

AV INTEGRATION COMMUNICATION NETWORKING

TRANSFORMING THE FUTURE OF DISPLAY SOLUTIONS

Online Instruments Unveils one of India's Most Advanced AV Manufacturing Facility in Bangalore





11 Questions with Scott Hix, CEO, Avocor Delving Into Avocor's Success and Strategies for The Future

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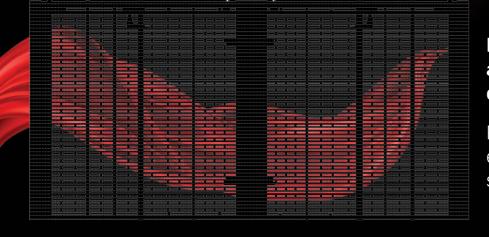


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SENNHEISER UNVEILS SPECTERA AT BROADCAST INDIA 2024

Sennheiser, one of the renowned leaders in audio technology, showcased various audio solutions at Broadcast India 2024, one of the top infotainment technology events. The biggest highlight of Sennheiser's product was the newly launched Spectera, the world's first bidirectional wideband solution.

Spectera leverages groundbreaking WMAS (Wireless Multichannel Audio Systems) technology to reduce the complexity of wireless systems, while enhancing capabilities, streamlining workflows, and offering comprehensive remote control and monitoring. Instead of many individual 200 kHz narrowband RF carrier frequencies, the model uses a single wideband RF channel for audio transmission – bidirectional transmission of audio and control data, to be more exact.

Over 700+ attendees at Sennheiser's booth explored the Spectera ecosystem, engaging in hands-on demonstrations with the engineering team. The ecosystem addresses common challenges faced by users of wireless audio systems, simplifying frequency coordination, rack cabling, and system footprint. By replacing multiple wireless mic receivers and IEM transmitters with a single base station, which, in a single rack unit with 32 inputs and 32 outputs, replaces a rack-full of wireless mic receivers and IEM transmitters. An entire production could be accommodated in a single wideband RF channel (6 or 8 MHz). The lower footprint continues to the bodypacks, which handle mic/line and IEM/IFB requirements simultaneously. Additionally, it offers comprehensive remote control and monitoring capabilities, including audio adjustments, IEM and mic level



Sennheiser Spectera - world's first bidirectional wideband solution

control, RF health monitoring, and more.

Spectera represents a total shift in control and monitoring. It doesn't just offer a back channel, but continuous two-way communication throughout, for truly complete remote control. Via the permanent control data stream, audio settings can be adjusted, IEM and mic levels adapted, RF health and battery status monitored, and much more.

Spectera delivers signature Sennheiser digital audio quality for mics, instruments and IEMs, employing different applicationoptimised audio codecs, which are all internally processed with 32-bit-float precision.

Eleven Audio Link Modes allow for selectable control of audio quality, latency, channel count, and operating range for every audio link, flexibly throughout a production. The operator can always use the RF channel to the maximum, either by giving fewer audio links a high quality or by allowing more links and reducing the quality accordingly.

Spectera's wideband solution is ideal for large productions in the touring, broadcasting, or theatre fields, or in any other area that requires multichannel audio setups. It satisfies the customers' key desires and needs regarding ease of

Continued on page 06

SCT UNVEILS RM-3CP AND RM-3CP-PRO MICROPHONE EXTENSION SYSTEMS

Sound Control Technologies (SCT), one of the industry leaders for camera integration solutions, introduced the RM-3CP and RM-3CP-PRO microphone extension systems for extending up to three Cisco Mic 20/Mic 60 and Table-J/

Table-E microphones from the Cisco Codec Plus, Codec Pro, Codec EQ, Room Bar and Room Bar Pro using standard CAT cable up to 100 meters.

"Our dealer base has been asking for a solution to extend Cisco table mics and codecs," explains President, CEO and Co-founder, **David Neaderland**. "At SCT, we're always trying to tackle the tough challenges—simplifying complex cabling and pushing beyond traditional limita-



tions to offer integrators cost-effective, time-saving solutions. Now, they can enjoy exceptional audio at the conference table without compromising quality, regardless of mic/codec placement."

The RM-3CP natively supports up to

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



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LIGHTWARE DRIVES INTEGRATION OF AV AND IT WITH EXPANDED IP-BASED SOLUTION PORTFOLIO

Lightware Visual Engineering, one of the leading manufacturers of connectivity solutions for the professional integrated systems market and a pioneer in signal management, has set a new industry benchmark in the integration of AV and IT with its expanded portfolio of advanced AV over IP solutions. This positions the company at the forefront of AV (Audio-Visual) and IT (Information Technology) convergence, a trend which is fundamentally changing the way professional AV systems are designed, deployed, and managed.

No longer seen as separate disciplines, AV and IT are becoming seamlessly integrated to provide more efficient, scalable, and flexible solutions for modern enterprises. Central to this transformation is the rise of AV over IP (Audio-Visual over Internet Protocol), which enables the transmission of audio, video, and control signals over standard network infrastructures.

By offering one of the industry-leading product ranges that features the VINX, Gemini GVN, Taurus TPN, and UBEX solutions, Lightware enables enterprises to implement unified AV over IP systems and benefit from transformational integration, scalability and remote management capabilities. Lightware solutions deliver unparalleled AV technological convergence to significantly boost collaboration between AV and IT teams to ensure smooth, unified deployments and meet the growing demands of AV integrators and IT professionals. Its innovative range includes:

• VINX: A network extender for Gigabit Ethernet networks, which offers diverse

LIGHTWARE

LIGHTWARE DRIVES INTEGRATION OF AV AND IT

> to streamline operations, this departmental merging will inevitably lead to some specialist audio-visual knowledge being lost. Moreover, with IT departments being asked to do more with less, there is a demand for simple deployment methods that make it easy to remotely manage meeting room equipment."

AV & IT

By using standard IP networking protocols, IT teams can leverage their existing knowledge of network management tools to monitor and maintain AV systems. This reduces the burden on AV integrators and enables more efficient system management. Lightware systems are also designed to integrate seamlessly with existing IT infrastructures, allowing AV and IT professionals to collaborate effectively. In addition, the rise of hybrid work environments means the ability to remotely monitor, and control AV systems has become essential. Lightware AV over IP solutions allow IT teams to manage AV systems from anywhere, providing real-time diagnostics and troubleshooting.

"The convergence of AV and IT is driving transformational innovation across the industry," said **Gergely Vida**, CEO at Lightware.

application possibilities for applications where scalability, flexibility and rapid deployment are key.

- Gemini GVN: An IP-based matrix switching solution built for mission-critical environments such as control rooms, broadcast centres and high-end corporate use cases, it offers the performance, reliability and ultra-low latency required by the most demanding organisations.
- Taurus TPN: A state-of-the-art device for large meeting rooms, boardrooms, and conference settings. It offers USB-C and SDVoE technology for high-quality HDMI 2.0 4K@60 4:4:4 matrix switching over a 10G network, with a range of up to 100 metres.
- UBEX: A technology that delivers pixelaccurate 4K@60 4:4:4 video in real-time, from live events to E-sports to XR applications, with Dolby Atmos capabilities for the ultimate immersive experience.

Scarlett Woodford, Head of Collaboration at **Futuresource Consulting**, commented, "Our recent Enterprise AV Decision Maker survey found that 65% of dedicated annual AV budgets sit with IT teams, highlighting the convergence between AV and IT teams within enterprises." She explains, "As companies look

SENNHEISER UNVEILS SPECTERA... Contin

use, operational reliability and flexibility. Its minimal hardware significantly reduces frequency coordination, redundancy, and the flexibility of an ecosystem that grows with your needs. Continued from page 04

Sennheiser's participation in Broadcasting India 2024 also included offerings like D6K, EW-DX, Shotgun microphones, Broadcast headsets, Profile USB microphone, and recently launched MD421 Kompakt microphone. These innovative products, designed to deliver unparalleled immersive experiences, solidified the company's position as one of the leaders in the audio industry.

AV-ICN CONFERENCE SERIES: UCC SOLUTIONS

Inviting the leading industry experts to talk about the evolution of unified collaboration and video conferencing, this AV-ICN Expo conference session set its course at the expo this year with panellists including Moderator - Rohan Tadke, Managing Director, RTAV along with Abhishek Pratap Singh, National Product Head, EdTech, PeopleLink Unified Communications Pvt. Ltd., Mayank Jani, CEO, MNT Info Vision and NANTA Tech Pvt. Ltd., Manu Sharma, Territory Sales Manager - India & SAARC, Neat, Grifiths Zachariah, AVP - EMEAIO Sales & Global Alliances, ClearOne. This feature brings a short excerpt from the session, keeping a keen attention towards insightful discussions on stage.



THE FUTURE OF UNIFIED COMMUNICATION: TRENDS & VIDEO CONFERENCING SYSTEMS

Session's moderator, **Rohan Tadke** initiated the discussion establishing its motive – to know more about the evolution of unified communication and how it has evolved over a period of time. Moreover, the interesting discussion tried to dig deep into the challenges that end users or even the manufacturers face in this industry.

Introducing the Video Conferencing Market

Opening the discussion with Grifiths Zachariah, Mr. Tadke asked,

"How do you see the evolution of unified communication and collaboration, since you have been in the industry for so long?" Mr. Zachariah shared, "The journey of unified communication and collaboration has been remarkable, starting from the early days of telephony to hardware-based video conferencing systems. Over time, advancements in software and computing have significantly enhanced processing power and capacity, enabling seamless audio and video communication across various devices, including mobile platforms and open-source solutions. The recent pandemic served as a catalyst, accelerating the adoption of cloud-based video conferencing and establishing the hybrid work model as a cornerstone of modern communication. Looking ahead, the hybrid model is here to stay, driven by the growing demand for technology solutions that support both remote and in-office work environments."

Drawing the conversation towards **Manu Sharma**, Tadke questioned Sharma on his take on the hybrid technologies. Sharma stated, "Not only from the polycom days but even earlier also I've seen the silos where email, phone, and even video conferencing was a silo, evolving into one unified communication piece. Basically, what we have seen in the last 20 years approximately has been the integration of messaging which could be verbal or video and from there on taking it from laptops to rooms or the hybrid world. It's been quite a leap for all of us here."

PeopleLink being one of the oldest companies to start off this technology's revolution, Tadke guestioned Abhishek Pratap Singh about his thoughts on this seamless technology. Singh replied, "I can definitely recall the good old days when video conferencing technology was coming from the west, majorly hardware and it was all fixed structures. We had a concept of fixed rooms for dedicated video conferencing. In 2007, when people were looking at the tangible technologies, it was very difficult for us to convince people about the software. We were competing against platforms like Skype that was free of cost. However, we knew technology was going to take over and that is where our journey started."

The Evolution of UCC Solutions

Video conferencing technologies, in today's era are playing a crucial role in almost every industry. However, in the early days, people found it hard to not only integrate it in their lives but also to manage the technology constantly. Tadke continues the session by initiating the conversation with Mayank Jani finding his perspective as an integration company and interrogating on the growth and evolution of the brand with technology. Jani comments, "When we started working on the audio-video technology, it was point-to-point connectivity in major organisations. However, now the days of needing such connectivity are gone and we have any hardware or software required. As an integration company, the major focus is on customer demands now with flexibility."

One such trending demand is the cloudbased solutions these days. Highlighting Singh's approach from earlier about people's hesitation on using software, Tadke asked Grifiths his thoughts on cloud as the trending solution. Grifiths took the conversation ahead stating, "As the rate of adoption of internet over a period of time and the processing speed to handle the data at a time has exponentially increased, it has definitely helped the adoption of cloud-based technologies. We all know that is also moving into the AI (Artificial Intelligence) side of things."

Al and Cloud-Based Solutions for The Fast-Pacing Era

Speaking of the continuously evolving trends, Grifiths mentioned AI and security in his conversation, which led the moderator to dig more into the two technologies - Cloud and Al. Sharma initiated the conversation for such advancements stating, "From an enterprise standpoint, there are many platforms available on cloud but from a user's standpoint, you have Google Meet, WhatsApp or other software available for free. Of course, security is also a big concern for them. Therefore, people try to work with the known companies only. However, AI can be used in many ways. For instance, cameras capture an entire room as a raw picture but Al's inbuilt intelligence into the software deciphers the human figures and those human bodies are zoomed and divided into equal frames, called a 'symmetry'. So, if there are five people in the room, there will be five frames, going up to 25 people getting relayed to the end using AI to create audio-video and more."

Moving forward discussing where AI technology is going ahead, Singh continued, "As far as AI is concerned, it is difficult to identify where the technology is moving. However, seeing our product journey, it is predictable because all the discussed technologies are leading to virtual solutions, which is getting close to having face-to-face conversations. Therefore, viewing a bigger picture, I feel AI is assisting in getting better videos in terms of quality and even conversion of language is something that AI is working on." Furthermore, Sharma added, "Al assists a lot from an experience standpoint too in terms of the voice front. For instance, if the mics are not properly placed in a room, there can

be an issue of echo. Therefore, AI has to be worked out for echo-cancellation or noise cancellation to avoid the disturbances.

As an integration company, Jani added his perspective stating, "Al is here to make everyone's life easier. From an integrator's point of view, the implementation will be much easier once the Al is fully developed and as far as the audio or video is concerned, experience is also a vital aspect for the technologies."

Challenges and Opportunities with UC Solutions

Talking about the challenges in terms of UC or VC infrastructure built by organisations, Sharma moves the conversation forward stating, "The most important challenge is bandwidth. If we have a great bandwidth, we can get high quality like 4K or include high-end mics but if the bandwidth is not right, transferring it to the other level is an issue. Another major challenge is the security because even with Al, security is a challenge."

Singh added to Sharma's perspective of bandwidth as a challenge, proudly stating, "While we were a part of the launch of National Optical Fiber Network program by India in one of the remotest areas of the country, there was no proper infrastructure, and the government wanted to put the first NOFN project along with the launch of BSNL line. Our chances of failing were high, yet we managed to overcome that and were able to connect to the remotest part of the country over a video link. So, I think bandwidth is a restriction, but we also have the necessary technologies right here in the country to make it work."

While the leading tech sure shares some challenges for the users to look at, it also ensures multiple advantages. On that front, Griffiths responded to the opportunities provided by such technologies from the end-users' or OEMs' perspective, remarking, "One of the global companies have predicted that the total addressable market for the video conferencing devices in 2022 was about 3 billion and by 2027, it's going to be around 7 billion in North America alone. This is a huge increase with a compound annual growth rate of 15%. Knowing India's history, we have noticed record-breaking possibilities. So, I think the total addressable market, or the opportunities are much wider than we see today."





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*Based on Futuresource Consulting. ^Colour brightness (colour light output) in brightest mode, measured by a third-party lab in accordance with IDMS 15.4. Colour brightness will vary depending on usage conditions. Top-selling Epson 3LCD projectors versus top-selling 1-chip DLP projectors based on NPD sales data for May 2017 – April 2018. *3 years or 20,000 hours, whichever is earlier. **BRAND FOCUS: ONLINE INSTRUMENTS**

TRANSFORMING THE FUTURE OF DISPLAY **SOLUTIONS**

Online Instruments Unveils one of India's Most Advanced AV Manufacturing Facility in Bangalore

Smita Rai, Content Head of AV-ICN Expo Magazine, was given a comprehensive tour of the Online Instruments factory at Dabaspete by Siddalingaswamy R, Assistant Plant Manager at the **Online Instruments** IFPD Manufacturing Plant, showcasing the company's commitment to innovation and excellence. This exclusive tour provided a firsthand look at the cutting-edge technology, rigorous quality control measures, and innovative manufacturing processes that Online Instruments has adopted in this new facility.

n a significant milestone, Online Instruments, one of the leading providers of AV solutions in India inaugurated its new fully automated CKD Interactive Displays (IFPD) manufacturing plant in August 2024, in Dabaspete, Bengaluru, spread across three acres in the city. This cuttingedge facility is designed to handle the

entire production process of interactive display panels, kiosks, outdoor LEDs and accessories, encompassing assembly, testing, packaging, and sales & service. The comprehensive setup enables end-to-end manufacturing, incorporating every stage of the process, from start to finish.

After years of successfully providing display solutions through assembled products



Online Instruments' conference room showcases latest 86-inch interactive display

from China, the company is now poised to make a strategic shift. Their goal is to establish a strong local presence, catering to the government sector and beyond, with innovative, Made-in-India technologies that align with the country's vision of self-reliance.

online

ne Instrutints (India) Ltd.

With this new facility, Online Instruments aims to provide top-notch technologies to the Indian pro AV market. The company's diverse product range of cutting-edge displays, offer superior image quality, touch sensitivity, and durability and will benefit educational institutions, government orga-

Siddalingaswamy R, Online Instruments at its manufacturing plant in Bengaluru

nizations, R&D labs, and more. The facility is equipped with fully automated robotic technology, enabling the production of almost 400 Interactive Flat Panel Displays (IFPDs) per day.

Smita Rai, Content

Head of AV-ICN Expo Magazine and

INSIDE ONLINE INSTRU-MENTS' STATE-OF-THE-ART MANUFACTURING FACILITY

Smita Rai, Content Head of AV-ICN Expo Magazine had the opportunity to tour the state-of-the-art facility, gaining a firsthand look at the latest advancements in the



The manufacturing plant is equipped with fully automated robotic technology, enabling the production of almost 400 Interactive Flat Panel Displays (IFPDs) per day

manufacturing unit.

Online Instruments' newly inaugurated factory is a testament to the company's commitment to innovation and excellence. The cutting-edge facility boasts a sleek and modern design, with a sprawling layout that seamlessly integrates state-of-the-art manufacturing technologies.

The facility has a total area of 1,20,000 sq. ft., including the ground floor office and warehouse, ensuring efficient production, manufacturing, and delivery of the LED displays.

The impressive external structure of the factory not only reflected the company's dedication to quality and precision but also served as a symbol of its ambition to revolutionize the display solutions industry with two high-capacity assembly lines, staffed by a team of highly skilled workers, working efficiently to ensure seamless production.

The ground floor of the building welcomed visitors to a spacious lobby area showcasing the products, complemented by modern offices, staff cubicles, and an expansive conference room. Additionally, a vibrant and welcoming pantry provides a comfortable space for employees to relax and enjoy their meals.

The conference room showcased Online Instruments' latest 86-inch interactive display, a shatter-resistant masterpiece that combined sleek design with unparalleled durability. This cutting-edge Interactive Flat Panel Display (IFPD) enabled effortless interaction, allowing users to write, erase, and move objects with precision. Ideal for collaborative environments, the IFPD supports an impressive 40 touch points and 20 simultaneous writing points, maximizing group productivity. Additionally, seamless screen sharing capabilities allow for effort-less content export.

Specifically designed with the education sector in mind, this innovative display enables teachers to create engaging lessons, share content, and track student progress. A unique barcode feature allows teachers to instantly save and share lesson materials with students, making it an invaluable tool for educators.

The fully automated production line at Online Instruments' display manufacturing facility is equipped with 8 to 9 robots, enabling high-speed productivity.

The displays manufactured at the facility undergo rigorous Engineering, Safety, and Testing (EST) protocols to ensure they meet the highest standards of quality and performance.

What sets their displays apart from others is the precision and accuracy enabled by their robotic manufacturing process, which ensures precise fitment placement and supports multiple touch points, allowing for seamless and intuitive user interaction.

A specialized water supply system is integrated into the cleaning process, ensuring a fully automated and efficient cleaning cycle. Once cleaned, the display screens emerge crystal clear, and to maintain their pristine condition, they are designed to be handled without direct contact.

The robotic manufacturing line seamlessly positions the screens onto respective pallets. The panels are then transferred to the aging chamber, which can accommodate up to 42 units at a time. Every two hours, the panels undergo rigorous testing at a temperature of 45 degrees Celsius, simulating extreme conditions.

Once testing is complete, the pallet is automatically returned via the conveyor system, making way for the next batch of panels to undergo the same rigorous testing and quality assurance process.

This additional testing phase involves a comprehensive evaluation of all critical components, including the motherboard, SMPS board, assembly, and speaker. We maintain exceptionally high standards and refuse to compromise on quality.

The factory features a series of display dashboards that provide real-time visibility into the entire manufacturing and testing process, offering a comprehensive overview of production metrics, upcoming plans, and previous and ongoing outputs. This integrated system, controlled by Online Instruments' system, enables seamless monitoring and control of every stage of production.

At the time of Rai's visit, the factory was poised to commence full-scale operations, with testing in its final stages. Before initiating full-scale production and operation, Online Instruments wanted to make sure that the factory underwent a meticulous 100% quality and safety check. Given the intricate nature of the materials and processes involved, the automation team meticulously fine-tuned every detail to ensure absolute accuracy. Since the production line is designed to run continuously without interruption, it was crucial for the company to guarantee flawless quality and safety standards from the outset. The company has also implemented a robust after-sales support system. "With the aim to keep our after-sales services up-to-the-mark, we have built sales and services offices in every area around the country," said **Pankaj Bellad**, Business Head at LOGIC.

CONSOLIDATION AND EX-PANSION: A NEW CHAPTER FOR ONLINE INSTRUMENTS

For almost three decades, Online Instruments has had a stalwart presence in Whitefield, manufacturing an impressive array of AV, display, and lighting solutions. In a strategic move to consolidate their operations, the company is relocating this facility to a brand-new site adjacent to their state-of-the-art factory, with the majority of their seasoned staff making the transition.

With the inauguration of its state-of-theart manufacturing facility, Online Instruments has reaffirmed its commitment to delivering top-notch AV solutions to the Indian market. By leveraging cutting-edge technology, innovative manufacturing processes, and a robust quality control framework, the company is poised to revolutionize the Indian pro AV market and cement its position as a leading provider of display solutions.

THE FUTURE OF UNIFIED COMMUNICATION: TRENDS...

WRAP UP

THE STATE

Bringing more insightful discussions to the table, the panellists further dived deeper into the discussion about security with AI and the technical possibilities that are advancing day-by-day. The discussions also move towards the evolution of video services with satellite bandwidth companies coming up, various questions put forward by clients to OEMs and integrators while talking about installing software, how aesthetics play an important role keeping in mind the ease of use for end users, how important it is to adopt the emerging technologies in audio for a seamless experience, how to integrate the technologies from a management perspective, and so much more.

Continued from page 08

In Rohak Tadke's words, "The only way forward is to look for better integration and more evolvement of technologies like unified and video communication."

To view the entire insightful conversation by the expert panellists, visit the link: https://www.youtube.com/ watch?v=I-RJk41ocJ4&t=155s.

Bring the cinema legacy to your home.



TECHNOLOGY FOCUS: AI IN AV



Contributor: Abdul Waheed, CTS, Managing Director, EYTE Technologies Pvt. Ltd.

A rificial Intelligence (AI) is transforming every facet of our lives, from home automation through devices like Alexa and Google Home to wearable health technology and advanced in-car navigation systems. As AI becomes integral to our daily routines, the AV industry is similarly evolving, with AI-driven technologies reshaping modern offices, meeting rooms, and training spaces. Through these adaptive solutions, AI is redefining how we work, interact, and learn in AV environments.

Enhancing Meeting Room Productivity with AI

Al is revolutionizing productivity in meeting spaces by automating and optimizing AV setups. Advanced room sensors can detect occupancy, automatically adjusting AV equipment to match user preferences. Facial recognition can further personalize the experience by adjusting lighting, temperature, and AV settings based on individual preferences. Additionally, data collected from these interactions

THE ROLE OF ARTIFICIAL INTELLIGENCE IN THE AUDIO VISUAL INDUSTRY

From automating designs to sharing data-driven insights, Artificial Intellgience has been at the forefront providing unmatched solutions today. In this feature, **ABDUL WAHEED**, CTS, Managing Director, EYTE Technologies Pvt. Ltd., talks about the role of AI in AV and how AI is redefining the way we work in an AV environment.

is analyzed on centralized servers, driving continuous improvement in AV system efficiency and user satisfaction.

Al in Digital Signage

Digital signage has advanced beyond static displays to become a dynamic tool for engagement. With Al, digital signage can tailor content based on viewer demographics like age and gender, heightening relevance and engagement. Smart cameras embedded in signage systems track foot traffic and viewing patterns, offering valuable data insights that enable businesses to optimize content strategies and measure audience engagement, ultimately enhancing ROI.

AI-Powered Video Conferencing Systems

Modern Video Conferencing (VC) systems are equipped with Al-driven features that elevate both visual and audio experiences. Al-enabled cameras now support auto-framing, speaker tracking, and ambient light adjustments, providing a seamless, broadcast-quality experience. In virtual classrooms, these features help cameras follow presenters, creating an engaging and interactive environment for remote learners. Real-time translation, live transcription, and automated meeting summaries simplify meeting documentation, breaking language barriers and improving accessibility.

Al in Digital Signal Processing for Enhanced Audio

Digital Signal Processors (DSPs) equipped with AI capabilities are setting new standards in sound quality. These DSPs automatically adjust audio levels based on room acoustics and size, ensuring clarity across spaces. Dynamic microphones with AI-guided features adjust gain and suppress echo in real-time, adapting to the speaker's position for consistent audio quality, enhancing communication in meetings, training sessions, and events.

Continued on page 23



EverGlow **AIRPORT SCREENS**







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P2.5 INDOOR TIMES MUMBAI AIRPORT T2 ARRIVAL 12.6 X 8.4 FT



P3 INDOOR TIMES COIMBATORE AIRPORT 21.00 X 6.30 FT.



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XTREME MEDIA ENTERS THE GRADUALLY PROGRESSING HOME ENTERTAINMENT SEGMENT

THE BRAND'S BIG LEAP INTO RESIDENTIAL AV

Xtreme Media made a remarkable impact at InfoComm India 2024, unveiling groundbreaking advancements in LED display technology. Among their highlights was the launch of the Spectra home LED display series, thoughtfully designed to elevate home entertainment to extraordinary levels. The launch of the Spectra series reflects the brand's commitment to redefining home entertainment experiences.

The brand identified a gap in the pro AV home market for premium, highly customizable, and technology-driven LED displays, making it take this big leap to provide immersive visual experiences. With a legacy of delivering LED display solu-

Delivering Mesmerizing Visuals with Spectra

One of the standout features of Spectra is its customizability. It comes in different sizes—108", 135", and 163"—to fit various spaces. It also comes in different pixel pitches. The LED video wall provides an impressive range of advanced features including:

Multi-layer calibration: Engineered for flawless visuals, this technology ensures precise color uniformity of 97%, delivering stunningly accurate images.

Deep black: Experience vivid, lifelike visuals with deep black technology, providing superior contrast and anti-reflection performance from every angle.



With cutting-edge technology delivering vivid clarity and lifelike colors, Spectra home LED display series ensures that users experience mesmerizing visuals

tions across sectors, the foray into the home segment is a natural progression.

Xtreme Media aims to stay ahead by combining advanced technology with consumer-centric design. The Spectra Series is built with features like HDR10 picture quality, multi-layer calibration, low power consumption, customizable sizes and bezels. The brand will continuously upgrade its product line by integrating innovations such as higher refresh rates and seamless connectivity to meet and exceed customer expectations. **True color:** With the capability to display trillions of colors, Spectra sets new standards in visual brilliance and realism.

Customizable Bezel Options: Customizable bezel options elevate the display's aesthetic, offering a sophisticated and seamless integration with the home's interior design.

Dust and Humidity Protection: Built for durability, Spectra features anti-knock, anti-shock, anti-dust, and anti-moisture protection, ensuring safety and durability. Sleek Design on Smooth Surface: Designed for elegance and performance, the slim profile of Spectra complements any surface, effortlessly blending with various architectural styles.

Standing out amongst its competitors, this LED video wall shares a comprehensive list of features including 4K LED with HDR10 picture quality, color uniformity of up to 97%, high contrast ratio with impressive viewing angle, ultra-fine pixel pitch in all ranges for unmatched clarity, customizable sizes (108", 135", and 163") and bezel finishes (metallic, wooden, gold, rose gold, yellow gold), true color technology with trillion colors and anti-reflection features, dust and water resistance for enhanced durability, and high brightness and low power consumption due to common cathode technology.

Strategizing the Market with Home LED Video Wall

According to the brand, key factors involved in affecting the overall home segment in the AV industry include rising demand for immersive audiovisual entertainment experiences, need for spacesaving yet impactful designs, importance of reliability and long-term service, and customizability to match modern home aesthetics. Xtreme Media's Spectra Series is designed to address these factors by offering sleek, anti-reflection, true color technology LED displays along with customizable bezel options that add to the overall home aesthetics.

Keeping in mind the ever-evolving home entertainment segment in India, Spectra is designed for individuals seeking premium solutions to elevate their home entertainment experience, blending audio visual technology with elegance for a truly immersive and luxurious viewing environment. These individuals reside in tier-1 cities where there is more likeliness to buy home LED displays. With time, we also aim at expanding to tier-2 and tier-3 cities.

Mentioning the brand's keen inter-

Continued on page 17

MAXHUB INTRODUCES THE E21 SERIES

MAXHUB, one of the global leaders in communication and collaboration technology, announced the launch of its new E21 Series interactive flat panels, designed to elevate learning and collaboration in both educational and business environments. The E21 Series is now available through

MAXHUB India authorized partners, ensuring that users have easy access to this innovative technology that promises to transform their digital experiences.

The E21 Series introduces a host of advanced features aimed at revolutionizing how users interact with technology. With intelligent touchscreen technology that supports up to 40 touch points, the E21 Series enables smooth and precise interactions, making it ideal for presentations, writing, and collaborative tasks.

Understanding the importance of eye health, MAXHUB has incorporated TÜVcertified Eye Care technology in the E21 Series to reduce blue light and screen



E21 Series to harness the power of technology

flicker, thereby minimizing eye strain during prolonged use. Additionally, an optional antibacterial screen is available, enhancing hygiene in shared environments like classrooms and meeting rooms.

Connectivity is made simple with the

E21 Series, featuring a versatile Type-C port that allows for seamless integration of webcams, microphones, USB drives, and other devices, all while supporting device charging up to 65W. The displays provide vibrant visuals with a brightness of 400 nits and excellent color accuracy, complemented by integrated 20W speakers that deliver rich, high-quality audio for presentations and media playback, ensuring an engaging experience for all participants.

CHRISTIE JAZZ SERIES HITS THE RIGHT NOTES WITH NEW 4K UHD+ PROJECTORS

Christie announced the launch of two new models in its Jazz Series, a family of 1DLP laser projectors that offer exceptional performance. Two 4K UHD+ projectors join the previously announced WUXGA models, which made their debut at InfoComm Asia. The new models, the 4K1600-JS and 4K2100-JS, feature 16,600 and 21,350 lumens respectively, and use Texas Instruments' 0.8" HEP (High Efficiency Pixel) DMD for improved color and contrast and a more efficient cooling system design.

Jazz Series projectors deliver high bright-



Christie's Jazz Series for exceptional viewing

ness and resolution in a manageable and compact chassis, weighing only 29.4 kg

(64.8 lbs.). With its quiet operation, built-in warping and blending capabilities, and a full suite of compatible lenses, including UST, Jazz Series is ready to illuminate a range of projects – from concerts and theme park attractions to museum exhibits and projection mapping.

The new projectors seamlessly create a complete Christie solution with optional Mystique automated camera-based alignment, and compatibility with Christie Intelligent Camera to trigger autofocus, automatically calibrate projector color, optimize color uniformity, and more.

XTREME MEDIA ENTERS THE GRADUALLY PROGRESSING... Continued from page 16

est in entering the home entertainment segment, one of the spokespersons from Xtreme Media stated, "We aim to demonstrate Spectra LED display at events and exhibitions to push the brand into the residential AV segment. Moreover, we are also planning to leverage digital platforms, influencer collaborations and experiential demos to highlight the product features. We are looking to incorporate product demos at our experience centers spread across India too."

The demand for active LED displays is steadily rising, with affordability driving

growth. In the home segment, currently favored by premium customers, the brand foresees broader adoption. As technology evolves, home LED displays will transition from a niche luxury to an accessible yet premium solution for all, reshaping modern living spaces.

AV INDUSTRY

XTREME MEDIA EXPANDS WITH GALLUS TECHNOLOGIES: EXPERIENCE CENTRE NOW OPEN IN CHANDIGARH

Xtreme Media, in collaboration with Gallus Technologies, inaugurated its stateof-the-art experience center in Chandigarh on 29th November 2024, marking a significant milestone in the region. This partnership signifies a shared commitment to excellence, with Xtreme Media and Gallus Technologies striving to leave an indelible mark on Chandigarh's technological landscape.

This launch will provide businesses and

technology enthusiasts with an unparalleled opportunity to explore innovative LED display solutions without the need to travel to distant locations.

The Chandigarh experience center showcases Xtreme Media's innovative range of LED displays designed to revolutionize various applications through their vibrant visuals and unmatched quality. Visitors can immerse themselves in the transparent LED display from **Iris series**,



Stronger Together in Chandigarh - Xtreme Media and Gallus Technologies

offering up to 60% transparency, perfect for retail and architectural integration. The L-shaped LED display from Vega series, a centerpiece attraction, highlights creative possibilities in display design. For corporate settings, the fine-pitch LED display from LIT series is tailored to enhance boardroom experiences with impeccable clarity. Additionally, the Nyx Series mosaic screen adds a dynamic touch to the space, blending aesthetics with functionality seamlessly. Additionally, Xtreme Media is a trailblazer in the outdoor LED display industry with displays designed for outdoor settings, a perfect solution to light up Chandigarh city in the long run.

This collaboration marks the beginning of a promising journey aimed at fostering interactive engagements and strengthening business relationships. The Chandigarh experience center stands as a testament to Xtreme Media's commitment to innovation and customer-centric solutions, paving the way for transformative possibilities in the LED display industry. The collaboration marks a new chapter filled with growth and success.

OPTOMA ANNOUNCES VIJAY SHARMA'S PROMOTION TO MANAGING DIRECTOR, OPTOMA INDIA AND SOUTH ASIA

Optoma, one of the leading brands in projection and display technology worldwide, announced the promotion of **Vijay Sharma** to Managing Director, Optoma India and South Asia. Vijay who has been promoted from his current role as Country Head, will continue driving growth and build a strong foundation for Optoma and will be responsible for new business expansion, company operation and team expansion across India and South Asia region.

Having proven himself in his previous roles, Vijay has assumed his new position and will keep an eye on the overall growth of the company to achieve new milestones. In his new role, he will also oversee Optoma's operations in India and South Asia and will lead efforts to enhance customer experience, expand market reach and bring innovative products to market.

With extensive industry experience, Vijay has gained valuable experience working with well-known companies such as **BenQ**, **Hitachi, Toshiba, CISCO**, etc. His professional career spans over 19 years, covering sales, channel management and team management, making him a well-rounded industry veteran. He will work closely with the management team to continue Optoma's commitment to innovation, customer satisfaction and sustainability in the projection technology industry.

Vijay Sharma has been instrumental in launching innovative products in the region, including advanced projectors and



Vijay Sharma, Managing Director

display solutions suited for a variety of sectors including education, business and home entertainment. Focusing on local partnerships and customer - cantered strategies, he aims to position Optoma as a favourite option of South Asian display solutions.

AIRTAME APS DENMARK ANNOUNCES DISTRIBUTION PARTNERSHIP WITH NTECK SYSTEMS FOR INDIA MARKET

Airtame announced partnership with Nteck Systems, distributor of professional AV-IT products and solutions in India region. Airtame offers a simpler, smarter, and more engaging shared screen experience,

offering solutions for hybrid conferencing, screen sharing, and digital signage. Anyone can effortlessly share from their personal device to the screen on the wall, whether

a student in the classroom or a team member in a hybrid meeting space. Airtame products are designed to be compatible with products from Logitech, Shure, Poly, Jabra, Aver, Bose, Sennheiser, INOGENI and EPOS, and with soft codecs such as Zoom, Microsoft Teams, Cisco Webex and Google Meet. Partnering with Airtame was therefore a natural fit for Nteck Systems.

Nteck Systems continues to focus on key relationships across the collaboration category and the ability to provide complete solutions for hybrid and col-



laborative work environments and elevating the conferencing experience. Partnering with Airtame will allow Nteck Systems to further enhance their product offering to allow simpler integrations for Screen Sharing, Digital Signage and provide complete Hybrid conferencing solutions to their partners across India region.

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Nataraju Upputuri, CEO & Co-Founder at Nteck Systems, is proud of this new partnership. "This new partnership enhances our UC&C portfolio, allowing us to offer our customers an a-list brand for collaboration solutions."

> "We are very pleased to be partnering with Nteck Systems. In addition to being a well-managed organization, Nteck Systems

provides a comprehensive product portfolio of complementary solutions for Airtame to be sold with. Nteck Systems have experienced technical, presales & support team to provide a value-added sales approach to help us further develop business with the Pro AV channel." said Fritz Andersen, Distribution Head MEA & APAC at Airtame.

INFLOW TECHNOLOGIES PARTNERS WITH NEAT TO ENHANCE VIDEO COLLABORATION SOLUTIONS IN INDIA AND SAARC

Inflow Technologies, one of the leading distributors of technology products and solutions, announced a strategic partnership with Neat, one of the renowned providers of innovative video collaboration technology. This collaboration appoints Inflow Technologies as Neat's value-added distributor for India and the SAARC region.

This partnership will leverage Inflow Technologies' extensive channel network and market expertise to bring Neat's cutting-edge video collaboration solutions to a broader audience. Businesses across India and the SAARC region will benefit from enhanced connectivity and seamless communication, empowering them to thrive in today's digital landscape.

Neat's Country Lead for India and SAARC, **Manu Sharma**, commented on the partnership, "We are thrilled to welcome Inflow Technologies as our value-added distributor in India and SAARC. With their robust channel network and deep market insights, we are confident that this partnership will accelerate our growth in the region. Together, we aim to bring Neat's exceptional video collaboration technology to more businesses, helping them connect and communicate effortlessly."

Rajesh Kumar, Sr. Vice President of Inflow Technologies, stated, "We are excited to partner with Neat as their valueadded distributor for India and SAARC. This collaboration aligns perfectly with our mission to provide innovative and high-quality solutions to our customers. We look forward to a successful partnership that drives growth and enhances connectivity for our clients."

VIZRT'S ANNOUNCES NEW CEO

Vizrt has announced **Rohit Nagarajan** as its new CEO, marking the next phase of the company's global growth. Nagarajan joins Vizrt with over two decades of experience in the technology industry. He has held pivotal roles across multiple geographies at SAP, SoftwareONE, and Salesforce. Nagarajan's focus will be on scaling Vizrt's international growth, and enhancing its offering for customers, partners, and users. **Michael Hallén**, who sat as Vizrt's CEO for the past eight years, has set a strong foundation for this next chapter. Hallén oversaw the joining of NewTek and Flowics into the Vizrt ecosystem to expand its legacy in broadcast graphics to live production and into the cloud, alongside the development of NDI.



Rohit Nagarajan, CEO, Vizrt

AV-ICN CONFERENCE AND SEMINAR

29 - 31 MAY, 2025, BEC, MUMBAI

The AV-ICN Conference sessions pave the way for the growth and development of the AV industry, with dynamic topics that align with the ever-evolving Indian AV landscape. The highlight is the presence of a knowledgeable lineup of key AV industry experts and thought leaders at the AV-ICN Conference platform, captivating attendees with engaging panel discussions and a diverse series of seminars across the three days focusing on topics like MicroLED, Future of Unified Communication, Hybrid Classrooms, Pro AV Managed Services, AV over IP, AV and IT Convergence, Pro AV Project Market Challenges and Opportunities, and many more. This knowledge platform provides attendees a valuable opportunity for learning and networking as AV industry experts provide insights on emerging trends, best practices, and imminent course of the AV and Systems Integration industry, thereby empowering delegates to elevate their businesses to new heights.

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Gangasagar Amula Absen Indi

Manu Sharma Territory Sales Manager India & SAARC Neat





Narendra Naidu Chairman & Managing Director

Punit Rastogi Managing Directo v It stems F



Vineet Mal Direct Unilumin

shant Govindan)irector. India Generation AV

AV-ICN 2024 CONFERENCE SPEAKERS



Grifiths Zachariah Area Sales Director, West AVP - EMEAIO Sales & Global Alliance ClearOr



Su Piow Ko AET Displays Limited



Mayank Jani CEO MNT Info Vision and NANTA Tech 1 td



Rajesh Patkar Country Manager



Rhythm Arora Chief Technical Officer Qubix Technologies



Sanket Rambhia Director Xtreme Media Pyt Ltd



Abdul Waheed Managing Director ries



Meet Shah Country Business Head (USA) PeopleLink Heified Communication



Rohan Tadke Managing Director RTAV



Kuldip Kamat Managing Director Allwave-AV Systems



Abhishek Pratap Singh National Product Head, PeopleLink Unified Communications Pvt. Ltd.



Ashish Bajaj Director, Enterprise Sales Harman Professional Solutions, India & SAARC



Mustafa Rampurawala (CTS) - HEAD Projects SISPL



Sajan Joseph Co-Founder & CEO Ctrl Alt Experience



Kelvin Ashby-King Principal Consultant Clarity Consulting

CASE STUDY: CONFERENCE ROOM SOLUTIONS

ClockAudio's and ErthPot's cutting-edge audio technology deployed at Gujarat State Co-Operative Agricultural and Rural Development Bank Ltd.

PINK NOISE PROFESSIONALS DEPLOYS GUJARAT STATE CO-OPERATIVE AGRICULTURAL AND RURAL DEVELOPMENT BANK WITH STATE-OF-THE-ART AV SOLUTIONS

The latest installation in Ahmedabad, Gujarat by **Pink Noise Professionals** was setup to deliver a 29-seater conference room with the installation of advanced audio systems for optimal conferencing, covering the project within a month. Read on to explore the entire integration process as shared by Pink Noise Professionals exclusively with the **AV-ICN Expo Magazine** team. he Gujarat State Co-Operative Agricultural and Rural Development Bank Ltd recently upgraded its conference room, transforming it into a modern communication hub. This 29-seater conference room was equipped with cutting-edge audio technology to deliver exceptional clarity and seamless audio experience for high-level meetings.

PRODUCTS INSTALLED

Clockaudio CRM102FN Microphones: 29 Clockaudio CRM102NRF microphones

were installed to ensure high-quality voice capture for each seat. Renowned for their noise-reduction and clarity, these microphones provided precise audio capture, making them ideal for large boardrooms.

Erthpot Keyer 1616 DSP:

Two Erthpot Keyer 1616 DSP units were deployed for dynamic audio signal processing, ensuring perfect sound distribution, minimizing feedback, and providing clear, balanced audio across all microphones.

INSTALLATION PARTNER

The project was carried out by **4inside Enterprises**, an experienced AV installation service provider based in Ahmedabad. Their skilled team managed the installation with precision, ensuring flawless integration of equipment within the conference room setup.

CHALLENGES AND SOLU-TIONS

Achieving Uniform Audio Clarity:

The size of the room and the number of seating positions required careful planning to ensure uniform audio clarity. The

Clockaudio CRM102NRF microphones were selected for their superior performance in large conference environments, ensuring each participant could communicate without interference.

Efficient Audio Signal Management:

The Erthpot Keyer 1616 DSP units processed audio signals efficiently, delivering consistent sound quality and reducing feedback. This ensured every participant could hear and be heard clearly.

Two Erthpot Keyer 1616 DSP units were deployed for dynamic audio signal processing, ensuring perfect sound distribution, minimizing feedback, and providing clear, balanced audio across all microphones.

OUTCOME

The 29-seater conference room now offers an exceptional audio experience, significantly improving internal communications for the bank. The system delivers unparalleled sound quality, making meetings more productive and efficient.

Pradip Sidhdhapura, 4inside Enterprises, stated, "We are proud to have been part of this prestigious project with Pink Noise Professionals Pvt Ltd. The combination of Clockaudio microphones and Erthpot DSP has truly elevated the audio standards in the conference room, ensuring crystal-clear communication for all participants. The installation went smoothly, and the results have exceeded expectations."

CONCLUSION

This project highlights the successful collaboration between 4inside Enterprises and Erthpot, delivering a state-of-the-art audio solution tailored for the banking sector. The use of advanced audio technology ensures the Gujarat State Co-Operative Agricultural and Rural Development Bank Ltd now has a robust, reliable, and modern conferencing setup.

THE ROLE OF ARTIFICIAL INTELLIGENCE... Continued from page 14

CENTRALIZED DATA COL-LECTION AND ANALYTICS

Al enables centralized data collection and analytics in AV settings. Systems can monitor and analyze room and equipment usage, providing insights into hours of operation and device-specific usage. This real-time data helps with predictive maintenance, optimizing the design of future meeting spaces, and determining the ideal number of rooms and AV resources needed.

REAL-WORLD APPLICA-TIONS OF AI IN AV DESIGN

• Room Scheduling and Analytics: In a recent project, integrating NFS software with Crestron scheduling devices provided clients with analytics on room usage, aiding decisions on office layouts, room sizes, and AV equipment choices based on the need for video conferencing or general use. • Facial Recognition for Access Control: One unique application involved using facial recognition technology to open doors only when a smile was detected, fostering a positive workplace atmosphere.

- Occupancy-Based Environmental Adjustments: In a Mumbai project, sensors under seating tables detected occupancy, allowing for automatic lighting and environmental adjustments based on real-time occupancy, enhancing energy efficiency and ambiance.
- Voice-Activated AV Controls: Collaborating with an architect in Mumbai, the team designed an office with voice-activated assistants for AV control. Users could command AV devices through natural language, while Al-enabled DSPs optimized room acoustics and adjusted camera focus based on participant count, greatly improving the user experience.

THE FUTURE OF AI IN AV TECHNOLOGIES

The future of AI in AV is rich with possibilities. Emotion recognition algorithms could enable AV systems to detect users' emotions, creating more responsive environments. Real-time translation and subtitling features will facilitate seamless multilingual communication, while AIpowered, context-aware content delivery will personalize recommendations based on location, time, and social context. As these innovations evolve, AI will make AV systems increasingly immersive, inclusive, and adaptable to user needs.

CONCLUSION

Al is a powerful enhancer of human creativity and expertise, not a replacement. As we embrace these advancements, Al will continue to drive AV industry's evolution, fostering intuitive, efficient, and interactive environments that elevate the user experience and unlock new possibilities.

PRO AV MARKET: TRENDS & TECHNOLOGIES

The Future of Pro AV Industry: Emerging Trends Shaping 2025

In this AV-ICN feature, Alok Anand, Director-Marketing, Asia Pacific, Kramer AV shares his inputs on the future of pro AV industry and the emerging trends that will advance the forthcoming year with multitude of seamless opportunities.

ver the past decade, developments in the Pro AV (Professional Audio-Visual System) industry have been phenomenal, especially in the APAC region. According to a recent report by Mordor Intelligence, the APAC pro AV market size estimated at USD 47.23 billion in 2024 is expected to reach USD 66.44 billion by 2029, growing at a CAGR of 5.54% during the forecast period (2024-2029). Pro AV solutions offer video conferencing, web streaming, and live broadcast services making it easier for teams across different geographies to communicate, collaborate, and work together. Thanks to AV and IT coming together to facilitate and build this new ecosystem. The report also attributes the pro AV systems' high growth to fast advancements in audio and display technology, rapid adoption of cloud solutions, the introduction of smart buildings, the expanding IoT ecosystem, and the rapid adoption of artificial AI.

This feature explores key pro AV technology predictions in Asia Pacific that will define 2025.

Al-driven AV

Al is revolutionizing various industries today including the pro AV domain, bringing about unprecedented changes in this space, enhancing learning, and meeting experiences. AV systems are getting reshaped by Al and new features are being introduced. Advanced Audio AI algorithms enhance voice clarity, remove background noise, reduce audio feedback, and are now able to identify speakers too. Al-powered systems are improving meeting experiences by framing, tracking and even automatically focusing on people. In the coming days, we can expect Al-driven features to further elevate seamless AV experiences creating intelligent audio adjustments and a more engaging and interactive environment for learners in remote locations.

· AV over IP

Traditional AV setups are now transitioning to AV over IP (Audiovisual over Internet Protocol), where users can transmit data or switch video or audio signals through LAN, WAN, or Internet Cloud. By doing so, organizations can benefit from cost efficiency, increased flexibility, and scalability, besides enabling long-distance transmission.

Separating audio and video signals over IP (Audio over IP) offers several advantages with Dante Audio as the leading protocol. Dante Audio offers uncompressed multichannel, low-latency digital audio, and interoperability between numerous products. AV over IP equipment has diverse codecs for handling video and audio and proprietary codecs used by manufacturers deliver high-quality video at low latency. Video codecs that optimize bandwidth and ensure smooth transmission over IP create a scale and flexible matrix using the network.

Immersive AV

The landscape of AV design is fast changing with evolving consumer behavior and growing demand for more immersive and engaging content. There is a demand for



Contributor: Alok Anand, Director-Marketing, Asia Pacific, Kramer AV

bigger displays and higher video resolution which is increasing from 4K to 8K with the latter becoming the new UHD standard. In the coming days, we will see the quality of displays reaching greater heights with higher definition. 8K displays and projectors are becoming more prevalent and so are the cameras and mobile devices. A bigger canvas is used to create captivating environments. Video walls, displays, and projection surfaces are getting larger in all spaces and industries, be it, corporate or entertainment.

Smart AV

loT is playing a key role in defining smart AV environments today and this trend is fueling the transition to smart offices. AV systems are increasingly getting integrated into the organization's IT and facilities solutions (Smart AV) as part of its ICT strategy. AV control systems' seamless integration

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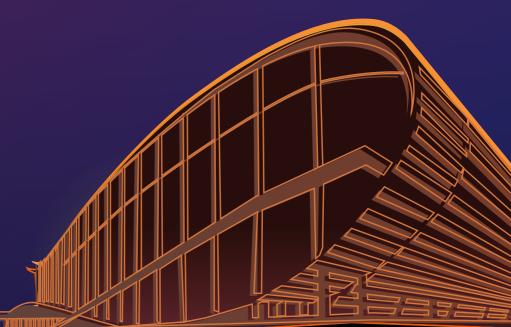
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ALL WAVE AV SYSTEMS TRANSFORMS KPIT TECHNOLOGIES, PUNE, INDIA

Revamping Auditoriums with Advanced Audiovisual Solutions

All Wave AV Systems, one of the leading systems integrators specializing in flexible workplace solutions, recently completed a cutting-edge AV installation at KPIT Technologies, an Indian multinational corporation which provides engineering research and development services to automotive companies. This transformative project improved KPIT's ability to connect, collaborate, and communicate efficiently. The dedicated team at All Wave AV shared a detailed case study with AV-ICN Expo Magazine, highlighting how they upgraded the venue with cutting-edge AV technology. he client envisioned an advanced auditorium equipped with state-of-the-art audiovisual technology to facilitate immersive learning experiences, dynamic presentations and seamless collaboration.

As **Rajesh Vaidya**, FLM Director, **KPIT** put it, "The communication within the project team was excellent and the coordination among support teams was also good. The project team did a great job at coordination, ensuring that the project timelines were well-maintained."

CHALLENGES FACED

1. Outdated audiovisual equipment



KPIT's Auditorium integrated with leading brands' comprehensive audiovisual solutions

hindering effective communication:

Prior to the intervention, the client's auditorium was equipped with outdated audiovisual systems that struggled to deliver clear and immersive communication experiences. This limitation hindered the effectiveness of presentations and lectures, impacting audience engagement and understanding.

2. Lack of coordination among different audiovisual components resulting in inefficiencies:

The disparate nature of the existing audiovisual setup led to coordination challenges, resulting in inefficiencies during events and presentations. Without seamless integration and coordination among components, the client faced difficulties in managing and operating their audiovisual infrastructure efficiently.

3. Inadequate support for modern presentation techniques and interactive sessions:

The existing setup lacked support for modern presentation techniques and interactive sessions, limiting the client's ability to engage their audience effectively. Without the necessary tools and technology, the client struggled to deliver dynamic and engaging presentations that met the evolving needs of their audience.

PROVIDED SOLUTIONS

Working closely with the client, the team developed a comprehensive audiovisual solution tailored to their specific requirements. Here's an overview of the key components installed:

Display System:

The team integrated a high-resolution LED wall processor by **Novastar (4K Prime)** to drive the LED wall, ensuring vibrant and crisp visuals along with a 65" Sidefill Display with custom brackets for optimal viewing angles.

Display Support System:

Installing cutting-edge AV solutions at the venue, the team integrated a customdesigned floor box with HDMI, data, and power connectivity, providing seamless integration with the auditorium setup. All-WAVE AV's team also recommended a **Cisco network switch** with 48 ports for robust network connectivity.

Video Conferencing (VC) System:

The team deployed **Sony PTZ Cameras** (SRG-A12 for Trainer, SRG-A40 for Audience) with **IP-based Joystick Controller** (Sony RM-IP500) for versatile camera control while utilizing Inogeni HDMI to USB Capture Card for efficient video capture. They also supplied a thin client PC for wireless presentation capabilities.

Audio System:

All Wave AV's committed team installed amplifiers and DSP for pristine audio output and sophisticated signal processing along with **Sennheiser's** wireless microphones and receivers for clear and reliable audio transmission, a **Studiomaster AIR16U Analog Mixer** for versatile audio control, and **KME ILS 64 FOH speakers**, mounted in the walls of the auditorium.

Lectern

The integrators provided a customdesigned lectern with USB charging, power sockets, LED light, and an openable flap for convenience during presentations.

Control System

They also implemented **Cue Systems Versatile D AV controller** for centralized control of audiovisual devices and installed custom wall mounts for iPads to streamline user interaction and control.

Cables & Connectors

The team supplied high-quality bulk cables for audiovisual and collaboration needs, ensuring reliable connectivity.

Services

The team offered comprehensive installation, testing, and commissioning services, along with system development and one-year onsite support. They also programmed DSPs to enable complete AV control via iPads, enhancing user experience and convenience.

RESULTS ACHIEVED

1. Enhanced communication and collaboration among presenters and

The solutions installed included Inogeni HDMI to USB Capture Card for efficient video capture and Sennheiser's wireless microphones and receivers for clear and reliable audio transmission.

audience members:

By upgrading to state-of-the-art audiovisual technology, the team facilitated clear and immersive communication experiences within the auditorium. The high-resolution LED wall processor and strategically placed displays ensured that visuals were vibrant and crisp, capturing the audience's attention and enhancing comprehension. Additionally, the deployment of advanced VC systems enabled seamless remote collaboration, allowing presenters to engage with remote participants effectively.

2. Streamlined operation and control of audiovisual devices, leading to smoother presentations:

Through the implementation of a comprehensive control system and customdesigned floor boxes, the efficient team addressed the coordination challenges faced by the client. Centralized control of audiovisual devices simplified operation, allowing presenters to focus on delivering their content without disruptions. The integration of network switches and high-quality cables ensured reliable connectivity, minimizing technical glitches and downtime during presentations.

3. Modernized infrastructure supporting a wide range of interactive teaching and presentation techniques:

The revamped audiovisual infrastructure provided the client with the flexibility to adopt modern presentation techniques and interactive sessions. The inclusion of wireless presentation capabilities, customdesigned lecterns, and advanced audio systems empowered presenters to deliver engaging and interactive content. Additionally, the provision of essential accessories such as trolleys, tripods, and AV racks enhanced the versatility and functionality of the auditorium, enabling the client to accommodate diverse event requirements seamlessly.

CONCLUSION

In conclusion, the team's collaborative efforts resulted in a transformative upgrade of their auditorium audiovisuals, addressing key challenges, and unlocking new possibilities for enhanced collaborative experiences. By meticulously analysing client's pain points and tailoring the solution to their specific requirements, All Wave AV's team successfully modernized their infrastructure while ensuring seamless integration and operation.

AV INTEGRATION

INFONICS TECHNOLOGIES LIGHTS UP IPL 2024 AND EXPANDS OPERATIONS

Infonics Technologies, one of the leading providers of innovative technology solutions, has once again demonstrated its prowess by playing a pivotal role in bringing the electrifying Indian Premier League (IPL) 2024 to millions of fans worldwide. The company's cutting-edge technology powered the live telecast for Reliance Industries Limited's Viacom18 Media Private Limited, elevating the viewing experience to unprecedented heights.

Infonics' state-of-the-art P1.9 and P2.5 indoor LED video walls were instrumental in delivering stunning visuals that captured the intensity and excitement of every match. These high-resolution displays provided crystal-clear images and vibrant colors, immersing viewers in the action.



Infonics Technologies' P1.9 and P2.5 indoor LED video walls at IPL 2024

Furthermore, Infonics' innovative XR studio model revolutionized the broadcast environment. By seamlessly blending realworld elements with virtual graphics, the company created immersive and dynamic studio sets that enhanced the overall viewing experience. This groundbreaking technology allowed for the creation of visually captivating and engaging content.

To further strengthen its position as one of the global leaders in technology solutions, Infonics recently inaugurated a new state-of-the-art manufacturing unit in Mumbai. This strategic expansion will enable the company to meet the growing demand for its high-quality products and services, while also fostering innovation and job creation.

This successful collaboration between Infonics Technologies and Viacom18 Media Private Limited underscores the company's commitment to pushing the boundaries of technology and delivering unparalleled visual experiences. By leveraging its expertise and innovative solutions, Infonics continues to shape the future of broadcasting and entertainment.

DEFENCE ORGANIZATION, PUNE MEETS HIGH-END AV SOLUTIONS WITH PEOPLELINK

PeopleLink announced the successful installation of its solutions at the Defence Organization, Pune, with the conjoined collaboration of its partners. The client required a versatile setup for their boardroom and training center, all in the same space. The team delivered AV excellence by integrating 98"



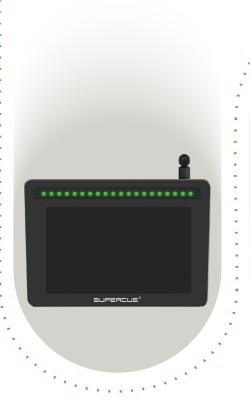
interactive display with OPS, PTZ 30x cameras, digital podium with signage, delegate conference system, amplifier and wallmounting speakers, and complete wireless local/VC audio solutions. The dual-purpose room solution is tailored for inperson and virtual meet-

ings. Certified with 'Make in India' and listed on GeM, PeopleLink's solutions are set to empower communication and collaboration with cutting-edge technology.

To feature Product Launch News, Industry News, or AV Installation News, contact: Ritika Pandey | Email: ritika.pandey@hyve.group

TECHNOLOGY FOCUS: MEETING ROOM SOLUTIONS

Contributor: Bhavani Raj, Marketing Director, AV Master Technology





HOW CUE CLICKERS ARE PLAYING MAJOR ROLE IN EVENTS, CONFERENCES, AND MEETING OR BOARD ROOMS

Traditional **Cue Clickers, Cue lights** have changed considerably, and mostly for the better. While some feel that they have a crucial role to play both in events and in corporate meeting rooms, board rooms more broadly, others are in a state of flux. In this feature, **AV Master Technology's BHAVANI RAJ** discusses his viewpoints and outlines why he feels Cue Clickers are one of the key solutions and imperative for the meetings or in the events. vent managers and AV rental partners claim that they are an indispensable tool for effective and efficient PPT switching between the laptops during their big conferences and meetings. Indeed, it comes with green laser pointer which strongly reflects or points out on the LED Screen in order to provide the seamless viewing experience.

There is no doubt that some earlier advances in technology have been very influential, such as those related to the **Cue light**, **Speaker timer**, **deliberator**, **Cue Slide Advancer**, and **Cue Mini**. Devices such as **Cue Commander**, **Super Cue**, or **laser pointer** were invented a few years ago, and now nearly every LED Screen rental company, AV, and Event Management have all or some of these in their production house, making their work much easier. Though they have been improved over time, they still carry out much the same purpose as when they were first invented.

However, if we look at some more recent developments, they have had a much greater influence than in the present. For instance, there is the Super Cue which is a significant development when invented to help many professionals. Although developed a year ago, technological developments over the last few years have enabled the cue systems to now super cue light versions this has had incredible impacts on the way professionals use the 433 MHz digital communication technology for the small, medium, and large-scale conferences.

LEDs, Video Walls and Displays: The Future of India's AV Market

he Indian market is witnessing a significant surge in the adoption and use of LED displays across various sectors, including residential, retail, and smart cities. This growing demand is driven by the increasing need for engaging visual experiences, improved communication, and enhanced ambiance.

In the residential sector, LED displays are becoming increasingly popular for home entertainment and décor. Brands like **Xtreme Media** are launching new home segment LED displays, catering to the growing demand for premium home entertainment experiences.

The retail sector is also driving demand for LED displays, with shopping malls and complexes being equipped with large-format LED video walls, digital signages, and other LED-based displays. According to a report by *Indian Retailer*, the retail outlet construction segment is set to establish malls in major cities, including Mumbai, Delhi, and Bangalore and many more Tier-I and II cities.

The Indian government's 'Smart Cities Mission' is also providing opportunities for the adoption of LED displays in smart cities. LED displays are being used in various smart city applications, including public The Indian AV industry is undergoing a significant transformation, driven by the growing demand for professional audiovisual solutions across various segments. The market is witnessing high-end transformations, particularly in the areas of corporate, education, hospitality, and residential spaces. One of the key drivers of this growth is the increasing adoption of various display technologies like LEDs and Video Walls. These visually stunning displays are being used in a wide range of applications, from corporate boardrooms and educational institutions to hospitality venues and luxury residences.

As the Indian AV market continues to evolve, brands, systems integrators, AV consultants, and OEMs are working to keep pace with the rising demands.

information displays, traffic management systems, and urban décor.

LED video walls, in particular, are gaining popularity in India, with prominent brands like **Christie**, **Absen**, **ViewSonic**, and many more, emerging as key players in the market. Christie, for instance, has achieved a significant milestone in India, with over 250 installations of its direct-view LED video wall solutions across diverse applica-



The growing demand for LED displays and video walls is expected to drive the need for a large number of displays in India over the next two years

tions nationwide.

This growing demand for LED displays and video walls is expected to drive the need for a large number of displays in India over the next two years. According to industry reports, the Indian digital signage market was expected to grow from 1,44,000 units in 2022 to 2,44,000 units by the end of 2024, at a CAGR of 21.1%. Similarly, the Indian LED display market was expected to grow from 50,000 units in 2022 to 1,20,000 units by end of 2024, at a CAGR of 34.6%.

In terms of interactive screens, the Indian market is expected to witness significant growth, driven by the increasing demand for interactive and immersive experiences. According to a report by *Grand View Research*, the Indian interactive display

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Keep a watch on the latest trends and experience a walkthrough to the changing dynamics in this column. Feel free to share market insights from the pro AV industry. Contact: ritika.pandey@hyve.group

AV-ICN CONFERENCE SERIES: CLASSROOMS

Unveiling the latest trends and essential considerations when deploying AV solutions in both enterprise and education sectors, this excerpt from the AV-ICN Expo conference session by Meet Shah, Country Business Head (USA) - PeopleLink Unified Communications Pvt. Ltd. talks about how AV can revolutionize and take classrooms or training rooms to the next level.



Meet Shah, Country Business Head (USA) - PeopleLink Unified Communications at AV-ICN Expo Conference & Seminar

TRANSFORMATIVE ENGAGEMENT: UNLOCKING THE POWER OF AUDIO-VISUALS & HYBRID CLASSROOMS

ow can the lecturers or speakers ensure that thousands of participants logged in from somewhere around the world experience the same environment that the physically available participants get? The ultimate response from the AV industry to this concern has led the market to dig into more opportunities like distance learning ensuring information to reach the masses effectively. With such AV technologies, people are now able to not only share maximum content but also take maximum content in.

Introducing the Era of HyFlex

Evidently, since the pandemic, the pro AV market has kept a keen attention towards hybrid models, be it in offices or classrooms and training rooms. After the increase in demands for video conferencing solutions, the world is striving to improve the ways of working and therefore, the need for hybrid-flexible model is topping the charts.

Initiating the conference session about the recent demands, Meet Shah shares, "A new term has come for hybrid or smart classrooms called **HyFlex**. HyFlex (short for Hybrid-Flexible) is a modern teaching approach that was designed to better accommodate student needs by combining online and classroom-based components. For instance, when we say hybrid, it predominantly means the environment that we create in terms of having physical students in the training session. According to me, pandemic was just one of the reasons and not the only reason to have lifted the video conferencing market."

He adds, "According to the global edtech and smart classroom, market share is projected to reach USD 319.65 billion in 2029, at CAGR of 17.8% during the forecast period, 2022-2029. This is the market we are operating in and that does not just cater to software or interactive displays but the entire solution that can be used by universities, training rooms, institutes, etc. This uprise is going to be contributing to the 320 billion market enabling the technology enthusiasts and manufacturers to provide as many solutions and technically advanced options to the users as possible."

For any efficient video conferencing setup, clear audibility with proper echo cancellation and noise cancellation are some basic requirements for a two-way communication. He continues stating, "One such product by PeopleLink is the All-in-One DSP, which is the high-end cost-effective solution, wherein there is a 2 U rack device with an inbuilt amplifier, inbuilt mixer, inbuilt receiver, inbuilt DSP with a USB port, along with two speakers, one level ear microphone, one handled microphone, and when we provide these kinds of solutions to classrooms, schools or universities it becomes easier for them by simply plug-and-play accessibility."

If colleges, universities, or schools can be shut for any unfortunate events like weather conditions and students can be brought to the virtual settings, why can't we adapt the same approach throughout the year to teach 500-10,000 students or more. With the addition of such advanced technologies, we'll not only be able to reach the masses but also take care of the education enhancement across the country. Meet Shah states, "The core values of HyFlex include Learners' Choice, Equivalence, Reusability, and Accessibility. There are three profiles of learners including Physical Learners, Online Learners, and Offline Learners where the physical profile includes multiple components to host a session. Replacing the blackboards or even projector-based learning with the first component – interactive displays of 55", 65", 75", or even 105", AV industry is advancing the physical education segment swiftly. Some other components meeting the transformative measures in a physical setting include cameras, audio solutions, wireless microphones, amplifier speakers, mixers, podiums, and more that enhance the quality of meeting rooms or training rooms tremendously."

The Big Role Play by Interactive Displays

AV industry is coming up with transformations where not only meeting rooms and boardrooms have a convenient setting, but teaching students has become far easier. AV technologies are now able to generate the learning interest in students with graphical representations popping up on interactive panels. At the session, Shah comments, "Interactive displays are a big game changer in terms of enhancing students' interest. Not to mention, even digital podiums are setting the standards high for learning environments. In fact, nowadays, AV has advanced to a level where podiums come with room automation. If a faculty wants to control the room with lights, ACs, curtains, or even projector screens, they can simply control everything with a press of a button." He adds, "The main concern for the industry is to inform the teachers and the institutes about such technologies and immersive experiences that even the teachers providing online sessions can get."

Emphasising on the importance of limited yet impactful features, Meet Shah recommends a small number of features in an AV solution but all the ones that can be used in a virtual classroom. Having said that, he continues talking about the third type of learning environment, that is completely offline, where students do not want to come to classroom and get through the recorded lectures at their own convenience. Adding to this type of learning, Meet Shah says, "With a proper search engine mechanism lecturers and students get access to the whole portal and students can search lecture or related content any time. Moreover, if as a teacher I'm being able to see 30 people seated and another 30 people in front of me in the big screens through virtual classroom solutions, I will get the immersive experience, utilising my time more effectively because I am able to connect with more than 60 students at the same time."

Connecting with the Cameras

Cameras are another important component in classrooms or training rooms. It's not possible to record a lecture with so many videographers moving physically back-and-forth in a room while recording. Therefore, delivering his viewpoint at the session, Meet Shah states, "Nowadays technology has come to a level where there are all types of cameras, and everybody can have it. If one wants to talk from the podium, it's now easier to put a small webcam and record everything with clear audio and video quality. It's also possible now to install a lecture-attracting where the camera can capture lecturers while they are in motion without shifting them from the centre of the frame and without compromising the audio-video quality."

Challenges and solutions with Virtual Classrooms

Every industry experiences multiple sets of challenges while looking to expand the segment. Meet Shah says, "The first challenge is working with multiple manufacturers. In fact, systems integrators also experience this. We can tell the client that we need to deploy a particular solution but there are almost 15 components that are needed to design it and that requires talking to five to seven different manufacturers. However, now when there are certain OEMs in the market who design the entire solution and provide it in one package, it solves three purposes – first is that people don't have to be trained from various people or manufacturers, second is that integration doesn't require multiple manufacturers, and lastly in post-sales service, it's not necessary to speak to different people." He adds, the second challenge

is the budget. As OEMs or integrators, we need not necessarily propose a full scape telepresence classroom. We can have five or six classrooms with full scape telepresence and another 50 calssrooms with an average setup. The third and the most important one is the quality education to reach the masses. We are trying to educate not only 50,000 students but lakhs because there is always a scarcity of quality teachers everywhere."

Meeting the 'Made in India' Initiative

Ending the session with a heads-up on

our government's most important 'Made in India' initiative, Meet Shah continues, "There's a huge difference between 'Make in India' and 'Made in India'. 'Make in India' probably means having a lot of equipment, doing some tweaking in terms of research and development, and selling it as a Makein-India solution but what we actually want to reach is Made-in-India where every component of the solution needs to be manufactured in India. This will also take the technology to the next level. So, this also is one of the challenges that we need to ensure to cater to. While keeping deployment easy to use and easy to install."

Conclusion

Opening the floor for discussions and quick Q&A, Meet Shah also responds to multiple audience questions about how an OEM, or a manufacturer would cater to technologies needed by students at home, how Smart TVs are a part of the setup, and more.

To watch the entire session and dive into the specifics shared at this insightful session by **Meet Shah**, visit the link: https://www.youtube.com/ watch?v=myZ1GbumY_M

THE FUTURE OF PRO AV INDUSTRY: EMERGING TRENDS... Cont

with IoT solutions enhances user control, and energy efficiency such as optimizing room conditions based on time, occupancy, or usage pattern, thereby creating smart spaces and smart offices. Pre-integrated AV equipment, furniture, and cable management systems for hybrid meeting spaces are designed to shorten implementation time and simplify support.

Cloud AV

As hybrid and remote work models are snowballing, cloud-based AV solutions offering flexibility, scalability, security, and remote management are also transforming AV technology management further. These solutions streamline the audio-visual ecosystem across different customers, vendors, environments, and device operations by provisioning and managing the entire AV infrastructure across networks regardless of location. In 2025, more organizations will invest in cloud-based AV solutions that enable seamless management, operation, optimization, and user experience of AV systems and establish smarter environments.

The Road Ahead

Advancements in the pro AV industry are driving organizations to adopt AV solutions offering superior experiences to the users and staying ahead of the curve. Corpo-

Continued from page 24

rate, education, retail, and entertainment sectors are driving the market's growth. Furthermore, the growing hospitality and event industry's need for advanced pro AV technologies is also boosting the demand for pro AV solutions. Al integration into AV practices is enabling organizations to ensure their communication strategies are innovative and dynamic.

The Asia-Pacific pro AV systems market is poised for significant growth over the next few years driven by technological advancements. Going forward, sustainable pro AV solutions will be in huge demand, setting new standards for innovation and responsibility.

DYNAMICS LEDS, VIDEO WALLS AND DISPLAYS...

market was expected to grow from 30,000 units in 2022 to 70,000 units by end of 2024, at a CAGR of 25.1%.

As the market continues to grow, we can expect to see even more innovative applications of LED displays, video walls, and interactive screens in the coming years. This growth is driven by the increasing demand for LED displays across various sectors, including residential, retail, and smart cities.

Investments by brands like AET LED Displays, Xtreme Media, Avocor, Unilumin, and Mindstec in launching new experience centers are also creating opportunities for the LED display market. These experience centers are showcasing the latest LED display technologies, powering up demand for LED displays among customers.

Continued from page 30

In conclusion, as the Indian display market continues to evolve, it's clear that the next two years will be pivotal in shaping the industry's future. With the growing demand for LED displays, video walls, and interactive screens, the AV market is expected to witness significant growth, driven by the increasing need for innovative and immersive visual experiences.

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Reinventing Conventional LEDs With Impressive LED Video Walls

LED video walls are advancing beyond the typical LED markets. With stunning visual experiences, LED video walls provide high performance and visibility for indoor and outdoor display applications. This feature brings the readers some of the best-in-class LED video walls that have turned the tables for indoor and outdoor viewing in 2024.

Christie Lumia Series LED

For a cost-effective, flip-chip COB (Chip-on-Board) option for premium boardrooms, experience centres, and collaboration rooms, Christie Lumia COB LED video walls are the smart choice. Lumia offers eye-catching visuals and reliability with the ability to create an interactive display that's easier to maintain and less prone to damage thanks to front LED coating.

Key features:

- Seamless LED surface delivers exceptional viewing experiences
- IP2X rating makes it reliable, less prone to daily wear and tear, and cleaning is easier
- Ultra-wide viewing angle lets you see the details from the side
- Excellent brightness with a 10,000:1 high contrast ratio
- With flip-chip technology COB video walls have better heat dissipation reducing power consumption

Technical specifications:

- Pixel pitch: 0.78mm
- Module dimension (W x H): 150 x 168.75mm
- Protection: IP2X
- Pixel density: 1,638,400 pixels/m2
- Maximum brightness: 600 cd/m2
- Contrast ratio: 10.000:1
- Color temperature: 9,300 K (Standard)
- Refresh frequency: 3,840 Hz



Avocor X Series

The AVX-1320 takes visual communication to new heights, combining large-format displays with a modular, easy-to-deploy design. Ideal for captivating audiences in varied settings, it features stunning visual clarity, user-friendly functionality, and innovative modular construction for hassle-free setup.

Key features:

- Ultra slim screen
- · Adapts to various settings for large-scale content delivery
- Modular design to fit into diverse spaces
- Quick-connect tiles enable swift formation of expansive uniform displays

Technical specifications:

- Pixel Pitch: 1.27mm
 - Screen Resolution (W \times H): 2400 x 1080
 - Screen Dimensions ($W \times H \times D$): $3064 \times 1489 \text{ x} 31 \text{ mm} 120.6'' \text{ x}$ 58.6" x 1.2"
 - Color Temperature: 2300 9300K adjustable
 - Contrast Ratio: 6500:1
 - Refresh Rate: 3,840 Hz
 - Operating Temperature: 10°C ~ 40°C



Nevon Solutions' DW Displays

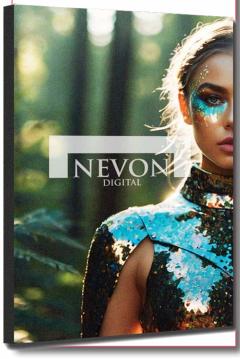
Nevon Solutions offers zero bezel displays for a frameless canvas like feel, accompanied with glare free active LED displays for a realistic content delivery ensuring audience sees content in the most realistic fashion.

Kev features:

- Slim design
 - Easy installation allowing windows to be mounted even with space constraints

Technical specifications:

- Display Type: Indoor
- Pixel Pitch (Px): P2, P1.5
- Brightness: \geq 500 cd/m2
- Refresh Rate: 3840 Hz
- Contrast Ratio: 3000:1
- Storage: 8 GB



Planar Luminate Ultra W Series

Planar Luminate Ultra W Series MicroLED video wall displays are designed to bring high-detail imagery and video to outdoor environments with close viewing distances. Their 16:9 aspect ratio is ideal for full HD and 4K cinema and sports media, while fine pixel pitch supports comfortable viewing from as close as 8 feet.

Key features:

- Complete 115", 145", 173" & 231" sizes
- Customizable with 1.3, 1.6 & 2mm pixel pitches
- 3,000-nit brightness
- Protective GOB coating

Technical specifications:

- Pixel Pitch (mm): 1.33
- Pixel Density (/m2): 648,000
- Power Consumption, Maximum (watts): 210W/cabinet: 840W/m2
- Line Voltage: 100~240v AC, 50/60Hz
- Brightness Max, Calibration On (cd/sq): 3000
- Viewing Angle (50% of brightness): >170° horizontal; >170° vertical
- LED Lifetime (Half Brightness): 100,000 hours





Barco TruePix TP1.2 | TruePix TP1.2-I is Barco's new flagship indoor high-resolution LED platform. The 27.5" inch tiles, with a 16:9 aspect ratio, have a pixel pitch of only 1.2 mm. It is designed for control room, corporate and broadcast visualization applications and supports both environments exposed to ambient light and controlled lighting environments.

Key features:

24/7

- Smart engineering guarantees
- truly seamless outcomes
- Higher brightness, less energy
- consumption
- Smooth and efficient operations,

• Superb color accuracy and contrast, under all lighting conditions

Technical specifications:

- Pixel pitch: 1.27 mm
- Pixel per module: 480x270 (HxV)
- Aspect ratio: 16:9
- LED lifetime: 100,000h (video -
- 50% brightness)
- Brightness: >1800 nit
- Peak brightness: >2300 nit
- Internal processing: 23 bits
- Color depth: 16 bit (281 trillion



Pixel Pro P4 Outdoor LED Video Wall

Pixel Pro's outdoor video walls are designed for maximum visual impact and are ideal for reaching a mobile audience through targeted messaging at specific times and locations. The LED technology used in these video walls provides full-colour, fullmotion, and dynamic displays that can reach large audiences more effectively than other types of displays.

Key features:

- 90-degree viewing cabinets
- All components mounted inside custom made metal cabinet
- Durable and long-lasting, making them a reliable solution for any outdoor setting
- Feasible for all industries, like malls, bars, restaurants, clothing stores, etc

Technical specifications:

- Pixel configuration: SMD1921
- Pitch: 4 mm
- Module resolution: 80pixels x 40pixels
- Pixel density: 62500 (pixel/m²)
- Brightness: ≥6500 (cd/m2)
- Colour temperature: 3500k-9500k
- Viewing angle: 140-degree
- Contrast ratio: 5000:1 (adjustable)



AV INSTALLATIONS: GLIMPSES

Absen Integrates Delhi Airport with Active LED Video Wall

Absen, one of the leading LED display providers, successfully installed an incredible Absen Active LED Video Wall at Terminal 1, Delhi Airport. This state-of-the-art display includes both straight and 90° curved panels, offering a seamless visual experience that captivates travellers and enhances the airport's infrastructure. This is just one of the many projects where Absen has been revolutionising the digital landscape of major airports across India.



From cutting-edge displays to dynamic digital solutions, Absen shares a strong foothold as a part of the transformation journey in shaping how information and visual experiences are delivered in such critical spaces. As India's airports continue to evolve into modern digital hubs, Absen LED Video Walls are playing a pivotal role in ensuring the best-in-class visual communication for travellers.

TOA India Integrates 'Chintan Bhawan' with TS-D1000 Series

TOA India shares the successful installation of TS-D1000 series at Chintan Bhawan in Sikkim state. Stakeholders appreciated the high-quality products brought by TOA for the efficient delivery of the government facility.

TS-D1000 series is a high sound quality and secure digital wired conference system, which received high praise for its reliability with digital transmission, scalability with a maximum of 246 units, and flexibility to be integrated with external devices or software for



expanded applications such as remote communications or synchronized camera controls.

The installation included a total of 146 devices with 1 master control, 1 chairman unit, and 122 delegate units at the assembly hall. Furthermore, the conference room was installed with 1 master control, 1 chairman unit, and 20 delegate units. As a result, it has been adopted in many governmental facilities and highly appreciated within the industry.

Adding to the successful integration, Superintend-ing Engineer, **Sonam Tashi**

Kaleon, added his feedback stating, "TOA's audio systems and audio quality are very good. We didn't find any major challenges installing the series in our project while successfully renovating the venue. The series were installed very easily and efficiently at the facility."

SAR BUILDCON Installs Financial Institution with Dual Active LED Screen

SAR BUILDCON shared the successful completion of a significant project for one of the leading financial institutions at their head office in Bengaluru. The team installed two Active LED screens that are set to elevate the visual experience within the office. First screen is a 7.68m x 1.92m, P4 pixel pitch and second screen beneath the

Nevon Solutions Seamlessly Install Grand Hyatt with World's Largest LED Video Wall Pillars

Nevon Digital installed world's largest LED Video Wall pillars at newly built event Hall at Grand Hyatt Mumbai in October 2024. The video wall consists of four pillars of height 17 feet and circumference of 17 feet. Another significance of the video wall pillars is that the video wall has no edges. The video wall curves its way around the edges to provide a seamless smooth display around pillars.

The installation included display of **P2.5 Indoor LED Modules** that deliver real life colours at 3840 Hz refresh rate combined with a high accuracy custom designed curved cabinet structure. This system is combined with powerful



first is a 2.56m x 0.96m P4 pixel pitch.

From structure design and execution to end-to-end LED installation and commissioning, this was a comprehensive project handled by the dedicated team. There was very limited time during office hours and therefore, the team worked meticulously during business hours to minimize disruptions. The team also braved the rain to complete the installation on time, demonstrating its commitment to deliver quality results under any circumstances.

The team's resilience and dedication contributed to enhancing the workspace of such a prestigious institution.



video controllers to achieve the desired result.

Client initially needed to cover the four pillars that were in the hall and four video walls with sharp edges. However, when the client visited Nevon workshop and saw a demo piece of curved display, they were awestruck and changed their requirements to curved edge pillars.

A detailed recce was performed before the installation at the site, and developing such a unique display system is of course, a challenging task. The team observed the individual pillars were not even throughout. Each pillar had size variations in them. The team faced multiple challenges during the deployment, but the most challenging task was uneven pillars. Nevon's team created multiple demo cabinets to find the best fitting as per the variable pillars until they got a working model which was then fabricated and installed.

"What began as a project to cover ugly pillars became the most important highlight of the hall. The LED pillars mesmerized the hotel staff, hotel owners, delegates and guests alike. No one had seen such a thing before since it's a world's first," stated **Neeraj Prasad Sawant**, Managing Director, Nevon Solutions while sharing the detailed installation with the *AV-ICN Expo Magazine* team.

To share installation stories leading the AV industry, contact: Ritika Pandey | ritika.pandey@hyve.group



Be it a classroom, a corporate meeting room, or a remote working environment, brands like Avocor play a crucial role in providing seamless, engaging experiences that inspire productivity and creativity. In this exclusive feature, Scott Hix, CEO, Avocor talks about the brand's passion to deliver state-of-the-art pro AV solutions and its focus on creating cutting-edge collaboration solutions for the audiovisual world. The interview further delves into the achievements and strategies of Avocor, sharing the success of an inspirational brand for the pro AV industry.

with Scott Hix

CEO, Avocor

1. What are the important milestones in the history of Avocor?

Avocor was founded in Oregon in 2016. Since our inception we have accelerated from a start-up to one of the world's leading professional displays brands, establishing our business in over 80 countries through a dedicated network of over 3,000 resellers and distributors. Today the company stands out as a worldwide frontrunner in collaboration and communication solutions.

We've achieved several significant milestones over the years. In 2018, Avocor became the first company to launch a certified **Microsoft Windows Collaboration Display (WCD)**, a Teams-centric interactive display designed to simplify collaboration. Another notable milestone was the partnership with Google, which resulted in the exclusive co-development of two new Google Meet hardware devices.

Bringing us into the present day, Avocor's recent acquisition by AUO is set to be a significant turning point in the company's history.

2. What transformations have taken place at Avocor since its acquisition by AUO?

Since being acquired by AUO Display Plus, Avocor has undergone a significant transformation. The acquisition has allowed Avocor to integrate AUO Display Plus' extensive expertise in display technology and global resources, which in turn will accelerate growth and enable Avocor to expand its product offering. This partnership has paved the way for Avocor to introduce new product categories, including DvLED displays, digital signage, and other commercial displays.

3. Would you like to share any strategic developments planned globally for the users to soon experience after Avocor's acquisition?

Following the acquisition, Avocor is poised to leverage the global positioning and expertise of AUO Display Plus to drive sustainable expansion and introduce innovative solutions. This strategic partnership aims to offer more diverse product platforms and comprehensive services to customers worldwide in the education and enterprise markets. This also includes the development of products for new vertical markets.

4. Could you shed some light on Avocor's recent announcement of expansion plans in India? How is Avocor strategizing to expand its footprint in the Indian collaboration and AV market?

At Avocor, we have announced comprehensive plans to expand the com-

pany's footprint in the Indian collaboration and AV market. This strategy includes establishing a strong presence in India by appointing and growing a dedicated local sales team and collaborating with best-in-class service providers. Avocor has also partnered with **Shree Info Systems Solutions Pvt Ltd (SISS)** and **Mindstec**, to leverage regional networks and expertise to bring Avocor's solutions to nationwide businesses.

We are also actively building the brand's presence in the government market in India by collaborating with national distributors and leveraging strategic partnerships. In the US, Avocor has deployed its solutions in government offices, including the Contra Costa Country administration building in California. Thereby, making it a market that we already know and understand.

This year, we also opened the first Avocor Experience Centre in India, which launched in partnership with Mindstec and is located in Bangalore. Such initiatives aim to strengthen Avocor's reach as well as support its growth strategy in the region.

5. We noticed Avocor plans to launch new Experience Centre in Mumbai also. Could you share a sneak peek on the launch of Mumbai Experience Centre and the pro AV solutions that are planned to be at display?

Plans are in place to open a new Avocor Experience Centre in Mumbai, following the successful launch of the Bangalore Experience Centre. The Mumbai Experience Centre will showcase a comprehensive range of Avocor's interactive and noninteractive displays, including the new **S Series**, which is designed for educators and students. Visitors to the centre will experience firsthand how Avocor's solutions can enhance productivity, engagement, and communication. 6. Avocor's focus towards corporate and education segment has always been an explorative opportunity for the users. What new can the customers expect in the corporate and the education segment from Avocor?

Avocor continues to focus on the corporate and education segments by offering innovative solutions that enhance collaboration and productivity. Customers can expect new products like the **H Series**, designed for high-performance collaboration, and the **E92 display**, which offers an ultra-wide 21:9 format for budget-conscious users. Avocor's strategic partnerships, including **Logitech**, **Jabra**, and **Lenovo**, ensure that its displays are matched with industry-leading peripherals.

7. Which Avocor products according to you, are unique to the audience and why?

Avocor offers several unique products that stand out in the market. The L Series, with its 21:9 aspect ratio and 5K image resolution, is designed to meet the challenges of hybrid working environments. The X Series introduces a modular, tiled video wall design that simplifies the installation of large LED displays. Additionally, CollabTouch combines Avocor's displays with peripherals from Logitech or Jabra to create a high-performing out-of-the-box collaboration solution.

8. Avocor's high-demand interactive displays have taken the spot amongst some of the best-selling AV products in the market. How is the brand strategizing to maintain the position in the industry and further increase its presence in the global market?

To maintain our position in the industry, we focus on innovation, strategic partnerships, and expanding the Avocor product offerings. The company collaborates with leading brands like Google, Microsoft, Lucidspark and Logitech to develop cutting-edge solutions. Avocor also invests in new product categories and markets to ensure its continued growth and presence in the global market.

9. What business challenges would you say are the most common in the AV industry and how does Avocor, as a brand, overcome them?

AV industry faces several common challenges, including the need for seamless integration of technologies, managing costs, and ensuring user adoption. Avocor addresses these challenges by offering versatile, easy-to-use solutions that integrate with leading collaboration platforms. The company's focus on innovation and strategic partnerships helps it stay ahead of the competition and deliver value to its customers.

10. How do you ensure team's support and exposure at Avocor?

At Avocor we ensure our team's support and standing by providing ongoing training, development opportunities, and transparent communication. The company also collaborates with marketing providers to drive brand awareness and generate product-specific exposure. This approach helps Avocor maintain a motivated and well-informed team that can effectively support its growth and success.

11. What is your vision for Avocor's future growth and development over the next five years?

I expect Avocor's future growth and development to be driven by our partnerships, our talent (Avocor team has deep-rooted backgrounds in some of the most successful UC, display, and AV brands), and global expansion.

Our tagline is 'Connection through Collaboration and Communication', and this is at the core of every technology we bring to market. Avocor's focus on creating cuttingedge collaboration solutions, leveraging its partnerships with industry leaders, and increasing the depth of its reseller partner network will help it continue to grow and succeed in the rapidly evolving AV market.

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To be a part of 11 Questions' CEO Insights, contact: Ritika Pandey | ritika.pandey@hyve.group

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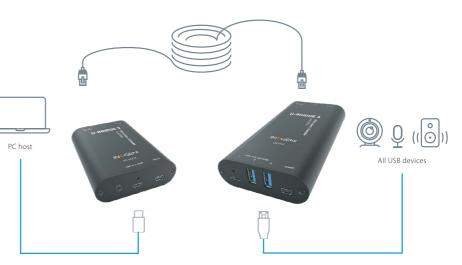
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