

AV-ICN EXPO MAGAZINE

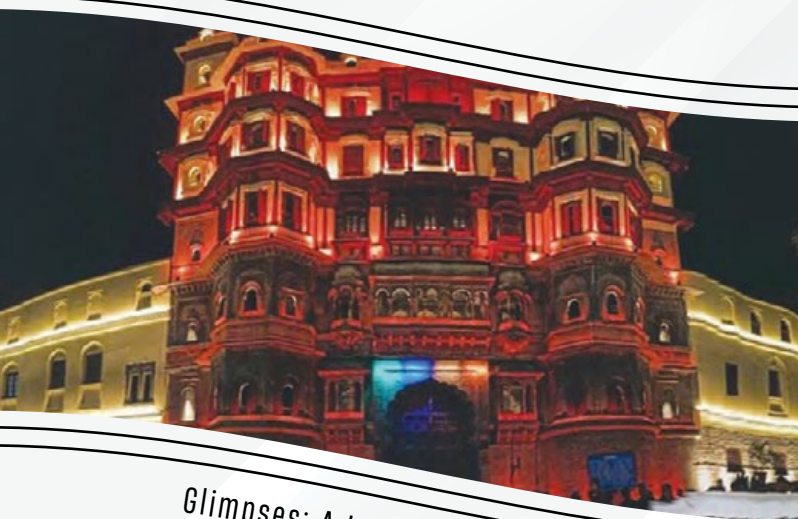
AV INTEGRATION COMMUNICATION
NETWORKING

OTHER STORIES

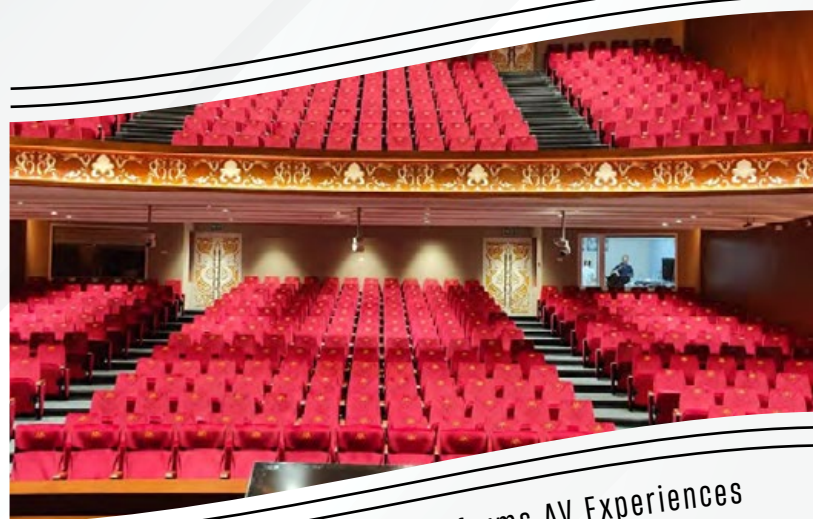
Unwinding The Changing
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Sennheiser with Naveen Sridhara

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Play Technologies Transforms AV Experiences
at Aljamea

Introducing the VPX-TC1 Series

**4K60 4:4:4 UHD 1G Zero Frame
Latency AV over IP**



VPX-TC1-WP2

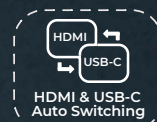
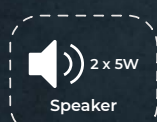
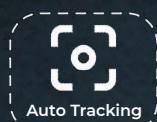


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LIGHTWARE APPOINTS ROBIN ENLUND AS PRESIDENT FOR GREATER APAC

Based in Sydney, **Robin Enlund** joined **Lightware** with more than two decades of management and sales experience in audiovisual, IT, SaaS, and workplace technology solutions across Asia Pacific. He will work closely with Lightware offices in the region, distributors, and consulting companies to support large business opportunities, ensure that they can operate effectively and meet needs of both staff and clients.

In addition, Enlund will act as a conduit between Greater APAC and Lightware HQ in Budapest. He will also work in close collaboration with his counterparts, the **President of Americas (Clint Hoffman)** and the **President of EMEA (Siegfried Hermann)**, to ensure a unified corporate message and a global go-to-market approach.

Enlund was previously Senior Advisor Hybrid Workplace at Ricoh, based in Sydney, where he was responsible for winning Audio-Visual systems integration



Robin Enlund, President, Greater APAC, Lightware

projects.

As a Managing Director of avt Asia, in Singapore, he was responsible for propelling the company's expansion across Asia. Prior to that, Enlund was Managing Director of AMX Asia Pacific

in Singapore, where during the course of a nine-year career, he started the first AMX office in the region, focused on supporting customers with training and solutions. Later on upon AMX's acquisition by Harman International, he was appointed Senior Director Sales Asia Pacific, where he continued supporting sales acceleration in the market across the company's range of automation of audio, video, lighting products and broadcast.

He holds a Master of Science degree with a Major in Energy Engineering from The Royal Institution of Technology in Stockholm, Sweden.

"I am excited to join Lightware and be a part of this growth period of the company. Current and coming product portfolios are best-in-class and I look forward to supporting the Greater APAC teams in growing market share. My goal is to establish an even stronger Asia Pacific Lightware presence in the upcoming years," said Robin Enlund.



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BARCO APPOINTS RAJEEVA LOCHAN SHARMA AS MANAGING DIRECTOR FOR INDIA

Barco, one of the global technology leaders that develop networked visualization solutions for the entertainment, enterprise, and healthcare markets, has announced the appointment of **Rajeeva Lochan Sharma** as the Managing Director of **Barco India**. He succeeds Rajiv Bhalla who decided to move on from Barco after successfully growing the India footprint for the company over a period of seven years.

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

Speaking on the appointment, **Ann Desender**, Chief Financial Officer, Barco stated, "We are pleased to extend a warm welcome to our new Managing Director,



Rajeeva Lochan Sharma, Managing Director, Barco India

Rajeeva Lochan Sharma. With a proven track record of leadership and expertise in the industry and a two-decade stint at Barco, we are confident that Rajeeva will play a pivotal role in steering our company toward greater heights. His strategic vision and collaborative approach will undoubtedly strengthen our organisation's

growth trajectory in India while fostering an even more vibrant and dynamic work environment. We'd also like to thank Rajiv Bhalla for his immense contribution to Barco's business growth in India and for building a high-trust, high-performance workplace culture which resulted in Barco India being recognized as a Great Place to work for 3 years."

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

HALL TECHNOLOGIES APPOINTS KEN EAGLE AS CEO

Hall Technologies, a ProAV company specializing in end-to-end solutions, announced a leadership reorganization naming VP of Technology, **Ken Eagle** as CEO.

An industry veteran, Eagle has been with Hall Technologies since July 2021 and has helped enhance the company's product portfolio and launch new holistic solutions.

"I'm honored to be named CEO and look forward to continuing the legacy that Hall Technologies has created over the last thirty years," said Eagle. "This reorganization will allow us to maintain our industry focus, expand our product offerings, and continue to provide best-in-class products and service to our clients."

Eagle replaces **Jason Schwartz**, who served as CEO since 2020. Hall Technologies CFO, **Matt Kingsley** will take on additional leadership responsibilities, with

VP of Sales and Marketing, **Hal Truax** also leaving the company.

"I want to thank Jason and Hal for their



Ken Eagle, CEO - Hall Technologies

leadership over the last several years," said Hall Technologies Board Chairwoman, **Monica King**. "We believe in Ken and Matt's strategic vision and are confident that this change in leadership will support the company's long-term goals and help take Hall Technologies to the next level."

For more than three decades Hall Technologies has been a market leader in the Pro AV industry with a longstanding reputation for providing top-quality, highly reliable end-to-end solutions. The company specializes in creating accessible AV solutions in a range of verticals including education, corporate, and hospitality applications. In 2021, Hall Technologies moved its headquarters to Dallas and opened a new, state-of-the-art experience center, where customers can interact with its products and technologies first-hand.

KEY DIGITAL ANNOUNCES THE RELEASE OF KD-WP8-2 PLUGIN

Key Digital, an award-winning developer and manufacturer of leading-edge digital video processing and video signal distribution solutions, announced the release of the first plug-in resulting from joining the **Q-SYS Technology Partner Program**. This program enables software and hardware technology partners to create market-ready solutions that integrate seamlessly with the Q-SYS cloud-manageable audio, video, and control platform.

As part of the program, Key Digital has worked closely with Q-SYS, who has fully vetted and endorsed the **Key Digital KD-WP8-2 Plugin** (developed with Q-SYS and supported by Key Digital and Q-SYS) with a Q-SYS Certified badge. The plugin makes Key Digital's KD-WP8-2 8 Button Programmable IP, RS-232,



KD-WP8-2 – An 8 Button Programmable IP, RS-232, IR Control Keypad

IR Control Keypad natively compatible with Q-SYS.

Jonathon Ferry, VP of Product Education & Experience at Key Digital, says, "The recently updated POE-powered single-gang keypad, KD-WP8-2, offers a host of sophisticated, programmable control capabilities. With this plugin, those capabilities are now available to Q-SYS users, and we are delighted to deliver our existing customers a direct control portal into the Q-SYS environment."

"We are proud to have Key Digital join our program and work collaboratively with us on a plugin integration that will enable elevated experiences across our shared customers," says **Geno Zaharie**, Principal, Alliances & Ecosystem, Q-SYS.

SENNHEISER WELCOMES TEAMCONNECT BAR SOLUTIONS IN ITS TC FAMILY

Sennheiser, the first choice for advanced audio technology that makes collaboration and learning easier, has entered the unified communications A/V bar market with the most flexible all-in-one devices for small and mid-sized meeting rooms and collaboration spaces. Part of the Sennheiser TeamConnect Family, the **TeamConnect (TC) Bar Solutions** were unveiled publicly during an exclusive launch event.

Sennheiser's TeamConnect Family is a versatile suite of unified communication solutions tailored to customer needs, conference room size, and configuration, all designed to enhance meeting experiences. With a focus on problem-solving capabilities, user-friendly interfaces, and enduring quality, each product is infused with the hallmark Trusted Sennheiser Audio Quality.

The latest addition to the TeamConnect Family, the TC Bar solutions comes with options for small (TeamConnect Bar S) or mid-sized (TeamConnect Bar M) meeting and collaboration spaces, the TC Bar Solutions are true problem solvers with benefits like easy setup, brand agnostic integration, easy management & control, high video quality, security, and sustain-



TeamConnect Bar Solutions by Sennheiser are easy to setup with easy management & control, high video quality and security

ability. The TC Bar S features 4 microphones and 2 speakers, while TC Bar M has 6 microphones and 4 speakers. Both easily integrate with any meeting platform and can be further enhanced with other compatible products, including those from Sennheiser.

Speaking on the development, **Naveen Sridhara**, Director of Sales, Business Communication at Sennheiser India said, "At Sennheiser, we take pride in our commitment to redefine the future of unified communications. The TeamConnect Family has been pivotal in shaping this vision, offering a comprehensive range of solu-

tions tailored to diverse customer requirements, be it the room size, configuration, or communication needs. Our journey to elevate meeting experiences has been unwavering, placing us at the vanguard of innovation. From the TC Bar Solutions to the TeamConnect Ceiling Solutions, we've meticulously engineered solutions for every setting including the EW-DX which is our digital wireless marvel that extends our legacy of innovation across meeting rooms, classrooms, and expansive corporate campuses."

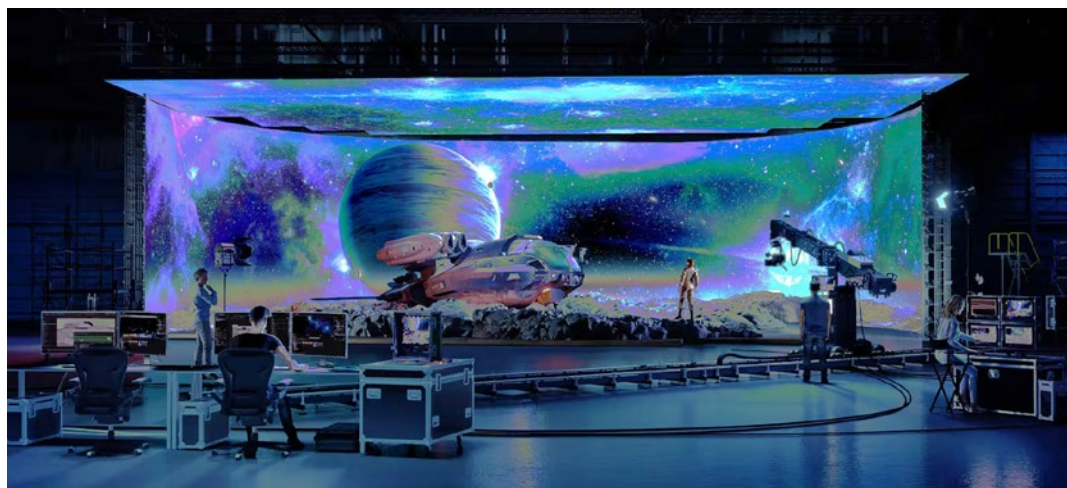
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SONY EXPANDS VIRTUAL PRODUCTION SERIES WITH VERONA CRYSTAL LED DISPLAYS

Sony Electronics has announced four new Crystal LED displays under the product name **VERONA**, purpose-built to meet the needs of virtual production applications. Each new panel benefits from technology advancements developed over several years and supported by the guidance of filmmakers, with the goal of bringing new levels of quality and efficiency to in-camera VFX applications.

Key to this was the development of a new Deep Black and Anti-Reflection Surface Technology, able to deliver deeper black-level expression while greatly reducing contrast loss caused by light from adjacent LED panels and studio lighting equipment. This innovative technology significantly reduces the difference in contrast between the image projected on the LED display and the actor(s) performing in front of it on set – blending virtual and real in a natural way, reducing time and cost required for post-shooting adjustments.

In addition to the extraordinary black



Sony's new VERONA LED Displays are set to support quality In-Camera VFX and tackle common virtual production problems

levels and low reflection, VERONA achieves a high brightness of 1,500 cd/m² and wide colour gamut covering more than 97% of DCI-P3 to increase the sense of realism of virtual shooting locations. It also employs high performance LED drivers, which enable high refresh rates up to 7,680Hz, to drastically reduce scanline artifacts on the camera.

Both new models, the **ZRD-VP15EB/23EB** and **ZRD-VP15EM/23EM**, are available in P1.56mm and P2.31mm pixel pitch.

For the new VERONA series of LED panels, Sony worked closely with industry leaders to create a new easy-installation 1:1 cabinet design so that produc-

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SENNHEISER WELCOMES TEAMCONNECT... *Continued from page 05*

The TC Bar Solutions provide unparalleled freedom and flexibility, allowing customer to choose the right video conferencing device for their meeting room size. Easily integrate the TC Bar into a room design with multiple mounting options like wall mount, VESA mount, tabletop, or freestanding. The option of using Dante for adding extension mics and/or a 2nd external USB camera make the device even more scalable.

The powerful full-range stereo speakers with their improved directivity pattern and optimized passive radiators ensure natural speech and outstanding intelligibility. Integrated beamforming technology enables seamless transition between presenters and offers freedom of movement and configuration within the space. The built-in DSP, as well as the option to adjust your audio settings via Sennheiser Control Cockpit, gives users the opportunity to further optimize room acoustics. The TC Bars also come with an automatic conference & music mode switch to provide the

best audio to match the content.

The Team Connect Bar Solutions feature some of the latest advances in meeting technology to further enhance modern hybrid meetings and lectures – taking video to the next level. The 4K Ultra HD camera is further enhanced by AI features like “Auto framing” and “Person Tiling”, enabling all remote participants to clearly see everyone in the room. With advanced AI, even the smallest gestures and facial expressions are conveyed to ensure increased meeting inclusion and engagement.

Thanks to Sennheiser's open and agnostic ecosystem philosophy, the TC Bars are also compatible with many major Media Control Systems from our Alliance Partners, with certifications currently in process. For basic adjustments, several features, like zoom, person tiling and more, can be found on the included remote control.

When it comes to security, the TC Bar Solutions follow industry best security

practices, and their configuration is password protected. The communication to the Sennheiser Control Cockpit, as well as 3rd party media control systems, is encrypted using industry standard Transport Layer Security 1.2 and safe from misuse. The TC Bars also support IEEE 802.1x network authentication and, of course, for additional privacy, a lens cap is included.

With the addition of the TC Bar Solutions to the TeamConnect Family, Sennheiser now offers another option to customers to compliment the family's trusted ceiling microphone solutions to support large and midsized rooms as well as an intelligent speaker for smaller meetings. Each product is designed to function as a standalone solution. Additional coverage or features can be achieved by scaling with other compatible Sennheiser or third-party products and by leveraging the power of the Sennheiser Control Cockpit for ease of configuration and monitoring.

NUREVA ENABLES EASY MULTI-CAMERA SWITCHING IN LARGER SPACES WITH NEW CAMERA ZONES FEATURE

Nureva Inc., an innovator in advanced audio-conferencing solutions, announced a new camera zones feature for its **HDL410 audio conferencing system** that integrates its sound location data with the **INOGENI CAM230 multi-camera selector**. Setup is quick, with only a few minutes needed to define up to three zones that are each mapped to a camera and its view of the room. Dur-

ing a meeting or class, sound location data is used to automatically activate the camera that is mapped to the zone where someone is speaking, making it easier for remote participants to follow the conversation. The feature is compatible with Microsoft Teams, Zoom and other UC&C clients that don't natively support multiple camera streams in a room. The CAM230 also works with any

brand of USB or HDMI camera, including the Nureva CV30. Camera zones are defined using a simple click-and-drag interface in Nureva Console, the cloud-based management platform included with every Nureva system. The HDL410 system's unified coverage map automatically generates a two-dimensional view of the room and the microphone coverage area, making it easy to create and map the zones.

Additional information on the unified coverage map

Nureva's patent-pending unified coverage map represents a groundbreaking approach to microphone pickup in larger spaces. It enables the physical mics from two microphone and speaker bars to be processed together instead of separately, creating a single giant microphone array covering the entire room. The HDL410 automatically determines the relative location of the two microphone and speaker bars and generates a coverage map when installed.



HDL410 audio conferencing system integrates its sound location data with INOGENI CAM230 multi-camera selector

SONY EXPANDS VIRTUAL PRODUCTION SERIES... *Continued from page 06*

tion crews can quickly and efficiently assemble a display that matches the desired stage size. They feature large, easy grip handles, locating pins for easy alignment and a lever-type locking mechanism which can be operated without tools. The Virtual Production series not only adapts to LED designs that are curved, hanging, and stacking, but now the frames are stronger to support more weight, enabling self-stacking screens up to 23-feet high. The LED surface and edges are protected by Sony's unique surface technology and specifically designed protection mechanisms that prevent damage during installation.

"As virtual production expands, Sony is uniquely positioned to provide an ecosystem of solutions – from our VENICE digital cinema cameras and Crystal LED displays – to the workflows, and expertise creatives require," said **Kevin**

O'Connor, Senior Director, Cinematic Production Solutions, Sony Electronics. "The new purpose-built Crystal LED VERONA displays are a critical piece in creating virtual productions that frictionlessly marry the real and the virtual realms. Through the support of some of the most innovative filmmakers, we've developed a new high-quality technology that is poised to simplify and enhance virtual production through its ease of use and compatibility while enabling powerful new forms of expression."

VERONA has been designed to work with leading virtual production LED controllers. The ZRD-VP15EB/23EB works with Brompton Technology's Tessera SX40, and the ZRD-VP15EM/23EM works with Megapixel's HELIOS Processing Platform.

The new ZRD-VP15EB model also sees

a roughly 27% power consumption decrease when compared to the current ZRD-B15A model.

This launch followed the latest Sony announcement of a new Virtual Production Tool Set designed to tackle common problems with virtual production and to support quality In-Camera VFX. The launch features of the Tool Set are the Camera and Display Plugin and the Color Calibrator. The Camera and Display plugin uses Unreal Engine to connect the real and virtual worlds, achieving synergy between hardware and software through a fully virtualized VENICE camera to aid in design, and visualize and refine the virtual production shots during PreVis. The Color Calibrator tool provides a simple and rapid process to calibrate display-to-camera color, to ensure the LED panels match the specific camera's color characteristics.

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PLAY TECHNOLOGIES Transforms AV Experiences at Aljamea



Showering excellence and dynamic learning, Aljamea Tus Saifiyah offers an inclusive environment for the young aspirants. Keeping the intellectual passions in mind, Play Technologies shapes the academic and cultural landscape with the AV installation at Aljamea Tus Saifiyah Mumbai Auditorium. Sachin K. Jain, Principal Consultant, PLAY technologies, shares insights on the state-of-the-art facility as he recounts the installation experiences with AV-ICN Magazine.

Play Technologies delivers state-of-the-art facility at **Aljamea Tus Saifiyah**, a world-class Arabic academy with an auditorium of 650 seats and 16.6m W X 24.6m L under balcony and 16.6m W X 9.9m L balcony. The exceptional facility is meticulously designed to deliver a top-tier audiovisual experience, incorporating cutting-edge

technology for unparalleled performance. With a combination of QSC, Shure, K-Array, Lightware, Blackmagic, Crestron, and AOTO equipment, this auditorium sets a new standard in AV excellence.

The 650-seater Auditorium, primarily intended for student use, is a versatile and spacious venue that caters to the diverse

needs of the academic community. It serves as the epicentre for a wide array of cultural events, skits, paper presentations, and lecture events, all organized and participated in by the vibrant student body. Equipped with cutting-edge audio-visual technology, the auditorium ensures that student presentations and performances are delivered with



A view of Aljamea Tus Saifiyah Mumbai Auditorium, equipped with AV solutions by QSC, Shure, K-Array, Lightware, Crestron, Panasonic, AOTO, and Allen & Heath

precision and impact.

With three existing campuses for state-of-the-art education in Surat, Karachi, and Nairobi, the client wanted a new campus in Mumbai with smart technologies that would stay relevant for the next decade. The sound and video quality had to be the best-in-class and at the same time, easy to use for smaller events such that it could be controlled using an iPad.

AV Transformation of Aljamea

QSC 510i Processor: At the heart of the audio system, the QSC 510i processor ensures crystal-clear sound quality. Its advanced signal processing capabilities and optimized audio output, guarantees that every word and note resonates with precision and clarity. QSC 510i being a chassis-based system, provides flexibility in selecting number of input cards and output cards based on the requirement. It also includes option of Dante Card, which provides Dante inputs and outputs of 68x68 channels.

Shure ULX Wireless Microphones: The Shure ULX Wireless microphones provide audio capture and versatility, allowing presenters and performers to move freely while maintaining impeccable sound quality. Their reliable wireless technology ensures seamless communication. Antennas have been installed on stage and in the audience area for microphones.

K-Array Line Array Speakers: The K-Array Line Array Speakers ensure that no

detail is lost during lectures, performances, or presentations. The entire auditorium is reinforced through just two stacks of loudspeakers on the left and right side of the auditorium. The sleek size and aesthetics of the loudspeakers ensured that the vision of the interior designers remained intact without any compromise on the sound quality and distribution. The sub-woofers were mounted below the stage for low frequency reproduction. A flexible array nicknamed Anaconda was provided as near fill speakers. This entire speaker system was powered by K-Array KA208 power amplifier.

Tannoy Wall Mount & Ceiling Speakers: Tannoy VX-6 Wall Mount Speakers are used

for Royal Box, which is private seating for VVIP attendees and Tannoy CMS503ICT LP ceiling speakers are used for backstage and green rooms.

Lightware AV Over IP for Video: Lightware AV Over IP technology offers high-definition video distribution, making it ideal for projecting presentations, videos, and live feeds seamlessly across multiple screens. Lightware VINX-120-HDMI-ENC/DEC are used to taking incoming stream from other areas in the campus and to distribute the stream from the auditorium to other Venus over the campus.

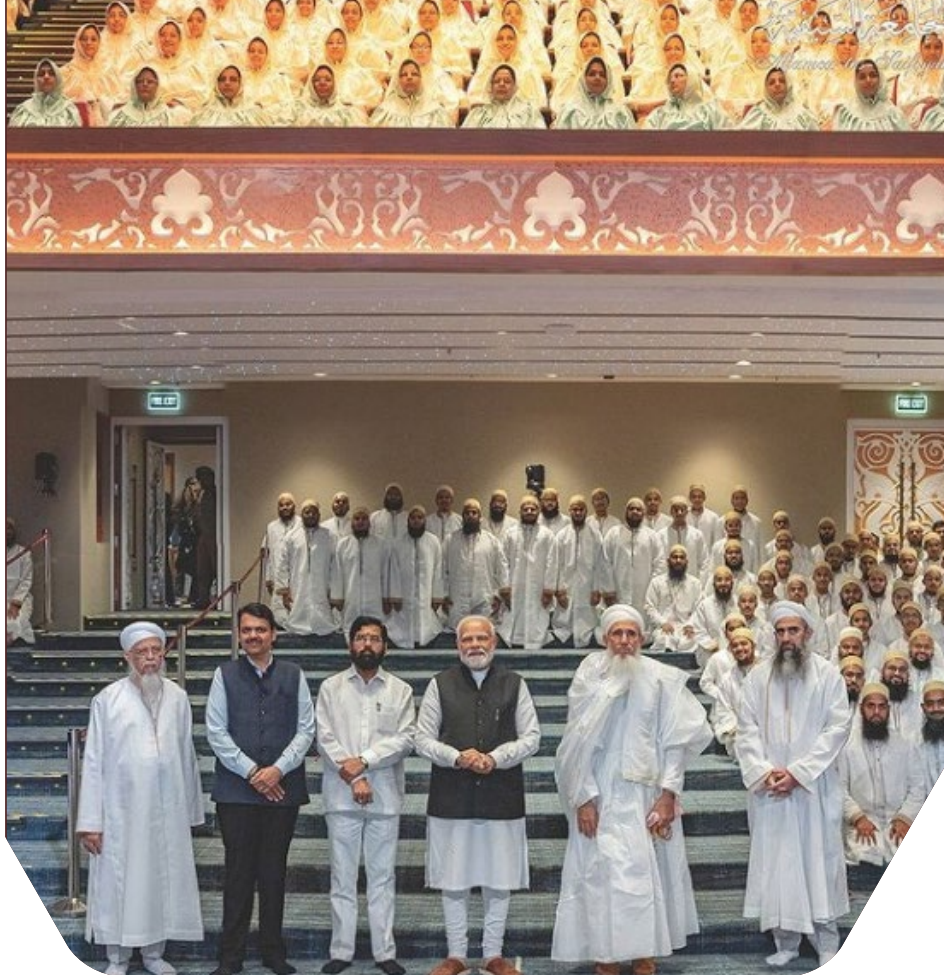
Blackmagic Video Mixer and Recorder: The Blackmagic Video Mixer offers professional-grade video mixing and production capabilities. With multiple camera angles and advanced mixing, the auditorium provides stunning visuals for the audience, whether it is for live streaming, recording, or

presentations. **Atem 4M/E Broadcast Studio 4K** is used for video mixing of content and cameras. Video Mixer can be easily controlled over the IP and provide default built in pre-sets for easy switching and mixing.

Hyderdeck studio 4K pro is used for recording.

Crestron Switcher: The Crestron switcher ensures seamless transitions between various video sources. Its user-friendly interface empowers operators to control and manage the AV components effortlessly, enhancing the overall efficiency of the auditorium. **Crestron HD-MD6X2-4K-E** is used for switching six HDMI inputs provided

There was the design team, client team, and the operations team with their set of requirements. All of these had to be consolidated on a common platform. Further the design required that the AV equipment be as invisible as possible. The design process took more than two years with various incorporated changes.



Inauguration of the auditorium took place in the presence of Prime Minister of India, Shri Narendra Modi, and Chief Minister of Maharashtra, Eknath Shinde

on the stage.

Panasonic Cameras and Joystick: True 4K cameras on 12G-SDI framework were deployed. A mix of Panasonic AW-UE150 and AW-UE-100 next-generation PTZ camera were used.

AOTO LED Wall with Video Processor: The AOTO LED Wall's high-resolution display ensures that every detail is vividly presented, captivating the audience, and immersing them in the content. An active LED wall of approx. 9m X 5m was planned to provide visibility across the auditorium in line with the AVIXA standards and with proper line of sight.

Allen and Heath Audio Mixer: The **Allen & Heath SQ6 Mixer** is a cutting-edge digital audio mixing console that combines powerful features and pristine sound quality in a compact and user-friendly package. With its intuitive touchscreen interface, the SQ6 offers seamless control over audio signals, making it ideal for live sound reinforcement.

Crestron Control System: For seamless control of the audio video system, **Crestron Control System of VC4** is used in the auditorium. Crestron provides the flexibility of building user-friendly UI, which benefits in developing the user interface as per client needs.

AV Design and Installation

The AV design had to run through various iterations to accommodate the changes in the interior design and functional aspects of the space. There was the design team, client team, and the operations team with their set of requirements. All of these had to be consolidated on a common platform. Further, the design required that the AV equipment be as invisible as possible. The design process took more than two years with various incorporated changes.

Sachin K. Jain, Principal Designer, PLAY, discussing on the challenges and experiences of the design team, stated, "Installation of the AV was very challenging. It was very important to maintain uniform sound distribution throughout the auditorium. To maintain that line array speakers were required to be installed at a very precise location and at a very precise angle so that a uniform sound dispersion is maintained throughout the auditorium." He added, "For an immersive video experience instead of going with the projector it was decided to install the Active LED video wall; the design of the LED video wall is so that the person seated at the far end is also able to view the content on the display without strain-

ing the eyes and the person seated on the first row will also have similar experience. The content is clearly visible to the people sitting on the extreme left and right rows as well. Installation of this LED wall was also challenging as each and every block of the LED wall had to be placed very precisely so that there are no gaps left between the two panels. Furthermore, due to the delay in civil works, the environment was dust free only a week before the opening date. The installation and commissioning had to be executed in this small-time frame."

Since the audio video system of the auditorium was supposed to be broadcasting the event throughout the campus and should be able to receive the content from any other venue throughout the campus, the team decided to build a network-based solution. For audio flow entire back-end system was designed and built on Dante and the video flow was designed and built using AV over IP technology.

"There was sufficient time for the design process, close to two years. However, for the install, there was not too much time due to delay in civil works. The areas were available for install in bits and pieces. Overall, we had around a month for installation, but not on a continual basis. About seven days were available for the final installation of LED wall and overall commissioning," shares Jain.

Conclusion

The final commissioning was done well in advance and a successful dress rehearsal was also carried out a day before the final showcase, that made it easy for the team to avoid any uncertain challenges at the inauguration. The auditorium was inaugurated by the **53rd al-Da'i al-Mutlaq Dr. Syedna Mufaddal Saifuddin**, and by Prime Minister of India, **Shri Narendra Modi** in presence of the Chief Minister of Maharashtra, **Eknath Shinde**, and Deputy Chief Minister of Maharashtra, **Devendra Fadnavis**.

In summary, the auditorium is a state-of-the-art facility that embodies excellence in audiovisual technology. The integration of top-tier brands like QSC, Shure, K-Array, Lightware, Blackmagic, Panasonic, Crestron, AOTO, Allen and Heath guarantee a seamless experience for any event, from lectures and presentations to cultural performances and multimedia exhibitions. This auditorium is a testament to the commitment to delivering the highest quality audio and visual experiences for its audiences and presenters alike.

PURELINK GMBH PARTNERS WITH ALPHATEC

THE GERMAN-BASED COMPANY AIMS TO BRING HIGH-QUALITY AV SOLUTIONS TO THE INDIAN MARKET

German-based **PureLink GmbH**, one of the leading manufacturers in the professional presentation and media technology industry, announced its strategic partnership with **Alphatec** in India. By extending its operations to India, PureLink aims to offer cutting-edge AV solutions to the dynamic Indian market, catering to the increasing demand for versatile connectivity options in modern workspaces and hybrid working environments.

Founded in 2006, PureLink GmbH with its headquarters, distribution, and logistics center located in Rheine, Germany, develops, manufactures, and markets a wide range of AV solutions. PureLink currently serves customers in more than 85 countries, with a diverse product range encompassing 3000 SKUs of ProAV products, including the PureInstall series for ProAV and IT connectivity, FiberX for active optical cables, PureTools for ProAV signal management, VueLogic for workspace and video collaboration, and Mediahub for workspace connectivity.

Talking about the launch, **Ronni Gug-**



genheim, Chief Growth Officer, PureLink GmbH, expressed great enthusiasm about the expansion, stating, "Our entry into the Indian market is a testament to our unwavering commitment to innovation and customer satisfaction. India is a key market because of its vibrant and growing market for seamless AV solutions across various sectors. We are thrilled to offer our cutting-edge professional presentation and media technology to Indian customers. With our strategic partnership with Alphatec, we are confident that our presence in India will succeed and will ensure Indian customers can access our AV technology without compromising on quality and performance."

Devasis Barkataki, Founder and MD, Al-

phatec, said, "We are excited to partner with PureLink GmbH, a leading provider of AV solutions. Through this strategic partnership, our shared mission is to empower the Indian AV market with state-of-the-art technologies. We are confident that we will swiftly capture the hearts of our target audience with PureLink products that are the benchmark for quality, functionality, and performance."

Since its inception 17 years ago, PureLink GmbH has gained global recognition for its technical brilliance, high-quality materials, and seamless performance over the period of time. From its inception with PureLink cables, to becoming a one-stop-shop for complete AV solutions, including cutting-edge video conferencing and workspace connectivity, PureLink's motto "**Install. Connect. Perform.**" defines its unwavering commitment to excellence.

The company serves the increasing global demand for versatile connectivity options, specifically tailored to hybrid Working and modern workspaces.

BARCO SHOWCASES NEXT-GEN AV TECHNOLOGIES AT BARCO CONNECT 2023

Barco, one of the global technology leaders in networked visualization solutions for the entertainment, enterprise and healthcare markets, showcased its latest products and solutions at the Barco Connect 2023 (One Barco event) held in Mumbai. With a strong focus on visioneering a bright tomorrow, Barco offers a diverse range of innovative, high-quality, and hi-tech networked visualization products in the Indian market, including Digital Cinema projectors, Large Screen display solutions, collaboration solutions, rugged displays for professional applications, and Hi-tech medical displays.

The Barco Connect 2023 (One Barco event) aimed at building awareness regarding the enormous domestic potential inherent in entertainment, enterprise, and projection mapping sectors, while show-

casing a broad range of products and solutions including **ClickShare Conference (CX-30/50 and CX-50 Gen2)**, **UDX 4K projector**, **PDS4K**, **Immersive Experience**, **Xcite (Virtual Reality)**: **CAVE**, **RigiFlex**, **RGB laser**, **Truepix**, **UniSee Bezel-less LCD video wall**, and **CTRL solution** among others.

Barco's RGB laser series is the first-generation of 24/7 rear-projection video walls capable of operating under any lighting conditions, and the XT-series is specifically designed to offer a reliable solution in a wide range of indoor LED applications.

In the meeting room space, Barco's range of ClickShare products enables the trends of BYOD (Bring Your Own Device) and BYOM (Bring Your Own Meeting) in the enterprise sector. The latest Barco ClickShare CX-50 2nd generation is a ClickShare Conference variant which is

designed to enable better decision-making and collaboration in high-impact meeting rooms. It provides dual screen support, every participant receives an equal seat at the hybrid meeting table, irrespective of whether they join remotely or in-room.

The Xcite group designs & develops large-screen & collaborative group VR solutions for the customers. These solutions include CAVE (which is a fully immersive multi-sided environment), Reality Centers based on large curved screens, and PowerWall.

In the UDX series, Barco offers a brightness of 26000 to 45000 Lumens in UXGA, WUXGA & 4K resolution.

Barco CTRL is the secure foundation of the control room that integrates into third party video management systems through APIs.

CHRISTIE INTRODUCES NEW INSPIRE SERIES AND HS SERIES PROJECTORS

Christie announced the launch of two new 1DLP laser projectors, the 4K860-iS and the 4K13-HS. They are compact and flexible projection solutions for venues including classrooms, boardrooms, and places of worship.

The Inspire Series 4K860-iS is easy to



The Christie 4K860-iS 1DLP laser projector

move and install, weighing only 33 lbs. (15 kg.), and lights up screens with 8,500 lumens in 4K UHD resolution. Built-in Christie Twist, and optional Mystique software, provide warping and blending

capabilities and camera-based alignment, respectively, to ensure content looks picture-perfect.

Easily illuminate large surfaces and screens with Christie's newest addition to the HS Series of 1DLP projectors. The 4K13-HS delivers 14,800 lumens for proj-



The Christie 4K13-HS 1DLP laser projector

ects that require a high-brightness projection solution, but without compromising form factor. Images are sharp and clear with 4K UHD resolution, and colors are more natural, and blacks deeper, courtesy

of built-in Christie BoldColor+.

"With our newest additions to our line-up of 1DLP laser projectors, we're offering customers even more choice when it comes to selecting the right solution for their project," says Andy Wang, Product Manager, Christie. "With 1DLP options ranging from 5,000 to 23,650 lumens, and features including passive polarized 3D and built-in warping and blending, our projectors are designed to deliver the best possible on-screen image."

The 4K860-iS and 4K13-HS are compatible with the new Christie Intelligent Camera (CIC), a powerful accessory that makes it faster and easier to achieve the desired image quality. Operators can use it to calibrate projector color, trigger autofocus, and, when combined with Christie's complimentary Mystique Lite software, automate warping and blending of up to three projectors in a horizontal array.

PPDS LAUNCHES FIRST STUDIO IN NEW DELHI, INDIA

PPDS, the exclusive global provider of Philips digital signage, interactive displays, direct view LED, professional TVs, and complementary solutions, announced the latest phase of its accelerated investment and expansion strategy in India, with the opening of its 'state-of-the-art' PPDS Studio in New Delhi.

Extending its network of PPDS Studios into India for the first time, the new facility – in New Delhi's National Capital Region, Gurugram – is part of a deepening commitment from PPDS to supporting existing, new, and prospective local partners and customers on the transformational benefits and capabilities available through its innovative portfolio of professional display solutions.

Global strengths, local support

Tailored to meet the unique needs of the Indian market, the new PPDS Studio in Gurugram

has been designed to showcase solutions supporting a diverse range of industry sectors, including corporate, education, healthcare, food and beverage, retail, transportation, and hospitality.

Solutions on show in the PPDS Studio at the opening, which will evolve as new solutions become available and to match demand, include: digital signage (**Philips D-Line**, **Philips Q-Line**), videowalls (**Philips X-Line**), interactive displays (**Philips E-Line**,

Philips T-Line), direct view LED (**Philips L-Line**), Professional TVs (**Philips Media-Suite with Chromecast built-in**), and the groundbreaking new, multi-award winning 'zero power' **Philips Tableaux Advanced Colour ePaper (ACeP)** signage display.

Next level service and support

Commenting on the PPDS Studio opening, **Atul Jasra**, India Business Head at PPDS, said: "This is not a showroom; it is an experience centre where partners and customers can come together and bring their ambitions to life ahead of installation. The Indian market is growing and we, at PPDS, are perfectly positioned to seize new opportunities and bring true change to the schools and businesses in this region. Our PPDS Studio will play a crucial role in achieving our ambitions, an exciting stage in our Make in India journey."



Atul Jasra, India Business Head at the PPDS Studio opening

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NEC CORPORATION INDIA RECEIVES INDIA SMART CITIES AWARD FOR SURAT'S URBAN MOBILITY

NEC Corporation India, a subsidiary of **NEC Corporation**, received an accolade at the **India Smart Cities Award Contest (ISAC) 2022** organised by the Ministry of Housing and Urban Affairs under the Smart Cities Mission. The event showcased NEC Corporation India as one of the top three MSIs in the smart city segment with its **Surat Bus Automatic Fare Collection System (AFCS)** project, winning the 2nd award in the MSI Partner category. NEC's award-winning Surat Bus AFCS has simplified citywide commuting for travelers, using contactless RuPay-based smart cards designed to enhance the daily travel experience for approximately 200,000 commuters.

Upon receiving this prestigious award from **Hardeep Singh Puri**, the Minister of Housing & Urban Affairs, during the award ceremony, **Aalok Kumar**, Corporate Officer & Senior Vice President - Head of the Global Smart City Business at NEC Corporation, and President & CEO of NEC Corporation India, said, "I am immensely proud of NEC India's significant strides in the urban mobility sector. This award speaks volumes about NEC's pioneering initiatives that champion sustainability, inclusiveness, and the advancement of the country's smart city vision. Received especially for the Surat smart city project, this acknowledgment from ISAC 2022 is reflective of both the city's and NEC's steadfast dedication to turning the notion of urban mobility into a beneficial daily reality for its inhabitants. Surat's transformation into a paradigm of a smart city is truly commendable. The flawless amalgamation of its public transport systems is just one among its many accomplishments, making the city a standard for others to emulate."

Aalok Kumar further added, "I thank the Indian government for trusting NEC India with vital smart city projects. We aim to provide safe, smart, and secure solutions, supporting India's growth and meeting

of a single integrated ticket, regardless of their chosen mode of transportation. This integration has empowered the Surat Municipal Corporation to consolidate and streamline various transit offerings, includ-



Aalok Kumar, Corporate Officer & Senior Vice President - Head of the Global Smart City Business at NEC Corporation, and President & CEO of NEC Corporation India collects the award for ISAC 2022 by Hardeep Singh Puri, the Minister of Housing & Urban Affairs

the needs of its billion+ citizens."

Kamlesh Naik - General Manager and Managing Director of Surat Sitilink Limited, said, "The AFCS implemented in Surat is a SMART solution that aligns perfectly with our city's vision for SMART public transportation. NEC has not only set up the system but has also exhibited unparalleled dedication in its operations and maintenance over the past seven years. This steadfast commitment has resulted in a seamlessly integrated public transit experience for our citizens. Thanks to NEC's comprehensive work, commuters in Surat can now enjoy the convenience

ing the Bus Rapid Transit System (BRTS) and city bus services within high mobility corridors. Furthermore, NEC's innovative approach has ushered in the digitization of fare collection and revenue generation, bringing technological advancements to our public transport system. This not only enhances efficiency but also sets a new standard for modern urban mobility solutions. We look forward to continued success in our collaborative efforts to elevate public transportation in our vibrant city."

Initiated on 10th March 2017 and ac-

Continued on page 16

PPDS LAUNCHES FIRST STUDIO...

Continued from page 14

Martijn van der Woude, VP Global Marketing and Business Development at PPDS, added: "At PPDS, we are fully committed to supporting our partners and customers in India. Opening this new PPDS Studio in New Delhi, together with our continuing 'local for local' manufacturing promise that will see the launch of additional

production facilities in India in the coming months, is a part of our 'Make in India' promise and another major step in our strategy to help bring true, transformational changes, via our extensive portfolio of professional solutions, to end customers everywhere.

Jasra concluded, "Today, we celebrate

yet another milestone in India. We will continue to innovate and deliver cutting-edge display solutions for our customers and partners. We cannot wait to welcome our customers, colleagues and friends to see our incredible new PPDS Studio and experience our solutions for themselves."

BIAMP ANNOUNCES ACQUISITION OF EVOKO

Biamp, a leading provider of professional audiovisual solutions for a wide array of commercial applications, announced that it will acquire **Evoko**, a Sweden-based manufacturer renowned for its advanced scheduling systems. The acquisition marks another major step in Biamp's expansion strategy and commitment to provide more comprehensive, integrated solutions to its customers.

Evoko, headquartered in Stockholm, Sweden, is a leading innovator in intuitive technology solutions for workplaces. Its suite of products includes room booking solutions and desk scheduling systems designed to enhance productivity and streamline office operations. These unique and forward-thinking offerings will expand Biamp's cur-

rent portfolio and consolidate its status as a comprehensive provider of professional AV solutions.

"We are excited to welcome Evoko to the Biamp family," said **Rashid Skaf**, Biamp's President, CEO, and Co-Chairman. "Evoko is a leader in the scheduling space,



and their products are highly regarded by customers around the world. This acquisition will enhance our portfolio of collaboration solutions and provide customers with more comprehensive solutions for managing their meeting spaces by adding room scheduling and more device

connectivity options. In addition, Evoko's innovative desk scheduling system helps organizations easily and effectively implement hoteling schemes in their workplace. By enabling this increasingly popular workspace management trend, Evoko stands to revolutionize desk scheduling

just as it did with room scheduling years earlier."

Evoko's technology, already found in more than 10,000 organizations worldwide, will enable

Biamp's customers to streamline their scheduling processes, creating an enhanced, unified experience. Evoko will join Biamp as a new product family within the company's portfolio, with business functions gradually being blended to form a single Biamp business.

NEC CORPORATION INDIA...

Continued from page 15

completed by 15th February 2019, AFCS is a SMART solution of the Surat smart city to achieve the SMART goals. NEC, having set up the system, now managed its operations and maintenance for seven years, highlighting its dedication to streamlined public transit. Thanks to NEC's comprehensive work in Surat, people can now commute throughout the city with a single ticket, regardless of their choice of mode of transportation. This initiative has empowered the Surat Municipal Corporation to integrate its various transit offerings, including the BRTS and city bus services, in high mobility corridors. The Surat Money Card (SMC) integrates multiple AFCS features, ensuring seamless operations across 157 BRTS stations and spanning 166 BRTS and 575 city buses. Furthermore, by minimising paper ticket use, the SMC supports Surat's environmental ambitions while providing users with advantages across municipal services

and shops. Notably, ridership (per day) surged from 28,000 in 2014 to 210,000 in 2022, and transactions per day via the Surat Money Card rose exponentially from none in 2018 to 72,754 in 2022.

Moreover, NEC also announced in August that it had been selected as the master system integrator by **Uttar Pradesh State Road Transport Corporation** (UPSRTC) for the **Vehicle Location Tracking-Passenger Information System** (VLT-PSIS) project under the **Nirbhaya fund** of the Government of India. This ambitious project is aimed at resolving the critical issue of safety in buses and enhancing the overall travel experience of passengers traveling in UPSRTC buses through advanced cutting-edge technologies, such as live tracking of buses in an Integrated Command Control Centre (ICCC).

Under this project, AIS 140-based Vehicle Location Tracking (VLT) devices and emergency safety buttons will be

installed across the majority of UPSRTC buses along with tracking of its entire fleet on the Uttar Pradesh state tracking platform. Large display screens will also be installed in around 100 major bus stations across the state to provide up-to-date real-time information to passengers. Alongside the implementation of a well-equipped state-of-the-art ICCC solution at UPSRTC headquarters in Lucknow, 20 regional viewing centers will also be established in regional headquarters of the UPSRTC. The scope of the project also includes setting up of a cloud platform to host and deploy various software applications, including a Fleet Management System, Route Management System, and Passenger Information System which will support the monitoring of the bus fleet, optimizing its routes and offering real-time information to support safety and a more personalized experience for passengers through a mobile app.

Catch an extract from the **AV-ICN Conference** session by **Narendra Naidu**, Chairman and Managing Director, Rhino Engineers in the next issue.

STATUE OF BELIEF WEAVES A TIMELESS TALE WITH BARCO-ENABLED PROJECTION MAPPING

Miraj Group operates across industry verticals and caters to millions of customers in India. One of its most notable endeavours is the **Vishwas Swaroopam** project, which features the **Statue of Belief** - the fifth-tallest statue in the world at a towering height of 369ft. This expansive project covers a sprawling 16-acre area and includes an interior exhibition hall and public viewing galleries. Visitors can also enjoy a range of amenities surrounding the statue, including three herbal gardens, a water body, musical fountains, landscaped gardens, an Amphitheatre, a food court, handicraft shops, and a children's amusement park.

The highlight of the project, however, is the projection mapping show, which required meticulous mapping and handling of 24 channels of high-resolution 4K content. The expansive and varied contours of the statue presented various challenges, from multiple shadow areas with a folded leg to the bronze colour of the statue. Furthermore, the lens too needed to be placed at a great distance of approximately 250 meters. To make this first-of-its-kind installation a success, the client and their partners collaborated with Barco for better colour and contrast, brightness, after-sales support, an offer of on-site spares, and more.

Bringing an idea to life

To meet the expansive requirements of the Vishwas Swaroopam project, Barco supplied high-end projectors for both outdoor projection mapping & indoor museum projection to create an immersive experience for the audience. **Axis Three Dee Studios Pvt. Ltd.** worked on the ex-

ecution and production of visual content for the project.

The technical aspect of the project was spearheaded by **Dataton**, who worked on the mapping and handling of 24 channels of high-resolution 4K content. "Dataton WATCHOUT is the go-to in India for this kind of impressive projection mapping where reliability and pixel accuracy are of the utmost importance. We were delighted to cooperate once again with

The UDX projectors offered best-in-class long throw lenses with up to 11:1 throw ratio that allowed the projectors to be placed at the extreme end of the park. This range offers the best white point and contrast and a brightness uniformity of 95% ensuring appropriate brightness distribution on the entire canvas. In addition, the compact projector size made it easy to fit the models in the folded leg area and illuminate it. To top it all, **Barco PulseSingle**



The Statue of Belief in India retells the story of Lord Shiva with impeccable projection mapping, achieved with Barco UDX-4K40 projectors

our friends at Axis Three Dee Studios and the Barco team in bringing the Statue of Belief to life with projection mapping," observes **Ashok Sharma**, APAC regional sales manager, Dataton.

On the façade, the project utilized 24 **Barco UDX-4K40 projectors** with a brightness of 40,000 lumens each. These projectors were set up on two temperature and humidity-controlled towers located on either side of the park, projecting at an angle on the statue. Eleven projectors are installed on each tower and two additional projectors are installed inside the folded leg of the statue to illuminate the hidden belly and prominent shadow area.

Step Processing (SSP) allows for sharper images and less latency for 4K signals.

Sanjay Singh, Group CEO at Miraj, says the following words about the results: "STATUE OF BELIEF - The way I know about it, this is not just another statue, neither is this created for any symbolic representation. It's yet another proof of what faith and belief can achieve, it is so impactful that it would force you to ask yourself - Why, and you would realize Mr. Madan Paliwal's conviction to convince us in the word "BELIEF". I am thankful, in the quest of searching the best, we chose Barco as a medium to convey the rest of the story."

AV-ICN
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INDIAN PRO AV MOMENTUM

30.05 - 01.06.2024 : BEC, MUMBAI, INDIA

MSS WORLD TRANSFORMS PUNJAB TOURISM SUMMIT AND TRAVEL MART 2023

Modern Stage Services Pvt. Ltd. managed every facet of the prestigious Punjab Tourism Summit and Travel Mart 2023, a 3-day extravaganza taking place from 11th to 13th September 2023 at the esteemed Amity University in Mohali, Punjab. This grand event, orchestrated by the Department of Tourism and Cultural Affairs, Punjab, stands as a monumental endeavor to catalyze tourism growth, unveils Punjab's latent tourism treasures, and unite policymakers, investors, industry mavens, and small and medium enterprises in one dynamic forum.

MSS added to the acoustics and audio-visuals of the Summit with the deployment of the following solutions:

360 Degree Immersive Zone

Optoma 10K laser projectors- 10, Pixera media servers - 4, JBL Audio AC18 loudspeakers - 8

CM Welcome Area

Christie 20K laser Projector - 8, Pixera media servers - 3, Bose L1 speakers - 4

Main Auditorium

Pixera media server- 4, Lightware Matrix switcher - 1, Switcher Analog Way - 1, 4K Prime Led Processor- 2, Cue Commander- 1, LED Wall Screen 2.6mm, Lighting - Mac Aura - 18 nos, Sunlite 15r beam - 16 nos, Sunlite LED 3*54 LED pars - 40 nos, Sunlite blinders - 10, and L-Acoustics A12 audio - 8 and 200 running meter, F54



Unique 360 Degree Immersive Zone experienced by visitors at the Punjab Tourism Summit and Travel Mart 2023

Global Truss.

MSS's commitment to meticulous planning and flawless execution ensured that every facet of this event was seamlessly orchestrated. From engaging international buyers, speakers, and investors to harnessing the power of media and influencers, the company left no stone unturned. The event's main attractions include a 360-degree immersive zone, captivating anamorphic content, selective performances by local artists, and a stunning array of 120 customized stalls.

The primary goal of this Summit is to cultivate a vibrant exchange of ideas and to foster collaborative synergies amongst

businesses, as well as between businesses and the government. Furthermore, a captivating Travel Mart, intricately woven into the Summit, will serve as a captivating platform for forging strategic alliances and showcasing the rich tapestry of Punjab's tourism offerings.

Here's a snapshot of the Summit's itinerary:

Day 1: The Grand Inauguration

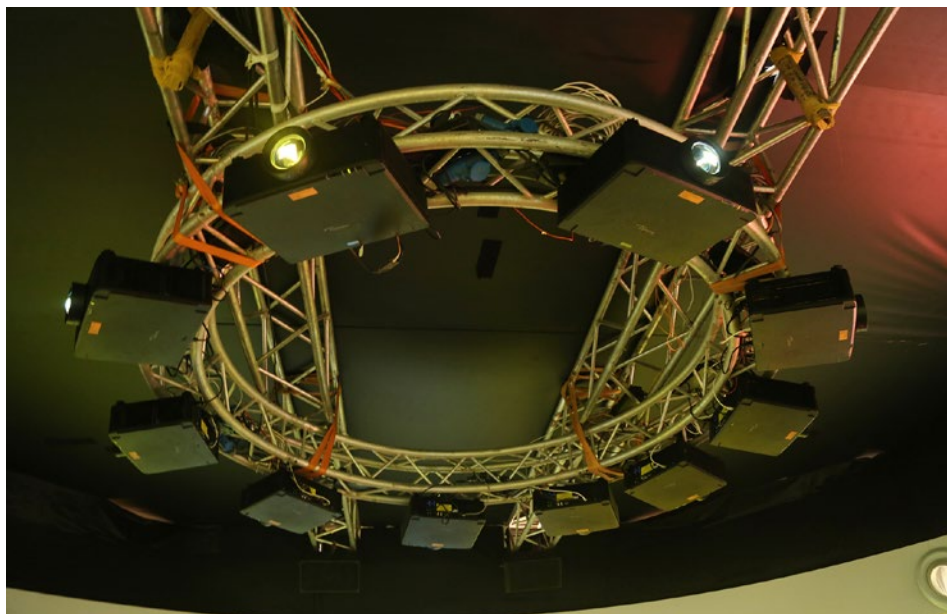
The Summit commenced on the 11th of September with a grand inauguration graced by the presence of the Hon'ble Chief Minister of Punjab, S. Bhagwant Singh Mann, alongside influential industry leaders. Subsequently, a series of compelling panel discussions on diverse sub-themes within the tourism sector will ensue:

- Amritsar 1: Religious and Wedding Tourism
- Amritsar 2: Amritsar Hinterland and Culinary Tourism
- Eco & Farm Tourism (including Water and Adventure Tourism)
- Wellness Tourism
- Heritage Tourism
- Media and Entertainment

The inaugural day will culminate in a spectacular cultural evening, a vibrant ode to Punjab's tradition and culture.

Day 2 & 3: The Punjab Travel Mart

Throughout the entire Summit, the Punjab Travel Mart was in full swing,



Modern Stage Services Pvt. Ltd. perfectly deploys audio solutions at the summit

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INDIAN POLICE DEPARTMENTS ACCELERATE DIGITALIZATION & TRAINING EFFICIENCY WITH TRUCONF VIDEO CONFERENCING SOLUTIONS

The Indian Police Force is one of the largest in the world and employs almost 2 million personnel. The state police play a crucial role in maintaining peace and security, preventing and detecting crimes, investigating cases, protecting individuals and properties in a country with one of the strongest economies in the world.

Under the modernization initiative of the government, the organization decided to facilitate the personnel training of all its cadres and create a large-scale and securely protected video conferencing infrastructure to speed up decision-making processes in its divisions. The video collaboration system should also help to reduce the number of local meetings, business trips, and negotiations. By utilizing this technology, the police departments aimed to overcome the challenges posed by traditional in-person training methods, such as logistics, cost, and time constraints.

The integration of **TrueConf** on-premises video collaboration platform was motivated by its exceptional security, resilience against network outages, and ability to operate autonomously. **TrueConf Server** runs on a secure communication protocol and is deployed on the police servers, giving the police full control over their communications and data and technological independence from blocks or restrictions from the side of other providers and IT companies.

TrueConf's video conferencing technology offers an important benefit — the ability to enable real-time interaction



With TrueConf's video collaboration platform and built-in team messenger, the Indian Police Force is able to facilitate online personnel training, conduct briefings, and enhance in-departmental communication

and engagement among India's police departments. By utilizing features such as desktop sharing and slideshow with annotations, reactions, and video file sharing, police officers can actively participate in training sessions and briefings and exchange ideas, all from the comfort of their own locations. Staff can join meetings from their workplaces, conference rooms, and using their PCs, laptops, smartphones, and tablets — TrueConf applications with user-friendly interface are available for Windows, Linux, macOS, Android, and iOS.

All the training sessions and video conferences can be recorded and subsequently used for repetition of material and training of new employees. This not only enhances the learning experience but also promotes collaboration and knowledge exchange among officers from different regions. Files, documents, and recordings are stored in the police's

own infrastructure, so that they can rest assured that their transmitted data are in absolute safety and security.

All users are utilizing a single address space on TrueConf platform to interact with colleagues from other departments. Built-in corporate messenger allows the officers to always stay in touch and fully interact with teammates — chat history is synchronized on all devices of each employee. With built-in SIP gateway, it is possible to use SIP/H.323 endpoints and call PBX users.

"In today's eGovernance era, no public facing organization can afford to not have a robust communication system. The quality of personnel training got a boost after India's police departments started to use the video learning solution developed by Trueconf to educate 30 thousand specialists in multiple locations," noted TrueConf India representatives.

MSS WORLD TRANSFORMS PUNJAB TOURISM... *Continued from page 18*

showcasing the indigenous, traditional products, culinary delights, and myriad tourism offerings of the state. The Travel Mart also offered invaluable opportunities for pre-scheduled B2B meetings with over 85+ foreign buyers from approximately 50 countries and 150+ Indian buyers. A mesmerizing cultural evening coupled with

a soul-stirring musical performance that further elevated the Summit's allure.

Moreover, the company meticulously curated familiarization (FAM) trips to Amritsar, Anandpur Sahib, Kapurthala, and Pathankot during the 13th and 14th of September. These journeys immersed participants in the enchanting vistas

of Punjab, offering them a firsthand glimpse of the state's incredible tourism potential.

Modern Stage Services Pvt. Ltd. extends its heartfelt gratitude to the Department of Tourism and Cultural Affairs, Punjab, for bestowing this invaluable opportunity.

AV INSTALLATIONS: GLIMPSES



Clarity Consulting Sparks Pragati Maidan/ITPO

Clarity Consulting successfully completes the installation in Pragati Maidan, New Delhi as it opened the doors for visitors on 26th July 2023 by Prime Minister Narendra Modi.

July 26, 2023, was a big day with the PM Narendra Modi opening Pragati Maidan/ITPO, the venue for the 2023 G20 Meeting. Clarity Consulting have provided Acoustics, AV, ICT, and Lighting Design consultancy for the complete project. The venue has a 3000 seat Plenary Hall, 4000 seat Multi-Purpose Hall (which joins with the Plenary Hall to make a 7000 seat venue),

3000 Seat Amphitheatre, 900 and 600 Seat Auditoriums, 100 Seat PM Conference Room, 2 x 50 Seat Conference Rooms, VIP Lounges, Leader Lounge, G2 Meeting Hall, 30 other meeting rooms of various sizes, State Banquet Lawn as well 30,00,000 sq ft of Exhibition Halls.

Kelvin Ashby King, Principal Consultant, Clarity Consulting comments on the installation provided by the team saying, "With more than 6 years of efforts from the complete team, we congratulate India on getting a "world class" Convention and Exhibition Centre."



Barco's Projection For The Statue of Belief

Miraj Group operates across industry verticals and caters to millions of customers in India. One of its most notable endeavours is the Vishwas Swaroopam project, which features the Statue of Belief - the fifth-tallest statue in the world at a towering height of 369ft. This expansive project covers a sprawling 16-acre area and includes an interior exhibition hall and public viewing galleries. Visitors can also enjoy a range of amenities surrounding the statue, including three herbal gardens, a water body, musical fountains, landscaped gardens, an Amphitheatre, a food court, handicraft shops, and a children's amusement park.

The highlight of the project, however, is the projection mapping show, which required meticulous mapping and handling of 24 channels of high-resolution 4K content. The expansive and varied contours of the statue presented various challenges, from multiple shadow areas with a folded leg to the bronze colour of the statue. Furthermore, the lens too needed to be placed at a great distance of approximately 250 meters. To make this first-of-its-kind installation a success, the client and their partners collaborated with Barco for better colour and contrast, brightness, after-sales support, an offer of on-site spares, and more.

...read more on page 17



TrueConf's Solutions Support Indian Police Departments

The Indian Police Force is one of the largest in the world and employs almost 2 million personnel. The state police play a crucial role in maintaining peace and security, preventing

and detecting crimes, investigating cases, protecting individuals and properties in a country with one of the strongest economies in the world.

Under the modernization

initiative of the government, the organization decided to facilitate the personnel training of all its cadres and create a large-scale and securely protected video conferencing infrastructure to speed up decision-making processes in its divisions. The video collaboration system should also help to reduce the number of local meetings, business trips, and negotiations. By utilizing this technology, the police departments aimed to overcome the challenges posed by traditional in-person training methods, such as logistics, cost, and time

constraints.

The integration of TrueConf on-premises video collaboration platform was motivated by its exceptional security, resilience against network outages, and ability to operate autonomously. TrueConf Server runs on a secure communication protocol and is deployed on the police servers, giving the police full control over their communications and data and technological independence from blocks or restrictions from the side of other providers and IT companies.

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Tricolor India Schauspiel Delivers Pioneering Audiovisual Upgrade

Tricolor India Schauspiel was handed over the responsibility to install modern, sophisticated, and hassle-free audiovisual equipment at the venue, Tricolor India Schauspiel, and deliver breathtaking immersive viewing experience to the visitors.

Himanshu Singh Sabharwal, Chief Creative Officer, shared with AV-ICN how Tricolor India Schauspiel was approached for the Cellular Jail Project, "The Andaman and Nicobar State Government was seeking a turnkey solution which included artistic, and hardware works which included all related E&M works as well as the successful installation and handing over of an upgraded show." He added, "With regards to this site, a strategy was created to utilize the given infrastructure for the most feasible solution. Existing old audiovisual equipment was to be enhanced and new technology had to be incorporated. A detailed site survey was done

to identify the possible cable routes, placement of major hardware, features offered by the site which can be incorporated in the show to add more dynamics to the overall experience."

The decision regarding which audiovisual equipment needed to be installed at the Cellular Jail relied heavily on the site's infrastructure. **Garima Mishra**, Managing Director, while enlisting the audiovisual inventory for the Cellular Jail, commented, "The audiovisual equipment was planned according to the detailed recce. Placements and strategy for major hardware was created, which not only involved the existing structure but also additional fabrication on site to enhance the visitor experience. Also to add more dynamism and seamlessness to the show, we offered 'holographic projection' on the ground, thus creating multiple layers of projection surfaces to enhance the viewing experience of the visitor."



Rhino Engineers Evokes The Glory of Rajwada Palace and Gandhi Hall

Fondly known as the Holkar Palace, as a tribute to the builders of the icon of royalty in Indore, the **Rajwada Palace** is an ode to the artistic intel-

ligentsia of the Holkar dynasty, an embodiment of the dynasty's love and wisdom of their history, heritage, and culture. On the other hand, the **Mahatma**



EYTE Technologies Pvt Ltd Brings AV Hybrid Classroom for Indira Group

Indira Group of Institutes Management College is a leading educational institution in Pune, India. The college has always been committed to providing the best learning experience for its students. To stay ahead of the curve and adapt to the changing educational environment due to the pandemic, the college decided to create a hybrid classroom that would allow for both in-person and online learning. To achieve this, they hired **EYTE Technologies Pvt Ltd**, one of the leading AV integration companies in India, to design and install the necessary AV technology.

EYTE Technologies designed and installed a cutting-edge AV system that met all the college's requirements. The system included a Samsung professional display, Newline interactive display, Logitech Rally Teams MTR setup, QSC speaker system, and a dual display setup for the lecturer. The Samsung professional display used in the classroom is a 55" 4K UHD Professional LED

Display, which is ideal for delivering high-quality visuals in a variety of lighting conditions. Newline 86" 4K UHD Interactive Professional LED Display is also equipped with a touch-sensitive panel, which allows for interactive learning experiences. The Logitech Rally Teams MTR setup is a state-of-the-art video conferencing system that provides crystal-clear audio and video. The system includes a Logitech Rally camera, a microphone, and a speaker that work together to deliver a seamless video conferencing experience. The system also supports multiple conferencing platforms, making it highly versatile. The QSC speaker system used in the classroom is a premium sound system that delivers high-quality audio for lectures, presentations, and video conferencing. The system includes QSC K10.2 powered loudspeakers, a QSC KSub powered subwoofer, and a QSC TouchMix-16 digital mixer, which work together to deliver a powerful and immersive audio experience.

Gandhi Town Hall in Indore is a towering structure constructed in an Indo-Gothic style. The front façade of the Town Hall also functions as a Clock Tower, and the Central Hall of the building is massive enough to accommodate upto 2000 people, which serves as an exhibition venue for several Indian trades and arts.

The **Indore Smart City Development Limited (ISC DL)**, a civic body focused on redeveloping the city as a Smart City, aimed at increasing the tourist

footfall at the above-mentioned historic destinations. AV consultant **Rhino Engineers** and AV integrator **Dhara Electricals** were tasked by the ISC DL to adorn the structures with intelligent, dynamic lighting and increase its appeal in the realm of Indian tourism. Moreover, the inventory for intelligent lighting installed at Rajwada Palace and Mahatma Gandhi Town Hall included entirety of **Signify India** (previously known as **Philips Lighting**).

Continued on page 26

Ceiling microphones are an ideal solution for hosting conferences and meetings in professional spaces. Ceiling mics are designed to maintain sound quality while capturing sounds from different directions without having to worry about the distances or the wires falling across the halls. To achieve more professional and quality sound, these audio solutions are now improved with the beamforming algorithms that measure directional sound resulting in high-quality remote meetings and conferences. To equip our readers with the latest meeting room solutions, this article features six ceiling microphones launched in 2023.

LDA Audio Tech – CH-62TN

High-quality and high-performance 30 W 2-way coaxial loudspeaker, EN54-24 certified for music and voice reproduction, the CH-62TN has wide frequency range, low distortion, and high sound pressure level. This ceiling loudspeaker has a fire protection dome.

Main Features include:

- EN 54-24 certified ceiling speaker
- High power and voice quality
- Fireproof metal dome
- IP44 rating
- Easy mounting

Technical Specifications::

- Speaker diameter 6.5"
- Max power 45 W
- Nominal power 30 W rms
- SPL (Pmax / 1m) 106 dB +/- 1dB
- SPL (1W / 1m) 93 dB +/- 1dB
- SPL (1W / 4m) 81 dB +/- 1dB
- Frequency response (-10 dB) 100 Hz-20K Hz
- Dispersion (-6 dB) 500Hz 1000 Hz 2000 Hz 4000Hz 180° 165°H 170°V 130°H 140°V 55°
- Nominal voltage 100 V / 70 V Nominal impedance 333 Ω / 666 Ω / 1.3kΩ / 2.6kΩ
- Thermal Fuse 115°
- Dimensions Φ 224 mm x 129 mm
- Installation drill Φ 195 mm
- IP protection grade IP44 (Type A according to EN54-24)



Genelec – 4435A In-ceiling Speaker

The 4435A joins the Smart IP product line to provide an in-ceiling loudspeaker solution, with the added ease of installation, system scalability and simple operation of Smart IP's single-cable networked technology. Designed for discreet in-ceiling installation, the durable and functional 4435A provides exceptional long-term value for premium AV installations.

Main Features include:

- Smart IP
- Requires single CAT for power, audio, and management
- Supports uncompressed low-latency audio over IP

Technical Specifications:

- Frequency Response - 70 Hz - 20 kHz (± 2.5 dB)
- SPL - Short term max SPL ≥104dB
- Woofer Diameter - 130 mm (5 1/8 in)
- Tweeter Diameter - 19 mm (3/4 in)
- Amplifiers - 4435A bass amplifier, 50 W Class D / 4435A tweeter amplifier, 50 W Class D
- Mains voltage - PoE+/PoE
- Input - 1 x RJ45 IP network interface (Power over Ethernet and Audio over IP)



Biamp – Desono C-IC6

The Desono C-IC6 is a low-profile, two-way passive coaxial loudspeaker optimized for speech reproduction in conferencing applications. Designed with the installer in mind, the C-IC6 loudspeaker supports audio connections via either standard category cable or traditional speaker cable.

Main Features include:

- Low profile, less than 151 mm (6") total depth
- Bridge-mounted soft dome tweeter mechanically isolated from the low frequency driver
- Directly integrates with Tesira AMP-450BP (PoE+ amplifier)

Technical Specifications:

- Nominal Beamwidth (H x V) - 130°, conical
- Transducers - LF 1 x 6.5" (165 mm) treated paper cone HF 1 x 1" (25 mm) soft dome
- Continuous Power Handling @ Nominal Impedance - 22V 60W @ 8Ω (240W peak)
- Nominal Sensitivity @ 1m - @ 1W 88 dB / @ 2.83V 88 dB
- Nominal Maximum SPL @ 1m - Peak 112 dB / Continuous 106 dB
- Recommended Amplifiers 60W - 120W @ 8Ω (22V - 31V); Tesira AMP-450BP



Ceiling microphones equipped with the best audio quality allow impressive communication around large venues. Deciding the number of number of microphones in a venue is now easy with the approximate idea of the size, acoustics, and design of the venue.

Bluesound Professional – BCS300 Network Streaming Ceiling Speaker

The BCS300 is a seamlessly integrated, all-in-one in-ceiling or hanging pendant speaker solution featuring a built-in music streamer and amplifier. Its high-performance build includes a UL 2043 plenum rating, fully certifying it for commercial installation. The optional pendant kit allows the BCS300 to be ceiling suspended and allows positioning of speakers at a lower height.

Main Features include:

- Full-range network streaming speaker system
- Flexible and unlimited grouping of zones within a BluOS system
- Specialist Bluesound Professional control panels

Technical Specifications::

- 5" LF driver and 1" HF driver
- 45Hz – 20kHz frequency range
- 003% THD+N at full rated power
- Maximum SPL of 102db (PoE+)
- DSP providing equalization and other audio processing
- 2 x BCS300's can pair in stereo configuration
- Security preventing unauthorized control
- Support of hi-res audio up to 192kHz/24 bit
- Support of MQA content
- Streaming via ethernet for increased reliability with PoE+ providing one-wire connectivity and power
- Slim profile requires only 5 inches of depth
- UL 2043 Plenum Rated



Sennheiser – TeamConnect Ceiling Medium

With a coverage of up to 40 m², ceiling microphone TeamConnect Ceiling Medium is the right choice for mid-sized meeting rooms and lecture or collaboration spaces. It adds to the design options to seamlessly include the audibly better ceiling microphone into meeting rooms.

Main Features include:

- Patented automatic dynamic beamforming
- TruVoicelift
- Dante or Analog Output
- PoE
- Camera Control via talker position data
- IEEE 802.1x
- TLS 1.2

Technical Specifications:

- Dimensions (Ø x H) - 407 x 46 mm (16 x 1.8 ")
- Weight - max. 4,9 kg (10.8lbs)
- Audio output - 1 x 3-pin terminal (fits Phoenix contact MCWW 1.5-3-ST-3.81) / 1x Digital Dante Network Audio (RJ-45)
- Network/Control - 1 x RJ-45 Ethernet Port for PoE power supply and data/control communication
- Supply voltage - PoE IEEE 802.3af Class 3 IEEE 802.3at / Typ 2 / Class 4 (when cascaded)
- Power consumption - Approx. 8 W
- Transducer principle - Pre-polarized condenser microphone
- AF frequency response - 100 Hz to 16,000 Hz
- Sensitivity - 0 dBV/Pa (1020 mV/Pa)
- Signal-to-noise ratio - 77 dB (A)
- Equivalent noise level - 17 dB (A)
- Number of KE 10-237 microphone capsules – 15
- Pick-up pattern - Beam pattern
- Max. sound pressure level – 98 dB SPL
- Dynamic range - 81 dB (A)



ClearOne – BMA 360D

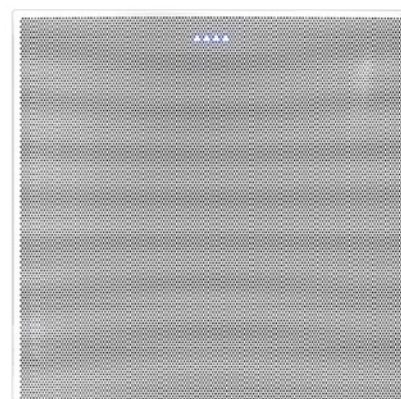
The BMA 360D with Dante audio is a microphone array ceiling tile that works with any Dante enabled DSP mixer. It incorporates the industry's only ultra-wideband, frequency invariant beamforming mic array technology with uniform gain response across all frequency bands.

Main Features include:

- Ultra-wideband, frequency invariant beamforming mic array technology
- Supports two different ceiling grid types - 24 in and 600 mm
- Voice lift and camera tracking functions

Technical Specifications::

- Beamforming Range - 100 Hz to 20 KHz
- Beam Pointing Accuracy of 0.2 dB
- Dynamic Range - 20 Hz to 20 kHz, > 70 dB
- Coverage Sizes - Up to 600 square feet/58 square meters
- Ceiling Height - Configurable with CONSOLE AI Lite from 7 ft to 20 ft
- Port Type - RJ-45 PoE++ power
- 56 V 90 W IEEE 802.3 bt Compliant Devices or equivalent, Mode A and B, Midspan
- Speakers - Requires 56 V 90 W IEEE 802.3 bt PoE ++
- Power Consumption - 100-240 VAC, 50/60 Hz / 23 Watt typical
- Output Power - 4 x 15 W Max, 8 Ω load, or 2 x 30 W, 4 Ω load, Bridged
- Frequency Response - 20 Hz – 22 kHz, +/- 0.5 dB



Unwinding The Changing Dynamics of Sennheiser with Naveen Sridhara



**TeamConnect
Bar Solutions**
Flexibility that empowers.

*When it comes to innovation and development, Sennheiser has been one of the global leaders to deliver impressive sound experiences. Motivated to expand the horizons and keep up the momentum, Sennheiser extended its portfolio in the pro-AV vertical. AV-ICN Magazine got in touch with **NAVEEN SRIDHARA**, Director of Sales, Sennheiser, during the latest 'TCC Medium' and 'TC Bar' launch where Sridhara shared Sennheiser's big leap in the unified communications market and its strategies to stimulate growth in the pro-AV segment.*

Could you introduce us to the latest TeamConnect Family solutions?

Sennheiser entered the TeamConnect Ceiling Solutions with TCC1 and later expanded its innovation with TCC2, which is a 2x2 tile with automatic dynamic beamforming. The company further decided to expand the portfolio under the same TeamConnect family while giving a thought to the medium sized rooms. While TCC2 covers 800 sq. ft. of area, it may not be a suitable option for the medium sized meeting rooms. Therefore, expanding the market standards and the pro-AV industry, Sennheiser launched TCCM (TeamConnect Medium), while advancing the performance and the cost of meeting room solutions. TCC Medium

takes up 400 sq. mt. with 40 sq. mt. as the radius of the product.

Sennheiser has been a pioneer in audio for about eight decades in terms of our innovation on stage, studio, or any such performance venues. Sennheiser also wanted to enter the unified communication market because right now when you enter meeting rooms, it's just not about the audio part, people also investigate video solutions. That's when TC Bar comes into picture. TC Bar is also an extension of the

TeamConnect family. It's not an independent device, it can be connected with the ceiling microphones when you have a larger room, which makes it a part of the same family. So now the family has TCC2, TCCM, and TC Bar.

Can you elaborate on the strategies that Sennheiser takes to ensure consistent growth for the pro-AV vertical in India?

There are three large segments at Sennheiser – Government, Corporate, and Higher Education. All other manufacturers trying to get in the AV market are joining the industry from IT, however, we are already into the AV market trying to get into Unified Communications. With a strong customer base that trusts us and is keen on exploring our segments, our strategy is to approach the existing clientele and aware them about the new solutions and products.

The key differentiator in our new product portfolio is 'Dante', a protocol in the audio industry, which you can expand with the TeamConnect family in the same room with boundary layered microphones and is not something available with other microphones. You use it like your regular ethernet port, but it is the way of controlling or transmitting the U signal in audio. So, it's the technology wherein it doesn't matter which manufacturer meets us, there is one single protocol on Ethernet, which can transmit your signal and your control. Everything is on one cable making it easier for users as that is the standard cable available in the market. As it gets challenging for manufacturers to have many cables, Dante is something that will resolve the problem of having one protocol for all the devices to network audio with Sennheiser's products. Another big advantage is the tiling and the addition of the camera in our new product portfolio.

What are the key features of TC Bar Solutions?

Dante is the biggest thing to have been

TC Bar is also an extension of the TeamConnect family. It can be connected with the ceiling microphones when you have a larger room, which makes it a part of the same family.

included in the TC Bar along with the extension of camera. You can have the secondary camera to capture rest of the audience. For normal cameras up to 5 meter is fine, but after that inbuilt primary camera is not able to capture. This is where you can have an additional camera. Another advantage is the DSP built in. While a good external DSP will cost around \$1500, the digital signal processing is within the bar itself.

What challenges do the Indian pro-AV market pose when it comes to accepting new technologies, and how does Sennheiser aim to address the same?

India is one of the fastest countries to pick up on the technology. India always looks after what is more advanced and cost-effective. All our offerings, even with the EW-DX, our recently launched microphone, have got features that are comparable to any high-end systems, which are charging more than five times but have got all the features with a premium of 10%, adding a huge value to the pricing and specifications. We always look at how we can optimise the system so that it is not so expensive and the same time it is premium for the Indian market. If you look at any of the Government projects, they are very particular, therefore, we must be way ahead of the curve offering great specifications with better costs to attract the Indian pro AV market.

One of the biggest challenges for the pro-AV industry also comes down to managing the Radio Frequency (RF) within auditoriums. If you have a receiver and a transmitter with 2000 people inside the venue with the antenna distribution; it needs to be done in such a way that there's no drop out. So, radio frequency management in itself is a big science. Sennheiser being the global leader, for any large events like the Olympics or any of the events on stage, dedicates a team that works on RF management because it's very critical to ensure all events meet quality

sound requirements.

What key factors, in your opinion, will drive the growth of the pro AV industry in India with respect to hybrid work environment in the near future?

People were talking about AV over IT around 10 years ago. People were talking about the technologies where everything through IT could be controlled in a classroom sitting somewhere remotely – All that is now a reality. That's how systems are interconnected and how hybrid classrooms are always working. It doesn't matter whether we are in the class, or we are taking remote classes, the experience is seamless. TCC started with the same concept, then the TCC1, TCC2, and the TCC Medium came into picture to follow the same vision. These are all hybrid solutions what Sennheiser has focused on and it has become a reality. Five years ago, during the pre-Covid times, we would talk about something like hybrid taking over but all that is a reality now.

How evolved is India as a region when it comes to cutting edge pro-AV technology?

Segment wise, I would say corporate is covering the major grounds when it comes to cutting edge pro-AV technology. Today, India has evolved from just being an outsource, call centre, or a service industry. All the excellence centres have their largest setup outside their home ground in India, which means it is talking about designing cutting-edge solutions like cloud computing or latest innovation that requires complementary AV setup to connect their meeting rooms or board rooms with the headquarters anywhere around the globe. For example, SAP labs have the largest campus outside the headquarters in Bangalore. The investment and technology are coming from Germany directly to India to bring in the global standards.

Everything in India is about 'Digital India', even the equipment market is digitally advanced. The Government is ready to invest in terms of large projects. 10-15 years back, there was only one convention centre which was associated to major events. Today, every city will have a large convention centre, state-of-the-art auditoriums, meeting rooms, convention halls, etc. Even the government has started upgrading the infrastructure since the last few years.

We are showing technology to the world. We have built the best software and we have the best people in the IT. Now, we also need

to adopt to the fast-changing AV market.

During the launch event of the Team-Connect products, the team highlighted about the security standards. Could you provide a brief on the measures taken by Sennheiser to keep the market innovations secured?

There are many protocols that the companies should follow as per the Government norms. There is a global security platform called IEEE, AES encryption software, and TLS software, which are all the protocols that the banks and institutions have made mandatory to participate in the tenure. Also, all the products need to be certified under BIS. Moreover, every product must be certified by the Microsoft Team or Zoom as the entire ecosystem is based on Microsoft. The market itself is working on the security standards to keep the market innovations secured.

What is the valuation analysis of Sennheiser of the corporate segment in the Indian pro-AV industry currently?

The Indian AV market is fragmented into video and pro audio. If you see the video part of it including displays, signages, video walls, etc., we are almost negligible in the industry as the pro AV market is very vast. Pro audio segment including loudspeakers, microphones, and other products, amongst which, microphones nearly cover 10-15% of the entire market, drives the major pro-AV industry. So, it's difficult to understand the factual data as the market is still not matured enough.

What's next for Sennheiser? Is Sennheiser

I believe in the proof of concept – as we did during the TC Bar launch event with the Voicelift. We showed Systems Integrators, Consultants, and end users present at the event what is Voicelift to encourage them to talk about it to others.

now, or in the near future, planning to expand its Pro AV vertical into direct-to-consumer or residential segments?

We had a consumer segment and a professional segment initially. Consumer segment was all into earphones, headphones, and more from the B2C industry, which is now sold to the Swiss company, Sonova. Later, the company decided to be in two segments – pro audio and business communication. The company's focus is on these two segments currently.

As far as the investment on the brand in India is concerned, we have direct presence with offices and service centres across the country and that's a clear indication of our sustaining model in India. In terms of solutions, customers can be assured that they would get the best solutions at Sennheiser.

While everything is growing every day and new innovations are uprooting the pro AV industry, how does Sennheiser inform people of the coming up technologies?

I believe in the proof of concept – as

we did during the TC Bar launch event with the Voicelift. We showed Systems Integrators, Consultants, and end users present at the event what is Voicelift to encourage them to talk about it to others. We applied the same concept at GITAM University in August, where we did a demo of the Voicelift. We entered two classrooms – one with existing multiple handled microphones going around and the second classroom with similar Voicelift. One classroom had the presenter and one the student. They started having our technologies installed in 20 classrooms initially and we are hoping to expand in the near future.

To build an excitement in our end-users, we also participate in various events displaying our business solutions. We have training for the people through platforms like Sound Academy, where you can see people discussing about how the devices can be used on stage, conference rooms, etc. We give certifications to people for completing the tests that add on to the awareness of the person about the products and technicalities.

We also have other initiatives that we partner with, like the Systems Integration Asia Awards, and even participation in the cricket event, which is one of the biggest things that bring people together in India. We have an event that gathers around 500-600 people together, called the AVPL (Audiovisual Premier League), in Bangalore where we own a team adding to the brand recall in the market.

AV INSTALLATIONS: GLIMPSES

Rhino Engineers Evokes The Glory... *Continued from page 21*

Narendra Naidu, Chairman and Managing Director, Rhino Engineers, explains the significance and the impact the right lighting has on any venue. He comments, "The lighting concept for the Rajwada Palace needed to be illuminated with attractive and vibrant lights which have been developed with a glimmering array of installations, figures, and optical illusions. For the Mahatma Gandhi

Town Hall, Rhino Engineers was tasked with decking the venue with warm white colour. He shares, "Lighting is an integral contribution in any architectural and façade/landscape environment design. Lighting is essentially a nocturnal makeup that can be used to bring attention to the façade of interest and turn potential eyesores into works of art. Lighting can create a unique and memorable experience.

Well-planned lighting can connect places and stimulate night tourism."

Monday to Friday: To illuminate all the floors (from ground floor to the 7th floor) of the Rajwada Palace in simple warm white colour, followed by a full facade illumination for 5 minutes.

On days of national importance: To illuminate the Rajwada Palace with the colours of the Indian Flag.

On Saturdays and Sundays: To illuminate the façade of the Rajwada Palace with vivid colours and patterns, changing every 5 minutes.

The inventory for intelligent lighting installed at Rajwada Palace and Mahatma Gandhi Town Hall included entirely of Signify India (previously known as Philips Lighting). However, numerous products from the brand were used to complete the lighting installation.

Hiring New Employees in AV Industry and Significant Challenges

by Abdul Waheed, CTS, Managing Director,
EYTE Technologies Pvt. Ltd.



In recent times, every AV event I have attended has featured discussions among senior management about the critical issue of employee retention. Over the past two years, retaining talent has become an enormous challenge for companies across various industries globally, but this challenge appears to be particularly acute in the context of the Indian job market.

"While there is ample evidence that this workforce discontent is a global phenomenon, the situation has further deteriorated in certain markets. In India, more than 60 percent of respondents expressed a desire to leave their current posts, well above their counterparts in Australia, Canada, the United Kingdom, and the United States. Workers in Singapore showed the second-highest level of job discontent, at 49 percent," as reported by McKinsey & Company.

On one hand, there's a persistent narrative about unemployment issues in the country. On the other hand, companies consistently express their struggles in attracting and retaining the right talent. Is this a manpower problem, a question of candidate

employability, or a lack of adequately skilled individuals among recent college graduates? Does this issue pertain exclusively to India, or is it a concern worldwide? Furthermore, can it be attributed to the cohorts of graduates who emerged during the Covid-19 pandemic or a more extensive global crisis?

Let's delve into this multifaceted issue, attempting to understand its nuances and exploring potential solutions.

Firstly, the audiovisual field is a very unique and niche field in itself. Many senior executives in this field have climbed the ladder based on their experience rather than their education. The simple reason is that there is no specific engineering stream that teaches or covers the entire audiovisual subject comprehensively. The field is mainly a blend of Electronics and Telecommunication but lacks a thorough understanding of sound, its physics, and acoustical behaviour. Moreover, the advent of AV over IP has introduced various computer signal protocols and the need to understand network protocols in the field. This unique combination has already made it challenging to directly hire engineering

graduates, and campus recruitments have become almost impossible for the AV field, making it challenging to find a talent pool.

Furthermore, the recent post-Covid crisis has exacerbated the situation. One of the most significant global challenges following Covid-19 that has affected industries and their smooth operation is the uncertainty of one's life. Employees and others have come to realise the importance of health, family, and the issue of mental health, as well as the need for a work-life balance. This has led to a re-evaluation of life and its goals. Employee priorities have shifted dramatically, and the effects of this shift became evident once the world returned to normalcy. Employees began considering self-employment, remote work, and alternative careers. Career aspirations have been pushed down to the third or fourth priority in many cases. The results of this shift have been observed in the form of what's now known as the 'Great Resignations,' a global phenomenon.

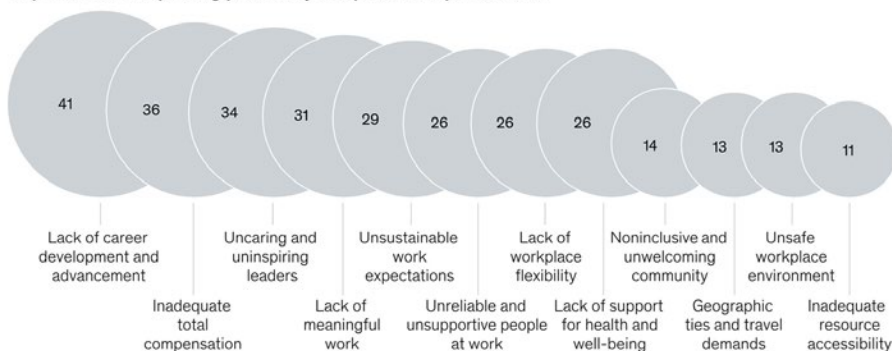
Industry Shift: A significant portion of employees chose to transition to different industries, leading to a substantial reshuffling effect. According to the survey, this shift is quite substantial, with 48 percent of respondents moving to new sectors, thereby creating shortages in their previous fields.

Flexible Work Endeavours: Approximately 29 percent of individuals explored flexible work options, departing from traditional occupations. This encompasses a range of choices, including temporary gigs, part-time roles, freelancing in emerging technology sectors, and venturing into fresh and innovative opportunities.

Life Priority Changes: For many, changes in life priorities have prompted job changes. Career aspirations have taken a backseat as

Continued on page 36

Top reasons for quitting previous job, Apr 2021–Apr 2022, %



Source: Subset of respondents from McKinsey's 2022 Great Attrition, Great Attraction 2.0 global survey (n = 13,382), including those currently employed and planning to leave (n = 4,939), those currently employed and planning to stay (n = 7,439), and those who quit their previous primary jobs between Apr 2021 and Apr 2022 (n = 1,154)

AV-ICN Expo 2023 took place across three days, from 25th May to 27th May, 2023 at the BEC, Mumbai. With 44 pro AV global exhibitors occupying Hall 2, displaying a gamut of groundbreaking technologies along with innovative products, and with a unique visitor count of 21,659 over the three days, the AV-ICN Expo has once again marked its presence as the torchbearer for the AV industry in India, proving once again, that international brands can no longer ignore the impact AV-ICN Expo has created in the world of audiovisual.

PRO AV MASS MARKET MOMENTUM EMPHASIZES AV-ICN EXPO SUCCESS

AV-ICN Expo won the support of the AV industry which was equally determined in creating an alternate AV expo platform that could be trusted to be neutral and independent. The Indian AV industry by virtue of strong IT legacy and very high level of knowledge in integration, communication, and networking boasts of a developed AV ecosystem. The AV professionals thus recognized the need for AV-ICN Expo as providing a just platform to showcase their latest product technology, innovation and frontier-edge engineering in providing solutions for 4G/5G interface and delivery in audio

video - AV over IP. *"Creating the future was the mantra for AV-ICN, and now after witnessing the opposing wind to somehow forestall AV-ICN, the mantra now is determining the future", declared AV-ICN Expo's Founding Director, Anil Chopra. He adds, "The explosion of very high-end AV projects in India in sports, hospitality, education, corporate, devotional and consequently explosion of large system integrators augurs success of AV-ICN."*

Attendees Galore At The AV-ICN Expo:

PALM + AV-ICN Expo witnessed a total

footfall of **27,786** and a unique visitor count of **21,659** across Halls 1,2, and 3 over the course of three days, with the visitors exploring and interacting with state-of-the-art product technology, innovation, and display, while acquiring trade knowledge, insight, and wisdom from reputed industry experts at the **AV-ICN Conference**. The rough estimate for visitor analysis at the AV-ICN Expo 2023 reflects that the show floor was populated with approximately **43% Actual Users** and **57% Trade Visitors**.

With these visitors engaging the exhibitors for business and identifying products for their needs, the show delivered quantum business



to fulfil the demand in the pro AV industry which is exploding – whether it is display, digital signage, or OOH LEDs. The exponential growth in AV conferencing in India with the entire marketplace supported by affordable broadband and the rapid explosion of corporate conferencing has resulted in a massive demand for microphones, displays, and speakers – fulfilled by a massive number of integrators.

A total of 44 marquee exhibitors displayed the latest AV products and solutions at the AV-ICN Expo in Hall 2, while a substantial number of exhibitors covering AV segments such as, but not limited to, install sound, amplifiers, and

more, were at the top of their game in Hall 1. The AV-ICN Expo 2023 saw crème de la crème exhibitors, influential, decisive, key players from the AV market, exhibiting avant-garde products from the game-changing brands, from **Epson, Christie, Aero, BenQ, Optoma, Maxhub, Absen, NVincy, NewTech Video Systems, Lotus Cine Group, and NTeck Systems.**

Narendra Naidu, Chairman & MD, Rhino Engineers Pvt. Ltd., was all praise for the show, *“AV-ICN Expo 2023 was great - I really enjoyed it! It was great to meet OEMs and Systems Integrators from the AV Industry face-to-face and understand their experiences about the*

growth of AV products after the pandemic.”

He further added, *“Coming to CAVS 2023, it was always a unique experience for me to attend such kind of event which leads me to explore new ways of designing technologies in smarter ways while educating the young generation about the professional audio, video, and various types of equipment used in AV Industry Application. Last but not the least, congratulations to the team of PALM and CAVS for managing the entire event on such a humongous scale. Thank you, Anil Chopra, for giving a chance to share my experience knowledge on the subject of professional*

audio system to the dynamic younger generation."

Global Exhibitors Assemble For The Biggest Indian AV Event For The Year

The AV-ICN Expo 2023 witnessed crème de la crème exhibitors, influential, decisive, key players from the AV market, exhibiting avant-garde products from the game-changing brands. Companies, both local and international marked their presence at the Expo with direct participation, propelling, addressing, and catering to the popularity and demand for more innovation, more cutting-edge, and more seamless pro AV solutions. The trade floor was permeated with a display of state-of-the-art AV products and technologies, drawing a massive number of AV-aware visitors to the show, inquisitive and interested in the emergence of pro AV as a pioneering field in the country, and delivering a clear message – from this moment onwards, the AV-ICN Expo cannot be ignored.

At the AV-ICN Expo, **Aputure** exhibited the **INFINIBAR**, the brand's first RGBWW full-colour LED pixel bars. Offered in 1-foot, 2-foot, and 4-foot lengths (the PB3, the PB6, and the PB12, respectively), each INFINIBAR Pixel Bar features a pixel density of 24 pixels per foot.

Astera LED displayed the **Astera HydraPanel**, a beam shaped panel with six light modifiers and a large range of mounting options, which makes the product more flexible than any other product in its class.

BenQ showcased the **RM03A Interactive Display Panel**, the industry-first octa-core processor- equipped interactive display series, the **LK935 – 5500 ANSI lumens high brightness 4K**

laser projector, the **LH730** – world's first high brightness 4LED projector, the **EH620** – world's first windows-based smart projector, and the **VS20**, a wireless presentation device.

The EH620 is an all-in-one full HD smart projector, with a built-in windows 11 operating system and Intel processor, enabling wireless and PC-less meeting rooms. The LH730 is the world's first high-brightness 4LED projector, featuring a 4LED light source (an additional green LED diode), which increases the perceived brightness of the projected image by a factor of 1.5x~2.4x. BenQ's LK935 is a 5500 ANSI lumens high brightness 4K UHD laser projector with 92% Rec. 709 colour coverage, enabling users to create large displays in conference rooms, auditoriums, and theatres. The RM03A Interactive Display Panel is industry's first octa-core processor-equipped interactive display

series for the performance-oriented education and corporate sector. BenQ's driver-free wireless presentation and collaboration device, InstaShow VS20, comes with a native 4K image quality transmission and an intuitive microphone with echo cancellation that provides users with an easy, secure, and efficient way of wireless presentation and video conferencing experience during hybrid meetings.

Canara Lighting displayed the **LED Space Light**, the **LED LINEAR WASH**, the **JEET light**, the **LED Jagle Panel**, and the Canaflo lights at the AV-ICN Expo. The LED Space Light is an excellent quality Canara LED Bi Color space light with dimming option for creating many effects for multiple applications. The LED LINEAR WASH is a high-quality LED Wash Light consisting of 18pcs LEDs, having various beam angles to support a variety of light distribution for different applications, including floodlighting, wall grazing and asymmetric wall washing. The JEET Light is perfect for indoor and outdoor use, with a protection rating of IP 20 and IP 66. The light is flexible to handle with a lifetime of more than 50,000 hours, CE and RoHS complaint, 5 times brighter than HMI. The LED Jagle Panel is true to its name, which is a derivative of Jaguar (which denotes high speed) and Eagle (which denotes sharp), the LED Jagle Panel imbibes the spirit of light in form and function; and is dubbed as a "dream for all lighting designers." The Canaflo Lights are high-quality LED soft light with high CRI for different applications, including flood lighting, photography, and video applications.

Gigatronics exhibited the **Audio Cable 1813A**, the **Audio Snake Cable 1512C**, **High-Speed HDMI Active Optical Cable with Detachable Connector**, and the **USB 3.0 Type-A to Type-C Active Device Repeater Cable**. The **Belden Audio Cable 1813A** is a profession-



Aputure's booth at the AV-ICN Expo captivates the visitors with its first RGBWW full colour LED pixel bars called INFINIBAR



At the AV-ICN Expo, Maxhub's booth delivers spectacular visual display with the V6 Classic Series' 75" Interactive Flat Panel For Display among a spectrum of other corporate AV solutions



The BenQ booth at the Expo, with the LK935 4K projector on display

al-grade two-conductor audio cable designed to deliver superior audio quality with minimal interference and noise. The Belden Audio Snake Cable 1512C is a high-performance audio cable designed to deliver exceptional audio quality for professional audio applications. The High-Speed HDMI Active Optical Cable with Detachable Connector is a 20 m (65 ft.), 4K@60Hz UHD, HDMI Male to Micro HDMI Male (Type D) and Detachable HDMI Male (Type A), featuring HEC, ARC, Gold-plated Contacts. The USB 3.0 Type-A to Type-C Active Device Repeater Cable is a USB-A Male to USB-C Male Cable, which is 10 m (33 ft.), SuperSpeed USB (USB 3.2 Gen 1), featuring 5 Gbps, built-in signal booster.

Lead Vision Electronics displayed the **Lead Vision P4.8 outdoor rental screen Full Color LED Screen**, the **Lead Vision P3 indoor rental screen Full Color LED Screen**, the **Lead Vision P6 outdoor rental screen Full Color LED Screen**, and the **Lead Vision Indoor Poster Cabinet**. The Lead Vision P4.8 outdoor rental screen Full Color LED Screen comes in the size of 576×576mm×65mm with 4 modules. Each module offers a pixel size of SMD 1921 and density of 43264 dots/m². The P4.8 cabinet comes with Nova receiving card and life span of 100,000 hours with a refresh rate > 3840 HZ. The P3 Indoor Rental Screen Full Color LED Screen features a size of 576×576mm×65mm with 9 modules. Each module offers a pixel size of SMD2020 and density of 111111 dots/m². The P6 Outdoor Rental Screen Full Color LED Screen comes in the size of 576×576mm×65mm with 9 modules. Each module offers a pixel size of SMD2525 and density of 27777 dots/m². The Poster Cabinet is available in the size of Height 192 cm X Width 64 cm X Depth of 4.8 cm. This cabinet has 24 modules with bracket or base installation options.

Nteck Systems exhibited the **WiFi - DIN-Rail 8-Channel Digital Input Output Module**, the **IPEVO-V4K Ultra High Definition USB Document Camera-Flyer**, the **EMCEE200**, and the **TOTEM**. The WI-IO-8 is a Din rail Digital Input & Output 8-Channel module that provides eight digital input dry contact and eight dry contact closure outputs at 12 Volt. The IPEVO V4K is IPEVO's lightweight, foldable and affordable USB document camera for those who like their doc camera as portable as their laptop. It is plug-and-play and easy to use. The EMCEE200 is a seamless multiview presentation switcher and scaler with Picture-in-Picture (PIP) and Picture-Over-Picture (POP) capabilities.

Optoma India showcased the **ZU2200T**, an ultra-bright professional WUXGA laser projector, the **ZU920TST**, an ultra-bright professional laser projector, the **ZU500UST**, a

high-brightness WUXGA ultra short throw laser projector, and the **ZH406ST**, a compact high-brightness short throw laser projector.

The high brightness ZU2200 professional laser projector fills the need for high-end installations, including the entertainment, exhibition, and digital signage markets. Part of Optoma's Ultra Bright Series, this projector offers incredibly high brightness of 22,000 lumens as well as extreme flexibility with eight interchangeable lenses to meet the needs of even the most complex installations.

At 9,800 lumens with 4K and HDR compatibility, the ZU920TST features a dust-resistant IP5X certified optical engine for 24/7 operation capabilities, offering true maintenance-free projection for up to 30,000 hours of powerful performance in Eco mode. Other features include a motorized zoom and focus, full motorized lens shift and built-in dual 10W speakers. High brightness, color precision and quiet operation, along with a short throw lens make this projector the ideal solution for a variety of end-user scenarios and professional environments, such as short throw digital signage, edge-blending and projection mapping, simulation, and immersive installations. The added control flexibility of HDBaseT and LAN make this projector an affordable install and forget solution.

The ZU500USTe is powered by long-lasting, low maintenance DuraCore laser light source. The lamp-less and filter-free design vastly reduces running costs for a lower total cost of ownership. Weighing only 12.5lbs, this projector can be mounted just inches away from a wall or surface and can project an image size



Optoma's ultra-bright laser projectors at work, delivering exceptional visual projection for a variety of applications



Narendra Naidu, Chairman and Managing Director, Rhino Engineers Pvt Ltd
the technical know-how of a large-scale venue's AV installation with the audience at the AV-ICN Conference

of over 100 inches. Supporting 24/7 operation and versatile orientation, the ZU500USTe is a flexible, powerful and bright ultra short throw projector that makes for a superb signage solution where space or accessibility can be limited, such as shop windows or retail displays.

The ZH406STx is a compact short throw Full HD 1080p DuraCore laser projector. Designed for virtually maintenance-free, continuous operation it can be installed in almost any orientation. Feature packed, this compact laser projector has built-in speakers, is 4K and HDR compatible, and is low maintenance with extremely long-life laser technology. For ultimate control, the projector comes with RJ45 connection allowing you to monitor and control your network in multiple rooms. Perfect for business, education and museums where a clear, bright image is required.

RZone Visual Studio exhibited the **MI BAR Light** and the **PSU 4X-100-V2**. The MI BAR Light is a dynamic and versatile multi-use LED light bar that can be used in wedding events, lounges and bars, social gatherings, clubs, resorts, banquets, and outdoor building lighting. The PSU 4X-100-V2 is widely used in stage lighting, bar atmosphere, advertising display, planetarium and science museum effect embellishment.

VCore showcased the **Private Design Cabinet**, which has connectivity with full power box and hub connection, which is available in several different pixels such as P3, P3.79, P3.84, and P4.8.

But it wasn't just the trade floor that was populated with top brands and innovative products. The exhibitors and visitors at the AV-ICN Expo 2023 were served with a treasure house of knowledge and wisdom at the AV-ICN Conference.

AV-ICN Conference 2023: A Symposium of Intelligentsia

A total of five key AV-centric conferences,

divided over a span of three days, focused on the latest trends, practices, and innovations in the world of Pro AV. The biggest names from the AV industry marked their presence at the Conference to address the audience on what, how, and why the field of AV is undergoing a massive transformation.

CAVS 2023 Galvanizes Indian Pro AV Education:

A highlight feature of AV-ICN Expo, CAVS (Certified AV Specialist) Course played a proactive role in galvanizing Pro AV standards, integration, and process for AV professionals in India. With 50 attendees eager to upskill

conducting day-long sessions on Pro Audio, Video, Integration Networking, and AR/VR respectively.

Aman Prajapati, AV System Engineer, Munro Acoustics, expressed his appreciation for the platform provided by CAVS to AV professionals seeking to upskill themselves from a professional standpoint, "CAVS 2023 was a great opportunity to network with professionals and experts in the audiovisual industry. I was impressed by the quality and diversity of the presentations and demonstrations. I gained valuable insights and knowledge that will help me in my career. I highly recommend CAVS to anyone who wants to stay updated on the latest trends and innovations in the AV field."

AR/VR Registers Unprecedented Success At The AV-ICN Expo:

Ctrl Alt Experience delivered another pivotal feature of the AV-ICN Expo with the revolutionary AR/VR walkthroughs. The company successfully got in touch with numerous clientele who demanded the AR/VR applications, such as 3D AR/VR Virtual Reality Walkthroughs, for their AV consultancies.

This Is Just The Beginning:

The AV industry is growing at an unprecedented rate in India. The AV-ICN Expo successfully mirrored and captured the growth of AV in Hall 2 at the BEC, Mumbai. With exhibitors, innovations, and interactions galore, it was



L to R: Anil Chopra, Founder, CAVS; Sajan Joseph, Co-Founder & CEO, Ctrl Alt Experience; Satyanarayana Reddy, Technical Manager, The Siemon Company; Abdul Waheed, Managing Director, EYTE Technologies; Harshen Naidu, Director, Rhino Engineers Pvt Ltd; Smita Rai, Deputy Project Manager, Hyve India Pvt Ltd

themselves in the field of AV, over the course of three days, the CAVS imparted AV knowledge to numerous attendees, with renowned industry experts such as Narendra Naidu, Arif Patil, Satyanaryanan Reddy, and Sajan Joseph

evident that the Indian AV market is gearing up for the next big revolution in audio and display.

The AV-ICN Expo is set to return to its home ground at BEC, Mumbai from 30th May to 1st June, 2024.

TRANSFORMING LIVING SPACES WITH LUMINA SCREENS' LEOR UST

Lumina Screens, a leading home theatre brand backed by Galalite Screens, leaders in the cinema industry with 60+ years of experience, announced the launch of their latest innovation, Leor UST.

With its unique lenticular structure, Leor UST delivers vivid and immersive visuals with enhanced image quality. It features advanced light-rejecting technology, ensuring exceptional clarity even in well-lit environments. Leor UST's 170 degrees wide viewing cone provides optimal visibility from any angle, making it perfect for cosy family rooms.



Leor UST by Lumina enhances immersive viewing experience with remarkable 16k resolution and superior ALR technology

"Leor UST's superior ALR technology takes your home theatre experience

to the next level," explains **Yusuf Galabhaiwala, Director of Operations, Galalite Screens**. "By precisely blocking ambient light from above and perpendicular to the screen, it delivers vivid, vibrant images while preserving the projector's contrast to enjoy visual clarity even in well-lit environments."

Leor UST's high gain and light shielding delivers stunning 16k resolution and exceptional detail for a cinematic experience at home to unleash full potential of the projector. Lumina Screens' Leor UST revolutionizes the home theatre, bringing cinema-quality visuals to any residential space.

EPSON LAUNCHES EH-LS650B/W 4K PRO UHD LASER TV PROJECTION

Epson has added a new affordable projector for the home to its EpiqVision range, with the launch of the EH-LS650. This latest **4K PRO-UHD Smart enabled Laser Projection TV** comes packed with premium audio and visual features, great connectivity & easy set-up, bringing hassle free viewing to the whole family. Its delicate, streamlined casing and modern design will compliment even the smallest of living spaces making it an ideal replacement to the traditional TV.

Available in either black or white, the EH-LS650 brings the big screen, immersive experience to the home with Android TV for streaming, Chromecast built-in for casting and sound by YAMAHA for impressive sound quality. This delivers easily accessible, shareable and on demand entertainment wherever its needed.

Chromecast built-in is a platform that lets the user stream their favourite entertainment from their phone, tablet, or laptop right to their projector. It's easy to

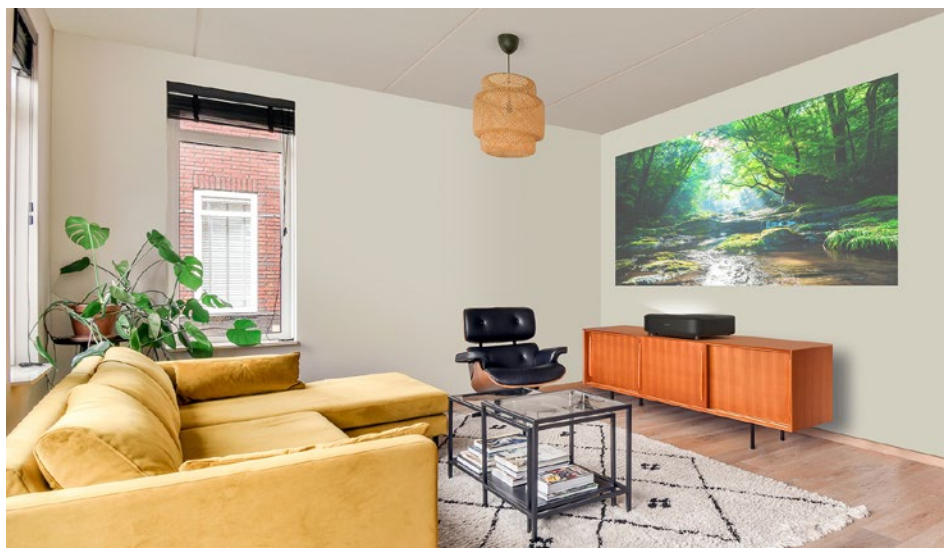
control familiar apps from their iPhone, iPad, Android phone or tablet, Mac or Windows laptop, or Chromebook.

The projector's built-in YAMAHA 20W speakers are stylishly housed in a punched metal cover with the ability to operate as a stand-alone smart speaker. Additionally, with Android TV, the projector offers thousands of movies, shows and games on Google Play, YouTube, and many other popular apps.

Sitting close to the display area, it can project bright images up to 120" with 3LCD technology. With 4K PRO-UHD, images are large, crisp, making it ideal for watching films, everyday TV, sports and with under 20ms input lag, it's great for gaming too.

With plug and play features, it's easy to set up using the Epson Setting Assistant app which automatically adjusts keystone using the smartphone's camera.

Amy Ng, Product Manager for home cinema products at Epson Europe said, "Our latest addition to the EpiqVision family, the EH-LS650 is a stylish yet affordable projector that family & friends can enjoy. Not only does it look stunning, but it also sounds incredible too. It's never been easier to replace your TV and get big screen entertainment in your home."



The latest 4K PRO-UHD enabled Laser Projection TV comes with smart audio and visual features

LG'S FIRST WIRELESS OLED TV IS SET FOR GLOBAL LAUNCH

LG Electronics (LG) is launching the world's first wireless OLED TV, the 97-inch LG SIGNATURE OLED M (model 97M3). The 97M3 is currently available in South Korea, with plans for global roll out to key markets including North America and Europe later this year.

Drawing on LG's technical and design prowess from a decade of OLED innovation, the 97M3 is set to reaffirm the company's leadership in the ultra-large

connect their TVs to various devices and peripheral such as gaming consoles and set-top boxes, and presents them with a new, hassle-free way of managing cables and connected devices.

As the Zero Connect technology eliminates the need to have cables and devices in close proximity to the screen, users can now fully enjoy the immersion offered by an ultra-large screen in a clutter-free space.

in the evolution of TVs. The Zero Connect Box supports a range of connectivity options including HDMI 2.1, USB, RF, LAN and Bluetooth – making it easy to connect various devices or peripherals from gaming consoles to set-top boxes. To ensure the seamless transmission of image and sound, the box identifies the optimal transmission path and has an adjustable antenna that can be positioned according to the screen's location.

LG's proprietary wireless AV transmission solution is able to transmit large amounts of data at up to 3 times the speed of the existing Wi-Fi 6E standard. Impressively, the company's cutting-edge Zero Connect tech even supports Dolby Vision and Dolby Atmos.

LG SIGNATURE OLED M also boasts the company's chic, ultra-modern Gallery Design, which provides a seamless, flush-to-wall mount. Eliminating the need to place a cabinet or table directly near the TV, users can arrange their space exactly how they want it.

In the near future, the 97-inch LG SIGNATURE OLED M will be joined by 83- and 77-inch OLED evo M models with Zero Connect technology, each offering superior OLED performance with wireless AV transmission at 4K 120Hz.

"The technical feat of the 97M3 was made with LG's decade-long commitment to creating new customer value as a market pioneer," said **Baik Seon-pill**, leader of the LG Home Entertainment Company's Product Development Division. "As well as delivering the ultimate viewing experience on an ultra-large screen, our first-of-its-kind wireless LG SIGNATURE OLED M presents customers with a new level of freedom in arranging their living spaces."



The industry's largest 97-inch OLED screen and the Zero Connect Box – 97M3

premium TV segment with the industry's largest 97-inch OLED screen and the Zero Connect Box, the world's first wireless solution capable of real-time video and audio transmission at 4K 120Hz.

LG SIGNATURE OLED M is an OLED TV completely free of cables, excepting the power cord. LG's wireless AV transmission solution was developed to aid users who

LG SIGNATURE OLED M boasts a 97-inch OLED screen (approximately 245 centimetres in diagonal length) and the Zero Connect Box, allowing AV transmission at 4K resolution (3,840 x 2,160 pixels) and 120Hz refresh rate, for a distance of up to 10 meters between itself the screen.

A true innovation, the 97M3 with wireless solution is an important step forward

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11 Questions with Rashid Skaf

President, CEO & Co-Chairman, Biamp



*Serving as the President, CEO & Co-Chairman of Biamp, for more than five years, **Rashid Skaf**, shares his success journey and the big leap in the AV industry with AV-ICN Magazine. Expressing his interest in pro AV in this brief '11 Questions' feature, Skaf mentions how he has established trust and built the global market through organic product expansions, and how Biamp is leading the market growth with high quality audiovisual experiences.*

Please describe your journey in the Pro AV industry.

My journey in AV started when I was asked to join a publicly traded control systems company on the verge of bankruptcy 25 years ago to turn it around. I never imagined I would fall in love with this industry and what it enables. Since then, I have grown companies organically and through acquisitions. I am pleased with the outcomes my team and I have achieved throughout my career in AV.

How would you describe your day-to-day responsibilities at Biamp as the CEO and Co-Chairman?

I see myself as a long-term strategist and day-to-day train conductor. I have an amazing team that all work towards a set of common goals. My job is to remove obstacles that prevent my team from reaching those goals.

What are important milestones in Biamp's history in terms of research and development?

Biamp has a long history of designing products that are easy to use, easy to install, and create high quality audiovisual experiences across a range of venues. Highlights include:

- The introduction of the Tesira platform that defined the standard for programmable processors and still does to this day thanks to continuous updates and enhancements.
- Beamtracking microphones that extend beyond beamforming technology to eliminate hassles with setup and allow users to position themselves and move freely around the room.
- Biamp Launch functionality that automatically detects, configures, and tunes equipment to deliver a professional quality experience at the touch of a button.
- Audio Intelligence/Video Intelligence that brings the power of AI to the pro AV experience, delivering unprecedented levels of audio and video performance with greater flexibility and power than ever before.

What is Biamp's roadmap with respect to developing Unified Communications solutions?

Biamp elevates collaboration with a complete portfolio of conferencing solutions for meeting spaces of any size, certified for leading UC platforms such as Microsoft Teams and Zoom. Biamp makes it easy to put a professional grade AV experience in every UC room that is easy to install and performs superlatively.

As more remote work is taking over the world since the pandemic, how is Biamp's latest MAX Connect BYOM Room Solution making it convenient for the users to enhance meeting experiences?

Biamp MAX Connect offers the same comprehensive experience that users have come to love in dedicated UC conference rooms, now within bring-your-own-meeting (BYOM) collaboration spaces. MAX Connect enables users to walk into any room, with any device, and join a meeting instantly using any video col-

laboration experience, including UC platforms or messaging apps. It is the first and only seamless BYOM collaboration experience: from joining a meeting, to sharing content, to adding remote participants, to controlling room AV, MAX Connect offers the same experience for all meeting participants and makes it easy for IT to manage and deploy.

Biamp recently won the Red Dot Awards for Outstanding Product Design. Can you name the products that caught the attention of the Jury and their credible features?

We are proud to have been recognized for outstanding product design by the Red Dot Awards for a number of products, including the Parl  Video and Audio Conferencing Bars, the Voltera line of power amplifiers, Desono EX Loudspeakers, NPX Network Paging Stations, Vidi 250 4K Video Conferencing Camera, and the industrial design for both the TesiraFORT  X and Devio SCX Digital Signal Processors. We are dedicated to creating extraordinary audiovisual experiences, and part of that experience includes how the user interacts with our products. Thus, high quality industrial design remains a priority for Biamp.

We recently came across a press release about the Biamp's acquisition of Evoko. Could you shed more light

on it and what are Biamp's expansion strategies through this acquisition?

Scheduling is an important part of conference room management, which is a core part of Biamp's business. Evoko's technology complements and enhances our current conferencing solutions nicely. We've been on a path to own the entire conference room space—and part of that experience is knowing you have a space scheduled for you to go into. This provides a nice completion to the overall conference room experience. In addition, with the growing interest in flexible workspaces, desk scheduling is a rapidly emerging market for which Evoko's desk management system is an ideal solution.

Could you describe the growth trajectory of Biamp in India as compared to the rest of the world? Is India a potential market for Biamp?

India is a fast-growing market where we see strong demand for AV solutions across a range of applications. We're very pleased with our progress in this important, tech-savvy market but know our current position is just scratching the surface of what's possible. We're committed to making India a major business geography in the next five years. To that end, we have now have an office and Customer Experience Center in India, offering local product support and repair.

What are a few of Biamp's most popular solutions in India? Can you mention the highlight features that make them stand

out from the competition?

Similar to our other markets, we see great popularity in solutions for conferencing, education, government, retail and hospitality, and large venues within India. Underlying all of it is our Tesira platform, supported by our Parl  microphones, amplifiers, and loudspeakers. In addition, our Sound Masking solution has gained a tremendous foothold in India. The unified and consistent product ecosystem we provide is unparalleled in our industry, and we make it easy to do business across the entire value chain. I am pleased at our continued growth in India.

How do you think the pro AV landscape has transformed in India over the past 5 years?

India is developing rapidly as a global economy with users that are becoming very technically sophisticated. The pro AV market has grown rapidly as well, driven by growth in enterprise, education, and government sectors.

What is your vision for Biamp, in India for the next couple of years?

We aim to expand our channels and partnerships to take advantage of this increasing demand, bringing the full power of Biamp's extensive product portfolio to Indian customers. India will continue to outpace the rest of the world when it comes to innovation, and I'm excited by the opportunities offered by India's dynamic market in coming years.

Hiring New Employees in AV...

Continued from page 27

priorities shifted towards caring for children, dedicating more time to family, and allocating personal 'me time'. This shift in life focus has contributed to workforce gaps within the industry.

In the Indian AV market, one more noteworthy factor is the presence of a few major international AV corporations. As global entities, they can provide significantly higher pay scales compared to the local market rates. This has disrupted the local Audio-Visual System Integrators (AVSIs) considerably. While the future will reveal whether these companies can effectively compete in the price-sensitive Indian market, the issue persists and exacerbates the existing talent shortage in many ways.

What we are witnessing is a fundamental disparity between companies' need for talent and the quantity of workers inclined to provide it. Companies persist in trusting conventional methods to retain employees, encompassing compensation, job titles, and prospects for career advancement. These factors remain crucial, especially for a group of employees who can be called as 'conventionalists.' Nonetheless, the Covid-19 pandemic has led more and more people to reevaluate what they want from a job—and from life—which is creating a large pool of active and potential employees who are rejecting this theory of traditional employers.

Employers must approach this issue with an impartial perspective in order to identify

the most fitting solutions. It is essential for them to examine prevailing trends that illuminate what aspects individuals highly value or strongly disapprove of in their roles. A salient example is the substantial influence of a problematic supervisor in motivating individuals to resign. In the past, a competitive salary could retain employees despite managerial challenges, but this dynamic has significantly shifted since the pandemic's onset. Our survey underscores that disinterested and uninspiring leaders are substantial contributors to employee departures, coupled with a dearth of opportunities for professional growth. Conversely, flexibility emerges as a pivotal driver and justification for retaining talent.

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You need a secure, TAA-compliant solution that gives you real-time access to your data. You need to display, arrange, and operate multiple sources from virtually anywhere for seamless collaboration and quick, informed decisions.

Christie Hedra does all that – and more.

Control rooms | Command centers | Broadcast
Security and surveillance | Public utilities
Transportation | Telecommunications



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