



# palm + AV-ICN

## EXPO MAGAZINE

PRO AUDIO | STAGE | STUDIO | AV INTEGRATED SYSTEMS | BROADCAST | DISPLAY | LIGHTING

### Executive Speak

Understanding the **Pro-Audio Market**  
with **Vipin Pungalia**, Director of Sales  
- Pro Audio & Country Manager  
Sennheiser India



15<sup>th</sup> edition



INDIAN  
RECORDING  
ARTS ACADEMY  
AWARDS

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## 46 AV Spectrum crafts stunning Projection Mapping Display at Bangladesh's Jatiya Sangsad Bhaban

# Features

## ADVERTORIAL- PROJECT DISPLAY & PROJECTION

08 Understanding the Dynamic Evolution of Projection Technology with NEC.

## CORPORATE FEATURE – PRO AUDIO

14 In conversation with **Vipin Pungalia**, Director, Sales - Pro Audio & Country Manager, Sennheiser - India

## REVIEW

16 **IRAA AWARDS 2021**- A Report on the 15th consecutive edition of Indian Recording Arts Academy Awards 2021.

## SHOW PREVIEW: NAB, Las Vegas

25 In conversation with **Eric Trabb**, SVP of Business Development, NAB Show

## INSTALL STORY: Special Venue Lighting

26 **Ashish Mehta & Becket Tundatil** Creatively Execute seamless Architectural Lighting Design at the Iconic Bandra-Worli Sea Link

## CERTIFICATION COURSE AT PALM AV-ICN 2022

37 PALM AV-ICN is fully committed to galvanize professionalism with this three-day certification course to be conducted by, **Abdul Waheed**, Managing Director, EYTE Technologies Pvt. Ltd. and **Arif Patil**, Principal Consultant at EYTE Technologies Pvt. Ltd.



## Annual Planner Launch

38 **PALM Expo** Unveils the PALM AV-ICN Annual Calendar Project Planner, designed and conceptualized as a high purpose, high utility tool.

## INSTALL STORY: PROJECTION MAPPING

46 **AV Spectrum** deploys tech-savvy infrastructure to enable stunning projection mapping display at Bangladesh's iconic **Jatiya Sangsad Bhaban**.

## AUDIO INSTALL: Hospitality

48 **Integrated System Design** deploys Harman gear to enhance the Aural setup at **Pass Code Hospitality's** newly opened restaurants.

# CONTENTS

# CONTENTS

## News

### 05 Audio & Music Production

Neumann Launches KK 14 Capsule; Royer Labs Unveils Dbooster In-Line Signal Booster; Sennheiser Launches HD 400 Pro Studio Headphones; Shure Unveils New Look for SRH840 & SRH440 Headphones; Presonus Launches Ultra-Portable Audiobox Go Audio Interface; API Announces Mc531 Monitor Controller; Universal Audio Debuts UA Microphone

### 10 Audio Visual

Allen & Heath Releases Audio Matrix Processors; RGB Spectrum Unveils Video Wall Processor; Yamaha launches Vsp-2 Speech Privacy System; Clearone Debuts Wireless USB Microphone; Muxlab Announces Muxmeet Video Conferencing; Audac Debuts Low-Frequency Transducers; Module Interface; Audio-Technica Unveils Atnd1061 Beamforming Ceiling Array Microphone; Audiofocus Presents New Installation Loudspeakers; Extron Launches ISS 608 & ISS 612; Matrox launches Convertip Transmitters & Receivers; Qsc Launches First Network Microphone & Loudspeakers; Sennheiser Introduces New Unified Communications Solution

### 30 Industry News

Jatan Shah Appointed President & Chief Operating Officer at QSC; Neumann Collaborates with Chordfather Productions For Dolby Atmos Music Mix Setup; Meraki & Mascot Join The Adamson Network; K-Array Appoints Sidharth Dham as Area Sales Manager APAC; Diversified Expands with New Office In Bangalore; EESA Approaches India's Event Services Fraternity; Medialogy Broadcast Expands in South Asia & West Africa; Showmakers Adds Adamson S10 To Inventory; Audio Waves Sounds Adds RCF HDL 50-A; Roe Visual Japan Expands.

### 50 Sound & Stage

Meyer Sound Presents Panther Linear Line Array Loudspeaker; JBL Expands the Party Box Category; Sunburn Goa Comes Alive with JBL Sound; Adamson Powers Hammerzz Open Air Goa; SSL Unveils Big Six Super Analogue; Yamaha Debuts Vst3 Plug-In Solution.

### 54 Install

Antisocial Powers India's Contemporary Culture with Adamson; Christie Elevates India's Annual Beating Retreat Ceremony; Myllem Presbyterian Church Installs State-Of-The-Art Audio Solution; VMT Enterprises Delivers Immersive Audio at Teerthanker Mahaveer University Auditorium.

### 68 Lighting

ADJ Unveils D4 Branch RM DMX Splitter & Booster; Claypaky Debuts Sinfonya Profile; Elation Professional Unveils IP65 Beam Moving Head Fixture; Showtec Introduces Six New Items; ADJ Unveils New Focus Profile; Elation Professional Discontinues LightJockey

### 71 DJ Technology

Pioneer DJ Introduces Ddj-Rev7 Controller; Hercules Present Limited-Edition Dj-control Inpulse 500 White Edition



HARMAN Sound complements the aesthetics at Pass Code Hospitality's newly opened restaurants

48

## Columns

### 36 The Bright Spark

**Virus Wanes: Viraf Pocha** shares his thoughts on trying to peer into life after Covid.

## Products

### 42 PRODUCT FOCUS - AudioVisual

A line up of LED Display Solution for Indoor Applications

### 57 PRODUCT SHEET

ARX Ultra De-Balancer; Astera AX2 Pixelbar; Clif Lighting Series; Elite Acoustics IGMIX 4-1 Four Chan Mini Digital Mixer; Ferrofsh Pulse16 Converts; LYNX PRO Audio XT Amplifiers; Mipro MI-58R ISM Digital Stereo Bodypack Receiver; Outline AI41 Column Loudspeaker.

### 62 PRODUCT FOCUS - ProAudio

Speakers & Line Arrays- Featuring a variety of essentials in Live sound launched in 2020-2021



08 NEC's versatile range of projectors for the changing Tech-Dynamics

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## API ANNOUNCES MC531 MONITOR CONTROLLER

Automated Processes Inc. (API) introduces the new **MC531 Monitor Controller**. The MC531 offers a stand-alone version of the monitoring functionality built into the center section of API's legendary analog consoles. Specifically designed to include fully-featured monitor control for DAW workflows, the MC531 can integrate seamlessly into any audio production environment where functionality, ease of use and an accurate reference of each audio source is required.

"In our ongoing mission to provide audio professionals with products suited to their evolving workflow, the company decided that a monitor controller would be a natural next step in product design," commented API's Director of Engineering **Todd Humora**. "We've certainly had many requests for a unit like this over the years. The MC531 provides users with the ex-

act same circuitry they would find in an API console, plus a few extra features that many people will find useful."

Drawing inspiration from the monitor control modules of all API consoles, the MC531 features a Main and two Alternate stereo outputs, the latter having individual trims for speaker level matching. Programmable subwoofer integration allows the user to link the Sub with the Main and/or either of the Alternate outputs. With a total of seven selectable stereo input sources (three analog line-level inputs, AES, USB, plus 3.5 mm and Bluetooth), the MC531 can meet the monitoring needs of almost any studio setup. Two independent Headphone outputs and a built-in Talkback mic complement the



**MC531 designed to include fully-featured monitor control for DAW workflows**

feature set. Of course, the classic API 41-detent Control Room Knob is right at your fingertips.

"API has always strived to engineer products that the audio community needs and wants," said API President **Larry Droppa**. "In the case of the MC531, we're offering a truly professional

monitoring solution that's equally at home in a commercial studio as it is in a smaller, personal creative space. Anyone familiar with an API console will immediately recognize the layout, functionality and the tradition that's built into this incredible sounding monitor controller."

## ROYER LABS UNVEILS THE DBOOSTER IN-LINE SIGNAL BOOSTER

**Royer Labs**, a manufacturer of ribbon microphones, has announced the **dBooster (model R-DB20)** In-Line Signal Booster for ribbon & dynamic microphones. As a phantom powered microphone signal booster and impedance buffer, the new Royer Labs dBooster accurately increases the level of passive low-output ribbon and mov-

ing coil dynamic microphones without distortion or coloration. Designed for professional applications, the dBooster provides two levels of clean gain boost: either 12dB or 20dB, selectable by a front panel switch. Unlike other in-line gain products, the dBooster maintains headroom and gain regardless of load.

The heart of the dBooster design is

configured an input stage consisting of multiple paralleled PNP semiconductors to keep noise low. These devices run in pure Class A mode for minimal distortion. The Class A input circuitry presents a high source impedance to the microphone to minimize loading (damping), reducing coloration and distortion while improving headroom. By utilizing the unit's 12/20dB gain switch, optimum balance between gain and headroom can be achieved for a variety of applications.

The low-impedance output of the dBooster is an increased microphone-level signal that can drive either a standard microphone preamplifier or a digital interface directly. The unit's output section utilizes a pair of operational amplifiers that act as buffers and low impedance line-drivers. The output stage enables the dBooster to drive difficult loads and long cable lengths without sacrificing gain or performance while maintaining excellent headroom. The dBooster's circuit is phantom powered and is fully regulated and de-coupled-providing clean voltage and

current for optimum circuit operation.

Royer's new dBooster is safe for use with all ribbon microphones and provides increased headroom at the preamp, true electrical isolation, and the protection of ribbon mics from phantom power hits-all while minimizing mic loading. Further, this rugged, compact device can drive difficult loads such as mic splitters and vintage-style preamps without loss of gain or increased distortion.

**John Jennings**, Royer's VP of Sales and Marketing, commented on the company's new dBooster, "Our R-10 ribbon microphone is what originally got us interested in providing an in-line signal booster. The R-10 has slightly less output than an R-121 and we knew engineers might want some extra gain for vocals and acoustic instruments. The amount of distortion in the available in-line preamps wasn't acceptable, so we designed our own and it does a great job of providing an extremely clean signal lift. It's a great fit with Royer's non-powered ribbons, and it kills with a number of dynamics too!"



**The dBooster's circuit is powered & de-coupled for optimum circuit operation**

## SENNHEISER LAUNCHES HD 400 PRO STUDIO HEADPHONES IN INDIA

Sennheiser launches a new pair of professional headphones for mixing, editing, and mastering. The HD 400 PRO studio reference headphones are an ideal companion for creators seeking natural and precise sound reproduction to accurately assess their audio mixes. To ease long sessions, the HD 400 PRO features a comfortable and lightweight open-back design fitted with soft velour ear pads. The unit includes both coiled and straight detachable cables, allowing the headphones to adapt to different user preferences.

"We are delighted to introduce the first open studio headphones in Sennheiser's PRO line," commented Vipin Pungalia, Director, Professional Segment, Sennheiser Electronics, India, "When editing and mixing, you need detail and honesty, and this is what the HD 400 PRO will give you. Thanks to their linear, high-resolution reproduction, these headphones are a reliable reference to create outstanding audio mixes to give an immersive listening experience to audiophiles."

The HD 400 PRO features a wide frequency response of 6 to 38,000 hertz to give music producers the full account

of their mix. The Sennheiser-developed 120-ohm transducers include a diaphragm made from a special polymer blend, which together with powerful driver magnets yields deeper, yet totally clear and well-defined bass. Distortion is below 0.05% (measured at 1 kHz, 90 dB SPL).

The HD 400 PRO accurately reproduces audio beyond the audible frequency range, giving you unbridled access to nuanced harmonics and ambiance in your music, while at the same time revealing a bold, articulate low-end.

The headphone transducers of the HD 400 PRO sit at a slight angle, carefully recreating the optimum triangular listening position you would place yourself in when listening to monitor loudspeakers in a recording studio. In addition, the open-back design of the HD 400 PRO ensures a natural propagation of sound, unimpeded by the acoustic structures required in closed-back designs. Both aspects create a wide and spacious

soundstage, neutral and transparent, which enables audio producers to work confidently knowing that their final mix transfers accurately to listeners.

The HD 400 PRO headphones feature high comfort that prolongs creativity. A carefully engineered ultra-light frame positions the earcups in place, gently hugging the ears with minimal pressure. Soft velour earpads allow users to focus on projects for hours on end, while the open, circumaural design offers sufficient ventilation for ears to keep their cool, even during long mixing sessions.

The headphones come with a 3-meter coiled cable and a 1.8-meter straight cable, both fitted with a 3.5 mm (1/8") jack plug for portable sources. A 6.3 mm (1/4") adapter is included, ensuring that the HD 400 PRO connects to your mixing desk or audio interface.



The HD 400 ensures a natural propagation of sound required in closed-back designs

## UNIVERSAL AUDIO DEBUTS UA MICROPHONE LINEUP

Universal Audio (UA), a manufacturer in audio production tools including Apollo and Volt audio recording interfaces, UAD plug-ins, LUNA recording application, and UAFX guitar products, has introduced its first **microphone lineup** in the company's storied 60-year history.

A company with roots in both analog and digital audio recording, UA microphones include Bock tube microphones handmade in Santa Cruz, California; the **Sphere L22** Modeling Microphone with its ability to accurately emulate 34 classic studio mics; and new **Standard Series** microphones designed for home recordists, serious podcasters, and content creators.

"We're excited to bring UA's audio expertise to microphones, and to bring something new to the table," said **Bill Putnam**, CEO/Founder of Universal Audio. "With Bock, Sphere, and the new Standard Series mics, there's a

UA mic within reach of every serious creator — ready to inspire great recordings, performances, and content for a lifetime." Handmade in Santa Cruz, the new flagship UA Bock mics represent a trio of tube and FET-based models designed by vintage mic authority **David Bock**, who joined the UA team with the purchase of his Bock Audio brand in 2020.

"The UA Bock mics are the best-sounding and most beautiful mics

I've had the pleasure of designing over my long career," confirmed Bock. "These mics are going to have discriminating singers, producers, and audio engineers smiling from ear-to-ear."

The accessible Standard Series mics feature two proven designs destined to become workhorses in serious production spaces: the SD-1 Dynamic mic for vocal and broadcast / podcast applications, and the SP-1 Pencil Condenser mics for easy stereo recording of

instruments and live performances.

On the digital side, with the technology acquisition of Townsend Labs Inc. in 2021, UA welcomes proprietary Sphere Modeling Microphone technology and modeling guru **Chris Townsend** to the UA team - aligning with audio plug-in platform.

All UA Microphones include presets designed to deliver album and broadcast-ready sound with the company's Apollo audio interface range.



FET-based UA Bock Mics Represents a Trio of Tubes

## SHURE UNVEILS A FRESH, NEW LOOK FOR ITS SRH840 AND SRH440 HEADPHONES

Shure debuts new enhancements and improvements to its portfolio of **SRH Headphones**. Featuring significant product design upgrades and nuanced improvements to sound quality, the second-generation **SRH440A** and **SRH840A** Headphones provide superior audio, long-wearing comfort, and signature Shure durability.

Designed with creators and recording professionals in mind, SRH offers superior audio with improved capabilities and a modern design so professionals can always look as good as they sound.

"Today's consumers are seeking high-quality audio without sacrificing style and comfort," said **Sean Sullivan**, Global Product Manager, Listening Products, at Shure. "This upgrade delivers just that—a low-profile design that looks great on camera and improved acoustics to ensure clean, and consistent audio reproduction. Recording professionals and content creators will benefit from professional headphones that include Shure's iconic sound signature and a fresh, modern design."

The new models incorporate a series of design upgrades, ensur-

ing Shure's iconic sound quality with an exceptional look to match. Both headphones are optimized for critical listening and studio monitoring, featuring nuanced improvements including lower harmonic distortion and more precise left-right driver matching. The SRH840A offers a precisely tailored frequency response powered by 40mm neodymium dynamic drivers to deliver rich bass, a clear mid-range, and extended highs, while the wide, padded headband and collapsible design combine to create the ultimate listening experience. The SRH440A delivers detailed frequency response with accurate audio designed for podcasting, home recording, and critical editing and mixing. The consistent and uncolored sound response provides an appropriate representation of the sound, making it an ideal fit for talent in



The SRH840A powered with 40mm neodymium dynamic drivers

a recording session.

**Ultra-Comfortable Lightweight Headband** – Superior comfort for extended use. The closed-back, circumaural design rests comfortably over the ears and reduces background noise for long-wearing comfort over extended periods.

**Sleek, Durable Design** – The new industrial design with matte finish looks great on camera and withstands the rigors of constant use. A straight cable is now standard for both models

to offer more mobility in creative spaces.

**Legendary Shure Sound Quality** – Both headphones provide unique sound signatures optimized for creating and editing. The SRH840A's precisely tailored frequency response delivers rich bass, clear mid-range, and extended highs. The SRH440A's transparent, natural sound signature delivers detailed, accurate audio across an extended range.

## PRESONUS LAUNCHES ULTRA-PORTABLE AUDIOBOX GO AUDIO INTERFACE

PreSonus Audio Electronics has announced the launch of the **AudioBox GO**, the smallest, lightest, most portable PreSonus audio interface yet. A solution for musicians and producers seeking an easy and accessible way to start their journey in home music recording or content creation, AudioBox GO is com-

pact enough to throw in a gig bag and powerful enough to be the centerpiece of a home studio. The bus-powered AudioBox GO connects via USB-C directly to Apple and Android mobile devices, as well as desktop and laptop computers, and is class-compliant, requiring no drivers or special applications, allowing

users to hit record and begin creating.

Designed to meet the needs of those new to recording, as well as those looking for a flexible, mobile solution, AudioBox GO is loaded with connections and allows musicians to record at up to 24-bit, 96 kHz resolution for professional results. The combo mic/line combo

input can be used to connect microphones or synths and features PreSonus' proprietary XMAX-L preamp design. The result of more than 25 years of recording know-how, the XMAX-L delivers clean, articulate sound with low noise, optimized for bus power. A second instrument input is provided to track guitar or bass simultaneously. In addition, a pair of balanced TRS, 1/4-inch outputs feeds studio monitors, and a high-powered headphone output provides performance monitoring at zero-latency.

AudioBox GO is a complete recording solution right out of the box and includes a license for PreSonus' Studio One Prime recording software for macOS and Windows and the Studio Magic software suite, an impressive collection of virtual instruments, effects plug-ins and more. It also is compatible with virtually every recording application for macOS, Windows, iOS, iPadOS and Android, including PreSonus' 32-track Capture for iPad and free 2-track Capture Duo (for iPad).



AudioBox GO built-in with connections that records up to 24-bit, 96 kHz resolution

# Understanding the **Dynamic Evolution** of **Projection Technology** with **NEC**



*Humans have always wanted to bring their imagination to life. Introducing 2K / 4K projectors that deliver superior colors' and high resolution has made that possible. The high detail, true color rendition and cinema-like quality video of projectors are being leveraged by Artists, museums, schools and businesses alike to educate, attract and engage customers or to uplift and inspire people in new and innovative ways. Putting it in simple words, Projection technology is paving the way for new possibilities.*

**L**ifesize experimental art - Technologies like Projection mapping using projectors and specially designed software to display images, animations and video onto any surfaces is being used to bring communities together. This showcasing of images and video onto any surface has become an increasingly popular enhancement

and even a main attraction at concerts, sporting events, art installations, advertising initiatives and countless other creative efforts.

For example, at the start of the pandemic, LuminArtz worked with local artists to create safe, socially-distanced art exhibits, including "Light Up The Night" by video artist Pamela Hersch.

The installation was projected on the exterior of the Wenham Museum near Boston, MA, with Sharp NEC Display Solutions PA1004UL laser projectors.

Fabricating immersive magical experiences - Projection technologies, when used to their fullest extent, can also enhance engagement and become a highly customizable and artistic tool

that offers the user versatility and flexibility, creating immersive interactions and magical moments that would be impossible for other digital technologies to develop.

For example, a 2018 projection mapping project in Chicago blended history, nature and technology into an audiovisual narrative that celebrated



Figure 1 NEC NC1202L



Figure 2 NEC NC1402L



Illinois history. Rooted in Greatness projected videos of the faces of prominent people onto trees at McCormick Square, and audio provided a brief biography of each person. The movement of the leaves provided a unique surface for the images. A Canadian team projection-mapped beautiful visuals onto the exterior of Barcelona's renowned Sagrada Familia cathedral, and even a

to miss. Messages and visual cues are the viewer's feet which is engagingly easy to follow.

### NEC Professional Projectors – NEC PA Series

NEC's unique filter free LCD technology means there is no need to change filters or replace bulbs. In addition to this reliability, the PA804UL and the



space shuttle has been used as a canvas for creative presentations.

Projecting on vertical surfaces and beyond – The talk till now has been for projections limited to vertical surfaces, but with newer technologies involving ultrashort throw lens, improved laser projections projectors can deliver maximum image size, resolution and colour depths even in tight spaces like hallways, ceilings and floors.

The directions and information provided by the floor projection are particularly effective because they are hard

PA1004UL bring extraordinary picture quality with resplendent long-term LCD colour performance. Their high brightness, sharp WUXGA resolution and vivid colour saturation mean they display content clearly even in bright spaces. The carefully calibrated white ranges make colours stand out while the whites look stunning.

Like all NEC products, the new projectors excel in the technical details. Their sealed light engines protect them from dust or external contaminants for

enduring picture performance, as nothing accumulates on the LCD panels. The engine itself runs so quietly that it's easy to forget that it's on. Crucially for existing PA projector customers, the transition to the new line of products is made easier by their compatibility with mechanical PA lenses. Is being used by customers across verticals like BFSI, Retail and Enterprises etc. for Auditorium, Training Room, Lobby, and large Conference Rooms etc.

"With high hopes of theatres continuing to bounce back in 2022, the modularity of this projection technology plays a large role in accessibility and is another avenue for theatre owners and operators to protect their investment."

### NEC Digital Cinema Projectors – ML Series

The ML Projector Series uses a flexible, modular design that enables cinemas to choose the appropriate 2K or 4K projector head combined with a laser module based on the requirements needed for the size and type of screen.

#### Features included:

- Modular Light Source – customizable light output with interchangeable light modules at 24,500lm, 20,000lm and 18,000lm for different brightness demands.
- Protect your investment – save on new lenses by reutilizing the NEC NC2000 Series lens family.
- Virtually zero maintenance – no lamp and no filter replacement costs, no maintenance personnel

costs and no lamp stock due to the innovative Laser Light engine.

- Lower TCO – highest reliability, maintenance-free operation, low power consumption and up to 50,000 hours life; the laser light source results in a significantly lower total cost of ownership.
- Sealed optical engine – minimizes dust ingress, consistent performance is assured and no special maintenance is required.

NEC NC1843ML 4K laser projector is the newest addition to the company's digital cinema projection series. The NC1843ML is an ideal projection solution for theatres with small and medium screens, and is also suitable for museum, house of worship, and art exhibit applications.

The reliable new cinema projection solution with interchangeable laser light sources in the projector head provides a lifetime of up to 50,000 hours, leading to less maintenance and lower total cost of ownership. In addition to future proofing, the NC1843ML also boasts increased flexibility, as it can be installed on the floor or the ceiling without the need for an exhaust system and features a wide variety of lens options.

The NC1843ML's next generation laser module uses a blue laser light source and produces 18,000 lumens of



Figure 4 NEC NC1843ML

brightness. The use of the blue laser and 4K DC-compliant quality creates a magnificent image bright enough to display on screens from 62-72 feet (roughly 19-22 meters) in DCI color.

"In accordance with the rest of the modular laser projectors in our digital cinema line-up, the NC1843ML provides outstanding performance at a competitive price" said, Krishna Tripathi, Business Head- Display Solutions, NEC Corporation India



Figure 3 NEC PA Series

Contact [Tamshil.Chaudhary@hyve.group](mailto:Tamshil.Chaudhary@hyve.group) to place your product advertorial in PALM AV-ICN Magazine

## ALLEN & HEATH RELEASES COMPREHENSIVE AUDIO MATRIX PROCESSORS

**Allen & Heath** has announced two powerful new **Audio Matrix Processors, AHM-32, and AHM-16**, supported by the most comprehensive ecosystem of scalable I/O, control, and Dante solutions.

Harnessing technology from the AHM-64 Audio Matrix Processor, AHM-32 and AHM-16 opens the platform to the full spectrum of installed audio environments - from a single boardroom to a complete campus - with emphasis on simplicity of programming and control, plus expandable audio networking and I/O capabilities.

"We are thrilled to see AHM-64 at the heart of so many installations, from global media networks to theme parks" says **Nic Beretta**, Head of Product at Allen & Heath. "Many integrators we spoke to were eager to see the same approach and technology deployed

in a smaller package to suit a wider customer base, and we have delivered on those requests with the AHM-32 and AHM-16."

The AHM-32 is built on a 32x32 processing matrix with 12 local analogue inputs and outputs, making it an ideal choice for multi-room installations in hospitality, corporate and education environments. The optional Acoustic Echo Cancellation (AEC) module is available for teleconferencing and videoconferencing applications.

The AHM-16 features a 16x16 processing matrix with 8 local analogue inputs and outputs. Out of the box, the AHM-16 is particularly well suited to single room applications and smaller multi-room environments including bars, restaurants, shops and school halls.

Both units benefit from a 96kHz I/O port for audio expansion and network-

ing, enabling the use of a 64x64 Dante card for integration into Dante networks and connection to Allen & Heath's

are supported, including an array of PoE remote controllers and the BY-



**AHM-32 & AHM-16 supports BY-OD-friendly Custom Control app for multiple device types**

range of Dante equipped expanders. Alternatively, a SLink card can be fitted for Plug-and-Play connection to Allen & Heath's comprehensive Everything I/O ecosystem of remote expanders.

A range of remote-control options

OD-friendly Custom Control app, enabling tailored user interfaces for multiple user and device types.

Both models feature a powerful suite of processing tools derived from the AHM-64, including Automatic Microphone Mixing (AMM), Ambient Noise Compensation (ANC), Priority Ducking, an 8-band parametric EQ on every input and zone, plus speaker processing options.

## RGB SPECTRUM UNVEILS NEW LEADING-EDGE VIDEO WALL PROCESSOR

**RGB Spectrum** has introduced **Galileo GO 80 4K video wall processor** for viewing and collaboration. Designed for mission-critical applications, it offers exceptional video performance, reliability, and advanced features.

The Galileo GO 80 processor consolidates critical visual information and data to provide a centralized, correlated view on an array of LCD monitors or seamless LED walls. Source signals are displayed in windows of any size, anywhere on the video wall. Operators can instantly switch and route sources,

choose preset display layouts, and pan and zoom to view particular items of interest.

For optimum viewing and decision-making capability, your video wall requires a processor that offers the highest level of video processing performance, and the Galileo GO 80 model delivers. It provides a superior video wall viewing experience with real-time

throughput and exceptional 4K image quality, unlike lesser systems that can drop frames or cause image tearing.

It's about more than just display. Being able to communicate and collaborate with local and remote colleagues is often a key requirement in the decision support process. The Galileo GO 80 allows operators to push video content to anyone, anywhere in the world.

A single processor can drive multiple video walls or individual displays. One Galileo GO 80 can power multiple video walls within the same or other rooms or feed both a video wall and individual displays interspersed throughout a facility. The output fed to multiple display surfaces can be the same or different. Imagine the possibilities.

Operators can select the entire video wall or any region of interest to be encoded as an IP stream for transmission across an Ethernet network.

The Galileo GO 80 can even encode a baseband signal, whether displayed on the wall, and distribute it to remote recipients. The processor supports an extensive range of baseband and IP-based inputs, including analog, AV-over-IP streams, DVI/HDMI, and 3G/HD-SDI. Scripting is available for third-party system control.

The Galileo GO 80 is tightly integrated with RGB Spectrum's Zio® enterprise

AV-over-IP platform. Zio technology provides enterprise-wide AV control and distribution of video content over any size network. And with the Zio Mobile App users can view these video wall streams remotely even on a mobile phone or tablet.

The Galileo GO 80 powers big video walls, with up to 16 outputs at 4Kp60 resolution or 64 at 1080p60 without compromise. PCIE Gen 3 technology offers the highest backplane bandwidth on the market, with the fastest available data transfer amongst I/O cards as well as to and from the CPU. That's the open secret of its raw power. And since rack space is often limited, it comes in a compact 4RU chassis, a smaller form factor than near peer processors.

The Galileo video display processor is an ideal solution for mission critical environments, including emergency operations centers, security operations centers, control rooms, command centers, traffic management facilities, and network operations centers. The video display processor forms the backbone to a decision support system, part of the company's commitment to collaborative decision making.



**The Galileo GO 80 integrated with RGB Spectrum's Zio enterprise AV-over-IP platform**

## YAMAHA ENHANCES CONFERENCE EXPERIENCE WITH VSP-2 SPEECH PRIVACY SYSTEM

**YAMAHA** is broadening its support for productive and confidential conferences and meetings with the new **VSP-2 Speech Privacy System**. Designed to be quickly retrofitted in almost any office, the system features Yamaha's high-performance audio technology that prevents speech privacy problems by effectively reducing human voice intelligibility with customizable sound options. System components include the VSP-CU2 control unit with user-selectable sound types and volume levels, supporting two, four, or eight VSP-SP2 speakers.

"As more meetings shift from closed to open spaces, maintaining the confidentiality of the information

shared during those meetings has become a must," said **Holger Stoltze**, Senior Director of Technical Sales and Marketing at **YAMAHA Unified Communications**. "However, sound masking systems have historically introduced noise into the area that's distracting for everyone — contributing to the prevalence of audio fatigue — and involved lengthy installations that have to go in during construction or require opening walls and ceilings. The VSP-2 leverages Yamaha's expertise to produce masking audio with 65% better performance at much lower sound levels for an environment that's comfortable, private, and can be installed without hours spent working behind walls and in the plenum."

Yamaha's VSP-2 Speech Privacy

System prevents information leakage and avoids high concentration of sound masking audio to create an environment that's easy to converse in almost any office meeting space. The system can be installed around huddle spaces, open conversation areas, and in front of and between small to medium rooms. The system layers in three key features for optimal sound masking: high-performance Info-Masking technology developed to cover the human voice in unwanted areas with a sound level that's 8 dB less than conventional systems, environmental audio with four types of sound that is mixed to the speech sound masker, as well as four types of sound effect audio that are added to unobtrusively distract others from unwanted conversation. From the control unit, users can power

the system on and off, select their preferred sound effect audio (guitar, piano, music box, and digital device) and environmental sound (forest, brook, urban clatter, and air conditioner), and set the performance and volume level for a personalized room environment.

The discreet and lightweight speakers are simple to mount to the ceiling or wall with the included mounting hardware and speaker cable (non-plenum rated). Furthering the ease of installation and setup, the back of the control unit features a speaker switch (2, 4, or 8) and four EQ options based on the configuration of the speakers.

### YAMAHA VSP-2 Speech Privacy System



## CLEARONE WIRELESS USB MICROPHONE FOR WEBCASTING AND CLOUD-BASED COLLABORATION

**ClearOne** a provider of audio and visual communication solutions, has announced the immediate availability of its **DIALOG 10 USB**, a single-channel wireless microphone system offering professional-quality audio with USB connectivity.

As the world has become increasingly digital, social media and content creation has grown in importance both professionally and personally. Using the right tools to communicate and create is paramount. The new ClearOne DIALOG 10 USB wireless microphone system's convenient deployment is the idea for today's applications.

Offering plug-and-play simplicity and wireless convenience, DIALOG 10 USB is the solution for webcasting and cloud-based collaboration through

Microsoft Teams, Zoom, WebEx, GoToMeeting, and other apps. Setup is a breeze with the included USB Type C cable that connects to any PC for audio, power, and control. With no external power source or additional audio cables required, DIALOG 10 USB is one of the easiest and fastest ways to enjoy high-quality audio in any application.

The wireless microphone system offers frequency-hopping spread-spectrum technology, with no frequency license restrictions worldwide. The auto-scan feature finds open channels for optimal reception. And standards-based FIPS 197 AES-128 encryption ensures a secure link for wireless audio. Wide audio bandwidth provides superior speech clarity, and ultra-low audio latency significantly

enhances the audio experience.

ClearOne offers a complete range of microphones for these settings, with Handheld, Boundary, and Gooseneck, plus Lanyard, Headset, and Lavalier Beltpack options. In multi-user environments, each user can be assigned their own microphone to pair with a common room

receiver. The receiver has a large color LCD for viewing received signal strength, and microphone Microphones can be powered by common environmentally rechargeable NiMH AA batteries – Charge via USB or optional charging dock.

The receiver has a large color LCD for viewing received signal strength, and microphone Microphones can be powered by common environmentally rechargeable NiMH AA batteries – Charge via USB or optional charging dock.



ClearOne Wireless USB Microphone

## QSC LAUNCHES FIRST NETWORK MICROPHONE AND LOUDSPEAKERS NATIVE TO Q-SYS

QSC has announced the NM Series tabletop network microphone and the NL Series network loudspeakers for the Q-SYS cloud-manageable audio, video, and control platform. Powered by the Q-SYS OS, these new products join the recently introduced Q-SYS NC Series conference cameras and Q-SYS TSC Series Gen 3 network touch screen controllers to provide a complete suite of native IP-based Q-SYS collaboration products for designers, consultants, integrators, and IT end users.

The Q-SYS NM Series NM-T1 is a tabletop PoE network microphone that features advanced beamforming technology with four software-configurable zones and up to 360° coverage, allowing designers to minimize noise and refine intelligibility for optimal collaboration experiences. The NM-T1 enables

users to easily manage meetings with a fully programmable RGB LED light ring for visual indication of microphone mute state. For touchless operation, it includes an integrated proximity sensor that is activated with a simple hand wave over the microphone.

All processing on the NM-T1 is centralized on the Q-SYS Core processor, providing processing flexibility and headroom for additional field-deployable microphone enhancements via software now and into the future. For example, the new Q-SYS Collaboration Bundle scaling licenses for the Q-SYS Core Nano or Core 8 Flex enables users to scale up and scale out their Q-SYS installation



Q-SYS offer three enclosure types, all delivering optimal speech and music reproduction to any modern collaboration space. As the first QSC soundbar, the NL-SB42 is a 4-inch, two-way network PoE

unlocking processing resources to allow for additional NM-T1 microphones and/or other software-based features.

The NL Series loudspeakers for

soundbar optimized for front-of-room audio in either horizontal or

*(Continued on page 61)*

## MUXLAB ANNOUNCES THE MUXMEET VIDEO CONFERENCING RANGE

MuxLab has announced its newest line-up of AV products designed for use in a wide range of conference and meeting room set-ups. The MuxMeet product line offers multiple products that can be used standalone or paired with each other as complete conferencing solutions for meeting and conference rooms.

The first product to launch in the MuxMeet Bar Series is the **MuxMeet**

**Videobar (model 500820)** which provides high quality audio, video, and microphone in one device with auto-tracking PTZ camera. The acoustic echo cancellation microphone keeps speakers sounding crisp, so the meetings run smoothly every time. The three-in-one design of a 4K ultra-HD camera, beamforming microphone and full frequency range loudspeaker reduces wiring clutter and simplifies video

and audio communications.

The **MuxMeet Share line** offers wireless multi-screen sharing with the touch of a button and will soon be adding a wireless USB-sharing device allowing laptops to connect with the room's camera and sound system, providing an entire ecosystem for video conferencing.

The **MuxMeet Share Base-1** (model 500826) and **MuxMeet Share HDMI**

and **USB-C Dongles** are the first products.

"It is truly remarkable how we have managed to enhance the meeting room experience," said MuxLab's recently appointed CTO, **Raviv Kramer**. "With MuxMeet we deliver a smart solution that is easy to use, allowing people to focus on their meetings instead of wasting time fighting with the technology."

## AUDAC DEBUTS LOW-FREQUENCY TRANSDUCERS

Audac has announced the new **VEXO series**. The VEXO family consists of six models: VEXO110(A), VEXO112(A) and VEXO115(A) which are available both in active and passive versions. The low-frequency transducer, is combined with a 1.7" voice coil compression driver, enabling high sound pressure levels and a tight driver response with a rotatable 90° x 70° coverage pattern for a wide range of applications. Optional 70/100V line transformer modules are available for the passive variants.

Due to the unique driver compo-

sition, the VEXO110 achieves a program power handling of no less than 600 Watts (300W RMS), the VEXO112 achieves 800 Watts (400W RMS) while the biggest variant in the family, the VEXO115, reaches up to 1000 Watts (500W RMS).

When not in use, the active versions of the VEXO series devices automatically go into an energy-saving standby mode. This means that active versions can also be used in fixed installations, as there is no need to physically shut them down after each use.

*(Continued on page 61)*



**VEXO series with low-frequency transducer for high sound pressure levels**

15th recording arts awards ceremony



Recording & Studio Equipment at **PALM**

**Grateful Thanks to the Entire  
Sound Recording Fraternity  
for making the  
15<sup>th</sup> IRAA a Great Success**

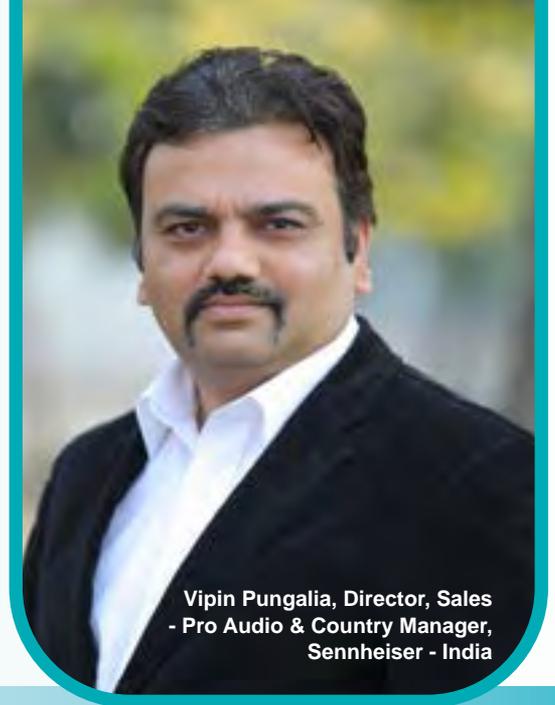
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# Understanding the Pro-Audio Market with Sennheiser



Vipin Pungalia, Director, Sales  
- Pro Audio & Country Manager,  
Sennheiser - India

*Sennheiser is a leading manufacturer of headphones, loudspeakers, microphones, and wireless transmission systems and has been creating unique sound experiences for customers. PALM+ AV-ICN got in touch with Vipin Pungalia, Director, Sales - Pro Audio & Country Manager, Sennheiser - India, to learn more about the company's plans for the Indian market.*

**The live music industry had seen a boom before the third wave of COVID stuck. What are the current industry sentiments, and do you think that the industry is poised to see a boom again?**

India has always been a music-loving country, for global as well as local artists. According to a survey by BookMyShow, 51%<sup>1</sup> of entertainment enthusiasts were eager to attend live events. With the ease of COVID restrictions, and rise of vaccination rates, real life concerts are back. It almost did not matter that they were not yet back in full effect, because even a gradual return before the third wave of COVID, drew a large number of audiences from across the country. Considering the enthusiasm from people on wanting to attend concerts, the live music industry has been witnessing a remarkable recovery post the pandemic and one can say, that it is definitely heading towards its boom.

Which is why, once again artists are hopeful to connect with their audience one-on-one through live concerts. To prepare for future live performances, artists are looking for the best quality products that will amplify their sound in a manner that their audience is captivated and realises what they have been missing out on these couple of years.

So, considering the ever-increasing footfalls at music concerts, the live music industry will continue to grow in India in the coming years. Because live

entertainment as a format will always remain a crucial element in providing a memorable experience to people. This will have a direct impact in the demand for superior professional equipment with cutting-edge technology, making it important for brands like us to constantly innovate and create the best to provide an impetus to this growing culture.

**How has the growth been for Sennheiser in India since the last year and what are Sennheiser's priority markets in India currently?**

India is one of the key markets for Sennheiser. We have a well-structured and large team covering everything from sales to support to technical services.

Live performance and Audio-for-video continues to be the topmost focused vertical for us. Additionally, the pro audio market has been reporting substantial growth for the last couple of years. The market is likely to grow further based on factors like the transition to digital audio, smart solutions like Dante (VoIP), innovative solutions for meeting and conferences, and investment from clients in cutting-edge solutions to resolve their challenges. Other major factors playing a role are favourable regulations, growing investments in M&E, exponential rise in OTT platforms, and content creation.

Currently, we are focussing on tier 1 and tier 2 cities are an important market for us.

We have seen quite an encouraging growth in tier 2 cities with the increase in level of awareness of the customers.

They are well-informed, demand high quality and strong after sales support which very well resonates with Sennheiser's approach. This has helped us solidify our stance in these markets.

**Could you elaborate on Sennheiser's channel strategies in the Indian market?**

At Sennheiser, we have our wide and strong network of channel partners region-wise and business segment-wise across India. During such an unprecedented time, brands may need to consider a Phygital approach – a combination of both physical and digital, a new powerhouse of experiences.

In this model, the physical aspect works on the human connection which

helps build trust & reliability, while the digital approach helps us acquire data, which when analysed can help reach out to our target audience, thus making this model a future-ready approach. This model is a powerful approach because it gives a 360-degree view of the current customer experience landscape and brings complete transformation in physical and front-end business.

Speaking of Sennheiser, our major chunk of business comes from traditional channel. However, online channel is also gaining popularity with many customer groups. Keeping this in mind, brands need to find the right balance between online and offline channels. Fortunately, we have a sturdy approach in place as Sennheiser and its channel partners provide consumers with a choice of both offline as well as online medium.

**Tell us briefly about the new products launched by Sennheiser and their USP and how do you think it will have an impact on the market?**

To give music producers the full account of their mix, we recently introduced the HD 400 PRO studio headphones to our portfolio. An ideal companion for creators seeking natural and precise sound reproduction, these headphones are a reliable reference to create outstanding audio mixes to give an immersive listening experience to audiophiles.

Witnessing the rise of content creators, we introduced from mobile kits for vlogging, shotgun mics for the most demanding environments, to an ultra-convenient digital wireless lavalier

**In India, people have started understanding the importance and the meaning of a superior audio quality. While investing in any audio device, consumers should not look at the price as the ultimate criteria.**

<sup>1</sup> <https://www.livemint.com/industry/media/51-of-indians-eager-to-step-out-for-live-entertainment-survey-11600849475821.html>

for crystal-clear dialogue, built to be a great addition for vloggers, videographers, and mobile journalists.

To equip artists who put quality and performance above all, Sennheiser launched the EWD- Evolution Wireless Digital, which provides the most reliable connection for any situation, any place, today or even tomorrow – whether it's voice, lecture, conference, moderation, or live performance. A unique tool, best in its class with staggering 134 dB dynamic range – highest in any wireless system at present. The EWD series introduces an easy, app-based workflow

while retaining all the professionalism, multi-channel capability and reliability that users have come to expect of UHF and 1G8 microphones.

Through these launches, Sennheiser is catering to the ever-evolving needs of our customers through innovation and our passion for excellence.

**Price has a significant influence on consumer behavior. What are your views on the Indian market for pro audio solutions given this price sensitivity?**

Sennheiser, with a 76-year legacy has

been at the helm of shaping the future of the audio industry. In India, people have started understanding the importance and the meaning of a superior audio quality. While investing in any audio device, consumers should not look at the price as the ultimate criteria. Considering that a lot of brands are entering the market, the audio space offers a huge scope for growth. Brands should ensure to not get into a rat race of producing affordable devices with no distinct USPs and key features.

**Do you have any plans in 2022 in terms of conducting webinars?**

In recent years, we conducted various virtual training programs for partners to help them navigate through unprecedented business-related dynamics. These trainings are undertaken to educate them about the market trends and leverage those to their benefits.

At Sennheiser we strongly believe that there should be no reason to stop educating yourself even while social distancing or working from home situation. Which is why we will continue to conduct a series of webinars this year, to offer both our customers and partners a chance to put forward their questions and clear out queries with the application engineer team.

The webinars would cover the applications of Wireless and RF Application - Wireless microphone and IEMs and various topics under the application such as the basics of Analogue & Digital Audio transmission, RF Noise floor, C/N Ratio, RF Dynamic range, Intermodulation, Multichannel and MultiZone antenna setups for wireless mics, In Ear monitors, Sennheiser Flagship Digital 6000 series features, and Link Budget.

**How does Sennheiser promote their service support system in India?**

We do have quite a strong network of distributors and channel partners across India who play an extremely crucial role for us in catering to needs of our diverse customers PAN India. Additionally, we have the Online Reputation Management team to manage daily online inquiries from the customers. Our service centres are located in Gurgaon, Mumbai, and Kolkata.

**Can you give us an outlook on what customers can expect from Sennheiser in the near future?**

We plan to launch a range of varied products in the pro-audio segment and will keep our customers, partners, and other stakeholders updated about the same.

**Considering the ever-increasing footfalls at music concerts, the live music industry will continue to grow in India in the coming years. Because live entertainment as a format will always remain a crucial element in providing a memorable experience to people. This will have a direct impact in the demand for superior professional equipment with cutting-edge technology, making it important for brands like us to constantly innovate and create the best to provide an impetus to this growing culture.**

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15th recording arts awards ceremony



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Recording & Studio Equipment at **PALM**

# IRA A 2021 Recording Arts Awards a grand success

***Know who won the coveted award in various categories, in this in-depth coverage of the IRAA 2021 which took place as a virtual only event.***

***Winners across 50 categories at India's only technical excellence award for the sound recording and music production industry, represent the future of music in the country. PALM AV-ICN reports.***

The **Indian Recording Arts Academy Awards (IRAA) 2021** which streamed live on **5th Feb 2022** was organised by **Hyve India Pvt. Ltd.**, leading organizer of trade exhibitions, conferences and business events in India, including the globally reputed **PALM expo**. Hyve

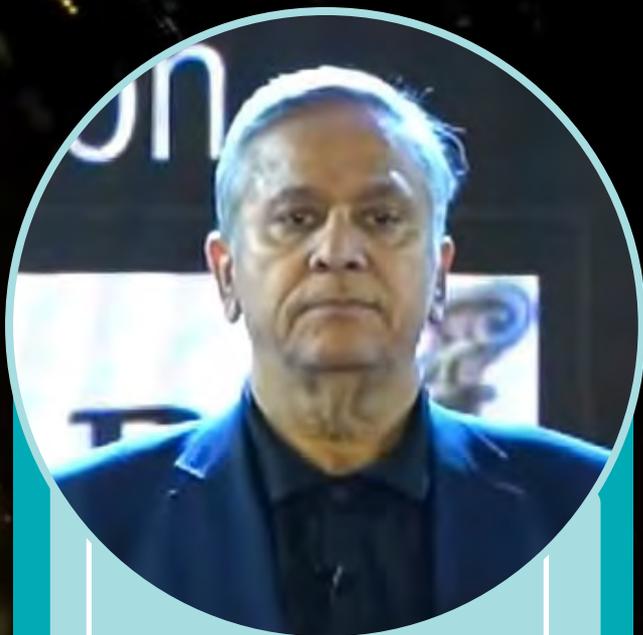
India is a part of Hyve Group PLC which currently runs 75 market leading events in 11 countries, including USA, United Kingdom, Russia, South Africa, Turkey, Ukraine, China and India.

Despite challenges and cancellation of shows and gatherings, IRAA awards continued relentlessly into its 15th

consecutive edition in a virtual avatar to deliver what is important, i.e., to recognize all those engineers and music producers who toiled untiringly behind the scenes to bring us the best "Sound & Music" of 2020.

IRAA announced winners across **50 categories** at the ceremony. The

winners and final nominees represented the most talented pool of the sound engineering and music production community from across India, selected from amongst almost 1400 nominations received, for movies, soundtracks and albums released between 1 January 2020 and 31 December 2020.



“It is a matter of great celebration this year with IRAA having reached a very defining moment. The time has come for IRAA to take membership seriously.”

**ANIL CHOPRA,**  
Founder & Chairman, IRAA

Hosted by Ms. **Rishika Keshari**, the awards ceremony was streamed simultaneously on the **PALM expo** and Sudeep Audio YouTube channels. **Sudeep Audio** along with **PALM AV-ICN magazine** were the official Media Partners for IRAA 2021.

*Click on link for Awards Ceremony video: <https://www.youtube.com/watch?v=QVN6r-SoobM&t=1314s>*

Keshari started the evenings proceedings by inviting on stage, **Anil Chopra** - Founding Director of PALM expo and Founder Chairman of IRAA, **Smita Rai** - Deputy Project Director, PALM expo, **Pramod Chandorkar** - Honorary Chairman of IRAA, **Vijay Benegal** - IRAA Director 2021 and Jury member, **Mujeeb Dadarkar**.

Video messages from **Aditya Todi** - Senior Director, Sales and Marketing, HARMAN Professional Solutions, India and SAARC, **Tom Whelan** - Regional Director - Asia, at Hyve Group PLC. and **Gaurav Sood** - General Manager - India, at Hyve India Pvt. Ltd. got the tempo of the streaming going.

For the second consecutive year, the IRAA 2021 was supported by HARMAN Professional Solutions India, a global leader in studio technology boasting of an extensive catalog of signature products for the studio, from legendary brands.

*Click on link for Aditya Todi's message*

*Click on link for Tom Whelan's message*

*Click on link for Gaurav Sood's message*

Also, executing the Streaming Concept and Production of the event for the second year in a row was **NJSM Studios**, in association with **BNA Talent**.

## IRAA 2021 Keynote Address

Anil Chopra, Founder & Chairman of the IRAA awards delivered the keynote address at the IRAA 2021 virtual Awards ceremony. Speaking on the occasion, he said that the idea of IRAA was born 15 years ago at the PALM expo and that he was proud that today IRAA had become globally reputed, with top engineers aspiring to an IRAA award. He thanked the august Jury members who ensured that the level of assessment was sincere and honest and complemented the Jurors on the tremendous hard work. Speaking about the nominations he said, "Each year we get more and more nominations for the IRAA awards and this in itself is redeeming. In 2021 there has been a huge change in IRAA as it is now far more dynamic than the previous years. We received 1400 nominations, i.e., 40% more nominations than last year, off which 46% were for Indie (Independent) music." Commending the explosion of Indie talent in the country he noted that one of the reasons for this explosion was the high level of music production at home, wherein home and project studios had become a part of the recording scene in India. "The response that we have received from



From l to r: Pramod Chandorkar, Smita Rai, Anil Chopra, Emcee Rishika Keshari, Vijay Benegal and Mujeeb Dadarkar



**“The online assessment process is fool proof and has minimal or no margin of error. The selection of the winners is strictly on the basis of the quality of work. All the entries are anonymous to all the jury members.”**

**PRAMOD CHANDORKAR, Honorary Chairman, IRAA 2021**

the Indie segment just goes to prove that this segment has as much respect and aspiration for IRAA, as do the established, sound engineers and music producers who have been recording the soundtracks of major movies. This gives IRAA a lot of dynamism and scope in future and we hope and expect that

edge recording and live sound technology and the whole gamut of equipment involved in sound. They are there at PALM, to see new equipment. Engineers from all over the country, visit the expo and a lot of studios get generated here,” he said. “We are all meeting after a two-year gap and PALM is expecting a

being the great quality of work we are receiving. It feels great to see that. We have been constantly working on increasing the standards of assessment to ensure that the best one wins. The online assessment process is fool proof and has minimal or no margin of error. The selection of the winners is strictly on the basis of the quality of work. All the entries are anonymous to all the jury members. A detailed online filtering process is created, wherein each jury gives marks on individual criteria to each track. The top contenders at each stage are re-assessed by different jury members to ensure that we are being fair.”

**Click on link for video of Pramod Chandorkar’s Message**

### Indie Music Scene at IRAA

2020 and 2021 was a boon for music

been remarkable and taking this into consideration, IRAA instituted a special jury, chaired by IRAA 2021 Director – **Vijay Benegal** and comprising of two new Jury members - music producer, recording engineer, multi-instrumentalist and founding partner at Cotton Press Studio - **Rohan Ramanna**, and award-nominated producer, engineer, guitarist and bassist from Ahmedabad, and also the founder of Compass Box Studio - **Raag Sethi**.

The decision to approach nominations for independent music has evidently shown results as almost 46% of the nominations received, were in the Independent music categories. Expressing his delight, Vijay Benegal said, “I’m most amazed and excited to inform you that we have received 1400 entries this year- largest number of nominees yet. This 15th Edition of IRAA Awards has received fantastic response from all over the country. Until this year the independent music category attracted very few entries so we decided we would like to expand these categories into different genres, to be as fair as possible in our assessment. A new group was introduced with me as Chair and two new jury members- Rohan Ramanna & Rag Sethi added to the team. Close to half the total number of entries this year fall into the independent music category and we hope that we would get even more next year.”

Talking about his experience as IRAA Director for this edition, he said, “It was a great privilege for me as the Award Director to oversee the event this year. I’d like to thank the IRAA team and the entire Jury member for their tireless support. It has been an extremely fulfilling experience in the selection of the final winners.”

**Click on link for video of Vijay Benegal’s Message**

### The Virtual Awards Ceremony

The awards were segregated into three main segments with the winners in Audio Engineering Segment being announced first, followed by the awards in the Music Production category and concluding with the Audio Postproduction awards.

**The List of Winners and Nominees can be accessed on: <https://iraa.in/Winner.aspx>**



**ASHISH SAKSENA, IRAA Award Director 2022**

in India, as Independent music and independent artistes flourished in a country which is otherwise dominated by Bollywood. The success of Indie music in India resonates international trends, wherein audiences are now more receptive to experimental music. The growth in this segment has

jamboree, the likes of which have never been seen before. The whole world and all the major brands and major distributors will ensure that their latest equipment is on display,” he added.

As a part of IRAA tradition of announcing the Award Director for the forthcoming year, Chopra also announced **Ashish Saksena** as the IRAA Award Director for 2022.

**Click on link for video of Anil Chopra’s Keynote Address**

### IRAA Assessment Process

The IRAA stands out distinctly from other film awards because of the high level of assessment and the focus on technical excellence rather than subjective opinions, budget or commercial success of the tracks and movies. Elaborating on the assessment process, Pramod Chandorkar, Honorary Chairman of IRAA said, “The assessment is getting complex year on year, reason

**Streaming Concept and Production by**



in the future the nominations will cross many thousands” he said.

He emphasized that IRAA should have a very serious body of professionals managing the nominations, assessments, and selection of awards. “It is a matter of great celebration this year with IRAA having reached a very defining moment. The time has come for IRAA to take membership seriously,” he said.

Chopra ended his keynote by throwing light on the upcoming PALM expo in May this year. “The PALM expo attracts almost 25000 professionals on its exhibit floors. There is a tremendous level of excitement on the exhibit floors. It’s like an annual pilgrimage as these 25000 professionals are using cutting

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“ Until this year the independent music category attracted very few entries so we decided we would like to expand these categories into different genres, to be as fair as possible in our assessment. A new group was introduced with me as Chair and two new jury members- Rohan Ramanna & Rag Sethi added to the team. Close to half the total number of entries this year fall into the independent music category, and we hope that we would get even more next year. ”

VIJAY BENEGAL, IRAA 2021 Award Director

## Musical Performances at IRAA

The IRAA 2020 also featured special performances by two indie bands. The first band, **Nissima** is a multi-lingual rock band from Pune, formed by Harshad Sathe and Saket Rao in 2019. They released their eponymous 4-song E.P. the same year in July and what they

performed for the IRAA streaming were three songs (**Barkhaa**, **Panaah** and **Nishaan**) from their second offering - a full-length album called “Panaah”! Joining Harshad and Saket for the performance was bassist Amit Gadgil

The second performance was by one of the winners, performing the winning track **Desire**. 23-year-old songwriter and guitarist, **Chirag Todi** started his

band **Heat Sink** in 2018 and his solo project in 2020. Over these years, his compositions have received national awards and several other honors. He has worked with maestros and industry titans like A.R. Rahman, Clinton Cerejo and Warren Mendonsa. For the IRAA streaming Chirag Todi teamed up with **Divyang Arora** on the drums,

**Raag Sethi** on the bass, and **Protyay Chakraborty** handling vocals/ violin with **Meera Desai**.

*Band Performance can be accessed on <https://www.youtube.com/channel/UCv98arGvIEqWxj1zJHOI2jg>*

Please visit [www.iraa.in](http://www.iraa.in) for the videos and for more information about the awards.

## IRAA Jury 2021



**Pramod Chandorkar**



**Vijay Benegal**



**Ashish Saksena**



**Aditya Modi**



**Indrajit Sharma**



**Jim Satya**



**Mujeeb Dadarkar**



**Shantanu Hudlikar**



**Sreejesh Nair**



**Vijay Dayal**



**Rohan Ramanna**



**Raag Sethi**



**NISSIMA, Panaah**



**DESIRE - Compass Box**

# IRAA Awards 2021 List of Winners and Nominees

## INDEPENDENT SONG RECORDING & MIXING – PROGRESSIVE/ ALTERNATIVE

### Winner

- Hersh Desai** – Life, 2Pi  
 Ashish Manchanda, –  
 Aman Moroney – Hosh Ha: Alif  
 Santhosh Jayakaran – Vaan (The Sky)

## INDEPENDENT SONG RECORDING & MIXING – ELECTRONIC

### Winner

- Mervin T Thomas** – Mer Song  
 Sujith Hydher Thaha – Open Your Eyes,  
 (Alai Payuthey Electro)  
 Abin Paul – Manadalli

## INDEPENDENT SONG RECORDING & MIXING-ACOUSTIC/ FOLK (NON – CLASSICAL)

### Winner

- Aman Arakh** – Maana Ke (Gumaan), Yahaan  
 Abin Pushpakaran – Sandaali  
 Allan Samuel Vetha – Love  
 Shrey Kotecha – Tan Dhariya Sukhiya Kahoon Na Dekha,  
 Saheb Ko Arpan

## INDEPENDENT SONG RECORDING & MIXING-ROCK / BLUES / METAL

### Winner

- Nitin Muralikrishna** – Kit Katt  
 Leslie Charles, Mrinal – I Love You - You're Nobody, You're Perfect  
 Himanshu Shirlekar – Mujhse Duur Ho Kyun  
 Samantha Noella – 5 minute Fudge

## INDEPENDENT SONG RECORDING & MIXING - POP

### Winner

- Aseem Dhaneshwar** – Is It Sunny (feat. Shakthisree Gopalan)  
 Sujith Hydher Thaha – Marainthu Pogum  
 Shadab Rayeen – Woh Chaand Kahan Se Laogi  
 Ishit Kuberkar – Dangerous, BIGSAM

## INDEPENDENT SONG RECORDING & MIXING - RAP & HIP-HOP

### Winner

- Abhishek Ghatak** – Me and My Pen, Mr Nair  
 Sunny M.R. – Peeta Nahi

## 15th recording arts awards ceremony



## Recording & Studio Equipment at PALM

- Rhitwik Raj Pathak – Paper Soap  
 Bhaskar Sharma – Bambai Main Ka Ba - Bhojpuri Rap

## SONG RECORDING & MIXING (FILM OR WEB RELEASE) – HINDI

### Winner

- Uttam Shah** – Mann Tu - Atkan Chatkan  
 Shadab Rayeen – Shayad - Love Aaj Kal  
 Pankaj Borah – Hayo Rabba - Thappad

## SONG RECORDING & MIXING (FILM OR WEB RELEASE) – REGIONAL

### Winner

- Debojit Sengupta** – Abar Phire Ele, Dwitiyo Purush  
 Shadab Rayeen – ButtaBomma, Vaikuntapuram  
 Debojit Sengupta – Je Kota Din - Duet New Mix,  
 Dwitiyo Purush  
 Shadab Rayeen – Maguva Maguva, Vakeel Saab  
 Ishit Kuberkar – Kaadhal Theevey, Dharala Prabhu

## CLASSICAL RECORDING & MIXING

### Winner

- Anand Dabre, Reena Gilbert** – Devi Ragamala  
 Aftab Khan – Saiyaan Bol – Bhoomi 2020  
 KJ Singh – Ooch Apaar

## INSTRUMENTAL & FUSION RECORDING & MIXING

### Winner

- Protyay Chakraborty** – Golden Monkeys- Lumiere (Live)  
 Ishit Kuberkar – Thoppai Vibes, Jatayu  
 Kohinoor Mukherjee – Unexplored, Kaushiki's jamroom

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## SOUND MIXING FOR ADVERTISEMENT

### Winner

<b>Devang Rachh</b>	– Pooja Didi - Facebook
Jiten Solanki	– Tata Tea Haryana TVC
Russel Stephen	– WakeFit   The Hunt For India's Sleep Champion
Shefinmayan	– Paradise Holidays

## MUSIC PRODUCER - HINDI FILM SONG

### Winner

<b>Prasanna Suresh,</b>	
<b>Ishan Das</b>	– Dancing in the Sun, Thappad
Ashique Elahi	– Ab Na Phir Se, Hacked
Sunny M.R. & DJ Phukan	– Haan Mein Galat, Love Aaj Kal
Ishan Das	– Hayo Rabba, Thappad

## MUSIC PRODUCER - REGIONAL FILM SONG

### Winner

<b>Sreehari K Nair</b>	– Olu, Maniyarayile Ashokan
Naviin Ravindran	– Lion Anthem - Kaattukkul Rajathan, God Father
Naviin Ravindran	– Chella Kannanai, God Father

## MUSIC PRODUCER - WEB SERIES

### Winner

<b>Arpit Mehta</b>	– Kab Tak, Dark 7 White
Ajay Jayanthi	– Raakh, Mirzapur Season 2

## MUSIC PRODUCER INDEPENDENT - ACOUSTIC (NON - CLASSICAL)

### Winner

<b>Meghdeep Bose</b>	– Maine Dekha Hai
Joshua Singh	– Dear Mind (En Route)
Samantha Noella	– Wonderland
Abhishek C S	– Sandaali

## MUSIC PRODUCER INDEPENDENT - ELECTRONIC

### Winner

<b>Lindsay D'Mello aka Dark Circle Factory</b>	– Good Vibes, Exhibit
Ishaan Gandhi	– Destiny
Shamik Guha Roy	– Bhromor

## MUSIC PRODUCER INDEPENDENT - RAP AND HIP-HOP

### Winner

<b>Prasanna Suresh</b>	– Bambai Main Ka Ba, Bhojpuri Rap
Karan Kanchan	– Divine - Satya, Punya Paap
Sunny M.R.	– Peeta Nahi
Sanjeev Thomas	– Not a love song

## MUSIC PRODUCER INDEPENDENT - ROCK / BLUES / METAL

### Winner

<b>Leslie Charles</b>	– I Love You, You're Nobody, You're Perfect
Raag Sethi	– Be Easy
Leslie Charles	– Beyond This Me and You Thing, You're Nobody, You're Perfect
Leslie Charles	– Tilt, Single by Thermal And A Quarter

## MUSIC PRODUCER INDEPENDENT - PROGRESSIVE/ALTERNATIVE

### Winner

<b>Ishan Das, Anubhav Gogoi,</b>	
<b>Nawaz Hussian &amp; Vivian D'Souza</b>	– Kukuha, Anurag Saikia Collective
Second Sight	– Dim Lights, Coral
Vikramjit Banerje	– Heroes The Epilogue

## MUSIC PRODUCER INDEPENDENT - INSTRUMENTAL & FUSION

### Winner

<b>Shitalchandra Kulkarni</b>	– Natural Understanding, Endless
George Joseph	– Sakhiye, Sakhiye
Sandeep Chowta	– Yetto Velli Chapter Two, Yetto Velli Diaries
Project Hamsadhwani	– Barkhaa ft. Anvitha Dharmeshwar, Disconnect

## MUSIC PRODUCER INDEPENDENT - POP

### Winner

<b>Divyang Arora</b>	– Desire
Siddhant Bhosle	– Din aur Raatein
Siddhant Bhosle	– Fida
Krina Shah	– Landfill - Savera

## DIALOGUE EDITOR / ADR ENGINEER (FILM OR WEB RELEASE) - HINDI

### Winner

<b>Shantanu Yennemadi</b>	– Thappad
Pranit Puro	– Dolly Kitty Aur Woh Chamakte Sitare
Lochan Kanvande	– Tanhaji: The Unsung Warrior

## DIALOGUE EDITOR / ADR ENGINEER (FILM OR WEB RELEASE) - REGIONAL

### Winner

<b>Dattaprasad Desai</b>	– Golkeri
Aravind Vijayakumar	– Prawaas
Tony Babu	– Trance

■ Category

■ Winners

■ Nominees

## DIALOGUE EDITOR / ADR ENGINEER FOR WEB SERIES - HINDI

### Winner

<b>Sidhardh Ramesh</b>	– Jamtara
Robin Kunjukutty	– Paatal Lok
Shantanu Yennemadi	– Masaba Masaba
Robin Kunjukutty	– Suraj Pe Mangal Bhari

## DIALOGUE EDITOR / ADR ENGINEER FOR SHORT FILMS

### Winner

<b>Abhijeet Vishwanath Sapre</b>	– Vikat
Pritish Kumar Chai	– Songs From A Faraway Land
Baylon Fonseca	– Ghost Stories - The Zoya Akhtar Chapter (Janhvi Kapoor / Surekha Sekhri)

## FOLEY ARTIST (FILM OR WEB RELEASE) - HINDI

### Winner

<b>Mohammad Iqbal</b>	– Choked
Rahul Kunkerkar, Raashid Khan	– Tanhaji: The Unsung Warrior
Rahul Kunkerkar, Raashid Khan	– Thappad

## FOLEY ARTIST (FILM OR WEB RELEASE) - REGIONAL

### Winner

<b>Sulthan Ibrahim, Jagadeesh, Khadar Baasha</b>	– Andhagaaram
Mohammad Iqbal	– Dhurala
Mohammad Iqbal	– Prawaas

## FOLEY ARTIST FOR WEB SERIES

### Winner

<b>Manoj Yadav</b>	– Mirzapur Season 2
Jeetu Singh	– ABHAY2
Manoj Yadav	– Jamtara

## FOLEY ARTIST FOR SHORT FILMS

### Winner

<b>Karan Arjun Singh, Shankar Singh,</b>	– Ghost Stories - The Zoya Akhtar Chapter (Janhvi Kapoor / Surekha Sekhri)
<b>Anil Pawar, Baylon Fonseca</b>	
Shameer Ahammed	– Numen

## FOLEY ENGINEER (FILM OR WEB RELEASE) - HINDI

### Winner

<b>Amandeep Singh</b>	– Choked
Prasad Chavan	– Tanhaji: The Unsung Warrior
Amandeep Singh	– Thappad

## FOLEY ENGINEER (FILM OR WEB RELEASE) REGIONAL

### Winner

<b>Sreesan G</b>	– Andhagaaram
Sarath Kumar M, Sp Narayanan	– Kappela
Santosh Gupta, Diful Jyoti, Amandeep Singh	– Prawaas

## FOLEY ENGINEER FOR SHORT FILMS

### Winner

<b>Karan Arjun Singh,</b>	
<b>Ram Kishan Nath</b>	– Ghost Stories - The Zoya Akhtar Chapter (Janhvi Kapoor / Surekha Sekhri)
Hiru Paban	– Chand Mubarak (Unpaused)
Shijomon George	– Numen

## FOLEY ENGINEER - WEB SERIES

### Winner

<b>Hiru Paban</b>	– Mirzapur Season 2
Hiru Paban	– High
Abhijeet Vishwanath Sapre	– Scam 1992: The Harshad Mehta Story
Abhijeet Vishwanath Sapre	– Paurashpur
Muhammed Ashique; Dattaprasad Desai	– State of Siege: 26/11

## SOUND DESIGNER (FILM OR WEB RELEASE) - HINDI

### Winner

<b>Shijin Melvin Hutton, Abhishek Nair</b>	– Ludo
Gautam Nair	– Choked
Lochan Kanvinde	– Tanhaji: The Unsung Warrior

## SOUND DESIGNER (FILM OR WEB RELEASE) - REGIONAL

### Winner

<b>Sankaran AS and KC Sidharthan</b>	– Kappela
Varun Venkataraman	– Vaanam Kottattum
Vishnu PC & Arun S Mani	– Kalla Nottam (False Eye)
Vijay Rathinam	– Nishabdham

## SOUND DESIGNER FOR WEB SERIES - HINDI

### Winner

<b>Arun Nambiar</b>	– Abhay 2
Manik Batra	– Class Of '83
Subash Sahoo	– Aarya

## SOUND DESIGNER FOR SHORT FILMS

### Winner

<b>Robin Kunjukutty</b>	– Numen
Baylon Fonseca	– Ghost Stories - The Zoya Akhtar Chapter (Janhvi Kapoor / Surekha Sekhri)
Pranit Purao	– Hichki
Pritish Kumar Chai	– Songs From A Faraway Land

■ Category

■ Winners

■ Nominees

## SOUND EDITOR EFFECTS & AMBIENCE (FILM OR WEB RELEASE) - HINDI

### Winner

- Shijin Melvin Hutton, Abhishek Nair** – LUDO  
Kunal Sharma – AK vs AK  
Siddhesh Sardesai, Surabhi Pandit – Tanhaji: The Unsung Warrior

## SOUND EDITOR EFFECTS & AMBIENCE (FILM OR WEB RELEASE) REGIONAL

### Winner

- Sankaran AS, KC Sidharthan** – Kappela  
Arun Varma – Halal Love Story  
Avinash Sonawane, Yash Shinde – Dhurula

## SOUND EDITOR EFFECTS & AMBIENCE FOR WEB SERIES

### Winner

- Teja Asgk** – Abhay Season 2  
Imran Shaikh, Amarjit Barman – Breathe: Into the Shadows

## SOUND EDITOR EFFECTS & AMBIENCE FOR SHORT FILMS

### Winner

- Jithin Joseph** – Numen  
Pritish Kumar Chai – Songs From A Faraway Land  
Baylon Fonseca – Ghost Stories - The Zoya Akhtar Chapter (Janhvi Kapoor / Surekha Sekhri)

## MIXING (FILM OR WEB RELEASE) - HINDI

### Winner

- Gandhar Mokashi** – Lootcase  
Pranit Puroo – Dolly Kitty Aur Woh Chamakte Sitare  
Alok Dey – Panga

## MIXING (FILM OR WEB RELEASE) - REGIONAL

### Winner

- S Sivakumar, Varun Venkataraman** – Vaanam Kottattum  
Vishnu PC – Kalla Nottam(False Eye)  
Vishnu Sujathan – Kappela  
A M Rahmathulla – Nishabdham

## WEB SERIES MIXING

### Winner

- Anish Poduval** – Abhay 2  
Boby John – Jamtara  
Vishnu Das – Breathe: Into the Shadowsapter

## SHORT FILMS MIXING

### Winner

- Robin Kunjukutty** – Numen

Baylon Fonseca, Mokashi Gandhar,  
Farhad Dadyburjor

- Ghost Stories - The Zoya  
Akhtar Chapter Janhvi Kapoor  
/ Surekha Sekhri)

## DOCUMENTARIES MIXING

### Winner

- Robin Kunjukutty** – Lockdown: India  
Fights Coronavirus  
Baylon Fonseca, Mokashi Gandhar – Rooting For Roona  
Avinash Sonawane – Anonymous

## SYNC SOUND RECORDING - SHORT FILMS

### Winner

- Baylon Fonseca** – Ghost Stories - The Zoya Akhtar Chapter  
(Janhvi Kapoor / Surekha Sekhri)  
Imtiyaz Jumnalkar – Avaghe Dharu Supantha

## SYNC SOUND RECORDING (FILM OR WEB RELEASE) - HINDI

### Winner

- Lochan Kanvinde** – Lootcase  
Dhiman Karmakar – Love Aaj Kal  
Dhiman Karmakar – Panga  
Dhiman Karmakar – Bamfaad

## SYNC SOUND RECORDING WEB SERIES

### Winner

- Bhabani Mallick** – Jamtara  
Manik Barta – Breathe: Into the Shadows  
Akshay Sathe – Aani Kay Hava Season 2

*“Disclaimer: Indian Recording Arts Academy Awards (IRAA) is an annual awards ceremony for the sound engineering and music production fraternity in the country. The award committee and Hyve India. Pvt. Ltd. does not subscribe to any statements made by any participant in the IRAA 2021 virtual award ceremony. Any and all performances during this virtual only event were non-commercial and not for profit.”*

[www.iraain.in](http://www.iraain.in)



Eric Trabb

## NAB Redefines Show Experience Post-Pandemic

*The 2022 NAB Show, slated for April 23–27 in Las Vegas, connects content professionals from all corners of the media, entertainment, and technology ecosystem. Eric Trabb, NAB Show SVP of Business Development, shares his perspective on the reimagined NAB Show experience and what you can expect on the show floor in 2022.*

**N**AB Show has been working on a reimagined experience for the 2022 show in Las Vegas. What will this mean for show attendees?

Ultimately, it means that whether you're a broadcaster, cinematographer, streamer, or podcaster - really anyone involved in creating content, connecting with audiences, or capitalizing on that content through monetization - you can find all the tools you need to do your work, all at the 2022 NAB Show. You can make the most of your time and get more out of the experience too.

Because the new event design is built around real-world applications and workflows, you can easily navigate your way to the right solution, the right vendor, the right contact. You'll also discover, right on the show floor, experience zones that bring products, technologies, and workflows to life. Focusing on inspiration, innovation, and implementation, these zones will give you a clearer sense of the big picture, new directions and opportunities within the industry, and the tools and technologies you can use to move ahead, whether with a new project or a new phase in your career.

Walk onto the show floor, and you'll find we've curated the journey for you. The show is organized around three pillars of the content life cycle - Create, Connect and Capitalize - and the Inspiration, Innovation and Implementation experience zones within each of those areas. We've added complementary activities and resources that align with each pillar, making it easier for you to learn in your interest area, to network with like-minded people, and to find the new products you need.

**Why overhaul the long-familiar NAB Show model, and why now?**

Rapid, ongoing change - and particularly convergence across different areas of the media industry - over recent years has transformed the way

media is created, managed, distributed, consumed and monetized. We've seen this change happening. We've also spent a lot of time seeking input from attendees and exhibitors from various communities about their needs and how the NAB Show can better facilitate networking, discovery and education.

The old model, with a radio hall, a broadcast hall, a film hall and so on, simply doesn't apply to today's media ecosystem. Building on expertise gained over decades producing a vital industry trade show and on extensive feedback gathered over the past year and a half, the reimagined 2022 NAB Show offers a new and different experience. That's going to be true whether you've been attending for 25 years or you're going to your very first show.

Walk onto the show floor, and you'll find we've curated the journey for you. The show is organized around three pillars of the content life cycle - Create, Connect and Capitalize - and the Inspiration, Innovation, and Implementation experience zones within each of those areas.

The reimagined NAB Show experience accounts for the fact that we live and work in a cross-platform world. High-end professional products and technologies previously within reach only for larger companies have become more accessible to smaller businesses, and those tools are no longer confined to different silos within the industry. The 2022 NAB Show design makes it easier for exhibitors to showcase their innovations and recent product development for this much broader audience. Attendees will find it easier to find and learn about tools and solutions that support their work.

**Given all this change, who should attend the 2022 NAB Show and why?**

The 2022 NAB Show is unique in addressing the full scope of the modern media industry while also guiding attendees towards the tools and expertise appropri-

ate to their niche within that industry.

If you're someone who started up a podcast during the pandemic or built up a following on Instagram, YouTube or TikTok, the show will not only help you find that camera or mic you've been needing, but also help you to see future possibilities for your work and your career. Maybe you know media is your future. Or maybe you're not sure. The 2022 NAB Show is the perfect place to explore your options. You can delve into educational and inspirational programs in your interest area, or stop by a social event to exchange ideas with other people working in the same space. So often, meetings at the show lead to lifelong connections with colleagues - and a larger professional network - that help catapult a small business toward further success.

If you're a longtime NAB Show attendee with an extensive history in broadcast or film, the 2022 NAB Show gives you the opportunity to reconnect with friends and colleagues, to see the latest best-in-class products implemented as part of modern, real-world workflows, and to learn more about what industry convergence means for you and your business.

In fact, the 2022 NAB Show will feature a brand-new showcase dedicated to one of the most notable areas of change across the media industry. The new Intelligent Content showcase will explore the ways in which data, artificial intelligence, and automation are influencing the full content life cycle, from the way content is created and managed to the manner in which it is delivered, consumed and monetized.

The 2022 NAB Show is where you'll find the people, technologies and inspiration that will help your business adapt and thrive going forward, and it delivers these benefits within a much richer experience - one tailored to provide fresh opportunities for learning, discovery and engagement.

**If I'm an exhibitor at the 2022 NAB Show, how does the new approach benefit me?**

One of the biggest changes in 2022 is that we're really bringing the applications and action to the show floor. In creating this experience, we make it easier for attendees to lock onto the workflows and solutions of interest to them. At the same time, we're delivering real, measurable value for exhibitors. We're helping to drive the right person to their booth so that there is alignment on both sides. We're also expanding the ways in which exhibitors can showcase their products and technologies.

Through the experiential zones associated with each content life cycle pillar - Create, Connect and Capitalize - exhibitors gain added opportunity to highlight their solutions. While exhibitors might take advantage of the "Inspiration" theater within their pillar area to demonstrate a new innovation or present a case study, they can also reach beyond their core area with a presentation, networking event or other educational program in the Inspiration, Innovation or Implementation zone of another pillar area. This is a great way to feature a new or expanded use case for established solutions - and to boost overall awareness of your brand and product offering in the process.

**Any words of advice for first-time attendees?**

You don't have to be an NAB Show alum, or even consider yourself part of the media industry, to go to the 2022 NAB Show and find valuable information, contacts and solutions. If you're even thinking about coming into the industry, it's a fantastic resource. In past years the whole experience might have been a bit overwhelming. When you go to the 2022 NAB Show, though, you can let your interests and curiosity be your guide. And, if you're a content creator of any kind, you're already part of the NAB Show community.

# Star Dimensions India accomplishes **STATE-OF-THE-ART- LIGHTING** **“BANDRA WONDERLAND”**

***Ashish Mehta & Becket Tundatil Creatively Execute Seamless Architectural Lighting Design at the Iconic Bandra-Worli Sea Link.***

**B**etween 24th December 2021 and 2nd January 2022, the project came alive as the sun set on the city - with the entire 1.5 km of the Bandra Reclamation promenade being engulfed in specially themed displays that emphasized the four different seasons of the year, boasting different eye-catching sections like a boot house, a crib, an igloo, a reindeer, a Santa ride, a heart, multiple selfie-stations and several different uniquely shaped tunnels and walkways. Even the adjoining greenery and trees located by the sidewalk of the promenade were brightly decorated, which added to the overall grandeur of the space.

On the other hand,

the Bandra Worli Sea Link, which measures in at a total of 5.6 km long and 8-lane wide, too was washed over with a captivating display of colourful lights that emphasized the same ‘four seasons of the year’ concept, offering a truly spell-binding viewing experience, irrespective of whether viewed from up-close while travelling on the bridge or from afar on the city shoreline. The sea-link also hosted a special laser beam show which took place at midnight

on New Year’s Eve and acted as the perfect welcome sight to ring in 2022.

## **Project Highlight**

Entrusted with the responsibility of bringing the ambitious Bandra

The Bandra-Worli Sea Link comes alive in a display of lights and colour to celebrate Christmas and New Year.

# ARCHITECTURE for the project in Mumbai

*India's maximum city – Mumbai – capped off 2021 in spectacular style with the first-of-its-kind 'Bandra Wonderland' project that saw the iconic Bandra-Worli Sea Link and the ever-bustling Bandra Reclamation promenade coming alive in a dazzling display of lights and colour to celebrate the festive occasion of Christmas and New Year's Eve. PALM +AV-ICN Reports.*

Wonderland vision to life was one of India's leading event management companies - **DNA Entertainment Networks Pvt. Limited**, who are regarded as pioneers in the art of flawlessly deliv-

ering awe-inspiring and unforgettable live entertainment experiences of every scale.

Considering the sheer magnitude, scale and high-value importance of the Bandra Wonderland, DNA chose to partner with **Star Dimensions India Pvt Ltd**, one of India's foremost professional live entertainment technology service providers for the required

inventory. Star Dimensions and DNA have a long-standing association and the two organizations have worked together on several different live mega-productions for over a decade.

To execute the design and vision for this project, **Kaunain Merchant**, Assistant VP, Team DNA Entertainment Networks, got in touch with celebrated Lighting Designer, **Becket Tundatil**, of **Fireflies**.

With the project envisioned as the city's celebratory hurrah for Christmas 2021 and New Year 2022, the team overcame insurmount-



**Bandra-Worli Sea Link illuminated with a string of lights in a changing array of colors as the towering arches and cables were bathed in rainbow hues.**

able odds to successfully illuminate the iconic Bandra-Worli Sea Link and Bandra Reclamation promenade through a seamless confluence of world-class professional entertainment lighting and architectural lighting technologies.

**Ashish Mehta**, Technical Director & Co-Founder of Star Dimensions India Pvt Ltd shares, "We have been associated with DNA Entertainment for over a decade and have worked with them on several different mammoth productions – much to their satisfaction and content. This made us the natural go-to partners who could assure the kind of superior technical service and systems that they desired for this project; and we're extremely honoured to have been entrusted with this opportunity to be a part of something so historic. Having said that, working on the Bandra Wonderland project has by far been one of the most challenging yet most memorable and satisfying professional experience in the history of our company – none of which would've

been possible without all the hard-work and dedication of our amazing team who worked tirelessly in ensuring an absolutely flawless execution."

### Challenges

Mehta informs that from the first brief with the DNA team to the eventual final execution, the Star Dimensions team had an overall time frame of just 48 hours. Another extremely crucial challenge that stood before the team was that of the environmental conditions of the project location itself. Being an outdoor location directly on the Arabian Sea, it was quite the task for the Star Dimensions team to work in the rather extreme maritime condition, with the location being extremely hot during the day and extremely cold at night.

Despite the odds stacked heavily against them, the Star Dimensions team managed to successfully commission the complete rigging, testing, and programming safely and securely within a span of 36 hours, thanks to meticulous planning and dedicated efforts invested by every single member. Taking the extremely tight turn-around time into special consideration, the warehouse team worked over night with a focused strategy of vehicle movements and ensured safe off-loading of equipment on-site, strictly abiding by the precisely planned load-in roster. Most of the addressing of key fixtures was done at the warehouse itself, which helped in reducing the overall rigging time to half; with the on-site rigging team split into two separate units, each of which were equipped with all necessary personal

safety gear and following mandated safety protocols. The respective teams individually worked tirelessly either during the day or the night and ensured that the entire set up was commissioned seamlessly and within the given time frame.

Between the two distinct locations that had to be illuminated, the one that posed the greater challenge for the Star Dimensions team was undoubtedly the Bandra-Worli Sea-link. The biggest hurdle for the team at this location (in addition to the testing weather conditions), was that of dealing with the sheer volume of vehicular traffic. "With the bridge being one of the busiest roadways in the city, especially during peak work hours, it was nearly impossible for authorities to completely shut the bridge and divert traffic to allow an easier setup experience. That being said, we did receive an immense amount of support from the Govt. of Maharashtra who helped us out by managing the traffic on one of the lanes on either side of the bridge in order for us to off-load our equipment and rig the system up as securely as possible while following all safety and traffic protocols" Mehta recalls.

"The most challenging aspect of this project was Programming & Designing the whole lighting design from five kilometers via networking. Networking installation and programming are the most challenging in distance manner," said Becket.

### Conceptualization

Talking about the short timeline to execute the entire delivery, Becket says, "Given the grandeur and importance of the show, there was a tight timeline to implement the project perfectly. The show had to be on-of its kind in India and ensure that people felt the festive

and celebratory spirit. But with a good crew like **Star Dimensions and Light Craft** and top-of-the-line equipment in the country like ClayPaky, Elation Lighting, Chroma-Q Vista, and Martin Lighting, we were sure we could pull off the setup in time with pre-planning and smooth coordination," said Becket.

The execution of lighting design architecture is a systematic process. Becket first designed the whole Architecture of the Worli Sea link by CAD Drafting design with estimation gauge and then executed the measurements and structure design. The Lighting designer built a rig for lighting design and then plotted the configuration to accomplish the right visuals. After finishing the lighting plot, the architecture lighting design was ready to be executed.

"Light Craft and Star Dimension have a versatile inventory for lighting gear and products. For this project, the companies unanimously came together to provide 670 lighting Fixtures. We used Win 11 64bit to ensure that hardware and software run smoothly with Server site System for all the lighting design and Development and observed the system by using a Desk Track to monitor all the workflow and benchmarks," said Becket.

Fireflies used Star Topology to customize the networking design. The lighting designer connected all the devices to a single hub through a cable-called central node. All the other nodes connect to the central node. The hub used in this project is intelligent and active with built-in repeaters. All X, Y, Z Controllers, and Artnet get connected with the final hub that gives Data Packets. These Data packets collect Data from all the controllers and send it to the Computer and Console, which shows which controller was working and sending the signal. After that, they developed a light patch design on the computer and console.

"We used **Croma Q Vista 3 Console & Software**, and **Vista I3 & Vista I2 Lighting Console** for operating and executing the designs. We created a timeline for theme-wise cue play and put Two operators for real-time theme changes," said Becket.

The concept and processing point took three days, and to plan the architecture design, CAD drafting itself took three days. To execute the design and installation setup, 40 Workers, ten technicians, two supervisors, two designers, and a programmer completed the installation within four days. Overall, each day was dedicated to networking, programming, and designing.

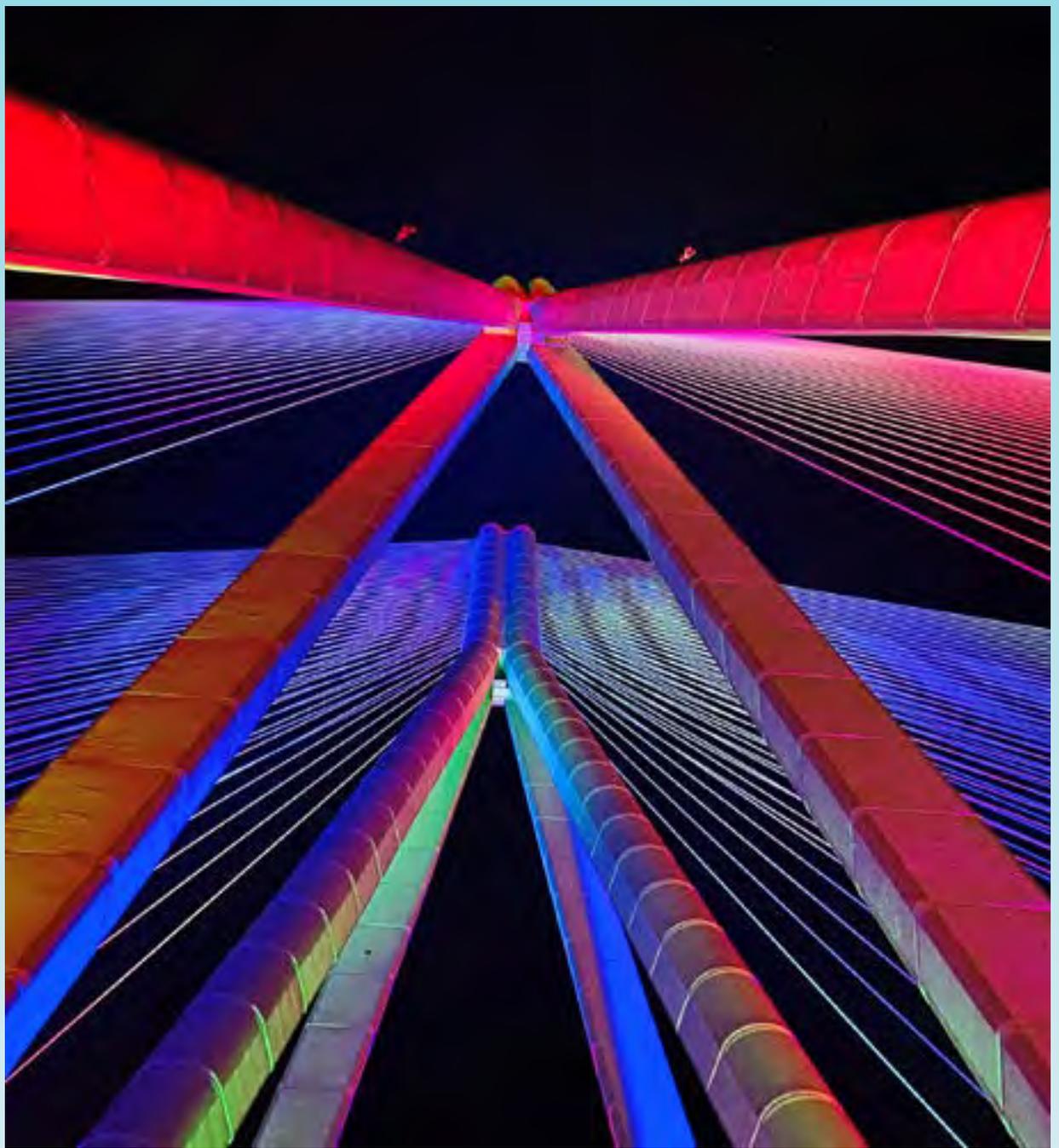
### Lighting Schematics

Star Dimensions team deployed a

**“We used Croma Q Vista 3 Console & Software, and Vista I3 & Vista I2 Lighting Console for operating and executing the designs. We created a timeline for theme-wise cue play and put two operators for real-time theme changes.”**

vast range of intelligent lighting fixtures that stretched over 6 kms on each side of the bridge making it one of largest on ground installs that the company has commissioned till date. The inventory included the use of over 1200 fixtures from industry leading manufacturers like **Elation**, **Martin Lighting**, and **Clay Paky**; with lights being spread over 4 lanes on either side of the sea-link which constituted a total of 12kms. The idea of running data cables of those lengths across the bridge was clearly not feasible, and this prompted the team to run the entire rig wirelessly to keep things organized and simplified for quick and easy troubleshooting. The team chose to rely on the Artnet Protocol to run networking capabilities across the entire stretch with multiple distribution boxes for power and data.

Speaking about the choice of inventory deployed for the project and the intricacies involved in bringing the design ideas together, Mehta explains, "Our main workforce for this entire project was **Elation Platinum FLX**, an award winning 3-in-1 light with a very powerful luminary output. We had to achieve a wide coverage over the water and had to ensure that audiences across either side of the bridge were able to experience this spectacle. While balancing the intense flourishes and movements with the heads, we also had to ensure that the six pylons and stay cables appeared clearly with soft lush washes, while maintaining clear visibility of the sea-link's intricate design, and we found the **Martin Quantum Wash** to be the perfect choice to bring this design idea to life, owing to its sheer power and market leading optical system. One of the key aspects in bringing our designs for this project together was for us to secure a centric view of the bridge, and we managed to find such a spot for ourselves on the opposite side of the coast. This made it a lot easier for us to accomplish our programming and design ideas, with



**Martin Lighting and Claypakya Dazzle the Eight-Lane Wide Bandra-Worli Sea Link**

the lighting programming being commissioned via WAN networking over a span of 5 Km."

For the laser show that took place on the night of New Years Eve, the team deployed **FB4 enabled lasers** from Kvant's Atom and Spectrum series, which have been designed specifically to deliver impactful aerial beam shows and liquid skies. "Conceptually, our objective once again was to ensure that the special laser show could be enjoyed by every single person watching it from any side of the sea-link" Mehta reiterates.

Additionally, the Star Dimensions team commissioned tailored lighting solutions for the different themed sections at the Bandra Reclamation promenade, with the individual walkways and tunnels being equipped with multiple washes that ensured a unique vibe at each space, while features like the boot house, crib, reindeer, and Santa ride etc., were equipped with a mix of spot lighting fixtures, washes and custom-designed

lighting sources to create a truly wondrous spectacle.

### Conclusion

The experience of successfully pulling off such a monumental project was one that will remain etched in the minds and hearts of the entire Star Dimensions team, as Mehta asserts, "Working on the Bandra Wonderland project has been a truly life-changing experience – not just for me personally, but the entire team. The fact that we were able to pull off such a humungous project in sublime fashion, is a testimony to the unparalleled level of commitment, expertise and sheer grit of team Star Dimensions. For me personally, the most memorable moment of this project was seeing the iconic sea-link finally lit up with those enchanting colors and patterns that exemplified the true essence and spirit of Mumbai, our hometown. It definitely is an experience that my team and I are extremely proud of, and one that we will cherish forever."

"We faced challenges from start to end, but overall, it was a great experi-

ence," concludes Becket.

Overall, the project was bought to life by Star Dimensions. The success of this project elevated the festive spirit and placed Mumbai on the Global map of Christmas and New Year Celebrations.

"This Project has turned around heads of all Indians towards the iconic bridge. This is a very proud moment for us to be part of this project and establish an everlasting memory" said, Kaunain.

The 10-day long spectacle was celebrated also on several networking platforms online by many noteworthy personalities from the field of politics, entertainment, sport and more – with dignitaries like the Hon'able Cabinet minister of Maharashtra, **Shri Aaditya Thackeray** posting a video on Twitter showcasing the gorgeous view of the Bandra-Worli Sea Link, while also inviting everyone to see the decoration and enjoy festivities safely. Cricket mega-star **Virat Kohli** also shared his amazement via a tweet that read "Phenomenal Job Guys. The city looks so festive and lovely!".

**“The most challenging aspect of this project was Programming & Designing the whole lighting design from five kilometers via networking.”**

## JATAN SHAH APPOINTED AS PRESIDENT AND CHIEF OPERATING OFFICER AT QSC

QSC has announced the promotion of **Jatan Shah** to President and Chief Operating Officer. In addition, **Joe Pham** has been named Chairman and CEO.

"Jatan has made a tremendous impact on QSC and the AV industry, working smartly with leaders across QSC to build new capabilities, increase scale and guide many strategic initiatives to success across our growing multi-national organization," says Pham. "His persistence, patience, and vision have not only guided our company but also our people to become stronger and more resilient. Jatan exemplifies the company's core values, which guide



**Jatan Shah President & Chief Operating Officer, QSC**

our thinking and actions, and is the ideal person to help lead QSC into its next chapter of success."

Jatan joined QSC in 2010 as Chief Financial Officer and has since taken on additional responsibilities in various aspects of the business. He most recently served as Executive Vice President, Chief Operating and Technology Officer, where he led product strategy and development, operations, finance, and IT. In addition, he currently serves as an AVIXA board member working to shape the future of the association and the Pro AV industry. Prior to QSC, Jatan held senior positions with McKinsey & Company.

"QSC is an amazing place to collaborate and create. With some of the most

capable and ground-breaking technology in the industry, combined with a talented and innovative group of individuals, we have been able to bring new products, solutions, and services to market," says **Shah**. "As we enter a new year, I look forward to continuing work with Joe, our executive team and founders to deliver on the promise of QSC, to capture new opportunities for our employees, partners and customers, and continue to help guide our company and business as we explore the many new opportunities ahead of us in the markets and applications we serve."

## NEUMANN COLLABORATES WITH CHORDFATHER PRODUCTIONS FOR DOLBY ATMOS MUSIC MIX SETUP

Neumann in collaboration with **Chordfather Productions** announced the launch of its exclusive Studio Monitor Experience Center for audio professionals in Mumbai. India is one of the few countries worldwide to have a Neumann Monitors experience center and additional zones will follow in near future across India.

In a quaint neighborhood of Mumbai, India, is situated designed a vision, **Sunny M.R.'s** Chordfather Productions speaks volumes of his passion for fast paced technology while being deeply connected to essence of eternal experimentation, which incidentally is one of the first few in the country to proudly boast of a Neumann collaboration.

Chordfather Productions caters to professionals, creating and delivering high end content spanning across various platforms. Being the first ones across the country, the Neumann experience at Chordfather Productions consists of a **Dolby Atmos Music Mix Room** with **7.1.4 configuration** and Two Stereo rooms for Music Production, Mixing and Mastering for Bollywood Films and Indie Music Artistes. The mixing room is professionally calibrated for optimum clarity and frequency response for industry standard music production, monitoring, mixing and mastering services.

Sharing his excitement on the collaboration for the Neumann experience at

Chordfather Productions, **Vipin Pungalia**, Country Manager, Sennheiser Electronics India said, "Neumann defines standards for microphone and audio culture since 1928. To understand that we do the same for monitoring, you need to hear the difference from what you considered "very good" up until now. We see the overwhelming interest in the industry. Monitoring is not something you can experience on a website or a tech sheet."

He further added, "We want business professionals to have a first-hand, a first-ear experience on the potential that comes with the KH models. Their reputation is already incomparable when it comes to precision, neutrality, and overall system integration options. Nonetheless: how much this eases your sessions, prevents acoustic fatigue, and allows for a new level of control and fidelity on your sound stage must be experienced. We want to bring experience rooms as close as possible to industry professionals so everyone can have an informed decision on the best possible audio."

Speaking on the collaboration **Sunny M.R.** owner at Chordfather Production said, "I am thrilled to partner with Neumann for my Music Production Facility enabled with Dolby Atmos Music Mixing. The partnership is aimed at building a community for artistes striving to get their musical work done.



**M.R. Owner of Chordfather Studio TO Sunny M.R. Owner of Chordfather Studio**

We give a huge amount of credit to the quality and finesse that Neumann gears add to the sound. The idea is to make more and more music in an environment, which is loved by artistes alike."

Chordfather Productions houses cutting-edge technology and an arsenal of various Analog gear. The Atmos Music monitoring setup has **11 of KH 310 speakers** and **Dual KH 810 Subwoofers,**

driving the space is filled with every variety of synths. Given the experience and expertise in the music industry, Sunny's admiration for Neumann equipment has grown over the years. Chordfather Studio is open for the old as well as new and upcoming artists who can come together and form a beautiful community of like-minded music professionals and admirers alike.

## DELHI'S MERAKI AND MASCOT JOIN THE ADAMSON NETWORK

The Delhi-based Production Companies, Meraki Brand Services, and Mascot have joined the Adamson Network. Meraki Brand Services is an Event Production Company that works with Event Agencies and media houses. The companies have acquired the delivery of **Eight S10 line array** enclosures and **Six E119 subwoofers**. The new system is powered by **Lab Gruppen, PLM20K44 amplification, and Sommer cable Elephant SPM840 cables**.

Mascot is a professional sound, lighting, and audio-visual production, and rental company. They are known for providing efficient solutions and demand the highest technical standards from both engineers and equipment.

"As an organization dedicated to creating unforgettable events for a wide range of clients and different industries across India, we are constantly updating with new technology and design solutions to deliver best in class partnerships to our clients that simply stand out," explains Abhinav Talwar, of Meraki. "The new Adamson system enables us to accomplish this; the brand has around the globe recognition, and everything we're looking for in a sound system –

excellent audio quality, versatility, and ease of use. I am excited that Meraki can now provide the most advanced equipment with unrivaled quality and latest specifications to our customers."



Delhi's Meraki and Mascot Join The Adamson Network News

Monty Khanna, Director of Mascot & Mix DJ Entertainment Services shares, "Being a DJ, I have performed on var-

ious sound systems around the globe and so I have the outlook of an artist in addition to a production person in assessing the quality of a sound system. Adamson's S10 definitely comes out on top! The tremendous output

E119 sub is amazing at reproducing clear, low-end audio, and provides superb directional control.

The smaller and lighter size of the boxes enables us to pack more in the same footprint which is a

combined with its compact nature, and simple rigging make it a very valuable addition to our inventory. The

serious perk for transporting and rigging. We're thrilled to be part of the Adamson Network."

## K-ARRAY APPOINTS SIDHARTH DHAM AS AREA SALES MANAGER APAC

K-array has announced the appointment of **Sidharth Dham** as its new **Area Sales Manager of Asia Pacific**. Sidharth has joined K-array from 1st January from Italian Sound Design India ("ISD India") where he has been developing new business in the country for K-array.

Sidharth is an Indian national currently residing in Paris with extensive international experience working with some of the world's leading audio/visual technology companies, his success with ISD India and business partner **Sawan Nichani** attracted the attention of **Marc Vincent, Massimo Ferrati** and **Alessandro Tatini** who asked him to develop and build the brand into further territories in Asia.

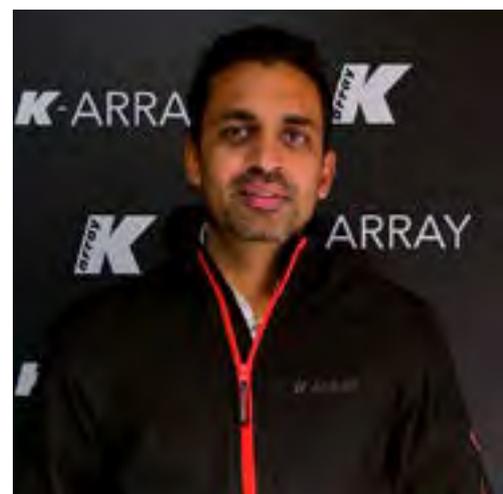
His responsibilities were expand-

ed to include connectivity, business development and piloting a series of successful moves into new business areas, with a particular focus on vertical market segments. **Marc Vincent** (the current Area Sales Manager of APAC) will continue to manage India, Australia, Pakistan, China, and Hong Kong for the foreseeable future while Sidharth will be responsible for developing and growing the rest of Asia Pacific.

Commenting on the new appointment, President of K-array Alessandro said: "We're delighted to welcome Sidharth Dham as our new Area Sales Manager of Asia Pacific. His deep understanding of the brand, our products combined with his business-building and leadership skills, will further

strengthen K-array in Asia."

Sidharth commented: "It's a special honour to be joining K-array in such an important role and I do so with an equal sense of excitement and responsibility. Excitement at the great opportunities that are there to be captured. And with a profound sense of responsibility towards the extraordinary achievements and capabilities of the men and women of K-array, to all the company's stakeholders and to everyone around the world for whom K-array is such a unique passion."



Sidharth Dham, Area Sales Manager, Asia Pacific, K-Array

## DIVERSIFIED EXPANDS GLOBAL FOOTPRINT WITH NEW OFFICE IN BANGALORE

**Diversified**, has announced the official opening of its office in Bangalore, India, and the appointment of **John Masters** as India Country Director. Having established itself as an international player more than five years ago, this milestone is yet another step the company has taken to meet the growing needs of its global clients and deliver the standards they're known for in the Americas, EMEA and other areas of the APAC region.

"India has become the third largest pro-AV market in the world and is the fastest-growing economy in the APAC region," commented Masters, who joined Diversified back in July. "Diversified is uniquely positioned—with the strength of our existing APAC presence and the breadth of our services in not just AV but broadcast, security and IT as well—to be a true technology partner to the global organizations entering this market at a rapid

pace."

In fact, the company has been delivering a variety of technology solutions for companies in APAC since 2016 when it opened its first office outside the U.S. in Seoul, Korea. and India marks the company's sixth legal holding in APAC with additional presence in Japan, Singapore, Hong Kong and Australia.

"Most, if not all of the multinational and global enterprises we work with have expressed the need for a technology solutions provider with a real presence in India," adds **Kevin Collins**, president of Diversified, overseeing all international business activities. "With the addition of this office and John on our team, I see us not only meeting those immediate needs but taking it even further to provide the global technology standards, high quality delivery and reliable managed services those clients need to be successful abroad."

Since John's appointment earlier this year, he has begun to grow the local team including the appointment of



**L to R: Habeeb Ibrahim, Medialogy Broadcast's new SAARC HQ office building, Manoj Sharma, and Dharamveer Grover**

**Vijay Lakshmanan** as India Operations Manager. Together, John and Vijay will work to set up a true boots-on-the-ground operation to not only deliver lo-

cal projects but also augment and support workforce constraints and demands of the global Diversified organization.

## EESA STEPS INTO 2022 WITH POSITIVE WINDS OF CHANGE FOR EVENT SERVICES FRATERNITY

The members of the **Event Equipment Services Association's** (EESA) working committee formally met with counterparts of the **Karnataka Event Management Association** (KEMA), and the two associations mutually agreed to come together to form a **Joint Working Committee** (JWC) with three representatives from each association, who will work together in effectively addressing the common concerns of the event management and technical services fraternities, while also acting as a unified voice in representing the entire event

fraternity in Karnataka when communicating with the state government, chambers of commerce, and other key decision making offices.

KEMA nominated **Srikant Kanoi**, Vice President - KEMA, Director - Ethereal Celebrations Management, **Pradeep Naik**, General Secretary - KEMA, MD - Fuel India, and **Ashwin** Member EC - KEMA, GM Marketing - DNA Networks, to represent the association within the JWC, whereas EESA nominated **Vinod Bangera**, Joint Secretary - EESA, Director - Systematic Inc, **Raghav R**, Member



**EESA**  
EVENT EQUIPMENT SERVICES ASSOCIATION

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- EESA, Director - LEDVISION, and **Shankar Devraj**, Member - EESA, Director - Firs take Productions, to be the active participants within the JWC.

The JWC has already established a concise agenda to be worked on for the first quarter of 2022, to have an established line of communication with Karnataka CMO and engage in purposeful conversations that address the current state of the industry and culminate in meaningful support extended to members of the community. Establishing an efficient mechanism that assures consistent engagement with hotels and venues and works to institute a concise SOPs with all venues in Karnataka that will be adhered by all concerned parties. List pressing issues faced by technical services and agencies respectively and engage in regular

communication with the intention to achieve effective long-term solutions through mutual consensus.

EESA President - **Felix Remedios** - is optimistic about the JWC's potential to breathe positive winds of change within the event industry, as he expresses, "The Joint Working Committee between KEMA and EESA is a monumental achievement that exemplifies the commitment and intent of agencies and technical service providers to come together as one united industry and work cohesively for the mutual benefit of both fraternities. We view this as the first significant step in standardizing the event industry in Karnataka, and consequently moving towards consolidating events and entertainment as a government recognized structured industry.

*(Continued on page 33)*



**Felix Remedios, EESA President**



**Santana Davis, EESA Vice-President**

## MEDIALOGY BROADCAST EXPANDS IN SOUTH ASIA AND WEST AFRICA

The London-based TV production equipment and service provider **Medialogy Broadcast** has announced the opening of a newly-formed sales and support company in **India** plus an addition to the recently established Nigerian branch which serves the West African region.

Support Manager, operating from Lagos, Nigeria, alongside Technical Sales Manager **Etukudo Etebom Akpan** who joined the company in Q3 2021.

"These new appointments build on a very successful 2021 during which we completed a series of new broadcast system deployments and introduced

industry experience between them."

"Medialogy Broadcast is a fast developing group of people who understand how to turn customer aspirations into cost-effective reality based on operationally efficient hardware, services or hybrid solutions," adds Manoj. "Their knowledge of computer technology is

Medialogy Broadcast from system integrator SRSB Broadcast India.

Dharamveer Grover started as a computer support technician in 2007 before joining P7 News channel in 2009 as a broadcast IT engineer. He arrives at Medialogy Broadcast from newsroom automation specialist Karthavya where he was regional support manager.

Habeeb Ibrahim brings to Medialogy Broadcast over 10 years of IT-related experience, commencing as IT support officer at Intercontinental Bank plc and progressing through media organisations such as Globacom, Bloomberg TV Africa, Consolidated Media Associates and, from Q1 2018 to Q4 2020, Echolab where he served as broadcast IT manager. Medialogy Broadcast's newly incorporated **SAARC HQ office** is at the centre of **New Delhi's** commercial, business and communications district. It is a British era zone in the heart of the city, Connaught Place opposite the British Council building.



L to R: Habeeb Ibrahim, Medialogy Broadcast's new SAARC HQ office building, Manoj Sharma, and Dharamveer Grover

**Manoj Sharma** joins the India office as Senior Manager, Sales, with **Dharamveer Grover** as Pre-Sales Support Engineer. Both are based in New Delhi.

**Habeeb Ibrahim** joins **Medialogy Broadcast** as Solutions Architect and

our service-based archiving platform, ArcPaaS," says **Medialogy Broadcast** Sales Director, **Ananth Sam**. "Manoj Sharma, Dharamveer Grover and Habeeb Ibrahim are all highly accomplished media specialists with more than 40 years of broadcast-related

particularly relevant to today's IT-centric broadcast industry."

Manoj began his career in the telco, IT and broadcast sectors in 1996, including 11 years with CMS Computers Ltd where he developed and managed key government and private accounts. He joins

## EESA STEPS INTO 2022 WITH POSITIVE WINDS OF CHANGE FOR EVENT... (Continued from page 32)

We thank KEMA for sharing our enthusiasm and extending their unequivocal support in making the JWC possible, and we look forward to this initiative acting as a beacon of inspiration for the entire events industry across India."

EESA has also voiced the sentiments of the event equipment rental service and event technical service community, as they announced a price correction in the cost of equipment rental & technical services for live events, along with a 'no

compromise' stance on miscellaneous costs which encompasses service components like transportation & logistics, Manpower, Crew Welfare, and Engineer Fees.

"These announcements were made by

EESA on behalf of the entire event equipment rental services and technical services community, with the view to foster a more secured future for our fraternity; and have been done so after careful deliberation of the on-going situation. There's been a conscious endeavour to minimize the impact of these decisions on our clients i.e., the event management community and our end clients; and we deeply appreciate the fact that our partners and clients have respected the sincere reasons driving these decisions and have continued to actively engage in working together on planning for future events. We are thankful for their consistent support in empowering us to maintain the highest level of commitment in providing the very best technical expertise and infrastructure for events across the board" asserts EESA Vice-President, **Santana Davis**.

These steps initiated by EESA have garnered support from majority of members from the technical services community, and the event management community – and looks to usher in a new era of a more cohesive, structured, and secure business ecosystem.

## SHOWMAKERS ADDS ADAMSON S10 TO THEIR INVENTORY

**Showmakers Event & Entertainment** has strengthened its inventory with an investment in **Adamson's S10** two-way, full range array cabinets. This new addition equips them to provide more flexible and scalable audio solutions for a wider variety of events. Showmakers joined the Adamson Network in 2019 with the acquisition of E12 three-way line array cabinets and companion E219 subwoofers. Having been extremely impressed with its performance, the company decided to expand their inventory with eight compact S10 array enclosures to serve

their growing client base.

"The E-Series system has excelled every time we've used it, in every application," says Showmakers' Owner, **Harry Kaushik**. "The S10 is the perfect cabinet to round out our package. It is strikingly powerful and has the same intelligibility and sonic signature we've grown accustomed to with Adamson Systems. The quality of sound when transitioning from the E12s to S10s is super smooth and consistent throughout. The S10 is a perfect fill for the E-Series and brings forth the same musicality even when standing on its own".



## AUDIO WAVES SOUNDS SAILING THE WAVES OF APPRECIATION WITH RCF HDL 50-A

As India's event industry is slowly getting back on track, **Audio Waves Sound** decided to update its inventory. The Chandigarh-based rental company recently purchased the advanced **RCF HDL 50-A line array (8 nos)** along with **RDNet Control 2**.

"We'd heard so much about RCF that we decided to take a serious look at what they offer," said **Manpreet Singh**, owner of Audio Waves Sounds, Chandigarh. "After meeting the RCF team from Hi-Tech Audio Systems and hearing their systems firsthand, we knew it was the right fit for both us and our clients."

"The HDL System is an excellent series from RCF, with effective networked control and a fast and easy rigging system. The astounding sound-quality and the unbeatable value makes the HDL system a fast-selling series in India", states **Ganesh Thapliyal**, Senior Application Engineer, Hi-Tech Audio Systems. Ganesh continues, "We have introduced the HDL 50 system to Audio Waves Sounds through proper technical training. In this session we have covered about proper system deployment,

rigging angles as per venue and how to work with the help of RDNet Control 2. Our agenda as a RCF distributor is to provide easy audio solutions to our clients and such after sales training is our way to support them." Ganesh Thapliyal was assisted by **Satyam Rajvanshi**, Application Engineer from Hi-Tech Audio Systems to conduct the demo for team Audio Waves Sounds.

Right after the purchase, the brand new RCF HDL 50-A was put into action at a grand wedding event. Live events, corporate gigs and weddings are regular clients of Audio Waves Sounds. RCF HDL 50-A provides a much advantageous opportunity for Manpreet and his team to provide broader audio solution to their clients. "Another landmark event where we used the RCF HDL 50-A system was at Investors Summit 2021 under the leadership of PM Narendra Modi. It was held at Himachal Pradesh and a prestigious event to be associated with for our team", shares Manpreet Singh.

**Manoj Kontay**, Sales Manager of Hi-Tech Audio Systems has been closely



**Audio Waves Sound updates inventory with RCF HDL 50-A line array**

working with Audio Waves Sounds to make them acquainted with RCF HDL series. "We have organized proper after

sales demo for Audio Waves Sounds for the newly invested HDL 50-A series. With the in-depth demo, their team were confident to operate the system at any given venue."

"We couldn't be more excited to have Audio Waves Sounds as one of our key customers in Chandigarh," said **Nirdosh Aggarwal**, Director Sales, Hi-Tech Audio Systems. "We've always felt that having the right partners in this industry is key to growth and success. We value our relationship with Manpreet Singh's team and look forward to working with them now, and into the future.

In the conclusion, **Rajan Gupta**, Director of Hi-Tech Audio Systems express his view about the beginning of new business relationship with Audio Waves Sounds. "It's a comeback for us and our clients after the Covid situation in India. Everything came to halt for our industry, but now we are motivated to welcome new clients by delivering them state-of-the-art RCF products. Thanks to Audio Waves Sounds for believing on our efforts."

## ROE VISUAL JAPAN FOUNDED TO SUPPORT EXPANSION PLANS

**ROE Visual** has announced that its Japanese-based subsidiary is fully operational. Following its global expansion plan, opening new subsidiaries is part of the sales strategy to have full-fledged sales and support bases close to the customer.

The office of ROE Visual Japan

located in Hatchobori, in the heart of Tokyo. The new office has over 260 square meters of floor space, including a showroom fitted with the latest LED products. An added conference room and support and test facilities enable the Japanese team to offer full service and support to its client base, either

from the office or on-site in Tokyo or the wider Japanese region.

With a broader spread of local sales and support, ROE Visual can deliver unrivaled customer service. ROE Visual now has sales and support bases in Shenzhen, China, to serve the broader Asian market, Leek, the Netherlands

for the European market, and Chatsworth, the US, for the North American market. In addition to that, the company runs a Repair and Service Center in Hong Kong. The establishment of ROE Visual Japan marks the further expansion of ROE Visual on a global scale.

ROE Visual's market influence has become significant in Japan over the past decade, growing to become one of the more critical and influential markets, next to the US and Europe. The company has established long-term relationships with renowned partners in the rental industry, like HIBINO, RAY, PLUSZERO, KOWA, SOUNDCREW, etc.

"We're thrilled to be able to extend our service and support package to our regional

client-based. It will enable us to not only to continue providing high-quality services but also to expand our support", states **Teppi Shuhama**, VP for ROE Visual Japan, "With our growing customer base here in Japan, it's paramount that the team can deliver optimal solutions in a fast and efficient way."

"Establishing ROE Visual Japan is a great opportunity to create and maintain those essential close connections with our client base. We strive to offer every customer in Japan the best support available," comments **Grace Kuo**, ROE Visual Sales Director.

Currently, ROE Visual Japan has already started the test operation and directly contacted with local customers step by step. The plan is to finish the localization of the company in the next two years, preventing all customers from worrying about the importation and the efficiency of services. While maintaining its leading position in the Japanese rental market, ROE Visual expects to expand its business volume with fixed installation and virtual production projects.



**ROE Visual expand its business in Japanese-based subsidiary**

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## VIRUS WANES

### Trying to Peer into Life After Covid.

The Live Event Industry has been decimated across the world. Jobs lost, careers killed, Companies ravaged. But we held on. Knowing that good days always follow storms. Looks like storms are clearing and there is talk (in the metro cities) that events will be allowed to happen.

Apart from the Government mulling permissions, there is also a sense from a large number of clients that they are dying to stage LIVE events, as long as they are safe from medical and/or legal complications. The authorities have taken their share of brickbats on how they have managed the crisis. To be fair they were caught off balance as much as we were. Their primary duty was to save lives.

Reports of medical shortages all around quietened people down as we all retreated in fear. Yes, we all suffered economic hardships. Yes, far too many colleagues and family members met untimely ends. Tragic Indeed. But we also have stories of fighters who pulled back from the brink and recovered. I understand that there is no balance or justification in touting numbers when our near and dear ones have been vulnerable. Adding to our mental anguish was that most of us were sitting on our hands. A few resourceful ones found something to do. Some used this opportunity to be of service to our communities.

Whatever we went through and however each of us individually managed to cope, the experience has changed us.

The Events business is a run run, go go business. After years we were able to just sit and think. Sooner or later we all came around to thinking of the future.

What our careers have meant to us and our families. What realistic expectations do we have for ourselves in the future?

Even Pre Covid some trends in our Industry were clear. Primarily

1. Budgets were shrinking. Clients were demanding more and more and were willing to pay less and less.
2. The Event Managers were winning Technical Contracts as part

of a package deal. Even the largest Event Technology Houses were being demoted to sub-contractors.

There was huge interest in young people for creating careers in this world. Sadly, when confronted with the scale of the work and diminishing rewards, a large number just stagnated while looking for other avenues to supplement Income.

1. (Which was great so that they an avenue to turn to when Covid Hit.)
2. Television was changing to the tastes of their Viewers. Reality and Talent Shows were becoming more and more extravagant but sagging TRP's was a concern.
3. The video was slowly taking over from all other mediums. Steadily, spending on Video overtook spending on Lights and Sound. Even Sets were replaced by larger and larger LED Screens. For variety, the LED screens were now shaped and staged to create unique architecture. Have I missed anything?

Then Covid Brought Things to a standstill. Events people by nature are energetic and want to be on their feet. All of us began looking for activity. Dozens of Webinars were hosted to educate our people. Equipment was overhauled and serviced.

All the long-standing, back end work that we simply did not have time for, was addressed.

And we still had time on our hands.

Some of us went in for an upskilling. We heard of the odd event. Weddings were cautiously arranged. Some activity took place, even though the scale was missing.

We kept hearing of pent up activity that was supposed to come roaring in within a few weeks. Nothing meaningful, so far. A few pockets which were in the right place to fit within the Government dictates thrived.

Everybody had lots of time to think of the future and what it holds for us. I have been chatting with some colleagues. Grizzled old dogs and some young Turks. Here's a summary of their thoughts.

Shrinking Budgets seems to be the biggest area of concern. Many Reasons are put forth. To My Mind, the single biggest reason is the lack of engaging content. Just Great sound Great Lighting or Great Visuals are not enough to

carry the day.

Even the smallest of shows demand Sophisticated Sound AND Lights AND Video Equipment. The sad part is that Content does not match – and so the end effect to the Client is underwhelming. Clients are leaning on technology – Not on Content. Perhaps that is what they are being sold. But the equation is not working, and Clients are walking away dissatisfied.

So, despite State of art equipment being employed the Client does not seem to be happy with the bang for his buck. We have to be able to address that. To create shows that are both pleasing and elicit 'Maaja aa Gaya 'using equipment that can be rented at a reasonable cost.

If we do that then the second issue, we all face would be taken care of (IN My View).

That of Fairness. The standard story we hear from investors is, 'I invested so much money – where is my return.' While Technicians say, 'I've invested so much time, mastering the machine and editing the content to address all the changes demanded – I'm not paid a fraction of what I think I'm worth'

This equation must be addressed and balanced FAIRLY for both sets of stakeholders.

The Third Issue that keeps cropping up is – Cost of Doing Business. With the current overhaul of business and tax parameters set by the government and its very strict compliance rules. In our own businesses, as well as meeting Compliance issues now being demanded by clients. Who in turn are also following Government Norms. Ours being a Buyers' market, we are forced to turn somersaults to meet these norms or lose business.

These hidden costs, that we only come to know off after contracts have been awarded and sometimes even after advances are paid, shrink margins even more. Today there is the added cost of Covid protocols that the government has established.

To date, I have not heard of one client, one venue or one production team that is even willing to discuss how to make this a win-win for all of us. I just see more and more powers being handed to security as nobody wants to be saddled with these responsibilities. The Event crew is more focused on meeting security compliance norms. Inevitably the content and creativity



of an event are rushed through and often compromised.

More and more the production meeting is focussed on how to maintain appearances and the actual creative content is left for the last point on agenda – where it's usually addressed as 'Chal Na yaar, kar le na Yaar. Don't Stress me out'

This must change. I have no answers how.

I understand that Both Venue Managers and the authorities have their reasons.

Some errant technology people are ignorant of norms and are a bit rough. In my view, the best way to address this is self-monitoring by the industry. We could form a Training Body that establishes norms and hand out some kind of certification which must be endorsed by each venue after each show. Promotion or demotion will depend on collective responses. Three cheers for EESA and other such Bodies being set up to address just such issues.

Ofcourse, it's tough. But the one clear thing is that, unless all of us, Authorities, Venues, Event Managers and Tech providers are not clear about our shared responsibilities and do not create Fair Standard operating practices – all of us will suffer at some point. If we find all of this really overwhelming, we really need to look outside of the traditional Event Space to put our skills to work and create wow experiences.

**Budgets were shrinking. Clients were demanding more and more and were willing to pay less and less.**

*(Continued on page 44)*



# CAVS

## (Certified AV Specialist) Course 2022

Following the success of the CAVS (Certified AV Specialist) certification course conducted by Mr. Ranjit Singh in 2019, PALM AV-ICN 2022 will once again organize the 3-day three-day certification course from **May 26 – May 28, 2022**, in Hall 1 of the Bombay Exhibition Centre, Goregaon.

PALM AV-ICN is fully committed to galvanize professionalism with this certification programme. CAVS will be run by Indian professionals to train on Specs, Techniques, Tools, Technologies, Trends. The three-day certification course will be conducted by, **Abdul Waheed**, Managing Director, EYTE Technologies Pvt. Ltd. and **Arif Patil**, Principal Consultant at EYTE Technologies Pvt. Ltd.

The course aims to empower attendees with an understanding of technology and trends in AV. The CAVS Certification is aimed at providing knowledgeable manpower, replacing the 'electrician' with a 'qualified integrator' and creating a talent with specific learning for AV integration.

### Anil Chopra, Founder Chairman, CAVS, Guidance Message

"CAVS is the mantra. The ethos of CAVS is to provide an independent neutral education forum suited to Indian AV ecosystems. AV professionals in India will be imparted basic knowledge of AV to gain their commitment to a future career in AV as a technician and join an integration team on par. Having a Certificate from AV-ICN platform providing the participant credibility to stand shoulder to shoulder with those who claim privilege. CAVS certificate launched, covers basic curriculum introducing the aspirant to essential AV protocol and standards, the must know



**Founding Director, PALM AV-ICN Expo**

factors. CAVS will introduce advanced courses in future, imparting learning in AV Design and Networking and Integration and full capability to practice AV consultancy for large projects.

Global Standards and Specs, latest techniques and products, adopting cutting edge solutions will be learned in the CAVS courses.

My guidance is clear, seize this opportunity to create and strengthen CAVS platform. Participate and have independence in developing communication and networking integration systems for our future infrastructure where India needs to compete with the world. CAVS IS THAT MANTRA. Join the force," said Anil Chopra.

### Message from Abdul Waheed

Elaborating on the importance of the CAVS programme, Abdul Waheed said, "Learning should always be an important aspect of life. It is one of the major differentiating factors between winners and losers. The companies having

erudite workforce prosper and shine. Post pandemic situation has made it more significant. During the lockdown situations, many institutions offered lot of training sessions and programs for people to learn and add value to their expertise. Sitting at home, they offered many opportunities to sharpen the skill sets. Many have taken advantage of it, many couldn't.

Technology is ever evolving field and to be on top of it, one always has to go through continuous learning. But when it comes to Audio Visual Technology, unfortunately there is no formal education available out in the field. There is Electronics and Telecommunication Engineering and Engineering in Computer Technology, whereas AV field is mixture of two along with the basics of Physics and Science. This is making it very difficult to get trained educated students in AV field directly from the institutes.

AV dynamics are changing day by day. This pandemic has forced everyone to be at par with technology. Clients are now talking about experiences and not just about features or equipment's. Its time for us to talk in the same language and keep ourselves at par as the market dynamics are now becoming prosumer.

CAVS, Certified Audio-Visual Specialist, is a unique training program being brought to you by PALM AV-ICN expo every year. This year it is scheduled to be held in the month of May giving a wonderful opportunity to those who want to seek, learn and make career in

AV field. This is equally important to the companies who have entered the AV market domain but want to have their staff to go through a formal training of AV to enhance their sales and quality of services.

**Right from AV basics, the physics behind audio, the engineering behind videos, the equipment being used, and achieving integration and automation through control systems, the syllabus covers complete course of AV** that a specialist in AV should possess. This is going to be a three-day classroom training program being taught by certified experience specialists who are in the field for more than 20 years.

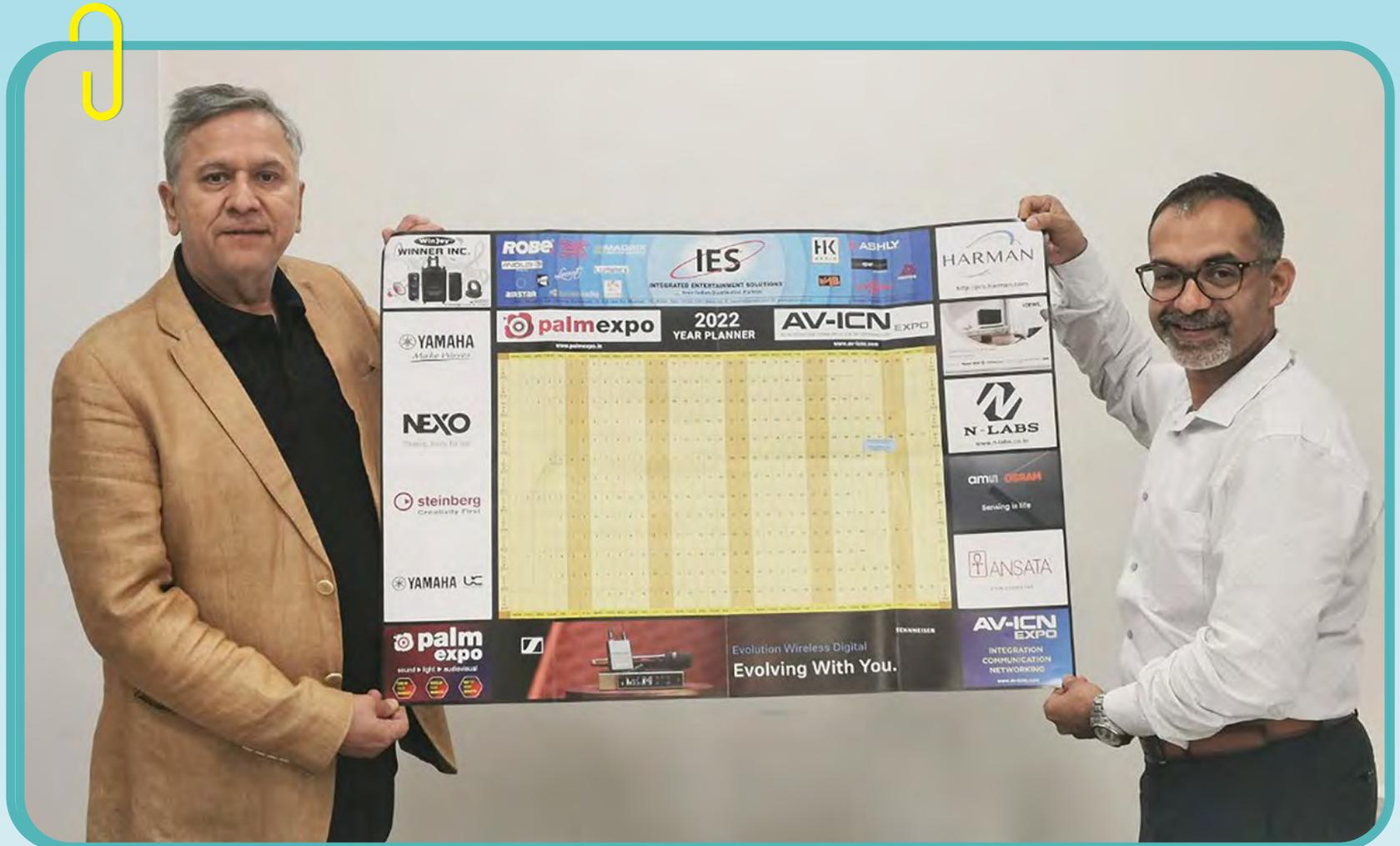
To grow and enhance yourself in the AV industry register now for the course. Those who are interested should not miss the opportunity as the training program is coming to your doorstep!"



**Abdul Waheed, EYTE Technologies Pvt. Ltd.**

*Interested delegates can log on to <https://av-icnx.com/cavs.aspx> for more information.*

# PALM EXPO Unveils Annual Project Planner 2022



L to R: Anil Chopra - Founding Director, PALM AV-ICN Expo and Gaurav Sood, General Manager, Hyve India



PALM Expo Team Launches its Annual 2022 calendar at the Hyve India office

**P**ALM AV-ICN Expo launched its Annual 2022 calendar at the Hyve India office, Mumbai in the first week of January 2022. Officiating this launch was **Gaurav Sood**, General Manager, Hyve India with **Anil Chopra** - Founding Director, PALM AV-ICN Expo, **Ramesh Chetwani** - Project Director, PALM Expo, **Smita Rai** - Deputy Project Director, PALM Expo and the entire PALM expo team.

The **PALM AV-ICN Annual Calendar Project Planner** is designed keeping in mind all the professionals in our industry and is conceptualized as a high

purpose, high utility tool for Project Studios, Event Companies, Rental Businesses, AV Consultants, Systems Integrators etc. All our industry professionals need to plan their dateline for projects and events; whether it is a studio recording project deadline or a film release or an AV project which has to be delivered on a particular timeline or a stage event, the planner is an optimum tool to mark the dates. Being integrated and involved with the market, the planner is as much for the manufacturers and distributors who can note down important dates, national and global shows/expos

and delivery dates of products and equipment. The planner has also been created as a very high value brand promotion vehicle for companies who want to promote and push their brand into the market. The planner primarily responds to the need of a cost-effective platform for brand reinforcement and the planner platform is working very well for them as it penetrates the decision makers who buy equipment ranging

from microphones, speakers, professional lighting to networking intercom system and conferencing systems, etc. The nine brands who have availed of this opportunity in the Annual Project Planner 2022 include **AMS-Osram, An-sata, HARMAN Professional Solutions, MZ Audio, N-Labs, Sennheiser, YAMAHA Music India and WinJoy.**

This high utility product will also go live by the next edition and an interactive version will be available on the net.

To access Digital Copy of PALM AV-ICN Annual Calendar Project Planner, Click on: <https://palmexpo.in/PALM-Expo-Annual-Calendar-Project-Planner-2022.aspx>



# PALM AV-ICN Planner 2023

## BRAND PROMOTION CALENDAR

AD-L1	AD-C1		AD-C2		AD-R1
AD-L2					AD-R2
AD-L3					AD-R3
AD-L4					AD-R4
AD-L5					AD-R5
AD-L6	AD-B1		AD-B2		AD-R6

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 smita.raihyve.group  
 Mob: +91 9289368200

### PALM AV-ICN Planner 2023

Dispatch date: 15/12/2022  
 Digital Circulation: 01/01/2023- 31/12/2023  
 Internet Presence: Website & social media

Size: H=25.27 X 35.35W  
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	MON	TUES	WED	THUR	FRI	SAT	SUN	MON	TUES	WED	THUR	FRI	SAT	SUN	MON	TUES	WED	THUR	FRI
<b>JAN</b> 2022						1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>FEB</b> 2022		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
<b>MAR</b> 2022		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
<b>APR</b> 2022					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>MAY</b> 2022							1	2	3	4	5	6	7	8	9	10	11	12	13
<b>JUN</b> 2022			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
<b>JUL</b> 2022					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>AUG</b> 2022	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
<b>SEP</b> 2022				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>OCT</b> 2022						1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>NOV</b> 2022		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
<b>DEC</b> 2022				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>JAN</b> 2023							1	2	3	4	5	6	7	8	9	10	11	12	13

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8	19	20	21	22	23	24	25	26	27	28									FEB 2022
8	19	20	21	22	23	24	25	26	27	28	29	30	31						MAR 2022
5	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				APR 2022
3	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	MAY 2022
7	18	19	20	21	22	23	24	25	26	27	28	29	30						JUN 2022
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# INDOOR LED DISPLAY

*The increase in the adoption of indoor LED screens for newer applications areas such as shopping malls and conference rooms for meetings are the key restraints to the growth of the indoor LED screen market. This month's product focus features a lineup of Indoor LED displays. The feature is intended as a guide and does not endorse any of the featured products.*

## ABSEN - KLiCon

**KLiCon** is built with ultra-slim frame, with wide vision that features 5mm ultra-thin frame and 98% screen-to-body ratio, providing an immersive viewing experience. Equipped with an Ai Box 3.0 intelligent control box, power on/off, brightness adjustment, signal source switching, menu settings, and other functions can be easily realized. KLiCon supports Wireless sharing with screen mirroring through computer, mobile phone and PAD screen. The screen shares multiple devices at one time wirelessly, allowing creativity display simultaneously. The mobile phone/PAD screen can work as a writing board, enabling online editing. Absen has been deeply involved in the LED industry for decades and is committed to providing customers with high quality and safe LED displays. 4000:1 high contrast ratio 110%NTSC wide color gamut. Supports Windows and Android dual system configurations; dual-frequency Wi-Fi designed to enable Internet access even when screen mirroring. Flexible installations, convenient maintenance. It allows for multiple installation methods and full front & rear maintenance, offering extreme flexibility to various application environments. Wall-mounting installation/ mobile stand installation the KLiCon is ideal for various application scenarios conference room/ lecture hall/ classroom/ exhibition hall etc.



## AOTO - CV SERIES



**AOTO CV series** offers fine pixel pitch which highly benefits touch screen application with the features of more sensitive sensing and smoother writing. With wireless protection screen and code scanning for sharing, it supports direct control on the PC tablet, computer or mobile phone for manuscript display and comment adding. Through code scanning for sharing, it can realize convenient sharing and simultaneous saving. Adopting AOTO's 24 bit color depth processing technology, which benefits to display chroma in richer ranges, presents the tiny differences among various colors. 110%NTSC wide gamut combines with pixel to pixel brightness & chroma calibration technology guarantees the consistency and accuracy of color performance. display strengths like high definition, high contrast ratio, low brightness and high gray level, wide viewing angle, front maintenance and seamless splicing, the CV series can provide the command and control center with a complete display system and a visualized information platform. The surface light source technology enables to effectively reduce the moiré effect. For multi-camera omnidirectional shooting or dead-zone free shooting, the high refresh rate ensures that the big screen can promptly respond

even with high-speed cameras, presenting smoother frame transition. The dual-card and dual-power backup system keeps the data safe and prevents data loss or interruption as a result of emergencies.

Reducing conferencing procedures and delivering multi-way interaction, it enhances conferencing efficiency, makes inspiration within reach and delivers efficiency. The radiation luminosity under 460nm is 0.008492W/nm, much lower than the hazard-free standard of 100W/nm. Tested at an exemption level, the product can help protect the eyes.

## BARCO - XT0.9-Q

The **XT0.9-Q** further expands Barco's indoor high-resolution LED tiles portfolio. The 27" inch tiles with a pixel-pitch of only 0.9 mm delivers superior seamless results and includes all necessary features to maximize the reliability of your LED wall. Leveraging the IMD (4-in-1) technology, the XT0.9-Q brings high-resolution images to any environment.

With each tile having a 16:9 aspect ratio, it is child's play to create native Full HD or UHD screens. This allows displaying video in the most common formats in full, without compression or unused canvas. What's more, the camera-supported seam correction technology makes sure tiles easily align, creating a single seamless canvas viewing experience.

Because these LED tiles are designed for wall mounting, they are fully accessible from the back and/or the front – creating a shallow depth. The improved robustness and the Assisted Module Extraction makes sure the tiles can be easily removed, for maintenance or replacement needs, with a reduced risk of pixel damage.

Thanks to Infinipix®, image quality is perfect in both dimmed and high-brightness mode with consistent Rec. 709 color accuracy. Video artefacts, which typically arise on fast-moving content, are successfully countered and video is displayed without hiccups. Automatic calibration makes sure the entire wall is perfectly uniform at any time. In order to support the use of Direct LED in critical environments and prevent downtime, redundancy of both power and data can be integrated in the XT0.9-Q. Also, instead of facing sudden complete wall downtime, the users can get a warning so proactive measures can be taken against potential wall failures. The XT-Q displays are backed by a three-year product warranty period. For extra peace of mind, customers can sign up for an additional EssentialCare maintenance contract with batch compatible modules up to five years.



## ROE VISUAL - JASPER



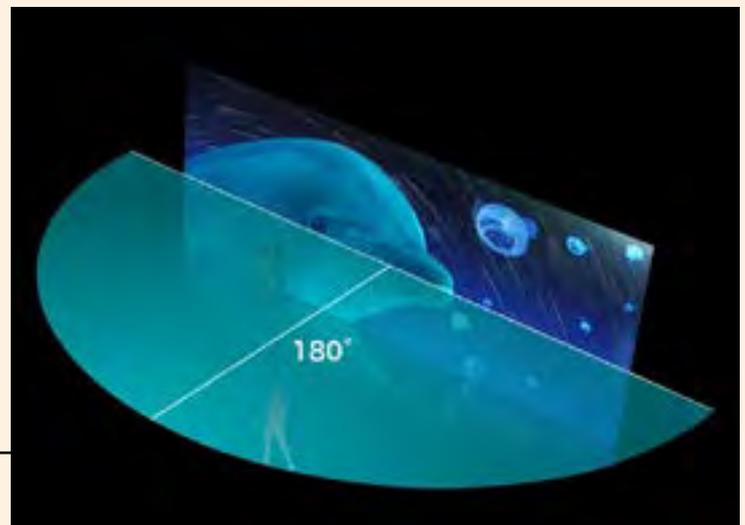
Jasper by **ROE Visual** is a modern LED display solution, offering uncompromised picture performance and optimal installation benefits, ideal for system integration. Deliver perfect presentations. Superb LED quality, HDR technology and high refresh rates go hand-in hand with flexible design. The Jasper LED panels mount flexible and easy, in a stacking or wall-mounted configuration. The panels can be mounted to almost any surface type, the 500x500mm panel size creating easy options for flexible screen sizes. The panels are mounted from the front side, while the LED modules are ready for front and rear service. The slim-line panels create a unobtrusive flat screen design. No special staff is needed for basic operation and servicing of the Jasper LED panels. Servicing and maintenance of the video screen are as easy as possible. The panel modules have front service for easy replacement and the modular design saves on spare parts, reducing the maintenance costs. With its energy saving power unit and re-calibration options, the Jasper LED panel ensures years of easy operation and stable visual excellence. With the re-calculate function the panels can be easily re-calibrated based on calibration data storage. System integration requires products that combine high-end performance with flexible installation properties. The Jasper LED panels are developed to play into these exacting demands and offers a fitting solution for permanent video installations. Uncomplicated installation, flexible design and low costs of ownership go hand-in-hand with high-end performance and unequalled visual qualities.

## AOTO - CV SERIES... *(Continued from page 42)*

38mm & 5kg Featuring a light and thin design, the cabinet is 38 mm thickness and weights 5 kg, saving transportation cost and installation cost, and delivering more attractive screens after installation.

Seamless Connection No wires can be spotted among cabinets behind the screen, keeping the screen intact and presenting a neater and more attractive look. The six-direction adjustment technology ensures no apparent segment gap or spacing among the screens, resolving the evenness and splicing problem of small pitch screens in an all-round way. The common cathode technology, ultra-low voltage power supply and dynamic energy conservation technologies are adopted to reduce power consumption by 20%. Highly energy-saving and improving the heat dissipation. Safe and Reliable Meeting the requirements of electromagnetic compatibility and fire prevention, the raw material and circuit design are highly safe and stable

**Nearly 180° Viewing Angle: The wide viewing angle allows clear visions from different positions.**



## SHARP - PN-CD701

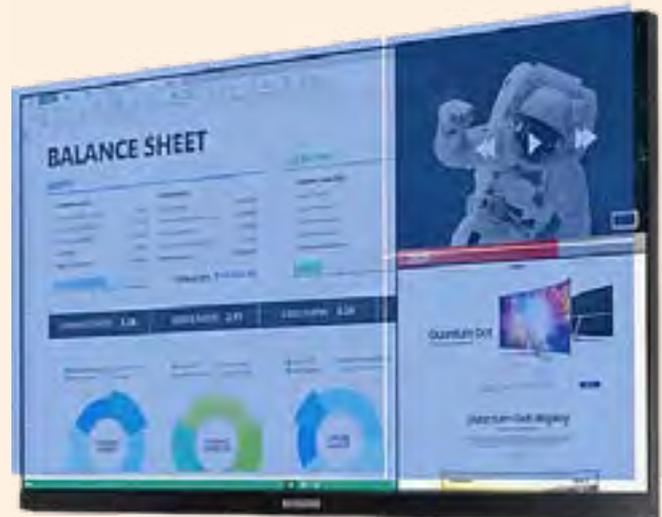


**Sharp**, is certified for Skype for Business and is a next generation 4K 70° interactive display that enables better space utilization and more productive collaboration in meetings, boardrooms, training rooms, technical reviews and almost anywhere else. It has a built-in microphone, high quality camera and IoT sensor hub, it works seamlessly with the best Microsoft 365 collaboration tools. It is simple to walk in to a room, plug in the device and start working together straightaway. Just connect with the 8m long USB-C cable and it automatically switches to the right input for whatever information you want to display. This single USB-C\*\* connector, which is also used with the latest Windows and Apple Mac notebooks, provides high-speed, high-bandwidth data transfer for multiple functions, including 4K Video, internet network and application data. And it can also provide power for attached mobile devices. With its 10-point Projected Capacitive (PCAP) touch technology and direct optical bonding, it provides a more accurate and natural Pen-on-Paper experience. Writing on-screen is just as quick and effortless as writing on a flipchart or whiteboard. By using either a finger or pen, notes and comments can be quickly added as simple text or by drawing freehand to highlight changes and annotate the information on-screen. Business teams come in all shapes and sizes — from tactical workgroups to large-scale, established project teams — and often span both local

and global locations. But to be truly effective they need to share ideas openly and inclusively. The Windows collaboration display from Sharp has been certified for Skype for Business and is supported by Microsoft Teams. It offers the highest quality audio and video and provides the best ways to connect and collaborate using the power and productivity of Microsoft 365 at room scale. The Windows collaboration display has in-built Wireless Casting that works with Windows and Android devices. As a result, you can simply connect your own device to the display and easily share and display any information. Up to five devices can be connected simultaneously and the Touch back control enables you to control screen content from either the display or the source device. So it is ideal for dynamic workgroups discussions or interactive training sessions as it allows you to work more efficiently, encourages active involvement and provides a more effective way of learning. The display has an attractive and elegant edge to edge design that looks good in even the most prestigious corporate boardroom

## SAMSUNG - TU874 SERIES

Simple and smart setup. With two Thunderbolt 3 ports you can connect to compatible Macs and PCs and work on a bigger screen, enjoying a simpler dual UHD setup. Plus, transmit video and data at speeds up to 40Gbps, while simultaneously charging devices (up to 90W) over a single cable. With 4K UHD resolution, you get stunning, lifelike image quality and highly legible fonts thanks to 4x more pixels than a standard Full HD monitor. The large 31.5" screen provides more room to work so you can be more productive when reviewing lines of code or detailed images. And the VA panel offers wide 178° viewing angles for easy viewing in team huddles and when collaborating with colleagues. Staying connected is critical. With ProCare Device Protection, you'll help ensure business continuity and maintain your company's valuable assets. Eye Saver Mode and Flicker Free technology help to reduce eye strain for a more comfortable work experience, even during long work hours. When Eye Saver Mode is active, blue light levels are lowered and Flicker Free technology eliminates flickering at all levels of brightness. This business monitor has an adjustable stand that swivels, tilts and is height-adjustable to deliver comfort and ergonomics at work. And since the monitor is VESA compatible, installation on a wall or separate mounting arm is easy. Connect two separate sources to the TU874 Series display and view them simultaneously. Code in one window and see the results in the other. Included software makes window management easy. A 3-sided virtually borderless frame gives the impression of one seamless display in a multi-screen setup. Daisy chaining lets you bring monitors together with just one single cable. TBT3 protocol gives amazing speed, transferring data at up to 40Gbps.<sup>1</sup> Equipped with two TBT3 USB-C ports and compatible with PC and Mac, the single cable connection transmits a digital display signal, data (USB) and Ethernet (LAN) while simultaneously charges your device (up to 90W).



### The Bright Spark... (Continued from page 36)

We are slowly moving to an Entertainment Economy. Look at our Malls. They have gone beyond being simple shopping centers and

have now extended their role to Entertainment centers. Right now, most mall entertainment is free – But if we can figure out a way to monetize the mall experience, I'm sure it could open many

doors for all of us.

Not Just Malls. Museums, Multimedia Experiences, and Installations in the unlikelyst of areas are a huge opportunity for people with our skill sets.

Tread Intelligently my Fellow Entertainment Techies. Make wise choices and I pray all of us to use this 'Covid Pause' to emerge Better and Stronger than we were before.

20<sup>th</sup>

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AV Spectrum installs state-of-the-art projection mapping at Jatiya Sangsad Bhaban

# SPECTRUM AV Commissions PROJECTION MAPPING PROWESS at Bangladesh's Historic 50<sup>th</sup> Independence Day Celebrations in Dhaka

***Bangladesh's iconic Jatiya Sangsad Bhaban comes alive with 35 Million pixels and a bespoke visual experience***

When GREY Advertising, an agency for entertainment and live experiences, was entrusted with the responsibility to have the entire **Jatiya Sangsad Bhaban** building act as a canvas, to display a myriad of visual content (images and video) that provided an insight into the nation's history and its 50 glorious years of independence, the team at Grey connected with one of India's well-known service providers of high-quality audio-visual equipment for large-scale live event applications – **SPECTRUM AV**.

The Jatiya Sangsad Bhaban a.k.a. the National Parliament House of Bangladesh, which by itself stands as the most prominent and remarkable architectural landmark in the country while also being acclaimed as the ultimate symbol

of the nation's pride, freedom, and sovereignty as its key design philosophy is believed by many to be the greatest representation of Bengali culture and heritage. The Jatiya Sangsad Bhaban illumination program was scheduled to take place during the evenings of 16th December 2021 and 17th December 2021 respectively.

December 16th, 1971 is noted a day of historical significance as it witnessed the birth of Bangladesh as an independent country. 2021 marked a very special year in the country's Victory Day celebration proceedings, with the itinerary being more extensive than any other, that the country had ever witnessed in its history, as the day happened to coincide with two other equally significant national celebrations i.e., the birth centenary of the Father of the Nation

**Bangabandhu Sheikh Mujibur Rahman**, and the **golden jubilee of the country's independence**.

Considering the importance of the occasion and the building itself, officials from the Bangladesh government wished for the exercise to deliver a truly special and wondrous audience experience – the likes of which was never witnessed in the country before, and of course, commissioned in a manner that would be befitting of the building's stature and prestige.

Besides hosting the Hon'ble President of India **Shri Ram Nath Kovind** as the guest of honour for the occasion, the programs marking 'Victory Day' celebrations included a 31-gun salute, placing of wreaths at the monuments to pay homage to martyrs, and hoisting of the national flags atop all government,

semi-government, and private offices as well as offices of autonomous bodies across the country.

## Project Highlight

Following a few detailed conversations about the project between the two organizations, the Spectrum AV team presented Grey with a meticulous plan to bring the project vision to life, along with a succinct and effective strategy to achieve the desired results. This interaction proved to be instrumental in Grey being convinced about Spectrum AV's capabilities and capacity to deliver true on their promise – which led to the Mumbai based maverick company being awarded the opportunity to be a part of this prestigious project.

"After understanding the grandeur of



**Jatiya Sangsad Bhaban illuminates with enchanting visuals to celebrate the country's 50th Independence Day**

the event and the client's expectations, we realized that the key priority on this project would be for us to ensure the optimal usage of the entire National Parliament House building as one single projection canvas and to fill every little square inch of this canvas space with crisp images and brilliant colors that would accurately represent Bangladesh's rich culture and heritage, while also spotlighting the country's journey of Independence (and Victory!) and the progress it has made this far" commented **Jay Mathuria**, Founding Director, Spectrum AV.

**Solution**

The Spectrum AV team carried out an extensive analysis of the building which involved securing accurate measurements of every inch, corner, and curve of the Jatiya Sangsad Bhaban's façade in order to devise a detailed technical charter to efficiently commission the task at hand. The analysis revealed the need for the Spectrum AV team to add multiple units of the brand-new **Barco G100 W 22,000 lumens projectors** – which the company ended up acquiring specially for this project.

While on-site, the SPECTRUM AV team stuck to its meticulous plan that detailed the deployment of over 24 units of **Barco Laser Projectors (UDX-4K 32,000 lumens & G100-WUXGA 22,000**

**lumens)** at extremely precise strategic locations, such that the projected content would cover every square inch of a stretch of almost 250 Meters

**Spectrum AV team stuck to its meticulous plan that detailed the deployment of over 24 units of Barco Laser Projectors UDX-4K 32,000 lumens & G100-WUXGA 22,000 lumens at extremely precise strategic locations.**

across the National Parliament House with crisp colors and sharp images. And the spell-binding projection design was mapped onto the building facade using a decisive system that included

**DATATON Watchout playback servers, Lightware Matrix switchers, and additional transmitters and receivers** from Lightware, all of which came together seamlessly to assure 100% redundancy in networking across the entire stretch. The team also deployed double the amount of Watchout Server Channels used in conjunction with Lightware Matrix Switchers to provide an additional layer of backup.

**Challenges**

The entire process of bringing all the technical concept together on-site was, however, far from being as simple and straightforward as the Spectrum AV made it seem. Mathuria details the several challenges that the team had to overcome.

"There was an unbelievable amount of time and effort that went into planning each and every detail of the project, most of which began before we could even board the aircraft to Dhaka. From narrowing down on products and quantity that would be perfect for the mapping, to the transportation and logistics of the equipment, to sorting out important formalities and securing a thorough understanding of international health and safety protocols

so that our team could work safely and efficiently in line with all directed mandates – all of it demanded only the utmost level of commitment from our entire team. Luckily, Spectrum AV is blessed to have a team workforce of expertly talented thorough professionals, which is why we could mitigate these and several other challenges with relative ease. I cannot commend our team enough for their sheer brilliance in bringing this monumental project to life. They're absolute rock-stars!" said, Mathuria.

**Conclusion**

Mathuria informs that the Spectrum AV team spent a cumulative of 48 gruelling hours to precisely set up the technical infrastructure that efficiently enabled the spectacular projection mapping show, which ran for 90 straight minutes individually on both days of the event. Owing to the outdoor nature of the event, the team had to take prevailing weather conditions and other environmental factors into account, wherein special arrangements were made to protect the equipment from the heavy dew that began to set in as the sun went down. In addition to the 48-hour set up time, the team invested an approximate of 20 hours in programming the visual content for the show which involved multiple checks on the resolutions, video codecs and also the reproduction of the content on the building façade itself, in an attempt to ensure the utmost level of perfection in doing justice to the client's expectation of accurately representing the spirit of Bangladesh.

At the end of it all, Bangladesh soaked-in the glory of one of the most enchanting visual experiences it had ever borne witness to, which not only celebrated the achievements of the nation and paid homage to its past, but also instilled inspiration for a promising future.

"The National Parliament of Bangladesh is considered as one of the twentieth century's most significant buildings, and seeing the building come alive with the 35 Million pixels all synced with music and lights, was truly a sight to behold. We're very grateful to Grey and the government of Bangladesh for trusting us with the responsibility of such an important project. We're really pleased with all the appreciation and praise that the show received from all quarters. Commissioning a one-of-a-kind projection mapping experience onto one of the finest parliament buildings in the world, in a matter of just 72 hours, and that too on one of the most important days in the country's entire history, is truly a proud moment for the entire team at Spectrum AV!" concludes, Mathuria.



**AV Spectrum deploys tech-savvy infrastructure to enable a stunning projection mapping display**

# Integrated System Design Crafts a Savvy Aural Experience

HARMAN Professional Solutions & ISD install a comprehensive Aural setup at Pass Code Hospitality newly opened restaurants

When *Pass Code Hospitality* opened three new bustling restaurants in Lower Parel, Mumbai, they reached out to **HARMAN Professional Solutions** and **Integrated System Design** to deploy a comprehensive Aural setup that enhanced each restaurant's theme well.

In the post-Covid world, the preservation and resurrection of the lively restaurants and hospitality industry have been a welcome breather for all in India. This exciting but guarded phenomenon is demonstrated with the conceptualization and emergence of three new dining spaces in Mumbai that, apart from delivering a bespoke culinary experience, also promise a unique, breath-taking aural experience, all under the same roof.

Kamala Mills area in Lower Parel Mumbai has been synonymous with good food, a fun crowd, and the promise of a good time overall. The place recently got more vibrant and livelier with the launch of three new, bustling destinations; **PCO**—a speak-easy-themed lounge-bar, **Saz Cafe** - an American brasserie, and **Ping's Cafe Orient** - an Asian restaurant, all of which cater to their distinct clientele but are in the same vicinity. The three venues are a part of Pass Code Hospitality, run by the brother-sister duo of **Rakshay** and **Radhika Dhariwal**, who aspire and encourage discovery among connoisseurs. This novel aim goes beyond the run-of-the-mill dining experience. Pass Code Hospitality's decade-long engagement with the food industry has led

them to unveil nine other restaurants across India.

Radhika shared with the media source *Vogue* shortly before the launch of these new spaces, "We know these brands like the back of our hand, so opening three was not any less or more difficult than launching one at a time. As long as the fundamentals are in place, we are good to go. Besides we did this before when Ping and Jamun launched together in Goa in 2020. It's a format we like."

Rakshay, on the other hand, said that they initially had Bengaluru and Hyderabad in mind for these spaces before later settling in Mumbai. He added, "Mumbai has always been ready for us. We were looking for a more opportune time, and the dip in real estate prices made this possible."

Each of these three spaces is a part of the same property incorporated with a unique design and atmosphere. This place goes beyond usual gastronomic expectations because they offer, apart from a unique dining experience, an engaging aural experience that you can immerse yourself in as you relish the offerings of their specialty chefs.

These spaces are carefully crafted, bespoke pro audio system architecture

from **HARMAN Professional Solutions**. The individual systems feature a thoughtful blend of products from the HARMAN Professional portfolio, which includes Loudspeakers from **JBL**, Amplification from **Crown**, and System Control from **BSS**, that was designed and commissioned by Mumbai-based system integration leaders – **Integrated System Design**.

**Malay Jhaverri**, Director of Sales, Integrated System Design, unveiled their approach towards the designing and commissioning for all three spaces. He focused on Pass Code Hospitality's vision for the spaces to emanate a soothing aura and energy created by superlative music ambience.

He says, "The focus was on the music being enjoyable and yet unintrusive – both visually and aurally. This would, thereby, enable connoisseurs to soak in the ambience while relishing the array of interesting cocktails and food, even while being able to engage in conversation with fellow connoisseurs." He also added that, given the proximity of all three venues, they needed to devise and design customized systems that would appeal to the target audience and the resultant focus of each of these spaces. For instance, one of the venues

wished to appeal to buoyant music, while the others preferred a quieter ambient soundscape. Furthermore, we invested time and effort in commissioning a detailed analysis of each space to figure out the right speaker system, along with accurate speaker placement points and precise system tuning measures. This exercise was critical for us to ensure that the system at each venue offered the desired music listening experience with no spillage of sound beyond each designated restaurant."

**PCO:** PCO (Pass Code Only) is a dedicated cocktail-forward bar in the city. It is approximately 2357sq ft of alfresco space and is touted to be one of its kind. The essential factor to bear in mind while designing the sound system design for the space was the concept and theme of the place. The concept draws inspiration from the modern-day speakeasies of New York City, so much so that the owners promise that it will always stay true to its original form and not turn into a club as the night wears on – as most other theme-bars have in the past. This was an essential factor to bear in mind while designing the sound system design for the space.

Malay said, "The conceptual music schedule here was for a relatively



**Pass Code cocktail bar deployed with JBL's Control 29AV-1 surface-mount loudspeakers and AC115s subwoofer for uniform listening experience**

upbeat jazz music playlist that would progress as the night wore on, but definitely at volume levels far lower than traditionally observed at theme bars in India. After viewing the analysis report of the space and considering the exact position of the bar area and the seating configuration. We realized that the space needed loudspeakers that were rugged enough to withstand all the

Series to provide solid low-frequency fidelity, and this decision worked great as it eased the task of matching the frequency response of the subs with the speakers that offer a uniform sound experience."

**SAZ Café:** Reminiscent of and inspired by the New Orleans's classic cocktail, Sazerac, SAZ Café is similar to PCO in its alfresco seating. However, it

the perfect fit for the team to match with the **Control SB2210** compact dual 10" subwoofers from JBL to provide consistent full-range fidelity while maintaining the same tonal signature in efficiently meeting the music reinforcement needs of the venue.

**Pings Café Orient:** Conceptualized as an intimate indoor family dining space, Pings Café Orient is, by far, the

dispersion in a manner that encompassed the entire seating area with immaculate sound.

"The decision to have the loudspeakers at all three venues powered via amplification from Crown and controlled through **Soundweb London BLU-100 signal processors** with BLU Link gave us the leeway to deploy a more efficient cabling scheme for each of the individual systems and maintain consistent low-latency high-quality output at each venue. Additionally, we've ensured easy and quick centralized control of volume levels and signal source switching of all the individual systems using a Soundweb London BLU-100 signal processor paired with a Soundweb **Contrio EC-8BV Ethernet** wall controller. Having these provisions in place has not just helped us keep overall system costs within the client's desired budget but has also enabled us to design and deliver a neat and efficient system architecture for each venue that's super-easy to use and maintain.", says Malay.

He further affirms that the simple and uncomplicated concept of maintaining the original vision of these spaces as much as was possible has, even within

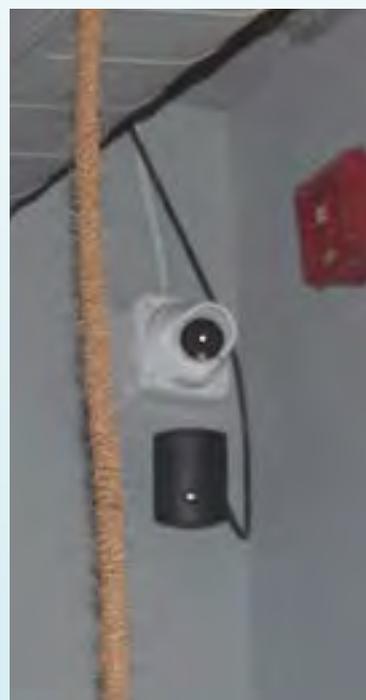


**SAZ Café incorporated with JBL Control Contractor to complement the ambience of the venue**

elements while simultaneously offering dispersion and coverage while maintaining optimum frequency response to ensure a uniform listening experience.

Malay adds, "It was cognizance that the sound had to be impactful. We deployed the **Control 29AV-1** surface-mount loudspeakers from **JBL's Control Contractor** Series to leverage its wide coverage range of 110° to cover more space efficiently. Its extended bandwidth and smooth frequency response make it perfect to efficiently reproduce the variety of music that the venue desires to offer. We've also deployed **AC115s subwoofers** from JBL's Application Engineering

has a smaller all-day dining kitchen & cocktail bar exuding a warm ambience that blends the charm of a New Orleans courtyard with the chic factor of a modern NYC diner. The peaceful and relaxed vibe of the space has influenced the music experience, with the venue choice to focus on lighter genres such as soft rock and down-tempo electronic. The music is delivered through a concise loudspeaker system comprising Control 28 high-output indoor/outdoor loudspeakers from JBL's Control Contractor Series that offers 90° x 90° coverage with 92dB SPL. According to Malay, these two key offerings from the **Control 28 loudspeakers** made them



**Pings Café Orient integrated with Soundweb & Control 50 Series for High-fidelity background music**

most compact space in the lot. Here, patrons can savor a variety of cocktails and oriental cuisine while soaking in the wonderful mood created by light-ambient music. It acoustics needed was designed keeping in mind the compactness of the space. The integration team thus decided to commission the space with the unobtrusive **Control 50 Series** subwoofer-satellite surface-mount loudspeaker system to allow for full-range high fidelity background music. Malay explains that placement of the satellite speakers at the accurate height enabled them to achieve the desired

their nascent days, succeeded in garnering dedicated patronage. Patrons have especially complimented these spaces for the pleasing soundscape and unique music experience. "It is great to know how well the venues have been doing, considering especially the fact that they are comparatively new launches. It is especially refreshing to have compliments come in about the quality of the sound experience, especially because the spaces were not consciously designed to be music-intensive or double up as party spaces for late evenings!" concludes Malay.

## MEYER SOUND PRESENTS PANTHER LINEAR LINE ARRAY LOUDSPEAKER

Meyer Sound announces **PANTHER**, a new flagship linear line array loudspeaker engineered to meet rapidly evolving demands for large-scale touring and installed systems.

Complex and visually-focused production scenarios, coupled with tighter safety regulations, often restrict the space and weight allowed for loudspeakers. At the same time, environmental policies require greater energy efficiency and a smaller footprint for transport as more productions shift to

just 150 lb (68 kg) and offers substantial savings on current draw from the previous generation flagship line array loudspeaker. A dual analog/Milan AVB network input module means PANTHER offers flexible signal distribution options and each cabinet comes standard with an IP55 weather protection rating — all at a substantially lower initial cost compared to LEO and LYON.

“This is our most significant loudspeaker introduction in more than a decade,” says **John Meyer**, President & CEO of Meyer Sound. “PANTHER advances my commitment to making

reducing weight and increasing energy efficiency.”

The electronics module in PANTHER is an all-new, lightweight design incorporating a four-channel Class D amplifier coupled to an innovative power supply. With power factor correction and higher voltage rails, the new amplifier package delivers higher peak current to the loudspeakers while presenting a stable load to the AC line.

PANTHER also features new, longer-excursion 12-inch low-frequency cone drivers and new 3-inch compression drivers. Each incorporates

advanced magnet structures using new materials for higher flux density despite substantial weight reduction.

Combined with a new LF port design, PANTHER has a maximum peak output of more than 150 dB SPL. Weighing only 150 lb (68 kg), PANTHER is a significantly lighter box than anything in its class.

“With PANTHER, we excelled with a full system design approach,” says **Katie Murphy**, Engineering Director, Acoustical & Mechanical. “We had the electrical and mechanical engineers working in a coordinated effort, which meant we could leverage reduced amplifier and transducer weight with new cabinet designs and materials to further reduce

weight. Everybody was in sync at every step to achieve our goals.”

The PANTHER family consists of three cabinets with different horizontal coverage patterns. PANTHER-M and PANTHER-W are 95 and 110 degrees, respectively, and will be familiar options for existing Meyer Sound owners. PANTHER-L features an all-new long throw horn with a tightly defined 80-degree horizontal pattern. Three options allow system designers to precisely tailor coverage in any size venue with uniform response from front to back and enable deployment of fewer arrays or shorter arrays in some applications, such as in-the-round configurations.

**Weather Protection Standard:** PANTHER is weather protected to the new IEC IP55 standard with full rain protection when using mating Neutrik TOP series signal and powerCON connectors. No rain hood is required.

With standard weather protection, the same PANTHER cabinets can be used for indoor or outdoor events with no special preparations required. With the compact size and lower weight, the same PANTHER inventory can be assigned to a wide range of applications, from theaters and convention halls up to arenas, stadiums, and festival sites. Expanded flexibility means PANTHER systems spend less time in the warehouse and more time generating revenue. And, when on tour, a tight truck pack with no amplifier racks further reduces expenses for enhanced ROI.

“Everybody on the team really came together and put their hearts and souls into this project,” comments Katie. “We went all out to create a loudspeaker that would define line array technology for years to come.”

“We see PANTHER as more than just a new product, but as something that adds a new dimension to what we are doing as a company,” adds John. “It has the potential to change the path we are on in the sound industry. I’m excited to see how industry professionals — and, more importantly, audiences — respond to it.”

Sun Infonet is the distributor for the Meyer audio brand in India, the company arm supplies professional audio products sourced from renowned suppliers across the globe.



**PANTHER is weather protected with the new IEC IP55 standard**

a networked signal infrastructure. Responding to these demands, PANTHER’s acoustic output is closer to the significantly larger and heavier LEO line array loudspeaker and occupies the slender form factor of the existing LYON line array loudspeaker. Despite stadium levels of performance, PANTHER weighs

loudspeakers with linear response, predictable coverage, and extended headroom for dynamic, uncompressed music reproduction — transient peaks. Essentially, PANTHER produces nearly the same power and headroom as LEO in the footprint of LYON. I’m proud of how our engineers achieved ambitious performance benchmarks while

## JBL EXPANDS THE PARTY BOX CATEGORY WITH ENCORE SPEAKER

JBL’s popular **PartyBox** speaker series now includes the **JBL PartyBox Encore** edition. This limited-edition loudspeaker outputs an impressive 100W of sound and features a built-in lightshow that syncs to music. The JBL PartyBox Encore also comes with two digital wireless microphones allowing partygoers to sing along to their favorite tunes all night long.

Its portable design has no limitation to the power it boasts and endless fun it will provide. Engineered with a rubber-gripped handle, the JBL PartyBox Encore is easily transportable to backyard gatherings, tailgates and karaoke parties. With up to 10 hours of battery life and an IPX4 splashproof

design, music lovers can party the night away indoors or out without worrying about the elements.

The interface on the top of the JBL PartyBox Encore enables users to easily control the lightshow, volume and microphone settings. Through the dedicated JBL PartyBox app, partygoers can also customize a dynamic lightshow including fun strobe effects and club lights that sync to the beat of



**JBL PartyBox Encore loudspeaker outputs 100W of sound with built-in lightshow to sync music**

the music. With the two included microphones, friendly sing-off competitions are endless.

## SUNBURN GOA COMES ALIVE WITH JBL SOUND

India's most awaited live music festival- **Sunburn Goa**, connected with **Sound Effects** to set up the sound for the main stage. The Pune-based sound rental company reinforced **JBL Sound Solution** for the 2021 festival.

It was essential to reinforce even sound coverage without having any sound spillage to the other stages throughout the live event. "To ensure optimized system performance on the main stages, our team relied on JBL VTX and STX speakers and subs assembled in different configurations, tailored to the needs of the main stage and the genre it represented," said **Uday Shah**, Owner, Sound Effects.

The Line Array Calculator (LAC) simulation software accurately deployed the design and prediction of acoustic performance of **JBL VTX Line Array systems**. This significant tool helped the Sound effects team to achieve incredible power, depth, and clarity with minimal system tuning.

Sound effects deployed **12 tops of JBL VTX V25-II** on each side for the FOH enforcement, **three JBL VTX S28 Subs** below the speaker towers on each side, **18 JBL VTX G28 Subs** in the center cluster with a time delay between each of them and **four JBL VTX V25-II Centre Fills** on top of **18 VTX G28 Subs** put in the center cluster.

**One JBL VTX V25-II** on top of **JBL VTX S28** as out fills on each side, **two JBL STX825 & STX828s** for VIP Area on each side and **Crown IT-12000HD Amplification** to power the complete setup.

"For a festival like Sunburn and the crowd it has been attracting year on year, the **JBL VTX V25-II** along with **G28 & S28 Subs** was the perfect combination one could deploy from the house of HARMAN Professional," said Uday.

The full-size three-way high-directivity line array JBL VTX V25-II includes a waveguide for further throw and wavefront control that deliver room for headroom or punch and clarity, which are essential concerning the genre of music at Sunburn. Further Uday adds, "EDM has a lot of understated effects that sometimes get lost in other PA systems. For the clarity of the JBL VTX system, you could hear every detail in the music, and the **VTX S28** and **G28 subwoofers** flawlessly delivered the impact necessary to get the dancefloor rumbling. It has the most accurate PA I have heard in the industry. I could get more into the technical details to explain what makes the system sound phenomenal!"

Sound effects did not face challenges in the installation process as they rightly analyzed the main stage for Sunburn Goa and kept space for headroom given the genre of music played at the



Sound Effects team deployed JBL VTX Line Array systems for optimized performance

festival. It took two days to install the acoustic setup for the event, which the team started on 25th December 2021.

"There is no question that Sunburn is an experience. It is so much more than a music festival. For the entire team of Sound Effects, setting up the sound for the main stage of Sunburn Goa 2021 itself was a wonderful experience of five

days – two days of setting up & three days of the event. Working alongside **Wouter Asselman**, Sound Engineer, **Armin Van Buuren** was truly phenomenal. The fact that we had compliments pouring in from not just the artists and the organizers but also the audience in general, had us feeling absolutely stoked!" Concludes Uday.

## ADAMSON POWERS HAMMERZZ OPEN AIR GOA

**Hammerzz Open Air Goa** has been updated with an **Adamson System**; the system was sold by Adamson's distributor **Stagemix Technologies** and installed with the help of **Advanced Integration Technologies**. The new venue aims to bring their patrons an international open-air experience which combines a mix of nightlife and nature.

The brand-new Adamson System was installed on December 18, 2021 and consists of **12 S10** enclosures - **two arrays of six**, hung to the left and right of the stage with **Six E219 subwoofers** ground stacked, three per side in front-back-front configuration. The entire system is powered by **four Lab.gruppen PLM20K44 amplifiers**. The system was used

the same evening with Farhan Akhtar performing live at the venue.

**Yatin Sharma** of Hammerzz shares, "We were looking for a sound system that would provide high quality sound with consistent coverage to deliver the feel of a typical concert but at the same time have the sound stay contained within the space. It was also very important for the loudspeakers to be flexible to handle the various music genres. We draw many famous artists, and they all deserve the best sound possible. Adamson delivers all of that and more! It has remarkable control in challenging acoustic environments and sounds much bigger than its size. It's very versatile and sounds great with everything - no matter what you throw at it, the clarity remains impeccable. We are very impressed with the result and

think the place sounds amazing!"

**Rajesh Khade**, who did the training for the team in addition to the implementation, alignment & tuning of the Adamson System comments, "The very first gig on the system was Farhan Akhtar Live and it was a blast! The crowd was thumping to the rocking beats of the band and the Adamson speakers reproduced it crystal clear with a bang, to a jam-packed space."

S10 2-way, Full Range Line Array Cabinet Adamson, E219 Subwoofer.



Hammerzz Open Air elevates the audio experience with E219 Subwoofer and S10 2-way Line Array Cabinet Adamson

## NEUMANN LAUNCHES KK 14 CAPSULE FOR CLOSE MIKING INSTRUMENTS

Neumann Berlin has announced their first product range designed especially for close miking instruments. The new **KK 14 capsule** can capture the details of sound better without any of the production tolerances that have been associated with electret solutions to date. The system's modular construction has been designed to ensure excellent stability and long service life for live

and stage performances. The system includes nine mounting solutions that make it possible to find the optimum positioning for acoustics while simultaneously protecting the instrument.

Portfolio Manager **Stephan Mauer** said "We had been dissatisfied with the sound delivered by electret solutions for quite some time. Technicians and artists alike want greater substance, higher precision for low and medium

frequencies and more openness. At the same time, we wanted to finally be able to create electret microphones that offered constant performance, so that sound engineers would not have to continuously deal with production tolerances impacting sound level and frequency response."

Mauer adds "All that work paid off. This capsule is unlike anything that came before." With minimized self-noise and an extremely high maximum sound level of 152 dB, the KK 14 delivers perfect results for both very quiet and very loud instruments.

In addition, the Miniature Clip Mic System is modular and rugged. Neumann assembles the KK 14 capsules by hand and encapsulates them in a titanium housing. The capsule can be easily unscrewed from the gooseneck connector whenever necessary. All the other components are also easy to replace. Neumann did not design the system for a single season – it is designed to last for decades. It should therefore be no surprise that a market comparison reveals that this microphone system offers a superior return on investment.

The system boasts nine options for reliable attachment to brass, string and stringed instruments, pianos, drums

and percussion. "Our field tests quickly revealed that all users share a desire for being able to reliably and securely position the microphone. Another wish that they all had in common was wanting to avoid damaging sensitive surfaces of their instruments. This gave rise to self-adjusting spring-loaded systems and newly developed mounting concepts for specific applications." Said, **Ralf Oehl**, CEO, Neumann, he further adds "We are proud that we have succeeded in redefining the potential of electret capsules. For the first time, they are more than just a compromise solution for technically demanding situations. With this product, we have created a new reference for sound that is truly natural, neutral and reliable – even in challenging technical or acoustic situations."

Typical users of this microphone system include orchestras, theaters, musical productions, concert halls, big bands, brass sections, and drummers. Thanks to connection cables with either a 3.5 mm jack, Lemo, MicroDot or 4-pin mini XLR connectors, the system is compatible with all standard bodypacks for wireless setups.



The KK 14 capsules include nine mounting solutions for optimum positioning on the instrument.

## SSL UNVEILS BIG SIX SUPER ANALOGUE FOR HYBRID PRODUCTION

Solid State Logic (SSL) launches its latest desktop mixing console, **BiG SiX**. Based on the widely acclaimed Solid State Logic SiX desktop mixer and incorporating feedback from artists, producers, and engineers to create the next step in SSL hybrid production, BiG SiX is a 16 channel studio grade mixing console that combines features and technologies from large-format SSL consoles with full USB integration, additional processing, and advanced routing capabilities — all with the quality that audio professionals have come to expect and rely from SSL.

BiG SiX is a tool for artists and musicians working in a hybrid recording and mixing environment. The console's SuperAnalogue design delivers the punch, clarity, and ultra-low distortion that engineers love from the company's 9000 consoles, along with a new 16 channel AD/DA USB interface. Also included is an 'Essential Version' of the SSL G-Comp Bus Compressor, now with

the renowned 'Auto' release feature, channel dynamics processing, and a three-band EQ based on the iconic SSL 4000E console. Producers and mix engineers will appreciate BiG SiX's comprehensive monitoring section featuring full source matrix feeding two independent headphone outputs, along with its impressive 18-channel analogue summing at mixdown capability. The result is that BiG SiX is the essential SSL studio.

"SiX introduced SSL console-grade processing and workflow to a wider range of users, and BiG SiX, with its enhanced feature set and full USB interface integration takes this a stage further, providing all of the essential tools of a hybrid studio. BiG SiX sets a new benchmark in desktop mixer performance and we can't wait to see how users enhance their productions with it." comments **Nigel Beaumont**, Managing Director of Solid State Logic.

BiG SiX is a nimble and capable solution at any point in the production process. In addition to 16 channels of high performance 96 KHz / 24-bit USB conversion which the user can reroute to External Inputs, Stereo Cues and Pre/Post Fader options, BiG SiX also features fully balanced insert points on all Super Analogue TM inputs, full size 100 mm SSL console grade faders, Mix Bus Inject for cascading additional SiX and BiG SiX, dual independent headphone outputs and much more. As well



BiG SiX desktop mixing console featuring comprehensive AD/DA conversion

as offering four SuperAnalogue™ Mic/Line/Hi-z inputs with polarity switch, the four Stereo Inputs can be individually switched to dual mono, adding further recording flexibility.

## YAMAHA DEBUTS VST3 PLUG-IN SOLUTION FOR DANTE-BASED AUDIO SYSTEM

Yamaha has launched **RUio16-D/VST Rack Pro solution**, which allows users to add **VST3 plug-ins** to any Dante-based audio system and is small, light, and rugged enough to be part of every sound engineer's toolkit.

Measuring just 180 x 125 x 42mm, the low-latency RUio16-D can be connected to a Windows PC or Apple Mac computer via USB, working seamlessly with VST Rack Pro software (license included), to easily add VST3 plug-in functionality to Dante-based audio systems. It radically expands the range of sound creation options in any live sound situation, for streaming and many other audio applications. As well as digital audio systems, it can also be used with analogue mixing

consoles.

The straightforward PC/Mac user interface of VST Rack Pro makes it simple to use VST3 plug-ins, even in the most pressurized live situations, allowing performers to use the same plug-ins they use when recording. It can also manage custom presets by rack, effect and scene, contributing to shorter setup times.

As well as allowing engineers to use their favorite VST3 plug-ins, VST Rack Pro is bundled with more than 30 high-quality plug-ins from Yamaha and Steinberg. These include hardware emulations of classic compressors and equalizers using Yamaha Virtual Circuitry Modeling (VCM), as well as the industry-leading REV-X reverbs. Bundled Steinberg plug-ins include versatile

sound-shapers like Quadrafuzz v2, the REVerence sampling reverb and VST Amp Rack, problem solvers like Cloner, the MultibandEnvelopeShaper and SuperVision, an unrivalled suite of visual monitoring tools.

The RUio16-D provides 16 inputs and 16 outputs of Dante, a high quality mic pre-amp and two inputs and outputs of analogue audio with phantom power, enabling it to be used as an interface for acoustic measurements. It also features an independent gain control with pad switch for each analogue input, switched Monitor/Dante/USB output level control and a headphone output with volume control. It also includes a Bypass USB utility function, which bypasses the VST3 plug-ins without in-

terrupting the sound, automatically adjusting the output volume to a preconfigured SPL to ensure the performance continues seamlessly.

"VST Rack Pro is a milestone for live production. Powered by Steinberg's award-winning audio engine and fueled with premium VST3 plug-ins, live sound will be taken to a new quality level", says **Timo Wildenhain**, Head of Professional Audio at Steinberg.

"At Yamaha, we strive to improve the mixing environment for all applications by providing new and flexible tools for sound engineers," says **Chihaya "Chick" Hirai**, Yamaha General Manager of the PA Marketing & Sales Department. "We are pleased to offer the RUio16-D/VST Rack Pro solution, a new partner for audio professionals which is designed to be compatible with a wide range of tasks and applications, assisting them as their needs become more diverse. "For customers who have invested in Dante mixers and cards, it also means that they can enhance their sound creation possibilities with less investment than alternative methods. We will continue to listen to the opinions of our customers and work hard to provide the most flexible, user-friendly solutions."



The RUio16-D features an independent gain control with pad switch for analogue input

## AJA ENHANCES THE MINI-CONVERTER LINE

AJA Video Systems has released a **Mini-Config v2.26.3 software update**, enhancing its popular Mini-Converter line with powerful new functionality for select models. The release boasts basic HDR metadata pass-through for Hi5-12G, Hi5-4K-Plus, HA5-12G, HA5-4K, 4K2HD, and 12GM; dual-link capabilities for 12GM; and Dolby audio support for Hi5-12G and Hi5-4K-Plus, among other enhancements.

AJA Mini-Config v2.26.3 highlights include basic HDR metadata pass-through and optional override functionality for Hi5-12G, Hi5-4K-Plus, HA5-12G, HA5-4K, 4K2HD and 12GM, plus new HDMI HDR Info frame generation for 4K2HD, simplifying HDR pipelines and offering more consistent results with Hi5-12G, HA5-12G, HA5-4K, and Hi5-4K Plus support for BT.2020 color space. An

enhanced Mini-Config GUI to show HDR input and output status, and an HDR metadata override tab in Mini-Config. Dual-link capabilities for 12GM, including 2x1.5G, 2x3G, 2x6G for inputs and outputs, and HA5-4K, including 2x1.5G output. Dolby Digital and Dolby Digital Plus audio pass-through support for Hi5-12G and Hi5-4K Plus, Compatible with macOS and Windows

"As the demand for audio and video has increased dramatically in the last few years across a range of markets and new technologies have emerged, professionals across industries are leaning more heavily on conversion technology, whether for a newscast or live event, postproduction, virtual instruction, medical training, or a host of other applications," shared AJA President **Nick Rashby**. "Our latest Mini-Config release



AJA Mini-Config v2.26.3 highlights include basic HDR metadata passthrough

brings AJA Mini-Converter customers new features that make this process much simpler and reflect customer

feedback, while also extending the value of their investments, and we encourage all users to download it today."

## BRITISH AUDIO BRAND ELEVATES THE ACOUSTICS AT LOCURA

Located in the laid-back coastal city of Goa, **Locura** is an open-air restaurant that wanted to enhance the Acoustic experience and reached out to **VMT Enterprises** to deploy a comprehensive sonic design solution.

Locura is a restaurant known for its entertainment and nightlife experience in Goa. The restaurant has two sections, one with a live performance stage in the open-air seating arrangement and another with a comfortable terrace space that provides an unhindered view of the open sea and sunset.

The decor has a rustic look during the day and a beautiful shack-like look during the evenings. The food menu caters to the palate of a comfort seeker and a gourmand alike. The alluring cocktail menu serves today's new-age drinkers and the old classical ones. The restaurant offers its customers a great ambiance and food that one can sit back and enjoy while listening to live music strumming in the background.

The installation carried out in this restaurant was a challenge as it is open air and there are noise level regulations, which had to be taken into consideration. A distributed loudspeaker system was deemed the best option to provide optimum SPL throughout the space. To create a party atmosphere, 6

nos. of 15" Mid-High loudspeakers and two Dual 18" sub-woofers were installed at the main stage area, acting as the main FOH system. The installed 15" loudspeakers, were chosen for the main stage due to the need for a truly directional system, avoiding spill into the other areas. Another six 12" loudspeakers in combination with two 18" sub-woofers were split equally at the mezzanine bar to ensure the party-goers can dance around the venue with no drops in sound levels. "The system is very powerful, but the control provided by the DSP Processor and placement of the subs ensures that the sound of the entire system is very well contained."

Said **Vicky Pereira**, Sales Executive, VMT Enterprise.

The system also delivers high SPL required at the restaurant, as the system loses no more than 3 dB SPL even with the increasing distance. Optimal placement also helped in directing the sound straight to the guests, with minimal reflections which were further eliminated by **British Acoustics** signal processor." The sound quality is very high in the restaurant, and on the terrace, with plenty of headroom," **Anurag Khanna**, Deputy General Manager, VMT Enterprise.

"It has been great working with Mohit and the passion he has for this

industry can be seen in the way the place has turned up! The system deployed meets and enhances the demanding needs of the restaurant; and has the ability to flawlessly transition and drive higher volumes when the dance floor expands." Concludes **Jeff Mandot**, National Sales Manager, VMT Enterprise

**Mohit Bachani**, Director, Locura, says, "The new speakers sound awesome and really help make each dance night a blast. Kudos to the team at VMT for their support. Their team was quick & professional while installing the systems and I'm extremely happy with the results"



British Acoustics installed to optimize SPL throughout the space

## ANTISOCIAL POWERS INDIA'S CONTEMPORARY CULTURE WITH ADAMSON

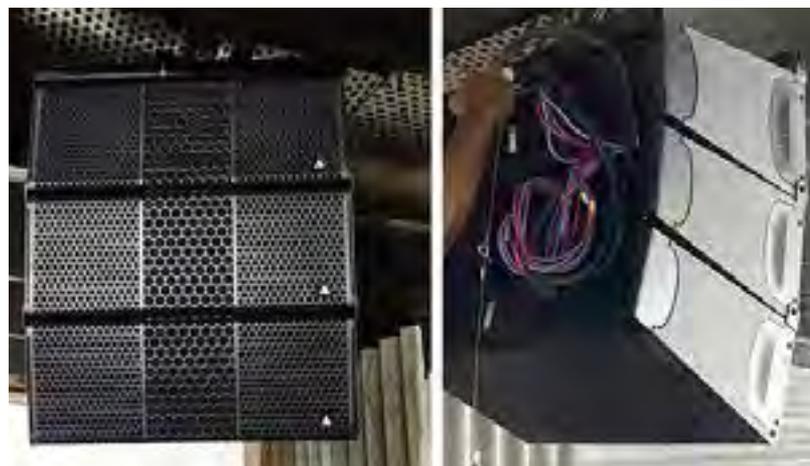
After establishing **antiSOCIAL** in Mumbai, with the backing of its permanent **Adamson Systems sound** setup, Impresario Handmade Restaurants has launched a brand new outpost in Pune, above FC Road SOCIAL.

Supporting antiSOCIAL once again, **Munro Acoustics** has outfitted the new site with Adamson comprising six **IS7 line array loudspeakers** (flown three per side), **two IS119 subwoofers** to handle the low end, and two **PC 10 passive coaxial loudspeakers** as delays – all powered by **Lab.gruppen D80:4L amplifiers**.

**Mayank Bhatt**, Business Head, SOCIAL says, "From my experience in

performance spaces, I wanted a clean and phase coherent system for the performers and the patrons. Post discussion with Munro and Adamson, we zeroed down on the equipment list."

"After a highly successful partnership at antiSOCIAL Mumbai, it was only natural to go with Adamson Systems at the Pune branch as well," remarks **Kapil Thirwani** of Munro Acoustics. The sound system adapts very well with the venue's restaurant feel during the day while morphing into a performance space at night. The IS7 is very versatile and serves outstanding audio quality with all genres of music, be it electronic,



ANTISOCIAL Equipped with IS7 Adamson

classical fusion, rock or indie. It's a pleasure knowing that all the guests at antiSOCIAL are getting the best possible sound experience!"

**Riyaz Amlani**, CEO & MD, Impresario

comments, "antiSOCIAL was dreamt of as a pure unadulterated music experience, and Adamson is the perfect partner to help us deliver best in class audio performance."

## MYLLIEM PRESBYTERIAN CHURCH INSTALLS STATE-OF-THE-ART AUDIO SOLUTION

When **Mylliem Presbyterian Church** in Shillong wanted to elevate their Aural Experience, they connected with System Integrator **Aidon Electronics** to craft a versatile Audio system that could deliver real-time live experience. Understanding these demands of the church, Aidon Electronics reached out to Delhi based audio supplier **Sun Infonet** to supply state-of-the-art audio gear.

The Mylliem Presbyterian Church is 15km far from the Scotland of India, Shillong. The church holds a seating capacity of nearly 700plus people and practices Mass Prayers and Cultural programmes often.

The church management wanted an intelligent audio system that could enhance the sermons and readings while also complementing the music of the in-house Band for the regular followers.

Shillong based System Integrator Aidon Electronics deployed a tech-savvy audio system with a versatile combination of equipment to deliver a real-time live experience.

**Don**, Managing, Director, Aidon Electronics, visited the church before installations and faced technical challenges concerning the church's architectural design. The church constructed was not audio-friendly and had reverberation issues, since the 20ft height of the ceiling was built-in with UPVC Board. After many visits and research and brainstorming sessions, Don came up with a combination of audio gears that would complement the infrastructure of the building while also fulfilling its purpose.

For the FOH, he deployed **Quest 4 HPI110** Compact Hi-Definition Loud-speaker and **two Quest QM600 Asi Sub Woofer** amplified by **QA3004**. The Gallery and Under Gallery with **four MX801**



Aidon Electronics craft a versatile Audio system to deliver a real-time live experience

**Ceiling Mountable Speakers** as fill-in amplified by **QA1004 (Power Amplifier)**.

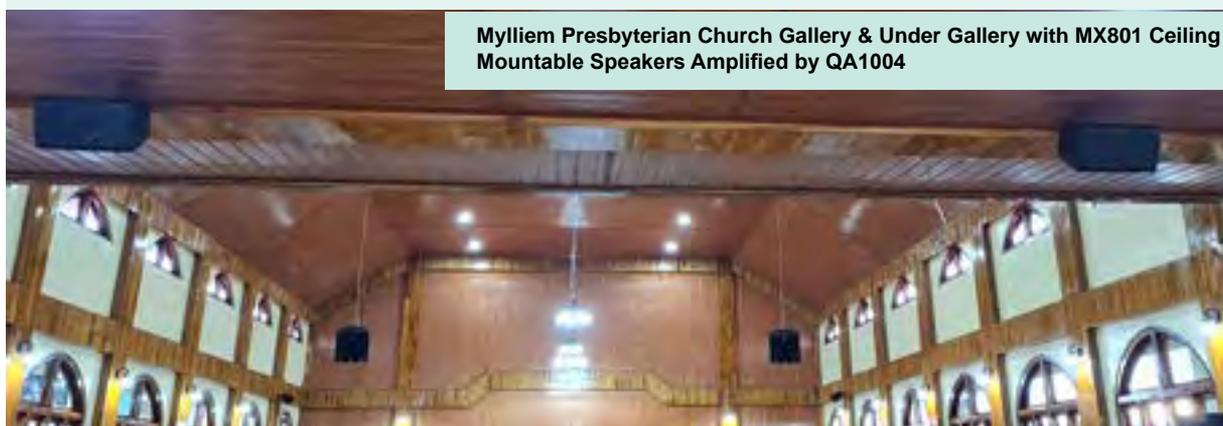
On the sides of the platform, he installed **two MX801**.

The Main Podium with **One Shure MX412**, and the other smaller podium with **two Shure CVG12 – 12" Gooseneck Microphones**. Whereas, for the Table: **one Shure – CVG18/D – 18" Gooseneck**

**Microphone**. For mixing the band and managing the entire installed sound system **one Allen & Heath QU 24**.

According to Don, "I have chosen the Quest brand and the HPI110 mainly because of the high reverberant issue of the venue and the long throw that the Quest speaker gives. With 130SPL on each speaker, the audio output would be sufficient enough to give a balanced sound to fill in a room of 700 people for both speech and live music".

Aidon Electronics completed the installation in the stipulated time frame of five days, which the management of the Church appreciated. Since this is the first hanging system in the entire surrounding area, so management was also satisfied and happy with the work done and system provided by the System Integrator.



Mylliem Presbyterian Church Gallery & Under Gallery with MX801 Ceiling Mountable Speakers Amplified by QA1004

## VMT ENTERPRISES DELIVERS IMMERSIVE AUDIO AT TEERTHANKER MAHAVEER UNIVERSITY AUDITORIUM

**VMT Enterprises** deploys a comprehensive audio system at **Teerthanker Mahaveer University's** multi-purpose auditorium. Located in Moradabad, Uttar Pradesh, the university was looking forward to an audio system that would deliver an immersive aural experience.

Teerthanker Mahaveer University is located on National Highway-24, 144 Km from New Delhi. The University stands committed to the ideals of Lord Mahaveer - Right Philosophy, Right Knowledge, and Right Conduct in all the spheres of activity and aspires to be recognized as the ultimate destination for world class education. This multi-disciplinary University offers career oriented programmes at all levels i.e., UG, PG and Doctoral degrees across diverse streams

to meet rising aspirations of the youth. TMU provides a unique environment for students to grow under the guidance of experienced academicians and to acquire creative, innovative, and technical skills which are required to make the students industry ready. The talented faculty and staff form a dedicated team committed to the mission of the University. It is a dynamic, research intensive University committed

(Continued on page 56)



TMU Auditorium Installed with British Acoustics & OHM Audio System

## CHRISTIE ELEVATES INDIA'S ANNUAL BEATING RETREAT CEREMONY

Christie laser projectors deployed for a spectacular **projection mapping showcase** on the iconic Secretariat Building in India's capital have elevated the scale and solemnity of the **annual Beating Retreat ceremony** to new heights.

The captivating visuals, specially designed to commemorate 75 years of India's independence, perfectly complemented the grand ceremony at Vijay Chowk, which included military bands, pipes and drum

bands, buglers and trumpeters from India's armed forces. Held annually on January 29, the Beating Retreat ceremony is a centuries-old military tradition dating from the days when troops disengaged from battle at sunset. In India, the elaborate military ceremony is conducted to mark the formal conclusion of Republic Day celebrations.

Over 40 Christie D20WU-HS laser projectors were deployed for the six-minute projection mapping performance on the parapet walls of

the Secretariat Building's symmetrical North and South Blocks, which feature Indo-Saracenic revival architecture and house key government offices. They were installed and commissioned by Christie's longstanding partner, **Modern Stage Services**, a renowned systems integrator with numerous high-profile, large-scale projects across India under its belt. This is the first time that a massive projection mapping performance has been staged during the Beating Retreat Ceremony.

of military tradition and state-of-the-art projection technology. My heartfelt congratulations to Pratik and the Modern Stage Services team for delivering a colorful, breathtaking spectacle that brings this year's Republic Day celebrations to a close on a high note."

Ranging in brightness levels from 7,000-20,000 lumens and resolutions including **WUXGA, HD and 4K UHD**, the **Christie HS Series** offers a powerful, reliable, and cost-effective option for almost any high-use application. Setting benchmarks in brightness, color accuracy, power requirements, and form factor, the HS Series pushes the envelope of what's possible with 1DLP technology.

Colors look natural and true-to-life thanks to Christie BoldColor Technology while the onboard Christie Twist warping and blending engine and optional Christie Mystique automated camera-based alignment tools make setup, alignment, recalibration and maintenance of multi-projector systems quick and easy. With their compact and lightweight form factor and omnidirectional capabilities, HS Series projectors are perfect for challenging, space-limited installations.

"We are thrilled to be given the honor of delivering the first-ever projection mapping show during the annual Beating Retreat Ceremony, which is a major highlight of Republic Day celebrations," said **Pratik Wadhwa**, Chief Executive Officer, Modern Stage Services. **Rishabh Nayar**, Sales Director for India, Enterprise, Christie, commented, "We are delighted that the Christie HS Series has been chosen to illuminate the majestic Secretariat Building for this large-scale projection mapping show, which is a stunning combination



Over 40 Christie D20WU-HS Laser Projectors were deployed for the six-minute Projection Mapping Performance

## VMT ENTERPRISES DELIVERS IMMERSIVE AUDIO...

(Continued from page 55)

to the development of life-saving discoveries and new technologies to tackle some of the most pressing global challenges.

A state-of-the-art auditorium equipped with modern acoustics and digital projection, is an essential part of the university campus. The auditorium periodically hosts debates, cultural programs, theater, and festivals organized by the students on campus and seminars, conferences, exhibitions organized in collaboration with corporates as well as competitions with universities and colleges across the country. Hence, the university wanted to install an audio system that would enhance their audio and deliver a real-time live experience.

The challenge was not only to get the best sound quality of the audio system, but also the interaction of the numerous

loudspeaker components to create an immersive sound image throughout the auditorium.

The 550-seater venue was the perfect size for the system, with multiple OHM 'Vela' flown on either side of the stage, along with a center array of **OHM 'TRS-218' sub-woofers**.

"The OHM 'Vela' gives impressive volume, SPL, clarity and lower frequency response from such a small box" says, Tech Engineer, VMT Enterprise. Additionally, **OHM 'BRW-26'** and **DSP-steered, British Acoustics 'XP 512i'** loudspeakers were deployed, "The audio easily fills the room without being overbearing or obtrusive." Comments **Swapnil Shingade**, Sales Engineer, VMT Enterprise. Power was provided by British Acoustics '2XM' and '2XL' amplifiers. Couple of **OHM 'Oyster'** digital controllers were used for delivering



VMT Enterprises Enhances the Aural Experience at the TMU Auditorium

EQ, crossover, processing, and system protection.

"The system is very scalable for all kinds of events." Concludes, **Anurag Khanna**, Deputy General Manager, VMT Enter-

prise. "We have been achieving universal success with British Acoustics and OHM brands in A/V installations." Said, **Jeff Mandot**, National Sales Manager, VMT Enterprise.

**ARX**  
ARX ULTRA DE-BALANCER

ARX Ultra De-Balancer, a 2 channel audio Debalancer and switchable +4dB or -10dB Level Optimizer, specifically designed to handle the critical task of converting Pro Audio balanced outputs to unbalanced signals.

The ARX Ultra De-Balancer interface offers a straightforward solution with industry standard Female Amphenol XLR Inputs and transformer isolated and de-balanced 6.5mm Jack, RCA and 3.5mm Jack outputs to cover all plug types.

With so many different consumer products in today's 'BYOD' environment, the ARX Ultra De-Balancer is illustrative equipment on hand to silently interface with unbalanced +4dB line-level signal paths or the -10dB unbalanced inputs of low operating level professional and consumer electronics.

The transformer Ground isolation provides low-noise operation suitable for any application whilst preventing ground loops and other extraneous noise.

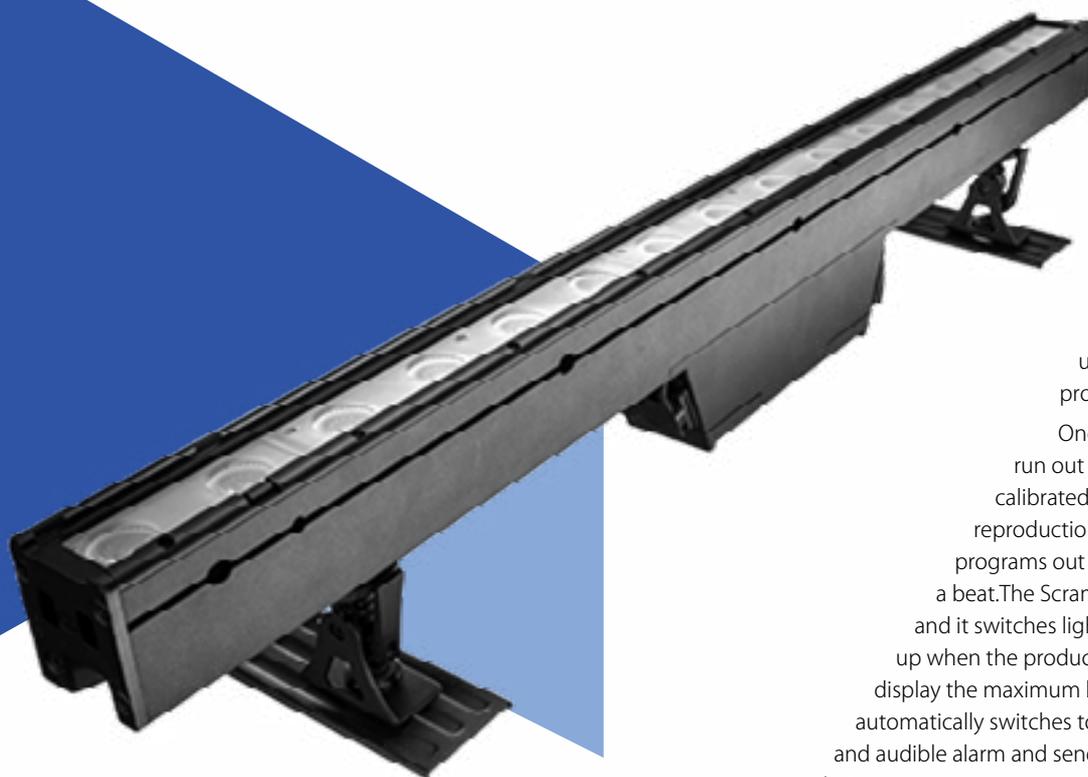
Built to last, the heavy duty all-steel chassis of the ARX Ultra De-Balancer is finished in attractive matt textured blue powdercoat, with hardwearing epoxy screen printing and a large slip resistant rubber pad underneath.

ARX Ultra De-Balancer has a frequency response range of 20Hz - 20 kHz  $\pm$  0.5dB. The input connector is built with three-pin XLR, wired Pin one Ground, Pin two +Hot, Pin three - Cold. Chassis Ground connects to the RCA Output connector shield/ground. The output connector has dual RCA connectors, dual 6.5mm jacks and a single 3.5mm jack.

Handmade at the ARX manufacturing facility in Melbourne, Australia, the ARX Ultra De-Balancer is a totally passive device with no power requirements, making it a universal problem solver. The product has All-steel chassis, fibreglass PCB, ultra-low noise audio transformer and the Input and Output grounds have both resistive and capacitive coupling for RFI suppression.



**ASTERA**  
AX2 PIXELBAR



Astera's Wireless PixelBar is a linear wash fixture with built-in battery pack. Each of its LEDs can be individually addressed and offers ultra-high color rendering, digital color calibration and a native 21° beam. Thanks to its smart stands, hanging bracket, connectable endcaps and the integrated airline track it can be quickly assembled in numerous ways and is suitable for a wide variety of applications such as concert/touring, corporate events, TV etc. The PixelBar detects all available lights, set them up, check their status, configure DMX addresses and DMX profiles.

One can set the length of production and the lights won't run out while still getting the maximum brightness. Individually calibrated lights lead to 100% color consistency and exact color reproduction of color temperature and filter gels. It quickly builds programs out of colors and effects, trigger them or make them match a beat. The Scrambled PWM technology to avoids flickering when filming and it switches lights into power-saving standby and schedule them to wake up when the production starts. This exclusive feature makes the light able to display the maximum brightness at all time and intensify non-white colors. It automatically switches to white light when AC power is cut. The lights give visual and audible alarm and send notification to the AsteraApp if they are being moved during an event.

Auto BPM analyzes the beat and matches programs to it, flash buttons can trigger special effects while being held down. The AsteraApp is packed with many additional items and new features are frequently added via software update. The PixelBar will be available in 1m (16 x 10W LEDs) and 50cm (8 x 10W LEDs).

**CLF LIGHTING**  
SERIUS

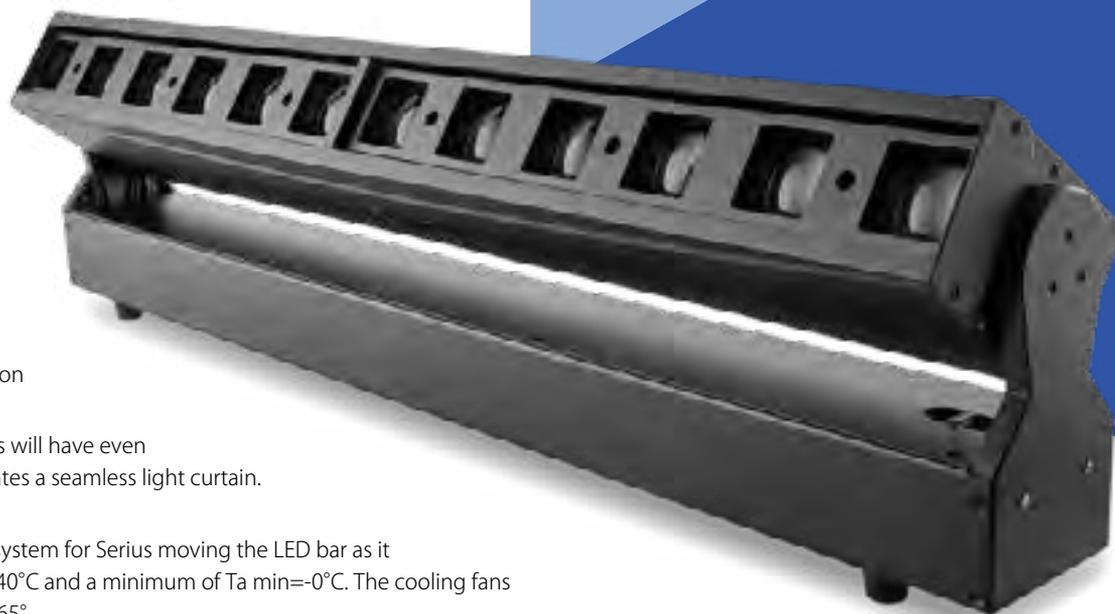
CLF Serius is a moving LED bar with a length of 1 meter. It comes with 12 x 30W high power RGBW LEDs which can be controlled individually. The zoom range of the Serius is divided in two segments which can be moved independently from 3.5° to 38°. Power features an input voltage of 100 – 240 vac, 50/60hz with standby power 31w and total power consumption of 450W. The power plug type is 1.9 ASeetronic Powercon TRU to ensure consistency. The products total power consumption is up to 450W with a 1.9A typical current and Seetronic Powercon TRUE power plug.

The shape of the CLF Serius makes sure that the LEDs will have even spacing when multiple fixtures are combined. This creates a seamless light curtain. The bar can be tilted precisely and smoothly by 220°.

CLF Lighting efficiently built the heat management system for Serius moving the LED bar as it features a maximum ambient temperature of  $T_{a\ max}=40^{\circ}C$  and a minimum of  $T_{a\ min}=-0^{\circ}C$ . The cooling fans regulate the heat and deliver a surface temperature of 65°.

Serius moving led bar features a 1000mm length, 113mm depth and 278mm height, and it weighs up to 17KG. With an IP rating of IP22, it also has a tilt lock with safety attachment points.

The onboard control panel and backlit graphic display are used to set the fixture's DMX address, configure individual fixture settings. The DMX address can be configured by using the DMX ADDRESS menu in the control panel. The interface has an OLED display with battery backup and comes with cooling fans to regulate heat management. The product comes with Manual, Power cable, 2 x Omega bracket as accessories. Serius moving LED bar comes with an interface of OLED display with a backup battery and DMX input for Software upload.



**ELITE ACOUSTICS ENGINEERING**  
IGMIX 4-1 FOUR CHAN MINI DIGITAL MIXER



GigMix 4-1 mini Digital mixer, porting the engine from the StompMix 4, the GigMix 4-1 is built with a powerful 32-bit 100Mhz DSP engine and a compact lightweight pocket size package. The GigMix 4-1 mini digital mixer offers a full featured, highly intuitive four channels Digital Mixer with a Color Display. 4 effects level control for Reverb and Shimmer. Assignable Delay effects. The DSP engine provides a compressor, limiter, Mid sweep able EQ, High pass Filter, Notch Filter, Phase reverse to each of the 4 inputs. Analog inputs consisted of 1 Class A solid-state Mic pre-amps and three 1/4" TS line/Instrument inputs. Two sets of stereo Mix outputs are selectable between a 1/8" TRS jack and 2 1/4" TRS jacks with output level control knob. 2 assignable switches, 1/4" TRS Balanced outputs. 10 Memory for easy recall and set up. Mic Stand mounting accessory is also available. The size/functionalities of the Gigmix 4-1 mini digital mixer makes it the great pocket live gig mixer to the guitar/vocal setup. Input Meters It is critical to adjust the normal input levels to be below -12db level to avoid Clipping the inputs of the StompMix 4. "Assigns" "A" and "B" footswitch have assignable functions. See next page for more details. Main Mix and Aux Mix outputs can be assigned to the 1/4" L/R jacks or the 1/8" jack. System Architecture is designed with Ultra-high-speed high-capacity DSP with lossless A/D and D/A conversion. Integrated Digital Mixer supports routing and seamless signal-level management for four fully configurable audio channels. Color Graphic LCD presents a highly intuitive GUI for settings and save & recall. The Digital Effects and Controls include Channel Parametric EQ, Notch Filter, Selectable HiPass/Notch Filter, Compressor, Noise Gate, Main and Aux panning, Reverb, Delay, Real-Time Chan-Level Bar Graphs, Save & Recall Programs.

**FERROFISH**  
PULSE16 CONVERTS

The PULSE16 converts 16 x 16 studio-grade balanced analog inputs and outputs up to 96kHz to ADAT I/O. As a cost-effective and mature interface, ADAT is already available almost everywhere – so expanding your studio with the PULSE16 by 16 x 16 analog channels is done in a few steps. The Low Latency Cirrus Logic converters, accompanied with a temperature-compensated clock and jitter reduction PLL, guarantees best crystal clear sound. All this packed in a compact 1HU, the PULSE16 delivers studio levels of up to +20dBu, individually adjustable in 1dB steps, brought to 32 TRS connectors. Thanks to the 4 x 4 ADAT interfaces, 16 x 16 channels can still be converted without any problems even at 96kHz.



Configuring the device is easy due to the two TFT screens, every information is displayed clearly on the screens. Remote control via MIDI and MADI is also possible. The headphone can be connected to any analog or digital input or output: ideal for control or monitoring. PULSE16 grows with it: MADI I/O can be added via a MADI-SFP module together with an upgrade of the firmware. The PULSE16 then becomes a full-fledged PULSE16 MX. All 48 x 48 analog and digital channels of the Pulse16 are brought together in groups of 8 using the internal routing matrix. For easy monitoring, any channel, mono or stereo, can be selected for headphone output. It can keep track of all 32 analog channels at any time: Everything is shown clearly on two TFT screens. The PULSE16 has an SFP port that can upgrade to MADI. By adding the SFP module and upgrading the firmware, the unit turns into a fully equipped Pulse16 MX, including a 192kHz operation. The device can keep track of all 32 analogue channels at any time: Everything is shown clearly on two TFT screens. Status information and all functions are presented clearly and intuitively, avoiding manual consultations. Each port transfers eight channels at a sample rate of 48 kHz (= 32 In + 32 Out). This way, the PULSE16 can work as a Splitter for analog and ADAT inputs. The LCD Display functions with 2 x TFT Color Screens for the complete control of all analog I/O levels and all settings of the unit, one Key Control provides easy control of all functions with multi-language. By adding the SFP module and upgrading the firmware, the unit turns into a fully equipped Pulse16 MX, including 192kHz operation.

**LYNX PRO AUDIO**  
XT AMPLIFIERS

XT series is a new generation of amplifiers that offer a high voltage output, with a powerful 96 KHz and double-precision 64 bits DSP. These amplifiers are ideal for touring and install applications.

Based on a switching mode power supply with an innovative Class H 3 steps topology, these amplifiers work with high voltages and offer superb dynamics. They also include a completely new PMS system, with protection both on the power supply and the audio modules, working in real time to make sure all the variables are secure. All these features make these amplifiers ideal for working with asymmetric loads and provide maximum power for each audio system. XT amplifiers are suitable for the most demanding applications offering the best reliability. It also offers similar power per channel in any impedance, exceptional power-sharing in asymmetrical loads and a powerful and fast response cooling system.



A powerful 96 KHz, double-precision 64 bits DSP with FIR filters, with a software specially developed for this series is key. The XT amplifiers have a user interface with an extra-large 4.3" IPS touch panel, making it easier and faster to use. From this panel it can control and manage each parameter of the amplifier and choose among the system presets, users, EQ and created snapshots. The XT series has two Ethernet ports for daisy chain connection and access to the OCS software, designed to monitor the amplifiers in real time. The XT series has digital control with an extra-large IPS display and touch screen panel user interface, making it easier and faster to use. The DSP management user functionalities include input routing matrix analogue, input EQ section with 8 filters and 20 memories, input EQ user section, system preset selection, a snapshot library management with up to 20 presets and master control groups. The XT series has two Ethernet ports for daisy chain connection and access to the OCS software, designed to monitor the amplifiers in real-time.



## MIPRO

### MI-58R ISM DIGITAL STEREO BODYPACK RECEIVER

The MI-58 Series is a digital IEM system operating in ISM 5.8 GHz band, due to the wider bandwidth property, the frequency response range is expanded to 20 Hz~23 kHz, and the S/N ratio is greatly improved, the audio latency is reduced, the sound quality is superior to the UHF system. Also available, MI-58TD model with Dante Interface.

The MI-58 Series consists of the MI-58R stereo bodypack receiver, the MI-58T/MI-58TD stereo transmitter and optional noise isolating earphones. Featuring a user-friendly control panel, long-distance transmission, it's ideal for personal and professional stages monitoring and conference language interpretation.

The MI-58R has Stereo / Mono / Mixed output modes and EQ settings to suit the users' preferences. A Ø 3.5 mm TRS jack provides left/right 100 mW @16 Ω output for earphones. Optional standard or professional Ø 3.5 mm TRS noise isolating earphones are available.

The MI-58T/MI-58TD is equipped with a graphic OLED, a rotary knob, an ACT sync button, an audio input set button, and the industry's first LED indicators (SLC) for clear identification of the input volume to prevent the loudest peaks. It has Ø 3.5 mm and Ø 6.3 mm dual earphone monitoring connectors and individual volume controls.

The rear panel of MI-58T is equipped with two XLR and Ø 6.3 mm input combo jacks, two Ø 6.3 mm phone jack loop outputs, an ACT-BUS networking interface, TNC RF output connectors, and a 12V DC power supply.

The MI-58T delivers < 25 mW output power (the maximum value depends on the telecom regulations of different countries) with an ON / OFF switch, presets several interference-free channels and can ACT sync to the receiver. With a high dynamic range stereo input combo jack, it can sustain the maximum output from any mixer.



## OUTLINE

### AI41 COLUMN LOUDSPEAKER



Outline's Architectural Series include the Ai41 ultra-compact columns. Despite their diminutive size, each of the mid-high modules delivers balanced audio, whether from playback or 'live'. The product produces maximum SPLs far in advance of what one might reasonably expect from such a design.

The Ai41 is a 2-way passive ultra-slim column loudspeaker specifically designed to ensure a minimal-discreet visual impact and an elegant design for an easy and seamlessly layout integration while ensuring the sound quality for which Outline has always been recognized.

This tiny, modular, externally powered loudspeaker provides the best performance when installed on a flat surface. It features four 1.3" neodymium magnet driver and one 0.7" treated silk dome tweeter producing a wide nominal dispersion and a maximum SPL peak of 107.5 dB.

With a nominal impedance of 8 ohms and requiring only one single channel, it is possible to deploy up to four Ai41 with just one single amplification channel on a parallel cost-saving installation solution.

Also, a passive crossover (manufactured with top-grade components) takes care to split the LF and HF and provides single and double protection for the drivers (LF and HF respectively). All the above enclosed in a compact, refined, and elegant design weighting just 0.6 kg (1.3 lb).

The cabinet, in HCDF (Hydrophobic Compact Density Fiber), is coated with polyurethane paint ensuring the correct operation even in the toughest places; while the grill, made of galvanized steel, features an epoxy powder coating. Custom RAL colour options are available to perfectly match any architectural layout.

The performance of the mid-high modules Ai41 is made possible by Outline's inclusion of an 'MTM' configuration of midrange and HF elements. This proven design, in which multiple transducers are symmetrically arranged within an enclosure, can almost eliminate unwanted lobing effects in the radiating sphere of a loudspeaker. This is a key factor in the system's intelligibility, particularly for speech, which makes it suitable for projects where that must be achieved with minimum-possible visual impact - examples include meeting and presentation spaces, houses of worship, museums, and boardrooms. Its ability to reproduce music to a hi-fi standard further extends its usefulness into applications including domestic installations, hotels, retail, and leisure. The entire range also features a degree of water resistance, which makes it an appropriate choice for high-humidity locations such as spas, swimming pools, leisure centers, gyms, and sports clubs.

## SENNHEISER INTRODUCES NEW UNIFIED COMMUNICATIONS SOLUTION

Sennheiser has announced an intelligent speaker Certified for Microsoft Teams, the **TeamConnect Intelligent Speaker**. Originally planned for launch at Integrated Systems Europe (ISE) 2022, the new unified communications solution for mid-sized Microsoft Teams Rooms was launched in an online seminar.

Sennheiser's TeamConnect Intelligent Speaker delivers a solution to support smart, focused, and inclusive meetings for up to ten people, whether participants join remotely or are in the room.

The neodymium speaker has 128.3 x 56.3 mm dimension with a frequency range of 200 – 14,000 Hz (-6 dB) and a Microphone frequency range of 50 – 8,000 Hz (-3 dB).

It features an omnidirectional speaker that covers a 3.5m radius and seven integrated beamforming microphones to achieve impeccable sound quality. Through this Intelligent speaker, Microsoft Teams provides an automatic meeting transcript in real-time, identifying the individual people speaking by name, in case they have enrolled their voices. This provides an inclusive meeting experience for remote and hard-of-hearing participants.

"Sennheiser is known for our industry-leading TeamConnect Ceiling 2 microphone with TruVoicelift," said **Anne Guhn**, Product Manager at Sennheiser. "This addition to our TeamConnect family offers an opportunity for us to expand into a different sized meeting room, at a price point that some might not expect from Sennheiser."

The intelligent solutions with integrated Cortana voice recognition software and automatic meeting notes make operation itself obsolete. Automatic meeting notes make an inclusive meeting experience possible for remote and hard-of-hearing participants. As an integral part of the room and equipped

with the latest technology, the product delivers quality audio with a cable length of three m.

With multiple mounting options, long cables and a variety of country-specific power plug adapters, the TeamConnect Intelligent Speaker offers an easy and flexible installation experience.

"Video conferencing tools like Microsoft Teams have become the communication backbone for many businesses and education institutions," **Albert Kooiman**, Senior Director of Microsoft Teams Devices Partner Engineering and Certification, said. "The Sennheiser TeamConnect Intelligent Speaker does not only provide excellent meeting room audio, but also unlocks the best speech technology. Only Intelligent Speakers offer the best speech transcripts."

Microsoft Teams Rooms combines the virtual workspace of Microsoft Teams with real-world meeting rooms that feature AV equipment from Microsoft-certified hardware partners.



**TeamConnect Intelligent Speaker automatically transcribes meetings in real-time**

## QSC LAUNCHES FIRST NETWORK MICROPHONE AND LOUDSPEAKERS... *(Continued from page 12)*

vertical orientations. The Q-SYS NL-P4 is a 4-inch full-range pendant-mount PoE network loudspeaker to accommodate open-ceiling installations, and the Q-SYS NL-C4 is a 4-inch ceiling-mount PoE network loudspeaker for blind-mount finished ceiling applications.

The NL Series models feature sleek, elegant designs with complimentary sonic characteristics making it possible for users to mix-and-match form factors to fit the unique needs of any space. In addition, integrators can utilize QSC's

Intrinsic Correction to simplify the tuning process using built-in custom QSC loudspeaker voicings delivered by Q-SYS. All NL Series models are PoE and PoE+ capable, delivering audio data, power, and control over a single network connection, greatly reducing traditional cabling infrastructure costs and complexity while expediting deployment.

As native Q-SYS Products designed to work seamlessly together, the NM Series microphone, NL Series soundbar

and TSC Series Gen 3 touch screen controllers benefit from the new Q-SYS Call Sync technology. This automatically syncs mute state, call controls and LED status indicators across compatible Q-SYS Products, major UC platforms and calling systems (VoIP/POTS) enabling a simplified collaboration experience without the need for complicated programming. Q-SYS Call Sync will be available in the upcoming Q-SYS Designer Software v9.5.

"These introductions continue the ex-

pansion of the Q-SYS portfolio towards more IT-friendly solutions that deliver a true end-to-end IP based Q-SYS system for virtually any dynamic collaboration space," says Josh Arnold, Senior Product Manager, QSC. "The idea was to deliver flexibility and simplicity for integrators and end users alike, while leveraging the unique software-based power of the Q-SYS OS to drive a truly unique approach to the collaboration space and allow system flexibility as room needs change and evolve."

## AUDAC DEBUTS LOW-FREQUENCY... *(Continued from page 12)*

Impact resistance is guaranteed thanks to the 12 mm plywood cabinet construction with a polyurethane coating and a DuraCoat top surface. The front side of the VEXO is finished with a powder-coated steel grill with acoustical foam, making the loudspeaker ball impact-proof as well for fixed installations in indoor sports

facilities.

The VEXO series comes equipped with a wide variety of mounting possibilities. They are standard fitted with a 35mm pole adapter and a large number of rigging points and holes pattern to be compatible with brackets and installation accessories. AUDAC's optional Clever U-bracket

allows you to mount the high power 2-way cabinet both horizontally and vertically, while an inclination of -90° to +35° ensures an optimal positioning. This optional MBK bracket even permits mounting the VEXO to the ceiling which gives the opportunity to install the loudspeaker cleanly in any environment.

The active variant of the VEXO series has a wide range of inputs. When installing the ANI44XT Dante audio network interface in the active loudspeaker, you can integrate the VEXO series into any Dante enabled AV network and transfer digital audio with any compatible solution on the market.

# Stage Speakers - Live Sound Essentials

## CODA AUDIO

### N-APS

The N-APS is an ultra-compact 2 x 6.5", 2-way array able point source that combines the versatility of a point source with the perfect array ability of a line array, creating a unique category reinforcement system for small to medium size venues.

#### Main features include:

- Product type: Ultra Compact Arrayable Point Source
- Dimensions (WxHxD): N/A
- Dimensions including hardware
- (WxHxD): 518 x 200 x 358 mm / 20.39 x 7.87 x 14.09"
- Net weight: 12.2 kg / 26.9 lbs
- Frequency response: 60 Hz – 20 kHz (-6 dB)
- Power handling AES / peak (passive): 1000 W / 4000 W Max. peak SPL (with LINUS14):\* 139 dB
- Dispersion horizontal: 60°, 90°, 120° or asymmetrical 75°=30°+45°, 90°=30°+60°, 105°=45°+60°
- Dispersion vertical: 20°
- Components Low frequency: 2x 6.5" neodymium, water resistant cones, 2" (50.8 mm) voice coil, 500 W (AES) each
- Components Mid/High frequency: 6" / 20° RDC, 1.75" (44.4 mm) voice coil, 80 W (AES)
- Crossover point: 900 Hz passive
- Input connectors: 2x Neutrik™ NL4MP
- Nominal impedance LF / MF+HF: 12 Ohm (+2/-2)



- Enclosure material: Hybrid - Birch plywood and aluminium
- Suspension: Integrated
- Input connectors: 2x Neutrik™ NL4MP
- Nominal impedance LF / MF+HF: 12 Ohm (+2/-2)
- Enclosure material: Hybrid - Birch plywood and aluminium
- Suspension: Integrated

## N-LABS

### V12

The V12 is a 100 watt line array consisting delivers innovative audio and sound system, ideally suited for open air concerts and capable to perform in every venue and road shows. They are designed for Indian Conditions and have an IP68 ratings.



#### Main features include:

- Specifications Components Single:2" Driver With 3.5" Vc
- Peak Voltage Handling: 110v: 2 Hours
- Components: Dual 1" Hf Driver With 1.8" Diaphrame
- Net Weight: 20 Kg
- Sensitivity: 1w/1m- 101 Db
- Grill: 1.2 Mm Ms Perforated Grill
- RMS Wattage: 1000 W
- Finish: Sandtex Finish
- Impedance: 8.2.
- Connectors: Neutrik Speakon
- Spl Peak: 136 Db
- HF Protection: Ntc
- Freq Response: - 10db 60 Hz To 20 Khz
- Handels: 2
- Freq Response: +6 Db 75hz To 19 Khz
- Recomend Amplification: 1.1 X2.5d For 12 Tops 2.8 Tops Recomendad
- Xover Point: 1500hz @ 24 Db
- Hp Filter 90 : 120 Hz @ 48db Bw

## MARTIN AUDIO

### SXCF118

The SXCF118 is a compact, high performance cardioid subwoofer. The flown version of the SXC118, it is the ideal for flown WPS arrays — combining maximum low frequency output with pattern control.

It features an 18" (460mm) forward facing driver and a 14" (356mm) rear facing driver, each driven independently by separate amplifier channels and DSP. Each driver has its own chamber with optimized bass reflex porting. The enclosure is constructed from tour-grade plywood and finished with a hard-wearing textured polyurea coating. It is equipped with four grab handles and foam-backed perforated steel grilles protect the front and rear drivers.

#### Main features include:

- YPE: Compact, Cardioid Subwoofer
- Frequency Response: 43Hz – 150Hz ±3dB, -10dB @ 34Hz
- Drivers: 18" (460mm)/4" (100mm) voice coil, long excursion, ferrite magnet, waterproof cone, 14" (356mm)/3.5" (88mm) voice coil, long excursion, neodymium magnet, waterproof cone
- Rated Power: 18": 1000W AES, 4000W peak  
14": 800W AES, 3200W peak



- Sensitivity: 104dB
- Maximum SPL: 140dB peak
- Nominal Impedance: 18": 8Ω, 14": 8Ω
- Dispersion (-6db): Cardioid
- Enclosure: Multi-laminate birch ply
- Finish: Textured black polyurea
- Protective Grille: Black HEX perforated steel
- Connectors: 2 x NL4
- Pin Connections (Input): 18": +1, -1; 14": +2, -2
- Pins Connections (Link): 18": +1, -1; 14": +2, -2
- Fittings: Two skids on base, with mating channels on top, M20 top-mounted thread plate for pole mounting, Two bar handles on each side
- Dimensions (Incl Skids): (W) 650mm x (H) 611mm x (D) 812mm (940mm incl castors), (W) 25.6in x (H) 24.1in x (D) 32.0in (37.0in incl castors)
- Weight: 75kg (165lbs), 78kg (172 lbs) incl castors

*This product focus features Speakers and Line Arrays essentials in Live sound launched in 2020-2021. This feature is intended as a guide and does not endorse any of the products that are featured here.*

## VOID ACOUSTICS

### Arcline 8

Operating as a two-way active, three-way line array module system, the Arcline 8 is versatile for live-sound and audio professionals. Delivering 110-degree dispersion with uniform polar pattern ensuring unwavering fidelity across the entire sound field. A popular choice for large scale-touring; indoor and outdoor events as well as for use in bars and clubs.

#### Main Features include:

- 110° horizontal dispersion
- True cylindrical wavefront
- 2 x 8" mid drivers with phase device
- 2 x 8" horn loaded low frequency drivers
- 2 x 1.4" compression drivers
- Frequency response: 110 Hz - 20 kHz single enclosure, 90 Hz - 20 kHz three enclosures



- Efficiency<sup>1</sup>: LF: 100 dB | MF/HF: 106 dB 1W/1m
- Nominal impedance: 2 x 16 Ω
- Power handling<sup>2</sup>: LF: 500 W AES, HMF: 500 W AES
- Maximum output<sup>3</sup>: 132 dB cont, 139 dB peak
- Driver configuration: 2 x 1.4" compression drivers, 2 x 8" mid drivers with phase device, 2 x 8" horn loaded low frequency drivers
- Dispersion: 110°H x 12°V
- Protection: Internal electronic control
- Connectors: 2 x 4-pole speakON™ NL4
- Weight: 39 kg (86 lbs)
- Enclosure: 15 mm multi-laminate plywood
- Rigging: angle pre-selected before you lift the enclosures, ground stackable
- Finish: Textured 'TourCoat' polyurea
- Grille: Perforated steel with foam filter

## WHARFEDALE PRO

### -25 DUAL 5" ARRAY SYSTEM

At the heart of the WLA-25 is 2 x 5" custom Wharfedale Pro LF drivers. Using a



Neodymium magnet and a 1.75" voice coil, this compression driver is coupled to a 100° x 10° waveguide. These custom designed transducers are what give a WLA-25 system its incredible sound and power handling capacity.

#### Main Features include:

- Small diaphragm cardioid condenser capsule
- Class A amplifier circuit
- Extended flat frequency response from 20Hz-30kHz
- Tight cardioid polar pattern with consistent frequency response to 90° off-axis
- 145dB SPL handling
- Includes MC4 microphone clip and storage bag
- Maximum rejection of sound sources at 180 degrees
- Stainless Steel Chassis

#### Technical Specifications:

- Frequency Response: 20Hz – 30kHz
- Polar Pattern: Cardioid
- Sensitivity: 10mV/Pa (-40dBV/Pa)
- Power Requirements: 24-48V Phantom, 10mA
- Max Acoustic Input: 145dB SPL
- Signal-to-Noise Ratio: 79dB A-weighted
- Output: XLR (pin 2+)
- Output Impedance: 65Ω balanced (between pins 2 & 3)
- Min Output Load: 600Ω between pins 2 & 3
- Noise: 15dB SPL equivalent (A weighted)
- Dimensions (L x D): 181.1mm x 40.6mm (7.13 x 1.60 inches)
- Weight: 1.5 lb. (.68kg)

## JBL

### VTX A8

The VTX A8 is a line array element that delivers JBL Professional's flagship VTX A Series technology in a compact solution for small to mid-size rental and installed applications. Proprietary JBL woofers and high-frequency transducer and waveguide technology, provides efficiency, and a consistent 110-degrees of horizontal coverage. Proprietary double-flared low-frequency ports precisely calculated for low-frequency performance extend the usable operating range down to 49 Hz.

#### Main Features include:

- Frequency Range (-10 dB): 49 Hz - 19 kHz (Preset: VTX A8)
- Coverage Pattern (-6dB)  
Horizontal: 110 degrees nominal (300 Hz - 18 kHz)
- Vertical: Varies with array size and configuration

#### System Input Power Rating<sup>1</sup>

- LF: 600W Continuous (IEC/100 hour)
- MF/HF: 390W Continuous (IEC/100 hour)
- Maximum Peak Output<sup>2</sup>: 139 dB (Preset: VTX A8)
- System Amplification:
- Crown I-Tech HD (all models)
- Number of Cabinets per Circuit: (3) VTX A8

#### System Impedance

- LF: 8 ohms
- MF/HF: 8 ohms



- Low Frequency: (2) JBL 258J, 8 in diameter, dual 2.5 in diameter voice coil,
- Mid Frequency: (4) JBL 2163H, 3in diameter, 1.5 in diameter voice coil, Neodymium Magnet
- High Frequency: (2) JBL 2423K, 2 in diameter annular diaphragm, 2 in diameter voice coil, Neodymium Magnet
- Construction: 18 mm and 15 mm, 11-ply Baltic birch plywood, Black DuraFlex™ finish, integral recessed handles
- IP Rating<sup>3</sup>: IP55
- Suspension: Captive suspension plates, quick-release pins, auto-locking mechanism for setting angles Inter-enclosure
- Grille: Powder-coated 14-gauge hex-perforated steel with acoustically transparent black cloth backing

## AUDIO-TECHNICA UNVEILS ATND1061 BEAMFORMING CEILING ARRAY MICROPHONE

Audio-Technica, has introduced the ATND1061 Beamforming Ceiling Array Microphone, a solution for conference rooms, boardrooms and meeting spaces from large to small. Designed in a familiar form factor (roughly the size of a wireless access point), the ATND1061 is easy to install, set up and operate. It may be used singly or in multiples (for larger meeting spaces) to capture every person speaking in a room with clear, natural audio that reduces distracting environmental sounds.

Room configuration, zone setup and other settings are handled through A-T's user-friendly Digital Microphone Manager software application. The ATND1061 has six individual output channels, which, collectively, can be configured with up to 32 user-defined microphone pickup zones, providing the flexibility to cover a wide variety of room sizes and meeting types. Across all the output channels, the microphone's 90-degree orthogonal beams can focus on a particular point in space, preventing the pickup of unwanted noise.

The ATND1061's proprietary voice activity detection (VAD) technology enables the microphone to discern between a voice and unwanted noises such as paper shuffling. For installations without external digital signal processing (DSP), the



ATND1061 features DSP and fourband EQ for built-in noise-reduction and automatic-mixing functions

ATND1061 features powerful onboard DSP, including auto mix, acoustic echo cancellation (AEC), noise reduction, automatic gain control (AGC) and four-band EQ. Exclusion zones can be set to avoid known sources of unwanted noise (such as HVAC systems), helping to maximize the effectiveness of the built-in noise-reduction and automatic-mixing functions.

User defined "Coverage Zones" and "Priority Zones" allow complete custom room coverage and optimized signal flow. Output Channel 1 can be configured with 16 user-defined Coverage Zones, within which a meeting participant may be seated or move about while speaking. The beam will track and keep the microphone focused on the

speaker's voice, minimizing any room noise. Only one of the 16 Coverage Zones can be open at a time with the microphone automatically selecting the zone with the strongest signal identified as speech. Coverage Zones can be helpful in picking up either nonpriority or unplanned participants. Output Channels 2-6 can be configured with 16 user-defined Priority Zones which receive priority over Coverage Zones. A maximum of five Priority Zones can be open at a time, with each open zone selecting the strongest signal identified as speech. Priority Zones can be helpful in providing priority for a room's known participant locations.

An IR remote is also included to allow users to quickly mute the microphone

when a muting function is not available in the room configuration. The IR Remote can also be used to recall presets or toggle the Power Save Mode on and off.

The ATND1061 can be flush- or surface-mounted in a drop ceiling or hard ceiling or mounted in open architecture spaces via a standard VESA mount. The unit's low-reflective white finish matches standard ceiling tiles in most environments. The ATND1061 is UL 2043 compliant for installation in plenum spaces. All mounts, safety wiring, mounting hardware, and accessories are included.

The Dante-enabled ATND-  
(Continued on page 65)

## AUDIOFOCUS PRESENTS NEW INSTALLATION LOUDSPEAKERS

AUDIOFOCUS has developed dedicated installation versions of its point source, constant curvature, line array, subwoofer, and stage monitor designs. As part of the development

process, touring features such as grab handles and rigging systems have been removed or simplified to make the new variants highly cost-efficient without compromise to their audio perfor-

mance, while aesthetic changes enable the speakers to blend discreetly into installed environments. Both passive and bi-amplified options are offered for most of the new installation models.

"AUDIOFOCUS built its reputation for audio fidelity and high return on investment in the touring world, but we have always enjoyed strong relationships with integrators who wanted to carry those same benefits into their fixed installation projects," explains Managing Director, **Ann Leroy**. "There are no fewer than 19 new installation loudspeakers in the range, from the super-compact **VENU 8ix point source cabinets** right through to our powerful **S 21i subwoofers**. It has been a huge project for the team, but the result is a complete installation loudspeaker solution that is ready for deployment in clubs, theatres, stadiums, houses of worship and any other environment where audio performance and competitiveness take priority." Like all AUDIOFOCUS loudspeakers, the new installation models are built in Belgium with quality European components.

### AUDIOFOCUS Installation Loudspeakers



## EXTRON LAUNCHES ISS 608 AND ISS 612 FOR SEAMLESS SWITCHING

Extron has released ISS 608 and ISS 612 seamless digital switchers for the dynamic presentation of HDMI, DisplayPort, and 12G SDI content at resolutions up to 4K/60. They combine true seamless switching with advanced Vector 4K scaling technology. Both switchers feature six HDMI 2.0 and two DisplayPort 1.2 inputs, providing full 18 Gbps support of signals up to 4K/60 with 4:4:4 chroma sampling on a single cable. The ISS 612 adds support for four 12G SDI inputs and duplicate 12G SDI Preview and Program outputs. HDCP 2.3 compliance ensures

display of content-protected media and interoperability with other HDCP compliant devices.

To enhance source switching and facilitate use in live environments, each provides multiple seamless transition effects, an independent preview output, and intuitive front panel operation. RS 232 and Ethernet are additional control options. Logo insertion, video keying, and PIP capabilities complement primary content, and audio de-embedding simplifies integration. Matrix Mode adds automatic, seamless transitions to matrix switchers with HDMI outputs. The ISS 612 also



Extron ISS 608 and ISS 612 seamless digital switchers

provides genlock capabilities, allowing for synchronization to an external reference signal when used in broadcast and production applications. These

features and capabilities enable the switchers to deliver a true seamless digital signal switching solution perfect for high-end, live presentation environments.

## MATROX SIMPLIFIES AV-OVER-IP NETWORKS SOLUTION WITH CONVERTIP TRANSMITTERS & RECEIVERS

Matrox Video introduces ConvertIP Series, a new family of standards-based IP devices that delivers a simple approach to SMPTE ST 2110 and IPMX-ready networks. These devices enable broadcast and Pro AV professionals to transform standard and existing infrastructures into interoperable, cost-efficient, and scalable 1 GbE, 2.5 GbE, or 10/25 GbE networks to support a wide range of compressed and uncompressed 4K AV-over-IP applications and workflows.

In tandem with the launch of ConvertIP is the new ConductIP signal routing software. Designed to simplify content distribution in AV networks of any size, the industry's first IPMX-ready signal routing platform features a customizable, 360-degree view of all devices and media flows to discover, monitor, and route any NMOS-enabled ST 2110 and IPMX-ready audio, video, and ancillary signal on the network.

ConvertIP transmitters and receivers are built on ST 2110, the NMOS suite of open APIs, and IPMX-ready industry-standards-based technologies, and combined with Pro AV, JPEG XS, and



ConvertIP devices infrastructures that support compressed and uncompressed 4K IP signal transport over ST 2110

uncompressed codec support, make them the most flexible and interoperable IP devices in the market today. This allows broadcast and Pro AV professionals to use existing 12G-SDI, HDMI, and HDBaseT, hardware to deliver lightly compressed and uncompressed 4K AV-over-IP transport with sub-frame to zero latency performance. ConvertIP supports both copper and fiber networks, while their compact form factor and fanless design make them ideal for a variety of monitor- and rack-mount installations.

ConvertIP Series includes an intuitive,

web-based command center that allows users to access, control, and operate all ConvertIP devices from any location. Also included with ConvertIP is the ConvertIP Manager application, which features a dashboard view for multi-unit setup/maintenance and routing operations. Lastly, the ConductIP standards-based signal routing platform enables multi-vendor interoperability by allowing users to discover, monitor, and distribute all ConvertIP signals, any other SMPTE ST 2110 signals compatible with the NMOS suite of APIs, and IPMX-ready signals from any third-party

manufacturer.

"Matrox ConvertIP Series unlocks a standards-based approach to IP signal transport that facilitates open, agile, and sustainable design implementations," said **Alberto Cieri**, Senior Vice President of sales and marketing at Matrox Video. "This new product line gives broadcasters and Pro AV/IT professionals the freedom to integrate the very best technology options from across both industries, so they can explore new and creative plug-and-play-type applications and workflows that can grow, and scale as required."

## AUDIO-TECHNICA UNVEILS ATND1061 BEAMFORMING...

(Continued from page 64)

1061DAN has two network ports, which can be configured to fit any installation requirement. In "Single Cable Mode," Dante audio and microphone control data are sent together over a single standard category cable. In "Split Mode,"

Dante audio and microphone control data are sent separately over two category cables. The ATND1061 is powered by network PoE.

Plug-ins are available for popular control systems. Notably, through a

strategic partnership with QSC, the ATND1061 is compatible with the Q-SYS audio, video and control platform.

"Q-SYS was built on an open, software-based platform giving users the unique ability to quickly and easily in-

tegrate third-party solutions with Q-SYS to help enhance audio, video & control capabilities required in high-value spaces such as meeting rooms, boardrooms and executive spaces," says **Geno Zaharie**, Principal Alliances & Ecosystem, QSC.

**AV-ICN**  
**EXPO2022**

AV INTEGRATION COMMUNICATION NETWORKING EXPO

**26 - 28.05.2022**

Bombay Exhibition Centre,  
Goregaon (East), Mumbai, INDIA

**THE SECOND LARGEST MARKET IN ASIA FOR THE AUDIOVISUAL  
AND SYSTEMS INTEGRATION SEGMENT CONTINUES TO EXCITE THE MARKET**

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

Being highly invested in the audiovisual domain PALM launched the CAVS (Certified AV Specialist) course with an aim to provide knowledge of audio and video fundamentals and enhanced troubleshooting skills, while promoting best-practices and technological expertise of systems technologies.

This three day course focusses on the basics and advanced application of installation and integration of AV, IT Networking and Communication and Collaboration on IP- Internet Protocol. The CAVS Certification is aimed at providing knowledgeable manpower, replacing the ‘electrician’ with a ‘qualified integrator’ and creating a talent with specific learning for AV integration.

**COURSE FEES: ₹ 6,000/-**



**FOR MORE INFORMATION ON THE COURSE, contact:  
Smita Rai at [Smita.Rai@hyve.group](mailto:Smita.Rai@hyve.group) or Mob: +91 9289368200**

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Organised by





### GOING BACK TO BASICS

**1**  
DAY

- a) Basics of Audio, Video and Control
- b) AV Maths
- c) Design Considerations

### DESIGN PHASE / DESIGNING

**2**  
DAY

- a) Requirement Gathering (Need v/s wants)
- b) Project Flow

### TECHNOLOGY POST COVID

**3**  
DAY

- a) Shift from Professional to Consumer
- b) Lifestyle and trends post Covid
- c) Technology and Experience

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## ADJ UNVEILS D4 BRANCH RM DMX SPLITTER AND BOOSTER

ADJ lighting has designed D4 branch RM is a 4-way DMX splitter and booster designed with both touring and permanent installation applications in mind. The reliable unit offers all the features lighting professionals need to distribute a DMX signal, packed into a compact and lightweight unit.

The D4 Branch RM features DMX input and thru connections in addition to four independent DMX outputs that are electronically isolated from each other to ensure uninterrupted data. Both 3-pin and 5-pin sockets are included for each of these, allowing integration into any DMX-512 system and complete flexibility for rental applications.

Signal amplifiers inside the unit boost each of the four outputs, making this an ideal solution for large projects where

(44mm) and a low weight of 5.3 lbs. (2.4kg). Power is supplied by a trailing cable on the rear of the unit, while a

Gonzales. "It offers a useful solution for taking a DMX control signal, boosting it, and splitting it into four



DMX splitter features Terminate button and signal LEDs output that aid with troubleshooting

long data runs are required. In addition, a Link Out / Terminate button and signal LEDs for each of the four outputs aid with trouble shooting.

With a convenient 19" rack mount design, the D4 Branch RM requires just 1U of space. It has measurements of 19" (482mm) x 5.5" (139.8mm) x 1.7"

convenient On / Off switch is located on the front panel.

"The latest addition to ADJ's product range, the D4 Branch RM, is a practical ancillary tool for lighting professionals that we know will be valued by many of our customers," comments ADJ USA's National Sales Manager, Alfred

independent outputs that can be rooted to different areas of a venue or parts of an event lighting setup. With a compact 1U rack mount design, light weight, and rugged construction, it is a reliable tool that is ideal both for installation projects and production/rental companies."

## CLAYPAKY DEBUTS SINFONYA PROFILE 600 FOR THEATRE APPLICATIONS

Claypaky announces the launch of its brand new, low noise LED based fixture exclusively designed for Theatre applications. Sinfonya Profile 600 contains features that increase the performance levels dramatically on previous models on the market.

It is stylish, compact, and packed full of new technology. Theatres are demanding applications that require extremely low noise operation, very high quality of light and control along with precision of re-positioning. The Claypaky new range meets those needs

and provides brand new levels of performance that were simply not possible before.

TONEDOWNTM is the products flagship feature. Claypaky started with a design to enable true silent operation on stage, achieved by re-designing the cooling system. Even at full output the noise is just 27db, a level impossible to achieve before. In addition to this, the fan has been taken out of the base. This reduces noise even further on stage and removes black noise from other frequencies that can sometime be annoying.

Another technology first for Sinfonya is the use of ACCU-FRAMETM. A new

framing system using two focal planes. We have used four planes ourselves for many years until our engineers discovered a new way to improve the performance. Saving time in programming and re-focusing was a key request from designers.

Claypaky have designed a new proprietary Optical system that gives efficiency and precision. By improving the performance, it increases the aspect ratio to 1:12 giving us a true 5 to 60-degree beam angle potential on stage. This feature allows for a greater flexibility of use in large theatres and small ones where the low height may be an issue. Sinfonya can be used now in a wider variety of venues without loss of performance in the beam for white or colors.

Claypaky's firmware gives precise control over the beam in the multicolor engine. This provides vibrant and rich colors optimized for the stage or TV with high CRI and TLCI levels. It's much simpler to install and operate saving time and controls the Sinfonya's five-color light engine precisely. More importantly the high control of the engine means the quality of light in the beam is exceptional. All this is possible thanks to the special firmware algorithm, developed internally by Claypaky.

Using the new Calibration feature in conjunction with the Claypaky CloudIO software you can easily align any fixtures on stage for a performance to the same light output and color tempera-

ture levels. Even older fixtures can have the color sampled and measured before being imported using the "digital filter option" and replicated in Sinfonya so that they all match perfectly to give unparalleled consistency on stage.

"We listened to the market and designed a new fixture just for them" says Product Portfolio Manager Giovanni Zucchinali. "It is the first pure theatre fixture for Claypaky, we wanted it to be special and we are thrilled with its performance" he says. "It definitely puts down a marker to the rest of the industry and to have a fixture with such smooth control at 30db is incredible, we are sure it will be welcomed by the market and can't wait to hear customer feedback".

Sinfonya includes a host of trade-marked and protected technology that is seen across the Claypaky range. The "Absolute Position" of Pan and Tilt is the first on the market. This feature will save lots of time for designers on stage. Sometimes during a performance, a fixture in a series may need re-setting, it happens it's just life.

"Absolute Position" is a massive step forwards in terms of lowering audience distraction because of a clever sensor in the head. This signals where the fixture is in the cycle meaning the audience do not see one fixture turning and swirling to distract them from the show as it tries to find the re-set point. This new system gives higher precision in term of re-positioning.



Sinfonya firmware provides vibrant and rich colors optimized for the stage or TV

## ELATION PROFESSIONAL UNVEILS IP65 BEAM MOVING HEAD FIXTURE

The **Proteus Excalibur** from **Elation Professional** is a powerful IP65 beam moving head fixture. The newest member in Elation's Proteus range of IP65 automated fixtures, long throw beam and wide front aperture make it seamless for creating aerial light columns, sweeping beams, throws of CMY color, and prismatic/air FX rivaling existing Xenon searchlights.

Capable of creating effects as magical as its legendary namesake, the Proteus Excalibur is ideally suited for theme parks, cruise ships, outdoor special events, large-scale shows and concerts, or any situation where a massive beam or very powerful prism and flower effects are required.

Excalibur is the brightest IP65 full-featured beam fixture ever created, producing up to 200,000 lux at 20 meters (7500 lux at 100 meters), an incredible light output from a surprisingly compact, and fast, body. Rivaling existing Xenon search-



**The Proteus Excalibur IP65 automated fixtures creates aerial light columns**

lights and sky trackers, the Excalibur's extremely narrow 0.8° beam ensures the fixture cuts effortlessly through the sky and is visible at great distances. The intense beam projects from an ultra-wide 260mm front lens as a massive column of solid, attention-grabbing light, a tower-

ing beacon that is impossible to miss.

A wide array of gobos (8 interchangeable plus a 17-position static wheel) and prism overlays (4- and 8-facet) allow for a large variety of dynamic sky animations that add excitement and draw attention to any event. The upcoming integrated sky animation system allows the Excalibur to operate impressive aerial shows without needing an external DMX controller.

The Excalibur offers full CMY color mixing plus 14 dichroic colors including CTO and UV. With its incredible light intensity, all CMY colors remain strong and vibrant, even when fully saturated.

Beam control through a precise internal focus lens provides crisp projection without optical errors. Dual variable frosts allow for softening of the beam when required and a remote-controlled Expander lens widens the beam to approximately 3.5 degrees for an even fuller look.

The Proteus Excalibur uses Philips' highly efficient FLEX lamp technology for long lamp life, lower power consumption

and reduced fixture maintenance.

The discharge lamp/ballast package produces an impressively high output for such a compact fixture while performance remains resourcefully economical with a lamp life of up to 4,000 hours.

The Philips Platinum 500 FLEX (550W) lamp is dimmable via the internal ballast, which not only dims the lamp electronically but offers a Hibernation Mode that reduces power to the lamp when not in use, resulting in lower power consumption. The lower internal heat produced extends the life of not only the lamp but all internal components of the fixture.

The Excalibur supports DMX, RDM, Art-NET, and sACN protocols and is naturally outfitted with all the professional features and IP65 connections that designers have come to expect from a Proteus luminaire. With unprecedented power and a full array of professional design features, the Proteus Excalibur sets a new standard in IP65 beam moving head fixtures.

## SHOWTEC INTRODUCES SIX NEW ITEMS WITHIN THEIR LINE OF PIXEL PRODUCTS

Showtec expands their line of pixel products with six new items. The **Pixel Panel 1024** is a 64x16 RGB LED-matrix panel, the **Pixeltube 32** and **Pixeltube 16** are RGB LED tubes with black frosted covers, the **Pixel Dot** is a single 3-W RGB LED for fixed (ceiling) installation, and the **Pixel Bubble 75** set is an RGB-LED-ball matrix with five strings, which can be extended up to 6 metres each with Pixel Bubble Extension Strings.

Six new products have been added to Showtec's Pixel line. The new Pixel Panel 1024 offers an impressive amount of individually controllable RGB LEDs: 1024 in a matrix of 64 by 16. For this, you need an impressive 3076 channels of Art-Net. With 30 presets, stand-alone operation is also an option, as are 8-channel control through DMX, Art-Net, and Kling-Net, master/slave control, and manual control through an OLED

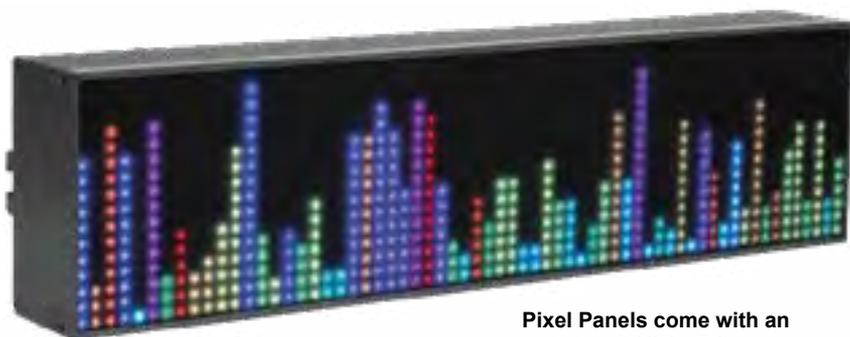
display on the back. A flexible rigging system and removable black frosted cover are included.

The new **Pixeltube 32** and **Pixeltube 16** house 32 respectively 16 1-watt RGB LEDs, which can be individually controlled by DMX, Art-Net, and Kling-Net through Showtec's dedicated Pixel Controller, a universal controller capable of driving the Showtec Pixelstrip 20 and 40, the Pixeltube 16 and 32, and the **Pixel Dot**, by switching between modes. Up to five metres of Pixeltube can be daisy chained. Pixeltube 16 and 32 can be mixed and used in any configuration, as long as you don't exceed the five-metre-per-output limit. They come with a black frosted cover and rigging system which allows easy attachment to truss or 50-mm pipe without the need for tools.

Showtec's new Pixel Dot is a single 3-watt, 50-mm RGB LED with a white frosted cover for fixed (ceiling)

installation. It is controlled through Showtec's Pixel Controller and can be daisy chained up to 40 units per Pixel Controller output. Its spring clips make installation as easy as installing an ordinary recessed ceiling spot.

The new Showtec **Pixel Bubble 75** set consists of a control bar with built-in power supply and five string outputs. Included are 15 one-metre-long strings, each with five white frosted 5-cm "bubbles", totalling 75 individually controllable RGB LED balls. Each string can be extended with the one-metre long Showtec Pixel Bubble Extension Strings with five RGB LED balls, up to a maximum total length of six metres per string. Up to 450 channels are then needed to control each individual pixel through DMX, Art-Net, or Kling-Net. Alternatively, it has several programs built in, and manual as well as master/slave control are also possible. Installation is easy using the two included brackets.



**Pixel Panels come with an optimized RGB LEDs**

[www.palmtechnology.in/Lighting](http://www.palmtechnology.in/Lighting)

## ADJ LIGHTING UNVEILS NEW FOCUS PROFILE

ADJ lighting introduces the new **focus profile**, a feature-packed automated profile luminaire powered by a potent 400w led light engine. This new fixture is the brightest and offers build quality and value for money for which the series has become known and a versatile array of creative features, it is designed for theatrical, concert touring and event production applications.

The fixture's exhaustive collection of beam-shaping tools begins with four framing shutters. Each shutter is controlled using two independent motors, one for each side, which allows the individual blades to be applied at any desired angle.

The unit offers full CMY color mixing,

with 16-bit control, allowing Lighting Designers to precisely select the right color for a given scene or look. The fixture also offers an additional color wheel loaded with six dichroic filters comprised of four primaries (red, green, blue, yellow) together with CTB and CRI filters.

Two separate wheels feature seven interchangeable indexed-rotating GOBOs and eight static metal-stamped GOBOs, respectively, providing lots of variety both for aerial break-apart effects and surface texture projections. Changing the rotating GOBOs is a quick and easy process, allowing for the use of custom patterns or logos for specific installations, tours, or events. The unit also features an animation wheel,

offering bi-directional variable speed rotation, which can be used to create dynamic projection effects.

The fixture offers a motorized focus feature that can be used to ensure GOBO projections are razor sharp or to deliberately blur out the beam to create soft-edged looks. In addition, the unit is supplied fitted with a medium frost filter that can be used to soften the edges of the beam even further.

A full color reversible LCD menu display, with six corresponding push buttons, is located on the front panel of the fixture. It facilitates easy DMX addressing as well as customization of the fixture's various operating parameters.

The rear of the unit is also home to

both 3-pin and 5-pin DMX input and output sockets as well as RJ45 ethernet (Art-NET) input and output connections, making it easy to integrate into any existing DMX system. In addition, it supports the RDM protocol which allows for remote DMX addressing and the feeding back of fixture operating status information to a compatible DMX control solution.

The Focus Profile is a substantial fixture, it is portable. Pan and tilt locks prevent unwanted movement of the head during transportation, while convenient side bar handles aid with lifting and rigging. Large rubber feet mean that the unit can be placed directly onto a stage or riser, while the supplied pair of omega brackets can be easily attached to allow for truss mounting.

"The Focus Profile is a significant step forward in the evolution of ADJ's product range," comments ADJ USA's National Sales Manager, **Alfred Gonzales**. "Our customers have been asking for an LED-powered profile fixture for some time. However, instead of rushing a fixture to market, our R&D team have worked diligently to ensure the Focus Profile is the best profile luminaire in its class that can be found on the market today. It is without a doubt our most feature-packed fixture to date and has already generated a huge amount of interest and pre-orders. We can't wait to get the fixture out to our customers and see the creative ways they utilize it for their shows, tours, installations and events."



A Feature-Packed Automated Profile Luminaire Powered By A Potent 400w Led Light Engine

## ELATION PROFESSIONAL HAS DISCONTINUED LIGHTJOCKEY

**LightJockey** One of the longest available lighting control software solutions from **Elation Professional** is discontinued. After over two decades of service and with tens of thousands of systems in the market, LightJockey to gracefully retires.

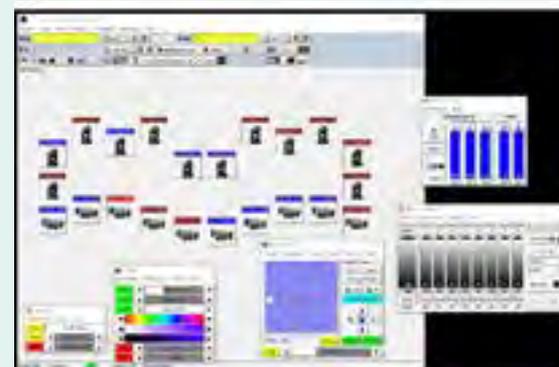
As ongoing security changes to Windows prevent LightJockey from

functioning reliably, the decision was made to phase out the lighting control software with the release of Windows 11 in October. The last LightJockey kit has been sold and this iconic software - the starting point for many professionals in the business - will no longer evolve.

The transition to a new and modern

software solution, however, is simple. LightJockey USB DMX hardware is recognized by ONYX, the innovative and easy-to-operate lighting control platform by Obsidian Control Systems.

Plug-and-play drivers unlock any of the devices to the ONYX NOVA license, which offers four universes of DMX, Art-Net or sACN support. Simply download ONYX, connect the LightJockey DMX adapter and enjoy limitless creative



LightJockey Lighting Control Software with USB Interface

opportunities. Obsidian offers a host of online training videos to help professionals easily learn and convert their systems from LightJockey to ONYX.



## PIONEER DJ INTRODUCES THE DDJ-REV7 CONTROLLER FOR SERATO DJ PRO

AlphaTheta Corporation has announced the release of the **DDJ-REV7** in a new series of DJ controllers from its Pioneer DJ brand. This 2-channel unit is built to deliver the most from the Serato DJ Pro performance software and boasts a brand-new design that includes large, motorized jog wheels with On Jog Display to create a tactile connection between you and your music.

The DDJ-REV series is a fresh range of DJ controllers with layouts that emulate a professional DJM-S mixer + PLX turntable setup, including specialized features for open-format and scratch DJs. For the first time ever on a Pioneer DJ controller, the tempo sliders have been moved to the top of the deck sections and turned horizontally to emulate PLX turntables arranged in a battle configuration. The Performance Pads have been placed in the

mixer section along with Lever FX paddles, exactly where they're found on DJM-S series mixers, enabling you to energetically change the sound during performances.

DDJ-REV7 is ideal for performing at parties and venues. Its 7-inch **VINYLIZED JOG** wheels are motorized and feel great when scratching and can experiment to find perfect level of torque and friction with customizable settings and two slip sheets included inside each deck that fit inside. The acrylic top plate is specially finished to feel just like a real analog record, with a spin treatment that easily catches on the fingertips when its touched.

At the heart of each deck on the DDJ-REV7 is the new 7-inch motorized jog wheel, which features the same rotational stability as a 12-inch turntable. In the center of each jog wheel, a 3.5-inch LCD keeps important information at your fingertips so there's far less need to switch your gaze between the decks and your laptop. The omnidirectional viewing angle, = can see what's being displayed from any angle, and can turn off the digital marker that indicates the playback position whenever one wants. It can also mark each jog wheel with the included stickers if preferred this method to the digital marker.

An effect that samples the

input sound and repeatedly fades it out like a reverb, while increasing the playback speed and pitch. It can also pull the effects levers down and hold them to apply effects from Serato DJ Pro in short bursts or push them up to lock effects on and free up the hands for scratching or track browsing. Instantly trigger the effects saved in 4 FX Banks and edit them via the Setting Utility on PC/Mac. While using one of these effects, you can also trigger up to 6 more from Serato DJ Pro. The DDJ-REV7 also has 5 popular Sound Color FX to experiment with. With a digital-to-analog converter from ESS Technologies and improvements to the audio design, the DDJ-REV7 achieves the highest sound quality of any Pioneer DJ controller. Even the unwanted noise that's commonly created by on-board power supplies has been reduced for a purer audio experience.

The DDJ-REV7 is solid and robust, yet still lightweight enough to grab by the handles on the chassis and carry to your next gig. Contrasting matte and hairline finishing in different sections of the aluminum top plate create distinction between the deck and mixer sections, so the layout looks like a traditional 2 x turntable + mixer setup, while the On Jog Displays mimic the label in the center of a vinyl record.



**DDJ-REV7 incorporated with digital-to-analog converter to minimize unwanted noise**

## HERCULES PRESENT LIMITED-EDITION DJCONTROL INPULSE 500 WHITE EDITION

With the success of its DJControl Inpulse range and the limited-edition DJControl Inpulse 500 Gold Edition controller, Hercules has announced the brand-new limited-edition **DJControl Inpulse 500 White Edition**. Always keen to stand out from the crowd and build even stronger ties with members of its community, Hercules is offering this new premium pack in a dazzling white edition — a color that has been very frequently requested by the manufacturer's fans. Like DJControl Inpulse 500 Gold Edition, this new collection is also available in Europe, North America and the Middle East in limited quantities: just 1,000 units will be made available in total. Each controller is unique and fea-

tures an identifying number from 1 to 1,000. The pack includes a **Serato DJ Pro license key, an embroidered carrying**

**case and a variety of free elements** and services to **enrich the DJing experience** (royalty-free music packs and cool

overlays for livestreaming), available for download.



**DJControl Inpulse 500 White edition included with Serato DJ Pro license key**

15<sup>th</sup> edition



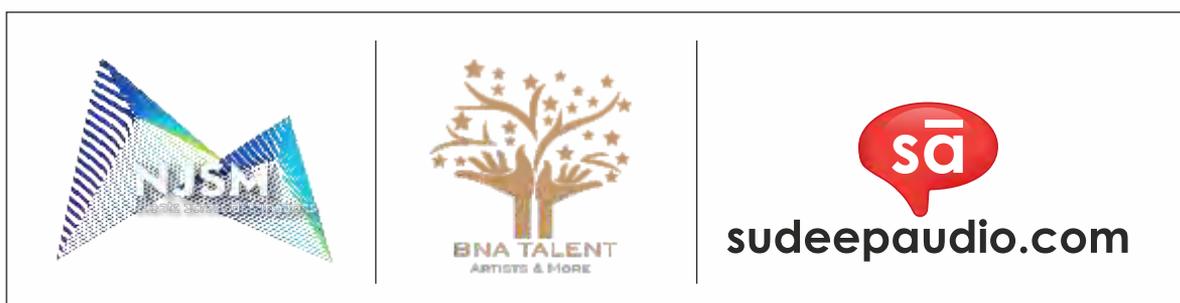
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