

AV Integrated Systems™

DISPLAY • PROJECTION • INTEGRATION • INTELLIGENT AUDIO • BROADBAND NETWORKING

EXPO PROMOTION

RANJIT SINGH'S 'AV IN DIGITAL ERA'



CERTIFICATION COURSE AT AV-ISE 2019.

Theme: AV in Digital Era

Principal Instructor - Ranjit Singh



JBL Professional reinforces Sai Theerth



Bose Professional Forges Beautiful melodies at Hammer & Song, Mumbai





Organize And Reserve Your Meeting Rooms Better

“JOAN” is a wireless, power-efficient, affordable, sustainable. A digital signage solution people can rely on. Show key information about your meeting rooms and office spaces. An easy-to-use device that helps companies organize and reserve meeting spaces and huddle rooms better. Ideal for the corporate, education and government markets, Joan solutions seamlessly integrate with the existing calendar* and Wi-Fi network to improve the way people use meeting spaces.

Best meeting room software does not always have to be complicated and expensive and they can provide multitude of benefits:-

- These software are capable of showing real-time schedules so that employees can book easily
- It will ensure better organisation and coordination in room booking. Less human errors like overbooking or no-shows. This software sends automated messages in case of cancellations or even reminders.
- People working in a 24/7 environment needs a software that supports their time schedules. Flexible anytime access helps the employees to book rooms anytime or anywhere.

JOAN
Meeting Room Booking System

 <p>Joan Executive</p>	 <p>Joan Manager</p>
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Build your smart office. See which Joan is the best fit for your organization.

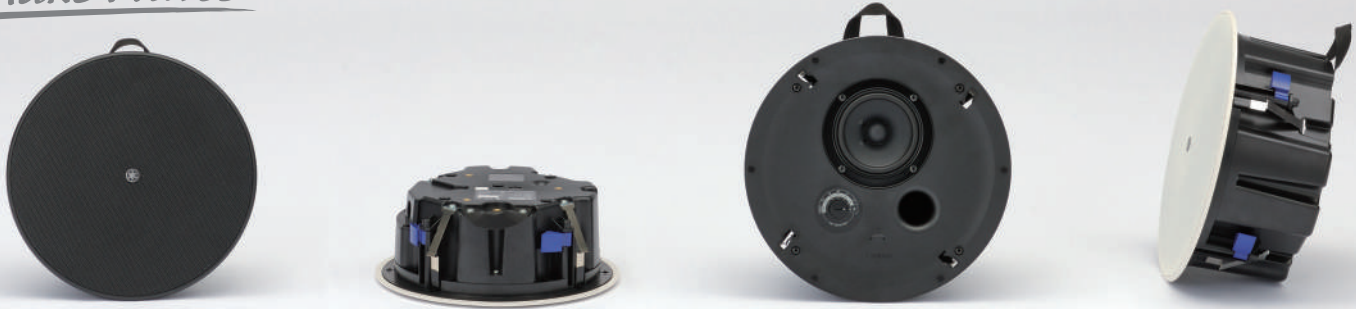
Ideal for the corporate, education and government markets, Joan solutions seamlessly integrate with the existing calendar* and Wi-Fi network to improve the way people use meeting spaces.



* Joan supports G Suite (Google Apps, Google Calendar), Office 365, Microsoft Exchange 2010+ (Outlook), iCalendar (.ics) or CollegeNET 25Live.



• Products • Solutions • Support



SPEAKER SYSTEM
VXC SERIES F

Recommended Applications



Retail Store



Restaurant / Cafe

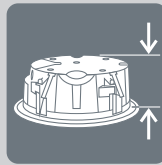


Hotel Lobby

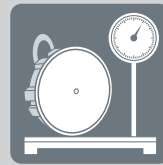
Smart Design for Safer, Faster Installation



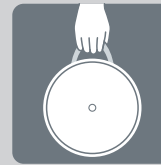
Hi-Z or Lo-Z
Both high-impedance and low-impedance connections are supported, and speaker wattage can be easily switched even after installation.



Low Profile
Reduced physical depth allows installation in ceilings where space is limited.



Lightweight
Reduced weight increases installation flexibility while lessening the burden on installation personnel.



Portable
A built-in carrying band not only makes the speaker easy to carry around, but also increases safety when working on a stepladder.



Secure
An anti-drop tab mechanism securely holds the speaker in place so that the installation can proceed safely and efficiently.



Fast
Double threaded screws used for the speaker clamp mechanism allow the clamps to be tightened twice as fast as conventional screws.



Streamlined
The supplied speaker grilles are firmly and elegantly held in place by powerful magnets. An anti-drop wire is also included.



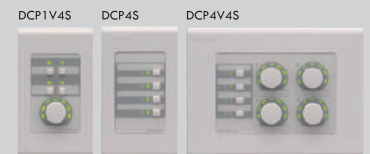
Paintable
The supplied grilles can be painted any color to match interior decor.

POWER AMPLIFIER
MA/PA SERIES
MA2030 / PA2030 / MA2120 / PA2120

Yamaha DSP Features for Enhanced Music and Mic Operation



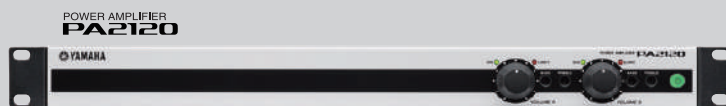
Digital Control Panel
DCP series



US standardized size models



EU standardized size models



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Barco - ClickShare

Incorporating

BROADCAST VIDEO PRODUCER

AV - INTEGRATED SYSTEMS

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Easy, trouble-free presenting

Share ideas and content securely from any device on the main presentation screen

ClickShare products enable power of collaboration in every type of meeting room

CSE-200



CSE-200+



CS-100



CS-100
Huddle



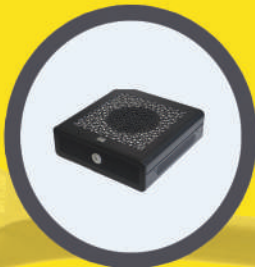
CSE-800



ClickShare

wireless presentation system

Connect via the ClickShare Button or App



XMS Edge - Management Server

Plug & Play server for central management of ClickShare devices

ADAM HALL HOSTS GRAND ENTRY INTO INDIAN MARKET

Adam Hall Group, a global manufacturer and distributor of pro audio and professional LED lighting solutions, hosted an ambitious event 'Tune In – Discover the Difference' on Friday, 15th March, in Bengaluru. The German Pro-Audio, lighting and staging solution major hosted the event to announce its grand entry in the Indian market. The show unveiled a range of products from Adam Hall coupled with a session of interaction with Systems Integrators, Consultants, AV re-sellers, MI players and End User community comprising Government officials, Corporates and Audio decision makers from major Educational institutions. The event was also supported by Adam Hall India's exclusive distributors **Sanjeev and Soham Chawla** of Kripa Electronics India.

Launched for the first time in India, the **Maui P900** was certainly the star of the evening. Introduced to the Indian audience by **Markus Jahnel, COO, Adam Hall Asia**, the P900 is a combination of state-of-the-art audio technology and unmistakable

design created in collaboration with the design agency Studio F. A. Porsche and has already won numerous awards, including the German Design Award, the IF Award and the Red Dot Award 2018. The P900 is the perfect choice for exclusive live events and installation applications requiring exceptional sound quality and sound dispersion. Its stylish appearance and outstanding clarity also make the

MAUI P900 a high-end home theatre system which is both an optical and aural delight. The line of other products introduced at the event included **Maui 5** and **Maui 5 GO**, an ideal set up for environments where an elegant, subtle appearance is needed. The Maui 5 Go is perfect for an outdoor event where no power source is available. The 5 GO comes with an integrated Li-ion battery which according to the



Markus Jahnel, COO, Adam Hall Asia and Chandan Mahtani, Managing Director, Adam Hall Asia with Content Manager of AV Integrated Systems Magazine, Anvita Pillai



Markus Jahnel speaking about Adam Hall and its latest products

specs lasts six to twenty hours, depending on the volume. Other products on display at the event included the **STINGER Series, U 500, U 300**, and more.

Commenting on the grand launch of these products, Jahnel says "We took a decision to invest into India by first hiring a country manager in 2018. We are gathering strategic information that will help us take the right steps forward. We

are certainly here to stay and strive to integrate well with our strategic partners in India. I would like to add that I was happy to learn that people in India are well informed and technically sound."

"With Nagaraj, our Country Manager in our team, we get closer to the action. He has been a good driving force into getting some key dealers and system integrators involved in Government projects under the Adam Hall umbrella "**Chandan Mahtani, Managing Director, Adam Hall Asia** added.

Post Markus, Chandan also took the stage to introduce other Adam Hall stage and lighting products like the **CAMEO, ZENITH B60** and **W600** - outdoor and architectural lights; the award-winning battery-operated **ZENITH B200**, LED moving heads from Cameo's **OPUS Series**, Gravity music stands, and more. The evening ended with live music organized by Adam Hall clearly defining the audio clarity of its P900 speakers.

TVONE INTRODUCES NEW 12G-SDI 1X6 DISTRIBUTION AMPLIFIER

tvONE, a leading designer and manufacturer of cutting-edge video and multimedia processing equipment, announces a new Magenta 12G-SDI distribution amplifier. The MG-DA-716 provides 12G-SDI broadcast quality video distribution in a small, surface mountable form factor.

The MG-DA-716 allows you to connect a single SDI source up to 6 re-clocked SDI

outputs with automatic switching between all SD-SDI, HD-SDI, 3G-SDI and 6G-SDI video formats. Re-clocked signals at every output and the cascading feature allows you to create a huge distribution solution. Other features include LED indication of signal lock and video rate, automatic input signal detection, and a locking power supply. This compact distribution ampli-



fier has low power consumption, using just 2 watts maximum.

BLACKMAGIC DESIGN ANNOUNCES DECKLINK QUAD HDMI RECORDER

NEW 4 CHANNEL PCIE CAPTURE CARD SIMULTANEOUSLY CAPTURES ANY COMBINATION OF SD, HD, ULTRA HD, 4K DCI AND COMPUTER VIDEO FORMATS FOR USE WITH SOFTWARE PRODUCTION SWITCHERS, STREAMING AND MORE

Blackmagic Design has announced **DeckLink Quad HDMI Recorder**, an all-new PCIe capture card featuring 4 independent HDMI 2.0b input connections for simultaneously capturing any combination of SD, HD, Ultra HD, 4K DCI and even computer video formats.

DeckLink Quad HDMI Recorder is a high performance 8-lane Generation 3 PCIe capture card that can transfer data at rates up to 32Gb per second. Featuring 4 independent HDMI 2.0b input connections for multi-channel capture, DeckLink Quad HDMI Recorder can capture 4 different streams of video at up to 60 frames per second. Each HDMI input connection can capture a completely different video standard or computer input signal, so it's like getting 4 capture cards in one.

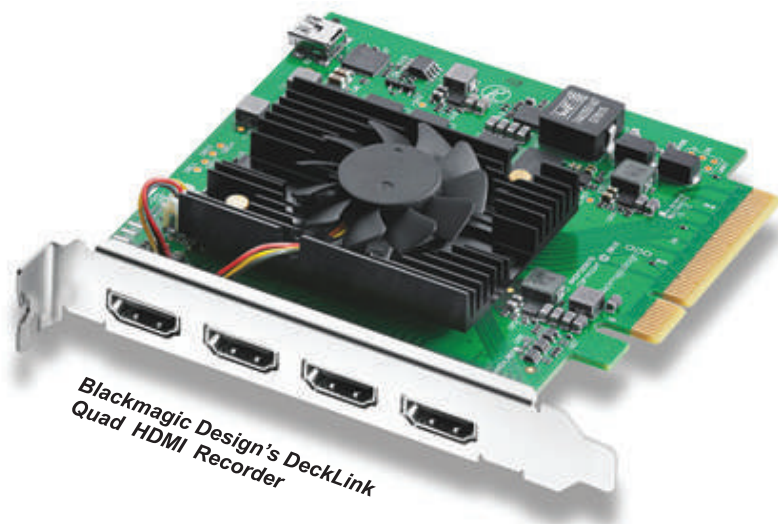
DeckLink Quad HDMI Recorder plugs into an available PCIe slot and appears as 4 separate capture cards on the host computer. Using the freely available Blackmagic Desktop Video SDK (software devel-

oper kit) for Mac, Windows and Linux, software developers can choose different HDMI channels for recording. Different software applications can all record different video streams at the same time. This makes DeckLink Quad HDMI Recorder ideal for use with live streaming solutions, software production switchers, broadcast servers and more.

Customers can use any combination of different software applications such as vMix, Wirecast and OBS for multi-channel recording and streaming.

The four HDMI 2.0b connections on DeckLink Quad HDMI Recorder can be used to record high quality 8 or 10-bit

YUV and 10 or 12-bit RGB at up to 4K DCI 30p, or 8-bit RGB at up to 4K DCI 60p. DeckLink Quad HDMI Recorder even supports computer and gaming consoles in 8-bit RGB up to 2560 x 1600 resolution. That means customers can record a mixture of video from cameras, computers, game consoles and more, all at the same time.



NEW BOSE ARRAY TOOL SOFTWARE MAKES SOUND SYSTEM DESIGN QUICK AND EASY

Featuring an intuitive workflow, the Bose Array Tool takes the pain out of sound system design.

Bose Professional today announced the release of the **Bose Array Tool**, a new software application to help make sound

system design smarter for AV professionals. The software features an intuitive workflow that requires minimal training.

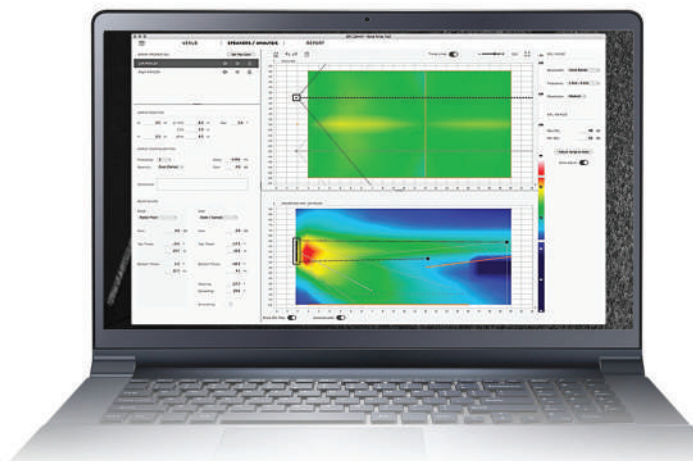
"It was important to us that the software have almost no learning curve," said Trevor Donarski, Product Line Manager, Bose Professional. "It's made to help system designers identify optimal loudspeakers and ideal placement with less effort, in less time. Our goal was to design a familiar and easy-to-use tool. And we'll build upon that simplicity with each update."

The Bose Array Tool brings variables

— such as room size, budget constraints, loudspeaker model and placement — under control. Using a direct-field calculation engine, system designers can quickly try out different loudspeaker models, placements, and formations to best match the audio needs of a venue.

The software provides intuitive drawing tools to manipulate room surfaces and loudspeakers dynamically and allows for visualizing the speakers' coverage effect in near real time. Ordering lists, rigging, and array information can be easily exported to make the virtual design a reality.

"We know that for system designers, creating 'quick estimates' can often waste hours of time," said Donarski. "The Bose Array Tool reduces that burden, so you can try out various coverage and SPL options for a specific room and budget, and deliver estimates quickly."



Blackmagic Design's DeckLink Quad HDMI Recorder

Bose Professional's new software application Bose Array Tool

HARMAN PROFESSIONAL SOLUTIONS EXTENDS THEIR INDIAN ENTERPRISE PORTFOLIO DISTRIBUTION RIGHTS TO BRIGHTSTAR TELECOMMUNICATIONS INDIA LTD

HARMAN Professional Solutions, the global leader in audio, video, lighting and control systems, including networked AV, has announced their distribution partnership with Brightstar India to include HARMAN installed solutions for their enterprise portfolio in India.

Brightstar India manages various business segments including Lifestyle Products & Accessories and Consumer Business (including cloud cameras, 4G data cards and hotspots). In addition to their existing portfolio, reportedly they have also developed CMS (Cloud Managed Services), VCaaS (video conferencing as a service) and SecaaS (security as a service) to further enhance value for our enterprise partners in a connected smart-world.

Brightstar India has an existing relationship with Harman Lifestyle division and this partnership will enable Brightstar to deal in the complete range of professional Installed audio and video products for the enterprise business.

"HARMAN is a global leader in end-to-end AV solutions, and we are excited about this partnership," said **Sanjeev Chhabra**, Managing Director, Brightstar India. "Inclusion of complete range of JBL,



Harman Professional India Partners Brightstar Telecommunications India Ltd

AMX, SVSi, BSS, Dbx, AKG, Crown, and Soundcraft will now help our partners to supply a complete audio-video automation solution from Harman which end-customers have been asking for a long time. We will also be the one-stop-shop for all HARMAN preferred partners in enterprise business."

"HARMAN Professional India values its relationship with the existing partners and continually strive to make it stronger.

Brightstar is a leading technology distribution business in India and one of HARMAN's largest distribution partners across multiple geographies. In keeping with our goals of continuous improvement and improving ease of doing business, we have appointed Brightstar India as our distribution and fulfilment partner for enterprise business in India," said **Prashant Govindan**, Sr. Director, India and SAARC, HARMAN Professional Solutions.

NEW CRESTRON DIN-RAIL CLIMATE CONTROLS FACILITATE CLEAN PROFESSIONAL INSTALLATIONS

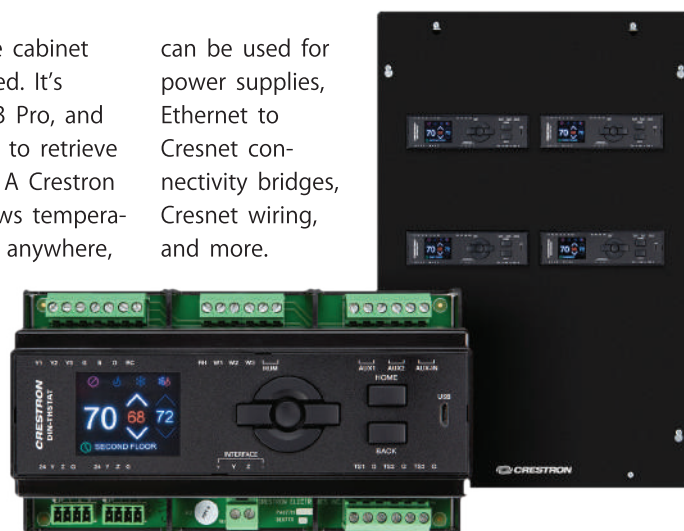
Crestron has announced it is now shipping its new **DIN-THSTAT DIN** Rail Mountable thermostat. Additionally, new Professional Installation Cabinets that perfectly pairs with the DIN-THSTAT will be shipping soon. Together, the new thermostat and cabinets enable system integrators to deliver clean professional, climate control installations.

Used with Crestron CHV-RTS, CHV-RTHS, or CHV-RSS temperature sensors, the DIN-THSTAT provides 3-stage heating and cooling, support for three independent remote sensor inputs, a full color LCD display for easy setup and diagnostics, and flexible Cresnet communications. The DIN-THSTAT can be installed in an equip-

ment cabinet or on a wall. The cabinet can be flush or surface mounted. It's supported in Crestron Pyng, D3 Pro, and SIMPL software, making it easy to retrieve and upload full configurations. A Crestron control system connection allows temperature adjustments from virtually anywhere, using a Crestron touch screen, handheld remote, or mobile app.

The Professional Installation Cabinets will be available in three sizes and can contain up to 10 thermostats. Controls are exposed for easy access. The provided service rail

can be used for power supplies, Ethernet to Cresnet connectivity bridges, Cresnet wiring, and more.



Crestron DIN-THSTAT DIN Rail Mountable thermostat

LEVERAGE THE POWER OF EXTRON CONFIGURABLE CONTROL WITH PANOPTO VIDEO CONTENT MANAGEMENT SYSTEMS

Extron and Panopto has announced a strategic partnership to seamlessly integrate Extron's configurable AV control systems with Panopto's media capture software and content management system. Extron is now publishing certified drivers for Panopto enterprise video content management systems. The power of Extron configurable control will provide customers with customizable workflows to streamline day-to-day in-room tasks and simplify the capture and delivery of lectures and presentations. Additionally, in coming months, the Extron SMP - Streaming Media Processors will be directly integrated into Panopto, allowing the publishing of live and on-demand video content from the SMP products for both ad-hoc and scheduled recording applications.

"This is a very exciting time as Extron integrates solutions from our uniquely broad AV product portfolio with Panopto's powerful enterprise video stream-



ing platform to provide robust turn-key video solutions for the modern classroom and meeting space," says **Casey Hall, Vice President** of Worldwide Sales and Marketing for Extron.

"Whether it be simple push button control to hands-off, fully-automated streaming and recording for any environment, we are jointly taking media capture and

management to a new level of simplicity for the industry."

The Extron – Panopto partnership will form the industry's first unified solution that truly encompasses award winning AV control, and Media Capture coupled with industry leading Enterprise video content management, delivery and collaboration software services.

IHSE USA AND VUWALL JOIN FORCES ON HIGH-END KVM MANAGEMENT SYSTEMS AND WALL DISPLAYS

IHSE USA, a company that develops high-end KVM display management systems, announced a new partnership with VuWall, a leading provider of high-quality and intuitive visualization solutions for controlling, managing, and collaborating on graphics information for video walls and multiscreen structures. The new partnership addresses a gap in the market, allowing companies to scale their KVM outputs to display walls or multi-view displays easily and confidently through a single integrated control interface.

The integration of the IHSE KVM matrix and VuWall systems makes it possible to control and visualize all sources from the matrix switcher onto the video wall. With this system, multiple sources can be switched and displayed simultaneously on the video wall. With VuWall's collaborative interface, operators have all critical data and information at their fingertips from a single user interface. It's also possible to mix in other sources from other systems, such as IP streams.



"IHSE and VuWall bring AV/IT integrators and video wall operators the perfect complementary technology with seamless integration," said **Paul Vander Plaetse, CEO** at VuWall. The VuWall system will be connected via an **IHSE Draco vario compact matrix** system and HDMI extenders. Multiple types of video sources will be distributed through the KVM matrix and extended to a 2 x 2 wall display, where multiple sources will be displayed simultaneously. Operators can control the content layout on the video wall via the VuScope video wall controller using a VuWall touch panel for quick macro access of pre-defined layouts. Users can easily interact with the matrix from a local keyboard or from the touch-panel interface. Communication between the IHSE and VuWall processors happens thanks to the IHSE API, through which buttons and images

can be defined by the operator for more graphical user experience.

The combined offering creates a valuable new premium distribution category for the audio and video integration market at a time when those in the broadcast, entertainment, and government command-and-control verticals are seeking cost-effective solutions for interactive knowledge walls. This collaborative interface gives the operators complete control from a single surface. The user-friendly interface also allows operators to resize all windows across the complete input range and access multiple sources even if they are on segregated networks. Interfaces can be set up in any configuration with operator-accessible templates and groups. This solution enables full end-to-end creation, management, production, and distribution of quality live video, combined with graphical overlays used in broadcast master control and C4ISR command centers.

MERSIVE SHIPS SOLSTICE 4.0 SOFTWARE AND NEXT GENERATION HARDWARE PLATFORM

SOLSTICE 4.0 AND THE GEN3 POD PROVIDE FUNCTIONALITY AND PERFORMANCE THAT PROVIDE CUSTOMERS WITH SINGLE WIRELESS CONTENT SHARING PLATFORM FOR MEETING ROOMS OF ALL SIZES

Mersive Technologies, the wireless content sharing, and collaboration solutions provider have announced that it has begun shipments of its new **Gen3 Pod** which includes version 4.0 of its Solstice software.

Christopher Jaynes, Founder, and CTO of Mersive states, "The Solstice Gen3 Pod allows customers to transform the design and use of their meeting rooms by reducing the cost and complexity of traditional systems by integrating multiple functions that typically require external hardware into a single platform. It extends the application space of the Solstice platform, allowing more room types, more use cases, and a greater variety of user preferences to be addressed through a single solution."

The newest version of the Solstice Pod introduces ShareSwitch, which together with an HDMI-input offers simultaneous sharing and control of both wireless and wired content. The Gen3 Pod also supports native 4k streaming, dual displays, and Power over Ethernet Plus (PoE+). The



Mersive Technologies has begun shipments of its new Gen3 Solstice Pod hardware which implements version 4.0 of its Solstice software.

new Pod leverages Solstice 4.0 software to increase connectivity, playback, and sharing performance allowing for even more seamless user experience.

Solstice 4.0 also includes added end-user features such as Solstice Ink which allows users to collaboratively highlight and mark-up displayed content from anywhere in the room by simply pointing and drawing with a smartphone. Additionally, in-product international support is expanded to 16 languages. Solstice 4.0 comes pre-installed on the Gen3 Pod and can be downloaded to existing Pods with an active Solstice Subscription.

The Solstice Gen3 Pod provides an HDMI-input with ShareSwitch capability al-

lowing hard-wired content sources to add a collaborative content stream directly into a Solstice session along with other wireless content sources. It's dual HDMI out-

put that can be configured to mirror or extend. In extended mode, users can post content across two displays to support more posts in view. Control across both displays remains an intuitive drag and drop interface from any connected client. The 4k Ultra HD (single display only) allows users to stream true 4k content to a display and its Power over Ethernet Plus (PoE+) support removes the need for an external power adaptor and wall plug. Solstice Gen3 Pod also has a powerful quad-core processor with the latest video decoders supporting a large number of simultaneous videos being shared and its mini stereo audio output supports the external audio systems in the room.

WYRESTORM'S EX-40-G3 ENTRY LEVEL EXTENDER GETS NEXT LEVEL UPGRADE

WyreStorm, a leading innovator of award-winning 4K UHD and HD signal management and control solutions for Pro AV and Custom Install released the **EX-40-G3**, a new UTP extender solution offering unrivalled quality of 2K HDMI point-to-point extension at unbeatable value for residential home applications.

With a whole new design, the EX-40-G3 is smaller than ever and at almost half the width of its predecessor, this makes the G3 lighter in weight and its slim 21mm chassis makes it easier to keep installation discreet. Size isn't the only upgrade found in the newly designed 40-meter extender. It includes features such as PoC (power-over-cable) which allows for powering both TX and RX using a single power supply connected to the TX, IR pass-through



WyreStorm EX-40-G3

RX>TX for source control, automatic EDID, Transmission of 1080p HDMI content over UTP to 40m/131ft, simple signal equalization via slider switch, long cable mode capability and IR source control, the

EX-40-G3 brings a tremendous number of features to any simple installation and with unbeatable value, reliability and ease of installation, your 2K signal extension is now back and better than ever.

AV-ISE SUMMIT

Conference • Seminar • Workshops

30-01
MAY JUNE
2019

Hall 3
BEC
Mumbai, INDIA

AV-ISE SET TO **EDUCATE ENGAGE EMPOWER** WITH ITS HIGH OCTANE SESSIONS

- ◆ Factors of night tourism development by exploring AV Technologies
- ◆ Convergence of AV & IT
- ◆ AV innovations in workspaces
- ◆ ICT in education
- ◆ Introduction to Dante Audio networking in install space
- ◆ Connect, Command & Control
- ◆ Integrating large scale projects
- ◆ Impact of Building design on audio systems selection

*Schedule subject to change

To register, visit:

avintegratedsystems.in/av_summit.aspx

www.avintegratedsystems.in



AURORA MAPS OUT TWO YEARS SUCCESS GRAPH IN INDIA

*India, an open market, has been accepting to AV brands that offer right technology at the right price. The message that new is better, sharper and has more to offer, is loud and clear and that's what Aurora Multimedia brings to the table. On the occasion of Aurora Multimedia celebrating its second year of growth and achievement in the Indian territory, the company organized an "Aurora Supercharged Nite" for its vendor partners and clients. On the sidelines of this event, **Anil Chopra** - Director of AV Integrated Systems Expo, got into a conversation with **Paul Harris** - CEO and CTO at Aurora Multimedia Corp. and **Nataraju Upputuri**, Director, Aurora Multimedia India to discuss Aurora's penetration, growth and success in the Indian AV Market.*

AC: How Excited are you about India as an AV Market?

PH: We are very excited! The market has emerged in the previous years but it's the team that has made it what it is right now. It takes a lot for people to make and build relationships and my team here,

especially Nataraju really embodies that. From all my territories in the world he has proven beyond doubt that he has what it takes to build the territory and for India, he has done it really well. I have to give the credit for the growth to the team working in Aurora.

AC: I do agree with you. Nataraju has been very stable and sure about his decisions as to how he wants to promote Aurora in India there is no doubt it. He was very quick and fast to respond to the new platform we have created and



L to R: Anil Chopra - Director, AV-ISE; Nataraju Upputuri, Director, Aurora Multimedia India; Paul Harris - CEO and CTO at Aurora Multimedia Corp.; Pawan Kuman Bariar, Marketing Manager, Aurora Multimedia; Ramesh Chetwani, Exhibition Director, AV-ISE

that shows the proactiveness and the need to explore and that is highly appreciable. With regards to India as an AV industry market, do you feel it is at the cutting edge and is adopting the latest technologies and techniques?

PH: Oh Absolutely! the numbers prove them more than anything. If you look at what Aurora has done, they have over 350 set conversions in less than two years. That's an amazing number and an amazing accomplishment. That does not just happen because of the product. It also happens because of the people, the companies involved and where this country is actually going. There is so much more coming that it is just going to continue escalating. I believe that the number has grown almost 250% from the growth that we had and that's an amazing growth rate. This is not even the growth rate for the world that I am talking about, it is the growth rate for India solely. We are a new company coming into India and the territory has embraced our technology so quickly. A growth of more than 250% is not just our growth but it is India growing with us. People shouldn't underestimate India, if the company is making good products there is no reason why they can't connect to the market directly and do awfully well. We needed to bring in this very heavy technological product and we brought it into India with a team from India itself and they have proved themselves more than efficient. You can't magically just bring the technology. For that you have to understand the technology, you have to understand the installation and you have to get the people you want. You can't just magically buy a box and get it done. It took a team of people who understood it and that's why I love this team. They don't need a lot of technical support from their corporate office. They understand the product and they know to support it locally by themselves. They are an entity on their own. That integrators have successfully deployed our technology and working 24 x 7 on it says a lot. There is an equal system in place where the manufacturer, integrator and the client all are working together successfully. Many a times, you take a technology into a country, and it just sits there because neither do they understand the technology, nor

do they have local people who can educate everybody else on the technology. I could try to sell all I want, but without the relationships, without the technical knowledge and the understanding, it is never going to happen.

AC: Do you have an India R&D setup to do some development work for Aurora because Texas Instruments, IBM, NASA, and you know the whole world has their own R&D set up over here in Bangalore.

PH: We actually have some of our programmers based out from here in India. We have our resources all over the world but some of our prominent programming resources are based right here in India and they do a fantastic job of the products that are being used in the Middle

A growth of more than 250% is not just our growth but it is India growing with us. People shouldn't underestimate India, if the company is making good products there is no reason why they can't connect to the market directly and do awfully well

East. The products are due to joint efforts. India has a crucial role in our AV over IP products as well, and even our new generation of ReAX Control Engine. So, India is playing an important role in a lot of different ways, not just from buying the product and installing it but also helping us develop the product. There is a lot of talent here and that's why I am here.

AC: How does it feel celebrating Aurora Multimedia India's two

years of growth and achievement?

NU: We started the journey two years ago. It's been a sort of roller coaster ride initially but we soon started sailing smoothly; we stood by our hard work, dedication and commitment throughout. As we complete two years of growth and achievement, we wanted to thank all those who trusted and supported us. The programme is all about the breakthroughs we achieved and how supercharged we are for the future.

AC: What is your vision for taking Aurora to the next level?

NU: India's AV market is the fastest growing in the Asia Pacific – having grown 26 per cent annually from 2009 to 2015, with sales turnover reaching US\$2.7 billion. The market in India is expected to continue growing at a rate of 25 per cent annually to 2025.

Today's intelligent enterprise focus on increasing productivity and streamlining operations for the sake of higher efficiency. We have noticed that the way traditional work areas are a concept of yesterday & lots of new conceptual ideas being implemented towards engagement of staffs by recreating work spaces with more intuitive amenities.

As a result, Many Enterprises are working towards newer ways of collaborating & communicating with employees and their clients, where merging of AV with IT Playing a critical role. So, they are looking at newer ideas of transportation of Audio Video across floors, buildings & campuses with a very low latency which traditional methods cannot achieve and even cost of ownership is high. But thanks to newer AV over IP concepts introduced by Pioneers like Aurora Multimedia which made it possible at affordable costs. Not only they prefer premium brand but also look that cost effectiveness. India being a very tech savvy country, we have a strong culture of pursuing engineering and technology and people are accepting the fact that AV over IP is the future. From the client side, most local and global companies have been demanding AV over IP solutions.

Here, Aurora is playing a significant role as Aurora develops cutting-edge products for markets looking for the most bang-for-the-buck, and their offerings are both competitive and innovative. And we will continue to do the same.

ARE YOU GETTING THE RIGHT ACOUSTICS ADVICE?



The article discusses the importance of using the right equipment, having the right knowledge, and making the right choice for acoustics materials for Acoustic solution. Acoustics a broad subject within itself, Ganesh Gurpur, Managing Director, GENCOM Asia, elaborates specifically on Acoustics for the closed environment. He has several training videos on YouTube discussing similar topics under the title 'Why Acoustics?'

Ganesh Gurpur, Managing Director, GENCOM Asia, has over 26 years of experience in the field of Acoustics, AV, and Broadcast. He has worked in Audio R&D for almost a decade and has successfully completed major Acoustics Projects using Jocavi Acoustics Panels worldwide from Asia to Africa in the last two decades. GENCOM Asia is one of the leading solution providers for Acoustics, Audio Visual, Broadcast, Cinema, Digital Signage & Film technologies providing services throughout South East Asia and South Asia.

ment. Whether it is your Home Studio, TV Studio, Media Room, Auditorium, Cinema, Home Cinema, Lecture Hall, Conference Room or any place, do remember that there is a professional approach for a right acoustics solution, that meets the international standards, good aesthetics, and your budget.

INTRODUCTION

Acoustics is a wide subject with various applications and solutions. Here we would like to narrow down to acoustics for a closed environment.

Acoustics is a less known or ignored subject, usually left in the wrong hands of carpenters. Indeed, they do their best job in ultimately making your place look good for your EYES, but not for your EARS.

Are such installation backed up with professional acoustics measurements? NO! Right?

Do you know that even the so-called Consultants in the market in many countries worldwide, still follow the decades-old traditional method of stuffing the walls and ceiling with glass wool/

Imagine a person going to a nearby Hospital, when he is sick and assume that the doctor doesn't have any equipment, but start operating on him with a kitchen knife, would it be acceptable?

The same holds good for your place when you are taking acoustics advice

from a contractor. Are they equipped with the right equipment, right knowledge, and right acoustics materials to offer the right Acoustic solution?

Let me guide you through a short journey for about 10 minutes in making you understand the basics of Acoustics that is right for your desired environ-



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technical measurement to support their acoustics claim.

There are two aspects of Acoustics that need to be considered.

- Sound Proofing and
- Room Acoustics.

When would you need Sound Proofing?

It is quite simple. If you do not want any outside noise to be heard inside the room or the other way, then SOUND PROOFING is a must. In this case, all the walls, ceiling and at times even the floor need to be covered with Sound Proofing panels. The complexity of the design will be based on how much "dB-difference" you intend to achieve between inside and outside.

In most of the cases, when you have a decent room that doesn't have the issue of Sound Isolation between inside and outside, then you do not have to spend for soundproofing.

Then what is Room Acoustics?

SSHHH! This is not a topic discussed by many consultants as they do not want to take the trouble of achieving something that they can't even measure.

Let me give a simple analogy:

When you go to your new flats upon getting your keys along with your wife, you will observe that when you both talk, you observe lots of echoes right? This is because there are more reflected sounds that reach your ears with few microseconds of delays. When this is too high, we call that room as REVERBERANT ROOM.

Let us take the other extreme. Say the room is now fully covered with an absorbent material like foam on all walls, ceiling, etc., which many of the consultants' advice or you do it yourself. In this case, you are totally avoiding any reflected sound and making it fully absorptive. In this case, the room now has become a DEAD ROOM.

So, neither a Reverberant room nor a Dead room is desired.

Which type of room is the right one? Unfortunately, you cannot guess and do something for the room to sound right for your application. One of the key technical parameters that are used is Reverberation Time, RT60.

Moreover, for Room Acoustics you do not have to cover all the walls and ceiling 100%. Based on the measurement, maybe

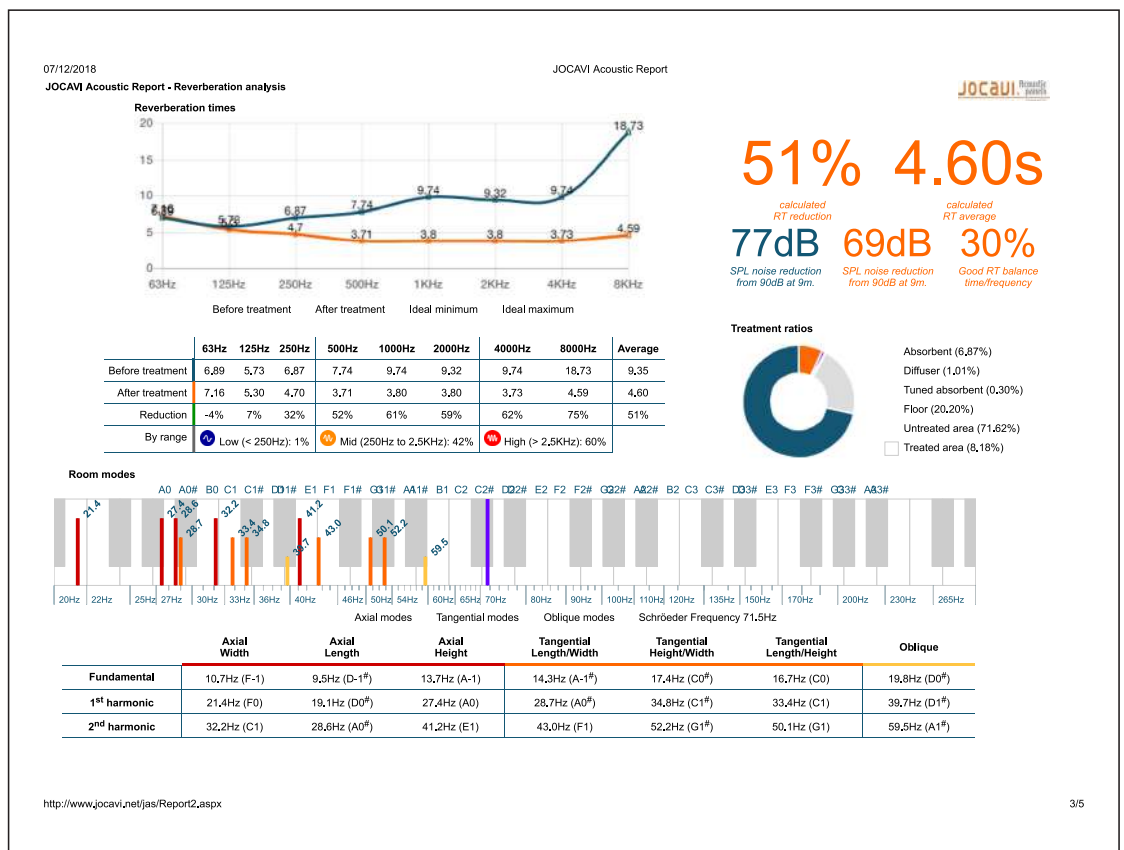
continued on pg 23

rock wool/ wooden studs/ perforated boards/ egg crate foam/ etc., Are these acoustic materials Eco-Friendly or Bio-Degradable or Flame Retardant?

Are such installations backed up with professional acoustics measurements? NO! Right?

ACOUSTICS – TWO ASPECTS

When we talk about Acoustics required for a closed environment, the hitherto adopted method followed by most of the consultants are only ONE. A team of carpenters is engaged with lots of carpentry materials to cover all the exposed surfaces and make it look pleasing to your EYES. As a customer, you never questioned the



PRODUCT FOCUS OF THE MONTH

*AV Integrated Systems Magazine's Product Focus for the month of March -April is **"Interactive Conference Room Technology"**. The faster, better, and smarter innovative conference room audio-visual technology plays a key role to get the most out of collaborative efforts and maximizes efficiency. Here we feature a selection of Interactive Conference Room Technology to help get the most out of every meeting space.*



Avocor - F8650

The largest size in the Avocor F50 family, the **86" F8650** is an open collaboration solution, working seamlessly with Unified Communications tools and software devices to create a collaborative environment that is perfect for the executive meeting space and conference room. Using the latest generation touch technology from FlatFrog, the F50 series delivers a superior writing experience that is incredibly fast and accurate. The display responds quickly to user interaction with up to 4 passive pens or up to 20 points of simultaneous touch. Built with cutting-edge, protective glass with no parallax gap between the glass and the display, providing users with a pixel-perfect touch experience. The F50 includes a built-in Windows swipe bar which has been optimized for Windows 10, delivering a tablet-like experience on a large format display. The OPS slot supports HDMI 2.0 allowing for 4K content to be run at 60Hz, while the Intel OPS (Open Pluggable Specification) allows for a module PC to be added easily to the display without cables. A high-quality, front-facing soundbar module is included in the F50, ensures that the display provides a crystal-clear audio experience, while the active microphone array allows the display to connect with a variety of Unified Communications based software, delivering the ultimate audio experience. The fine-tip stylus delivers an accurate writing and annotations on the display, while object awareness means that the display can easily distinguish between pen, finger, and palm, delivering a smooth touch experience.



BenQ - RP750K

BenQ corporate **RP750K** interactive flat panels (IFP) ideally suit meeting spaces from small to medium sized with stylish designs incorporating two frontal speakers and integrated pen trays. Pioneering innovations include 20-point multi-touch, 4K resolution, Smart Eye-Care, and Account Management System (AMS), BenQ's corporate RP750K delivers intuitive collaboration and display interactivity with the ease of wireless presentation, open-platform software compatibility, and hassle-free maintenance. The EZWrite 4.1's, an advanced handwriting recognition feature, it allows users to convert text, numbers, forms, and drawings into highly legible materials without having to switch modes. To enforce privacy protection while ensuring convenience, BenQ IFPs feature Account Management System (AMS) for multi-account management via NFC technology, which allows presenters to directly access personal system setting and folders, as well as bring up customized presentation settings on the IFP simply by tapping an ID card on its front-bezel sensor. Additionally, AMS also offers instant access to major cloud storage services such as Google Drive and Dropbox after logging in without having to enter password on BenQ IFPs. Integrated into BenQ corporate RP750K, the InstaQShare app enables simple wireless presentation and collaboration by screen mirroring. With the pre-installed Zoom video conferencing software, RP750K facilitates effective communication for international corporations without external PCs, training, or complicated server setup. Zoom enables high-quality video conferencing across multiple devices, connecting teams across the globe.



Integrated into BenQ corporate RP750K, the InstaQShare app enables simple wireless presentation and collaboration by screen mirroring. With the pre-installed Zoom video conferencing software, RP750K facilitates effective communication for international corporations without external PCs, training, or complicated server setup. Zoom enables high-quality video conferencing across multiple devices, connecting teams across the globe.

Barco - ClickShare

To enhance meeting room experiences and to improve productivity **ClickShare** from BARCO is an efficient wireless collaboration tool in the market today with a range of models fitting all budgets. Wireless collaboration and presentation solutions play an important role in the meeting rooms by making it very convenient to share and present your content on a display. ClickShare ensures a seamless user experience across small, medium and large sized meeting rooms. Anyone – including guests – can connect with one click and share right away, without the need for any training. Users simply plug a USB-powered device – the ClickShare Button – into their PC or Mac and click the button to get the content from their laptop on the large meeting room screen. With the ClickShare App, users can also share content from their mobile phones or tablets. Easy, trouble-free presenting, sharing ideas and content securely from any device on a main presentation screen. ClickShare is a very useful device for standard meeting rooms and board rooms. It helps to make meetings more productive and efficient and is the need of all progressive organizations. ClickShare range is ideal for use in MNC's, Government sectors, Universities, Public Sector Undertakings. Ceeco Technologies is the exclusive distributor for Barco in India.



CRESTRON - TSS-752

Crestron Room Scheduling Touch Screens is a productivity tool for organizations with multiple conference rooms and meeting spaces. Mounted on the wall outside each room, they allow anyone to see at-a-glance if a room is available or in use, and view details about the current meeting.



The **TSS-752** Room Scheduling Touch Screen features 7-inch (178 mm) widescreen display with lots of space for displaying essential meeting and scheduling information all at once without forcing the reader to flip through multiple pages. Crestron Smart Graphics delivers gesture-driven user experience with many customizable features. Capacitive touch screen technology affords a nimble touch response for navigating the intuitive on-screen interface. Soft-touch buttons to the right of the touch screen offer an alternate method for navigating the on-screen interface. Side-mounted, multi-color LED beacons provide a clear indication of a room's status down long corridors. With its clean, modern appearance, the TSS-752

makes an elegant statement in any environment including office buildings, conference centers, hotels, and universities. A choice of mounting options allows the TSS-752 to be installed in places other touch screens just can't go. It can be installed on a wall over a standard 2-gang electrical box, mounted to virtually any flat surface - even glass, granite, or marble or mounted to the mullion of a glass wall, window. Crestron Room Scheduling Touch Screens are designed to be installed as part of a complete enterprise room scheduling solution using Crestron Fusion Cloud Enterprise Management Software and the Crestron Hosted Scheduling Service.

HARMAN - AMX CT SERIES

Create meeting spaces where visiting devices and in-room devices share the room without complication. The **AMX Connectivity and Transport (CT) Series** is a family of 4K switching and distribution kits that combine switching, scaling and distance transport into a single kit that includes both a transmitter and receiver. Simply connect a visiting device to the transmitter, the room display/projector is automatically turned on, and the signal is transmitted and scaled for optimal viewing. The AMX Connectivity & Transport (CT) Kits are an all-inclusive 4K60 4:4:4 auto switching, scaling, and distance transport solution that include both the transmitter and receiver. The Conference Kit features USB 2.0 peripheral switching, allowing dynamic sharing of room USB peripherals between visiting and in-room devices. Connect USB for any peripheral device, such as the AMX Acendo Vibe Conferencing Soundbar, to the visiting laptop. The receiver has a second input for a room PC or wireless sharing device such as AMX Acendo Core. If a source, such as a room PC, is connected to the receiver the kit still automatically switches to the visiting laptop when it is connected.



KRAMER - KRONOS

Kramer **Kronos** by Kramer Electronics is a secure, enterprise-class cloud-based room booking and scheduling platform. Kramer Kronos streamlines and automates the management side of room booking. Due to its integration with Kramer Control, IT administrators can easily use a room's availability as a trigger for automatically controlling room elements. With 802.1x and Transport Layer Security (TLS) encryption on all communication to and from the scheduling touch



panels and the Kramer Kronos server (cloud-based), sensitive booking and scheduling information is completely secure. Kramer Kronos offers a comprehensive library of UI templates for complete customization. Additionally, its schedule can also be displayed on the room display using a VIA device, when no presentation happens. Kramer Kronos works seamlessly with popular scheduling platforms, including Microsoft Exchange, Office 365 and G Suite. It is also compatible with iOS and Android tablets. Kramer Kronos is a key component of the Kramer meeting room ecosystem. The new meeting culture demands simplicity: you book a meeting, arrive at the room and that's it.

BOSE PROFESSIONAL FORGES BEAUTIFUL MELODIES AT HAMMER & SONG, MUMBAI

For the beautiful people of the magnetic city that never sleeps (read Mumbai!), there's a new dining and nightlife destination in town, and it's already singing tunes that locals just can't seem to get enough of! The venue – Hammer & Song.

Sporting a space that expands roughly 4500 sq.ft in area spread across a ground level and a mezzanine, and complete with a luxurious seating, a smacking stretch bar, a luscious open area, cozy group seating arrangement, and a tucked away DJ booth, Hammer & Song - located within the premises of the plush World Trade Centre in the upmarket Cuffe Parade area – is one of Mumbai's latest hotspot where one can experience comfortable fine dining, an enchanting ambience, and a night that progresses from leisure lounging to a groovy party experience quite subliminally.

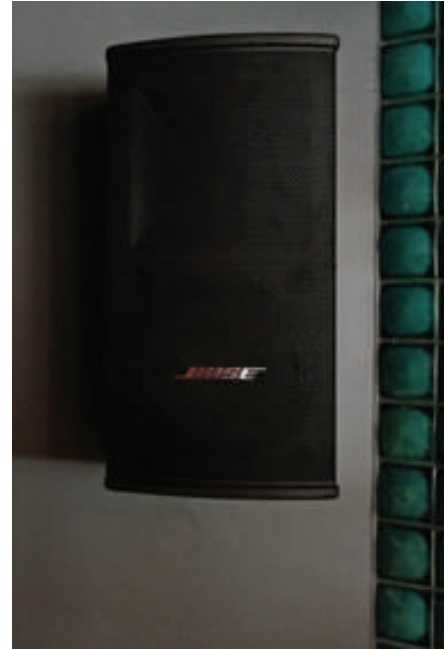
Considered as THE place to let your hair down and just be yourself, Hammer & Song projects itself as one of the few truly engaging dining and nightlife destinations in the city; proudly flaunting how different it is from other venues, as

surprisingly inviting as it eases patrons into the space and sets the mood up for a fun night.

Fun never happens on an empty stomach, and the guys at Hammer & Song know this all too well. So they've created an interesting FnB menu which is as much fun as the other fun stuff around the place. Popular cocktails, Vodka, Rum, Tequila, Whisky and Liquours, with designed finger-food munchies form the house favourites that provide body fuel for a night full of grooving and dancing.

But when the music takes over, Hammer & Song turns into an even more attractive delight.

A key component of the engaging the crowds is the music – which not only entices people to visit (and keep them coming back for more again and again!), but also ensures that they'd never want to leave once they're in. With genres ranging from soft comfortable lounge music, to Deep Electronic to Hip-Hop and Commercial; Hammer & Song lives up to the hype as Mumbai's premium destina-



Bose Professional scheme at Hammer & Song involves a carefully designed system comprising products from the brand's famed line of install products which have been chosen specifically to meet the venue's aural requirements that were derived from commissioning a detailed acoustical analysis of the space. Each of loudspeakers across both levels of the venue have been are strategically placed, and meticulously aligned and calibrated to ensure even distribution and optimum coverage of Bose' signature crystal clear and impactful sound performance throughout the venue.

The all Bose Professional loudspeaker scheme – designed and integrated by reputed Mumbai-based consultant Milind Raorane with key support from Bose Professional's technical team – involves the deployment of multiple units of Assymetrical RoomMatch modules as the primary FOH reinforcement at the ground floor level, with multiple numbers of the RoomMatch RMU108 multi-utility loudspeakers distributed as fills. Critical low frequency fidelity here is derived through RoomMatch RMS 218 dual 18" subwoofers used in tandem with Modular Bass MB24 dual 12" subwoofers. The mezzanine level, on the other hand, features multiple numbers of the RoomMatch RMU208 and RoomMatch RMU108 multi-utility loudspeakers along with the Modular Bass MB210 com-



Hammer & Song - located within the premises of the plush World Trade

it engages visitors like no other and keeps their spirits high through-out.

In terms of the ambience, almost everything about the place spells chic including the décor and furniture – a big hit with the crowd is the stretch-corner bar which is spotted busy almost all through the night. The décor exudes a characteristic air which is evidently upmarket yet

tion that dishes out some of the best music in the city.

But what makes the music even more stunning is the quality of the sound experience thanks to the club's awesome, amazing and comprehensive audio system from the world's leading professional audio brand – Bose Professional!

The massively effective and efficient



agreed on the Bose Professional system comprising the RoomMatch and RoomMatch Utility series of loudspeakers as this was the only system that perfectly met the acoustic requirements of the venue and the quality and performance demands of the owners and management. Precise positioning of the speakers allows us to cover the entire space, and, also effectively solve aural issues arising due to the ceiling height of the venue. Plus, with Bose's Powermatch series of amplifiers powering the loudspeakers and the ControlSpace ESP unit taking care of end to end processing and loudspeaker manage-

sip & dine experience in the city, and they continue to do so every single day. That apart, the music and sound at Hammer & Song is absolutely spot on! The place sounds brilliant with our new Bose system – it warms our hearts and gives me goosebumps!! And we're overjoyed to hear compliments that pouring in from our patrons about how lively the place sounds and feels. All the individual teams that have worked on this project have done a fantastic job in their individual capacities – and it just shows. The place is always busy, and our patrons are always having a great time! What more could we ask for!"

Vibhor Khanna – Country Manager – SAARC, Bose Professional expressed his thoughts about the brand's association with Hammer & Song as he asserted, "Hammer & Song is so elegant and beautiful yet so refreshing and fun as a venue, and it is an absolute honour and privilege for Bose Professional to be a

compact dual 10" subwoofers, delivering the full-range of Bose' signature top quality sound. The loudspeaker setup is powered through the ever powerful and efficient PowerMatch PM8500 amplifiers, with a unit of the ControlSpace ESP4120 control unit shouldering the complete loudspeaker processing and management gamut.

Milind delves into details of the audio scheme at the venue, sharing "When the owners first met with me and discussed about the venue, the first thing they mentioned to me was the need for an absolutely adept sound system; cost notwithstanding. The idea was to have a system that would deliver optimum performance and do justice to the wide range of music that the venue planned to host. This involved live instrumental performances to soft rock to hard-hitting electronic music and everything else in between. Considering the physical dimensions of the space, the most critical aspect for us to ensure that we have a system with loudspeakers that were not just aesthetically pleasing, but also delivered power with optimum dispersion in a manner that would cover the entire venue. The owners had a vast portfolio of brands and products to choose from, but eventually unanimously



Bose Professionals aural installation at Hammer & Song

ment – this comprehensive Bose system has created a lasting positive impact that's left the venue's patrons enthralled and the management extremely pleased!"

Amrish Arora – owner of Hammer & Song talks about the venue asserting its mark in Mumbai as a place that delivers the complete experience, saying "Hammer & Song is all about the experience, and I'm proud to say that's exactly what we deliver. Our in-house service team have done a fantastic job of delivering the best

part of it. Sincere thanks and appreciation to the entire management at Hammer & Song for investing their faith in our brand; and a big mention of commendation to the audio commissioning team including our partner Mr Milind Raorane and our in-house technical team and regional sales & support team members, for concluding a great job with the audio solution at Hammer & Song. We are proud to deliver world-class audio to a truly world-class destination like Hammer & Song."

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RANJIT SINGH USHERS YOU INTO 'AV IN DIGITAL ERA'

Ranjit Singh, Principal Consultant, Workspace Technology and Experience, at PTS Consulting, Singapore is the first Asian to achieve the CTS -I certification and has been utilizing his experience and knowledge to support the industry in developing and creating leaders. In conversation with AV Integrated Systems Magazine, Ranjit Singh gives an insight on his three decades of experience in technology projects, his view on 5G Technology, and about three-day certification CAVs course to be conducted by him at AV Integrated Systems Expo



Ranjit Singh, Principal Consultant, Workspace Technology

Tell us a little about your current role and responsibilities at PTS

Being the Principal Consultant for Workspace Technology and Experience at PTS Consulting Singapore my role here is to deliver Strategic Workspace projects ensuring a robust, future-proof technology infrastructure underpins the experience of the space, as well as managing the PTS Workspace Technology and Experience practice.

Coming from an Audio-Visual background and being a passionate technologist, and through the deep pedigree in delivering prestige projects throughout Asia with an emphasis on quality for almost three decades, along with consulting experience in technology projects and programs in the market and recognizing



the importance of technology in wellness, I have expanded my areas of expertise into IT infrastructure, acoustics, and user

experience.

Being the first Asian to achieve the CTS-I certification and having delivered projects for almost every industry sector throughout Asia, this wide range of experience has provided me a unique insight into current, emerging and future technology trends for the enterprise. I aim at sharing my experience and knowledge to support the industry in developing and creating the leaders of the future. As part of this belief, I have shared my experience with over 2,000 attendees of my training courses in Asia.

The advent of 5G technology seems certain to revolutionize the AV industry. Can you shed light on some emerging technologies in the horizon or early adopters of 5G in Audiovisual realm?

I feel it is a bit too early to predict how much it will directly affect the Audiovisual realm but it will definitely affect the way we work and design future workplaces. The ability to have high bandwidth content readily available will drive display resolution and supporting peripherals. Predictive analytic technologies will be able to process information from IoT devices, which help the industries to design better space in the future. We may also find some emerging market countries leap-frogging their peers by avoided 4G altogether.

You are spearheading the three-day CAVS course at AV Integrated Systems expo, which will focus on AV in the

Digital Era. Can you elaborate on the benefits and/or challenges that the digital era brings to the AV industry and also a little bit about what you will aim to do through this CAVS course?

My aim for the course is for the attendees to leave with an understanding of the technology and trends that are driving today meeting spaces. I will cover some basic foundation on Audio, Visual, IT passive for the participant to then research and do their own read up to increase their knowledge. Accordingly, the 3-day CAVS course will be broken down into the following parts:

• **Part 1 – An Introduction to Audio, Visual and Control**

- The Basics of Audio, Visual and Control
- Understanding Factors When Designing Meeting Spaces

• **Part 2 - Understanding the Requirement**

- Asking the Right Questions
- Identifying the Right Requirement
- Understanding the Flow of a Technology Project

• **Part 3 - Technology and Trends**

- Understanding How Lifestyles Are Driving Design
- Why Technology Underpins the Meeting Space Experience
- What is Important to Meet the Demands of Today.

continued from pg 14

40% - 60% of the area only need to be covered. Most of the time you can fix such panels yourself and doesn't require you to engage a team of carpenters.

CAUTION: Do not get fooled by someone measuring your room only with a Sound Level Meter saying they are providing you an Acoustics Solution. It is like a Doctor saying that he can do Open Heart Surgery using just two kitchen knives.

ACOUSTIC PARAMETERS & MEASUREMENT

For measuring RT60 and few other related acoustic parameters, one needs to use sophisticated Acoustics Equipment capable of measuring - RT60, Real Time Analyser (RTA), FFT, etc., Do you know that there are International Standards for Acoustics and specific measurement methods to follow, in making your Room sound right?

Any material in this world has a specific NRC (Noise Reduction Co-Efficient) value. Any sub-standard acoustic material with an NRC value doesn't make it a good Acoustic Material. There are a few other parameters to be considered in choosing

the right combination of different types of acoustic panels.

ACOUSTIC SIMULATION

There are Acoustic Simulation methods to simulate your room with your existing furniture and the right combination of Acoustics Panels.

Acoustic simulation needs to be done in using different types of below panel types in order to achieve the desired RT60 and other values.

The simulation methods are so close to accurate, that one can achieve the desired RT60 and confirm with acoustic measurement, post installation.

Below is an example of one of the Acoustics Simulation Report:

ACOUSTIC PANELS

Do not be deceived by the Acoustics grade partition boards available from leading brands that are used for Office partitions for large offices. They are not suitable for achieving the Right Acoustics for a closed environment.

A professional Acoustic Panel is usually developed using detailed analysis of

material to get a specific set of properties suitable to achieve the desired parameter. Each acoustic panel should have a detailed specification sheet from the manufacturer.

Acoustic panels meant for SOUND PROOFING are specially designed for achieving specific values of Sound Isolation.

Acoustic panels for ROOM ACOUSTICS usually comprises Absorption panels, Diffuser panels, and Bass Traps. The combination of these panels can be determined only using Simulation method studies to arrive at the right count of these 3 types of panels to achieve the desired acoustic parameter.

FINALLY, WHAT IS ACOUSTIC SOLUTION?

Acoustics Solution is not just in using some Acoustic panels.

It is the right solution offered using acoustic panels that are developed using scientific studies and having a detailed technical specification, doing Acoustic simulation, doing on-site measurement – Pre & Post Installation.

ANTIK Technologies
EX5108/EX5104



EX5108/EX5104 is a series of high-density real-time H.264 HD/SD Encoders that can support up to eight high definition (HD) A/V signals compressing and encoding simultaneously. These A/V signals can be fed into the unit via 8x HDMI or 8x SDI input ports as different factory options. The encoded streams can be then re-multiplexed and output over its GbE IP and ASI ports. All models support time base correction (TBC) to ensure the audio and video synchronization, the features necessary for the professional TV signal flow. The series provide two TS/IP operation modes. The first is "Full Duplex", which allows one MPTS or SPTS inputted over 1 multicast/unicast to make up a new MPTS with local encoders, and then sends out the new one over 1 multicast/unicast. In the second mode "Multiple output" which delivers up to 9 streams over IP. There are 8 un-stuffed SPTS (lower bit rate but less PCR accurate than normal SPTS, from local encoders) and 1 MPTS (from internal re-multiplexer) over the IP with different unicast or Multicast IP addresses. EX5108/EX5104 allows user to configure, monitoring and manage over the informative front panel and keypad, or Web interface, or SNMP based management software from 3rd party. This Encoder family presents brilliant picture quality, high density design, high stability system architecture, and the hot-swappable power supply.

AURA OPTO
P 2.5



P2.5 is full color indoor LED screens with integrated 3in1 SMD full color LED block modules as unit is another deeper revolutionary development in the LED screens industry. It shows a super fine and high -quality picture on the LED screens and has a much wider viewing angle than the full color dip lamps LED screens. The 2.5mm 3in1 SMD has been the outmost smallest pitch of conventional LED lamp display. Cabinet size of 976 mm (w) x 976 mm (h), the P 7.62 provides a wide viewing angle. It has a good color mixture from far or very near distance giving consistent transparent pictures with uniformity.



The **IPX-TC3C** provides one of the most advanced IP Streaming solutions on the market utilizing Aurora's IPBaseT technology, which synergizes various IP/AV standards to work together as

one. It is the industry's first 4K2K transceiver with zero compression and latency based on BlueRiver NT platform. Using a transmitter (encoder) and receiver (decoder), respectively, used to be the standard – until now. The IPX-TC3 can be set up as either one to make installation, inventory, and troubleshooting easier. Another industry first is the option slot to add other IP capabilities, like ExtremeUSB (USB 2.0 over IP), ReAX IP control option or Dante audio, for a more complete, distributed system. Audio, video, data, and control can be sent securely to one or many units using off-the-shelf 10G Ethernet switches. When the IPX is set up to be a transmitter, the 2 HDMI inputs become a source switch and the HDMI output becomes a potential loop out. When set up as a receiver, a user can select the local HDMI inputs or an IP source. Seamless switching of sources further enhances the presentation. Regardless of how the IPX is set up, the audio can be de-embedded at any locations, break away, and/or be sent to or received from a Dante enabled device. The USB 2.0 option is also flexible, working as a KVM and/or a high-speed data transfer (480Mbps) for memory sticks. Each IPX USB feature can also be set as a host or a device. To keep the system friendly, a customizable OSB and web server are available to be programmed as required. For RJ-45 LAN devices, the 1G Ethernet port allows full bandwidth end-to-end over the IPX 10G fiber or copper port. The IPX fiber version has an SFP+ port that can use single or multi-mode fiber.



The **VA-4030e** is a digital networked, four-channel amplifier for use in Vocia systems. It is capable of delivering continuous audio power at 30 Watts RMS per channel. The

VA-4030e is CobraNet enabled for audio and control with dynamic use of bundles. It has local analog inputs and dual power supply. Two RJ45 connectors on the rear panel provide redundant CobraNet connectivity to the Vocia network. The on-board DSP provides

comprehensive fixed-chain, digital signal processing within the device. In addition, emergency messages can be stored in local non-volatile memory. Page active relay outputs provide a contact closure per channel when paging is active on the channel. The amplifier offers low impedance and constant voltage outputs. The VA-4030e also has comprehensive failover capability with device-to-device and channel-to-channel failover.





Google Jamboard is a digital, collaborative 55-Inch 4K touch-enabled whiteboard that makes it easy for teams to share ideas. It brings the best of G Suite and the web to your team's creative sessions. You can sketch out plans or ideas in real-time with teammates from across the globe via other Jamboards or the mobile and tablet apps. With a built-in HD camera, speakers and Wi-Fi, set up to collaborate with the best sensory experience. It enables better creation by using its creative drawing tools, clip content from the web using Google Search and add images and content from Google Drive or your smartphone. It provides better collaboration by projecting the Jamboard into Hangouts, participating from your tablet or phone and also enables working with multiple Jamboards within or beyond the walls of your company. All works can be saved in Google Drive and your jams retaining their interactivity, so you can pick up right where you left off and your ideas are not erased away. Moving and resizing objects is natural, just like on cellphones or tablets, and the stylus and eraser work without any batteries or complicated pairing or setup. With the optional rolling stand and a single power cable providing plug and play option, you can take Jamboard with you and jam on the go. Jamboard was custom designed to meet the highest standards of fidelity and responsiveness. The Low Latency touch technology delivers a lag-free experience



Christie **Brio presentation** and collaboration solutions remove technical barriers and enable business and academic team members to drive for results together. Designed to address common meeting, classroom and lab technology challenges, Christie Brio solutions enable work colleagues, teachers and students to wirelessly present, share and interact with each other – within the same room or across multiple locations, in real-time. When you need to collaborate securely and share high-quality content between multiple locations,

Christie Brio Enterprise integrates smoothly into the local area network for access to Internet and network services. Any content from devices connected to Brio Enterprise units can be shared across all the displays in the same collaborative session regard-

less of geographical locations. Brio Enterprise processes high-quality video with sources playing at full 1080p with HDCP support. Any content on a source device may be shown on-screen in a meeting. Specific configurations depend on the Christie Brio model and your own personal device. It can also support Miracast, Chromecast and any future wireless transmission protocols by connecting a receiver to a wired input. There is a content sharing solution for each device platform and operating system to support live content editing and to provide a full, live desktop capture.





The BSS **DCP-555** is a digital conferencing processor designed specifically for meeting spaces. It allows IT managers



and integrators to easily configure hundreds or thousands of meeting rooms using a web interface without requiring Audio Architect or other software. Technicians simply select the desired template and make configuration adjustments from a web browser, offering a powerful, yet scalable and programming-free solution. The BSS DCP-555 offers 4 bidirectional VoIP connections, providing support for up to four rooms of audio-conferencing connectivity simultaneously without the need for separate IP phones in each room. The DCP-555 also offers a range of onboard I/O connection options, with BLU link, USB and 16x8 analog audio all built in. This provides easy compatibility with other HARMAN and third-party audio devices, with GPIO and relays available for simplified control. To streamline integration with other HARMAN devices, the DCP-555 includes built-in microphone tunings and JBL speaker tuning presets, offering simple, IT-centric configuration. When using the DCP-555 along with AMX SVSI networked AV solutions, encoder syncing is available to ensure the audio and video signals are perfectly aligned for an optimal experience without any manual setup.



DDA120 was developed to allow you to enjoy music from any source in fantastic quality. Its diminutive size and elegant styling conceal a sophisticated amplifier capable of extracting every last detail and nuance from your music collection. The DDA120 builds



on the success of its predecessor the critically acclaimed, multi award winning **DDA100**. One can connect it wirelessly via Bluetooth to play music stored on your smartphone or tablet, stream music from services such as Spotify or listen to your favorite music service. Additionally, four digital inputs enable you to connect all your other digital devices making the DDA120 the hub of your digital music system. The minimalist Direct Digital architecture

maintains the purity of your digital music - resulting in a perfectly transparent, dynamic and exquisitely detailed sound. Using an ultra-high-quality conversion process it follows the same minimalist processing as your digital music and so maintains its original distinctive character. Any hi-fi speakers you choose will be driven with ease. The massive power available is used to effortlessly control your speakers with astounding precision ensuring you hear the recording exactly as the artist intended.

Shure
Axient Digital ADX Wireless Transmitters

Aurora Multimedia redefines HDBaseT with many new industry-first capabilities including the ability to work at 4K60 4:4:4 with a single unshielded CAT 5e or better cable and the world's first Dante option for 2 or 8 channel Dante. Three new HDBaseT 2.0 products comprised of the HTW-2 two gang transmitter Decora wall plate, **HTE-TX2** transmitter box unit and the **HTE-RX2** receiver box unit will change the way HDBaseT is utilized. All products are capable of transmitting 4K60 4:4:4 18Gbps HDMI 2.0/HDCP2.2 100m (330ft) over a single unshielded CAT cable with no quality compromise and with zero frame latency. In addition, all products have an integrated web server for remote IP control, USB 2.0 with directional control, and the world's first Dante option for 2 or 8 channel Dante. For enhanced audio, the HT Series supports ARC (Audio Return Channel). To further simplify the installation, the HT Series can power both TX and RX from a single port of a PoE Switch eliminating external power supplies. The HT Series also supports the new ReAX IP Control engine option (IPE-REAX-1) based on JavaScript. ReAX allows full IP control automation throughout the network without the need of an external proprietary control engine.



VIEWSONIC
SC-T25 Citrix Workspace Hub



The ViewSonic **SC-T25 Citrix Workspace Hub** (based on Raspberry Pi 3) is perfect for businesses looking for cost-effective and high performance solutions for their virtual workspace needs. With integrated Bluetooth, the SC-T25 supports all of the Citrix Workspace Hub usage models, include beacon-based session roaming, QR code login, and Citrix Casting. The included Stratodesk No-Touch OS and Center management software allows for simple provisioning and updating across the network. With a slim and compact design and optional mounting plate, the SC-T25 easily attaches to your VESA-ready monitor. With its eco-friendly design, the SC-T25 consumes less than 5W of power and uses up to 90% less energy than standard PCs. The SC-T25 is the smart choice for your virtual workspace. This high-performance HDX-ready thin client is built upon the latest Raspberry Pi 3 platform. It delivers a high-definition experience to users of rich media apps and desktops in a virtual computing environment. With this thin client, you can achieve the best possible Citrix performance at the lowest per-seat cost. This thin client is Citrix Ready HDX verified, providing users with secure, fast and convenient access to remote desktops and applications on their Citrix servers in a familiar Windows environment. It's a perfect thin client device for Education, SMB and Enterprise customers. An integrated real-time media engine supports audio and video conferencing via Skype for Business. With a digital HDMI output, this thin client supports displays with up to 1920x1200 resolution.

CHARTING THE GROWTH OF VIEWSONIC IN INDIAN MARKET

ViewSonic, a leading provider of display solutions, has been working towards creating distinct, eye-catching visual products portfolios which, instantly communicate such attributes as brilliant color and sharp resolution. In conversation with Anil Chopra – Director, AV-ISE, with Business Head, AV Products - Muneer Ahmad, discusses ViewSonic products, launches, escalation of ViewSonic in India, and their future strategies.



Widely acclaimed company in providing color perfect display solutions, ViewSonic started its operations in California, USA, in 1987. Ever since then, ViewSonic has managed to diversify its presence in almost to 28 countries. "We have been successful at delivering almost perfect color to image display solutions right from the early 90s. In fact, our logo the Gouldian Finches signifies clear distinctive colors," says **Muneer Ahmad – Business Head – AV products**, ViewSonic India

When asked about their product line, especially in India, Ahmad says "ViewSonic has been focused towards only one thing since its period of inception and that is visual displays. We have our product line broaden into projectors, monitors, interactive flat panels, video walls, digital signages, ViewPads and more. Now, we have also extended into

cloud solutions which gives a user-friendly and systematic approach to the presentations and helps avoid the mess on the board. When it comes to the Indian market, we are strong footed into three product lines - the projectors, Interactive Flat Panels i.e. the IFPs, and monitors.”

ViewSonic has seen a steady growth in the Indian market, especially, for the past two years. It has seen a growth from 9,000 units in 2017 to nearly 25,000 units in 2018 in projector sales alone, surging ViewSonic from 14th position to the 3rd spot as per a Future Source report. Elaborating on what makes Viewsonic products such a standout compared to other products in the market “as far as our products are concerned there are quite a few specs which set us apart from our competitors.

If I had to give an example the best one would be that all of our projectors are DLP technology based (In comparison to other DLP brand projectors our Projectors are giving better colors to the image which is because of our color wheel. ViewSonic’s projector color wheel is custom designed by our R&D team and has the closest resemblance to

the color quality required. A projector comprises color wheels, chips, optics like a lens, and more; The color wheel gives accurate color to the images when it comes to the DLP Projectors and considering our color wheel is custom designed by us, gives it a much closer color reach. Aside to the color wheel, we have various features like the horizontal and vertical keystones, LAN controls, products like cube speaker and more” says Ahmad.

ViewSonic has been quite on the forefront in bringing out innovative new technologies. Talking about their latest products in the market Ahmad says “one of our projectors - the M1 recently won an award for its vivid and immersive viewing performance for all entertain-

ment types in a stylish, intuitive design. We plan to go forward with this legacy in providing superior quality projectors, IFPs, and monitors to the Indian market. We recently launched a key product which is very unique to us and no other company has launched similar product it yet in India . It’s the **X10 – 4k LED Projector**, it’s the first 4k LED Projectors with inbuilt apps with Harman/Kardon speakers. Till date, no higher lumen projector has featured in-built apps in it, it was an attribute unique to the televisions. Now ViewSonic’s X-10 is the first projector to have this feature. The X10-4K has an integrated Smart TV interface for easy streaming of TV shows and movies from popular content services, while its built-in OS provides access to popular apps via the

is our My View Board software, which we have been constantly updating and upgrading. Our latest launch the My View Board software can be divided into six parts which means six people can view it simultaneously at once. Keeping aside the general IFP specs that it obviously has, it possesses features like Google support wherein you can directly save your file on google i.e. google drive, one drive, etc. The smooth touch interface of the IFP’s (IFP6550/IFP7550/IFP8650 – 65”, 75” and 85” respectively) avoids even a second of lag and the My View Board software allows users to write, highlight, edit and transform documents and images on the screen in real time.”

India is the second largest market in Asia for Audio Visual and systems In-

tegration segment continues to excite the market. Providing his perspective on this exploding Indian AV market as also ViewSonic strategies to cater to the currently growing AV industry, “there has definitely been a close to 30% - 40% growth in the Indian AV market. The private and public sectors have been investing majorly into AV projects and towards providing modern AV infrastructures. This is very positive for us

and we foresee a very good opportunity of growth in India” he asserted. “To cater to the increasing demand, we have our chain of national distributors, regional distributors, and resellers who are helping us to cater throughout India. So, our distributors i.e. Creative Peripherals, Ingram Micro, MZ Audio, and WPG import the ViewSonic products directly and then further take care of the distribution of it. We have been following this focused structure of which is one important factor that has helped us achieve the position we have today. We will be continuously working on bringing some new innovative products for the industry to serve better and meet the consumer demand” concluded Ahmad.

“ There has definitely been a close to 30% - 40% growth in the Indian AV market. The private and public sectors have been investing majorly into AV projects and towards providing modern AV infrastructures. This is very positive for us and we foresee a very good opportunity of growth in India. The private and public sectors have been investing majorly into AV projects and towards providing modern AV infrastructures. ”

MUNEER AHMAD, BUSINESS HEAD, AV PRODUCTS

Android Aptoide store. It also has a short throw projection making it perfect for a home set up. We have certain features in the X10 projectors which our competitors are yet to explore.

ViewSonic has witnessed exponential growth in the last two years alone. Talking about the reasons for the growth of their IFPs and its rising demands Ahmad says “We have just ventured into Interactive Flat Panels (IFP) and have managed to be the third best brand in India for IFPs. With our constant inventiveness and professional graphics for users and consumers, we have managed to see a 41.8% growth in the last year alone. According to me what makes us one of the leaders in IFPs in such a short time

TSL PRODUCTS UNVEILS NEXT GENERATION SAM-Q AUDIO MONITORING PLATFORM

NEW PLATFORM OFFERS ADAPTABLE FUNCTIONALITY FOR EVER-CHANGING AUDIO MONITORING REQUIREMENTS

TSL Products, designer and manufacturer of broadcast workflow solutions, unveils its new **SAM-Q** audio monitoring platform. SAM-Q represents a new approach to audio monitoring, allowing customers to determine how they wish to control and visualize their audio content based on application, environment or simple personal preference. Designed in direct response to customer requirements and feedback, SAM-Q provides a completely new user

experience and seeds the next generation of TSL's audio monitoring range.

"Customers need to feel confident they are making the right decisions when choosing to invest in new equipment and technology," says **Stephen Brownsill, audio product manager** at TSL Products. "An audio monitoring platform designed to serve all levels of user, regardless of their audio knowledge or experience, that also has the functional capacity to grow

and adapt in line with ever changing technical requirements, all helps to protect a customer's investment." The SAM-Q-SDI is the first audio monitor to realize the benefits of TSL's new SAM-Q audio platform. Designed for customers oper-

ating with SDI infrastructures, the SAM-Q-SDI demonstrates exactly how customers can maximize operational efficiency and reduce operational error simply by choosing their preferred method of interaction. From the most demanding engineer to the operator who simply needs to listen to their chosen source, the SAM-Q-SDI caters for all. Built on the SAM-Q platform, the SAM-Q-SDI brings the freedom to monitor SDI, AES and Analogue audio sources with maximum operational efficiency. Providing full support for SAM-Q operational modes, the SAM-Q-SDI provides multiple levels of interaction and visualization, catering for all levels of audio expertise, user preference and broadcast application, from the most demanding engineer to the operator who simply needs to listen to their chosen source.

The key features that differentiate the SAM-Q-SDI from existing audio monitoring solutions on the market include customizable configuration, lock-down controls and expandable capabilities via the license system.



TSL Products SAM-Q audio monitoring platform

SONIFEX INTRODUCES NEW DANTE AUDIO INTERFACES

At the end of last year Sonifex announced new Dante commentary units. Sonifex has launched its range of **DIO Audiophile Dante Interfaces** which are Dante Domain Manager compliant.

The DIO Audiophile Dante Interfaces are simple plug and play audio interfaces provide a convenient and elegant method of connecting legacy analogue and digital audio equipment to the Dante AoIP audio network. With a supreme audio quality Sonifex are using A/D and D/A circuitry that's 10 times better than similar competing products, offering >120dB of dynamic range.

If you're converting audio sources into AoIP, it makes sense to use the best converters that you can afford, to benefit the whole network. These cost-effective products provide the answer. Using Dante



Controller for configuration and powered by PoE, these rugged aluminum boxes have side slots for screw mounting and contain superior audio circuitry for optimal

audio performance. In addition, they use rugged Neutrik EtherCon connectors and Neutrik lockable audio connectors for ultra-reliable connectivity.

VIEWSONIC LAUNCHES NEW X10-4K LED PORTABLE PROJECTOR ALONG WITH M1+ AND LS800 HD PROJECTOR

THE PROJECTOR FEATURES AMAZON AND GOOGLE VOICE CONTROL COMPATIBILITY WITH BUILT-IN WI-FI/BLUETOOTH, AND PREMIUM HARMON KARDON SPEAKERS

ViewSonic Corp., a global provider of visual solutions, has launched their latest line of projectors - **X10-4K**, **M1** and **LS800** HD Laser Projector in India.

ViewSonic X10-4K

The ViewSonic X10-4K LED portable projector is engineered with a DLP 4K Ultra HD (3840x2160) chip with XPR technology. With the long-lasting LED technology, the projector offers up to 30,000 hours of operational life. The X10-4K projector



includes an integrated Smart TV interface for easy streaming of TV shows and movies from popular content services, while a built-in OS provides access to popular apps via the Android Aptoide store.

The X10-4K features 125% of Rec.709 color accuracy and Frame Interpolation technology, which reduces motion blur and ensures fluid multimedia content projection. With HDR content support, the X10-4K delivers incredibly detailed video playback, contrast, and vivid colors. The connectivity options include HDMI 2.0/HDCP 2.2, USB 2.0 Type-A, Type-C, Audio In/Out, and RJ45.

Combining stunning 4K resolution with smart streaming functionality and portable design, the ViewSonic X10-4K LED

portable projector delivers a theater-like experience in just about any room. With a lightweight design, easy carry handle, and short throw lens, the X10-4K can be conveniently moved from room to room, indoors to outdoors. Furthermore, the projector features 2,400 LED lumens of brightness, and Wi-Fi connectivity, allows users to stream content from their favorite providers such as YouTube. In sum, the X10-4K delivers big pictures in a small package.

ViewSonic M1+ LED

ViewSonic M1+ LED ultra-portable projector provides convenient entertainment and content delivery. It comes with a built-in battery that provides up to six hours of battery life, and the LED technology offers up to 30,000 hours of usage.



The M1+ weighs less than two pounds, and its compact and lightweight design makes it easy to carry. Featuring 300 ANSI lumens of brightness and a 120,000:1 contrast ratio, the ViewSonic M1+ also includes dual Harman Kardon speakers. With multiple connectivity options, including Bluetooth wireless connectivity, HDMI,

USB 2.0 and USB Type C, Audio Out and a MicroSD card reader, the M1+ is a great device to share and view a variety of multimedia content. The M1+ projector utilizes the latest solid-state LED technology, making the projector mercury and lamp free.

ViewSonic LS800 HD

The LS800HD is a full HD phosphor-based projector designed for the professional installation market. Bright and versatile, the LS800HD is loaded with features



that make it an ideal installation projector for education and business applications in larger venues. Built with professional installers in mind, the ViewSonic LS800HD projector feature a brightness of 5,000 ANSI Lumens, a 100,000:1 contrast ratio, and up to 30,000 hours of light source life. From lecture halls and large boardrooms to houses of worship and auditoriums, the LS800HD is bright and versatile enough to make an impact in just about any environment needing Full HD 1080p resolution combined with ViewSonic's SuperColor technology, the LS800HD laser projector delivers advanced color reproduction, bringing to life captivating color, crisp graphics, and stunning images.

EPSON DEBUTS NEW PRO L INTERCHANGEABLE-LENS LASER PROJECTORS

Epson, one of the leading projector brands worldwide, has announced a new range of compact, interchangeable-lens **Pro L laser projectors**. In addition, Epson has also introduced the new 9,000 and 30,000 lumen laser projectors. The new range of Pro L projectors are Epson's most compact, interchangeable-lens laser projectors.

These versatile projectors, complete

with 4K enhancement, HDBaseT and wide lens shift, are designed for large venue usage – from visitor attractions to higher education, museums to corporate meeting rooms. They produce bright (up to 7500 lumens), detailed, high contrast, images with defined shadow details. The minimalist, discreet design and quiet fan noise ensure these new projectors fit seamlessly

into a wide variety of environments.

The new 30,000 lumens laser projector, the Epson **Pro L30000U**, is a high-end installation laser projector. The new 9,000 lumen laser projector joins the successful **Pro L1000-Series**, which range from 6,000 to 15,000 lumens. These projectors are designed for permanent installations as well as rental and staging.

BARCO AND CINIONIC LAUNCH NEXT GENERATION 4K LASER PROJECTOR PLATFORM TO TAKE CINEMA INTO SMART PROJECTION ERA

Barco cinema joint venture, has introduced the new Barco projector line-up for cinema screens. The next generation projector platform will deliver an unmatched cinema experience to moviegoers and futureproof results with native 4K resolution, higher contrast, wider color gamut and enhanced uniformity. The new platform is the result of thorough value engineering and advanced innovation including 4K and laser technology to guarantee unsurpassed image quality.

With more than half of the world's movie theaters illuminated by Cinionic and over 85,000 Barco projectors installed globally, Barco leads the industry in cinema projection technology. Barco Series 4 has a laser portfolio of high-quality and captivating technologies that provides compelling experiences for moviegoers worldwide.

Cinionic is rolling out its Barco Series 4 platform to help exhibitors drive their renewal strategy: "With more filmmakers creating content in 4K, they are looking for ways to showcase these advancements on screen. Our Barco Series 4 laser

projectors provide a unique opportunity for exhibitors to bring 4K into mainstream theaters by combining the benefits of laser technology with efficient set-up and



Barco and Cinionic introduces projector line-up for cinema screens

unprecedented financial solutions," says **Wim Buyens, CEO** of Cinionic. "Our new generation of laser projectors makes it easier for any theater - from independent cinemas to multiplexes - to offer audiences differentiated experiences." Series 4 platform to help filmmakers drive their renewal strategy: Series 4 is designed with audiences in mind, building on Barco's

heritage in cinema projection. Cinionic market experts and Barco's R&D team spent several years working directly with its customers and other industry partners, to solve the challenges they are facing in today's cinema landscape.

With knowledge of the market, Barco team delivers a next generation projector family including the latest technologies as well as the outcomes of advanced value engineering and platform modularity practices. The Series 4 laser projector is the world's first projector to include the new compact Texas Instruments 4K chip, as well as the latest RGB laser technology. As a result, the new projectors deliver a cinematic experience in 4K with brilliant images on all types of screens.

These laser-illuminated projectors are more than twice as energy-efficient compared to old lamp-based solutions, and allow for a more attractive total cost of ownership (TCO) and operational robustness while the Barco EcoPure design delivers on power and air-flow, resulting in the greenest cinema projector ever created.

CHRISTIE CINEMA ASIA APPOINTS NEW SALES DIRECTOR FOR INDIA

Christie, a leader in creating and sharing the world's best visual and audio experiences, has announced the appointment of **Kanwal Brar** as **Sales Director** - Cinema (India) for Christie Digital Systems India, reporting to **Don Shaw, Senior Director of Sales** - Digital Cinema, Asia Pacific Region.

Kanwal will focus on building and strengthening Christie's sales channels within India and re-establish direct relationships with key accounts. Further focus will be on promoting new RGB laser projection products to support Christie's position as the leading provider of advanced cinema exhibition technologies and solutions in the Indian market. His appointment takes effect on April 15.

Previously Kanwal has led an entrepreneurial initiative, launching



Kanwal Brar, Sales Director - Cinema (India), Christie Digital Systems India

and growing the businesses to a stable profit generating organization. Prior to being an entrepreneur, he was associated with Christie Digital Systems in India in various positions for ten years.

"In his new role, Kanwal will be accountable for the strategic focus of Christie's cinema sales efforts in India," said Shaw. "His previous experience as part of the Christie family is a tremendous asset in building on the foundation already in place for the Christie brand and its cinema technologies, which are eliciting keen interest in the burgeoning Indian entertainment market."

Kanwal is a graduate in electrical engineering and later completed his MBA from the University Business School, Punjab University Chandigarh.

SHURE INTRODUCES TWINPLEX PRISTINE PERFORMANCE FOR ANY STAGE

Shure new line of premium subminiature (5 mm) omnidirectional lavalier and headset microphones, the TwinPlex was launched on 8th April, 2019. Designed to stand up to the toughest conditions, **TwinPlex** provides natural audio at both high and low frequency when professional vocal performance is a must. The new patent pending capsule technology offers best-in-class sound in an easy-to-conceal package, ideal for quick costume changes or discreetly placed under wardrobe with no impact on sound quality. Developed with input from leading audio professionals, TwinPlex supports the diverse needs of theater, broadcast, film and television, and corporate presentations to produce high-quality audio production with superior dependability.

TwinPlex consists of four lavaliers (**TL45, TL46, TL47, TL48**) and an ultra-light, fully-adjustable headset microphone (**TH53**) in multiple colors with extensive accessories and options. The unique dual-diaphragm omnidirectional design yields extraordinary off-axis consistency and industry-leading low self-noise creating lifelike vocal clarity and warmth. "We've put these mics on a number of different people, and they simply sound outstanding. The noise floor is really low, and there's an appreciated lack of handling noise—clothing noise from the cable is actually nonexistent," commented Peter Schneider, owner at



Shure TwinPlex four lavaliers (TL45, TL46, TL47, TL48)

Gotham Sound..

To simulate years of intense use, the ultra-thin, TwinPlex cable was flexed, stretched, and pulled to the absolute limit in internal tests. Available in 1.1 mm and 1.6 mm options, the paintable cables are immune to kinks and memory effects, resulting in never-before-seen flex performance due to an innovative spiral construction with redundant shielding.

Ideal for unpredictable, high-stakes environments like theater or reality TV, TwinPlex

was pushed to the boundary during development and field testing to ensure flawless audio regardless of the condition it encounters. The superhydrophobic coating and interchangeable sweat-resistant frequency caps keep perspiration and moisture from upstaging the audio, while the medical-grade cable technology flexes to fit the costume design and demanding schedules



that often come with associated uses.

"In developing TwinPlex, we gathered valuable input from leading industry professionals at every stage of the process and extensively tested prototypes to ensure we were ready," stated **John Born, senior global product manager** at Shure. "This resulted in a comprehensive portfolio of more than 60 versions in a variety of color, connector, cable, frequency response, and sensitivity to meet the demands of any application when you need amazing sound quality and unprecedented durability."

NEW UNIVERSAL FLAT SCREEN MOUNTS FROM B-TECH

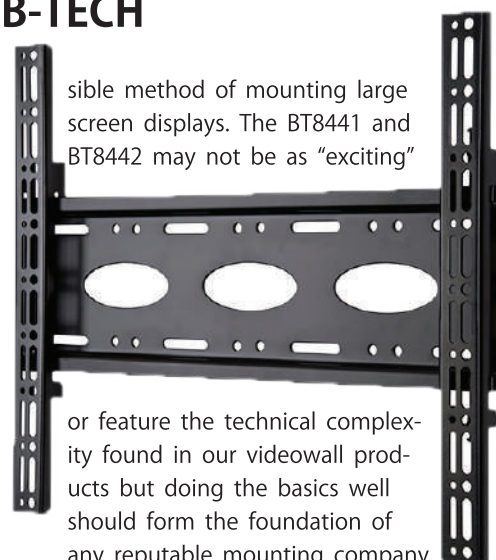
B-Tech adds two new flat screen mounts to our broad mounting solutions portfolio. Large screen displays are now a factor of modern life, being seen in the high street, home, education and a wealth of other vertical markets. To make things easier for integrators, B-Tech's new **BT8441** and **BT8442** mounts deliver a simple, fast hook-on mounting process, with lateral adjustment of screen position once fitted.

The BT8441 is suitable for screens from 39 to 55 inches, with an impressive maximum weight capacity of 80kg. The BT8442 benefits from the same high load limit but with a larger wall plate suitable for bigger mounting patterns, can cater

for displays of between 49 and 80 inches in size.

Both mounts share the same low-profile design, allowing for close-to-the-wall fitting of 30mm. Levelling screws allow adjustment of screen height and, for professional, high ceiling installations, the mount can be easily paired with our collar and pole system.

Early feedback has already shown these to be a hugely popular choice for single displays, demonstrating how crucial a part mounts play in AV, at even the simplest level. Mark Walker, B-Tech's Director of Operations (UK) said: "With a simple hook-on installation, our latest flat screen mounts provide the easiest pos-



sible method of mounting large screen displays. The BT8441 and BT8442 may not be as "exciting"

or feature the technical complexity found in our videowall products but doing the basics well should form the foundation of any reputable mounting company and with these products we have done just that.

YAMAHA EXPANDS INTEGRATION WITH CONTROL4 AND RTI HOME-AUTOMATION SYSTEMS THROUGH ADDITION OF MUSICCAST CONTROL

YAMAHA TO EXPAND INTEGRATION WITH CONTROL4 AND RTI HOME-AUTOMATION SYSTEMS THROUGH ADDITION OF MUSICCAST CONTROL

Yamaha is strengthening its ongoing collaboration with leading home-automation companies Control4 and RTI with the planned addition of **MusicCast** multiroom audio control to the companies' home-control systems.

The development demonstrates the commitment by Yamaha to custom integrators, enabling them to design home-control solutions that access the full array of MusicCast sources and multiroom streaming capabilities. Control4 and RTI systems already control the basic operations of many Yamaha MusicCast products, but new IP-based drivers in development will expand control to include multiroom-audio functions of many MusicCast-equipped products, including AVENTAGE AV receivers, sound bars, a streaming amp and preamp, and powered speakers. Such functions include room linking for simultaneous playback of music in multiple rooms.

The new drivers of the Control4 and RTI solutions, will integrate the control of multiroom audio, home theater, lighting, security, HVAC and other home systems



Yamaha MusicCast WXA-50

through in-wall and tabletop touchscreens and in-wall keypads. To bring the advantages of MusicCast to even more installations, Yamaha is working with additional third-party control companies to develop MusicCast drivers for their control.

The compact **WXA-50 streaming amplifier** and **WXC-50 streaming preamplifier** are ideal for custom integrators who want to add MusicCast music-streaming sources to a central equipment rack for playback through wired in-wall, in-ceiling and outdoor speakers installed throughout the house.

Versatile, high-performance MusicCast technology empowers to stream music

stored on networked computers, smartphones, and tablets to MusicCast-equipped audio products in multiple rooms of the house over a Wi-Fi or Ethernet network. MusicCast products also stream music wirelessly from the cloud through built-in cloud-based music sources such as Pandora, Spotify Connect, Napster (formerly Rhapsody),

and SiriusXM Internet Radio as well as thousands of internet radio stations via vTuner.

With MusicCast, a smartphone or tablet also doubles as an intuitive remote control to select songs from the user's music library, direct them to the room or rooms of their choice, and even direct different songs simultaneously to different rooms. In addition, MusicCast devices redistribute music from external audio sources plugged into their inputs, including turntables and TV set-top boxes. MusicCast devices can also redistribute music from Bluetooth-connected smartphones and tablets.

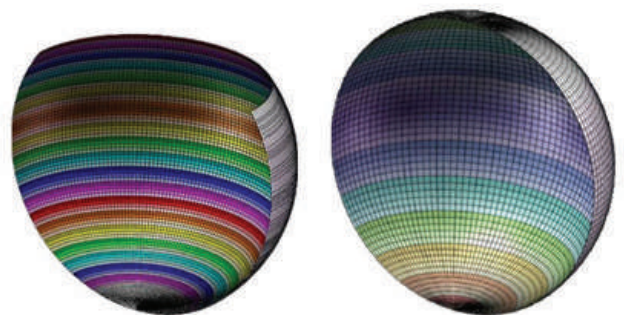
INNOVATIVE LED DOME SOLUTION LAUNCHED BY KRAFTWERK LIVING TECHNOLOGIES

LED display technology has evolved rapidly throughout the years. Today, almost any shapes or sizes are possible, with crystal clear images, a wide variety of potential uses and flexibility in structure. Under the internal project name **Projekt KVS**, Kraftwerk LT has been looking into the use of LED display technology in dome applications and is now ready to launch on the global market.

With the company's system integration experience in providing complex and high-performance LED display systems as well as its knowledge and experience in the field of control systems, playback and signal processing, this new technology rounds off the product portfolio for Kraftwerk LT and its broad range of clients

– with applications in industry, entertainment and the cultural sector, offered as turnkey solutions.

Kraftwerk LT is already a leader in entertainment, the applications of domes as well as other complex displays and has an important strategic goal of becoming a leader in the field of hybrid dome solutions and multi-functional planetarium spaces. **Manfred Meier, CEO and Founder** of Kraftwerk LT adds, "25 years of experience and an aspiration to always offer the latest and most innovative technologies, which we have been showcasing in the area of LED applications and any other, allow us to work



the market and perfectly address its needs with a well-rounded range of products and services."

In the first phase, the available pixel pitches for LED domes will be 2.7 mm and 4 mm with total resolutions of up to 12 x 12K pixels. Sizes and shapes are flexible and can range from smaller applications to large domes such as planetariums, flying theaters and many more.

SAI TEERTH DEVOTIONAL THEME PARK ELEVATES AUDIO EXPERIENCE FOR DEVOTEES WITH HARMAN PROFESSIONAL SOLUTIONS

TECHNOSALES MULTIMEDIA TECHNOLOGIES PVT LTD. DEPLOYS JBL PROFESSIONAL CINEMA SURROUND SOUND SYSTEMS TO PROVIDE A MORE IMMERSIVE SPIRITUAL EXPERIENCE FOR DEVOTEES

Technosales Multimedia Technologies Pvt Ltd. recently deployed industry-leading JBL Professional by HARMAN cinema surround systems in two theatres at the Sai Teerth devotional theme park to provide a more immersive spiritual experience for devotees.

Sai Teerth is India's first devotional theme park, featuring immersive exhibits dedicated to one of the most worshipped secular saints of all time; Sai Baba. With four world-class audio-visual attractions,



Technosales Multimedia Technologies deploys JBL Professional by HARMAN cinema surround systems in two theatres at the Sai Teerth devotional theme park

extended low frequency response, while 14 JBL 9300 cinema surround loudspeakers offer enhanced coverage in a compact package, making them easy to hide out of sight. Crown DSI 2000 and DSI 4000 amplifiers are used to power the system in the 5D Theatre.

"At Sai Teerth, we want devotees to experience a magical holy journey," said Mr. Sanjay Dabke, Managing Director, Guardian Media & entertainment Pvt. Ltd. "We want to create an immersive experience that combines devotion with technology and entertainment. The audio-visual system plays a major role in accomplishing that, which is why we chose industry-leading HARMAN cinema surround systems."

"It gives us immense pride at HARMAN Professional Solutions India to be associated with a project of such magnificence and spiritual significance," said Prashant Govindan, Sr. Director, Harman Professional Solutions, India & SAARC. "I congratulate the team members who worked together to complete this project in such a short span of time. I thank Vikas Corporation, our authorized dealer for Cinema sound, for providing timely logistical and technical support, as well as Technosales, and HARMAN's in-house cinema application team for their perfect installation and commissioning. We're thrilled to provide an immersive cinematic audio experience by JBL and Crown for the devotees at the theme park."

Sai Teerth is home to one of the largest cinema screens in the country, as well as an innovative 5D theatre. In order to provide the most immersive experience for devotees, Sai Teerth hired one of India's most renowned distribution groups—Technosales Multimedia Technologies Pvt Ltd. After surveying the location, Technosales designed a custom cinema surround sound system that utilizes JBL Professional loudspeakers and Crown amplifiers for their unparalleled performance and rock-solid reliability.

"Sai Teerth asked us to provide a world-class audio system to make their exhibits more engaging and immersive," said Rajesh Patil of Technosales Multimedia Technologies Pvt Ltd. "The biggest challenge was providing consistent coverage due to the size of the Giant Theatre and the interactive nature of the 5D Theatre. The flexibility and clarity of HARMAN

72' cinema screen. In order to make the soundtrack as immersive as the visuals, Technosales installed three high-power JBL 5742 four-way ScreenArray loudspeakers for their high output, optimal coverage and minimal distortion. Six JBL 4642A subwoofers deliver a powerful extended low frequency response, while 18 JBL 9310 cinema surround loudspeakers mounted throughout the theater offer studio quality sound and precise coverage. Crown DSI 4000 and DSI 6000 amplifiers are used to power the system in the Giant Theatre.

Lanka Dahan is a custom-built ride that features an interactive 26-minute film with 5D stereoscopy audio. In order to meet the advanced technological needs of this immersive exhibit, Technosales equipped the 5D theatre with three JBL 4722 ScreenArray two-way cinema loudspeakers for their smooth and accurate response. Two JBL 4642A subwoofers offer an



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EXPO HIGHLIGHTS

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SPECIALIST COURSE

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AV PROJECT GALLERY
WALK OF FAME

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INDIAN AV INDUSTRY AFFIRMS AV INTEGRATED SYSTEMS EXPO INITIATIVES

The inaugural AV-ISE Expo and Conference in 2019, organised and hosted concurrently with 19th PALM™ Expo, attracting 25,000 trade visitors, has received warm and appreciative reception from the AV industry spread across India. The expo born out of a demand by AV consultants and Systems Integrators attending the PALM expo each year for a dedicated AV expo is being organized with a long-term vision and commitment.

India, the second largest market in Asia for the Audiovisual and Systems Integration segment continues to excite the market. The AV industry in India is on a fierce growth trajectory. The AV Integrated Systems Expo 2019 was launched to serve this booming AV industry with business opportunities that add up.

Over the years, PALM expo has witnessed phenomenal growth in the number of Systems Integrators and AV consultants sourcing products and solutions for entertainment venues and home theatre

projects. The world's leading audio brands participating religiously in PALM include HARMAN, Sennheiser, Shure, Bose, Genelec, Digico, AVID, d&b audiotechnik, Allan & Heath, Yamaha, Sonodyne, P Audio, Behringer, Outline, OHM, Audio-Technica, Pioneer, Denon, Taiden, JTS, QSC, RCF, EV, Martin Audio, Robe, OSRAM etc. Joining the marquee list of exhibitors at PALM are leading AV technology brands participating in AV Integrated Systems Expo 2019.

Focus product segments include Video Projection & Display, Digital Signage, Large Display, interactive Display, Unified

communications, Education technology, Audio Processing, Digital Cinema, Cabling, Connectors and signal management, Conference and collaboration, IP & Network distribution.

AV Integrated Systems is leading the charge with several key initiatives. The expo's eponymously titled publication – AV Integrated Systems, will drive the expo's highlight features – namely the AV Integrated Systems Summit Conference, CAVS – Certified AV Specialist program, AV Education & Training Programme and AV Project Gallery Walk of Fame.

KEY HIGHLIGHTS AT AV INTEGRATED SYSTEMS EXPO

AV Integrated Systems Summit – Conference, Seminar, Workshops

The AV Summit aspires to engage audiences eager to learn more and provides professionals an opportunity to speak about their knowledge. The Summit will focus on key technologies and will aim to be a window to the future of AV in India.

Day 1 - Time : 13:00 - 14:00 CONVERGENCE OF AV AND IT



KELVIN ASHBY KING, T2 CONSULTING

With the rapid scaling up of networked AV technologies, the AV and the IT sectors are ineludibly moving closer to each other. The AV and IT professionals will get an opportunity to understand better technological advancement in order to create a secure, efficient, and productive IP-based AV networks. The session on Convergence of AV and IT will discuss the change in the industry, the direction and skill set for understanding the impact upon network configuration and performance. He would also be shedding light on how IOT will impact AV.

Day 1 - Time : 15:45 -16:45 AV INNOVATIONS IN WORKSPACES



RAJEEV ARORA, QUBIX CONSULTING

There is lot of visual and audio to be communicated in any workspace. The session on AV Innovations in Workspaces, while putting into focus and highlighting JLL's most talked about Centre for Excellence will also discuss Critical AV Integration Design implications and innovations in the workspace.

Day 2 - Time : 12:00 - 12:45 INTRODUCTION TO DANTE AUDIO NETWORKING IN THE INSTALLSPACE



DIPANSHU MITRA, PRODUCT MANAGER, PRO AUDIO

Introduction to Dante Audio Networking in the Install Space Audio will explore how basic concepts of Dante and how it can allow for easy management of networked audio devices and multiple rooms / public spaces while allowing seamless expansion of Dante systems over Gigabit network infrastructure. Also in the scope of the seminar we will look at how Dante can be used to revive, old buildings with existing analog audio infrastructure in to the new age of networked audio.

DAY 2 - TIME : 14:30 - 15:30 INTEGRATING LARGE SCALE PROJECTS



SACHIN PRABHUDESAI, VICE PRESIDENT - PROJECTS AT ACTIS TECHNOLOGIES PVT LTD.

The session will throw light on the intricacies and imperatives of Integrating Large Scale Projects like airports, stadiums, etc. The session will cover the frontier end of integration in regards to design and networking along with information on large projects integrated by Actis, with a brief on the approach, execution, team deployment etc.

Day 1 - Time : 17:00 - 18:00 ICT IN EDUCATION



VILAAS NAIK, CTS AND ICT CONSULTANT, VIOAV SYSTEMS INDIA PVT. LTD.

There is a tremendous market opportunity for Information & Communication technology business in the field of education in India. There has been an upsurge in adopting the next generation technologies in both public and private sector, India is in a very elementary stage of imparting quality digital education across the regions, we can leapfrog technologies to implement the latest technologies and employ the most effective solutions and methodologies. The session would revolve around the current trends and effective use of technologies in education.

DAY 2 - TIME : 13:00 - 14:00 CONNECT, COMMAND, AND CONTROL



KULDIP KAMAT, DIRECTOR OF ALL WAVE AV SYSTEMS PRIVATE LIMITED

The session titled Connect, Command, and Control will talk about control and automation in workspaces, factories, airports etc.; functions of AV Control systems to deliver efficiency and central control, benefits of software-based AV Control and how integrators need to adapt.

DAY 2 - TIME : 15:45 -16:45 IMPACT OF BUILDING DESIGN ON AUDIO SYSTEMS SELECTION



MATHEW M. GEORGE, MMG ACOUSTICAL CONSULTANTS

The new-generation buildings – residential, institutional and corporate are required to deliver users increased comfort, improved flexibility, satisfaction and productivity, courtesy a high-tech integrated design. All these buildings generally apply life-cycle analysis to optimize early investments into systems selection, besides other investments in the building; thereby impacting the selection of audiovisual components. The session on Impact of Building Design on Audio Systems selection will provide insight and case studies into how building design can impact selection of audio systems.

CAVS – Certified AV Specialist Program

The three-day Certification Course in AV Install & Integration will be conducted by **Ranjit Singh, CTS-D, CTS-I and Principal Consultant for Workspace Technology and Experience at PTS Consulting, Singapore.**

The Certification is aimed at providing knowledgeable manpower, replacing the 'electrician' with a 'qualified integrator' and creating a talent with specific learning for AV integration. The Certification Course is designed to provide knowledge of audio and video fundamentals and enhanced troubleshooting skills, while promoting best-practices and technological expertise of systems technologies. The focus of the CAVS programme this year is **AV in the Digital Era**

The course aims to empower attendees with a understanding of technology and



trends in AV, that are driving meeting spaces in today's Digital Era. The CAVS training will cover basic foundations in a three part series on Audio, Visual, & IT across the three days of the show.

While Part 1 will offer **An Introduction to Audio, Visual and Control**, Part 2 will enlighten on Understanding the Requirement and Part 3 will elaborate on Technology and Trends

Part 1: An Introduction to Audio, Visual and Control

- The Basics of Audio, Visual and Control
- Understanding Factors When Designing Meeting Spaces

Part 2: Understanding the Requirement

- Asking the Right Questions
- Identifying the Right Requirement
- Understanding the Flow of a Technology Project

Interested delegates can Log on to <http://avintegratedsystems.in/cavs/index.aspx> for registering for the CAVS Training Programme



Ranjit Singh, CTS-D, CTS-I and Principal Consultant for Workspace Technology and Experience at PTS Consulting, Singapore

Part 3: Technology and Trends

- Understanding How Lifestyles Are Driving Design
- Why Technology Underpins the Meeting Space Experience
- What is Important to Meet the Demands of Today.

AV Education & Training Programme

As technology takes quantum leaps, disseminating information on new technology, quality standards and training becomes more important. AV Integrated Systems expo is committed to raising the standards in Indian AV integration, both



by building the cadre of qualified technicians as well as in adopting high-quality product. The three-day expo will provide exhibitors at the show an opportunity to host training sessions on their products and solutions. The sessions will focus on new technology and trends or new product launches, with in-depth product education and sharing of latest techniques.

On Day 1 of the AV Education & Training Programme - 30th May, 2019, Aurora Multimedia India will host a IPBaseT Technology Specialist Certification and training, spearheaded by **Nataraju Upputuri – Director, Aurora Multimedia India and Amith C Pillai – Technical Manager, Aurora Multimedia.**

What is IPBaseT®?

The Ultimate Solution for 4K AV Distribution Over IP

Aurora's IPBaseT® combines a variety of 4K IP technologies and features under one unified protocol using a simplified topology. Uncompressed video with zero-latency, visually lossless video with low latency, seamless switching, videowall and multiviewer modes, digital audio, USB 2.0,



Nataraju Upputuri – Director, Aurora Multimedia India

Ethernet, and control are just some of the core capabilities of IPBaseT®. Utilizing the bandwidth of a standard 1Gbps copper

(VLX Series) or 10Gbps copper or Fiber (IPX Series), IPBaseT® supports large scalable audio/video matrixing, and it does so while replacing multiple technologies and products with a “single-box” distributed platform. The days of needing a separate AV switcher, control system, videowall processor, audio/DSP converter, and more are a thing of the past!

Training Overview:

This day-long course starts with an interactive session covering the basics of IP networking, followed by hands-on training exploring an AV-over-IP system. It includes the installation, configuration and management aspects of the system including encoders and decoders as well as the management platform, which drives configuration and content management.

IPBaseT training sessions will make AV Engineers learn what they need to know

to leverage the standard for high performance AV network deployments in education, healthcare, enterprise, entertainment, hospitality, retail, houses of worship, government, military, industry and security.

Upon Completion:

Upon completion of the course, attendees will be able to:

- Understand the basics of IP network communication
- Describe the OSI communication model
- Understand the TCP/IP suite of protocols
- Understand how to leverage IP networks for AV solutions
- Understand the capabilities of AV over IP

- Understand the IP network infrastructure requirements to deploy a system effectively
- Select the appropriate switch for deployment
- Install and configure an AV-over-IP system
- Interact with a management platform

Prerequisites:

Before taking this course, attendees are recommended to have the following knowledge,

- Basic knowledge of IP network devices, networking protocols and network topologies
- Familiarity with audio and video signals, connectivity and digital media

Interested delegates can register for free for this training on <http://avintegratedsystems.in/IPBaseT/index.aspx>

AV Project Gallery Walk of Fame

AV Integrated Systems Expo has created an independent, neutral and all-inclusive open platform in India, fulfilling an important need for the AV-ISE and Information Communication industry in India.

In line with the expo’s mantra of “Motivating the market and putting technology in place”, AV-ISE expo has conceptualized a special Project Gallery feature at the expo, which is branded as the **AV Project Gallery Walk of Fame**.

This gallery will enable top AV Consultants and SIs in the country to have

a space of their own to showcase their projects and expertise to a target audience of end users comprising – CTOs, CIOs, procurement and purchase managers across segments which include Corporate, Government, Hospitality, Retail, BFSI etc.

Within the AV Project Gallery Walk of Fame area, design consultant and integrators can display and highlight graphic and/or video presentations of their best and bespoke projects with succinct explanation of all the technologies integrated in the design on interactive / touch screen displays.

Anil Chopra, Director, AV Integrated Systems expo & PALM expo, enthuses on the new opportunities “The expo is indeed going to result in quantum growth. In a robust market with innumerable AV projects we see a great need to provide education and training toward which the expo will in fact contribute consciously. Promise is to be neutral with the objective to spread information.

As such our focus is the engineering talent pool who must be introduced to global best practices, standards and specifications.”

Participants at AV Project Gallery Walk of Fame



GOVERNMENT OPENS BIDS FOR INSTALLATION PROJECTS

ICGAS DAMAN COMMISSIONS PROJECT WORTH 32 LAKHS

ABOUT: Indian Coast Guard Air Station Daman, invites tender for Procurement Of Audio Visual Equipment: -1.00 Projector 2.00 Smart Podium With Accessories 3.00 Amplifier 4.00 Audio System 5.00 Cctv System 6.00 Television

TENDER VALUE: 32 Lakhs

EMD: INR 80003.00 /-

LOCATION: Daman

To know more about the project - <https://eprocure.gov.in/eprocure/app>

DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED SUPPLY AND INSTALLATION PROJECT LIVE

ABOUT: Dedicated Freight Corridor Corporation Of India Limited invites tender For Supply And Installation Of Media Suite Virtual Edition Including Self-Service Recording, Ugc, Vcm Portal And Up To 500(Live/Vod) Streams, Hot Plug Hard Drive Or Better Compatible With Software Of Polycom Video Conference System And Support For One Year In Corporate Office Of Dfccil, New Delhi.

TENDER VALUE: 25.20 Lakhs

EMD: INR 50400.00 /-

LOCATION: New Delhi

To know more about the project - <https://www.tenderwizard.com>

INDIAN INSTITUTE OF MANAGEMENT COMMISSIONS AUDITORIUM AUDIO – VISUAL INTEGRATION PROJECT IN AM- RITSAR

ABOUT: Supply, Installation, Testing, Commissioning And Integration Of Audio-Visual Equipment For Auditorium In IIm Amritsar, SITC Of AV Equipment

TENDER VALUE: 20 Lakhs

EMD: INR 100000.00 /-

LOCATION: IIM Amritsar Transit Campus

To know more about the project - <http://eprocure.gov.in/epublish/app>

IIM KASHIPUR EXPRESSES INTEREST FOR EMPANELMENT OF HOTELS AND RESORTS

ABOUT: Indian Institute Of Management releases tender for Empanelment Of Hotels / Resorts For Boarding, Lodging And Conference Services For Two Years: -1. Black Masking Box Screen with Projection 2. Lcd / Led Projector 3. Lcd / Led / Plasma 55" For Dias 4. Podium Microphone 5. Table Microphone 6. Cordless Microphone 7. Collar Microphone 8. Sound System 9. Splitter 10. Switcher

TENDER VALUE: 6 Lakhs

EMD: INR 30000.00 /-

LOCATION: IIM KASHIPUR AND OTHER LOCATIONS

To know more about the project - <http://eprocure.gov.in/epublish/app>

IIT INVITES BID FOR SUPPLY PROJECTOR AND AUDIO SYSTEMS

ABOUT: Indian Institute of Technology invites tenders for supply projectors and audio systems

TENDER VALUE: 6 Lakhs

EMD: INR 3.95 Lakh

LOCATION: IIT Goa, At GEC Campus, Farmagudi, Ponda – Goa

To know more about the project - <http://eprocure.gov.in/epublish/app>

INTEGRATION AND ACROSS INDIA

CPWD 1.77 CR COMPREHENSIVE MAINTENANCE OF AUDIO VIDEO SYSTEM PROJECT LIVE

ABOUT: Central Public Works Department invites tenders for Annual Maintenance And Operation 2018-19 Electrical And Mechanical Service Of Extension To Parliament House Annexe, Parliament House Complex, New Delhi Sh Providing Services Of Conference System With Video Presentation System Operation And Comprehensive Maintenance Of Audio Video System

TENDER VALUE: 1.77 Crore

EMD: INR 354210.00 /-

LOCATION: Delhi

To know more about the project - www.tenderwizard.com/CPWD

NAYA RAIPUR DEVELOPMENT AUTHORITY COMMISSIONS 2.17 CR AUDIO – VISUAL SYSTEM AND VIDEO WALL SYSTEM PROJECT

ABOUT: Naya Raipur Development Authority has opened bid for Supply, Installation, Testing & Commissioning (Sitc) Of Audio – Visual System And Video Wall System In Ilt Auditorium Building Of Sec-24 In Atal Nagar Dist. Raipur (C.G)

TENDER VALUE: 2.17 Crore

EMD: INR 220000.00 /-

LOCATION: New Delhi

To know more about the project - <https://eproc.cgstate.gov.in/CHEPS/security/getSignInAction.do>

NATIONAL THERMAL POWER CORPORATION LIMITED OPENS BIDS FOR AUDIO VISUAL INSTALLATION

ABOUT: National Thermal power Corporation invites Tender For Comprehensive Onsite Biannual Maintenance Of Audio Visual Systems Installed In Auditorium At Ntpc Township-Mouda

EMD: INR 20000.00 /-

LOCATION: SSC Kawas Gas Power Project Gujarat

To know more about the project - <https://eprocurentpc.nic.in/nicgep/app>

ONGC COMMISSIONS INTEGRATION PROJECT AT VASUNDRA BHAWA

ABOUT: Oil and Natural Gas Corporation Ltd is inviting bids for Supply, Installation, Commissioning And Integration Of Video Wall And Related Systems At Vasudhara Bhavan And 11 High With 03 Years Warranty And 4 Years AMC

EMD: INR 1465000.00 /-

LOCATION: Maharashtra, Mumbai

To know more about the project - <https://tenders.ongc.co.in>

BIDS INVITED FOR PROVISION OF CERTAIN MISCELLANEOUS ITEMS FOR DRDO

ABOUT: Defense Research and Development Organization invites tender for Provision Of Certain Miscellaneous Items For Drdo Transit Facility :-1 Audio Video Equipment LED Smart 42" Sony or eqvt 2 Audio Video Equipment LED Smart 32" Sony or eqvt 3 Aqua Guard Reviva 50 LPH Storage RO Aqua Guard or eqvt 4 Washing Machine fully Automatic LG or eqvt (7KG) 5 Oil filled Heater 11 FIN Havells or eqvt

TENDER VALUE: 2.60 Lakhs

EMD: INR 5200.00 /-

LOCATION: Almora, Uttaranchal

To know more about the project - <https://eprocure.gov.in/eprocure/app>



The course aims to empower attendees with a understanding of technology and trends in AV, that are driving meeting spaces in today's Digital Era.

The CAVS training will cover basic foundations in a three part series on Audio, Visual, & IT across the three days of the show.

AN INTRODUCTION TO AUDIO, VISUAL & CONTROL

PART 1

- a) The Basics of Audio, Visual and Control
- b) Understanding Factors When Designing Meeting Spaces

UNDERSTANDING THE REQUIREMENT

PART 2

- a) Asking the Right Questions
- b) Identifying the Right Requirements
- c) Understanding the Flow of a Technology Project

TECHNOLOGY AND TRENDS

PART 3

- a) Understanding How Lifestyles Are Driving Design
- b) Why Technology Underpins the Meeting Space Experience
- c) What is Important to Meet the Demands of Today

EXAMINATION TO BE HELD ON 1ST JUNE 2019.
CERTIFICATE TO BE PROVIDED ON SUCCESSFUL COMPLETION OF TRAINING.

COURSE FEES: ₹ 6,000/-



Training Conducted by: Ranjit Singh, CTS-D, CTS-I

Ranjit Singh is the Principal Consultant for Workspace Technology and Experience at PTS Consulting Singapore. His role is to deliver Strategic Workspace projects ensuring a robust, future-proof technology infrastructure underpinning the experience of the space, as well as managing the PTS Workspace Technology and Experience practice.

To register, visit: avintegratedsystems.in/cavs



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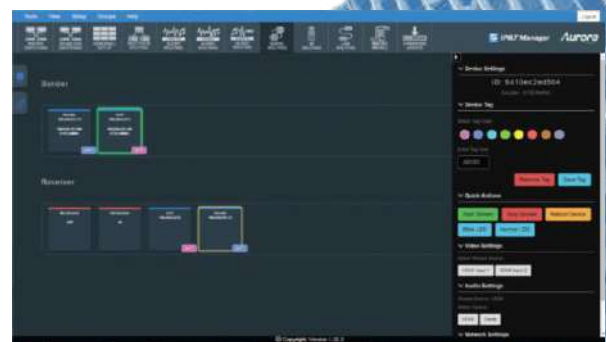
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Leading the Innovation of

AV over IP



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BOSE PROFESSIONAL CONFERENCING SOLUTIONS

Today's conference rooms require innovative audio solutions. Bose EdgeMax™ in-ceiling loudspeakers are uniquely engineered to be installed along the ceiling edge, enabling aesthetic design options. With ControlSpace® EX conferencing processors and under-table endpoints, Bose Conferencing Solutions offer an integrated, reliable approach for clear, productive meetings.

Learn more about our full line of conferencing solutions at [PRO.BOSE.COM/CONFERENCING](https://pro.bose.com/conferencing).