with Latest WallControl 10 Features

Datapath has released the latest version of their WallControl 10 video management software. WallControl 10 v1.12 includes a number of user-driven enhancements to improve source identification, simplify the management and re-use of assets, and provide increased control of available sources.

The latest developments provide a new On-Screen Display (OSD) feature, which allows users to identify displayed sources at a glance by adding text labels to their source windows. This is especially useful in control room and security environment where sources may appear similar at first glance (such as CCTV camera feeds or cropped sections of an application). The OSD feature also allows users to include dynamic variables in their labels such as source name, time/date, frame rate and resolution.

To further differentiate sources and their boundaries on the video wall, users can now overlay coloured borders onto content (for Vision and SQX card sources) and add frames around any displayed window.

With the latest version, WallControl 10 Pro now includes support for creating banners for display on the video wall. Users specify the banner text, either by entering manually or by specifying an RSS feed, text scrolling direction (or setting as static) and the background colour for the banner. Transparency backgrounds are also supported.

The latest release of WallControl 10 (v1.12) is available now. For a personal demonstration, or for more details, please contact your Datapath representative.

www.datapath.co.uk

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Renkus-Heinz’ New Iconyx Compact Series Brings Powerful Flexibility to Integrators

Renkus-Heinz is thrilled to introduce its newest solution for positioning sound precisely where you want it – the Iconyx Compact Series 12/3-RN single array module.

The Iconyx Compact Series brings the ultimate flexibility of the Iconyx to a smaller footprint array, filling a need for integrators seeking integration options in the “medium-sized” installations common in the house of worship, corporate, transportation, education, and government markets.

Further, the ICC12/3 offerings are shipping immediately out of Renkus-Heinz California headquarters.

The Iconyx Compact Series brings performance and directivity to spaces where even the classic Iconyx arrays might be too large. The very narrow cabinet disappears into nearly any venue, while the exceptional vertical directivity can help penetrate even the most challenging acoustics, making the exceptional performance of beam-steered line arrays available to even the most architecturally sensitive spaces.

An all-new, twelve-channel digital amplifier powers twelve, 3” 77 mm full-range, high sensitivity, treated paper cone drivers. With an amplifier and DSP channel for each driver, the flexibility of Iconyx is now available in a package nearly 40 percent smaller than the classic Iconyx.

Still, the ICC12/3 offers the impressive performance synonymous with Renkus-Heinz: full RHAON II beam-steering with the latest U.R.G.O beam algorithms, a movable acoustic center, multiple beam opening angles and high-pass filtering of individual beams. All with the fidelity and musicality expected of a Renkus-Heinz product.

The included wall-mount bracket makes mounting easy and is nearly invisible behind the arrays. Standard RN units have analog and AES inputs.

www.renkus-heinz.com

LEA Professional Now Shipping Powerful IoT-Enabled Amplifier Solution For Small-Scale Installs

Comprehensively delivering on the promise of IoT-connected high-performance amplifiers, LEA Professional has announced that global shipments of its 160-Watt and 80-Watt Connect Series amplifiers had begun and that systems integrators around the world will now have shortened delivery times for the industry’s most anticipated audio product in several years.

LEA Professional, the startup turned industry player in amplifier and systems design, is now shipping the eight, low-power models of IoT-enabled, professional amplifiers to provide system designers and integrators simple and cost-effective solutions for professional-grade, small-scale system installations. The new models consist of the Connect Series CS84, CS88, CS164, and CS168 in both Network and Dante. All eight of the Connect Series low-power models are built with fully-routable analog input/outputs, as well as three network connection options: using the built-in WiFi Access Point, connect to an existing WiFi network, or using a Local Area Network Ethernet connection. Once connected to a network, integrators have access to LEA’s new cloud platform, leaprofessional.cloud for remote control and monitoring.

Designed and engineered to optimize configuration capabilities and control for integrators, the Connect Series amplifiers also feature DSP with built in crossovers, PEQ, limiters, and load monitoring. The models also feature LEA Professional’s proprietary Smart Power Bridge, universal switch mode power supply, and direct LoZ and HiZ selectable per channel in a-one-rack-unit chassis.

The new Connect Series models are compatible with the LEA Professional Web UI and via the cloud platform for control and monitoring. The cloud platform utilizes a built in Amazon Web Services (AWS) IoT core, which allows integrators to control and monitor critical operational datapoints that are integral to maintaining system health securely and remotely. The capability delivers greater visibility and response time which enhances preventative maintenance, simplifies troubleshooting, and cuts down or even eliminates on-site maintenance requirements. All of this together provides a unique opportunity for new recurring revenue streams for integrators to add to their service contracts.

leaprofessional.com
LG’s LED Signage Featuring Non-Contact Connectors Delivers Better Images, Easier Installation

LG Electronics (LG) is introducing its most advanced digital signage solution yet, the innovative LG LED Signage (model LSAA), the latest in display technology and design. The LSAA offers even better image quality and easier installation than its popular predecessors which propelled LG into one of the leading digital signage solution providers in the industry.

The LSAA features a block-assembly design that makes constructing large displays a cinch. LG designed its solution around a single LED cabinet hub (600W x 337.5H x 44.9D mm) to provide power and signal to the entire signage without additional cabling between cabinets to save time, hassle and costs while delivering up to 4K UHD resolution and 16:9 aspect ratio. The ability to smoothly send and receive signals wirelessly is due to LG’s non-contact connector technology with power being sent to each display via pin connectors located on the edges of the LED cabinet hub.

What’s more, the LED cabinet allows installers to connect multiple displays to achieve the desired size. With straightforward installation and expandability, the LSAA can be set up or reconfigured onsite in a fraction of the time it takes other LED displays. Wall-mounts and frame-type accessories offer a number of installation options to meet the diverse requirements of different site conditions and customers’ needs.

LG LSAA with the same AI-powered Image Processor found in LG’s popular high-end TVs delivers vibrant images via its self-emissive display technology and narrow 1.2mm distance between pixels, with gaps to narrow even further to less than 1mm in the second half of the year. To ensure better efficiency, the product employs the common cathode method where the cathodes of the LEDs are common and connected to a single pin to prevent unnecessary power consumption, delivering only the required voltage to each sub-pixel.

1 Compared to LG’s LAS-F Series, cabling number is reduced by one-eighth based on UHD 16:9 screen. Cabling may vary depending on the actual installation environment.

2 AI image processing may result in differences in picture quality.

www.LG.com/b2b
Shure Now Provides a Complete Conferencing Audio System for Every Type of Collaboration Space

As video conferencing becomes even more important in today’s world, Shure has announced a new selection of products to provide systems integrators and AV professionals with a complete conferencing audio ecosystem.

The expanded range of Microflex Advance products -- with complementary software for design, management, and control -- offers expanded possibilities for systems integrators to deploy Shure’s premium audio capabilities into more types of meeting and collaboration environments than ever before. These products are all natively designed to work seamlessly with each other, and provide the market with a fast and efficient means to deploy premium audio, with IntelliMix audio signal processing in either device-based or software formats.

With the introduction of the Microflex MXN5-C Networked Loudspeaker, along with products like the new MXA710, MXA310, MXA910, Networked Mute Button, Designer, SystemOn, P300, and IntelliMix Room, Shure can now provide the complete audio signal chain, from input to output.

Shure’s conferencing audio ecosystem comprises:
- **Microphones**: Ceiling Array Microphones, Table Array Microphones, and Linear Array Microphones
- **Loudspeaker**: Networked Ceiling Loudspeaker
- **DSP**: Audio Conferencing Processor and Audio Processing Software
- **Software**: System Configuration Software and Remote Management Software
- **Accessories**: Network Mute Button and Audio Network Interfaces

The Shure audio conference ecosystem is flexible across audio system architectures in all room types and ensures end users will experience a high-quality, more unifying AV conference experience across an enterprise -- regardless of location.

As the market is looking at increasing adoption of AV technologies geared around simple deployment, intuitive operation, and seamless compatibility with leading collaboration platforms, Shure is offering a complete solution in one place. Ecosystem advantages include:

- **Collaboration Platform Ready**: Shure works with leading third-party software and hardware conferencing platforms, including Zoom, Microsoft Teams, Cisco, and others to secure certifications and ensure compatibility.

- **Streamlined Configuration and Deployment**: With a Shure ecosystem, more rooms can be deployed in less time, using Shure Designer software as “one pane of glass” for system-wide integration. AV techs have visibility to everything on network with SystemOn for easy monitoring/troubleshooting.

- **Pre-Packaged “Soft Bundle” Solutions**: Shure offers availability of product bundles for specific room size requirements so rooms are more consistent-sounding from room to room, providing a turnkey audio solution.

- **Easier Maintenance**: One manufacturer provides a single point of contact for sales, service, support, training, updates and more. Less gear overall (no amplifiers for loudspeakers, outboard DSP, etc.) and a lower learning curve for intuitive audio system operation are additional advantages for AV techs.

Shure has developed an ecosystem landing page to provide an evolving set of resources, including informative blogs, product overview videos and product bundle examples.

www.shure.com/ecosystem
Supernova One 2.0 – the Original ALR Screen in New Streamlined Design

The new slim-frame version of the award-winning dnp Supernova One is equally well suited for meeting room applications and portrait digital displays in retail environments.

Supernova One 2.0 incorporates true ALR optical technology that combats ambient light and enhances contrast and image quality. The new version comes with a 20mm or 30mm frame (in flock-version) that is up to 66% narrower than the original screen. For a safer installation the dnp Supernova One got a new Fire-Retardant alu-panel that makes the rigid screen compliant with the ASTM E 84 CLASS B fire rating. Moreover, the new frame is well suited for portrait digital signage applications in retail environments, airports and museums.

The trend goes towards displays with narrow frames, or completely frameless screens like the dnp Supernova Blade. The benefit of the narrow 30mm frame (including 10mm flock) is that it can increase the perception of contrast in the image. Moreover, the masking frame makes it easier and less time-consuming to adjust the projector.

Supernova One 2.0 is available with SN 23-23 or ISF certified SN 08-85 screen materials in five standard sizes: 100” and 110” in 16:10; 100”, 110” and 120” in 16:9. It comes with two standard frame options: Silver Alu (30mm including 10mm masking frame) and Black Sand (20mm, no masking frame).

Supernova One 2.0 is ideal for digital signage in portrait mode. If you plan to install the screen vertically, please specify this at time of ordering to secure correct placement of the logo on the frame. Custom sizes and frame options are available on request. The screen is supplied pre-assembled from the factory, ready to install, and ships today.

www.dnp-screens.com

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RGB Spectrum Announces CrossPoint KVM-over-IP for Multi-User Control of Remote Systems

RGB Spectrum’s CrossPoint KVM-over-IP allows operators to connect and control remote systems across a room or worldwide enterprise. Leveraging a standard 1 Gigabit Ethernet (GbE) network, the CrossPoint KVM-over-IP system delivers a scalable KVM matrix switching solution connecting multiple users with controllable systems, including multi-headed computers. Most importantly, the CrossPoint system offers high performance at low bit rates with exceptional latency performance as low as 40msec.

Users can view and operate multiple systems from a remote station, with control by a single keyboard and mouse. CrossPoint’s scalable IP switching architecture delivers outstanding 4Kp60 4:4:4 UHD visual performance and excellent keyboard and mouse responsiveness over a LAN or WAN.

A point-to-point configuration pairs a CrossPoint Transmitter with a CrossPoint Receiver to extend bandwidth-efficient KVM control of a multi-headed host system. CrossPoint drives up to four monitors over a single Ethernet port (RJ45 or SFP) to simplify operations for applications including control rooms, dispatch centers, government, healthcare and education.

A networked CrossPoint KVM-over-IP system supports one-to-one, one-to-many, many-to-one, or many-to-many configurations. It allows operators to view multiple desktops on a multi-display or multiviewer operator station and take control of a system by simply moving the mouse to the target desktop using KlickSimple cursor navigation.

CrossPoint receivers accept the encoded video streams from CrossPoint transmitters for display on up to four monitors, depending on model. Keyboard and mouse signals are sent back over the network to a CrossPoint transmitter and then forwarded to the computer over a USB link.

Users select signal to view on their receiver via an onscreen display or hotkeys. The CrossPoint system provides simple control using the CrossPoint Central Manager application. This allows users to discover, configure, manage, and monitor all transmitter and receiver endpoints. It provides a system level view of connections, where users can switch control of computers through an advanced on-screen-display (OSD) that features thumbnail previews. Presets are available for routine changes. The system offers a high level of security. Central Manager can create and manage password protected user rights. Alternatively, industry-standard Microsoft Active Directory Services can provide user authorization. The CrossPoint system uses HTTPS, a secure communication protocol, with audio, video, and USB signals encrypted to protect both AV content and control signals.

www.rgb.com
Crestron Flex R-Series Empowers Customers to Instantly Put Unified Communications Anywhere It’s Needed

Crestron has announced its newest addition to the company’s award-winning line of Unified Communications (UC) conferencing technology, the Crestron Flex R-Series. A first-of-its-kind, rapid deployment solution, Crestron Flex R-Series is a mobile UC system that brings collaboration where it’s needed most, closing the distance between remote teams wherever they may be.

In today’s climate, rooms are radically changing with an exponential demand for meetings that utilize video conferencing. Crestron has remained one step ahead by developing a mobile UC solution that enables customers to quickly and easily share information and work collaboratively. Crestron Flex R-Series offers unprecedented versatility by eliminating the costly, time-consuming installation process, allowing organizations to better anticipate the evolving needs of the places people meet.

Crestron Flex R-Series features optional dual-mode technology based on the revolutionary Crestron Flex MX architecture. It enables organizations to run native Microsoft Teams or Zoom Rooms software, or seamlessly switch to bring-your-own-device (BYOD) mode for all other conferencing software. The turnkey system can be installed in minutes and can easily be moved, supporting people wherever they meet – whether in cafeterias, classrooms, manufacturing floors, or in open spaces.

Featuring exceptional audio and video quality to ensure everyone is seen and every word is heard; Crestron Flex R-Series includes the following features and options:

- Intelligent camera with 150° field of vision that autoframes participants, enabling social distancing without compromising experience
- 360° quad mic array with up to a 20’ range
- Support for displays from 50” to 60”
- Retractable Ethernet and power cables for easy connections
- Support for Crestron AirMedia Wireless Presentation System, enabling users to share content wirelessly from any device

Crestron Flex R-Series is designed for an array of enterprise corporations and businesses globally, as well as in hospitals, medical centers, universities, and manufacturing facilities, among other organizations where social distancing measures are of utmost importance.

Crestron Flex R-Series is available now and features seven different models customers can choose from to suit their collaboration needs.

www.crestron.com

AUDAC Launches Touchlink Technology

AUDAC’s new AMP203 Dante mini stereo amplifier will come equipped with a brand new innovation called TouchLink.

TouchLink is an ingenious system that can be used for creating virtual zones by linking multiple TouchLink compatible devices with each other. In AUDAC Touch 2 you can select multiple devices or amplifier channels that should react to the user as one zone. A typical application example is a large open area where multiple (compatible) amplifiers are used. When they are virtually linked, all devices or amplifier channels with the same TouchLink assigned zone will be following each other’s settings (including volume, input, muting, etc.). It means, if they are all installed throughout the same area, they all will be simultaneously operated by one single control (e.g. volume fader) from the AUDAC Touch 2 app. Additionally, a wall panel which is physically connected to one of the linked devices will automatically control all the linked devices. A number shall be assigned as a TouchLink zone (e.g. 1, 2, 3, etc) and all devices with the identical TouchLink ID will virtually work as one zone.

www.audac.eu
Atlona Launches New Velocity Products

Atlona’s Velocity 2.1, is a new firmware update for its ground-breaking Velocity IP-enabled AV control, room scheduling, and device management platform. In addition, Atlona has announced the immediate availability of two new hardware components. Collectively, the new software features and hardware will make it easier for integrators, tech managers, and end users to create and manage AV control and room scheduling environments.

Velocity 2.1 streamlines navigation, enhances control capabilities, and improves configuration efficiency. Velocity 2.1 enhancements include:

* **Simplified Menu Navigation**: Optimizes access to primary functions of Velocity, including control, scheduling, and asset management. The new menu structure also adds direct connections to system settings and help resources.
* **Two-Way Driver Creation**: Allows users to build two-way drivers for control and device feedback, enhancing control system functionality where actions are based on status information returned from the device.
* **Custom UI Enhancement**: Adds support for new shortcut and multi-select functions related to selecting, arranging, copying and pasting elements to accelerate custom user interface development.
* **Bulk Add Rooms**: Allows users to create multiple rooms with AV control, or scheduling with calendar integration, to reduce configuration time for large projects.
* **Context-Based Training**: Places helpful tool tips throughout Velocity’s configuration screens, offering brief tool descriptions and links to online training videos for the specific topic.

Atlona has also announced the immediate availability of the AT-VGW-HW-20, their highest capacity Velocity hardware gateway. A key advantage of the second generation Velocity architecture is multi-room AV control and scheduling from a single gateway, substantially reducing cost of ownership compared to AV control platforms that require a separate processor per AV system or room. The VGW-HW-20 provides AV control for up to 20 rooms, and room scheduling for up to 40 rooms. Additional features include browser-based setup and management, BYOD control at no extra cost, centralized organization of Atlona AV devices, industry-standard secure data communications, failover protection (when a second redundant gateway is added), and Velocity Cloud Lite for remote configuration and management.

Atlona is also shipping its new AT-VSP-800 8” scheduling and AV control touch panel with integrated bezel lighting. For scheduling applications, the AT-VSP-800 is ideal for lobbies, hallways, or meeting space entrances where the bright LED lighting on the edge of the bezel provides a visual representation of room status. The panel can also be used inside huddle spaces, conference rooms, classrooms, lecture halls and other spaces where the outer frame lighting can add visual emphasis to AV control functions such as AV mute or divisible room state. Since the AT-VSP-800 can be configured for room scheduling or AV control within Velocity, system integrators and tech managers can eliminate the expense of purchasing and managing separate software platforms.

www.atlona.com
Fujifilm Develops “FUJIFILM PROJECTOR Z8000”

FUJIFILM Corporation has announced the development of the “FUJIFILM PROJECTOR Z8000 (FP-Z8000),” which boasts high brightness of 8000 lumens (lm) and a class-leading compact and lightweight design. The new product, to be launched in the beginning of 2021, will join the lineup of the Z Series of ultra-short throw projectors equipped with the world’s first “folded two-axial rotatable lens.”

Fujifilm entered into the projector market last year with the launch of the ultra-short throw “FUJIFILM PROJECTOR Z5000 (FP-Z5000),” equipped with a folded two-axial rotatable lens. The FP-Z5000 is being used in digital art exhibitions worldwide and introduced to company showrooms or commercial facilities.

The “folded two-axial rotatable lens” enables the projection of images in various directions without having to move the main unit. It has become easier than ever before to throw images on not only walls and screens but also ceilings and floors. The projector features an ultra-short throw lens with the TR value of 0.34, capable of projecting images on a large 100-inch screen from the close-up distance of just 72cm.

The FP-Z8000 supports zero-offset projection, eliminating offset that occurs in conventional mirror-system ultra-short throw projectors to allow maximum use of projection surfaces in spatial presentation. Its 1.1x optical zoom capability means the size of projected images can be adjusted without having to move the projector.

The use of a large-diameter aspherical lens element produces the class-leading Lens Shift function of up to 70% vertically and 35% horizontally. The function makes it easy to shift the position of projected images across a wide range without having to change the location of the main unit or direction of the lens. Users can freely create spatial presentation with their inspiration.

Projectors are used in a wide variety of situations including offices and educational institutions. In recent years, opportunities have expanded to include projectors in spatial design, as well as presentation at commercial facilities and art galleries or museums. These have increased the needs for projectors to be implemented for effective spatial presentation in limited space.

The new FP-Z8000 inherits the main features of the FP-Z5000 while adopting a high-transmittance lens and a laser light source to deliver bright 8000lm images. It can project vivid and high-contrast images even when used for digital signage in brightly-lit stores. The projector comes in a class-leading compact (W460mm x D510mm x H163mm) and lightweight (weighing approximately 19kg) form factor by the optimum layout of components inside the main body. It can be positioned vertically or horizontally to enable spatial presentation that makes effective use of otherwise wasted space. The geometric correction function, which corrects distortion caused when projecting images on a curved surface, makes it possible to throw powerful images on places where such visual projection could not have been considered.

www.fujifilm.com

VDO360 Launches 2SEE Visual Collaboration Camera with Built-In Microphone

VDO360 introduces the new 2SEE, easy-to-use, detachable1080p USB webcam with far-field voice pickup technology.

Be represented with crisp, clear picture and audio when you work from home with the 2SEE high-quality 1080p HD video conference camera. The 2SEE includes a four-microphone array system that provides excellent, true-voice pickup. Based on the AI VocalFusion algorithm, the 2SEE series camera uses Acoustic Echo Cancellation (AEC) and Automatic Noise Suppression (ANS) technologies to get a 26-foot range of far-field voice pickup.

The 2SEE also uses the most advanced video processing technology with an OmniVision imaging sensor. Enjoy smooth and vivid 1080p HD image capture, even in low-light conditions. Virtual communication from your home office is easy with the VDO360 2SEE video camera.

www.vdo360.com
QSC Announces New Q-SYS Control Plugins to Simplify Meeting Room Device Integration

QSC announces two new Q-SYS Control plugins now available in Q-SYS Designer Asset Manager. The Sennheiser TeamConnect Ceiling 2 microphone plugin and the UCI QR Code plugin allow for drag-and-drop integration into the Q-SYS Ecosystem, saving programming time and resources for AV integrators, programmers and consultants.

New to Q-SYS Designer Asset Manager, the Sennheiser plugin offers configuration and management capabilities for its TeamConnect Ceiling 2 microphone inside the Q-SYS Ecosystem. This plugin allows users to easily discover the microphone on the same subnet as the Q-SYS Core processor, monitor audio levels, and view in realtime the vertical and horizontal angle of the detected person speaking. All these capabilities can be exposed as graphic elements and drag and dropped onto any custom UCI.

The QSC UCI QR Code plugin expedites the process of putting room controls in the hands of a user’s smartphone, thus creating a safer, touchless meeting room environment. Designers can quickly and easily use the plugin to create direct links to a given Q-SYS user control interface (UCI) and place them on existing Q-SYS touch screen devices. Users need only aim their phone’s camera at these special QR codes, and the smartphone will automatically open the room’s predetermined controls through the Q-SYS control app or standard mobile web browser.

The new UCI QR Code plugin allows integrators and programmers to easily adjust with a tool to help speed up integration and deliver a meeting space where end users can be productive and safe.

www.qsc.com

SYSPORT –the Flexible Table Channel for a Tidy Workspace

Wiping under tables ...is often cumbersome and annoying, especially if the cable clutter reaches down from the table to floor. The fully adjustable SYSPORT table channel provides a remedy and ensures a time-saving, attractive and well organized cable management at the workplace. That way also the cleaning staff or the robot vacuum/mop can wipe fast and easily under all tables without hitting into obstacles. All connection leads and even power strips or power supplies can be generously stowed. With the smart universal angles the all-metal cable duct is adjustable in various positions and may also be used as a connection console for on or under table mounting. The SYSPORT can be fitted individually with the front panels from the large SYSBOXX range providing power sockets, network, HDMI extenders, function keys and many other connection variants. The through-hole also allows to lead through large connectors (Schuko etc.). Thus cascading several SYSPORTS and desks may be realized at any time. The table channel is available in custom length and RAL colour.

www.sommercable.com
Powersoft has extended two of its most popular fixed install ranges with the introduction of the two-channel Duecanali 6404 DSP+D and the four-channel Quattrocanali 8804 DSP+D.

Both products feature Dante digital audio networking architecture and on-board, high-end signal processing, as well as being able to deliver 175 Vpeak, making them ideal for applications where high SPL is required, such as clubs, performance venues and stadiums.

As with the other models in their respective ranges, the new Duecanali 6404 DSP+D and Quattrocanali 8804 DSP+D amplifier platforms are able to deliver this high level of performance at a competitive price point and with the same low operational cost and carbon footprint as any other Powersoft product.

With this new extension, the new Duecanali 6404 DSP+D and Quattrocanali 8804 DSP+D series now sits coherently alongside Powersoft’s install dedicated amplifier platforms, addressing the requirement for small and large size applications where the channel count is limited and the need for a flexible product to work with Hi-Z and Lo-Z systems is a must.

The new Duecanali and Quattrocanali models all feature Powersoft’s trademarked switch-mode power supply with Power Factor Correction (PFC), Smart Rail Management (SRM) and bridgeable switch mode fixed frequency Class D output circuit topology.

Duecanali 6404 DSP+D
The excellent sound quality and ample output power available from the latest member of the Duecanali range is thanks to Powersoft’s unique approach to Class D amplification, making it well-suited to serving as the main system in any venue where performance is priority.

A fully integrated, state-of-the-art DSP yields extensive system management functionality. In addition to sound shaping and limiter functions, the DSP hardware and ArmoníaPlus software enable compliance with the crucial requirements of sound systems for emergency purposes. The Duecanali range is able to drive low impedance loads (2/4/8 Ohm) and 70V/100V distributed lines selectable per channel delivering a maximum output power per channel of: 1800 W at 8 Ω; 3200 W at 4 Ω; 4600 W at 2 Ω; 9200 W at 4 Ω bridged; 6400 W at 8 Ω bridged; 4000 W at 100 Volt and 3200 W 70 Volt.

The series is also versatile, providing status feedback via its front panel LED display or a connected PC running ArmoníaPlus software.

Quattrocanali 8804 DSP+D
In just 1 RU, the Quattrocanali series offers smaller dimensions, lighter weight and the traditionally amazing sound quality and reliability of all Powersoft products.

Quattrocanali Series amplifiers implement a high-efficiency, microprocessor-controlled power supply with built in PFC (Power Factor Correction) that allows flawless worldwide operation with any AC mains voltage in the range 85-275 VAC tolerant to peak up to 400 V. The patented SRM (Smart Rails Management) technology allows to maximise the efficiency of the system and drastically reduce power consumption at any load and usage condition.

With this latest extension, the Duecanali, Quattrocanali, and Ottocanali Series of fixed installation solutions can address a full spectrum of applications, particularly where the channel count is limited and the need for a flexible product to work with Hi-Z and Lo-Z systems is a must.

Both of the products can seamlessly integrate within a networking environment through standard Cat5-cabled and Wi-Fi networks. Remote access via the Armonía Plus allows for full operability, including monitoring and diagnostics, from a decentralised location — via laptop, PC, tablet or smartphone. The fully-customisable interface seamlessly integrates all devices in one easy-to-manage screen, so that everything displayed can be monitored at a glance.

The range extension will be shipping in July.

www.powersoft.com
BAP Strives on Customer Satisfaction and Best Possible Service
Three Es are Key Ingredients for the Success of the Company

Four guys have been driving their 4-wheel SUV to strive together towards a common goal since 2003. They had a same purpose to dedicate their experiences to do something for the industry. That led to the establishment of BAP.

Finson Lam is the Managing Director of the company. The company’s vision is to seamlessly connect people with technology and to do that Finson’s primary aim was to ensure that all the company’s divisions delivered the best possible service. He has been involved with collaborative technologies including AV/IT and control integration, unified communications and project management for more than 30 years.

Marco Tang is the Sales Director, who is the driving force of business development. He is leading the Sales Department to cover business in Hong Kong, Macau and China. Marco is good at implementing innovative technologies to provide customer-focused solutions and always gain high level of customer satisfaction. He has been working in the industry for over 24 years and has extensive experience in AV/IT & intelligent dimming and energy control solution.

Cliff Lee, Project Director, had worked in the mobile industry for over 20 years managing 200+ engineers to set up mobile networks and provide maintenance service. After that, he was involved in AV/IT and intelligent dimming & energy control technology for 15 years. His rich experience in project management and maintenance has led BAP’s Engineering Department to deliver 600+ projects to clients with satisfaction every year.

George Lau serves as the Finance Director. He provides sufficient finance resources to support every project and company development. George also takes responsibility to diversify the company’s investment and has obtained significant success in finance and property market for the company.

What are BAP’s core competencies?
BAP is a one-stop full service solution house for Audiovisual, Lighting and Control Systems. The company serves a wide variety of educational, commercial, governmental and residential clients throughout Hong Kong, Macau and China. BAP provides the full gamut of design, supply, install and support for all aspects of audiovisual & control system, collaboration system, AV conferencing, digital signage, projection system, dimming & shade control, LED wall, streaming & recording system, unified communications and wireless presentation system.

The company partners with some of the top brands in the industry including but not limited to Aoto, Bosch, Extron, Logitech, Lutron, MaxHub, Microsoft, NEC, Panasonic, Poly, Reach, Samsung, Sony and TeamMate.
People Drive the Company
As in any organisation the staff help drive the company to reach its objectives and at BAP it is no different. “Every position of our teams is made up of teams of talented, highly trained individuals who work together to deliver solutions and services that give our clients a competitive edge. Our front-line people are technically certified from leading manufacturers to ensure that our projects have the highest standards in the industry. Most of them have at least 10 years working experience in the industry,” said Finson with pride.

Ensuring a Strong Foothold in the Education Segment
Either by design or/and strong hard-work and focus, BAP seems to have captured the higher education market. BAP reckons it has a very strong market share in this segment. “Our AV solutions cover all kinds of venue in a campus, including classroom, lecture theatre, auditorium, meeting/conference room, collaborative room, open area, laboratory, gymnasium, multifunction room, simulated room, practical room and even council chamber etc,” says Marco.

Looking at some of the list of projects BAP has been involved in, it is not just marketing hype of capturing a strong share in this segment.
<table>
<thead>
<tr>
<th>Name of Client</th>
<th>Project Period</th>
<th>Brief</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Open University of Hong Kong – Jockey Club Institute of Healthcare</td>
<td>May – Aug 2020 (In progress)</td>
<td>AV integration work for entirely new campus which involves: Auditorium: 1 Lecture Theatre: 3 Conference Centre: 1 Classroom: 30 Simulation Lab: 5 VR Lab: 2 Nursing Lab: 10 Seminar Room: 10 Practical Room: 7 Special Room: 3</td>
</tr>
<tr>
<td>Hong Kong Baptist University – School of Continuing Education</td>
<td>August 2019</td>
<td>Upgrade AV systems to existing 56 classrooms in 2 weeks.</td>
</tr>
<tr>
<td>Technological &amp; Higher Education Institute of Hong Kong (Thei) – Chai Wan Campus</td>
<td>2017-2018</td>
<td>AV integration work for entirely new campus which involves: Auditorium: 1 Lecture Theatre: 2 Lecture Room: 8 Interactive Combined Room: 2 General Classroom: 14 Computer Room: 24 Language Lab: 4 Meeting Room: 4</td>
</tr>
<tr>
<td>Hong Kong Community College from Hong Kong Polytechnic University – Hung Hom Bay &amp; West Kowloon Campuses</td>
<td>Jun – Aug 2020 (In progress) Jun – Aug 2018 Jun – Aug 2015</td>
<td>Upgrade AV systems for the two campuses which includes: Lecture Hall: 17 Multiple Sport Hall: 2 Library: 2 Combine Room: 10 Classroom: 160 Tomorrow Classroom: 6 IT / Language Lab: 20 Executive training room &amp; meeting room: 8</td>
</tr>
</tbody>
</table>
### AV Integration Projects

<table>
<thead>
<tr>
<th>Institution</th>
<th>Start - End</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chu Hai College of Higher Education – Castle Peak Bay Campus</td>
<td>2016</td>
<td>AV integration work for entirely new campus which involves: Lecture Theatre: 5, Classroom: 32, Lab: 10</td>
</tr>
<tr>
<td>The Open University of Hong Kong - Jubilee College</td>
<td>2014 - 2015</td>
<td>AV integration work for entirely new campus which involves: Lecture Theatre: 3, Auditorium: 1, Multi-Sport Hall: 1, Classroom: 24, Lab: 22</td>
</tr>
<tr>
<td>Hong Kong University of Science &amp; Technology – Main and Lee Shau Kee Campus</td>
<td>2012 – Current</td>
<td>AV integration work for entirely new campus which involves: Lecture Theatre: 14, Tiered Classroom: 14, General Classroom: 160, Lab: 20, Seminar Room: 40</td>
</tr>
<tr>
<td>The Hong Kong Polytechnic University – The Innovation Tower</td>
<td>2012 - 2014</td>
<td>AV integration work for entirely new campus which involves: Lecture Theatre: 1, Classroom: 71, Lab: 12, Meeting Room: 35, Common Learning Area: 2, Studio: 4</td>
</tr>
</tbody>
</table>

So how did the company manage to capture such a large share in such a competitive space?

BAP does this by first and foremost by not being complacent. “In such a competitive space it is easy to lose your market share if you are not well prepared,” says Marco. He adds, “First of all, we are laser focused on the needs of essential buyers. By understanding the difficulties they face, and resolving them, we are better prepared to design the ideal content to engage them. Secondly, it’s crucial to remain updated on the key sector to keep an edge. Brand-new technologies and knowledge are regularly introduced in the market. To stay ahead of the pack, we continuously educate ourselves on what is going on in our environment. In addition, we do have in-depth understanding of the market such as who are the key players? What are the most recent technologies that campuses are using? Where is the market going to be in the next 3-5 years? Having such information gives us a leg-up when communicating with this segment.”

All these strategies have helped BAP become a trusted vendor in the higher education space. For the summer of 2020 (June to August in Hong Kong), the company has received tens of orders to manage 283 teaching venues for the higher education market. “Our advantages are our strong system design, outstanding project management skill and excellent technical support. With these advantages, we are able to meet our promise to have all AV systems to function properly in every teaching venue on the first day of school commencement,” highlights Cliff.
Expertise in Dimming and Energy Control system

BAP has also upped its expertise and focused on Dimming and Energy Control over the years so as to provide further special value to its clients. “In dimming and energy control the challenge is to manage client’s expectation and coordinate with different parties. Project management is the key in every integration work. BAP has extensive integration experience in AV & dimming control industry for over 16 years. With our expertise in technology know-how, we have completed over 10000+ projects and have gained appreciation from clients over the years,” comments Cliff.

The company has a dedicated team of 30 including front-line and administration staff specifically responsible for their Dimming and Energy Control projects.

Some of the recent projects the company has been involved in, include the Grand Suite, Four Seasons in Macao and the new extension development of the New World Centre in Hong Kong.

Grand Suite, Four Seasons is a 5-star luxury hotel at Cotai Strip, Macao which has 277 suites room and 10 duplex suites. BAP delivered Lutron room control unit solution for all rooms for light, temperature and shade control. It integrates with the hotel’s property management system and is capable of monitoring devices, offer data and trends as well as harmonize with the building’s décor, and still be user-friendly for guests and staff.

At check-in, the system integrates with hotel’s property management system to ready the room for arrival. The thermostat is signalling to adjust the temperature; the lights are dimmed; the television is directed to offer a welcome message. Minutes later, as the guest flashes a key card at the lock and opens the door, the room goes into Welcome mode, brightening the lights, opening the curtains, and showcasing the room’s amenities. There is combination of technologies to determine if a guest is in the room. When the room is empty, the lights turn off and the temperature is set to a background level.
“The system had to be designed, delivered, installed and commissioned in a very short time in 2019, a total of 287 suite rooms have to be completed in 2 months,” says Marco

The New World Centre is a recent major project that includes K11 MUSEA and Rosewood Hotel situated at Victoria Dockside waterfront location in Tsim Sha Tsui, Hong Kong.

K11 MUSEA is a 10-storey cultural-retail destination that brings together retail, art, culture and entertainment with the world’s largest green walls and Hong Kong’s first urban biodiversity museum and sustainability-themed education park. BAP delivered a total light management Lutron Quantum system, for the entire building that incorporates a broad range of automated control strategies, including occupancy sensing, simple integration with time clocks and the HVAC system and precise control of different types of electric light sources.

Rosewood Hotel is an ultra-luxury hotel that occupies 43 floors of a multi-use tower, destined to become a landmark on the world famous skyline. BAP work covered all meeting and event spaces, ballrooms, private clubhouse, lounges, restaurants, wellness & fitness centre, swimming pool, reception counters, lobbies and public areas. The dimming and energy control system allows Rosewood Hotel to control and monitor all lights in each area to reduce energy costs and enhance comfort.

“Work schedule for this development project was tight and had to be completed within a few months. A team of skilful

BAP project members was a-must to deal with different parties effectively as well as provide on site installation work in flexible manner efficiently,” narrates Cliff.

Three Es for Success
Finson Lam highlights that the success of BAP lies on three Es. “We drive the project forward and toward success by connecting Effort from Client, Effort from Manufacturers and Effort from BAP.”

Finson elaborates, “end user is the one who will be using the system on a daily basis and contribute to the acceptance of the system. Participation of end user has a positive impact on the use and success of the project. Therefore, we always listen for any challenge, goals, and requirements while taking into consideration of unique spaces and budget from client. We think from the client’s point of view. Our purpose is to delight our client to build long term relationship.

With involvement of manufacturers, we are able to deliver turnkey solutions without compromising simplicity of system operation which leads to customer satisfaction.

Finally our highly skilled project team members are certified to ensure that our projects have the highest standards in the industry.”

www.bap.com.hk
Coping with COVID-19
Delta Electronics: Preparedness, Planning Pepped up Pandemic Handling

There may hardly be a few terms in recallable human history that became household names with dubious distinctions. Novel Coronavirus or COVID-19 is one for the contemporary world. While the name and fear of it spread worldwide arguably faster than the virus itself, the world nations’ locking down one after the other – some proactively and some reactively though – for nearly 10 weeks meant a lot to the world, and to the ProAV domain as well.

SI Asia decided to speak to some of the industry leaders how they have lived through the period, and led their business continuity. As the first in the series, we bring you the ‘business’ at Delta Displays as we hear from Hemant Agarwal, Business Head at Delta Electronics (Display Division) India.

How has COVID-19 impacted your business?

The pandemic as they call it has impacted the whole world on a scale that we haven’t seen in recent history. When the whole world is affected, we cannot say we aren’t. It did affect us but not to the extent that it would rub our bottomline. It’s been minimal for us.

There has been a disruption in business activities; people could not travel to work places and client sites; manufacturing got affected too. Particularly, our activities panning out from Delhi, and Delhi being the eye of storm (for all sorts of reasons) it did cause us some disruptions but we stood strong and have been putting efforts to tide over the crisis effectively.

Keeping the impact minimal is interesting. Would you please elaborate how were you able to achieve it?

There are few factors of course. One- the foresight and guidance from our global headquarters in Taiwan; two- Thailand, our Asiatic regional headquarters being much less affected and open to business; three- some very clever planning from our side, and, of course our being lucky to have some big good customers who supported our billing during the time.

Now, as you know, Delta is a Taiwanese company with global headquarters by default in Taiwan. Also, if you recall when the SARS endemic broke out in China 18 years ago, Taiwan being right on border had a natural extension of the endemic and bore the brunt of it. Passing through endemic the hardest way, they learnt their lessons from it.

Noticeably, when the novel coronavirus began shaking Wuhan in China, Taiwan quickly recalled what they learnt from previous experience; they knew what they needed to do. They implemented both preventive and curative plans on a rapid action mode even before the rest of the world even had a hint of lurking pandemic.
As you can see today, Taiwan is one of the very few countries that have not only successfully warded off the disaster but also quickly brought back the normalcy in public life and business. The reason for the success was their learning from previous experience with SARS endemic as well as the foresight about the dos and don’ts. Delta stood to benefit from that knowledge and guided the company businesses worldwide.

That gave us a sense of preparedness, and we initiated some critical measures with some clever planning even before the lock-down began in the country. We addressed what our clients wanted on a priority basis. That ensured our billing cycles in time, and we revived our payments in both April and May that helped us plan still better for the crisis period.

We have also been fortunate on two more counts. We had some good customers who were very supportive – getting special permissions whenever required – and ensuring our shipments and some personnel cross the hurdles of preventive regulations. So, we were able to do a few shipments and there was some business.

The other important point was that Thailand which is our Asiatic headquarter remained largely unaffected, and therefore, our operations relating to that market continued.

Cumulatively, all these factors contributed to our staying strong till now. We hope will continue to do it.

How about the revenue loss/flow factor?

Like I said earlier, there has been an impact on business and revenues. But let me tell you it hasn’t been what it appears like for most others. Our preparedness and planning for the situation has helped us a lot in keeping the revenue loss to minimal.

How about the employee connect/confidence quotient?

For the first part, i.e. the connect with the employees, it’s been more or less the same, standard practice what most others have been doing- encourage work from home concept, and regular interaction online both for internal matters as well as product trainings or technical sessions through tools like ZOOM, Skype and Microsoft Teams whatever possible or compatible with the employees’ location towards upgrading their skillsets and competence.

For the second part, i.e. the confidence part, we talk to them about how well we have been approaching the crisis, and explain to them about safety measures and better days ahead for life and business.

The biggest boosting factor has been that despite the financial challenges, we have been able to manage some business processes – of course with support from our trusted customers – and thereby our billing too. So revenue loss has been minimal, and no jobs lost and salaries cut.

We hope we will continue the journey till we reach normalcy.
INTERVIEW

How about the notion of increased use of work-from-home format resulting in a specific change in the thinking of AV users – tending to reduce their spending on ‘large’ infrastructure...

We think that’s the way for the industry to go in the future. Given the way the world is journeying through time with challenges of environment, travel, time, and money, the increased use of work-from-home would bring multiple benefits all we spoke. It will save all that, and much more. Time and money saving, and better productivity for the companies; personal safety and work efficiency for the employees; faster and effective communication between companies and employees, besides contributing to better environment for the whole future generations.

Delta’s forte of SmartCity Surveillance would have been helped better monitoring of COVID movements?

Smart City mission is a government programme, and we all understand the constraints due to the current crisis. However, we did expect we will get some requests for building COVID-19 control rooms; it would have certainly helped handle the situation in various cities better. But we also understand there are certain constraints in going for those builds. However, considering the critical nature of the builds and their usage, there will be a demand for such builds in the coming weeks, and we sincerely hope we will have a role to play.

In fact, that may actually open up a new industry dynamic altogether, and new avenue for Delta during and post-lockdown, to build a better equipped tomorrow.

We do intend to take up this vision forward to more cities across the country. That the Smart City programme involves many other allied industries segments like cameras, switches etc. we hope better times for the industry.

What roadmap ahead to capture new opportunities post-lockdown

We have already formulated our strategies on how we will need to map the market requirement. We will soon be ready with full action plan, and will roll out as and when the market opens up. Our idea is to make sure that our products should reach every potential market place.

We do manufacture certain critical components that go into building ventilators and mask making machinery both of which are the need of the hour currently. This particular competence, we hope will contribute to our better standing through the crisis period and beyond.

www.deltadisplays.com

Delta’s brightest Video walls at Lucknow Metro MRTS!

One of the many prestigious projects that Delta was involved in
Digital Signage in the Era of COVID-19

Due to the ongoing Covid-19 pandemic, we have observed that temperature scanning or traffic control functions have been embedded into the display screens. It is relatively simple to integrate, however it is cost ineffective over a long run, as it may not meet the needs of each customer in totality.

At LG, we aim to provide a customized and tailor-made solution for our customers. LG offers innovative displays that enable us to propose different levels of experiences to customers. We have been working closely with our System Integrator (SI) partners to develop a comprehensive plan for customers. Depending on their needs and country’s situation, LG and our SI partner can provide an all-in-one solution, including the display screens, software system and kiosk.

For example, the kiosk can act as an integrated access control. Users can self-administer temperature checks by detecting their body part such as the forehead, and hand sanitizer can be dispensed automatically when activated. This can be placed at any public areas like shopping malls, hotels, offices or transport hubs.

In addition, hotels reception or VIP rooms in banks can enhance their contactless solution with LG Transparent OLED Touch Signage, providing a seamless and safe process for visitors.

What criteria should a user consider when purchasing a display so as to make the right decision? Why LG displays?

The most important criteria would be for customers to establish their needs and commercial purpose in order to buy the right display screen.

Since 2012, LG have strengthened our leading position in providing innovative products. We continuously invest in product quality and technology that will strive to make life better for the future. Overall, the holistic strategies saw LG Display being awarded as a Global Top Brand in the market.

![Photo Credit: LG Electronics Singapore](https://www.lg.com/sg)
Celebrating COVID-19 Challenge with Business Excellence

Sennheiser India Sings in Sync with the German Major on their 75th Anniversary Celebrations

Sennheiser India – in sync with its German parent who has tuned in 75 years of successful business existence this year – has planned grand celebrations across its footprint in the country. While the pandemic has its way, affecting the field-side activism, the India team continued the spirit of celebrations and has been reaching out to its market with its own ‘engaging programmes.’

SI Asia caught up with Vipin Pungaliam, Director, Professional Segment, Sennheiser India, to understand how the audio major has been ‘celebrating the anniversary.’

VIPIN: Sennheiser India has completed 13 years now, hence this celebration means a lot to us. Though we could not celebrate it due to the ongoing pandemic, we recently held a virtual get-together and engaged with our employees for some fun bonding exercises on a weekly basis.

On a global scale, Sennheiser has been shaping the future of audio industry for the past 75 years now. To give you a brief history, Fritz Sennheiser who was the Founder, was a university lecturer-turne-entrepreneur in the Post-War reconstruction period. After making vacuum-tube voltmeter and measuring devices initially, the company received an order in the summer of 1945 to build microphones. That was the beginning of Sennheiser and our 75-year legacy.

At Sennheiser, our aim has always been to understand the needs of our customers and cater to those needs by providing efficient solutions. As everyone knows, India is one of the key markets for Sennheiser. We have a large team in India, covering everything from sales to support, to technical service. We have witnessed big potential and growth in the Business Communication segment in addition to some other segments. We long back recognized there is a need for right audio solutions to conduct effective virtual meetings, conferences, etc.

This is our opportunity to grow as technology has become the biggest enabler in assisting businesses and communities to sustain through the on-going crisis. Moreover, the growth of Digital Content creators, YouTubers, video-bloggers and audio for video has also increased in importance and popularity alike.

Sennheiser is shaping the audio world of tomorrow, based on our history, our culture of innovation and our passion for excellence.

SI Asia: 75th Anniversary is a great milestone for any enterprise. While it is an accolade at global level, what does it mean to Sennheiser India? It’s branding, market positioning, and perseverance?

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SI Asia: Apart from pride, what does it bring along-particularly, looking from the perspective of current COVID-19 crisis? Employee connect; re-inventing technology solutions etc? Could you please exemplify?

VIPIN: COVID-19 has disrupted the way the world is functioning today. This is the testing time for multiple generations and the entire ecosystem is extremely volatile in nature. This pandemic has naturally impacted our business. Connecting with the completion of 75 years of successful business, we did have in place plans but we haven’t been able to convert them into action due to the pandemic. However, that did not dilute our focus, as we continued to engage with our employees who have been an integral part of our success journey. Now that they are working from home and are generally caught up working every day, we initiated a virtual launch party to celebrate the 75 years of Sennheiser. We have been holding weekly team bonding activities with fun interactive game sessions as well.

COVID-19 has admittedly impacted how the world functions. We have been cognisant of the current scenario and wanted to utilize this opportunity to encourage learning amongst our Professional Segment customers, and partners. With this particular objective, Sennheiser initiated a campaign #DontStopTheEducation – a series of free online webinar sessions as we believe that there should be no reason to stop learning even in the current social distancing and working from home situation.

On the technological innovation- to stay relevant and add meaning to customers’ business, Sennheiser TeamConnect Ceiling 2 microphone has been made compatible with Zoom. This will become an integral resource especially post Lockdown, where only a few of the workforce is likely to attend office while the rest work remotely. Collaborative tools like these enable people to connect seamlessly from anywhere in the world. While the world is adjusting to the new normal, solutions like these will help businesses in the long-term.
As part of Sennheiser’s 75th anniversary celebrations, the company has created a dedicated space within its website that enables visitors to Read, Listen or View Sennheiser’s employees, customers and fans tell their stories and share their personal magic moment with the company.

**SI Asia: Tell us about Sennheiser India’s prideful contributions to Sennheiser global - that you can feel as achievements...**

**VIPIN:** India has been a key market for Sennheiser especially for the Professional Segment. The Professional Segment has been one of the major growth drivers of Sennheiser. Our plan is to continue growing consistently while providing the best offerings. We have a strong network of pan-India channel partners and strong in-house team. Sennheiser India has always been in forefront in terms of brand initiatives which has been highly appreciated by the global team. We have been able to create many success stories in the segment across the country- in almost all verticals. Some of them have been truly incredible installs.

**SI Asia: Are there any special initiatives being organized in India to mark the great occasion?**

**VIPIN:** To appreciate the love we receive from our customers and partners and thank them for being a part of the Sennheiser journey, we have created a few offers on few of our selected products. Again, like I maintained earlier, while our ambitious planning had admittedly been impacted by the pandemic situation, we have been able to conduct a series of programmes online, and continue the strong bond we have created over the years. The programmes included both fun-type aimed at maintaining the liveliness as well as educational aimed at improving skill sets and understanding Sennheiser solutions vis-à-vis market dynamics.

The #DontStopTheMusic campaign is an exclusive streaming concert on Sennheiser’s Instagram channel. We had a line-up of artists such as David Guetta, DJ Madoc, Murthovic, Bob Sinclair, Third Eye Blind amongst others. Through this initiative, we encouraged people to support the World Health Organization in its fight against COVID-19.

**SI Asia: What special resolutions in India will mark Sennheiser’s 75th Anniversary?**

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www.sennheiserindia.com
COVID-19: Manufacturers Give Their Take About Possible New Workplace Requirements

In the last issue (June-July) we reached out to SIs in Singapore, consultants in the region as well as the full gamut of industry players (SIs, Distributors, OEMS) from India and Middle East to get a feel of how COVID-19 has affected them, how are they preparing themselves as well as how they think the AV requirements might change or be enhanced, going forward.

The Workplace is an area of particular interest with remote communication and social distancing becoming integral to the operations of the space. SI Asia reached out to three key manufacturers who are heavily involved in this space to get their view. We thank Aurora Multimedia India’s Director, Nataraju Upputuri; Extron’s Joe da Silva, Director of Product Marketing and David Chua, Regional Technical Manager, Kramer Electronics for participating.

What possible changes do you see in terms of requirements in the office space that has or might come about because of the impact of COVID-19?

**Nataraju Upputuri, Aurora:** Most of organisations across the globe are implementing physical distancing in all their offices without exception. That too, starting from the very basic of re-orientation of their Work desks. Some architects are given a job to design something which will be effective and economical, with the key consideration being minimising contact with people within the office.
Since this pandemic seems like continuing world-wide even in 2021, many companies are now deciding to change their managed entrances to a new methodology that includes monitoring and basic checks related to COVID-19. By implementing this, they want to ensure that infected persons and also persons with travel history are not allowed into their premises. This also helps ensure that strict Quarantine rules by each individual irrespective of designation, is followed.

Joe da Silva, Extron: AV automation will play an important role in helping people feel more comfortable about returning to work. There are many ways this can work:

• Make systems hands-free where appropriate
• Automate a system to turn on when a person enters a room
• Notify cleaning staff after a meeting has ended
• Use personal devices for system operation wherever possible
• Use an app or QR code to control a system or start a meeting

Customers are looking to change the accessibility of their existing systems to accommodate new requirements for returning to work. All scenarios involve meeting the needs of both local and remote users. Businesses can adapt the features of their Extron products to meet the demands of new workflows.

Examples:
• In education there is an overwhelming need to record and then stream content that at one time only lived inside the classroom. Now, that same content needs to be available to both local and remote users.
• In the office, companies are making meeting spaces safer by automating system functions by using touchless and hands-free technology.

David Chua, Kramer: Flexible workspaces, hot desking and home offices were all part of a growing trend prior to Coronavirus. The pandemic really pushed things into high gear by speeding up the evolution of remote video conferencing and the associated technology. Government mandated social distancing and work-from-home policies represent an enormous potential savings for employers in the form of reduced real-estate requirements and lower operational costs. Many forward-thinking organizations are reinvesting those savings into updating meeting space infrastructure.

The new focus is primarily easy-to-use room booking technology for flexible spaces and a ‘hygiene first’ approach that prioritizes wireless BYOD presentation tools – sharing dirty dongles and cables is a risk no organization can afford to take right now.

What are your solutions that will fit with the above requirements?

David Chua, Kramer: Kramer’s VIA family of wireless presentation tools is perfectly positioned to help. With VIA there is no need to touch a potentially contaminated communal cable or dirty dongle. It’s incredibly simple to wirelessly connect and present using your own sanitized laptop or mobile device. VIA supports all the leading brands and operating systems.

Kramer knows that video conferencing is a key component of our new daily work routine. That is why VIA devices come pre-installed with all your favourite VC codecs. You can easily jump between MS Teams, Blue Jeans and Zoom – with VIA you’re in control.

And, to answer the new BYOM (bring your own meeting) challenge, VIA brought to market a brand-new feature called VIA Versa. With VIA Versa it is incredibly simple to run a video conferencing meeting wirelessly from your own laptop while using the professional camera, microphone, and speakers in your VIA enabled meeting space.

Looking for an easy-to-use room booking tool for all those new flexible work environments? Our brand-new Kramer KronoMeet room booking solution removes the unnecessary complexity you find in bloated scheduling software and delivers an intuitive elegant tool for booking temporary workspaces and meeting rooms.

Kramer also just launched a new USB, audio, and control signal extender. The PT-2UT/R kit is a great addition to any working space. It has never been simpler to send your USB 2.0 signal up to 100m.

Nataraju Upputuri, Aurora: Responding to the demands of ‘Testing’ times of COVID-19 across the globe and that there has been countless number of surveys and guidelines stressing the importance of physical distancing and keeping the threat away at every move that humans make, Aurora came up with a solution to contribute to strengthening preventive mechanisms of people and companies against the spread of the pandemic.

Aurora Multimedia very recently Introduced the all new Tauri Temperature-Check Tablet which is an all-in-one
infrared temperature sensing tablet to add an extra layer of protection to a facility and help protect their most valuable assets – their people. Forward thinking of Paul Harris, CEO of Aurora Multimedia, has made it possible to bring this new ground breaking technology product into market in very quick turn around time with very relevant features required during this New Normalcy period.

The tablet provides alerts when a person is running a high temperature within one second from 3.3 feet away. The system uses an advanced algorithm for detecting and calculating heat signatures. Based on technology developed in Germany, the highly accurate sensor measures with a tolerance of +/- 0.3 degrees Celsius (+/- 0.5 degrees Fahrenheit).

Why a temperature sensor?
• Provides the first layer of screening protection
• More hygienic with non-touch infrared technology
• Multiple devices can be monitored by a single user

Tauri would help organisations check temperature of every staff, guest, visitor at any managed entrance into premises.

Joe da Silva, Extron: Extron manufactures more than 4500 products, and there are many options but the following are highlights that fit current requirements:

• We have a touch-less solution for controlling your room AV using QR codes.
• We also have Room scheduling panels that automatically catalogue occupancy status of a meeting room without a need for direct user interaction
• OCS 100 occupancy sensors can trigger many actions as people enter and leave rooms
• Extron ShareLink Pro 1000 enables wireless collaboration and content sharing
• Our SMP streaming products are ideal for live-streaming classes, course content, teachers, and presenters

What are your thoughts about touch control?

Joe da Silva, Extron: If there are concerns about direct user interaction with systems, Extron has many touchless control options available that permit the use of an App or a QR code to automate system functions from a mobile device. All of our apps are free on Google Play or the App Store.

One of the benefits of using a touchpanel is how easy it is to sanitize the glass screen. We have a web page and short video outlining product cleaning procedures for all Extron products, which includes touchpanels. Refer to: https://www.extron.com/article/productcleaning

Many systems already include a touchpanel and these can be easily updated to provide instructions specific to COVID-19 procedures for using the workspace.

Extron TouchLink Pro touchpanels are versatile options with a variety of mounting possibilities, so they can be placed in convenient, easily accessible locations as information displays or as interactive points of control.

David Chua, Kramer: End users are justifiably concerned about touching shared surfaces and equipment. People want the ability to use their own personal devices to connect to and control AV presentation tools and room elements like lighting, window shades and HVAC. Kramer has developed a variety of solutions including Kramer Maestro, which provides complete hands-free automation for AV and room element control. Hands-free automation has obvious benefits when it comes to limiting exposure to potential contagions, it also reduces operational costs and unnecessary IT service calls.

There are also some exciting innovations coming that utilize a combination of QR codes and web browsers, making
it possible to control room elements using your personal mobile device. Voice activation and gesture control are not far off and will undoubtedly have a major impact on user experience.

Nataraju Upputuri, Aurora: Aurora Multimedia released a new firmware for TAURI Temperature check Tablets usable by both new as well as previously shipped units. This Tablet is not just Temperature Sensing and has lots of Features as explained here:

- This Tablet has inbuilt ReAX Control Engine. ReAX will allow us to help in Integration of Access Control Systems of managed Entrances with Face recognition built into this panel (even after wearing Face Mask).
- Temperature Check without any human Intervention or touching any surface.
- Face Mask Detection
- QR Code Detection & Reading
- Integration with Databases for advanced features required for Storage & recording.
- After Temperature check, we can Auto Slide into Customisable Simple Interfaces based on Gesture Control to answer simple questions that require to be answered before allowing access to the premises. Questions related to travel information, symptoms, contact with COVID-19 patients.
- Snapshot of Data & Email Sending based on Alert (HTML Pages)
- When no movement detected for predefined time, it can auto roll into digital Signage application & once movement detected at 3.3ft distance, it automatically comes back to Temperature Check Screen.

With all these new and well thought features, we can eliminate users touching the surfaces and making it more hygienic with non-touch infrared technology system.

Are we going to see less emphasis on large boardrooms and meeting rooms and more emphasis on huddle spaces or smaller meeting spaces?

Nataraju Upputuri, Aurora: This has been an increasing trend in the last 4 to 5years and this pandemic is emphasising smaller group of people instead of one big gathering. By this, we can surely maintain physical distancing which is new normalcy of 2020. To cater to bigger group gatherings, people are asking for AVoIP streaming devices like Aurora’s VLX / IPX to other parts of facility or even into work areas. This also opens up a new concept of having more dedicated UC Application devices in smaller spaces as well.

Paul’s forward thinking is helping Aurora bring the most out of any our product design. TeamStream TS-100 for instance helps in integration of huddle spaces at economical cost yet is sophisticated as it is also a Multi-format 4K60 Switcher cum Scaler with built-in Wireless Presentation feature. Apart from above Switching and wireless presentation capability, TS-100 is unique by itself as it features a mini control system which can be integrated with in-room motion sensor to turn ON/OFF the display. When no movement is detected for say five minutes, the display turns OFF by itself.

Joe da Silva, Extron: The COVID-19 pandemic has caused organizations to reset their use of meeting spaces as more employees are working from home. There is a need to adapt the traditional use of AV technology to meet the new health and safety requirements of their businesses and customers. Customers are re-imagining all spaces that include AV technology – not just designated meeting rooms. Some smaller meeting rooms may not provide enough space for adequate social distancing.

David Chua, Kramer: The trend away from traditional large boardrooms rooms toward huddle spaces started almost a decade ago. What we are likely to see, is a continuation of the trend toward small casual meeting spaces that balances the need for huddle style meetings while still providing enough space for social distancing.

Any other thoughts you would like to share with our readers?

David Chua, Kramer: Kramer will continue to focus on the future and new opportunities to innovate AV in both large organizations and home offices. We see a growing demand for hygiene focused, wireless, hands-free meeting and learning environments.

There is no doubt that Coronavirus has caused untold damage to the global economy and to countless individual lives. However, like so many times throughout our shared history, Kramer believes that adversity will again serve as the engine of our innovation.

Nataraju Upputuri, Aurora: During this new normalcy, every one is implementing Innovative ideas to avoid physical contact in work / public spaces & maintain social distancing. Our TAURI solution is an effective tool that can be used seamlessly at Airline Check-in counters, Healthcare & Hospitality sectors as well.

Joe da Silva, Extron: At Extron we are helping customers transform their organization by using features already present in the Extron products they own. Plus, we are available to provide the product and application support the industry needs, from system design assistance to the technology expertise to help make these solutions work together seamlessly.

www.auroramultimedia.com
www.extron.com
www.kramerAV.com
What’s Next in Business?

Take the Lead with Transformative Technologies

Exciting times are up ahead for the collective Professional AudioVisual (Pro-AV) and experiential communication industry. According to the 2019 AV Industry Outlook and Trends Analysis (IOTA) Global Summary produced by AVIXA, the industry will grow to $325 billion in 2024, up from $247 billion in 2019. Such trajectory of optimistic growth should come as no surprise. Pro-AV is anchoring all facets of business, its applications enlivening the human and user experience like never before. Projection mapping takes live entertainment to new heights; connected offices are supercharging productivity. Digital healthcare brings essential medical services even to rural parts of a country while smart retail is redefining the way we shop.

Virtual reality (VR) and augmented reality (AR) are also transforming the classroom and military training. Using VR, teachers can let students tour the inside of a blood cell, see a whale in its natural habitat and trek through a rainforest – all in the classroom.

The Boom of 3D Audio

Apart from the aforementioned technologies, one innovation that is showing tremendous potential in the world of Pro-AV is 3D audio. What exactly is 3D audio? Digital Journal defines it as “a group of sound frequencies that manipulate the sound produced by stereo speakers, surround speakers or headphones. It deals with the placement of sound virtually in the three-dimensional space.” Simply put, in a sound environment, 3D audio makes you feel as if different sounds are coming from multiple directions – not just around but also above you. You will also be able to identify the distance and direction from where the sound emanates.

Wheels of Audio Evolution Already Turning

While we are still years away from 3D audio reaching its true potential, many ground-breaking applications have already been rolled out. In the article “New Gear, Enhanced Techniques Mark Immersive Evolution”, Sports Video Group details how Dolby Atmos was used in NBC Sports’s coverage of the Notre Dame home-game season. Since 2016, NBC Sports has been broadcasting the games in 4K HDR – Dolby Atmos immersive audio therefore makes the perfect accompaniment. Primary audio engineer Doug Deems explained that the overall goal was to recreate what one would hear as if he were in the stadium. To turn this vision into a reality, stereo sort shotgun mics were strategically placed on each side of the stadium’s roof to capture the overhead sound. Crowd sounds were collected at three different levels: field, booth and roof. There was even a channel set up for the referee, so that viewers could hear him whenever he spoke.

An audio experience is also synonymous with music. Music connects, and it heals, and so a well-designed audio experience can evoke powerful emotions. 3D audio has been instrumental in bringing listeners “into” the music. First released in 1967, The Beatles’s Sgt. Pepper’s Lonely Hearts Club Band has become a monumental psychedelic-rock album in the music industry. To celebrate the album some 50 years later, Tate Liverpool and National Museums designed the Sgt. Pepper’s Lonely Hearts Club Band: The Immersive Experience. The experience places participants “inside” the recordings, whisking them to Abbey Road Studios where the
band recorded the album. Participants feel as if the band members are playing all around them and can savour the sounds in crystal clear quality and astonishing clarity.

The fast-thriving VR and AR industry is also set to create lucrative market opportunities for 3D audio. As the visuals of VR and AR technologies place audiences “inside” of an unfolding story, the audio experience needs to be equally all-enveloping, since it provides crucial sensory information and sensations. A multi-sensory film and 360-degree production, Cosmos Within Us is an example of how 3D or spatial audio makes a critical element in VR storytelling. It is shown in a live environment with actors and musicians. Detailing the production in the article “A Deep Dive into Award-winning VR Production Cosmos Within Us”, news-based publication Pro Sound News Europe wrote that various sound elements were fed through a 3D loudspeaker array and binaural headphones to create an immersive whole. Wearing open headphones, the participants hear the voiceovers and sound effects; an ambience layer comprising music and additional sounds is played through the auditorium’s surround sound system.

To not only preview the latest digital solutions but also understand their salient features and applications, you need to be at Beijing InfoComm China. One of the largest technology shows in Asia Pacific, the 3-day event shines the spotlight on next-generation Pro-AV and Integrated Experience solutions. Drawing 40,866 AV professionals, IT managers and technology managers from end-users across all industries in 2019, the event is able to rally the most renowned Chinese and global innovators to showcase their solutions. More than 450 names will lend muscle to the 2020 edition.

Running alongside the exhibition is the Summit, where you can gain enriching insights from experts during the free-to-attend educational sessions. Enduring collaborations with leading trade and industry associations and publications ensure presentations and discussions are relevant to current and future needs of businesses across all industries.

Besides the exhibition and Summit, there is also the Next Integrated Experience Technology (NIXT) Conference. A world’s first, the NIXT Conference will return for a second year after a hugely-successful debut in 2019. NIXT 2020 focuses on the transformative power of six technologies – namely AI, IoT, Robotics, Smart Wearables, Extended Reality and 5G – on manufacturing, smart cities, retail, and entertainment and media.

Beijing InfoComm China 2020 is slated for 28 to 30 September 2020 (Mon-Wed) in CNCC. Mark your calendar for this illuminating event, which is replete with expert insights that will elevate your caliber.

See you in Beijing InfoComm China 2020!

www.infocomm-china.com
Building an Open Standard for an AV over IP Future

“This article is contributed by Andrew Starks of Macnica and David Chiappini of Matrox Graphics Inc. Both companies are involved with the AIMS Alliance.”

Integrated Systems Europe held in February this year, saw its usual rollout of new product innovations, curious acquisitions, and compelling partnerships. These common events are what continues to drive our industry forward.

As typical in recent years at ISE, a large percentage of the news addressed convergence with IT operations, and the ongoing transition to AV over IP systems. These are themes we expect will continue for years.

It’s not every year that the industry sees tangible forward momentum with potentially game-changing standards development – a process that tends to move slowly through various standards bodies, tests and review procedures. ISE2020 will therefore stand apart as the show that introduced the Internet Protocol Media Experience (IPMX), a set of open standards and specifications to enable transport of video, audio and data over IP networks.

Developed by the Alliance for IP Media Solutions (AIMS) ProAV Working Group, IPMX implements a standards-based, SMPTE ST 2110-based approach with features and capabilities specific to Pro AV professionals including manufacturers, integrators and consultants. The ability to carry compressed and uncompressed signals over varied networks (1Gb, 2.5Gb, 10Gb, 25Gb and even 100Gb) will address interests and requirements for virtually anyone working in the AV industry, including tech managers that manage and operate end user systems. IPMX also offers features of specific interest to integrators such as device discovery, registration and connection management; and specifications for copy protection and security.

Overall, the introduction of IPMX is intended to move the AV industry forward with a flexible and future-proof way to ensure interoperability for AV over IP product and systems, and as a framework for open, easy-to-deploy solutions for integrators.

The Scars to Prove It

The IPMX set of open standards and specifications was developed from battle-tested operations in the broadcast industry. This is important to understand for two reasons. First, the technical elements are proven through an industry renowned for exacting demands, with input from high-end IP transport and networking companies such as Cisco, Arista and Mellanox.

Second, it means that the inherently gradual pace of standards review and approval – a well-rounded, democratic process that creates a trusted platform to build on – is offset through the evidence of working products.

Trusted manufacturers such as AJA, Macnica, Matrox and Ross introduced IPMX-compliant products at ISE2020 that are proven and prepared to help fulfill the mission of AIMS and IPMX. In many cases, these will become competitive products that drive further innovation for users, versus locking them into closed, proprietary solutions.

However, broadcast and ProAV represent two very different sets of customers and use cases. For example, IPMX will include a written specification for HDCP, a form of digital copy protection that requires transmitting devices to recognize if receivers are authorized to receive content before sending the data.

Unlike broadcast, which demands a stronger level of precision that requires master clocks and expensive,
boundary-aware PTP-capable switches, the ProAV market favors a simplified timing model with more manageable costs and technologies.

HDCP is a requirement for ProAV both over baseband and over IP on LANs. The need to leverage and process and distribute protected content occurs very often in the ProAV mission. An adaptation document is being discussed with the HDCP organization about how to use HDCP with ST2110.

Similarly, ProAV today embraces compression, where broadcast has transitioned to more uncompressed models. IPMX therefore addresses a broader spectrum of transport networks that is agnostic to the underlying carriage layer. That requires intensive reviews and exposure to move highly compressed, lightly compressed and uncompressed signals over a variety of networks using the same standard and technology, versus forcing customers to adapt to either 1Gb or 10Gb networks, for example. It also means confirming that performance-related requirements important to Pro AV, such as very low latency and pristine visual quality, provide consistent high-quality results regardless of how much compression is employed.

**Clean and Open**

Many technical advantages have been built into the IPMX set of standards and specifications. These technologies are accompanied with the freedom for each user to make their own decisions, and with strong documentation to review in support of those choices.

For the purpose of brevity, let’s look at the elements that are priorities for most ProAV users. These important technical elements include clean switching, ultra-low latency, compression options, and device discovery and registration.

Clean switching is an attribute that many claim exist within their products, although the results vary in success. The desire for clean switching grew out of the AV industry’s reliance on the HDMI matrix switcher. In these systems, the user adds baseband video and switches from one input to another; the transition would be “clean,” with no need to resynchronize if the timing was close enough to monitor in real-time.

Historically and even today, clean switching has not been considered mission-critical. However, the lack of synchronized presentation of source content in an expensive AV installation is plenty enough reason to want clean switching.

In the IPMX universe, clean switching represents a simplified timing mode that, when correctly implemented, provides a seamless experience upon transitioning from one IP stream to next. The clean switch eliminates on-screen glitching; an interruption that typically causes black is instead repaired at the transition boundary.

Normally, the higher the compression amount used, the more challenging that clean switching with lossless quality is to achieve. However, IPMX’s inclusion of JPEG-XS’s frame-based compression means that streams can be tightly synchronized, with seamless, glitch-free presentation of audio and video on transitions.

This does not mean that JPEG-XS is the only viable form of compression within IPMX. As AIMS is focused on open standards, IPMX can support multiple compression standards and algorithms, and at different bitrates. It is also well-understood that there is no one-size-fits-all compression solution.

JPEG-XS proved to be the ideal starting point for IPMX for several other reasons. This includes cost-efficient and flexible FPGA implementation, available software codecs, it is based on a true open standard (one little piece left to be approved later this year), and as referenced earlier, ultra-low latency.

To the latter point, IPMX supports sub-frame latency that is on par with the best, and unnoticeable to the human eye. Sub-frame latency is a perfect complement for use in live events and medical environments, for example. Sub-frame latency is also a critical feature for KVM applications that benefit from high-quality compression and timing technologies, and assures low minimal delay from source to destination.

**Integrators Win**

Beyond the more SMPTE ST-2110-driven benefits of hardware, transport and compression, IPMX also offers a genuine value proposition on the software side with its embrace of NMOS (namely IS-04 and IS-05) standards. That software side includes an open RESTful API that is perhaps of special interest for integrators. IPMX is unique in offering a RESTful API as a base layer for integrated control and configuration, enabling device discovery and registration. The underlying NMOS support is what allows users to full control and manage the entire networked solution. By making this part of the system open and interoperable, systems integrators have more creative power and control over the systems they design and integrate.

Combined with flexibility across network architectures, compression bitrates, and a single common programming language among other benefits, integrators will virtually limitless freedom to customize AV over IP systems that optimize each end user’s experience. In the meantime, IPMX still has a roadmap ahead for testing, approval and refinement with standards bodies, but the critical toolsets are established and ready to provide real value for the ongoing AV over IP transition.

AIMS is an industry consortium led by broadcast and ProAV engineers, technologists, visionaries, vendors and business executives dedicated to an open-standards approach that moves broadcast and media companies quickly and profitably from legacy systems to a virtualized, IP-based environment.

[aimsalliance.org](http://aimsalliance.org)
Kneura – the World’s First Virtual Integrated Classroom Platform

A New Technology Learning Domain To The Fore

As the COVID-19 pandemic began to show its ramifications across geographical and sociological lines, they said— it’s a new world order in the making, where the virtual realm will take over the physical, and remote connect will determine the regime of many a manual activity. Education – while a significant number of areas in the domain have already begun migrating to virtual – is one big transformational segment, or so it appears.

Bengaluru – the de facto design hub of the IT and ITES world – has sprung yet another education design, with machine intelligence and smart connected device major Cybernetyx bringing to the fore what it calls Kneura and claims the world’s first virtual integrated classroom platform.

SI Asia delves into knowing and presenting what it is…

It goes without saying that the world had been in a transformational mode for some time now, owing to the digital strides being drawn all over the place. Education segment – across the geographical contours and social strata – had also been having a fair share of this transformation with phenomena such as distant learning, e-learning, and smart classes etc.

While this was good to some extent in what people now tend to call Pre-COVID-19 time – where the learning processes were an operable blend of both human and machine-powered modulations – it is thrown out of gear and application, let alone appreciation, in the current-COVID-time, and the thought leaders of the segment, like most others, are apparently alarmed about the spectre of Post-COVID times that will by default condition ‘distance’ people from one another.

Thanks to the pandemic situation- it’s a whole big paradigm shift worldwide, where a new world order is set to define and determine the human existence and experience. Education segment, already under some form of transformation in certain areas and levels took to further digital strides into virtual learning environment to be able to continue their teaching processes beyond the barriers of physical location, time and/or device.

However, among the many ‘make shift’ arrangements to implement virtual teaching, a major missing feature is an integrated solution that could enable an ‘easy transition’ to truly definable and experiential virtual learning environment.

Cometh Cybernetyx, Cometh Kneura – the New Level

Cybernetyx – who had been making some real credible ‘cyber’ waves in the learning domain – has come out with what it called the Kneura integrated virtual classroom platform- particularly aimed at powering the teaching dynamics in the COVID-restricted world of education.

Claimed to be first of its kind in the world, the Kneura Platform, according to the promoters, brings to place the blended learning - a combination of traditional face-to-face and online learning, and provides powerful tools for administrators and educators to perform multiple tasks with ease and effect.

In a fully deployed environment, it would be like this:

• Administrators can create virtual structure of school on Kneura platform in minutes by creating classrooms, mapping teachers and students

• Teachers can create lessons from anywhere using AI-powered tools

Launch Expedited to Tide Over COVID Impact

The Kneura platform – developed essentially at Bengaluru office of Cybernetyx – had been in the making for over 18 months, and was actually intended for Q3 end of CY 2020 launch. However, with the COVID-19 pandemic suddenly breaking loose and disrupting the global activities and affecting the education severely segment, Cybernetyx decided to expedite the launch and spread the benefits of the programme in the larger interest of the users.

“We believe the timing is perfect, as there has been tremendous response for the offering,” said Ramya Chatterjee, CEO of Cybernetyx. “Also, now we know that we need to live with COVID-19 for a foreseeable future, we hope to Kneura to contribute and redefine the ‘New Normal’- even as we evolve it further and further.”
One of the world’s leading developers of perpetual AI device solutions and platforms, with offices in Germany (Hannover), and India (Bengaluru and Noida), Cybernetyx enjoys the distinction of transforming over 15 million users globally through its interactive teaching solutions. The company has its corporate and R&D establishment in Bengaluru with sales and marketing division panning out from Noida.
While both the institutions and the students are at a massive loss of the whole academic process – annual examinations and subsequent entry to higher levels – two things have been discreetly happening.

Whatever investments the institutions have made for imparting e-education have not helped handle the situation, and ensure continuity of teaching - that’s one.

Two- a multitude of self-learning apps are having a field day with a propaganda against school-based learning and enticing students into spending big amounts for ‘fanciful’ learning, the success of which is never guaranteed.

The solution?

**Classroom 3.0**

Cometh Classroom 3.0- that promises a blend of face-to-face (F2F) and online teaching delivery, with the added advantage of personalised, continuous learning environment! While the combination of F2F and online education is enabled by an innovative, smart-connected technology, the personalized and continued impartation takes the process ‘beyond the confines of a fixed classroom.’

“We call it Kneura – the new mode of education in the emerging world,” declares the Cybernetyx CEO. “Particularly in a situation where people are distanced physically, and existing tools of learning cannot connect them.”

“The key differentiator between existing F2F model and Kneura Virtual Classroom is the place of instruction, which is not restricted to any particular physical location,” Ramya explains.

This, according to him, essentially means that teachers can prepare content from anywhere, share with students anywhere even before they come to the classroom; similarly students can access the study material from anywhere. In essence, students stand to stay well informed even before they get to the class. There is nil or minimal communication gap between students and teachers. Learning becomes a continuous process.

However, this can happen only when all the tasks are digitised and made available on cloud platform.

Asserts the Cybernetyx Chief: “While there are various sets of tools like LMS, assessment, performance management, video-conferencing, and messaging tools currently used by many institutions for blended learning, the critical component of integrated platform hasn’t been there. Kneura is bringing that.”

**How Does Kneura Platform Unfold**

While it reads impressive, and sounds exciting too, the critical aspect is how does it work, and unfold the functionalities?

A typical step-by-step functional flowchart of the Kneura is explained as:

**Step 1**: On boarding institute

**Step 2**: Adding teachers, students, classrooms and curriculum

**Step 3**: Assigning teachers and students to respective classrooms and allocating syllabus from the curriculum

**Step 4**: Teachers and Students, once mapped, will get Invite Emails to their Email Id through which they are supposed to create their own accounts

**Step 5**: Once a teacher logs in using her/his credentials, the classes mapped to that teacher will be available

**Step 6**: Teacher can select respective class, create lessons and once published, all students mapped to the class will get the notification
Step 7: Instruction
a. Teacher can take online classes directly from their prepared lessons; all students in that class get notification and can join the class through their logins
b. Teachers in F2F Classroom with digital teaching devices – can pull their prepared lesson from Kneura Platform and teach in the classroom

Step 8: Teacher can create assessments – using AI automatic question generator tool / predefined question templates, can define correct answers, scoring rules, and time limit. Once the results are published, students in the class get a notification on the same.

Step 9: Student can attend the test and get instant results

Step 10: Teachers can take student attendance from their login

Step 11: Attendance and performance data of the student will be automatically updated, and reports are made available on-demand.

The first initiation of the Kneura functionality, therefore, begins from the institution where the designated administrators will board the institution onto the Kneura platform. They add resources like teachers and students; map them to the classes; create syllabus and allocate to the class. Further, they will have the access rights to monitor the performance of students, class or the institute as a whole. They can even manage as and when required institute-wide or class-level announcements from their logins.

While all this looks fine, how does the video-conferencing blend with online teaching?

It is like this: Every teacher by his/her login credentials will have access to all the classes assigned to him/her. The lessons created for that class are made available, and by clicking on the lesson the teacher can open the teaching canvas, which is actually a collaborative canvas that can be accessed by the students as well.

“This is the critical connect,” asserts Ramya. “From the teaching canvas the teacher has accessed, he/she will have the flexibility to “Go Live” to enable video, and audio virtual teaching.”

What Does the Kneura Require for Deployment?

It goes without saying- any ICT deployment takes a combination hardware and software, and Kneura can’t be different. It does require hardware to lay the matrix architecture for a tripartite connectivity: Institution, instructor and the student.

The Kneura virtual platform is device agnostic, and therefore works on any device such as laptop, desktop, tablet, mobile handset, or even the conventional television on the student and the teacher’s side, while on the institution side, it can work with any digital classroom device like projectors, whiteboards and interactive flat panels.

This is the area where the Kneura has its business model unfolding in the form of software only or both hardware and software together. Given the fact that most e-learning set-ups already have the hardware with them, the Cybernetyx offers the flexibility of enabling Kneura platform on the institutions’ existing architecture. In such cases, the Kneura is offered on paid-licence for per-student, per-time unit basis.

For institutions wanting the Kneura platform along with its dedicated hardware architecture, the promoters package the Kneura licence FREE along with the Cybernetyx Smart Connected Devices like EyeRIS Pro, Galileo One, and Quriosity Panel.

- EyeRIS Pro – an advanced surface-independent wireless touch interactive teaching device; can convert any flat surface (such as a wall or dry-erase whiteboard) into Touch-enabled Digital Whiteboard
- Galileo One – a clip-on, wireless interactive device that can turn any flat TV or display into a full-blown touch-interactive smart display (by means of globally recognised EyeRIS vision sensing interactive technology)
- Quriosity – an integrated Interactive Whiteboard Solution that optimizes teaching environment and elevates the learning graph
“We have also recently launched dedicated Galileo Teach and Galileo Learn respectively for teacher and the student side deployment,” the Cybernetyx chief details further. These tools come with three essential components:

1. EyeRIS interactive sensor - which converts a normal TV into touch screen

2. Built-in Android processor - which enables any TV to be a standalone Android device with Wi-Fi enablement, wireless collaboration

3. Interactive teaching software suite which connects Kneura virtual classroom platform

Kneura is a virtual, cloud-based platform, and therefore needs (seamless) Internet connectivity for a good performance, if not an enriching experience both at the provider, and the user level. That brings into question the Internet bandwidth in countries like India. How about that compatibility with Kneura?

“We were pretty conscious while developing this platform,” informs Ramya Chatterjee, “which is why we tried and developed this workable for lowest possible bandwidths.”

According to him, the lowest subscription model with only collaborative whiteboard and audio conferencing needs just 20-50 kbps connection for a session. If one needs a multimedia content and video-conferencing, then it takes 0.5 mbps.

“Even if one goes for the third option of collaborative whiteboard + multimedia + VC + screen sharing, still it takes only 1.0 mbps capacity,” he explains. “With such low bandwidth compatibility, there is no reason why it cannot work even in poorest connectivity environment.”

That should certainly make it workable. How about the takers then?

Asserts Ramya: “We have done some very aggressive marketing promos with several institutions in India and worldwide. Response has been tremendous with thousands of happy subscribers already using, and many more adding on at rapid pace. That's the winning.”

For more details, say: hello@kneura.com

www.cybernetyx.com

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The Bandwidth for Kneura Deployment

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Bandwidth</th>
<th>Use Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Collaborative Whiteboarding + Audio Conferencing</td>
<td>20-50 Kbps</td>
<td>Teachers &amp; students can access the same whiteboard with audio conferencing</td>
</tr>
<tr>
<td>Collaborative Whiteboarding with Multimedia Content + Video Conferencing</td>
<td>0.5 Mbps</td>
<td>Teachers &amp; students can access the same whiteboard with video conferencing</td>
</tr>
<tr>
<td>Collaborative Whiteboarding with Multimedia Content + Video Conferencing + Screen Sharing</td>
<td>1 Mbps</td>
<td>Teachers &amp; students can access the same whiteboard, share screen with video conferencing</td>
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RSX Series Deliver Intuitive and Straightforward Performance With Dante Integration

EAW Takes Sound Quality to the Next Level at China’s Xi’an Olympic Sports Center

When construction began on the Xi’an Olympic Sports Center, home of China’s 14th National Games, officials wanted the modern 18,000 seat venue to feature a state-of-the-art PA system that would give every seat a memorable experience. With help from pro audio distributor EzPro International, officials found the solution they were looking for in EAW’s RADIUS (RSX) Series loudspeakers and subwoofers.

“In designing the sound system, the goal was to provide the same frequency response for each listening area and to address any unevenness throughout the audience areas,” says System Designer Zhang Xianjun. “We first built a 3D model for the stadium in AutoCAD, according to the architectural drawings. We then imported the model into EASE4.3 acoustic analysis software, followed by a 1:1 EASE model setup. We choose EAW’s RSX line array for its strong directivity, ability to optimize speech intelligibility and its overall fantastic sound.”

For the project, integrators installed six clusters of 44 EAW RSX212L active loudspeakers and eight EAW RSX18F single 18-inch active subwoofers in six arrays. Four EAW RSX129 active speakers were installed under the in-arena scoreboard and four single 12-inch EAW VFM129i moving wedges were configured for the rostrum.

“All of the speakers were installed under the catwalk of the stadium, which makes it difficult to see their operational status,” adds Xianjun. “Thanks to the self-detection of EAW’s RSX series active loudspeakers, the sound engineers can quickly access their operational- and signal-status.

The catwalk of the stadium is an asymmetric-hexagon structure, so it is harder for us to control installation angles of loudspeaker clusters. We were able to overcome this by using EAW original flyware, fixing the arrays under the catwalk by 3T electric hoist. We used two safety cables and the horizontal coverage is adjustable. With RADIUS series speakers, we have much less sound diffusion and direct sound coverage is improved.”

EAW’s RADIUS Series is designed to streamline setup and deliver maximum results in minimum time. The line features OptiLogic™ to drastically cut down on setup and tuning time, while the EAWmosaic™ app provides total system optimization from anywhere in the venue, plus intuitive room design and prediction in a single, comprehensive application.

“The EAW RSX Series delivers an excellent listening experience with high fidelity and extended dynamic range, while also proving Dante™ integration across the line,” adds Xianjun. “The system has admirable intelligibility and it is easy and seamless to switch between signals to keep the system safe and sound.”

Located in Xi’an International Trade and Logistics (ITL) Park, the stadium is the main venue for the opening and closing ceremonies of the 14th National Games, as well as various events including basketball, volleyball, ice hockey and gymnastics.

www.eaw.com
CHINA

17 Christie LWU650-APS projectors are installed in the four-sided CAVE

Smart City Science and Technology Exhibition Hall Adopts Christie APS Series Laser Projectors

A total of 17 Christie LWU650-APS laser projectors are installed overhead in the exhibition hall

A smart city science and technology exhibition hall in Heze, a city in China’s south-western Shandong province, has become the first public space in the municipality to showcase a visually stunning four-sided CAVE installation using Christie APS Series laser projectors.

The spectacular showcase uses 17 Christie LWU650-APS laser projectors strategically installed on the ceiling of this venue by Christie’s trusted partner Dicction (Beijing) Science and Technology Development Co., Ltd. The bright and colourful visuals transport visitors into a highly-immersive environment that illustrates how Heze City is gearing up development into a smart city leveraging big data and cloud computing for its newest projects.

“We are very proud of this 14-channel, four-sided CAVE installation at this smart city science and technology exhibition hall in Heze City as it aptly demonstrates how Christie’s state-of-the-art laser projection technology blends in perfectly with the facility’s overall theme,” said Leo Zhang, chief executive officer, Dicction. “The end result exceeded our expectations and we are thrilled with how the APS Series delivered outstanding and highly-immersive images.”

This smart city science and technology exhibition hall is already an ambitious endeavour in itself, covering 400,000 square meters. It boasts a capacity of 130,000 servers, and a staggering 100 petabytes (100,000 terabytes) worth of data storage capacity. The facility supports the construction of high-quality and high-end server rooms, science and technology exhibition halls, and technology plazas in Heze City.
Zhang noted that his engineering team took one week to install and calibrate all 17 Christie LWU650-APS laser projectors using a distributed hardware integration system developed entirely in-house by Dicction. The projected visuals on each wall covered 24 square meters, while the floor projections occupied 64 square meters.

"Thanks to the omnidirectional capability of the LWU650-APS, we have unlimited flexibility in installing them in this exhibition hall. Coupled with an efficient laser illumination system that provides up to 20,000 hours of reliable, maintenance-free operation, as well as a small form factor and ultra-quiet performance, the client is highly satisfied with this CAVE installation," he added.

April Qin, Director of Sales, Enterprise, Christie China, commented, "The APS Series is a high-value and affordable laser projector that provides reliability, performance and long operational life. We are delighted that Dicction has accomplished an innovative four-sided CAVE installation at this smart city science and technology exhibition hall using the APS Series, which proves that affordable projectors don’t need to sacrifice quality. We look forward to more creative deployments of these projectors in venues beyond classrooms, boardrooms and conference rooms."

www.christiedigital.com
New Music Venue’s Diverse Music Genre Seamlessly Powered by d&b

d&b Powers Region’s Most Talented Rising Acts at the Tin Box

In early March, Singapore’s Tin Box: The Live House — a music venue that focuses on local up-and-coming talent — opened to the public. Tin Box, with help from prestigious concert and event management company IMC Live Global, offers a performance space to some of the region’s best artists.

Residing below Singapore’s historic Chijmes building complex, the space is compact, yet equipped with tour-standard staging, lighting, and audio. In order to give audiences and performers the best possible sound quality, the venue installed d&b audiotechnik A-Series augmented arrays to fit comfortably in the intimate 250-person room, providing the listener with a state-of-the-art audio experience.

IMC Captasia group director of artist management and development, Joy Yong, spoke on why the A-Series was the obvious choice to power the venue.

“d&b is our trusted, go-to brand for our live shows and concerts,” Yong explains. “The A-series is more suited for smaller venues such as this live house in comparison to the other models used in large arenas. The sound is in no way harsh and the audience is not subject to fatigue when there are high volumes.”

Being a basement venue, Tin Box has low ceilings and is only about 240 square meters in size. Yong admitted that one of the challenges they initially had was the low ceiling height, making it difficult to provide even and complete sound coverage. However, the installation challenges were not so much technical as they were aesthetic, with the main concern being that the sound system would block views to the stage. Fortunately, after the installation process was complete, she revealed there was no obstruction and that the audience has a very good view of the stage no matter where they are in the club.

The A-Series has cemented itself as one of d&b’s most sought after products. Combining variable splay angles and acoustic optimization in a compact format, the A-Series addresses a broad range of applications where coverage flexibility is paramount. Together, the AL60/ALi60 and AL90/ALi90 modules form a d&b system that can scale from a single loudspeaker to a full sound reinforcement solution.

The loudspeakers ability to be displayed eclectically is another one of its biggest draws and a feature that helps make it work so well. Arrays of two to four loudspeakers can be deployed horizontally or vertically, covering areas
of 50 to 150 degrees. Variable splay angles allow arrays of up to four A-Series loudspeakers to adapt precisely to venue shapes in five-degree increments from -10° to +10°. Midrange directivity control provides acoustic optimization directly from d&b amplifiers. This function uses fewer amplifier channels than ArrayProcessing, while keeping lower midrange directivity symmetrical at every possible splay angle.

So far, the response has been nothing but positive. Unfortunately, the club is not able to hold any live music events currently due to COVID concerns, but prior to that, Yong had praise for the results.

“The entire show experience is of top-notch quality, not just for the audience off-stage, but for the performers on-stage,” said Yong. “Musicians and singers are able to deliver a high standard of performance, and the audience, from right upfront to the back of the room, enjoys an equal richness of sound.”

This bodes well for a club that books incredibly diverse acts. As the venue features genres from alternative rock to jazz, d&b’s systems are proving they can handle the job. Lauded for being effective at larger venues such as concert halls and arenas, d&b products are demonstrating excellence in more limited venues like the Tin Box as well.

While reflecting on her experience with d&b, Yong had plenty of positive feedback. “Their support was great! We will without a doubt continue to use their products for future endeavours.”

As for now, Yong waits patiently for live events to be able to safely resume so the club can continue to provide locals with some of the region’s best new music.
AUSTRALIA

Dimmers and Power Distribution are Critical Components Working Tirelessly in the Background

LSC Lighting Systems Offers Power and Protection to NIDA

Power and protection are the keywords with dimming and distro and Sydney’s National Institute of Dramatic Art (NIDA) now has both - thanks to LSC Lighting Systems.

NIDA is Australia’s leading centre for education and training in the performing arts and features six professional performance venues, studios and rehearsal rooms. As the largest of the performance venues at NIDA, the Parade Theatre offers seating for audiences of up to 707 people in its three-tiered, horseshoe-shaped auditorium. The Playhouse is a 155-seat amphitheatre, designed for more intimate productions. NIDA has three smaller black box theatres – the Space, the Studio Theatre and the Reg Grundy Studio – that are frequently adapted to suit different production needs.

NIDA recently decided to upgrade its dimming and power distribution systems with LSC Lighting Systems GEN VI dimmers and APS power distribution. A total of 42 x GEN VI dimmer /distros and an additional four Advanced Power Systems power distribution units have found a new home at this celebrated institution. The Parade Theatre, Reg Grundy Studio and Space Theatre have all benefited from the recent LSC Lighting fit-out.

NIDA’s previous dimmers were installed in 2003 and had exceeded their expected 15-year longevity mark, thus becoming electrically unreliable and so NIDA began investigating replacement options.

“Once we found the money we went hunting for dimmers!” said Chris Dickey, NIDA’s Technical Manager. “We wanted something that offered a bit extra in the venues and that was the LSC GEN VI range. I’ve had a fair bit of experience of LSC equipment and it’s always rock solid.”

The dimmers were installed in January and were successfully used on a handful of productions before the COVID-19 lockdown was enforced. Fortunately, NIDA’s lighting crew managed to familiarise themselves with the dimmers in that short time and found the changeover very straightforward.
A GEN VI dimmer (available in rack-mount or wall-mount versions) uses TruPower allowing configuration of any of its outputs to be an 8-bit or 16-bit dimmer or a direct power relay channel. This enables the GEN VI to dim traditional lamps or power moving lights, LED fixtures, video screens or audio power amplifiers – in fact, any situation where controlled power distribution or dimming is required.

“The way the relay channels in the GEN VI can be set to come to life and go to sleep when they do and don’t get DMX has to be my favourite feature,” said Chris. “The start-up and warm-down practice at NIDA has now changed dramatically as we don’t have to traipse around the entire building to wake the system up as it all happens automatically. Zero-point crossovers for power switching is amazing and has been faultless so far.”

By using LSC APS modules to power the lighting and video systems – all LED fixtures, video screens and moving lights are automatically powered off at a set time after the lighting console is turned off. When the console is next turned on, the lighting and video equipment will be sequentially powered-up over a few seconds, without user intervention.

“This means there is less chance of some lighting gear being accidentally left on when not in use, ensuring the maximum service life of expensive equipment and a lower power bill,” added Chris. “Both the GEN VI and APS units are also RDM (Remote Device Management) enabled which is handy. We can simply change the DMX address of the unit, adjust settings and view any faults from any RDM controller.”

Features of the APS power distribution unit that impressed Chris were supply voltage and load-current monitoring, trip indication and a colour touchscreen for local data display and menu navigation.

Inrush currents of all the equipment power supplies and load lamps starting up at the same time can cause the supply breakers to trip, and secondly, the transient currents drawn by the power supplies can cause earth protection breakers to trip.

“This APS offers staggered start-up of each circuit, enabling sequenced load ramp-up while maintaining phase balance – and that’s phenomenal,” said Chris. “High current drawing devices such as LED screens can now sequence themselves up automatically.”

This staggering of the power-up sequence is programmable from the front panel – with a setting from 0.1s to 5s of delay between outputs being energised.

Chris commented that since the installation of LSC GEN VI dimmers and APS power distribution, tech life at NIDA has been made so much easier.

“For example, during our festival season we always have a mirror ball in our standard rig and now we don’t have to have a special switch as it can go straight into a dimmer (set to non-dim mode) and is triggered straight from the desk.”

Now, at the end of a long night when the crew simply want to go home, they can do so knowing the lighting gear can safely be put to bed with LSC Lighting.

www.lsclighting.com.au
IN INDIA

Qubix Technologies Equips Resort with World-class Audio, Video, Lighting and Control Systems

MAYFAIR Lake Resort Features End-to-end Integration with HARMAN Professional Solutions

Providing travellers an unforgettable stay, the MAYFAIR Lake Resort enhanced its immaculate facilities by hiring Qubix Technologies to design and install a complete, state-of-the-art HARMAN Professional AVLC (audio, video, lighting and control) solution.

Opened in 2019 and located amid lush greenery that overlooks the Jhang Lake, the luxurious MAYFAIR Lake Resort offers lavish accommodations, great banqueting and event space, world-class facilities and some of the best restaurants in Raipur. In addition to being a renowned travel destination, the resort is also a popular wedding and event location, as it features more than 124 rooms and suites, the MAYFAIR Spa, salon, fitness centre, swimming pool and Kids Play area. Adding stunning lighting displays, pristine sound and high-tech control systems and signal distribution that match the hotel’s luxurious facilities, Qubix Technologies outfitted MAYFAIR Lake Resort with premium solutions from HARMAN Professional, including a wide range of Martin lighting fixtures and JBL Professional loudspeakers.

“MAYFAIR needed a multi-aspect, cross-category solution for their new property in Raipur. From audio and video over IP signal distribution, to lighting, microphones, mixers and speakers, we sourced products from HARMAN because of their complete solutions,” said Rhythm Arora of Qubix Technologies.

Illuminating MAYFAIR Lake Resort’s amenities with dazzling lighting, Qubix Technologies deployed an arsenal of Martin fixtures. With their powerful output, compact size, energy-efficient LED and rugged, IP66-rated housing, Qubix Technologies installed 40 Martin Exterior Wash 200, 32 Exterior Wash 100 and six Exterior Wash 210 fixtures. While the Exterior Wash lights provide reliable performance and durability to withstand weather demands, Qubix Technologies lit up the indoor spaces with two RUSH MH5 Profile compact moving heads and 96 RUSH CS1200 Graze linear wash fixtures, which offer the resort ultimate flexibility to choose the exact look they need for certain areas. The lighting system also includes eight Martin DMX 5.3 Splitters to ensure peak operation and maintain proper DMX signal throughout the hotel.
Beyond the lighting displays, Qubix Technologies also equipped MAYFAIR Lake Resort with world-class sound. Twelve JBL VRX932LAP two-way powered line array loudspeakers provide pristine audio and crystal-clear speech intelligibility, while four VRX918SP powered flying subwoofers with patented Differential Drive 18” woofers offer impressive, accurate low-frequency response. Throughout the rest of the resort’s indoor spaces, Qubix Technologies installed an array of JBL Control 10 Series, Control Contractor 20 Series, Control 40 Series, 8100 Series and Control CRV Architectural speakers, including 50 CRV White speakers, 64 JBL 8124, 56 Control 47HC, 50 Control 12C/T and 30 Control 24CT ceiling loudspeakers as well as eight Control 23-1, four Control 28-1 and two Control 25-1 two-way speakers.

Completing the indoor sound systems, Qubix Technologies deployed four AC599 and AC18/95 two-way loudspeakers, one AC115S 15” high-powered subwoofer, four SRX828S subwoofers as well as many more JBL speakers. Delivering excellent audio outdoors and providing guests a complete, immersive sound experience, MAYFAIR Lake Resort features 50 Control 85M landscape speakers, 14 AWC82 all-weather loudspeakers and one AWC15LF all-weather low-frequency speaker. For public address applications that offer guests with crystal-clear announcements throughout the property, Qubix Technologies installed eight JBL CSS-H30 paging horns as well as six AKG DST99 S dynamic paging microphones.

Though JBL speakers provide the audio, Crown amplifiers power the complex solution while an assortment of AMX, BSS, dbx and Soundcraft products guarantee the system delivers optimum sound quality. Qubix Technologies chose Crown CDi Series amps because of their power handling capabilities and extreme durability, while AMX N1000 Series Encoders and Decoders provide MAYFAIR Lake Resort with a local AV over IP switching solution that packetizes video into a minimally compressed IP format. BSS signal processors, dbx direct boxes and Soundcraft mixers, including Si Impact, Signature 16 and Notepad-5 consoles, ensure the system provides pristine fidelity throughout the hotel.

“We are pleased with the output at MAYFAIR Lake Resort, and what a difference the products have made to the property. We were able to engineer the appropriate solutions using HARMAN Professional products because they’re adaptable, reliable and produce great results” Arora said.

“It’s an honour for our products to highlight such an iconic hotel,” said Aditya Todi, Senior Director of Sales and Marketing, HARMAN Professional Solutions, India and SAARC. “MAYFAIR Hotels & Resorts offer some of the best luxury hotels in India and provide today’s travellers with authentic hospitality, thoughtful service and world-class facilities. We’re happy to have provided them with HARMAN Professional’s top-of-the-line solutions in the audio and lighting categories.”

pro.harman.com
DUBAI

Three Lighting Brands Unite to Produce an Array of Colours in Broadcast-Friendly Vibrancy

Cooper Lighting Solutions at the Coca-Cola Arena

The new Coca-Cola Arena in Dubai unites three dynamic, industry-leading lighting brands from Cooper Lighting Solutions – Zero 88 for entertainment-style control, iLight for architectural-style control and Ephesus LED sports lights.

The interior lighting and control systems together with all associated infrastructure were delivered as a turnkey solution during last year by Eaton Lighting Systems – now known as Cooper Lighting Solutions (CLS).

These aspects of this flagship project were managed by Peter Coles (Business Manager), supported by Martin Piper (iLight International Training & Support Manager), Jon Hole (Zero 88 Product Manager) and Cooper Lighting Solution’s two EMEA Project Teams – one based in the UK, the other in Dubai, who together oversaw the process from design to final delivery in close collaboration with UAE-based lighting installation contractor, BMTC.

The venue itself is a 17,000 capacity (bowl format) multi-purpose indoor arena located in the City Walk neighbourhood of Dubai, United Arab Emirates and operated by ASM Global.

The tender requirement stipulated the specific sports lighting criteria required to maintain the correct lighting levels to be TV / broadcast friendly. The whole arena had to be properly lit in white as well as having the capability of being turned into an array of vibrant colours and textures, so in all, some 369 high output LED fixtures were specified.

Three different types of LED fixtures are used in combination – 74 x Ephesus Arena Pro Variable White, 191 x Ephesus Prism RGBA fixtures and 104 x LED profiles. These are carefully positioned around the venue to light the floor, seating stands and surrounding areas for both sporting and non-sporting events like concerts.

The Ephesus Prism RGBA fixtures are ideal for lighting the seating areas and for providing high level practical ‘states’ for cleaning and working. Being RGBA, they also offer a fantastic range of colour effects.

The Arena itself is divided into four key areas – each of which can then be subdivided into different sections allowing for multiple types of music shows and sporting events to be staged, but also allowing for weddings, corporate events, dinners and awards shows, etc.

Each light is individually controllable and can be used in several different setups. In any situation, venue managers can change colour in the upper, middle and lower tiers of seating and across the arena floor, so the space can be illuminated and adjusted according to the specific event lighting requirements.
The primary control system offers architectural-style lighting control for day-to-day running. It’s based around an iLight touch screen controlling the powerful Zero 88 ZerOS Server which drives all the lighting scenes, cues and DMX setups and merges with the FLX lighting desk in the control room. Other touch screens are located in the security room and the VOC room. The whole system can also be controlled from the BMS system or via an App.

For aisle and step lighting this custom-configured CLS control system is designed to be as flexible and straightforward as possible; combining the architectural and show lighting systems so that they can work independently or seamlessly together. This approach highlights the synergies of the CLS brands and the flexibility of the solution, where Zero 88 FLX, ZerOS Server and iLight Touch Screens can all work together.

All the different settings – cleaner, load-in, working, special events, sports lighting, etc. – can be called up and tweaked, activated, etc via the Touch Screens.

The main roof catwalk features an IP-based Art-Net 4 system running on a dedicated IP fibre network that is controlling of all the sports and arena lighting either via the architectural control system ... or via the in house FLX lighting console.

Zero 88’s FLX console was selected for its power, simplicity and intuitive hands-on control of lighting and LED fixtures. It includes a touch monitor for quick access to palettes / show overviews and is ultimately portable with a small footprint.

Free apps are available from Zero 88 to enable wireless monitoring of the lighting rig and there’s support for a range of networking accessories.

Inbuilt tools include the award-winning “RigSync” and “Auto Palettes” to assist with prep work. Colours can be quickly and accurately selected and applied via the multi-touch Colour & Image Picker or the encoder wheels or by selecting colours contained within “Mood Boards” by LEE Filters.

In a concert scenario, visiting productions can bring in their own touring consoles and hook into the house system – in addition to their own production rigs – and take control of the Arena lighting for the duration of their show, using their touring desk accessing the in-house lights via Art-Net.

The two systems (iLight Touch Screens with ZerOS Server and the Zero 88 FLX console) work on an HTP hierarchy with the architectural controller as the primary controller for the whole Arena – so in the event of a fire or other emergency, it has precedence.

Another advantage of Zero 88 and iLight being “sister brands” is that many of the team resources – sales, production, R&D, customer service etc. – are shared, so on projects like this, there is constant dialogue, coordination and interactive creative thinking to bring the project to delivery.

The Cooper Lighting Solutions team was very proud to be involved in this large and high-profile project. “The project encapsulates an array of firsts,” commented Peter Coles.

“It’s the first fully air-conditioned indoor multi-purpose arena in the Middle East, the first arena to be operating year-round in the region, the first EMEA project for Ephesus LED fixtures, and the first project worldwide to unite Zero 88, iLight and Ephesus all together under Cooper Lighting Solutions.” A great example of a 100% LED lit venue with 100% teamwork.

www.zero88.com
Novel Coronavirus, has practically disrupted the world. In every sense- so much so that the very understanding of the way humans interact and communicate with one another in life and business is in for a presumably paradigm shift. In what way this shift will turn and shape is a big take for any industry observer.

Disruption of technology domain is immanent, feels Prashant Govindan, a name that is familiar to most industry professionals in Asia and beyond.

“For all those born beneath an angry star, lest we forget how fragile we are” – Fragile by Sting

One of the things that this pandemic has reminded us is the fragility of the human race. Just as vulnerable as we were a century ago when the Spanish Flu almost wiped out a sixth of the human population. The dystopian future that sci-fi movies have shown us seems frighteningly real. With no cure and no vaccine in immediate sight, we are left with our immune systems to battle the novel corona virus.

The other painful reminder that this pandemic has brought to the fore is how businesses, markets, entire economies can be disrupted, brought to their knees by a seemingly innocuous virus from the wild.

A few steps back...
The Industrial Revolution of the 20th century brought with it the concept of the factory – the first ‘organized community workplace.’ Manufacturing replaced agriculture as the main economic growth engine. The age of modernism with mass production of both implements and products dawned, and quickly followed by the boom in allied services including sales, marketing and advertising. To finance this sudden upsurge of consumerist growth, banks and financial institutions flourished through the last century.

One common element that took root during this time was the concept of the workplace, mainly because the tools for
business were situated at the workplace, and also because it was a place to meet, to collaborate, exchange ideas, to plan and to execute. Home or the residence was where one lived with family as the social unit and the workplace was physically separate from the residence, often involving travel to the center of the city or the central business district as it was termed. Urban planning often revolved around this paradigm with separate residential and commercial buildings and complexes built to cater to these needs. The need to commute between these two spaces spawned the whole passenger transportation industry – roads, railways, metro rail and personal transportation.

With inventions in electronics came rapid advancements in information, communication and entertainment technologies. Cultural changes followed. Cinema, Radio and Television brought about sweeping changes in the way humanity consumed information and entertainment. Communication technologies in the form of telegraph, telephony, facsimile and telex brought the world of business closer. The age of globalization had begun.

Enter the Internet!

The dawn of the millennium brought about massive change in the form of the Internet – in the way we lived and worked. The Internet brought with it, convergence of information and communication technologies and rendered many of the former modes of communication and entertainment redundant. Increasingly, the Internet disrupted and replaced many of the inventions and conveniences of the last century. Thus came the Age of Convergence beckoning in a big way. The workforce also underwent a sea change with the new breeds of ‘knowledge workers’ who have harnessed the Internet for not only information and entertainment, but to also conduct businesses, shop and most of all ‘remain connected’. Every vestige of the last industrial revolution had thus been disrupted and had been truly revolutionized – but one.

What remained was the ‘office’, the fundamental unit of administration and control, sacrosanct and untouchable. Daily routines would revolve around going to the physical location called the office. Working from home was novel and mostly cumbersome, often only adopted by “new age” organizations and startups who would often extend this privilege to senior employees or to someone working in a remote location, often when it would be impractical to commute on a regular basis.

As home Internet connectivity and the ability to connect on the move with wireless Internet improved, it became possible, in theory at least, to virtualize the workspace. However, even as this paradigm shift appeared immanent, most organizations shied away from implementing a completely virtual organization. Part legacy, part confidentiality and part just plain habit, if not a habitual resistance to change!

Come COVID-19! It has changed all that, rudely and rather abruptly shaking all of us out of our collective reverie and bringing us face to face with some very uncomfortable questions. Questions that will redefine the very nature of work and play, of organizations, of trust and how-to best harness human potential.

We’re in the middle of 2020 and we are still shaking our heads in disbelief

What then is the future of the office? How will meetings of the future look like? What will be the future of the corner office, the board room, the corridors of power? Will this last vestige of the industrial economy need to be re-imagined, re-calibrated and re-configured?

These are questions to which we don’t have complete answers right now.

Maybe organizations will eschew complete real offices for virtual offices, or maybe reduce office space just about enough to account for a third or half of the workforce working remotely. Maybe this presents an opportunity to re-look at working hours, hierarchies, organizational structures and
maybe overhaul power and control equations, for a more egalitarian, open, virtual, *distributed workplace* to focus on what really matters.

**Cost is key! Offices mean cost. Cost means lower bottom lines. Not good news.**

Organizations have started questioning the wisdom of maintaining large offices and the attendant costs to service and maintain them. With a distinct change in culture where conference calls and webinars will replace face to face meetings, maybe managements will realize the futility in carrying large fixed costs in maintaining offices. While this may not sound very appealing to real estate companies and property management firms, this may be necessitated partly due to the exigencies arising from the current pandemic but also in the need to control costs and shore up the bottom line.

As organizations burn cash and look at ways to stay afloat, these decisions would not be a matter of choice, but a matter of time.

Most companies have already realized that the façade of an impressive corporate office as a branding tool is temporary, even unnecessary. Brands now reside on the Internet and in the collective consciousness of customers, suppliers and partners. Most customers don’t really care today if the company they are buying from has an impressive address on- say Madison Avenue or Nariman Point.

The new reality is that of a strong presence online and the ability to delight customers with exceptional customer service. Most customers don’t really care if Netflix or Amazon or Flipkart or Ola have a shiny office in the city or if they have employees wearing suits and ties to work. Most customers don’t even seem to care if their banks or insurance companies have addresses in the city as long as they get the work done efficiently.

**The future is virtual, in pajamas – and at home, mostly!**

The workplace of the future is then virtual and distributed, often with most employees and executives sitting out of home offices connected on high-speed broadband link; connected on the ubiquitous laptop, webcam and headset.

Going to the office is pretty much likely to become the exception than the norm, often to sign or collect some paper document or maybe to catch up (with appropriate social distancing, of course!) with a colleague or customer. Catching up over coffee (or beer) may as well remain in fiction and in the distant past.

As we have seen in the last few months, it’s possible to conduct online meetings effectively, albeit with a certain degree of inconvenience. Workflows can be adapted and modified to suit the new reality. It’s equally possible to conduct business effectively with all stakeholders operating from their homes without *huddling* in the same room. This change of workspace behavior would be disruptive in the least.

**What does this mean for the ICT/AV? our bread and butter?**

The ICT and AV industry domain makers would then require to re-evaluate investments made towards building products and services for large scale ‘enterprise conferencing’ or training facilities. Use-cases and entire spectra of applications would also need to be re-evaluated, and therefore, so would be the need for re-assessment of meeting technologies that the future would require.

Technologies and products that shaped the last couple of decades would need to be modified and re-calibrated to suit the new realities. Standards and norms that defined the communication needs of the last generation will need to be re-written.

In the new reality, then, what of video conferencing rooms, boardrooms, classrooms and auditoriums? From the AV industry’s perspective will this mean a trend towards distributed meeting spaces? Will this mean lower demand for enterprise solutions and a death knell for large-scale conferencing?

Maybe we need to change, evaluate the real needs of our customers and their customers, and take their lead on what matters to them most. Technology for technology’s sake is often self-serving and unnecessary. Companies that realize this will move on to creating true value for their customers, by disrupting their own technologies and imagining new products and services.

The oft repeated truism of *‘change is the only constant’* is probably very relevant during these uncertain times. There is now uncertainty not just on the immediate repercussions, but also on the long-term future of industry as a whole.

**SI Asia thanks Prashant Govindan for his insightful mind share and dare we say provocatively on the subject. Having occupied many a high-profile AV echelons for close to 20 years – with the last position being Senior Director-India & Sri Lanka for HARMAN Professional – is currently an independent consultant, sharing his knowledge and expertise with the industry. He can be reached at prashant.govindan@gmail.com**
in front of it

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behind it
New Smaller, Easy-to-Use Steerable Sound Systems are Now Delivering Audio Intelligibility to A Much Wider Range of Applications

By Graham Hendry, Vice President of Strategic Development, Renkus-Heinz, Inc.

It’s an unfortunate fact, but a fact nonetheless, that within many projects — from classrooms to boardrooms, to houses of worship — that so much time, effort and resources are invested in the visual elements of a space (lighting, interior design, screens/projectors, displays), that sometimes the audio tends to take a backseat in the process. This is unfortunate because sound profoundly affects people’s productivity and enjoyment within a space.

Some of this may be due to the expense and complexity commonly associated with high-quality sound systems. However, a new generation of steerable column sound systems offers a way to elevate the quality, intelligibility, and flexibility of a sound system in a smaller, easy-to-use format.

Steerable Audio 101

Simply stated, steerable audio allows you to put sound where you want it.

When you think of schools or corporate environments, there is a considerable amount of ambient noise and distraction, as well as plenty of reflective surfaces, unconventional spaces, and atypical room shapes. Steerable audio is a great tool for managing these areas for significantly increased sound quality and intelligibility.

For example, in a school environment, audio is about much more than supporting a little music for a video. Classrooms today are very AV driven, with instructors and presenters needing to deliver a clear, understandable message. And with today’s social-distancing requirements, with students spread widely throughout a space, delivering clear sound across the entire audience is more important than ever. The spoken word is crucial for understanding — and yet, many children sitting to the rear of a classroom may strain to hear. We should prioritize intelligibility over everything else.

With a conventional loudspeaker at the front of a classroom or lecture hall, SPL attenuates quickly — at a reduction of about 6db with each doubling of distance — drastically limiting the communication effectiveness of the audio. If the audio is coming only from above, then it’s difficult to focus attention on the presenter.

However, with a properly deployed steerable column, you can have the same SPL at the back of the room as you have at the front. Students or audience members can pretty much sit anywhere and still be able to hear and clearly understand the audio.
In addition, most school campuses – as well as corporate and public facilities, are integrating their available audio systems with announcement and emergency systems. Instead of just alarms or bells going off, live or pre-recorded announcements are made to inform and direct people properly, especially during an evacuation. In these instances, intelligibility is critical.

On the corporate side of things, the situation is similar. Business progress is all about the effective exchange of ideas, and this involves live presentations as well as voice or video conferencing. High-quality audio is more important than ever in ensuring productive business outcomes. Boardrooms and classrooms are all about verbal communications. A good conference room doesn’t just happen, you don’t buy it on Amazon or Ebay. And if the video fails, you can still communicate, but the reverse is certainly not true.

One Size Does Not Fit All

So, if we know the benefits of such an integration, how do we make it more effective, efficient and – dare we say it – affordable for organizations and firms of all size and buildings of all purpose? The answer is for manufacturers to engineer solutions that bring the benefits of pro audio to the small and medium sized world.

Smaller format steerable audio systems are a huge first step. Utilizing loudspeakers with smaller form factors, which are easy to commission, and designed with the classroom and boardroom application in mind are a must. With digitally steerable technology, this leaves out the traditionally cumbersome distributed speaker installation – instead, most spaces can benefit from only one or two columns.

And while that alone can cut down on installation time, it isn’t enough to just put these technologies in a smaller package. They must be truly accessible. Manufacturers must bring the technology to the masses as opposed to just a very focused set of applications. For small to medium sized integrations, digital steerable audio products shouldn’t require specific training nor expertise to deploy. To achieve this, we must turn to supporting technologies – such as the now ubiquitous mobile device.

Yes, mobile applications should be looked to as an emerging technology in this space. If the user is on a limited budget an integration firm can still offer steerable solutions through a reduction in integration time. Just plug in the height of the loudspeaker, the throw distance required, and you can quickly access superior, digitally steerable audio.

By allowing for easier installation through a very simple mobile device interface and smaller form factor loudspeakers, manufacturers can drastically reduce the specialization and integration time required for such solutions to be added to a job.

This, in turn, helps the integrator to win more business. It not only allows for more impressive audio at a lower integration price point, but it also allows for the AV integration to occur “deeper” into a facility – in additional classrooms, meeting spaces, and conference rooms – where quality audio may have previously been considered unfeasible. It also greatly benefits the end user by allowing them to achieve more impressive AV results. If you have invested significant resources into learning audio and acoustics, you should go one step further and learn to market speech intelligibility as a product.

Innovation, Not Compromise

With enhanced, integrated DSP, smaller systems deliver excellent spoken-word SPL and clarity while remaining very musical. Users can easily mix the spoken word, music, and performance-based sound with this technology as well. This is good news for houses of worship, especially where the small footprint, nice aesthetics, and ease of use are of paramount importance. And for uses from education to corporate, this provides a level of flexibility, scalability and creativity in terms of how the system is utilized.

At the end of the day, the work we do is all about creating a soundscape that is pleasing, clear and intelligible for the audience — whether that be executives gathered in a conference room, or students in a lecture hall. We want to ensure we deliver a great experience, and bring them back for more.

A new generation of smaller and easier-to-use systems allows digital beam steering technology to become part of the right audio solution for an increasingly wide range of new applications. The result? A better sounding world – from the largest enterprises and into the smallest conference spaces!
Schneider Electric and Cisco Partner to Bridge OT and IT in Building Management Systems

Schneider Electric, the leader in digital transformation of energy management and automation, and Cisco have formed a technology partnership designed to help drive major advances in making smart buildings the standard. Working together, the two companies have developed, tested and validated designs that help connect building management systems to an Internet Protocol (IP) network with a secure, scalable and resilient architecture that is easy to manage.

Christie Pandoras Box Servers Deliver Stunning Visuals

The award-winning Christie Pandoras Box is delivering amazing visual experiences to visitors at a newly completed five-sided 3D immersive visualization chamber in Qingdao, a major sub-provincial city in China’s Shandong province. Installed by Christie’s partner Marvel Vision, this state-of-the-art visualization showcase – known as the Light and Shadow Cube – is an initiative by the Qingdao Municipal Government to spur the growth of 5G high-definition video applications.

PSNI Global Alliance Forms New Global Services Committee to Leverage Worldwide Standards

Following the highly successful Global Deployment Committee, launched last year, the Services Committee is composed of sixteen global representatives who are internally responsible in their respective companies for post-installation services and support. Ryan Cook, CTS, Post Project Services at Delta AV in Grisham, Oregon, has been appointed to the PSNI Global Board of Directors to serve as the Chairperson for 2020-2021.

Vega Global Announces New Chief Operating Officer

Vega Global, has announced the appointment of Paul Cullum to the role of Chief Operating Officer for the group. In this role, Mr Cullum will be central to restructuring and transforming the Company’s business operations, improving efficiency and building upon the Company’s strong foundation for achieving growth.

Peavey Electronics Celebrates 55 Years of Business

Peavey Electronics celebrated the 55th Anniversary of its founding on June 1, 1965. Forged in the birthplace of the blues, Peavey began during one of the most dynamic and ground-breaking years in rock music history. During this 55th Anniversary celebration, Peavey reflects on its history as well as music’s powerful ability to overcome barriers and unite people.
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