

# **PALM** EXPO MAGAZINE **+AV-ICN**

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

## *In conversation with*

**Aditya Todi**, Senior Director,  
Sales, & Marketing, HARMAN  
Professional Solutions, India &  
SAARC

**Krishna Tripathi**, Business  
Head – Display Solutions, NEC  
Corporation India



Aditya Todi



Krishna Tripathi



*Case Study*  
**SAGA: Cuisine** installs HARMAN  
Professional Audio and Lighting Solutions

## *Interview Focus*

**Thomas Richard Prakasam**,  
Editorial Director, S.I. Asia

**Vijay Sharma**, Country Head  
India, Optoma

**Eric Wei**, Senior Sales Director  
Asia Pacific, ViewSonic

## *Product Focus*

### **Projectors**





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Vijay Sharma Country Head India,  
Optoma Corporation

33

# Features

## Corporate Feature – Display and Projection

**08** Krishna Tripathi talks about NEC's presence and future plans with respect to the Indian market.

## Interview Focus -Visual Display Market

**18** Eric Wei, Senior Sales Director, Asia Pacific, ViewSonic talks about the company's operations and latest trends and opportunities in the India market.

## Product Focus

**22** A line up of Projectors for the Corporate and Business Segment.

## Interview Focus - Sound Recording & Music Production

**24** In conversation with Aditya Todi Senior Director of Sales and Marketing, HARMAN Professional Solutions, India and SAARC.

## Interview- ProAV Media

**30** In conversation with Thomas Richard Prakasam, Editorial Director, S.I. Asia

## Interview Focus - Pro Av & Home Segment

**32** Vijay Sharma Country Head India, Optoma Corporation on exploring the Indian Home Cinema Market

## Install Story

**35** Crescendo AV recently equipped SAGA: Cuisines of India with futuristic HARMAN Professional audio and lighting solutions

## Product Sheet

**42** Avocor G series Interactive Displays, Biamp Beam tracking Microphones, Crestron HDBaseT to AV-over-IP Encoder, Gude Expert Power Control 8291-1 Distribution Unit, Nexo ID14 point source speaker, Samsung Flip 2 digital flipchart.

# CONTENTS



# CONTENTS

## News

### 05 Sound & Stage

RCF Expands ART Series; AUDIX Ships A10 AND A10X EARPHONES; Sennheiser Launches IE 100 PRO BT in India; Blackmagic Unveils Streaming Solution.

### 10 Audio Visual

Ahuja Radios Introduces Ultra-Modern Digital Conference Solution; A&H Extends Install Range; AMX by HARMAN Presents PR-Series matrix switchers; Analog Way Launches Next-Generation Picturall Mark II Media Servers; Atlona Expands its Omega Series; Neutrik Debuts NA2-IO-DPRO Controller V2.0; EAW Debuts NTX Series Line Array & SBX Series Subwoofer System; Celestion Debuts CDX1-1412 Compression Driver; Atlona launches AT-WAVE-101 Wireless Presentation Platform; JBL Presents New L75ms and L52 Classic Loudspeakers; Logitech launches Logitech Scribe; Renkus-Heinz I adds Dante interoperability; Prysm Systems Unveils Interactive LPD 6K Series; Sharp NEC Adds New Models to Desktop Display; Daktronics Unveils Narrow Pixel Pitch; LYNX Technik Announces Seven New Yellobrik Models

### 14 Audio Install

**AVkraft** installs HARMAN Sound System at St. Joseph's College; **Beta3** Elevates the Acoustic Experience at Hotels; **LD System** revamps the acoustics at Jehovah Nissi Assemblies of God Church (JNAG) Church; **Sonotone** deploys sound solution at Dharmachakra Prabhav Tirth and Victorious Life AG Church

### 25 Audio & Music Production

API Announces API Select Range; KG Movie Envisages with DiGiCo and KLANG; Muserk Announces Partnership with IPRS; KRK Expands Studio Monitors; Modal Electronics Announces AlgoRhythms; Soundideaz Academy's Audio Education Curriculum gets World Recognition; Neumann Debuts DSP Powered KH 750 AES67 Subwoofers; Dolby Atmos Upgrade for Headroom Studio; PreSonus Revelator Io24 Audio Interface; Sennheiser unveils MKE 400 microphone; Digital Music Giant Believe Acquires Venus Music, Rebrands it Ishtar.

### 37 Lighting

Fusion Launches Fusion Stick; ADJ Debuts Led-Powered Moving Head; Grandma3 Lights Up A.R. Rahman's Grand Digital Concert; Astera Launches PixelBrick luminaire; Robe Unveils Cuete Spot Light; Astera Debuts AX9 PowerPAR; ARRI Releases ARRI Lightnet.

### 48 DJ Technology

Pioneer DJ Announces Exclusive Off-White Collaboration, DDJ-1000-OW; Native Instruments Releases Free Traktor Pro 3.2 Update; Rane Debuts Limited-Edition Seventy A-Trak Signature Edition Battle Mixer



## Columns

### 20 An Unequal Music

**NFTs & the Indian Music Industry: Abhimanyu Malhotra** talks about how NFTs are creating a new paradigm in the Music Industry.

### 32 The Bright Spark

**Tunnel: Viraf Pocha** talks about how the industry is slowly gaining momentum via live events with the help of technology.



### 16 Ramada Hotel elevates the guest experience with Beta3's Acoustic setup



## Anil Chopra Founder Director promises PALM AV expo 2022 will attract full spectrum of product and technology



**Anil Chopra,**  
Founder and Director of PALM Expo

**Anil Chopra**, Founder and Director of PALM Expo platform including the Pro AV expo organized alongside PALM, expresses his perception of the future of the annual gathering of 25,000 professionals at the PALM each year till 2019.

PALM Expo will fulfill its RESPONSIBILITY in 2022 in once again organizing a full-blooded **pro audio, audiovisual and lighting expo**.

"PALM Pro Sound & Light + PRO AV Exhibitors in 19 years of the expo have grown Indian markets and delivered the best the world has to offer to Indian trade and community of professionals. The last two years was a great disappointment when 25,000+ pros and trade attending the expo couldn't meet and jam the extensive highlight features. Planning new product launch and developing user community at the PALM is what grew the business. PALM delivered business. The two-year gap means PALM will provide a robust show in 2022 to gear up business and connect the industry to network again.

My perception is that it is PALM responsibility to gear-up pro audio, audiovisual, lighting+ PRO AV to high-growth in demand and consumption and provide trade that fantastic connect once again with all the popular features PALM is famous in hosting.

Smita Rai, Vice Exhibition Director, has delivered PALM Sound and Light Conference Summit, IRAA Awards, PALM Sound and Light Awards, PALM Technology Magazine and AV-ICN Magazine and the website content. She works with the industry to bring to you the news of latest technology and product in all the PALM Media. As Vice Exhibition Director she will also oversee the Exhibit Features like the Live Arena, Qube Demo and Line Array Demo."

**Smita Rai** tells you more about what to expect in PALM AV- ICN 2022.



**Smita Rai,**  
Vice Exhibition Director

### Smita Rai Vice Exhibition Director Promising All Features and Highlights at PALM 2022

"PALM has always been the principal catalyst which has fueled the industry by connecting manufacturers and distributors with dealers and end users. It is the place to meet buyers from India. The importance of PALM expo 2022 is incontestable as it points to new beginnings. PALM expo 2022 in conjunction with the AV-ICNx expo will be a major game changer as it will drive the revival of the Pro Audio, Audiovisual and Lighting industry, reactivating the trade and providing a physical platform for buying and selling. The expo will reinitialize business connections, networking and interaction between the exhibitors and their prospect partners, dealers and end-users.

PALM expo has grown consistently year on year till 2019 covering 27,000 sqm across Demo Qubes, Line Arrays, Conference Halls and exhibit area. We will meet the challenges to once again provide an international class show production presenting exhibition floors, Demo Qubes and Line Array demos featuring industry leading brands, besides other engaging and dramatically successful features such as a stellar line-up of

speakers at the PALM Sound and Light Conference Summit, Lighting Design Showcase providing a platform to young aspiring lighting designers to showcase their talent and the PALM Sound & Light Awards and IRAA awards which honour innovation, technology, creativity and talent."

**Destination for AV Industry:** PALM's evolution in providing total solutions in event entertainment technology has witnessed the largest gathering of systems integrators than at any other expo in India. PALM's focus on Audiovisual is a game changer providing exhibitors a real opportunity to reach the potential market in exhibiting to over 25000 unique visitors directly or indirectly involved in AV technology.

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## RCF EXPANDS ART SERIES WITH ADVANCE AUDIO TECHNOLOGY

**RCF** celebrates a 25-year history of ART speakers by introducing the ninth generation of the series, with a sleek, new design and 6 active speaker models to choose from. ART 9 is a reliable audio solution that can be used as the main sound system, fill speaker, or stage monitor. All models share 2,100 Watt two-channel Class-D amplifier with advanced

DSP processing. ART 9 Series is created with music in mind and manufactured by RCF in Italy.

ART 9 manages extremely high sound pressure levels. The amplifier is energy-efficient so there is no need for a cooling fan. The circuit is attached to a solid aluminum heat exchanger in the back of the unit with no moving parts. Performance improvements

are assured by new RCF transducers, featuring advanced materials such as Kapton, Titanium, and Neodymium. The new 1.75-inch compression driver with Polyimide-Kapton dome features a new bonding technology and reinforced ribs that make it 10 times more durable than previous models. Newly designed woofers gain more stability over high currents, with less distortion. Every woofer design is tested with a 200-hour continuous signal to stress the transducer at extreme levels.

The electro-acoustic design of ART 9 lies within the housing of the speaker. The new

True Resistive Waveguide (TRW) is the result of several refinements in both the transducers' and the vented ports' design with Finite Element Analysis, and constant measurement in RCF anechoic chambers. TRW mimics a resonance-free pure resistive load reducing the high-frequency distortion of a classic horn. With its asymmetric acoustic radiation, the coverage angle of the waveguide provides constant directivity to the entire listening area with a balanced stereo panorama.

These components work in harmony with two RCF exclusive DSP algorithms, one for phase linearization and cross-over design, and the other for woofer excursion management. Fir-PHASE, a superior digital FIR technology, allows for a coherent distribution of sound without phase distortions, ensuring minimum latencies to the system. With proprietary Fir-PHASE technology, the new shape, and the placement of the vented ports, the speaker now acts as a single source for a true sound image. The woofer excursion management feature, Bass Motion Control works by creating a complete map of the dynamic behavior of the transducer, to generate a custom algorithm that only limits over-excursions. This gives total freedom of signal reproduction, avoiding both high-pass filters and large-band limiters. The speaker is now allowed to reproduce the input signal at all volume levels for the entire audible spectrum, maintaining all nuances of the music with deep, detailed bass response.

The sleek black cabinet uses a special polypropylene composite material with a radically new construction concept. RCF's M-Brace internal reinforcement design connects four sides of the enclosure with the amplifier, preventing any deformation for a completely inert body, with augmented acoustical damping even at maximum volume settings. M-brace also performs exceptionally well for greater resistance to mechanical stress.

The ART 9 is easy to move and transport with ergonomic handles on both sides and the top. The bottom side includes a steel pole socket for mounting on a stand or sub-woofer pole. Each model can also be flown, wall- or truss-mounted using multiple M10 rigging points and special accessories.

The ART 9 Series consists of six new models, ranging from 10" to 15" woofers and share the same 2100 Watts power amplifier. ART 945-A is the largest, most powerful model of the series delivering an impressive 135 dB max SPL featuring a 4" titanium compression driver, and a neodymium woofer that goes down to 45Hz. The ART 935-A and ART 932-A can produce respectively 134 dB max SPL and 133 dB SPL, sharing the same 3" titanium compression driver. The exceptional clarity and minimal distortion of the new Kapton driver of the ART 915-A, ART 912-A and ART 910-A features remarkable SPL and power to weight ratio.



ART 9 with Polyimide-Kapton dome features

## AUDIX IS NOW SHIPPING THE A10 AND A10X EARPHONES

The **A10 Earphones** are engineered to deliver studio-quality performance for live sound monitoring and critical listening with exceptional imaging and isolation. The A10 features a dynamic low-mass moving coil assembly and titanium alloy diaphragm delivering ten octaves of frequency response with accurate phase coherence.

The A10X Earphones are designed for the ultimate immersive listening experience. At the heart of the earphone is a dynamic low-mass moving coil assembly and composite beryllium diaphragm delivering over ten octaves of balanced frequency response and extended bass.

Both models feature lightweight and durable injection-molded shells which

are internally textured and ported for acoustic control and accuracy throughout the frequency range. The included small, medium, and large pairs of silicone ear tips attach securely for optimum comfort and sound isolation. Gold-plated MMCX connectors allow for 360 degrees of rotation for ease of placement. Silver-plated, oxygen-free copper cable is equipped with a reinforced wire wrap near the connector to further ensure that the earphones will stay securely in place.

The low-mass moving coil drivers of the A10 and A10X earphones produce full-range frequency response, high output and low distortion from a single point source for exceptional phase

coherence.

"Great sound starts with a great driver and the proprietary, no-compromise drivers of the A10 and A10X leverage our decades of dynamic transducer experience," says **Steve Johnson**, VP of Sales and Marketing at Audix. "Whether you are on stage or on a plane, the new Audix earphones deliver high-fidelity listening for the most discerning ears."



A10X with gold-plated MMCX connectors

## BLACKMAGIC DESIGN UNVEILS COMPLETE STREAMING SOLUTION

**Blackmagic Design** has announced the new addition to the **Blackmagic Web Presenter family**. This new Blackmagic Web Presenter 4K model has an upgraded Ultra HD resolution H.264 encoder for live streaming in native Ultra HD. The new Web Presenter 4K is a compact design that includes a 12G-SDI input with down converter, so customers can select to stream in 1080p HD or 2160p Ultra HD resolutions. This new model also simulates a USB webcam when connected to computers, and the USB webcam feature also supports 1080p HD or 2160p Ultra HD resolutions.

Blackmagic Web Presenter is a complete streaming solution that includes a professional hardware streaming engine for direct streaming via Ethernet to YouTube, Facebook, Twitter and more. It's just like a modern broadcast television transmitter for a new global streaming audience. Plus the built in USB connections work like a webcam, so customers can connect a computer and use any streaming software, or even Skype or Zoom. For redundancy, customers can stream to the internet via Ethernet or connect a 5G or 4G phone to use mobile data. Web Presenter also includes a technical monitoring output that includes video, audio meters, trend graphs and even SDI technical data.

Blackmagic Web Presenter supports the most popular streaming platforms. Plus the built in hardware streaming engine has been designed for live streaming at professional broadcast quality. Setup is easy, as the Web Presenter Utility software lets customers select the streaming platform and update the streaming key.

Blackmagic Web Presenter is a self-contained solution that includes a powerful hardware encoder,

software for connecting to streaming platforms, and network connections. Simply connect an SDI video source such as a live production switcher or a camera, then connect to the internet using the built in Ethernet connection. Or plug in a mobile phone to use mobile data. With settings built in for popular streaming platforms, customers simply need to enter a streaming key and press on air. Plus customers can simultaneously use the USB webcam output to connect to a computer, allowing other video software to be used.

codec data rates and cache fill, plus a summary of the streaming settings and detailed SDI technical information. Plus the technical monitoring output works in full 1080 HD and outputs to both SDI and HDMI. That means customers can use an SDI router for monitoring multiple units, or connect a simple HDMI TV.

The Blackmagic Web Presenter Utility software provides a single place to manage multiple web presenters and to update the settings and software. Simply plug directly into the front of the web presenter's USB connection, or

Blackmagic Web Presenter takes the incoming HD or Ultra HD input signal and automatically converts it to high quality, low data rate 1080p HD or high resolution 2160p60 Ultra HD depending on the model, which is then sent to the hardware H.264 encoder for streaming.

Blackmagic Web Presenter is based on the modular Teranex Mini design allowing desktop or rack use. The portable design is only 5.5 inches wide, which means customers can mount 3 in a single rack unit, perfect



The portable design Web Presenter offers Self-contained solution

If users are streaming from a remote location, or customers need a backup for the main Ethernet connection, customers can plug in an Apple or Android phone to connect to the internet via mobile data. For convenience, there are USB connections on both the front and rear panel that can be used for tethering phones. Plus it works with the latest high speed 5G phones, as well as 4G phones. Blackmagic Web Presenter will auto detect when a phone is connected and switch its internet connection to use it. Customers can select Ethernet or phone priority, which makes phone internet backup fully automatic.

Blackmagic Web Presenter includes a feature technical monitoring output. The graphics based monitoring output includes a video view, audio meters with accurate ballistics, trend graphs for

connect using Ethernet so customers can configure remotely, which is important when users are managing multiple remote sites. The familiar menus and controls make it very easy to set up a live event, so customers can get started fast. Plus the front panel LCD menus have the same settings and controls. The Blackmagic Web Presenter Utility software is included free and runs on both Mac and Windows platforms.

Blackmagic Web Presenter includes a 12G-SDI input with support for all HD and Ultra HD formats up to 2160p60. A 12G-SDI loop output is included enabling customers to loop video through more than one web presenter, so customers can stream to multiple services. Blackmagic Web Presenter features Teranex conversion technology on the SDI input for incredibly clean looking video.

when customers need to stream to multiple independent services all at the same time. Plus customers can combine Blackmagic Web Presenter with other products such as the ATEM Television Studio HD switcher for a live production and streaming solution in a single rack unit.

"We are so excited to have this new model of Blackmagic Web Presenter that adds streaming in both HD and Ultra HD" said **Grant Petty**, CEO, Blackmagic Design. "This means you can choose between lower data rates of HD, or full resolution Ultra HD at the click of a button. Plus the USB webcam feature has been upgraded to Ultra HD. This really is an exciting model and we cannot wait to see more live streaming in Ultra HD!"



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## SENNHEISER ANNOUNCES THE LAUNCH OF IE 100 PRO BT IN INDIA

Sennheiser has announced the launch of **IE 100 PRO BT** in India. The new IE 100 PRO Wireless in-ears takes the top-grade monitor sound from the stage right onto the street thanks to the inclusion of a Bluetooth connector that can be swapped with the cable when preferred. Listen to playlists, make calls, or watch videos, while the AptX Low Latency codec ensures that sound and image are in perfect sync. The Bluetooth connector features a built-in microphone, remote for call and music control and a battery life of up to ten hours. Naturally, the IE 100 PRO is also available individually for stage work, where it surprises with some clever extras.

According to **Vipin Pungalia**, Director, Professional Segment Sennheiser India, "We are elated to announce the launch of IE 100 Pro BT in India. These earphones are meticulously crafted for musicians, sound engineers and DJs for precise monitoring sound for live stages, mixing, producing. The compact design combines a secure fit with excellent wearing comfort. Its robust construction from the connec-

tion to the cable duct is designed to be suitable for the rigors of stage use. These earphones are also a perfect companion for audiophiles for daily use. We are looking forward to seeing how our customers in India respond to it."

When making music, more control means a better performance: As successor to the IE 40 PRO, the IE 100 PRO in-ears offer a natural, warm and utterly precise monitoring sound that allows you to fine-tune your performance with ease. Thanks to the included silicone and memory foam ear tips, the in-ears adapt perfectly to your ear canals, coming as close as possible to custom ear moulds. This snug, comfortable fit is supported by a low-profile mould. A reinforced ear-hook and detachable cable with patent-pending, break-proof connec-



The IE 100 PRO featuring AptX Low Latency codec

tor give you the reliability you need during your performance. The package is rounded off by a cleaning tool and a soft pouch.

While the IE 100 PRO retains the same transducer and frequency response of its predecessor, it is now fitted with the same connector type and clever stage-proof internal cable duct as the

IE 400 PRO and IE 500 PRO. The new IE PRO Mono Cable is a twisted cable that offers excellent suppression of structure-borne noise. It can be used with the right or left earpiece, which gives a single-sided broadcast solution for live moderation, correspondents and ENG applications. With a stereo signal, the left signal will be transmitted.

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# Understanding the Display Market with NEC



*The global IT and Networking Company NEC is known for their innovative solutions and expertise. **PT** got in touch with **Krishna Tripathi**, Business Head, Display Solution at **NEC Corporation India**, who talks about NEC's presence and future plans with respect to the Indian market.*

**Krishna Tripathi, Business Head – Display Solutions, NEC Corporation India**

**C**ould you tell us the latest products that NEC is currently pushing forward in the Indian market for both projection and display solutions?

We bring end-to-end Display Solutions to Indian market. NEC India has launched specialized panels called the 'M series.' It is designed as part of signage solutions in meeting rooms and board rooms, and these will be the game changer for NEC. The full range contains three new series; MESSAGE Essential (ME), MESSAGE (M), and MES-

SAGE Advanced (MA) Series. These new display models deliver complete flexibility and ease of use. A large part of the feature set covers entry, mainstream, and professional signage for retail and corporate applications. Additionally, we have introduced an economy series product, 'E series', to play on volume and cover more partners as well as smaller locations.

Furthermore, NEC has an extensive series of laser projectors with brightness ranging from 5K to 20K lumens. PA804UL, PA1004UL, PX2000UL are

some popular models that we sell in the India market.

We are also actively promoting the dvLED display solutions segment, strengthening our portfolio further in the display market.

**Which are your target segments (education/corporate/hospitality, etc.) regarding Display solutions & Projection Systems?**

We see a lot of scope in the display business with enterprise customers and the government. The lineup of display

solutions for the target segment range from Large Format Displays (32"– 98"), VideoWall, IT Monitors, Digital Signages, Projectors, and dvLED.

NEC's professional display lineup provides:

- A wide color gamut panel.
- Complete metal chassis.
- Advanced feature-set for compelling and memorable UHD digital signage.

These displays are ideal for professional applications in various sectors, including BFSI, IT/ITES, Government,



Aviation, Oil & Gas, Retail, and Manufacturing. We offer a wide range of 24/7 operational display products and offerings tailored to suit niche environments and applications. Our strategy is to keep our customers in the center of all the product innovation and implementation.

**Developments in interactive technologies have resulted in continued actions of better, more extensive, and brighter displays? How has NEC incorporated the latest technology in your products?**

Building upon our global strengths, we address the display and visualization needs of our Indian customers. We are at the forefront of technological innovation in India, leading the way with new offerings and services that put the company ahead of the competition.

NEC incorporated the interactive technologies by having intelligent, innovative, tailor-made interactive solutions which provide all the tools needed to facilitate enhanced outcomes from collaborative working. NEC interactive solutions feature single large format solutions, interactive video walls, and scalable multi-projection solutions supporting instant video conferencing, creative applications, interactive lectures, and meetings, plus information systems.

NEC's WD551 is a smart all-in-one solution for modern meeting space supporting BYOM (Bring Your Own Meeting) securely via USB-C. The bezel-free PCAP optically bonded touch screen is easy to clean and provides a superior writing experience whether interacting via a finger or active pen, supporting Windows Ink and palm rejection. This is the only certified Microsoft Teams solution available in the market.

Moreover, NEC's CB series is an Infrared touch collaboration display. Available in three different sizes (65", 75" and 86"), featuring UHD resolution and up to 20 touchpoints. This allows business and educational sessions to start up instantly with a built-in whiteboard and wireless screen sharing functionalities. The embedded annotation tool lets clients annotate over any

content shown on the screen. For more demanding applications, the OPS slot provides the opportunity to enhance computing power.

**Two months ago, NEC released the P Series large format displays tailored to mission-critical applications. What exactly do you mean by mission-critical applications? These displays are best suited for which segments and applications and are they available in India?**

The upgraded P Series displays deliver vivid, crystal clear imagery and messaging with native UHD resolution (3840 x 2160). The displays feature NEC's proprietary SpectraView Engine, a function that works cohesively with the new wide color gamut, 700 cd/m2

**“Our primary challenge was customers' reach in Tier-B and C class cities. To overcome that, we are in the process of tying up with new distributors and channel partners across India. Another challenge for us was awareness in Indian market, for which we have strategically planned our digital marketing activities.**

professional-grade panel by allowing the precise color and luminance accuracy.

These displays are ideal for professional applications in finance, IT/ITES, retail, transportation, and aviation.

Additionally, Multi Picture Mode functionality removes expensive external processing needs. It allows the display to carry that burden by giving the customer the ability to show multiple and separate simultaneous images at once. This could be an essential feature for network operation centers or command and control hubs where many data inputs need to be scanned quickly.

**What cutting-edge technology does**

**this series have which is unique or different from its predecessor?**

The P series is available in 43, 49, and 55-inch displays and increases its previous modularity by offering the ability to fit customers' needs through multiple integrated professional technologies. All new MultiSync P Series displays accept the Intel® Smart Display Module Small or Large through a clever mechanical and electrical design for sleek all-in-one intelligence and interoperability in a small form factor setting. This allows for seamless implementation of Intel processor-based PCs and other peripheral devices without dealing with the hassles of mounting external devices or running video or audio cabling. Additionally, the P Series expands on the success of earlier versions of this lineup by allowing for the optional implementation of the Raspberry Pi Compute Module 4 directly into each display, which outperforms previous versions by offering gigabyte network speeds and faster CPU processing as well as NEC MediaPlayer support.

**What solutions does NEC have which features 4k or UHD resolution in their display solutions series?**

NEC all-new display series P, M, & E support 4K & UHD resolution. The New P series of professional displays can even support up to 8K resolution.

**Earlier this year, NEC launched the all-new MESSAGE range of large format displays for retail and corporate applications. Do you see a demand for this range here in India in the near future?**

Definitely, yes! The M series are designed for signage solutions in meeting rooms and board rooms, and these will be the game changer for NEC. The full range contains three new series; MESSAGE Essential (ME), MESSAGE (M), and MESSAGE Advanced (MA) Series. The new display models deliver total flexibility, ease of use, and an extensive feature set covering entry, mainstream, and professional signage for retail and corporate applications.

**Do you think there is a lack of knowledge or unawareness about new technologies being introduced in the market? If yes, how does NEC plan to promote and push your products into the AV market?**

As we advance, we plan to strategically focus on digital marketing and organizing events and programs to engage our partners. To create awareness about the new technologies, we have designed marketing activities this financial year. Tie-up with renowned AV magazines, EDM blasts, and partner enablement training are some of the activities we have budgeted for this year.

**Price has a significant influence on consumer behavior. What are your views on the Indian market for display solutions given this price sensitivity? What effect does this have (if any) on the quality of products pushed into the Indian market?**

We agree that the Indian AV/Display market is very price sensitive. Keeping that in mind, NEC has created products and solutions that are value for money and are superior in quality. Customers can enjoy seamless product operation years after the purchase, giving them ROI and peace of mind beyond expectation. NEC has even introduced the E series, an affordable quality product to cater to entry-level segments.

**What are some other significant challenges you encounter in the Indian Market, and how is NEC overcoming these challenges?**

Our primary challenge was customers' reach in Tier-B and C class cities. To overcome that, we are in the process of tying up with new distributors and channel partners across India. Another challenge for us was awareness in Indian market, for which we have strategically planned our digital marketing activities. Additionally, we have budgeted for events and promotions to engage our partners and customers.

**Would you say that NEC's partnership with Sharp has given you access to their technology and vice versa and enabled further penetration into the market? How has the association changed the way you conduct business at NEC?**

This new partnership represents an ongoing commitment to the display solutions business. Both Sharp and NEC display businesses are two market-leading brands in the production and development of visual solutions, and the Sharp-NEC joint venture will result in a wide range of synergies. Known worldwide for a commitment to high-quality products, focus on customer support, and excellent partner relationships, we plan to approach this new opportunity by continuously delivering high-quality, innovative solutions to our customers around the world.

**Any other new product from NEC, which the industry can look forward to soon?**

DvLED wall is the latest product on offer from NEC, featuring larger, brighter images than single LCD display options, built virtually in any configuration. Like building blocks, dvLED solutions can be made to fit a specific space or purpose and are designed without seams for one continuous image.

## AHUJA RADIOS INTRODUCES ULTRA-MODERN DIGITAL CONFERENCE SOLUTION

**AHUJA'S** Wired Conference System **CM-5000** and **CM-4000** series have set high standards in terms performance and reliability for audio conferencing applications. Taking cue from the evolving requirements of the new-age audio conferencing users, AHUJA has come up with their most advanced, software controlled Digital Conference Solution, the **DCS-9000 Series**.

DCS-9000 series consists of stylish table-top, Chairman & Delegate Unit which is aesthetically designed to gel seamlessly with modern corporate décor. At the heart of the system is feature packed Host Unit with comes with free bundled software 'DCS Control'.

The new DCS-9000 series is an end-to-end fully digital system which provides better Control, better Sound and sophisticated Features to the users.

Be it an offline or an online conference, DCS-9000 is compatible with both. You can reinforce sound in live-room and at the same time use it with any popular cloud meeting application with camera tracking. The external camera Pans Tilts and Zooms to the person who is speaking on the delegate unit. The audio integration can be done with any USB Audio Interface.

### System Components of DCS-9000 Chairman/ Delegate Units:

The units are rugged and yet aesthetically built with textured dark grey color and touch keys. Equipped with LCD for showing general information, voting process and results. They come with a detachable gooseneck condenser microphone with superior sensitivity. Built-in speakers deliver highly intelligible sound. Headphone jack is also available for personal listening. Priority button in chairman unit is provided to override all delegate units.

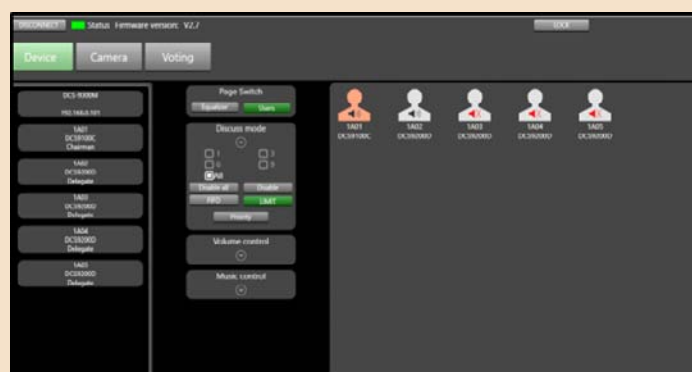
### Host Unit:

32(16+16) delegate and chairman units can be connected in two parallel lines in a daisy chain manner. Total number of delegate units can be scaled up to 72 by using additional expansion units. Cat-6 patch cords are used for connections and RJ-45 connectors ensures easy plug and play installation.

Host unit provides 1-button feedback suppression utilizing the DSP engine. Recording the conference audio is also made easy with the available USB port.

The host unit connects with the local network to give user control from any Windows PC with the AHUJA's free software- 'DCS Control'.

It also has a dedicated microphone input for the real-time interpretation.



**CM-5000 and CM-4000 with Device Control and Monitoring**

RCA inputs and outputs for external speakers and any other audio integration are also provided on the back-plate of Host Unit. Back-plate also features RS-485 interface for PTZ Camera Integration and a LAN port for PC Control.

### Expansion Unit

The Expansion unit is used in tandem with Host Unit to connect Delegate units beyond 32 numbers. Just as Host-Unit, Expansion unit also supports up to 32 Delegate units.

**DCS Control Software:** The software offers User-friendly GUI for easy access to powerful features of DCS-9000 series.

**Device Control and Monitoring:** This lets the user control the meeting from the software screen. User can select number of open microphones, change

the discussion modes from LIMIT, FIFO and ALL. Volume and Media Playback can also be controlled from this screen.

**DSP Control:** Say goodbye to the horrible feedback in your conference room with the help of the built-in DSP engine. The user can easily eliminate the feedback according to the acoustics of the room, occupancy and other factors.

**Camera Control:** User can control the external PTZ Cameras right from the software screen. This screen is also used for configuration and defining presets for camera tracking feature.

**Voting:** The voting process can be initialized from the Host Unit buttons as well as from the software screen.

## A&H EXTENDS INSTALL RANGE WITH NEW HARDWARE OPTIONS

**Allen & Heath** has announced several new additions to its installation portfolio, including compact Dante breakout boxes, touch-screen control panels, and an echo cancelling module, further cementing the brand's reputation as a one-stop solution for sound management and distribution.

The **AHM-64 audio matrix processor** can benefit from hardware based echo cancellation via the AEC processing expansion module, providing 12 channels of AEC with a 150ms adaptive FIR filter, non-linear processing for residual echo and background noise reduction, plus AGC (Automatic Gain Control) for

the far-end signal. Offering multiple benefits over cloud-based echo cancellation, including the ability to handle multi-microphone setups and dedicated Sound Reinforcement outputs, the AEC module offers a step-up in audio quality for teleconferencing and videoconferencing applications in meeting rooms and conference centers.

Three new Dante interfaces bolster Allen & Heath's Everything I/O range of audio expanders: the DT20 with 2 mic/line inputs on combi connectors; the DT02 with 2 line outputs on XLR; and the DT22 with 2x2 I/O on Phoenix connectors. The compact form-factor, in conjunction with rugged aluminum casing, makes these suitable for the rigours of portable AV hire, while surface-mount and rack-mount kits enable integration into more permanent installs.

Rounding out the new install offerings, the CC-7" and CC-10" touch panels

augment the existing range of remote-control options for AHM-64, dLive and Avantis mixers. PoE powered and pre-configured to run the Allen & Heath Custom Control app in kiosk mode, they offer an elegant alternative to BYOD in houses of worship, corporate and educational facilities. Multiple user interfaces can be designed by the installer or system integrator, uploaded to the mixing system, and instantly deployed to all connected Custom Control devices.

"We are responding to a changing paradigm where every room is a potential videoconferencing facility, audio needs to reach new spaces over complex networks, and AV control gets more distributed and user specific" says **Nic Beretta**, Head of Product at Allen & Heath. "The ecosystem approach, scalability and flexibility are what make our products a top choice for many integrators, and these latest additions are a perfect example."



**AHM-64 for dedicated Sound Reinforcement outputs**



## AMX BY HARMAN PRESENTS MATRIX SWITCHING, WINDOW PROCESSING, AND HDMI-TO-USB CAPTURE PRODUCTS

**HARMAN Professional Solutions** introduces six new products that transform today's meeting and lecture spaces utilizing software-based conferencing platforms like Zoom and Teams as well as meet many capture, switching or window processing needs.

The debut includes four new **Precis PR-Series matrix switchers** supporting up to eight sources and eight outputs, the new **Precis PR-WP-412 windowing processor** to dynamically window up to four sources, and the new **UVC1-4K HDMI to USB 3.0 capture device**. Whether used individually or together, these products ensure incredibly impactful collaboration at a powerfully competitive price point.

Ideal for affordable yet beautiful video routing in small to medium installations, the new Precis PR-Series Matrix Switchers are available in four configurations - 4x2, 6x2, 4x4 and 8x8. All models include best-in-class capabilities like pixel-for-pixel video reproduction, fast switching, comprehensive EDID management, HDMI audio



**The PR-Series Matrix Switchers supports auto-switching in small applications**

de-embedding, an open control API, and a simple-to-use web interface. The PR-0402 also supports auto-switching to provide touch-free video switching in small applications.

The new AMX PR-WP-412 is both versatile and cost effective by combining a 4x1+1 windowing and a 4x2 seamless matrix switcher in a single, compact

unit. Collaboration in meetings and distance learning can be enhanced and amplified with included technologies like truly seamless switching, class-leading 4K60 4:4:4 video quality, integrated audio breakaway, an open control API, and a simple-to-use web interface.

The new UVC1-4K capture device solves the immediate issue of PCs that

lack HDMI or other video inputs. The UVC1-4K seamlessly delivers content from video cameras, document cameras or other HDMI sources into software-based conferencing and streaming applications via the computer's USB port. Features include 4K60 4:4:4 video input, HDMI and separate analog audio input, standard UVC interface and control, and USB 3.0 output up to 3840x2160p@30fps.

"The proliferation of software-based conferencing has created a momentous shift in the AV designs of traditional meeting and lecture spaces," said **Jeff Burch**, HARMAN Professional Director of Video and Control.

"This suite of new products ensures users are equipped to take advantage of the enhanced capabilities of the modern collaboration space as well as simplifying AV management for just about any application. And no matter which of these new products best serves your need, they all provide legendary AMX reliability, security, and ease-of-use."

## ANALOG WAY LAUNCHES NEXT-GENERATION PICTURALL MARK II MEDIA SERVERS

**Analog Way** has announced their next generation of Linux-based media servers: the **Picturall Mark II** series. Entirely engineered around a new, robust and professional hardware platform, the new Picturall Mark II series delivers outstanding

performance for supporting large-scale events and installations from a single server unit while offering ease of use and rock-solid reliability at affordable prices. The new line replaces the current Picturall media servers and includes four products: Picturall Pro Mark II, Picturall

Quad Mark II, Picturall Quad Compact Mark II and Picturall Twin Compact Mark II.

With the ability to drive up to sixteen 4K@60Hz LED videowall controllers or video projectors from a single server unit and enough power to play back media up to 16K@60Hz or uncompressed image sequences up to 8K@60Hz, the Picturall Mark II series is the obvious solution for challenging video playback for fixed installations, museums, broadcast, houses of worship, video rentals and live events.

The Picturall Mark II media servers have

been designed with hardware components to provide a robust, heavy-duty platform and deliver optimized uptimes and durability for any mission-critical applications, the Picturall Mark II media servers are based on Linux software engine by Picturall. Additionally, the Picturall Mark II media servers feature a redundant, hot-swappable power supplies option to achieve high fault-tolerance capability.

The Picturall Mark II media servers can receive up to six low-latency input cards to capture either up to 24x 1080p@60Hz or 6x 4K@60Hz sources. A wide selection of input interfaces is available supporting one or more channels of 3G-SDI, HDMI 1.4 or HDMI 2.0. The Picturall Mark II media servers can also receive several network video streams and are compatible with NDI live video streaming. They can also display HTML-based web content with full Java script support.

The Picturall Mark II media servers come standard with read-intensive professional drives offering consistent performance and reliability for demanding 24/7 environments. Several storage options are available to store hours of

high-quality uncompressed video content. The Picturall Mark II media servers offer high network bandwidth with two standard 10 GB/s Ethernet connectors for faster transmission of massive media files and for more networked video streams.

The Picturall Mark II media servers offer synchronized multi-channel audio playback and support real-time audio de-embedding and routing from HDMI or SDI sources, network streams and web sources. The Picturall Mark II media servers feature several optional audio interfaces and are also compatible with a wide variety of third-party multi-channel USB audio interfaces.

The Picturall Mark II media servers provide dozens of powerful features to meet the expectations of the most demanding customers. All products in the range feature Art-Net interface and Ethernet control via a standard TCP/IP socket connection supported by all major third-party control systems. They can be also entirely configured and operated by Picturall Commander and powerful user interface.



**Picturall Mark II Media Servers offer high network bandwidth for transmission**

## ATLONA EXPANDS ITS OMEGA SERIES

Atlona has unveiled the latest entry in its Omega Series of AV integration solutions for modern workspaces and meeting environments: the **AT-OME-SW21-TX-WPC** wallplate switcher and HDBaseT transmitter. The successor to the company's popular , the new device uniquely combines HDMI and USB-C switching with extension of both AV and USB data in a U.S. one-gang, wallplate form factor.

"The exponential growth of online meetings and soft-codec conferencing has reinforced the importance of USB data in today's evolving AV workflows," said **David Shamir**, Vice President of Product Management, Atlona. "The transition from shared devices to BYOD also continues to accelerate, increasing the need for inconspicuous AV connectivity even in highly-visible locations. The OME-SW21-TX-WPC builds on our proven wallplate transmitter family with single-cable, USB-C AV and data connectivity and an integrated USB hub to efficiently address these trends."

The OME-SW21-TX-WPC transports video, audio, display control signals and – when paired with Atlona's **AT-OME-EX-RX** receiver or **AT-OME-SR21** switcher – USB data via HDBaseT over distances up to 330 feet (100 meters).

The transmitter supports video sources up to 4K/UHD at 60 Hz with 4:2:0 Chroma subsampling and is HDCP 2.2 compliant for delivery of protected content.

The **OME-SW21-TX-WPC**'s USB-C input supports both AV and data, enabling simple, single-cable connectivity for recent Mac, Chromebook, and Windows PCs as well as smartphones and tablets with AV-capable USB-C ports. Separate USB 2.0 interfaces and the built-in USB hub support an additional host system and a peripheral device such as a speakerphone or microphone, making the device an ideal extension solution for soft codec and web-based conferencing applications when used with a compatible Omega switcher or receiver. The USB type B host interface can also be paired with the HDMI input for synchronous switching of video and data.

Offering presenters, educators and meeting participants convenient yet discreet AV and data interfacing on walls, in furniture or in floor boxes, the OME-SW21-TX-WPC also includes powerful automated features that enable touch-free operation. Automatic input selection intelligently switches between inputs when sources are connected



**AT-OME-SW21-TX-WPC wallplate switcher & HDBaseT transmitter with Separate USB 2.0 interfaces**

or removed, while automatic display control turns compatible monitors and projectors on or off without the need for an external control system or user intervention.

The ultra-compact, single-gang form factor of the OME-SW21-TX-WPC minimizes space requirements, while

its included, interchangeable black and white trim kits allow inconspicuous installation across a wide range of environments. Power is supplied remotely over HDBaseT from an Omega receiver or switcher, simplifying wiring while maximizing installation flexibility.

## NEUTRIK DEBUTS NA2-IO-DPRO CONTROLLER V2.0

**Neutrik** has issued an update of its **FOC Controller** app for its compact, ultra-robust **NA2-IO-DPRO I/O** Dante interface device that enables connectivity of legacy analogue and non-networked digital audio equipment within Dante audio networks, in the most demanding application environments. The DPRO Controller gives users remote control of device functions such as level, mute, gain, phantom power, input signal (including patching input signals to either output) and low-cut filter; as well as monitoring the status of the device and providing the ability to change its network settings. DPRO also enables save, recall and loading of user presets. V2.0 introduces a completely new device discovery mechanism that dramatically improves the response speed of the software and enhances the user experience by separating ONLINE and OFFLINE devices. For optimal performance DPRO Controller V2.0

should be used in combination with the latest (v9.14) firmware and the website download bundles the updated controller and firmware.

Available in Windows and Mac OS versions, the Controller app requires a minimum of 2GB RAM, better than 1280 x 1024 pixel display resolution, and Windows 7 or later and Mac OS 10.12 or higher. The NA2-IO-DPRO front fascia features two inputs on XLR, switchable between mic and line level and AES/EBU, and two XLR outputs switchable between line level and XLR/EBU. The rear panel sports Primary and Secondary Dante ports, making it one of the most versatile and powerful portable Dante audio interface devices on the market. XLR connector and Ethernet ports are lock-

able and the ultra-rugged form-factor has a movable rubber safety casing for maximum reliability in field production applications. Optional mounting

brackets or a rack panel, allow all three devices to be mounted on the underside of tables, in floor boxes, outboard racks or on a truss.



**The NA2-IO-DPRO features two inputs on XLR**



## EAW DEBUTS NTX SERIES LINE ARRAY AND SBX SERIES SUBWOOFER SYSTEM

**Eastern Acoustic Works (EAW)** has announced **NTX Series Line Array** and **SBX Series Subwoofer**. EAW's NTX201L will deliver high-performance solution that streamlines setup to deliver maximum results in minimal time. It is a 2x10" articulated array with an integrated 1600W two-channel amplifier and universal PFC power supply. The NTX210L operates in the 55 Hz – 18 kHz range with a max SPL of 140db and has a 90° horizontal and 12° vertical nominal beam width.

With the NTX series, achieving optimal sonic performance has never been easier or more accessible. Different from other powered line array products, the NTX's patented OptiLogic technology provides au-



**EAW NTX Line Array**

tomatic array self-detection via onboard infrared sensors and accelerometers, and near instant optimization including air loss compensation and more. The NTX series features integrated Dante networking (with loop-thru) including analog redundancy capability, allowing the analog input to be set to automatically enable if the Dante signal is lost.

EAW also introduces its SBX Se-

ries High Output Subwoofers. The SBX Series active 18" subwoofers include the SBX218 (capable of a total 5,000 watts) and the SBX118 (capable of 2,500 watts). Both operate in the 25 Hz–120 Hz frequency range with a max SPL of 141db for the SBX218 and 135db for the SBX118. Both models feature exclusive 18in neodymium



**EAW SBX Series Subwoofer**

woofers with four-inch voice coils. While the SBX Series Subwoofers are mechanically designed to complement the NTX210L Line Array, they can support other systems, such as the EAW Anna ADAPTive and RSX Series lines.

## CELESTION DEBUTS THE NEW CDX1-1412 HIGH FREQUENCY COMPRESSION DRIVER

**Celestion**, the supplier of professional loudspeakers and compression drivers for sound reinforcement applications has introduced the new **CDX1-1412 1"** exit, neodymium magnet high frequency compression driver. The unit's ultra-compact size makes it ideal for small two-way cabinet designs and other highly portable applications, at a very attractive price point.

The CDX1-1412 is the latest of Celestion's high frequency compression drivers, and features plenty of output for a driver this size: 35W (AES standard), 70W (Continuous) power rating, and 107dB sensitivity across a 1500 to 20 kHz frequency band.

Designed and developed at Cele-

stion's headquarters in Ipswich, England, the CDX1-1412 features a 34mm/1.4-inch diameter edge wound copper clad aluminum voice coil, and a 25mm/1-inch exit size. The new driver provides 70-watt power handling and delivers a 107dB sensitivity performance over a frequency range of 1,500-20,000Hz, with a recommended crossover frequency of 2,000Hz. The unit features a single piece Polymide film diaphragm and surround, and is fabricated using a rigid engineering thermoplastic with a standard 2xM5 bolt fitting. Acoustic foam is utilized to minimize internal air cavity resonances, dampening unwanted reflections from the inside of the cover.

"With a diameter of only 60mm, the

CDX1-1412 is extremely compact for a one inch exit compression driver, enabling the device to be fitted into small cabinets where space is critical, or to be used with multiple driver horns," explains Celestion Product Marketing Manager **Ken Weller**. "It has highly optimized neodymium magnet assembly and a single piece polymide diaphragm which means the driver rates at an impressively high 35-watt power handling, measured to AES standard. This makes the device a serious contender for a range of fixed install and compact array applications."



**CDX1-1412 with single piece Polymide film diaphragm**

## ATLONA LAUNCHES AT-WAVE-101 WIRELESS PRESENTATION PLATFORM



**AT-WAVE-101**  
with programmable IP display control

**Atlona**, a Panduit company, is continuing to innovate at the forefront of the ongoing BYOD AV movement with the unveiling of the **AT-WAVE-101** wireless presentation and collaboration platform. Designed for easy content sharing from iOS, Android, Mac, Chromebook, and Windows devices, the WAVE-101 is available immediately and lets up to four presenters display their content on screen simultaneously in dynamically adapting layouts.

"The built-in wireless BYOD capabilities of our AT-UHD-SW-510W and AT-OME-MS52W switchers have been very popular with our customers, but

we have also seen growing demand for a standalone wireless device for use on its own or as part of a larger AV system," said **David Shamir**, Vice President of Product Management, Atlona. "The WAVE-101 leverages our extensive BYOD experience and customer feedback to meet this need, together with several unique, powerful features at very competitive pricing."

The WAVE-101 directly supports all popular, device-native, wireless casting protocols including AirPlay, Google Cast, and Miracast. This enables exceptional convenience for ad hoc presenta-

(Continued on page 44)

## AVKRAFT INSTALLS STATE-OF-THE-ART HARMAN SOUND SYSTEM AT ST. JOSEPH'S COLLEGE

When you scour through the list of colleges in Calicut, there is one college that you most likely will not miss, **St. Joseph's College** (Devagiri College). For more than five decades, they have been in the spotlight among the leading institutions when it comes to the arts and sports. Perhaps this track record is what led them to erect a huge indoor stadium spanning 4,000 square meters- Enough to hold a few thousand people - inside their campus.

Named after **Fr. Joseph Paikkada CMI** in recognition for his numerous contributions to youth and sports affairs in Kerala, this indoor stadium will no doubt take this institution to a whole new level in terms of prestige and achievement. And besides, this stadium could be a source of revenue as well, by renting it out for conducting mega-events such as concerts and international sports events.

With all these varied goals in mind, what they needed was a facility that could boast global standards. The architecture of the complex was sleek and huge with a huge floor area for activities. But it would be incomplete without an equally impressive sound system. So when the construction reached its final stages, they started looking for Audio-Visual Consultants.

**Fr. Bonny Augustine**, the College Admin recalls, "When we decided to implement a good sound system, we began searching for a consultant. Although some parties came forward, our committee was anything but satisfied. And that's when I was introduced to **AVKraft**. It was they who gave us a clear idea on how to proceed."

**AVKraft** is Audio, Visual & Facade lighting consulting and system Integration Company based in North Kerala. They were brought in to install a comprehensive, powerful, and superior audio system inside the indoor stadium. The Company has been designing and building audiovisual & facade lighting systems for monuments, auditorium, mosques, churches, schools and many other related businesses all around North Kerala.

However, they were confronted with a couple of daunting challenges



**AVKraft deploys a comprehensive sound solution system catering to different events at the indoor stadium**

es when they undertook the project. The foremost challenge was that the large hall proved to pose an acoustic problem. The speakers wouldn't be able to equally distribute the frequency throughout the stadium because of its shape. It would also produce multiple reflections at some points in the stadium.

Another challenge was that the sound system had to cater to different events – from small assemblies housing few hundreds to mega-events with thousands of people. But the ultimate challenge was working around these problems by staying within the budget they were given to work with. If they aren't smart about this, there was no doubt that the whole project would go awry.

But being the audio specialists that they are, the team led by the Technical Consultants and System integrator, **George Matthew**, stepped up to the challenge,

With extensive experience as a live sound engineer and fixed installation expert, George started knitting his plan together to bridge the gap between installation and live sound systems in the indoor stadium.

Usually, an AV expert's job would have been to install some speakers and operate them for an event. But today it's more sophisticated and tedious. The expert has to bring in their team of engineers and technicians to set up a

whole sound system - from designing and running simulations to integrating and installing the sound systems. It's all about creating an ultimate sensory experience for the participants. In this case, the planning and designing phase took a couple of weeks.

The team used the **VRX Array Processing software** to design the configurations. By using this, they could get around the acoustic challenges that the auditorium posed and even out the frequency distribution throughout the stadium.

After much deliberation, they decided that the **Harman Sound System** would be perfect for bringing out the best sound quality in the stadium as it relied on the powerful **JBL audio technology**. "It's a huge site," George said "we did the **CAD** drawings and the **EASE** simulations, tested lots of speakers, and finally decided to go with the **JBL line arrays**. We particularly selected the **JBL VR series line arrays** and focused on the audience area and adjusted the level."

But right when the work was picking up pace, COVID-19 struck and things came to a halt.

Work stagnated as the material prices hiked and transportation ceased, which resulted in many technicians being unable to reach the site. But despite the setbacks, George was dead set on finishing the project on time. So he took everything into his own hands and carried on with the project.

But one problem was followed by another as the expensive cable wires had to be repurchased because the stadium flooring had already been completed and the wiring of the stadium did not align with what the technicians had already drawn out. So the 400m high-quality imported **Belden cable** was rendered insufficient. An additional 1,100m wire of the same quality was needed to complete the cabling.

This was impossible given the

*(Continued on page 15)*



## MACKIE & DYNATECH FOSTER A DIVINE EXPERIENCE AT VICTORIOUS LIFE AG CHURCH

Based in Chennai, **John Pro** is a pro-audio company in Tamil Nadu having numerous church and auditorium installations in the region. They have recently fitted the Victorious Life AG Church in Pondicherry with 6 units of the powerful **Thump15A loudspeakers** from **Mackie** and a **Digi24 mixing console** from **Dynatech**.

**Jaychandra** from John Pro who consulted on the installation shares, "The management at Victorious Life AG Church wanted to do a complete overhaul of the church's audio and were looking for a comprehensive package to deliver top-notch sound for speech and music during their regular services. We chose to go with the Mackie Thump15A powered loudspeakers owing to its astounding audio pick-up and pristine delivery. These speakers deliver a feature set that no other model in its class matches up to. As for Dynatech's Digi24 mixing con-



**Victorious Life AG Church enrich their regular service experience with the new Sound System**

sole, it is undoubtedly a fantastic asset with a multitude of features packed into its compact size, and is very easy

to use. Not only is the church committee elated with their new sound system, but even the church attendees

are in awe of how beautifully the pastor's words are translated through the system."

### AVKRAFT INSTALLS STATE-OF-THE-ART HARMAN SOUND...

(Continued from page 14)

fact that the pandemic ceased international transportation. But thanks to Bangalore based **4 Squares Corporation**; **Tajo** managed to get the rest of the cable without much hassle. All the **Neutrik connectors** used were also provided by the same company. After the cabling was all done, the next step was to rig and install the sound system. But since most of the technicians could not reach the site to install the system, George took a different route. He sought out **Nathan Lively**, a US-based AV expert to run the rigging simulations. Despite the differences in time zones, they worked things out over Zoom calls. This helped George to work with the best possible installation solutions even though it shot up the installation costs.

With the limited manpower AVKraft proceeded to install the whole audio system. Striving to finish the project on time was a herculean task, but AVKraft pushed through. They installed a total of eight **JBL VRX932LA-1 passive line arrays**, four on the left and four on the right respectively as the Front of House speakers. In the rear, six of the same speakers were installed, 3

on the left and 3 on the right, to serve as the delay speaker system.

Six **JBL VRX918S-1 subwoofers** supported by two **Crown XTI6002 2Ch power amplifiers** were placed under the stage because of the slight issues that stemmed from rigging. Even though it was ideal to rig them on the ceilings, it was clear that subwoofers were better placed under the stage after running numerous simulations. To capture amazing sound quality, two **AKG Dynamic Mic D7 C S wireless microphones** and two **AKG WMS470 presenter wireless sets** were provided. The stadium's green room also boasts excellent sound quality after installing two **JBL Control 28-1 passive loudspeakers** with a **Crown XLS1002 2Ch power amplifier** for additional reinforcement.

On top of that, four **JBL VRX915M 15-in passive loudspeakers** as stage monitors were installed, supported by two **Crown XTI6002 power amplifiers**. The system can be controlled by a **Sound-craft SI Impact digital mixing console** along **32i stage-box**, with **AKG K72 headphones** and a **D5 C S talkback mic** for real-time control and manipulation of the system.

The transmission is handled over **BSS Blu-100 DSP**, with the DSP selected for

its ease of use and accessibility. Since lots of different people will be operating such a complex system, George locked it down so that no outsider could interfere and manipulate the systems. "It supports us as the systems integrator and also guarantees that we can deliver the perfect output for different events," George said.

For small events with less audience, using the whole sound system would be a waste of resources. So **JBL's Eon one pro [portable seven-channel PA system]** was provided which had exceptional quality and could be carried around anywhere. With that, the installation was complete. The only thing left was to test the whole system. For this, the college had already planned an inauguration program with a light music show.

On the day of the inauguration, Professors, College officials, and CMI congregational members came and took their seats. But due to the pandemic, the sound system operator couldn't reach there. But that didn't matter as George Matthew himself was a live sound engineer and did the sound mixing. As the choir started singing, the harmonic vocals accompanied by a violin, keyboard, cajón and guitar filled the entire stadium.

Everyone basked in the transparent quality of sound the Harman Sound System produced. There were absolutely no dead spots or reception issues anywhere in the stadium. Every single syllable spoken on the mic was crystal clear. A resounding applause ensued when the program finished. Each one present there were ecstatic for the success of the project. They went up to George and congratulated him for the amazing job that he'd done.

Father Bony had nothing but praises for the success of this huge undertaking. It was more than what they'd bargained for with such a tight budget. He went on to say that AVKraft will be their go-to team for developing the next phase of AV experience in the auditorium.

The project wrapped up on time thanks to the collaborative success between everyone involved, the AVKraft team, St. Josephs College, Cinettek (Master Dealer), 4 Square Corporations (dealer - Belden & Neutrik) and Harman Sounds. With this world-class infrastructure, St. Josephs College has set a new quality standard for educational institutions across Kerala.



### BETA3 ELEVATES THE ACOUSTIC EXPERIENCE AT HOTELS

Beta3 caters to the hotel segment with the latest sound systems. The company recently installed a fine quality audio system that complements **Ramada Hotel's** facility followed by upgrading the audio system at **Malabar Hotel**.

Located in the heart of Aligarh, Ramada hotel by Wyndham is a top-notch travel destination. Built with a unique, distinct, with a property size of 8000 square meters, the hotel includes guestrooms, conference rooms, a banquet hall, a fitness center, an outdoor pool as well as entertainment and dining amenities. Adding to its allure as a top-notch travel destination the property required premium audio systems that enhanced its facilities with pristine sound and provide travelers an elevated guest experience and reached out to beta3.

In December 2021, Meeting the hotel's sound requirements the



Ramada Hotel elevates the guest experience with Beta3's Acoustic setup

al acoustics and creating a fun, party atmosphere, the system also features **Beta 3 X10i-two-way speakers, QS600, Sigma J218-dual 18" high powered subwoofers and MU12ba compact subwoofers**. Plus, in case of an emergency,

their design and solution. Known as one of the best hotels in Kasol, Malabar Hotel spans more than 5,000 square feet and offers guests a one-of-a-kind exuberant stay and nightlife experience. The impressive facility features an

vironment with crystal-clear sound, the integrator installed **Beta3 VR110** high power two-way loudspeakers as the main PA, while **QS600 speakers** supply delay fills. Adding accurate, authoritative bass, the system



Beta3 Revamps the Audio Experience at Malabar Hotel with their Design Solution

audio integrator designed and installed a cutting-edge Beta 3 Professional audio solution. For the system that covers the hotel's lobby, canteen, all-day dining area, the bar, rooftop and pool areas and fitness center, the integrator installed **BS4002 and CSP6 ceiling loudspeakers**. Further adding exception-

the audio system is synchronized with the hotel's fire alarm system. **Sigma C2600U** signals processor maintains peak audio performance and provides versatility. In addition to **DT4000 amplifiers, Ua1330 and Ba3240 amps** were used to power the system.

In July 2021, beta 3 revamped Malabar Hotel's audio experience with

indoor clubbing space with a DJ booth and dance floor as well as an outdoor terrace with a patio and bar. Looking to take the impressive venue to the next level and offer an even greater partying experience, Hotel Malabar upgraded its sound systems to Beta Three Professional audio solutions

Filling the hotel's bar indoor club en-

features two **Sigma J218 dual 18" high powered subwoofers**, which are directed towards the dance floor for optimum performance. The system is powered by **DT 4000 and UA1330 amplifiers**, while **Σ C2600U signal processors** to ensure guests are treated to peak audio quality.



## INDIA'S KNOWLEDGE PLATFORM ON AUDIO VIDEO INTEGRATION SYSTEMS

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## SOUND VISION PRO EQUIPS JEHOVAH NISSI ASSEMBLIES OF GOD CHURCH WITH LD SYSTEMS

Jehovah Nissi Assemblies of God Church in Parassala, Kerala recently built a state-of-the-art 4000 seater church with a balcony and a huge dome. To energize their new premises, they brought in Tamil Nadu based **Sound Vision Pro** for the acoustic treatment and sound installation.

**Jacob Alexander** from Sound Vision Pro who oversaw the entire installation shares, "The church was looking for a clean and efficient sound reinforcement solution with premium brand speakers. After surveying the church that has a 150 member choir and 16 instruments, it was a challenge due to its acoustics; hence we suggested they go with the **LD Systems MAUI 44** as it can cut down the cost of acoustics, all while delivering incredible sound. The pastor couldn't believe that a single speaker could cover such a huge area; so we gave them a demo in the adjoining church with just a single unit of MAUI 44 catering to an audience of 3000+, and all of them were left amazed. They enjoyed the worship and the pastor thanked God for blessing this world with new technology that makes translating the word of God effortless. The media team is impressed with the ease of use and neutral sound of the speakers. Now the church has 2 units of MAUI 44 as FOH, 4 units of



LD System enhances the acoustics at JNAG Church

**MAUI 28** under and on the balcony, and 2 units of **MAUI 11** on the stage for side fills with **LD Systems monitors**."

Speaking with the audience and management of the church, a member of the church comments, "We are grateful to God for this sound in our church and love the worship every time we go to church." "I have used many premium speakers from other brands for my own gigs but I always enjoy mixing with the LD Systems in the church", says **Santosh Kumar** - a well known sound engineer in Kerala. Another mix engineer for the church comments, "My job has become

so much easier with LD Systems." An assistant pastor of the church says, "I had never heard of LD Systems before this and was wondering how a small speaker could cover such a large audience. But when I heard the sound I was blown away."

The senior pastor of JNAG Church, **Rev. N. Peter** said that the LD Systems demo given to them left no doubt that they had to have their speakers and it aided in solidifying their purchase. He mentioned that the MAUI 44 fits amazingly in the church environment and has made life simpler for them owing to

its ease of use and reliability, which helps them focus on the songs and sermons rather than worry about the sound. He said that it does not require much technical knowledge to use the system and anyone can get good sound from it. He was delighted that the LD Systems speakers do not take up much space and said that the cost to quality ratio is excellent. The management is thrilled with their purchase of LD Systems and would like to thank Sound Vision Pro & Stagemix for their service and after sales support.

## DYNATECH DELIVERS IMMERSIVE AUDIO AT DHARMACHAKRA PRABHAV TIRTH

Dharmachakra Prabhav Tirth in Vilholi near Nashik has been faithfully serving the community in addition to its regular services. To energize the premises in the open ground surrounding the temple, they brought in Nashik-based **Prakash Marketing** to equip the space with a modern sound reinforcement solution.

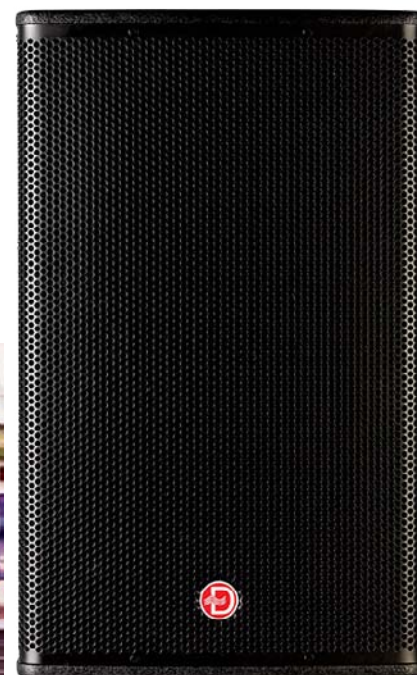
**Ravi Parekh** from Prakash Marketing who was part of the installation process shares, "The Tirth management was looking for an efficient audio system to assist them in providing serene and crystal-clear services. We suggested going with 2 units of the **Dynatech DEL-115** taking into account the area and the management's requirements

of user-friendliness and reliability. The DEL-115s totally nailed it! The speakers convey the sound uniformly across the entire space with exceptional clarity, are compact and deliver top-notch perfor-

mance. The disciples in addition to the management of Dharmachakra Prabhav Tirth are thrilled with how amazing it sounds and have only praises for it."



Dynatech DEL-115 installed at Dharmachakra Prabhav Tirth







*The evolving display market has paved the way for efficiency and productivity. One of the leading Visual display technology market players –ViewSonic, has diversified its range of products. The company provides cutting-edge technology products that deliver the ultimate user experience and performance display solution. PALM+AV-ICN got in touch with **Eric Wei**, Senior Sales Director, Asia Pacific, ViewSonic talks about the company's operations and latest products in the India market while tapping in on the latest trends and opportunities.*

# Dynamics of Visual Display Technology with ViewSonic

Eric Wei, Senior Sales Director Asia Pacific, ViewSonic

**Y**ou have worked in the AV industry for over a decade now, could you tell us little about your journey and experience in the industry?

The audiovisual sector has evolved tremendously in the last decade. ViewSonic has long been an industry leader, offering some of the most cutting-edge visual technology available. Old technologies wane away with time and the newer innovations take the center stage allowing for new scenarios that combine evolution, advancement, and improved quality of products. As a brand, we emphasize on meeting consumer demand and satisfying market expectations. Because of the

economies of scale in the Indian market, products have become more accessible to customers, resulting in higher consumer demand, making quality of life smoother and business more efficient.

**Can you tell us about some new exciting products from Viewsonic in the display as well as projection market?**

ViewSonic India has been expanding rapidly and is launching new and innovative products in the Indian market, keeping technological advancements at the forefront to provide better experience and services to its customers. ViewSonic has recently launched lamp free projectors like LS600WE, X series projectors like X10-4K+ and X100-

4K+ which provides lamp free home cinema projection with better color performance and longer durability, the All-In-One Direct View LED display for high end, enterprise conference rooms and lobbies. A few other projectors like X1000-4K+ are in the pipeline and are slated to hit the market soon.

**Which segments are you targeting for your new display products?**

We work towards the improvement of the products and our aim is to constantly grow and develop. Hence, we are on a constant spree to launch new and innovative products for our discerning customer keeping in mind the needs of our end-users. Owing to

the continuous evolution in technology, our focus has always been to introduce products based on the interest and needs of the Indian consumer in sectors like education, corporate, and home entertainment.

**The demand for 4k or UHD resolution has risen in recent years. How is ViewSonic incorporating latest technology in their products to meet this demand? Could you elaborate on the R&D process of your products?**

UHD is becoming extremely popular these days and our Research & Development team is constantly working towards the amalgamation of newer technologies and trends in ViewSonic



products. As a leader in the display industry, ViewSonic is constantly thinking of new ways to improve UHD performance. ViewSonic, for instance, was the first to use LED light source technology for 4K UHD projection. In addition, ViewSonic developed Pantone validated panel technology for better color reproduction in 4K desktop monitors.

**Does Viewsonic plan to penetrate the consumer segment market with the new launch of the PX748-4K DLP projector for home entertainment?**

ViewSonic has been offering award-winning, innovative and dependable projection solutions for home entertainment environment. Being one of the target segments, ViewSonic has a series of home entertainment projectors including PX701-4K, PX748-4K, X10-4K+ and X100-4K+ Consumer preferences have shifted toward home entertainment products as a result of the current pandemic. Understanding the needs of our end-users, we're introducing new features that are integrated with high-end technologies to provide cinema-like experiences at home at a reasonable price.

**ViewSonic's LS920WU and LS921WU projector features 2nd Generation Laser Phosphor Technology, could you tell us more about this product and how does it stand out from other business projectors in the market?**

Adopting 2nd generation Laser Phosphor technology, the LS920WU offers high and consistent brightness with a lifespan of 20,000 hours, 360° projection, and portrait mode combined for incredible flexibility that gives life to captivating creative installations, especially ideal for auditoriums, board rooms, commercial displays, restaurants, and sports bars. Adding to that, the compact size and the built-in HDBaseT for the perfect mix of high-quality projection and cost-effectiveness.

**What solutions does ViewSonic have to easily Transition to hybrid teaching and learning?**

Bridging the gap between physical classrooms and digital learning, ViewSonic has incorporated various aspects, including hardware such as ViewBoard Interactive Flat Panels, ViewBoard Pen Display and myViewBoard, a visual learning platform. Allowing teachers and students to interact digitally in-

person or online, ViewSonic has been constantly innovating and developing methods for an easier transition during these tough times. myViewBoard, a full-featured digital whiteboard that connects people, technology and tools into one interactive space and can integrate a classroom environment using the same. Other products such as Pen Displays and Interactive Flat Panels provide better accessibility, connectivity and therefore, leveraging for a digitized future.

**The Pandemic has changed the face of academics. How does Viewsonic's hybrid teaching and learning platform assist customers to overcome the challenges?**

ViewSonic has been at the forefront of the EdTech market for many years. From creating digital material and video-capturing classes to organizing digital assignments, ViewSonic's education solutions provide everything that both teachers and students need no matter where they are. Leading their way to the normalization post-COVID, ViewSonic's learning solutions are student-centered to deliver enhanced outcomes for teaching, studying or collaborate anytime, anywhere. No matter what your classroom looks like, ViewSonic will help out in every step of the way towards a better education.

**How is the Viewsonic partner ecosystem structured globally? How does Viewsonic plan to enhance its distribution network in India and what challenges do you face in the Indian market?**

The COVID-19 epidemic had a devastating global impact, particularly in India. When the second wave hit the country in the first quarter of this year, the government's strengthening of lockdown in specific areas created significant issues in terms of material

availability and delivery.

However, ViewSonic has been extending its workforce to create many domains by cooperating with key global technology companies such as Google, Intel, Microsoft, and others. This difficulty with India in its diversity has also been quite an opportunity along the same lines in domains such as education, government, commercial, or home entertainment.

**“ViewSonic has not limited itself to a single industry but has diversified into several. With the country returning to normalcy and rules being relaxed, there has been tremendous growth in the education industry, necessitating the use of hybrid learning models that blend online and offline learning concurrently.”**

**What are your target segments in India with respect to Display solution and Projector systems?**

ViewSonic has not limited itself to a single industry but has diversified into several. With the country returning to normalcy and rules being relaxed, there has been tremendous growth in the education industry, necessitating the use of hybrid learning models that blend online and offline learning concurrently. Also, we have been targeting other major domains of the industry that have been affected the most during these dire times, such as corporate and home entertainment sectors. Pandemic has forced many people to set up a theater-like environment in their cozy homes and watch movies/series rather

than going out, thanks to ViewSonic's ongoing development and adoption of new approaches. The market for lamp-free and home theatre projectors has exploded as a result of this new normal.

**What differentiates Viewsonic from the current market players in the display market and how does Viewsonic plan to align its market strategies for this product?**

ViewSonic has been on a constant approach to develop and innovate technologies. Keeping that in mind, ViewSonic has offered various new and innovative products, such as LED light source technology for UHD projection. Apart from that, ViewSonic has also created a Pantone validated panel technology for a better color in the desktop monitors.

**How is Viewsonic looking to connect with AV integrators and consultants to push your products in this segment?**

One of the most important elements is AV integrators and consultant in order to provide quality products and a reliable after-sales service to AV integrators.

**Would you say that Viewsonic's brand presence in the Indian market is relatively restrained compared to flagship brands like BenQ, Barco?**

Keeping an enhanced brand presence in multiple segments of the industry, ViewSonic has been quite successful in certain domains. With education also being targeted for the same, it has been a non-stop goal to constantly develop and innovate.

**How does ViewSonic maintain the quality of its product in India, given that consumer behavior is influenced by price in India?**

Being a global brand, ViewSonic has never compromised with the quality and materials. Following the standards as per the USA protocols, the control on the quality and materials have never been sacrificed by pricing difference.

**What new products can we expect from Viewsonic in the near future?**

Various new products are in the process of being launched including projectors such as X1000-4K+ and CPB701-4K. Other products such as Direct-View LED Video Wall for corporate purposes is also being launched soon. Pantone validated monitors will be launched as well in the near future.

# An Unequal Music

by **Abhimanyu Malhotra,**  
The Sonic Arts Co.



## NFTS & THE INDIAN MUSIC INDUSTRY

Once every 2 or 3 decades, a piece of technology comes along which drastically alters the shape of our industry. Right from the advent of the 2 track recorder, to 16 tracks, to digital consoles, to cassette tapes, compact discs and digital streaming - all these forms of technology have brought with them a degree of change which has required the industry to adapt to a new way of thinking and operating. The latest and possibly the most disruptive in this series of game-changing technology is the birth of block chain and what is called 'NFT', or a 'non-fungible token', which is in essence a public and decentralized record of ownership of an asset that can be verified in a completely transparent manner.

The very nature of block chain brings transparency to the ownership of copyrights, and is about the shift of power from a central authority back to the creators of the content. It empowers creators to reach fans directly and eliminate the need for middlemen, whether it be record labels, publishing companies, distributors etc. It disrupts traditional industry to pave the way for something more direct, transparent and most of all, fair. It also enables fans to own a piece of work from an artist and till now the co-ownership of creative assets has always been out of reach for music fans.

In a country where the systems of copyright control have long suffered due to abuse of power, the introduction of NFTs can shake things up. NFTs also have a potential to increase the following of an artist and bring more exposure to their content which resides on a digital streaming platform through populating their credentials on the digital ecosystem.

This index is directly proportional to popularity, and as fans become co-investors in content, the word spreads like wildfire, and creates value for both, the fans

and the content creators. NFTs can also help safeguard the tremendous value erosion in the content industry which all artists are subject to. Content which gets lost in the vastness of the internet will now have measurable scarcity, traceable value and proof of ownership.

The Indian music Industry is a follower of global trends, and so it is only a matter of time before we see the

Ethereum, a currency which converted to roughly INR 1.5 crore at the time of sale. This made him a record holder in terms of Indian-origin musicians who have sold their music on the block chain.

NFTs are creating a new paradigm of patronage at a time when earning music royalties is a frustrating and highly convoluted route, and live touring is still down for the count due

**The very nature of block chain brings transparency to the ownership of copyrights and is about the shift of power from a central authority back to the creators of the content. It empowers creators to reach fans directly and eliminate the need for middlemen, whether it be record labels, publishing companies, distributors, etc. It disrupts traditional industry to pave the way for something more direct, transparent, and most of all, fair. It also enables fans to own a piece of work from an artist and till now the co-ownership of creative assets has always been out of reach for music fans.**

major music studios and artists follow in the footsteps of Eminem, Deadmau5, Bappi Lahiri, Imogen Heap and more. Artists such as these have pioneered the demonstration of the future of fan-commerce through the implementation of content through NFTs.

Some of the main gateways for NFT sales and ownership include WazirX, Opensea and Rarible. In fact in late April of this year, a Singaporean-Tamil entrepreneur Vignesh Sundaresan purchased an NFT of Tamil singer-composer Kaber Vasuki's 2012 demo version of a song called Vasanam. He bought it for 50

to the pandemic. Hundreds of Indian artists have started issuing NFTs on the platforms mentioned above, and most of them are just testing the waters. They still need to understand how to drive perceived value and what it actually is that connects a tentative buyer with a particular NFT - is it emotion, is it representative of the intangible connection that we all feel with music and art? As more and more artists catch wind of this, the more we as a community can learn about this disruptive technology and how to harness it in the coming years.

READ





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# PROJECTORS

*Digitalization and technological advancement has contributed to the growth of projector systems.*

*Projectors have gone through a massive evolution with the introduction of laser light sources, which enable much longer use cycles and expanded applications. The pandemic has increased the demand of end-users who are looking forward to a unique viewing experience with flexible installations. This month's product focus features a lineup of Projectors for education and conference rooms. The feature is intended as a guide and does not endorse any of the featured products.*

## BenQ - LK953ST PROJECTOR



**LK953ST** produces 4K UHD 3840 x 2160 resolution with 8.3 million distinct pixels for each frame to achieve standard, and it utilizes the revolutionary 0.47" single-DMD DLP technology. With four times the resolution of Full HD 1080p, 4K UHD delivers awe-inspiring clarity and crisply defined details. Generating razor-sharp images and pure colors, LK953ST eliminates problems such as blurriness, shadowing, and interference patterns for immaculate clarity. Supercharged by HDR10 support with BenQ's exclusive Auto HDR Color Rendition, LK953ST's high Dynamic Range performance offers greater brightness, contrast range, and image optimization in a single step, bringing out every detail in 4K content for superior video display. BenQ LK953ST adopts the cutting-edge 4K Image Amplifying Technology to further enhance the quality of projected images. Additionally, LK953ST also comes with Pixel Enhancer 4K, a motion-adaptive edge enhancement feature that detects changes in the color between an object and its background to produce sharp edges and precise surface textures. BenQ laser projectors are based on the absolute

reliability of the 1-chip DLP design. The highly durable DLP chip can last over 100,000 hours without degradation, ensuring true-to-life colors and pristinely legible text over countless uses. LK953ST's 5000lm high brightness produces wondrous displays in bright, compact exhibition spaces with image quality. LK953ST laser projector creates strikingly clear images with stratospherically high 3,000,000:1 contrast ratio for true deep blacks, vivid rich colors and fine subtle details. LK953ST also features spontaneous response, requiring no wait to turn on or resume from blanking in true black for flexible performance capability.

## EPSON - PRO EX10000SWITCH

The **Pro EX10000** is a full HD 1080p wireless laser projector. Designed to maximize visibility for socially distanced presentations, this sleek projector displays vivid, larger-than-life images up to 300" with 4,500 lumens of colour and white brightness. The projectors display 100% of the RGB colour signal for every frame, providing colour accuracy while maintaining colour brightness, without any distracting "rainbowing" or "colour brightness" issues seen with other projection technologies. The high-performance Pro EX10000 features advanced 3-chip 3LCD technology, Color Brightness, and a contrast ratio of up to 100,000 to produce vibrant, captivating images with sharp details. The 4,500 lumens of colour and white brightness help display in large-group presentations, spreadsheets and videos, even in well-lit rooms. The Pro EX10000 includes a 20,000-hour laser light source with no lamps to replace, that allows for intuitive Zoom video conferencing, and offers easy connectivity to streaming devices, such as Fire TV, Apple TV, Roku, and Chromecast, through the HDMI ports so you can share a variety of rich content, including movies, TV shows and more. Power EX10000 has a built-in 16 W speaker for audiovisual experience and incredible sound quality right out of the box. The Built-in picture skew sensor automatically analyzes the picture and instantly corrects the vertical keystone to help square the image.



## PANASONIC - PT-VMZ50U PROJECTOR

The **PT-VMZ50** with 5,000lm brightness with WUXGA resolution from a compact, stylish 15.87 lbs (7.2 kg) body, this business projector brings dynamic images to any space. The solid shine Laser light source delivers 20,000 hours of consistent brightness and colour accuracy. The virtue of the three-panel LCD design is an absence of rainbow artifacts that can appear on some single-chip DLP projectors with a colour wheel. The PT-VMZ50 business projector offers installation, flexibility in placement and accommodation for mounting errors with 1.6x zoom, V/H lens shift, and short 1.09:1 throw-ratio. The device supports signals up to 4K/30p. The images are converted to 1920 x 1080 for PT-VMZ60/VMZ50/VMZ40 and 1280 x 720 for PT-VMW60/VMW50. The VMZ50U can function as a portable projector, but it will readily accommodate ceiling- or shelf-mounting thanks to its rare combination of vertical and horizontal lens shift. The same RJ-45 LAN connector on the rear panel of the PT-VMZ50U, one of two provided, can accommodate either an Ethernet network input or an HDBaseT-compliant signal. The PT-VMZ50U's integrated USB media viewer offers broad support for file types including .jpeg, .bmp, .gif, .tiff, and .png images. Images up to 2GB can be displayed, and the viewer can address up to 1,000 images on a flash drive.



## NEC - ME SERIES

**ME Series** projectors using LCD technology and a breakthrough lamp design provide all the essential features that you need to simply and reliably connect with the audience at a very affordable price. The bright 4500-lumen, XGA (1024 x 768) native resolution NEC ME453X is ideal for classrooms that need a clear image that can be seen all around the room. The ME Series offers an incredible lamp life up to 20,000 hours which reduces maintenance requirements and lowers total cost of ownership. The ME Series features a broad 1.7x zoom range that provides greater mount placement options for a more flexible installation in projector replacement



applications. The environment is kept in mind with ECO Mode technology, a carbon savings meter and energy-saving features such as quick startup and auto power off. Built-in MultiPresenter functionality allows for screen sharing of up to 16 devices simultaneously via a wired or wireless connection (wireless requires NP05LM1). MultiPresenter is Windows, MAC, Android and iOS compatible. (No Internet access or WAN required). This LCD projectors can be used in large rooms where a greater projection distance with 4500 lm brightness and 16,000:1 contrast ratio that deliver in depth sharp and lively visuals. The XGA - a graphic mode is suitable for spreadsheets and presentations at a budget-friendly price

## OPTOMA - ZH406ST PROJECTOR

**ZH406ST** features High dynamic range (HDR) technology improves contrast ratio, brightness, and color depth on the display, delivers brighter whites and deeper black levels. With short throw lens design, allowing only 1.1m projection distance for 100" big screen experience. This projector is designed with Optoma's Airtight Optical Engine with IP6X certification. The airtight enclosure resists dust particles and ensures a long lasting, reliable and maintenance free experience, and ultimate brightness consistency and reliability. The Mercury free laser light source is rated for up to 20,000 hours enabling a low total cost of ownership. By individually adjusting each corner of the image, it eliminates any crooked or distorted images in off-angle or restricted space installations for that perfect picture. The color matching system, combines accurate measurements across multiple projectors creates seamless blends every time. Images can be projected over a full 360° range along the vertical axis, including reproduction on a ceiling or floor. To maximize energy saving it also includes a 'pause projection'. The ZH406ST is applicable for businesses, conference rooms, higher education, digital signage, entertainment venues, projection mapping, and simulation.







**Aditya Todi, Senior Director of Sales and Marketing, HARMAN Professional Solutions, India and SAARC**

**“HARMAN Professional Solutions’ Senior Director of Sales and Marketing says the IRAA Awards are unique as it recognizes the talent behind-the-scenes; which HARMAN also strongly believes in.”**

**H**ARMAN is supporting the IRAA Awards for the second consecutive year. What is the HARMAN philosophy and vision behind supporting IRAA?

The IRAA Awards are unique because it recognizes the technical fields of music recording and engineering talent in India – which often may not receive the attention they deserve. We support that vision to acknowledge those who exhibit the courage, and creativity to bring about a transformation in the world of music – especially behind-the-scenes. Moreover the industry is going through some tough phases due to the pandemic. Supporting and recognizing talent behind-the-scenes is something we strongly believe in.

**What are some of HARMAN’s latest products for the sound recording and post production industry?**

With industry-leading microphones, reference monitors, and consoles, HARMAN has the perfect solution for any postproduction studio working in film, television and other immersive formats. Microphones like the AKG Lyra and JBL Commercial CSUM10 provide artists with crystal-clear audio quality; whereas headphones like the AKG K361BT/ K371BT offer precision engineered to reproduce natural, balanced audio in exceptional detail, so you can make more confident decisions when you’re mixing and editing. Added to this, products like the JBL Professional Nano K Series studio monitors can address all your recording and mixing needs.

**Over the years, sound recording for music and motion picture production has seen a steady evolution with regards to the technologies used. Formats used for recording sound have changed markedly over the years with the major transition being the move to digital. For instance giant mixing**

**boards are a thing of the past. So how has HARMAN adapted and addressed these changes with your products across your studio brands.**

At HARMAN, we realize the requirements of sound recording professional to lead a more mobile lifestyle. Portability, mobility and accessibility have been key features we’ve added to our legendary audio solutions. For instance, the AKG K361BT/K371BT include a built-in microphone which allows two-way Bluetooth communications along with gesture controls located right on the earcups to answer calls, adjust volume, play and pause music, and more with the swipe of a finger.

The integrated USB audio interface of Soundcraft Nano M08BT and M12BT, compact analog mixers supporting Bluetooth, can work seamlessly with Mac and PC, making it easy for you to use commonly used audio production software to easily record, edit and play audio.

Furthermore, our recently launched modular BRX300 Series makes the power of line array technology accessible to customers who are not trained audio engineers, thanks to its plug-and-play simplicity, built-in corrective signal processing, smart transport system and hassle-free rigging hardware. Now it’s easier than ever to bring that legendary sonic performance to small and mid-size productions.

**Over the last several years the music industry has shifted to online purchases. What kind of impact has this had for HARMAN?**

A significant move in the e-commerce world has been long coming for the professional audio business in India. With greater access and comfort found in e-commerce today, we believe it’s the perfect time for the audience to gain access to our professional range of

products. We have taken this step with all the major players in the e-commerce world, and excited to reach our consumers directly.

With HARMAN Professional Solution’s prosumer range, we want to enable the upcoming and professional creators with tools to build high quality content whatever medium they choose - from video to podcasts to music. With simple plug-and-play operations, all those who aspire to express themselves can do so without any hassle and without ever leaving their homes.

**Whilst the pandemic took its toll on live concerts, there were still some major installation projects and studios being built or refurbished across India? Any major projects that HARMAN was associated with in the past year?**

Despite the pandemic, many installations were executed in spaces such as studios across verticals. We’re proud to have provided HARMAN Professional audio solutions including AKG microphones, JBL Professional studio monitors, and Soundcraft mixers at various educational spaces such as Bundelkhand University, Mudra Institute of communication, IIT Madras, IIT Palakkad; along broadcast companies such as MY FM, Republic Bangla, TV9 Noida, TV18 Mumbai, Broadcasting House New Delhi, DD News New Delhi, among many other private studio spaces.

**Does HARMAN Professional India have any special initiatives for independent music artists and engineers?**

With a focus on engaging the independent music community online, we introduced two special digital initiatives for artists, engineers and other professionals from the industry. HARMAN TechKnow Heroes is a video series where we invite professionals from different verticals of the pro audio industry, such as sound engineer/

music producer KJ Singh, to share the stories of their professional journey, key projects, and advice for those getting started in the industry.

Another social media initiative is hosting an Instagram live session with an artist every month to discuss their training, their projects, how they’re keeping up with the times, and lot more.

**What are the major challenges HARMAN faces in the Indian market?**

With the current pandemic, a major challenge is to keep providing the industry with solutions with lockdowns in most major states and cities. Many studios and artists have had to adapt to a WFH or remote working model – collaborating remotely with other artists. While the industry has largely taken a hit, we’re sure the resilience will help us bounce back together as a community.

**Any new exciting products and solutions from HARMAN that studio engineers can look forward to in the near future?**

We’re excited to be launching various prosumer products under the JBL Commercial banner which will help content creators, news presenters, singers, podcasters, vloggers, and independent artists give their recordings a professional edge.

We’ve also successfully launched products like the JBL Commercial CSLM20 lavalier mic with earphone, CSLM20B battery-powered lavalier mic and CSHM10 handheld vocal mic; and we have many more such prosumer products lined up for content creators, singers, and artists.

Innovation was also brought into the portable speakers’ category with products like JBL EON ONE Compact all-in-one battery-powered portable PA and JBL BRX300 Series modular line-array system.

## API ANNOUNCES LIMITED EDITION API SELECT RANGE

**Automated Processes Inc** (API) has unveiled a new line of pro audio gear, called **API Select**. Designed, built and tested at the API factory in Jessup Maryland, API Select is specifically engineered to complement API's classic mix of mic pre's, equalizers and compressors.

"Over the years, we've acquired the technology and experience to engineer and produce audio products that don't necessarily conform to API's classic component structure or topography," explained API President **Larry Droppa**. "API Select gives us the opportunity to offer gear that's very high quality, but that's different from API's legendary

line of classic products. A great example of this is API Select's new T12 Tube Mic Preamp, which is a 2-channel, all-tube, Class-A microphone preamplifier. Its tube technology is combined with

produces that incredibly rich API sound — but in a distinctly different way."

API is introducing several different API Select products to mark the new line's debut. Rack mount gear includes



**API Select is engineered to complement mic pre's, equalizers and compressors**

API's proprietary AP2516 transformer in the input stage and a custom API transformer on the output stage, so it

the T12 Tube Mic Preamplifier, the T25 Tube Compressor, the SR22 Dual Channel Compressor, and the SR24 Dual

Channel Equalizer. Two new guitar pedals complete the line's introduction; the TranZformer GTR for guitar equalization and the TranZformer CMP for compression effects. Both pedals are designed to fit into a standard pedalboard and both use standard 9 volt power supplies.

"It was particularly satisfying to develop this kind of vintage-style equipment," commented API Engineer **Jeffrey Richards**. "We designed every piece with care and precision, and I have to say with respect for this kind of solid, reliable analog technology. Although API Select is produced in 'small batches', we think the value is enormous."

## KG MOVIE ENVISAGES NEW FUTURE WITH DIGICO AND KLANG

Kolkata-based event management and audio visual rental company, **KG Movie**, is one of the popular choices among event clients in India. Founded in 2001 by **Manoj Singh**, KG Movie has developed an exclusive offering that is a rare, out-of-the-box service for its clients. "To offer the best, you need the best audio equipment, too," shares **Manoj Singh**, Managing Director, KG Movie. "That's why we have invested in a **DiGiCo SD10 with KLANG:fabrik**." Both the DiGiCo console and KLANG:fabrik unit were supplied by Hi-Tech Audio Systems, New Delhi.

Manoj explains why he chose DiGiCo for his company. "The industry is well aware of DiGiCo's reputation and many top-notch live mixing engineers in India are comfortable with DiGiCo SD-Series consoles, which you will find as the most popular choice on artists' tech ride. Moreover, we are India's first company to own a KLANG:fabrik unit which I think will give us a real edge over the competition. Along with Vicky Singh, who is the General Manager-Operation, KG Movie as a company can offer custom-tailored audio requirements to our various clients. With the new DiGiCo SD10 and KLANG:fabrik, we will be able to introduce our clients to the immersive audio quality that will add a real difference to our business approach."

The introduction of KLANG's immersive in-ear mixing solution is a real boost for both mixing engineers and musicians, whilst the KLANG:app, for use with smartphones and tablets, and

their concept of immersive sound for in ear mixing is interesting for the team to experiment with.

"In India, the knowledge of the KLANG setup is limited and Hi-Tech Audio Systems as a company is trying to

for India, it's our sole responsibility to provide up-to-date technical information about the consoles that will benefit the audio market. Though the pandemic impacted our in-person training and product demos, it has not stopped

inspired by KG Movie's cutting-edge DiGiCo and KLANG inventory. It will also help the company to approach more event clients with the latest audio addition."

"This will pave a new way for more



**(Left to Right) Surojit Dhol, Ravi Kant Prasad, Bivash Mistri, Samir Roy**

reach out more audio engineers, rental companies and artists to make them aware of this state-of-the-art immersive technology", says **Vanshaj Sharma**, Application Engineer for DiGiCo at Hi-Tech Audio Systems. "The DiGiCo and KLANG setup will open up new horizons for rental companies to pitch for their clients."

"It's absolutely brilliant what DiGiCo as global brand offers for users," shares **Rajan Gupta**, Managing Director of Hi-Tech Audio Systems. "As a distributor

us from disseminating information via online trainings. Our DiGiCo application engineer scheduled online training with KS Movie's technical team for an in-depth walk-through of the new DiGiCo SD10 and KLANG:fabrik immersive IEM mixing solution."

**Akshay Rajput**, Sales Manager for Hi-Tech Audio Systems, who worked closely with KG Movie to understand what would suit the company's requirement says, "The audio rental business industry of Kolkata will be boosted and

rental companies to invest in DiGiCo as well as KLANG", concludes **Nirdosh Aggarwal**, Director Sales of Hi-Tech Audio Systems. "When you experience something new that you have only heard about before, as an investor you are aware of its pros and cons. Companies like KG Movie will become our living testimony and will justify the capabilities of DiGiCo consoles. And by being India's first KLANG:fabrik owner, KG Movie will achieve new milestones in their business."



## MUSERK ANNOUNCES PARTNERSHIP WITH IPRS

The Indian Performing Right Society Limited (IPRS) has partnered with leading Digital Rights Management Platform, **Muserk**, to collect online Mechanical and Performing Rights. This partnership follows a major deal Muserk recently announced with **JASRAC**, (The Japanese Society for Rights of Authors, Composers and Publishers), Japan's largest musical copyright administration society for Muserk to collect JASRAC's U.S.-based mechanical rights for all digital platforms in the US.

The multiyear deal sees IPRS benefiting from Muserk's "The MLC services" for online as well as offline mechanicals in the United States. Moreover, Muserk will collect for IPRS' mechanical and Performing rights from Apple Music



in Russia (FSU), "It has been a very constructive process striking this deal

with IPRS", says Partner – Head of Global Business Development, **Hans Peter**

**Roth**. "It is obvious that the organization has a focus on optimizing their members' international collections, and we are thus thrilled that IPRS has partnered with Muserk so that our proprietary platform, Blue Matter, can ensure all their members' works are tracked, matched and ultimately swiftly and correctly compensated for."

"Music plays an important role in our culture, and we are determined that the songwriters, composers and all the rights holders receive what is due to them," said **Rakesh Nigam**, CEO IPRS. "We are happy to be working with Muserk as they have proved to be the leader in both the industry and the Southeast Asian region. We know our members are in good hands."

## KRK EXPANDS ITS CLASSIC LINE OF STUDIO MONITORS

Building on **KRK's** legacy of sonic accuracy and performance, the brand announces the expansion of its **CLASSIC** line of studio monitors with the addition of **7- and 8-inch models**. KRK's CLASSIC product range was designed using concepts from the brand's previous ROKIT lines to deliver the same high-quality mixes that customers have come to expect from KRK at a lower price-point.

"We are thrilled to welcome two new solutions to KRK's family of professional-grade studio monitor

offerings," says **Sterling Doak**, Director of Marketing for Gibson. "Joining KRK's CLASSIC 5, the new CLASSIC 7 and CLASSIC 8 provide the enhanced bass response and sound that music creators around the world have trusted for years. Perfect for all genres of music, KRK CLASSIC monitors provide artists, producers, and engineers with the renowned KRK sound, without breaking the bank.

Plus, with three sizes to choose from, there's now a CLASSIC monitor for everyone."

True to their name, KRK's CLASSIC ac-

tive two-way studio monitors are packed with a multitude of time-tested features, including innovative bi-amped Class A/B amplifiers with a built-in automatic limiter and a low-resonance enclosure for minimized distortion and colorization. With the optional ability to engage the +2 dB KRK Bass Boost, the CLASSIC line of studio monitors can hold true to the acclaimed KRK sound that music creators desire.



**CLASSIC** Line integrated with bi-amped Class A/B amplifiers

## MODAL ELECTRONICS ANNOUNCES ALGORHYTHMS

**Modal Electronics**, a global synthesizer manufacturer, has announced an all-new sound library for the feature-packed COBALT Series synthesizers – **AlgoRhythms**. Leaning on the recent v1.1 COBALT Series firmware update, this rhythmic-centered patch collection is set to spice user's productions and performances with polyrhythmic flavor.

Complete with after touch, an expensive mod-matrix and 3-clock synable LFOs (2 polyphonic and 1 global), there's no denying the COBALT Series' rhythmic presets scattered throughout the factory preset banks separate from the pack. Building on this legacy, Modal Electronics set their sound design team

a challenge. Arm the Modal Community with a preset pack brimming with pulsating textures, reactive to the subtle inflection of a truly expressive performance and mapped for tactile control to switch their sound up on the fly. The result: AlgoRhythms. A collection of 30 unique sounds, 20 sequences, 25 rhythmic sounds and 5 uber-expressive performance centric patches, that showcase the sheer power the firmware v1.1 update provides. From pulsating beds, to edgy leads and driving basses, everything the forward thinking creative is included to pepper their production with the power of polyrhythms.



**AlgoRhythms** is mapped for tactile control that helps to switch the sounds

## SOUNDIDEAZ ACADEMY'S AUDIO EDUCATION CURRICULUM GETS WORLD RECOGNITION

The **Audio Engineering Society's** International Conference on Audio Education was held from 22nd to 24th of July 2021, at the Middle Tennessee University, Murfreesboro, Tennessee, U.S.A. This conference was streamed virtually in which 102 faculty, experts and guests presented 42 research papers that highlighted current trends in

audio engineering curriculum from across the globe. The music and sound departments of world-wide universities participated in this event.

A research paper titled '**Soft Skills & Personality Development training program enhancing the productivity of Media related professionals**' from India caught everyone's attention.

This paper has been co-authored by

**Dr. Pramod Chandorkar** and **Prof. Shraddha Sankulkar**. With their more than 20 years of experience, Dr. Chandorkar, an eminent Sound Engineer and Founder-Director of **Soundideaz Academy** Mumbai, India and Prof. Sankulkar, a Psychologist, Educator & Founder-Director of **Mind Matterz's School of Emotional Intelligence** Mumbai, India, investigated the quality & effectiveness of the mind management-based training program, which Soundideaz Academy conducts, since its establishment in 2010.

The paper highlights the importance & effectiveness of inclusion of 'soft skills & personality development training' modules, besides the technical modules taught in a sound engineering & music production-based course at the academy. The unique training program, which the paper proposes, has been tried and tested at Soundideaz Academy for the past 10 years. As informed

by Chandorkar, "Every student at the academy has to undergo audio & music theory related technical training as well as soft skills training pertaining to communication skills, team-building skills, assertiveness management, stress management & interpersonal relationship management to name a few". The research paper confirms the success of the holistic training approach adopted by the academy that aims towards the over-all development of the audio professionals that graduate from the academy. The Audio Engineering Society & the dignitaries at the conference appreciated & have recognized the pioneering effort done by Soundideaz Academy, to give equal importance to both technical education & also the soft-skill management aspect of grooming an audio professional. **Interview with Dr. Pramod Chandorkar and Prof. Shraddha Sankulkar in Sept-Oct 2021 issue of the magazine.**



**Dr. Pramod Chandorkar and Prof. Shraddha Sankulka**

## NEUMANN DEBUTS DSP POWERED KH 750 AES67 SUBWOOFERS

**Neumann** presents the **KH 750 AES67 subwoofer**, a product variant of the highly acclaimed KH 750 DSP for AES67-based environments. The DSP power provides access to Neumann's revolutionary Automatic Monitor Alignment MA 1, thus allowing for room adaptive correction of the entire monitoring system, including even the connected analog Neumann loudspeakers.

"The compact KH 750 AES67 is the ideal subwoofer for all areas in which audio over IP in existing AES67 infrastructure is to be routed all the way to the loudspeakers in a redundant and lossless manner. Its AES67 interface allows to address not only the subwoofer but the entire stereo system, including the speakers connected to the KH 750 AES67," explains Portfolio Manager **Markus Wolff**. "Its dual AES67 audio network connections are fully compliant with broadcast standards such as ST 2110 and ST 2022-7 redundancy. At the same time,

the KH 750 AES67 is also compatible with DANTE generated AES67 network streams."

The acoustic properties of the successful KH 750 DSP have been retained, as well all other features, such as the Bass Manager with four routing modes,

flexible acoustical controls for a wide range of configurations and setup conditions, as well as analog and digital inputs and outputs. Of course, the KH 750 AES67, too, features a powerful DSP engine.

In combination with the Automatic Monitor Alignment - MA 1, which is available for Mac and PC, the entire monitoring system can be precisely calibrated to suit the specific room character. This also includes the monitors connected to it, whose amplitude and phase frequency responses are perfectly corrected and adapted to the monitoring environment. This makes the KH 750 AES67 the ideal complement to all KH-Line analog monitors such as the KH 120, KH 310, and KH 420, as well as to Neumann's DSP-based monitors such as the KH 80 DSP.

The newly developed 10-inch ultra-long excursion woofer features a

powerful, extremely linear magnet system with ELFF technology (Extremely Linear Force Factor). Despite its compact dimensions, the KH 750 AES67 provides bass extension down to 18 Hz. Because the subwoofer relieves the connected monitors of much of the low frequency reproduction, intermodulation distortion is drastically reduced, and the maximum sound pressure level is increased. By adding another KH 750 AES67, even larger systems may be realized.

"The new KH 750 AES67 is Neumann's entry into the continuous support of AES67 networks. It raises the entire monitor system to a new level: deeper bass, higher SPL capability, and even greater sound transparency. In addition, the integrated DSP engine makes it possible to linearize and room-align amplitude and phase via the revolutionary MA 1 system for sound reproduction with unprecedented precision," summarizes Neumann's CEO **Ralf Oehl**. "It is, without exaggeration, the beginning of a new era in Neumann monitoring which is finally making its way into AES67-based environments such as broadcast studios. More products are to follow."



**KH 750 AES67 subwoofer with flexible acoustical controls for a wide range of configurations and setup conditions**

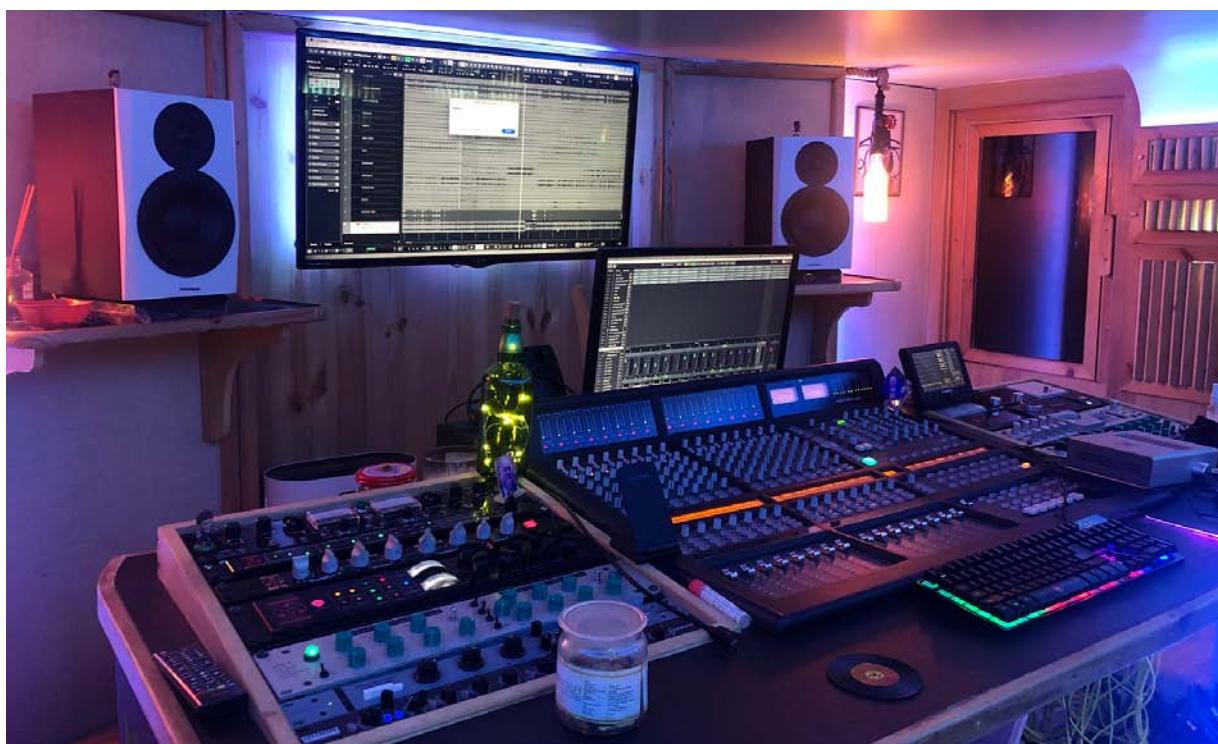


## DOLBY ATMOS UPGRADE FOR HEADROOM STUDIO

**Headroom Studio**, designed by veteran sound engineer **Aslam Khan** and his son **Aftab Khan**, an established Mix and Master engineer who has worked extensively on hundreds of background scores and songs, recently upgraded to **Dolby Atmos**. Located in Mumbai, Headroom specializes in recording, mixing and mastering songs, scores and other audio related projects from the film industry and the independent music scene.

"Dolby Atmos brings surround sound to a whole new level and is a requirement of the day. It has become popular on Smartphones and Home Theatres," said Aslam Khan who expects majority of the work for Atmos mixing to come from Background Scores for Films, OTT and also for music mixes.

Though there were minimal acoustic design changes made to the room for the installation of the speakers for Atmos, the Dolby design guidelines were followed and **Kapil Thirwani** who was the acoustic consultant on this project, deployed a comprehensive setup of 7 Surround speakers, 4 Overheads and 1 Subwoofer. Monkey Banana Gibbon 8 active near field monitors and Monkey



**Headroom Studios repurposed its mastering facility with Dolby Atmos**

Banana Gibbon 10 active subwoofers have been used in the studio. "The only major challenge we faced was to maintain the same level of sound quality in the Monitor Room," said Aslam. The

room also boasts of a **Pro Tools Ultimate** along with **Dolby Atmos Renderer** and **AVID MTRX Studio interface**. The Monitors were supplied by **Beatbox Entertainment** and the AVID interface

by **Ansata**. The Dolby Atmos Calibration was done by **Bhasker Pal** from Dolby.

**Full length interview with Aslam Khan in Sept-Oct 2021 issue of the magazine.**

## PRESONUS REVELATOR IO24 AUDIO INTERFACE FOR STUDIO AND STREAMING

The new **Revelator io24 USB-C audio interface**, integrates high-headroom mic preamps, a two-channel loopback mixer, and extensive processing to deliver polished, professional-sounding results for streaming, podcasting, and music production. Revelator io24 is an audio interface designed for both recording and streaming. Their mixers quickly records Zoom calls or Skype interviews and adds backing tracks and sound effects for podcasts, live stream performances, music production, and more. Engage Stream Mix mode with the click of a button, and it completes mix-analog inputs, loopback channels, reverb, and effects—are routed to the USB output. From there, one can easily send it to their streaming software.

Two analog mic/instrument/line inputs with PreSonus' professional-grade XMAX-L microphone preamps which can be stereo linked, make Revelator io24 a high-quality production front-end. It has two balanced 1/4-inch line outputs, a high-powered

headphone output, professional metering, and zero-latency monitoring. It can record up to 24-bit, 96 kHz audio to the included Studio One Artist or other recording and production software.

The Revelator io24's simple loopback mixer, which makes it easy to add backing, tracks to live stream performances or conference in a Zoom caller to a podcast. With two dedicated stereo channels for loopback audio on mac OS or Windows, which can simultaneously mix and record the audio from two different applications, along with the two analog input channels. Easily remote-control your mixes, processing, and routing using PreSonus' Universal Control software for mac OS, Windows, iPad, and Android tablets. Stream Mix mode turns your Revelator io24 into the ultimate compact streaming mixer.

Process each input channel using PreSonus' famed Fat Channel DSP, which provides a high-pass filter, 4-band parametric EQ, compressor, gate, and limiter. Apply the detuner, vocoder, ring modulator, filters, and delay to create crazy effects. A dedicated



**The Revelator io24 features two dedicated stereo channels for loopback audio**

reverb bus lets you add just the right amount of ambience.

Revelator io24 locally stores two presets per channel, and eight more factory presets can be loaded from Universal Control for fast, no-sweat processing. But the Fat Channel processing also is fully editable, so you can dig in and create your own presets. Presets are available for each processor so you can quickly make customized channel settings. When you're ready to dive into

Revelator io24's compressor and EQ models and more, launch advanced mode to expose a fully editable Fat Channel, complete with State-Space-modeled vintage processors.

Revelator io24 comes with a wealth of software, including Studio One Artist and the Studio Magic Suite, which includes Ableton Live Lite, an impressive collection of virtual instruments and effects plugins, and more.

## SENNHEISER UNVEILS MKE 400 SHOTGUN MICROPHONE IN INDIA

Sennheiser has launched the new **MKE 400** – a highly directional compact shotgun microphone that brings compelling audio to DSLR/Ms and mobile devices alike. For vloggers, videographers, and mobile journalists, storytelling is equal parts – art and craft. Perhaps more than anything else, it is sound that makes a story come to life. To provide creators with a tool to explore their sonic horizons, whether interviews, commentary, or ambiance,

offer our customers the most premium products which are possible basis our expertise and passion for excellence in the sound industry. Over the past few years, we have witnessed a significant rise of content creators in India. Due to this, the Audio for Video segment has seen a growing demand for wireless audio devices. Keeping this in mind, we have introduced the MKE 400 shotgun microphone that provides a crystal-clear recording without any background

while cancelling out distracting noise from the sides. The shock-mounted capsule minimizes handling noise, while the cleverly designed microphone housing doubles as a standard windscreen. For outdoor use, a furry windshield is included: Simply place it over the integrated windscreen for maximum wind protection while recording. The microphone's low-cut filter also does its part in removing problematic low frequencies like the hum from air-conditioning systems or the rumble from wind. In your creation process, you will come across loud and confident speakers – but you will also want to catch those softer voices. The 3-step sensitivity switch adjusts the audio level to the mic input of the camera, helping you to address all the differences in dynamics that you encounter on a shoot. The MKE 400 is not only fitted with a low-cut filter and three-step sensitivity switch to fine-tune your sound but also with a headphone monitoring output and integrated 8-step digital volume control, as not every camera has its own audio output. You can plug any headphone with a 3.5 mm (1/8") jack directly into the MKE 400 and conveniently check levels and audio performance while rolling.

The MKE 400 includes 3.5 mm TRS and TRRS locking cables to be used with DSLR/M cameras or mobile devices, en-

suring that switching from one device to another is accomplished with ease. The mic's cold-shoe mount with 1/4-20 thread allows for universal mounting atop of cameras, gimbals or even at the end of a boom pole. The MKE 400 helps you stay ready by being so compact and lightweight that you can take it anywhere. The microphone housing doubles as a standard windscreen, and the shock-mount is inside it – this not only leaves valuable space in the camera bag but also on the camera itself, providing room for other accessories. Speaking of accessories – the MKE 400's cables are coiled and locking so they stay out of your way and stay securely connected while shooting. It takes just two AAA batteries to power the microphone for up to 100 hours of continuous audio capture. A low battery indicator will reliably warn you three hours before the batteries run flat – more than enough time to finish the shot you're working on.

When connected to DSLR/M cameras, the MKE 400 automatically powers on/off with the camera. So your mic is ready the instant your camera is, and helps you save energy when you're not rolling. Power detection also works with many smartphone models: if you remove the MKE 400, it will automatically turn off. A manual power button is provided too, featuring an off-delay to avoid any accidental operation.



**MKE 400 compact shotgun microphone with 3-step sensitivity switch**

the sound is the key to captivating and drawing in an audience.

According to **Vipin Pungalia**, Director, Professional Segment, Sennheiser India, "Sennheiser has been shaping the future of the industry for last 75 years. We have always endeavored to

voice. We are looking forward to seeing how our customers respond to this."

The MKE 400 achieves its directionality with an acoustic interference tube, providing a super-cardioid polar pattern that ensures pick-up from the direction in which the camera is facing

## DIGITAL MUSIC GIANT BELIEVE ACQUIRES INDIA'S VENUS MUSIC, REBRANDS IT ISHTAR

Leading Indian music record label company, **Venus Music** from the Venus Worldwide conglomerate which was acquired by leading Paris based digital music company **Believe** in 2019 will now be rebranded as **Ishtar** as part of this 100% acquisition.

The acquisition covers all music rights of Venus Music which has a strong catalog of non-film music as well as Indian film music and entails categories such as Bollywood, regional, pop, classical, ghazals, qawwalis, devotional and instrumental.

As part of this strategic move, Venus Music will now not be limited to dominance in the domestic circles but will also parallelly enjoy global leverage through Believe's extensive international affiliations.

**Vivek Raina**, Managing Director,

Believe India states, "This rebranding exercise represents a significant step in the company's evolution. The reputation and equity built by Venus Music over the years is an asset for Believe and with this rebranding, it will evolve the service offerings through new content creation, independent artist association, promotions across television and media, music distribution and other media in India and overseas market. We are also looking at leveraging the catalog to promote and support talent as well as music".

This announcement will be helmed with the release of the very first project under the newly formed moniker by Indian playback singer **Mamta Sharma** best known for her tracks 'Munni Badnaam Hui' and 'Fevicol Se' in the film *Dabangg*. Titled 'Mera Dil Bhi Kitna

Pagal Hai', the brand-new track will release on the Ishtar YouTube channel and all leading digital stores on 5th August 2021. The track is a reprised version of the original song from the 1991 super-hit romantic drama 'Saajan' that featured Madhuri Dixit and Sanjay Dutt. Popular television actor Shaheer N Sheikh and singer Mamta Sharma will share screen space in the music video of the reprised track which has been directed by **Ashraf Ali**.

Mamta Sharma states, "My new release is a recreation of the iconic song 'Mera Dil Bhi Kitna Pagal Hai' from the movie *Saajan*, which released 30 years ago and still continues to hold such a memorable spot in all our hearts. Being an avid Madhuri Dixit fan, this is a project that is very close to my heart and is my humble ode to her legacy. I

had a great time putting this project together. Shaheer is extremely hardworking, humble and cooperative. Bad-Ash has done a flawless job with the lyrics while Ashraf Ali has brilliantly captured the essence of the track in the video. I hope the listeners love this recreated version of the track."

**Shaheer N Sheikh** states, "I had a great time shooting the video with Mamta Sharma as the song is one of my personal favorites. A song which released 3 decades ago gave 'romance' a whole new meaning at that time and till today, it lives on in our hearts! Mamta and I have tried to capture every sentiment attached with the song, recreating this popular track from *Saajan* and hope our fans will appreciate the effort."





Thomas Richard Prakasam,  
Editorial Director, S.I. Asia

# Spanning the Systems Integration Market with Thomas Prakasam

*Boasting of over two decades of experience in the AV industry, S.I. Asia's Editorial Director, **Thomas Prakasam** is an industry expert and veteran. His association with the AV trade professionals, manufacturers and end users has ensured that his publications SI and ETA are among the top industry magazines today. PALM + AV-ICN got in touch with Thomas Richard, who talks about his journey in the industry, the beginnings of the AV market in Singapore and the global AV market trends.*

**W**hich year did you start journalism for the pro audio industry, and which year did you start the magazine. Tell us a little about your journey?

I started my journey in publishing by launching a magazine for the post-production industry mainly targeted at Southeast Asia. At that time, post-production was done primarily in Australia or Thailand. Then a new post house started in Singapore, and they were looking for a communication vehicle to explain what is post-production and about the technologies. It became a regional magazine. This was in the late 80s.

I then, together with my other Director, launched another magazine for the region in 1992. At that time, the entertainment industry, which embraced sound, light and lasers, was popular. The exhibition Pro Audio and Light Asia (PALA) was brought for the first time to Singapore, and we decided to launch E-Line (Entertainment Line) as there were no other magazines that encompassed audio, lights, laser and even video. E-Line had gone through different management and then closed briefly before I revived it as Entertainment Technology Asia or ETA in brief, which is now under the current company's portfolio.

In 2001, I also launched the first-ever regional English-language commercial AV magazine, Systems Integration Asia. We are celebrating our 20th anniversary this year.

Yes, I write for the magazines, but I feel more pride in having identified opportu-

nities and launching the various titles.

**What was the subjective level of involvement with pro audio and audio-visual which made you start the magazine?**

It is simple. Two events mainly drove them. Trade exhibitions related to sound, light and visuals were being launched in Singapore, which was the epicentre for such exhibitions and new technologies in Southeast Asia and even India. Two, they did not have many options for communication with the trade. This offered me the opportunity to launch the titles and continue to serve the "infant" SLV trade industry at that time, even after the exhibition.

**What is your view of the pro audio and audiovisual industry in Asia? And what have been the major changes which you have witnessed down the years?**

The pro audio and AV industry has grown in tandem with the economic growth of the region. Compared to the early years, more sophisticated solutions are being introduced by the industry to the end-users. There is also certainly more professionalism in the industry and those working understand the value they are providing. Many in the industry are also getting certified and are following best practices to ensure complete satisfaction for the

end-users. The industry continues to keep pace with the latest technologies and has also at times been the first to sell globally the latest solutions from brands, showing their confidence in bringing the best to the region.

**Singapore was the epicentre of pro audio in Asia with PALA show in 1990s. Can you explain the dynamics of the pro audio industry in Asia that lead to Asia losing Singapore as a meeting point?**

Yes, you are right about Singapore being the epicentre in the 1990s. I want to highlight that the acronym PALA was coined by my writer back then. She was tired of typing the long-form in the early years. Singapore was the meeting point as we are a free-trade port, and it was easy for exhibition organisers to launch events here. We also had excellent connectivity, which enabled many to come to Singapore easily. I recall during PALA, we had many from India who would fly in and buy equipment lock, stock and barrel from the exhibitors at the end of show day.

Singapore lost the shine, especially where pro-audio and lighting is concerned, because India and China started their own very successful exhibitions like PALM India and now the Prolight + Sound Guangzhou. Furthermore, in the

early years, manufacturers were hungry to meet and appoint distributors. However, that has settled down as most manufacturers have distributors now, so the need to participate in shows in Singapore has been switched from manufacturer led to distributor led.

Singapore does still attract the set-up of brand's regional offices. In a way, the country is still an epicentre but more from the business perspective rather than an exhibition perspective.

**In India the pro audio, AV and Lighting industry is developing at this point. In your experience and learning of the market in India, how would you compare India, in terms of being knowledgeable of product in regard to product application and technology? If you believe Indian market is not matured enough, when do you feel Indian market will mature further?**

I can clearly state that the AV and lighting industry in India is up to par. I have seen absolutely impressive projects done in India. As you may know, we conduct the Systems Integration India Awards, and our judges, who are all from overseas, have remarked at how impressed they are with the entries to the awards. I would like to bring some of the permanent projection mappings in India is outstanding.

India's renowned software expertise will play an even more critical role as AV moves more into software. The Indians are also very quick to learn and adapt. So I sincerely believe that the Indian AV industry has strengths that it can continue to build on and grow.

**With a close understanding of markets across Asia and the world, it would be wonderful if you could give us an idea of how the China disruption (in terms of production sourcing by large companies across the world) has impacted the pro audio, AV, lighting industry in different regions. (Like kindly treat each segment pro audio, AV, lighting separately in your answer)?**

Many international audio manufacturers took advantage of China's lower cost to manufacture their products. This did lead to some transfer of knowledge, and the Chinese started to produce their own brands. What drove the growth of the Chinese brands was the lower cost of the audio equipment, which was especially attractive to cost-sensitive countries like some in Southeast Asia. Some international brands are still manufacturing in China as it is, for now, cost-effective for them. But things might change as salaries in China goes up and trade tensions impact manufacturing.

With lighting, the Chinese were swift

in copying the technology and launching their brands. I think the duplicate solutions most hurt the international lighting manufacturers. You may recall at the international shows, including those in China, brands were going around identifying IP infringements by Chinese manufacturers.

However, in the past few years, there is certainly been a change in trend. There are now China brands across audio, lighting and AV who have certainly come on their own and are manufacturing solutions with their technology and expertise.

On the AV side, especially with LED, nobody can dispute that China is the leader. Many LED manufacturers buy their components from China.

**Your thoughts on road to full recovery (post covid) for the industry?**

It would be country dependent. If a high percentage of the population gets vaccinated, there is a strong possibility of returning to near normal. I believe eradicating the virus is not going to be possible but learning to live with it and mitigate it as much as possible is the way forward. In some countries in the West, we can already see where full concerts are possible with the caveat that attendees must be vaccinated.

We can also see how offices are preparing for hybrid work situations, where

AV technology would play a critical role.

**You have contributed a lot to the growth and development of pro audio and audiovisual. We want you to tell us of how your work and media contributed?**

Thank you. I certainly hope I have contributed positively. Our magazines play an interconnecting role for brands, distributors, industry professionals and end-users. I hope that our coverage has helped the industry in understanding technologies, trends and opportunities. I certainly have, over the years, introduced companies to each other, which has resulted in blossoming business relationships.

But I am more proud of how we have enabled the industry and end-users to upgrade their knowledge. We were the first to bring in the famed SynAudCon training to Southeast Asia. I had so many participants thanking us as they could learn and train from a renowned industry expert without needing to travel to the USA. We brought in Dante training and SDVoE training to Southeast Asia. We brought a house of worship AV trainer to the Philippines, which went exceedingly well. We helped promote and organised CTS training in the Philippines and India.

“

I would like to bring some of the permanent projection mappings in India is outstanding. India's renowned software expertise will play an even more critical role as AV moves more into software. The Indians are also very quick to learn and adapt. So I sincerely believe that the Indian AV industry has strengths that it can continue to build on and grow.

**What is a highlight event in your life that defines fulfilment of what you achieved?**

The highlight to me is connecting and building relationships with so many great individuals from so many countries and knowing that our magazines and events are playing a part in the industries that we are serving.



# N-LABS

## Per Channel Output(Peak)

**X2 - 1200W @ 4Ω**  
**X3 - 2025W @ 4Ω**  
**X5 - 3025W @ 4Ω**  
**X7 - 4225W @ 4Ω**

## Per Channel Output

**X2 - 800W RMS @ 4Ω**  
**X3 - 1400W RMS @ 4Ω**  
**X5 - 2000W RMS @ 4Ω**  
**X7 - 3500W RMS @ 4Ω**

Get in touch to know more  
[www.n-labs.co.in](http://www.n-labs.co.in)



दूसरों के बहकावे में न आएँ, हमेशा सर्वोत्तम का उपयोग करें, केवल N-Labs खरीदें...



# The Bright Spark

Viraf Pocha

## TUNNEL

**T**he Only Light Everybody is looking for these days, lies at the End of the Tunnel.

It's Hazy. It Gets Brighter. Then it dims. Turns smoky. At Times gets blanked out buy Landfalls.

As elusive as it remains, at least we can all take solace that it persists. It's there. It is inviting us to get there.

The Olympics has shown that even in the Tunnel – The Human spirit is undaunted. Our Neeraj Chopra has flung his Javelin at it. His herculean throw lit up our nation with a Golden Glow. Silvers Followed Gold. Many Bronze Medals followed the silver, giving all of us much to cheer for.

We in the events industry breathed easily. Even in these crazy Times. Events can happen. Large Scale Events on the World Stage. Events attended by almost every country on the earth.

All the terrible news from around the world was forgotten as the world came together to celebrate Human Achievement.

The US ended on top of the Gold medal tally continuing their dominance of the world. But China was just a single medal behind.

That's a sign we must be mindful of.

The US has started staging large scale Live events. Concerts are back. Not in Cars spaces 12 feet apart. But in seats Totally Sold Out. Sadly Broadway and the West End are dark. The Light at the end of the tunnel really dim in those areas. Apologies No news on Live Events in China.

The media tried hard to sensationalise How Covid was plaguing the games. Fortunately Nothing happened and the Humans beat the virus over those 14 days.

Is it just me, or have you noticed that across all Social media outlets, there is distinct lessening of Well Meaning Individuals sharing their take on how to deal with this dreaded Virus.

Sequins and Flash are replacing PPE suits in the popular images of the day.

I am not suggesting for a minute that the crisis is over. Honestly I am too uninformed and uneducated in Virus and the devastation they can cause, to make any judgements.

All I (and most of us in the Event Industry) can do is look for signs of activity to get hope.

The one thing this Pandemic has made us all realise is how underrepresented our Industry is to make even a dent of our plight. The Live Event Industry, Studios (Not directly connected with the Film Industry), The Conference Industry and huge number of Companies servicing the activity are looking for reasons to continue.

Large Organisations collapsed or had to drastically Re Organise. Even the biggest Daddy of them all – The Disney Corporation had to back pedal furiously to stay afloat.

It is my sincere belief that in times of crisis the only way forward is with the help of our friends. It alarms me that so many companies seem to be taking the opposite approach. To Think only for themselves. Adopt the 'Every Man for Himself' Policy. Sorry Ladies 'Every

to join. Add your voice to the growing call and be comforted that you are not alone.

All of us are part of an ecosystem and feed each other. Great Sound Engineering adds to a singer's performance. Great Lighting adds to his Live Act. Great Video work helps project the performance to an increasingly large audience.

Which means more people will buy tickets. More venues will be filled. More food and beverage will be sold at Live Events. Which will inspire performers to top their last performance. Leading to a demand for technicians and more creative work for all of us. Probably means more technical institutes to impart the knowledge of doing even better shows.

Which means greater corporate sponsorship which leads to more.....

.....And all the while contributing to a better world.

**The one thing this Pandemic has made us all realise is how underrepresented our Industry is to make even a dent of our plight. The Live Event Industry, Studios, The Conference Industry and huge number of Companies servicing the activity are looking for reasons to continue.**

Woman for Herself'. Better?

That just does not work. We are all interconnected and live in a cycle of feeding each other. Maybe you seen the meme about the monkey who tried to grab all the bananas? Apparently the tribe threw him and his bananas out. He Perished, his bananas rotted. His tribe flourished on the newer sweeter bananas. In the Human World – The banana gatherers are put on the Cover of Business magazines, their bananas gleefully counted and kept score of, and the winners decorated.

Monkeys are thriving. Humans are not. Lesson learnt.

What does that mean for our Industry?

The answer lies in the popular Beatles track (Gloriously Covered by Aerosmith) and it's called 'Come Together'

Some initiatives have started by enlightened individuals. I urge you

So I urge you to get rid of your silos. Collaborate and Grow.

Which brings me to imagining what the world will be like when we emerge from the tunnel.

First – I see more general purpose venues coming up. All equipped with better technology.

Venues vying to create better events to keep those venues filled.

Which all fundamentally means better inputs from us Humans – at least until AI decides to step in and take over.

Technology has been amazing. Computer power is being added into the most basic tools of our trade. This makes entry level technicians and designers on par with leader of their field just a few years ago. They get a chance to express their ideas so much easier and so much quicker.

The winners of the next age will be the ones who will build on those

platforms to create great audience experience.

How long before Rock stars and Corporate Honchos can sit in the comfort of their homes and watch avatars of themselves stand Live on stages all around the world 'performing' for their adoring audiences.

Today when music is distributed almost free. The only way for a recording artist to make money is through Live performance. And Box office Takes are increasing year on year.

Did you know that the largest single earner of performing dollars is the Lion King. Of course the movie created a cult. But the money rolled in on Stage Shows, Experiential activity and merchandising.

The second largest money spinning entertainment enterprise was a Theatre Offering. Yes. The Phantom of the Opera stage performances worldwide have earned more money than even the most Popular Computer Games.

Which means that Humans are still running ahead of their computers.

How will that change?

Apparently the bet is on a Live CGI performance at a club of capacity in a few hundred that will perform songs on demand and have the performer do their bidding.

Very similar technology to another world where video interaction rakes in lots of money.

Only, This ain't video, baba. Its 3D CGI with our Live performance not in the flesh – but in Binary Bits.

Fun, exciting times ahead – What?

So My Fellow Event professionals – I urge you to take your minds off WHEN will we see the Lights at the End of the Tunnel. Let's all Focus on how we going to bend those light rays to focus on our work and our careers.





Vijay Sharma, Country Head India,  
Optoma Corporation

# Exploring the Home Cinema Market with Optoma

*The Pro AV and Residential AV segments have grown amid the pandemic propelling launch of new equipment in these sectors. Leading DLP Projector brand Optoma Corporation recently introduced a new 4k UHD projector for home. In an interaction with PALM+ AV-ICN, **Vijay Sharma**, Country Head India, Optoma Corporation, talks about the Indian home cinema market and its growth trajectory going forward.*

**W**ith all kinds of projectors - 4K, DLP, LED, LCD, buying a solution for the home can get confusing for consumers. What features should home consumers look for while buying a projector?

As the AV sector is witnessing rapid advancement in technology, now it is possible to create a home cinema setup that can rival the theatres in real sense. We can briefly discuss the critical components that are essential to buy right projector

Since the essence of a home theatre setup is larger than life screen of 120" and above, to achieve that, you need a projector. The current trend is to have ideally a 4K UHD home cinema projector or a minimum of Full HD home entertainment projector. These need to be checked for



home cinema centric features like resolution, Brightness, HDR, contrast, Life of Light source and Colour output quality. Projection Screen also plays an important role and will improve the quality of image significantly.

Optoma is world leader in 4K UHD and DLP Technology space. DLP technology is the most preferred technology for Digital Cinema and The home cinema projector space is dominated by DLP brands. As far as light source is concerned, Laser based light engines are latest in technology and give maintenance free life span of more than 20000 hrs.

**Optoma recently launched 4K UHD home cinema projector ZK750. Tell us more about this product. What are the features that make it stand out from other cinema projectors in the market?**

The 4K UHD high brightness home cinema projector ZK750 features Multi-Color Laser (MCL) technology with 7500 ANSI Lumen of brightness. It forms part of the DuraCore range which combines longer-lifetime light source and an independent IP rated dust certification. Designed for even the most complex home installation, ZK750 offers six interchangeable lens options for ultimate flexibility.

With native 4K UHD resolution and 100% coverage of Rec. 709 colour gamut, as well as supported with HDR 10 and unique PureMotion and UltraDetail technology, ZK750 offers the best experience. As a complete home cinema projector, designed for continuous 24/7 operation, it supports with 100 variable power and luminance settings making it perfect for the cinema-like experience. It is as if you are owning a real movie theatre at home, 24/7.

In addition to this we have launched UHZ65LV, with 5000 ANSI lumen brightness. Optoma is committed to bring its world class product into Indian market to full fill the growing market of Home Theatres.

**Home theater solution being a niche market how is Optoma planning to promote ZK750, reach out to a larger audience and maximize sales?**

Both the models ZK750 and UHZ65LV are meant for screen larger than 150" and easily cater to 300" screens. The products are positioned to be the best in industry for technology and experience. These are promoted through our dedicated channel partners who cater to HNI audience and are cinema connoisseurs.

**Projectors are most commonly used in conference rooms,**

**edutainment purposes, professional entertainment, cinemas and home theaters solutions. Does Optoma have solutions for all these segments and if yes how do you prioritize each segment and reach your target audience?**

Projectors has diversified into multi-dimensional display devices in almost every facet of life. We at Optoma has our strengths in almost each of the segments in which projectors are used. Optoma India is also focusing deeply on Pro AV / Installation segment and Home segment for which we are also strong players world wide. We collaborate with large SI's for the education market and are in position to provide products specific to the unique requirements of Indian Market.

**How big is the share for home cinema projectors in India's projector market?**

Home Projector market is seeing

**"Home Projector market is seeing 100% YoY demand in Indian market, it is closely following the worldwide trends. The Biggest gainer in home projectors is the 4K Projector segment which has seen jump of three times since the COVID pandemic has hit in 2020. As per current figures Home Segment is having around 15% market share value wise in overall projector business."**

100% YoY demand in Indian market, it is closely following the worldwide trends. The Biggest gainer in home projectors is the 4K Projector segment which has seen jump of three times since the COVID pandemic has hit in 2020. As per current figures Home Segment is having around 15% market share value wise in overall projector business.

**How has the Indian market for projectors in general grown in the past years and are there any perceivable changes since the pandemic last year?**

Consumer behaviour has rapidly evolved as the world adjusted to a new normal, where social distancing, work from home and virtual meetings are the norm. Demand for at-home digital media grew significantly, as habit-formation and ease of access emerge as drivers. OTT platforms and digital media have already been the biggest beneficiaries. 2020 has magnified the apparent shift from small screen digital devices and TV viewing to large screens. This is paving the way for innovation and technology solutions wherein consumers are bringing the entertainment in larger than life size to their homes, living rooms & bed rooms whether it is movies, events, sports or shows. Technological advancements

in projectors are playing a pivotal role through affordable 4K, long life Laser Engine and high brightness products which now don't require dark rooms or can work efficiently in ambient light to give users big screen experiences of 120" & above and synchronize the 4K content with right display device to provide us with exhilarating experience.

**Why buy 4K projectors at all? Isn't a 60inch + 4K TV good enough?**

Today, people want to have premium experience in everything they do. That's why they are looking

at projectors for home-theatre which are not only sophisticated in terms of technology, but also bring an unparalleled viewing experience which is the constraint of large screen TV's upto 65" or so.

Also the availability of easy and ample quality of 4K content whether it is movies, OTT programs, and large scale sporting events like football world

cup or Olympic games has driven the trend, since to really enjoy 4K content you at least need to have 120" and above screen size.

Unlike traditional televisions, projectors have the lowest cost (on a per-inch of screen basis). The cost-benefit ratio is outstanding as the overall expenses to manage a projector is nowhere close to what it used to be a few years ago. The lamp-based projectors are slowly giving space to modern technologies like Laser and LED due to the technical innovation in the field. This has further reduced the cost and increased the overall efficiency of the projectors. Unlike LED and 4K televisions which might need a great deal of investment.

**You have worked in this industry with major brands like, Toshiba, Hitachi, BenQ and now Optoma. Could you tell us a little about your journey and experience in the Indian AV industry?**

I am a channel-oriented person who loves to be transparent and open. I have worked for more than 17 years in the industry. Throughout my journey I have worked in various segments like storage, display, IT and then moved to the AV side. I started from Bangalore as a city in sales subsequently moved to product management and then to the business management. I like to be connected with the customers and enjoy learning about their experiences with Optoma product.

**What are Optoma's plans for 2021? Are there any products or new launches in other segments that we must keep an eye on? Has the pandemic compelled Optoma to innovate and evolve?**

At Optoma we are looking towards coming year with great enthusiasm. We will built upon our recent launch of range of Interactive Flat Panels and will launch pioneering All-in-One Quad LED displays which are already selected for worlds prominent installation based display requirements.

In recent past we have introduced many new products for the Indian customers ranging from our Creative Touch Interactive Flat panels in India which caters to Education and Boardroom/Meeting room applications to affordable 4K UHD Home Cinema Projectors i.e. UHD 35+ and UHD33 which is our latest offering in value segment and we are getting good response from the Home AV Industry for this product. We will further enrich our 4K UHD Home Cinema models and Pro AV Laser projector Models. This year we are also planning to Introduce our High Brightness Pro AV Laser Models to cater to Professional Large Venue solutions.

# SAGA: Cuisines of India Installs State-of-The-Art HARMAN Professional Audio and Lighting Solutions

*Crescendo AV recently equipped SAGA: Cuisines of India with futuristic HARMAN Professional audio and lighting solutions to provide a memorable experience for dining and entertainment at the ambitious new restaurant and bar.*

Created by restaurateur Vishal Anand, SAGA: Cuisines of India is a spacious, elegant dining destination with a food and beverage menu curated by twice-Michelin-starred chef Atul Kochhar. The 200-capacity venue features a 51-foot ceiling, one of the world's tallest bar displays and a stage for live

performances that can accommodate anything from a DJ to a six-piece band. To provide high-quality sound and dynamic lighting in the unique space, Crescendo AV outfitted SAGA with JBL Professional loudspeakers, Crown amplifiers, BSS signal processors, AKG microphones and Martin Professional lighting fixtures.



Crescendo AV equipped SAGA with Martin lighting and JBL Professional loudspeakers solutions.



## Inventory list

### JBL Professional loudspeakers

JBL VTX A8 loudspeakers

JBL B18 subwoofers

JBL AC18/95 compact loudspeakers

ASB6118 subwoofers provide

PRX812 floor monitors

(Outdoor Areas)

JBL Control 29AV-1 indoor/outdoor monitors

Control 85M mushroom landscape speakers

### Crown and BSS networked audio solutions

Crown I-Tech 4X3500HDS, XTi 6002 and XTi 2002 amplifiers

HiQnet System Architect software

BSS BLU-100 signal processors

EC-8BV Ethernet controllers

WMS40 wireless vocal microphone

AKG D5S microphones

### Martin lighting solutions

Martin RUSH MH 5 Profile

MH 11 Beam moving-head fixtures

Martin RUSH PAR 2 RGBW Zoom fixtures

RUSH PAR 2 CT Zoom fixtures

Martin DMX 5.3 splitters

Martin JEM compact hazer

JEM C-Plus haze fluid

"SAGA was a really unique install in every sense," said **Vineet Wadhvani**, Managing Partner, Crescendo AV. "It was definitely exciting to be a part of the journey from concept to installation. The 51-foot ceiling height and being located in the midst of corporate offices, an upcoming hospital and a residential complex all posed challenges in terms of the acoustics and overall audio set-up, but we were able to achieve the desired result using a combination of appropriate soundproofing, acoustic treatment and setting the right dispersion angles for the speakers."

Crescendo AV outfitted SAGA with a variety of JBL Professional loudspeakers for premium sound throughout the venue. **JBL VTX A8 loudspeakers** and **B18 subwoofers** provide main sound reinforcement for the stage, delivering high-output, full-range sound with comprehensive coverage in a compact and lightweight package. **JBL AC18/95 compact loudspeakers** and **ASB6118 high-powered subwoofers** provide additional sound reinforcement, while **PRX812 floor monitors** with Wi-Fi allow

the performers onstage to hear themselves clearly. In outdoor areas, **JBL Control 29AV-1 indoor/outdoor monitors** and **Control 85M mushroom landscape speakers** deliver crystal-clear audio with enhanced durability and weather-resistant construction.

To power the system and provide flexible signal routing and control capabilities, Crescendo AV equipped SAGA with **Crown** and **BSS** networked audio solutions. **Crown I-Tech 4X3500HDS, XTi 6002** and **XTi 2002 amplifiers** deliver crystal-clear sound and feature HiQnet System Architect software for remote network control of levels, signal processing and more. **BSS BLU-100 signal processors** provide high-bandwidth digital audio networking, while **EC-8BV Ethernet controllers** provide simple, intuitive control for staff. Additionally, Crescendo AV provided SAGA with **WMS40 wireless vocal microphone** sets and **AKG D5S dynamic microphones** to capture high-quality sound on stage.

**"SAGA is the first permanent install in India to have the JBL Professional VTX A8 and VTX B18 line array loudspeakers and we would like to thank Crescendo AV for designing and delivering robust audio and lighting solutions that are sure to elevate visitor experience at the venue."**

**ADITYA TODI, Senior Director of Sales and Marketing, HARMAN Professional Solutions, India and SAARC**

To provide versatile illumination for intimate dining, live performances and high-energy DJ nights, Crescendo AV equipped SAGA with a range of Martin lighting solutions. **Martin RUSH MH 5 Profile** and **MH 11 Beam moving-head fixtures** provide bright, crisp spot lighting and unique gobo effects. **Martin RUSH PAR 2 RGBW Zoom fixtures** deliver rich, colorful wash lighting and

**RUSH PAR 2 CT Zoom fixtures** provide general-purpose white illumination from 2700 to 7800 degrees Kelvin. **Martin DMX 5.3 splitters** provide reliable data connectivity over long cable runs, seamlessly connecting the lighting rig. For dramatic haze effects, Crescendo AV provided SAGA with a **Martin JEM compact hazer** and **JEM C-Plus haze fluid**.

"Crescendo AV has done outstanding work in executing the complete installation," said **Vishal Anand**, Founder, Moonshine Food Ventures. "They have done an exceptional job commissioning audio and lighting for SAGA and allowed me to present an unforgettable experience to my guests. I must make a notable mention of the HARMAN Application Engineering team and their contribution as well. This install is a result of their hard work and dedication."

"Venues like SAGA: Cuisines of India require audio and lighting solutions that can deliver a unique nightlife experience for their visitors," said **Aditya Todi**, Senior Director of Sales and Marketing, HARMAN Professional Solutions, India and SAARC. "SAGA is the first permanent install in India to have the **JBL Professional VTX A8** and **VTX B18 line array loudspeakers** and we would like to thank Crescendo AV for designing and delivering robust audio and lighting solutions that are sure to elevate visitor experience at the venue."



Crescendo AV provides versatile illumination and intimate dining experience with Harman Professional solution.

## ADJ DEBUTS VERSATILE LED-POWERED MOVING HEAD WASH

Adj's popular focus series of led-powered professional moving head luminaires launched the **Focus wash 400**. this dedicated wash fixture combines a potent color mixing led light engine with a Fresnel lens and motorized zoom mechanism to create a versatile soft-edged beam with an even field and high cri. The perfect wash companion to the existing focus series spot and beam fixtures, the new focus wash 400 is ideal for illuminating all kinds of stages and performance spaces, both for live and broadcast audiences.

At the heart of the Focus Wash 400 is a 400-Watt six-in-one LED light source, which combines red, green, blue, amber, cyan and lime LED chips to offer unrivalled color mixing for stage-based applications. This LED engine configuration allows for a CRI in excess of 90, as well as excellent white light output across a range of color temperatures. The light source also offers a high CRI R9 rating of 87.3, meaning that it is capable of effectively illuminating saturated red subjects, which has been traditionally problematic for LEDs. In addition, the LED engine boasts an impressive 50,000-hour average life expectancy, effectively removing the need for lamp replacements.

Independent color mixing control over the LED source's six primary colors permits the creation of a huge

range of both vibrant saturates and subtle pastel shades, allowing lighting designers to achieve the exact looks they require. Exacting control over white light color temperature is also provided through linear color temperature control from 2700K - 6500K, as well as separate red to green shift control. The fixture also features a virtual CMY mode, which uses the six LED chips to emulate CMY color mixing. This means that the fixture can be patched and controlled as a CMY fixture, utilizing the CMY color pallet selection tools found within many hardware and software DMX control systems.

The Focus Wash 400 is fitted with a 6-inch Fresnel lens, which creates a soft-edged wash output with a very even field and no color shadows. This is paired with a motorized zoom function with a variable beam angle of 10 to 41-degrees. It features 16-bit fine control over the zoom motor, allowing for extremely smooth zoom effects as well as precise control over the beam angle. The wide zoom range makes this a very versatile fixture, which can be used both to wash a large area of a stage and to spotlight performers or small scenic elements.

Electronic dimming with 16-bit fine control is combined with selectable dimming modes, curves, and speeds (which can all be set remotely via DMX), affording lighting designers with a high level of customization as well as exact-

ing control. Fitted with high performance pan and tilt motors, the Focus Wash 400 can achieve quick movement. However, its motors also offer 16-bit fine control, which allows for precise static positioning as well as extremely smooth movements at slow speed.

The fixture features electronic strobing that allows for the creation of regular, random and pulse effects at a variety of different speeds. The unit has a default LED refresh rate of 1200Hz; however, this can be customized between 900Hz and 25 kHz to ensure flicker free operation when used in a broadcast setting. It also offers a Quiet fan mode for applications where background noise must be kept to an absolute minimum.

"The new Focus Wash 400 is the natural next step in the evolution of the Focus Series," comments ADJ USA's National Sales Manager, **Alfred Gonzales**. "It is the perfect wash accompaniment to the existing spot and beam fixtures, providing a versatile lighting tool for performance stages, event productions and houses of worship. With its powerful LED engine, utilizing cyan and lime chips, this next generation wash



**Focus wash 400 featuring virtual CMY mode**

fixture is capable of delivering a high CRI and huge range of colors. With virtual CMY color mixing as well as tunable white color temperature, it offers the best of both worlds when it comes to control. This, combined with its Fresnel lens and wide zoom range, makes it a versatile wash fixture that is ideal for all kinds of performance stages and production spaces."

## FUSION BY GLP LAUNCHES WEATHERPROOF FUSION STICK WITH HALO-DIFFUSER RING

**Fusion by GLP** has announced Weatherproof **Fusion Stick FS16 Z** with New Halo-Diffuser Ring. These can not only be connected to produce absolutely seamless lines, in the tried and tested GLP manner, the innovative halo diffuser rings, when placed in front of the individual light sources, develop a new optical effect. Lines of light are a popular and versatile design element

for stage and TV shows. However, most of the solutions available do not meet modern design and camera requirements. The FS16 Z is based on the proven FUSION Stick FS20 with identical dimensions, so that all FS20 accessories are also compatible with the FS16 Z.

The FUSION Stick FS16 Z is populated with 16 x 20-watt RGBW LEDs. The motorized zoom ranges from 8° to 40°. The

1m-long sticks are only 23.6cm high, 9cm deep, and, despite the weatherproof design in the high-quality die-cast aluminum housing, weigh only 13kg. Its innovative halo diffuser ring ensures the FS16 Z will create a real impact in every application without exception, but it is particularly relevant to the TV and studio markets.

The ring surrounding the front lens

and the visibility of the pixels in the camera has been significantly improved. The pixels are clearly visible even from very acute camera angles, whereas the lens is retracted far back into the housing in a conventional design, due to the zoom mechanism.

The Fanless design ensures extremely quiet operation, which also makes the new LED stick ideal for noise-sensitive environments such as theatres or TV studios. Various installation options ensure even greater flexibility and creative experimentation. The individual FS16 Z LED sticks can be connected to one another without difficulty, so that both vertically hanging, and ground-standing installations can be implemented with minimal rigging effort. Two different



**The Fusion Stick FS16 Z compatible for noise-sensitive environments**

**continued on pg 38**



## GRANDMA3 LIGHTS UP A.R. RAHMAN'S GRAND DIGITAL CONCERT

The Indian music industry is largely dominated by Indian film soundtracks. For decades the music industry has welcomed various composers and musicians, but few have become icons with their compositions. **A.R. Rahman** needs no introduction when we talk about maestros of modern Indian music. Known as 'Mozart of Madras', A.R. Rahman has recently released the 99 Songs Special Concert - a digital show chronicling the music of his upcoming film 99 Songs. Streaming in Hindi, Tamil and Telugu, the 99 Songs Special Concert sees Academy and Grammy Award-winning composer Rahman unite with the voices of the 99 Songs soundtrack.

Since lighting played an important role for the digital concert experience, veteran Lighting Designer **Becket Tundatil** have opted for **MA Lighting grandMA3 lighting console** running on



**grandMA3 Lighting illuminates A.R. Rahman's Grand Digital Concert**

show-files which is a priority. Since most of the shows are pre-programmed in **grandMA2 software** with few updates

required, MA2 software saves my time after creating show-files. This makes my life easy and enhances my lighting skills". Becket continues. "For the online streaming show I have used Sharpy (160 no's), LED wash (80 no's), LED Par (200 no's) and a grandMA3 Light console."

MA Product Manager /Tech Support Engineer **Kakkaroda Ajay Teja** from **Hi-Tech Audio Systems** stepped in to help with the technical part. Hi-Tech Audio Systems is the distributor for MA Lighting in India. "As a technical expert my main role for this one-of-a-kind digital concert was to manage the event show-file on the console. I have also used Art-Net protocol to send DMX data from the grandMA3 Lighting console to the Lighting fixtures. Since I was working from a remote place and not at the venue, I have provided the Technical Support for creating the MA Network backup solution with the onPC application. Such features and software from MA really makes it easier for us to provide impeccable technical support to our clients", explains Ajay.

The **grandMA3 Light console** for A.R.

Rahman's 99 Songs Special Concert was rented out by Udaya Lights Ltd., Kerala. **Azeem** from Lumos Lighting Ltd, accompanied Becket Tundatil in operating the show and on-venue support. Azeem has a vast experience about entertainment lighting scenario as he has been part of this industry for more than a decade. The show was directed by **Mr. Nazeef Muhammed** from BtoS Productions, Mumbai and Azeem has worked along with the show director to light up the grand stage. The grandMA3 Light console was purchased from Hi-Tech Audio Systems, New Delhi by Azeem. Lumos company.

"At this time of global pandemic, it's very difficult for entrepreneurs to escalate their business in the live entertainment industry. But such grand experience ticketed digital concerts can play an important role to maximize business. Moreover the support from international brands like MA Lighting can be beneficial for India's live entertainment industry", concludes **Rajan Gupta**, Managing Director of Hi-Tech Audio Systems.



**User-friendly grandMA3 Lighting console for Digital Shows**

Mode2. Becket shares his compatibility of using MA console, "MA is the first and only choice when it comes to AR

Rahman's live show. As I often tour with A.R. Rahman, MA Lighting console's are very user-friendly and easy to create

## FUSION BY GLP LAUNCHES WEATHERPROOF FUSION STICK... continued from pg 37

dimmer curves and four control modes up to a maximum of 79 DMX channels are available. Meanwhile, the built-in FX engine makes it easy to create impressive, dynamic looks.

"The FUSION Stick FS16 Z is yet another GLP development that is a direct response to immediate market demand," said GLP Managing

Director **Udo Künzler**. "During countless conversations with lighting designers, we kept hearing that there was still room for improvement in the area of LED sticks—especially for applications in front of the camera. Although we already had a weatherproof LED stick in the FUSION Stick FS20, which could also be seamlessly connected with the same

pixel spacing, the effect in the camera image was not yet ideal for many designers and lighting cameramen. If the camera is looking directly into the stick, you can't turn up the brightness too much. Otherwise the devices can easily outshine them. On the other hand, from an oblique camera perspective, most LED sticks appear as if they were not

switched on at all. This problem has now been resolved with the FUSION Stick FS16 Z. Designers and DoPs can now use LED sticks in TV and studio applications in an even better, more creative and versatile manner. But even away from the camera, the FS16 Z, with its halo ring, is guaranteed to be sensational."



## ASTERA LAUNCHES MULTI-FUNCTIONAL PIXELBRICK LUMINAIRE

Astera adds another dimension to its expanding portfolio of lighting products – the **PixelBrick**. This hugely flexible luminaire is a multi-functional light source with the power of Astera's famous Titan LED engine coupled with the practicality of its popular AX3 LightDrop product, all in a completely new and fully adaptable housing.

Ideal for concerts, events, filming, or broadcast scenarios, PixelBrick is compact, light (1.1kg) and exceptionally handy as an up-lighter – like an AX3 – or it can be hung anywhere and become a universal light for accenting and texturing buildings or facades. For exterior use, it is IP65 rated and therefore resistant to rain and other elements.

The PixelBrick has 450 Lumens and 1200 Lux at 2 metres – both at 3200K and can also be used like a PAR as a general-purpose fixture complete with a bracket.

PixelBricks can be easily joined together and built into an impressive array of geometric shapes and clusters. With the help of adjustable connectors, shapes like circles, hearts, numbers, etc. plus other illuminated scenic pieces or signage can be created. These can be used in a plethora of contexts, like performance spaces, on live events, on location or in the studio for film projects and photo shoots.

The lights can be arranged in matrix patterns or as numbers and

letters spelling out a name, a word or a tag, and they can be pixel-mapped to produce yet more stunning effects. The combination of the punchy and infinitely usable LED light source and wireless control is a brilliant solution for



**450 Lumens PixelBrick with multi-functional light source**

so many aspects of a stage or an event space.

Diffuser Domes are available to switch the PixelBrick beams to softer eye-and-camera-candy effects and 'pixel' looks.

PixelBricks are physically interconnected via a bespoke engineered track system on all four sides which gives maximum scope for creativity. These

tracks can also be used to mount airline track accessories like TrackPin, Hangar, Handle, etc., and brackets can be mounted to the PixelBrick using the same track system.

The Titan LED engine is robust and proven technology with great reliability, and the fixtures have an onboard battery pack offering five hours of full-brightness operation. Other major features include RGB Mint Amber for creating stunning colours – from the richest saturates to the most delicate pastels – authentic white tones from 1,750 – 20,000 K and an impressive CRI & TLCI of 96 or above.

Several different beam options are available. The fixture's native 13-degree angle can be customised with the use of a 17-degree diffuser for a soft-light effect or a 30-degree flood filter to enable smooth coverage of larger surfaces and areas.

The PixelBricks can be wirelessly controlled via the inbuilt LumenRadio CRMX DMX receiver and the units can

also be run via wired DMX through an Astera PowerBox. Up to four PixelBricks can be daisy-chained using a single power / data combination cable, and units are compatible with the Titan PowerBox.

Additionally, the AsteraApp can be used for local control, either via the ART7 AsteraBox or by directly connecting the PixelBrick fixtures to the App when ART7 is not being used.

The rear panel display has dedicated buttons for brightness and colour adjustment, just like the Titan Series tubes, for super-fast tweaking when running in stand-alone mode.

A handy PixelBrick set of 8 units is available from Astera, complete with filters, a PowerBox charging flight-case complete with cables and connectors. The PowerBox can be used for in-case charging and to wire the lights – power and data over a single cable – for longer installations.

As you would expect, a complete Accessories Set is available for 8 PixelBricks which expand the flexibility of this fixture event further!

Astera sales director Sebastian Bückle stated, "We are really excited to bring this ultra-adaptable light that can be used for a zillion different occasions to the market. I think our customers will have plenty of fun with PixelBrick and use it imaginatively, discovering many previously impossible ways to light people, objects and environments!"

## ROBE UNVEILS CUETE SPOT LIGHT FIXTURE FOR SMALL-TO-MEDIUM PRODUCTIONS

Robe has launched the **CUETE** moving head spotlight fixture, which features the fast pan and tilt movement that is essential for lighting all genres of electronic music, highlighting the creative work of DJs, and enhancing club environments.

Creating dynamic effects and projections is quick and simple with the CUETE, which offers a CMY color mixing system and 4,200-lumen output of sharp, crystal clear white light, making it stand out on any lighting rig. To achieve this output and to easily maintain the light quality and consistency across any lighting rig or inventory, CUETE utilizes Robe's patented TE 120W White LED Engine which is at the core of the manufacturer's ground-

breaking TRANSFERABLE ENGINE technology.

The CUETE's 16-degree fixed beam lens has remote control focus and can be swapped to the optional 24-degree lenses for shorter throw and low ceiling scenarios. This includes a CPulse flicker-free management system for setups using HD and UHD cameras, great for live streams/broadcasts; the L3 Low Light Linearity dimming software for super-smooth fades to black and the AirLOC (Less Optical Cleaning) technology which keeps the optical elements in pristine condition over long time periods.

The fixture's very cool effects package includes a Colour Wheel with 13 dichroic filters.



**Cuete moving head spotlight fixture with 4,200-lumen white light**



## ASTERA DEBUTS HIGH-INTENSITY AX9 POWERPAR

Astera launches another new product – the **AX9 PowerPAR**. The AX9 is a high-intensity, rock-solid, all-purpose everyday LED lighting fixture with battery operation, wireless control, and quality engineering.

AX9 is bigger, brighter and benefits from all Astera's latest innovations, like the Titan LED engine, an optimised bracket with Airline Track, a Titan-style keypad for fast and easy local control and direct control via the versatile AsteraApp. Effectively it is a three-in-one solution. Offering a wireless PAR light source that can also be run as a wired PAR for longer-term installations and an elegant up-lighter, with the fixture's 105 Watt output offering over 3000 Lumens of beautifully homogenised light. Being wireless, AX9 can be used anywhere – on set, onstage, in the studio or on location – and at short notice, quickly deployed as and when needed.

In situ as a wired PAR – it is just like any standard PAR – it is perfect scenarios requiring the lighting to be on for sustained periods of time. AX9 is an excellent wall or surface washing up-lighter – without a flex cover and with the bracket removed – which can produce a sleek, streamlined effect to transform any space. The AX9 is overall a fantastic multi-purpose lighting fixture that is hugely efficient and can

be used on the widest range of jobs as a cost-and-carbon-efficient quick ROI solution offering extreme brightness in a compact, stylish housing.

Astera's Titan LED engine includes high CRI and the wide range of tuneable colour temperature whites, plus that rich and diverse gamut of colours encompassing the whole spectrum. The inbuilt battery offers up to 20 hours of reliable runtime which can be programmed to maintain optimal output over the designated period. Direct control via the AsteraApp removes the need for an AsteraBox, further optimising and making setup simpler.

The keypad on the rear has a logical and easily navigable menu resembling the Titan Tube layout with dedicated buttons for quickly adjust colour and brightness. Wireless DMX is available utilising LumenRadio's CRMX technology, and for wired options, there is a choice of Powercon and XLR connectors on the rear.

The AX9 unit can connect to a smartphone or tablet via Bluetooth and can then act as a transmitter, sending the radio signal to other Astera fixtures. The standard 13-degree beam angle can be modified with the addition of two filters, a 32-degree flood filter and a 17 x 46-degree elliptical wall-wash filter. The AX9 – as you might expect from Astera

– comes with practical and handy mounting / rigging brackets that can easily be slid on and off (a feature of the original Astera AX5 PixelPAR), and importantly, this bracket contains an Airline Track to hold a selection of rigging accessories like Astera's TrackPin.

A 3/8-inch thread is also integrated into the bracket, with a 14mm hole for attaching clamps. The AX9 legs can be folded for transportation and the same legs used for truss hanging, also like the AX5. A spring-loaded quick-release kickstand is available for the fixture, a neat tool that pops out with a button press and is perfect for angling an AX9 without a bracket. The AX9 is IP65 rated for outdoor use and combines beautifully with any / all other Astera products. X9 accessories include flexible covers – available in white and mirrored finishes in addition to black for blending into different environments – which can be wrapped around the light to suit the set, room or other visual elements. Glare reduction can be enhanced by using an egg-crate which also produces sharper beam definition.



The AX9 with IP65 rating

The main applications will be for film and television productions, stages and concerts and all indoor and outdoor events. Astera Sales & Marketing director **Sebastian Bückle** states, "The AX9 is Astera's best value for money light right now with twice the output of the AX5 and only 1.5 times its price, featuring cinema-grade light output and tons of premium features to make daily lives and usage even easier! We are expecting this to be very popular!"

## ARRI RELEASES ARRI LIGHTNET-A UNIQUE CENTRALIZED MONITORING SOFTWARE PLATFORM

ARRI has announced the release of its latest innovation-**ARRI LightNet**. ARRI LightNet is a unique new software platform designed by ARRI's Solutions Group to offer smart, logical, and centralized moni-

toring, fault-finding, and management of broadcast studio lighting networks from anywhere.

It enables broadcast facilities to streamline the management of their lighting network in one robust platform.

ARRI LightNet leads the way for essential, comprehensive, user-friendly monitoring of lighting networks and will be offered with all ARRI Solutions Group tenders and projects.

This trailblazing product observes and shows all elements across a broadcast studio lighting network-luminaires, consoles, network switches, splitters, nodes, etc.-displaying all the relevant data in real-time on a single interface. This allows for users and technicians to work

harmoniously in parallel while accessing and managing different aspects of the network.

ARRI LightNet assists the smooth and efficient operation of contemporary studio facilities with both IP-based and DMX-controlled lighting systems. Features include a very straightforward setup with a coherent, easy-to-understand dashboard to help maintain the status, security, and stability of these lighting systems. All devices on the network will be auto detected for speed and accuracy of setup, saving time and hassle. ARRI LightNet is an essential resource that can be operated and understood by those who are not necessarily lighting specialists.

As ARRI LightNet is compatible with the hardware of multiple manufacturers and established lighting protocols, it can be retrofitted into existing facilities and lighting eco-systems as easily.

The system's central back end can

offer full redundancy and run on any performance machine, including virtual servers, which can be located anywhere and connected to the network.

Additional front-end features include graphical interface with a clear and accurate overview of all status monitoring data, plus the quick and easy identification, location, and rectification of faults or glitches. Furthermore, the interface can be questioned to reveal any and all useful information needed for a day-to-day operation like the IP and DMX addressing of fixtures or the modes in which they are set, etc.

ARRI LightNet is widely adaptable for all environments. The user interface can be run simultaneously on various client devices and in studio or production control rooms, and even in or out of the studio complex via a VPN.



ARRI LightNet: Seamless workflow integration for broadcast lighting systems



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## AVOCOR G SERIES INTERACTIVE DISPLAYS

**G series interactive display** is designed to streamline workplace collaboration. Available in 65", 75", and 85" edge-to-edge diagonals, the G series collaboration displays feature proprietary Avocor UiQ single-button touch interface and the latest generation of Avocor InGlass Intelligent Touch to give users an intuitive and interactive experience that achieves an equitable meeting experience for participants in the room and for those who are remote. The Avocor G series is compatible with any UC software, including Meet, Zoom, Teams, and WebEx, the G series enables every meeting attendee the ability to see what's being presented and see their teammates faces in stunning 4K as well as be able to see all annotations and whiteboarding as well as annotate and whiteboard from their personal PC, phone or tablet. This immersive experience breaks down the barriers common for remote attendees and fosters better communication, collaboration and accelerates getting more done.

The G series displays feature a thin-framed bezel-less, edge-to-edge design that measures as thin as 4.5 inches deep. A hyper-capable Type-C port offers single-cable 4K video, audio, USB touch, Ethernet, and power, while three top-edge USB ports provide easy access for guest connections and a camera. High-quality speakers are onboard to provide crystal-clear 40w audio output and far-field, beam-forming microphones with more than 15-foot range ensures everyone in your meeting is heard.

Avocor G series displays in 65" and 75" sizes are available now via a trusted and experienced global network of distribution and reseller partners.



## BIAMP BEAMTRACKING MICROPHONES

The **TCM-X ceiling** and **TTM-X tabletop** models join the TCM-1 pendant that each combines industry leading acoustic performance with sleek, attractive designs, providing crystal-clear conferencing with no aesthetic compromises. Only Biamp's patent-pending Beamtracking technology follows meeting participants as they move around the room, ensuring the highest quality voice pick up wherever the person is sitting or standing. Better yet, they require zero microphone setup, reducing installation and programming time for integrators. The TCM-X is a low-profile, ceiling mounted 6-inch microphone contained within a discrete enclosure that blends subtly into the ceiling. For rooms where a tabletop microphone is desirable, the TTM-X is small enough to fit in the palm of your hand, minimizing the amount of table real estate it occupies. The new Parl  models feature four 90-degree tracking zones delivering dynamic, 360-degree room coverage, and each microphone uses just one channel of acoustic echo cancellation (AEC) for far more efficient processing resource utilization than conventional beamforming models. Leveraging Biamp's termination-free design, installations requiring two microphones can add an additional satellite microphone to either the ceiling or tabletop model by connecting it to the primary microphone's processing unit. Biamp's combination of a termination-free solution, elegant industrial design, advanced Beamtracking technology, and integration of the entire audio signal path — from microphone to speaker — ensures that Tesira conference rooms sound better, look better, and are easier to install than any other system. The addition of the powerful SageVue management tool makes monitoring and managing deployed systems a familiar and comfortable process for technology managers.



## CRESTRON HDBASET TO AV-OVER-IP ENCODER

The **DM-NVX-E760 encoder AV-over-IP** bridging technology enables tight integration for standards-based HDBaseT solutions or expanding an existing room system for broader distribution.

DM-NVX-E760 features support for Crestron DigitalMedia technology, including DMmatrix switchers, all-in-one DMPS systems, and DM Lite® transmitters, providing the largest selection of endpoints, 1- and 2-gang formfactors, wall mount, surface mount, and single and multi-input models to the system designer's toolkit. Offering a single wire solution for power, audio, and video, it can be powered through a supplied power pack, PoE+, 802.3bt, or UPoE. For customers that have invested in DigitalMedia or other HDBaseT solutions, DM-NVX-E760 provides the ability to continue to leverage those investments while still taking advantage of everything AV-over-IP does so well, such as room overflow capability and global source distribution.

DM NVX is flexible and interoperable AV-over-IP signal distribution platform that conform to HDBaseT standards. Customers now have the ability to integrate DM NVX with their existing technology deployments and can also explore how they can further evolve their systems.



## GUDE EXPERT POWER CONTROL 8291-1

**Expert Power Control 8291-1** is a Power Distribution Unit (PDU) which allows switching and current measurement of electrical devices via a TCP/IP network or serial connection. Up to 21 AV and ICT devices can be connected to the unit. The special feature: Thanks to the integrated quality power supply unit, typical AC or DC consumers with different voltages and connection types can be supplied, measured and controlled: PCs, servers, monitors, amplifiers, routers, NAS, external drives etc.

Due to the integrated industrial power supply unit in Expert Power Control 8291-1, the space-consuming plug-in power supply units of the connected consumers can be discarded. The load outputs can each be switched separately via a web interface, via the serial interface, via SNMP or the button on the AC/DC power switch. Safety is a top priority: Each DC output is protected with its own eFuse, so that short circuits in connected devices do not affect other consumers. Furthermore, a type 3 overvoltage protection is integrated and prevents damage to the device and connected consumers. Expert Power Control 8291-1 supports SNMPv3, SSL, SSH and IPv6 as well as Telnet, Radius and Modbus TCP. The measurement of a wide range of electrical parameters enables the user to identify and exploit power saving potentials in the IT environment. In addition, responsible receives warning messages when fault currents occur (residual current measurement type A). This enables preventive maintenance measures to be taken before downtime occurs. Expert Power Control 8291-1 is applicable for switching network or media technology devices through media controls of well-known AV manufacturers (Atlona, Barco, Crestron, Extron, Neets). Restarts PCs, servers, routers, and switches remotely and reduces power consumption of standby devices through schedule control. The device helps in network monitoring through integration with monitoring software.



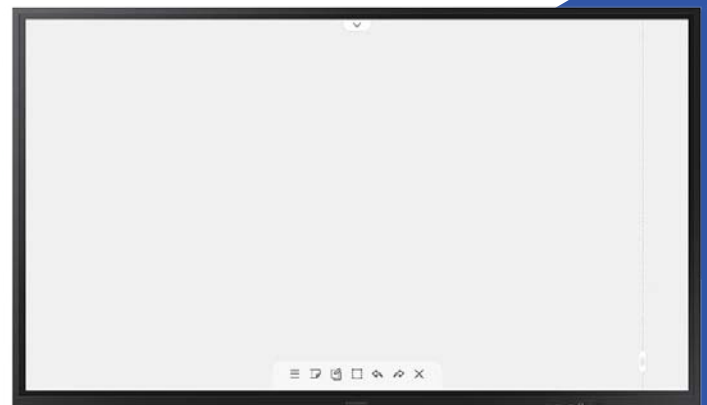
## NEXO ID14 POINT SOURCE SPEAKER



This super-compact speaker provides an extremely powerful point source that can be used standalone or in a distributed system, for front fill, infill or delays. Available in black, white or any RAL colour, **ID14** will be of especial interest to the installation sector. It is a creative tool for those solving architectural challenges in historic buildings, and those with a need for unobtrusive high-power performance, such as houses of worship, airports, hotels and the hospitality industry. The ID14 is also expected to prove popular for surround sound and FX applications, and is the perfect tool for creating thrilling and immersive audio in even the most complex environments. The Installation version features an acoustic fabric fitted front grille, and there is a cable gland with 2-core cable for audio input, offering IP55 protection. The Touring version of the ID14 uses a Magnelisâ steel grille, and the back plate holds two Speakonâ connectors. The ID S108 is the purpose-designed companion subbass cabinet for the ID14, and together they create an extremely compact high-power 3-way system, ideal for small clubs and bars. Using a high efficiency bass-reflex design, the ID S108 features a long excursion 8" Neodymium driver precisely tuned to match the frequency response of the ID14. Like the ID14, the ID S108 is available in touring or installation versions, in black, white or custom colours on request. There is a comprehensive range of accessories to allow use of the ID14 in a wide variety of applications. The ID14 has a dedicated U bracket, but it can also be installed on a microphone stand. On the rear of the speaker, two M6 inserts (73mm pitch) are ready for the NEXO accessories for wall-mount applications. Because ID14 has a fully symmetric design, there are no left or right versions: every unit in rental inventory can be the same. The recommended amplification solution is the NXAMP4x1Mk2 Powered TDCcontroller, which can power up to 8x ID14s per channel.

## SAMSUNG FLIP 2 DIGITAL FLIPCHART

Samsung flip board is an interactive, touchscreen digital display that allows teams or students to hold and recap meetings or classes with incredible ease. It drives greater collaboration, expands presentation capabilities and is ideal for all types of meetings, training or group brainstorming. **Flip 2 digital flipchart** is designed for small conference rooms, classrooms and huddle spaces. With Brush Mode, the Samsung Flip 2 recognizes a wide range of thicknesses, so you can create art at the stroke of a brush. Water and oil painting modes allow different styles and textures, while the Flip 2 also gives a full, vibrant color palette, even allowing for flexible color mixing. Every presentation, every image and every video will be reproduced clearly and accurately. 4K UHD resolution and Samsung picture technologies ensure it. Backed by the powerful Tizen 5.0 operating system for a seamless user experience, embedded sensors automatically activate the display when the screen is knocked. The Samsung Flip 2 display, can quickly and easily select, move, crop, capture and edit any images. Each image can also be merged to the digital note roll with just one click of a button, allowing it to be edited or erased. The touch out functionality allows your team to sync their personal devices with the Samsung Flip 2 for real-time content sharing and control.





LOGITECH ENHANCES REMOTE MEETING EXPERIENCE WITH LOGITECH SCRIBE

Logitech has introduced **Logitech Scribe**, an AI-powered whiteboard camera, in the Indian Market in order to create a more equitable meeting experience for remote participants. Logitech Scribe, compatible with leading services like Microsoft Teams and Zoom, broadcasts whiteboard content into video meetings with incredible clarity, virtually transporting everyone into the same room.

From meeting rooms to classrooms, Logitech Scribe comes at a crucial time when hybrid work and learning has become more pervasive. Logitech Scribe makes brainstorming, teaching, and team meetings equally accessible and productive for all participants through its simple-to-use design. Leveling the playing field for distributed teams, Scribe gives everyone — in-room or remote — a perfect view of the board.

On the launch of Logitech Scribe, **Scott Wharton**, General Manager and Vice President, Logitech Video Collaboration said, “We’ve obsessively worked toward solving the problems of providing high-quality audio and video collaboration in both meeting rooms and remote desktops, but there remains a gap in integrating non-digital content like whiteboards, or Post-it’s into virtual meetings. Logitech Scribe works because it takes advantage of what people already know how to do: pick up a marker and draw on a

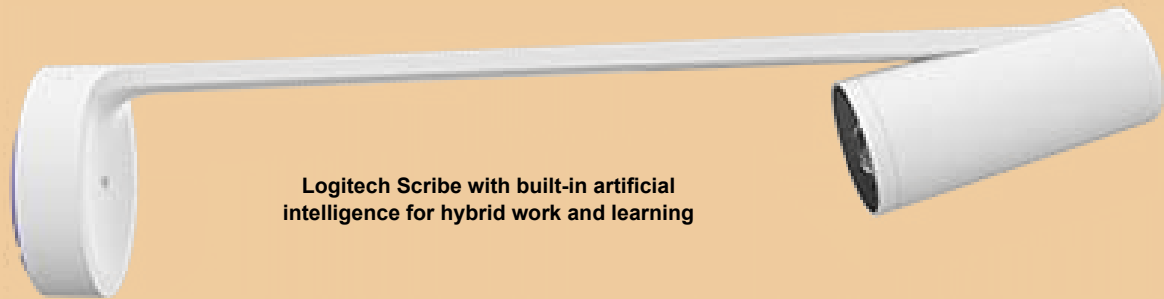
whiteboard. Now, we’re able to elevate non-digital collaborative content for everyone to see in high fidelity, while being extremely easy to use and share, thanks to its compatibility with today’s most popular cloud services like Teams and Zoom.

Enhanced integrations with Microsoft Teams Rooms and Zoom

real-time view of the whiteboard. Using built-in artificial intelligence, Scribe can render the presenter transparent, so remote users can see the whiteboard with nothing in the way, and automatically enhances the color of markers so the content is easier to read. Scribe even has the ability to detect other non-digital content like Post-its, a favorite

and meaningful ways.

“With the almost immediate corporate change from in-office to work from home, this past year has required us to make a lot of adjustments. Logitech may have seen these same issues, but they didn’t stop working and created a great product,” said **Will Cool**, Video



Rooms make the experience effortless. In-room participants can begin sharing whiteboard content into video meetings by simply pressing the wireless button included with Scribe or tapping the meeting room touch controller, like Logitech Tap. The wireless button currently works with Zoom Rooms, and support for Teams Rooms will come later this year. Scribe also works as a USB content camera with virtually any video conferencing application, providing the flexibility to use Scribe in meeting rooms, classrooms, or even home offices.

Capturing dry erase surfaces up to six by four feet, Logitech Scribe is a dedicated whiteboard camera that gives virtual meeting participants a clear,

tool for collaboration sessions. Whether viewing from a laptop at home or on the meeting room display, Scribe makes sure everyone has the best seat at the table.

With a clean, wall-mounted design and thoughtful cable management, Scribe elegantly blends into any modern office or classroom. Plus, it comes with everything you need to quickly get it up and running. Together with the whiteboard content camera, Scribe includes a wireless share button, mounting components, power supply, and category cables for deployment at scale. With Scribe, Logitech is expanding what it does best: creating collaborative tools that make it easier for people to interact with the digital world in more natural

Conference Standards and Operations at PayPal. “Scribe brings the ‘in-room collaboration’ feeling to global conferencing through a sleek and modern whiteboard device. Scribe’s high-definition imaging and plug-and-play connectivity make for an effective and easy to install tool that is essential within the hybrid collaboration industry.”

Continued **Ehrika Gladden**, Vice President of the global video collaboration commercial organization at Logitech, “Whether your mission includes creativity, design, development, or teaching we’ve gotten a glimpse of what the tech-enabled collaboration of the future can look like with Scribe.”

ATLONA LAUNCHES AT-WAVE-101... (Continued from page 13)

tions with no prior setup required, while content encryption and randomly-generated PIN codes – displayed on the WAVE-101 welcome screen – ensure secure wireless sharing. Offering effortless, touch-free operation, the WAVE-101 features a patent-pending, Dynamic Layout Mode that automatically adapts the on-screen layout for up to four participants when a new content source is added; a presenter disconnects from the system; or a connected mobile device is rotated between portrait and landscape orientation.

Designed for use in classrooms, meeting spaces, and other collaboration environments, the WAVE-101 is equally adept on its own or as part of an integrated AV solution. The compact device can be installed discreetly near a display for easy, ad hoc content sharing or used in conjunction with a switcher to enhance a new or existing AV system with wireless, multi-participant BYOD connectivity. While ideal for a wide range of presentation and collaboration purposes, the WAVE-101 offers value-added features designed specifically

to enhance learning experiences in educational environments. Instructor Mode, accessible through the WAVE-101’s intuitive web interface, enables easy management and moderation of multiple active and queued student presenters. Additionally, sessions can be streamed live over YouTube for remote learning, while integrated playback of locally stored images, media files (up to 4K at 60 fps), and YouTube source content enables easy incorporation of supplemental lesson materials.

The WAVE-101 features a configurable firewall and supports industry-standard network security features

and protocols including WPA2-PSK and AES-128 encryption. The device’s integrated Wi-Fi access point can also be firewalled from the customer facility’s LAN if desired for security purposes. Multiple WAVE-101 devices can be remotely configured, monitored, and managed over the network through the free Atlona Management System (AMS) software, part of the company’s Velocity System AV control and management platform. Additional integration convenience features include programmable IP display control and support for URL-based digital signage platforms as input sources.

## JBL PRESENTS NEW L75MS MUSIC SYSTEM AND L52 CLASSIC BOOKSHELF LOUDSPEAKERS AT PROSOURCE SUMMER CONFERENCE

ProSource has announced that vendor JBL is introducing its **L75ms Music System** and **L52 Classic bookshelf loudspeaker** at the Summer Conference. Certain to be an instant classic, the JBL L75ms Music System cater to enthusiasts who seek an easier way to listen to their music collection without sacrificing acoustic performance. The L52 Classic boasts a size that allows it to work in a variety of applications, from stand-mount to bookshelf to tabletop to wall-mount. The appearance of the L52 Classic echoes that of its larger siblings, with a walnut wood veneer enclosure and a Quadrex foam grille available in a choice of black, blue, or orange. As a modern reimagining of the traditional hi-fi system, the L75ms finds its design inspiration from the JBL Classic Series with which it shares its walnut wood veneer cabinet finish and black Quadrex foam grille. Behind that retro appearance lies thoroughly modern acoustic technology, including high-res audio capability and a wealth of wired and wireless connectivity. With its incredible combination of style, size, and performance, there is simply nothing like the L75ms Music System.

### L75ms Music System

The integrated streaming engine provides both wired and wireless network audio capabilities via Ethernet, Google Chromecast built-in, Apple AirPlay 2, and Bluetooth audio. A 32-bit/192kHz high-resolution DAC ensures their favorite music comes across with the highest fidelity. In addition to wireless audio, the L75ms provides a number of connections for physical sources, including a 3.5mm analog input. For vinyl lovers, there is a moving magnet (MM) phono stage for connecting a turntable, and there is an HDMI ARC input for great movie and gaming sound when connected to a television. For even more acoustic impact, there is a dedicated signal-sensing subwoofer output for connecting to an external powered subwoofer.

Behind the Quadrex foam grille and curved front-panel shape, the L75ms contains a pair of 1-inch titanium dome tweeters with waveguides, a pair of 5.25-inch white cone woofers with dual front-firing ports, and a 4-inch central midrange driver – all arranged on a multi-angled baffle that brings to mind the “built-in acoustics” curved shapes of famous heritage JBL models. Each of the five drivers has a dedicated



**L75ms Music System with high-resolution DAC delivers music with high fidelity**

channel of amplification and DSP tuning to deliver wide soundstage across a large listening area. System operation of the L75ms is via the aluminum control panel on the top of the walnut enclosure, the included wireless remote control, or wireless connectivity to a Google Chromecast-, Apple AirPlay 2-, or Bluetooth-enabled device.

“ProSource and the Harman Luxury Audio Group have been great partners over many years,” commented **Dave Workman**, President and CEO of ProSource. “We are honored that they would choose our Summer Conference to unveil the JBL L75ms Music System. I have no doubt that it will impress our members with its performance, style, and price point and become a popular option for many of our dealers to offer to their customers.”

To highlight the performance capabilities of the L75ms Music System, JBL has partnered with streaming audio service Qobuz to offer a free trial subscription for customers to provide them the experience of listening to high-resolution music. “We are excited to be able to expose more music enthusiasts to our platform by bundling a 90-day premium subscription with this incredible music system,” stated **David Solomon**, Chief Hi Res Music Evangelist at Qobuz. “JBL is working with Qobuz to curate a playlist of songs used by the engineering and product team during the development of the L75ms so that customers can discover for themselves some of the finest attributes of the product.”

### L52 Classic Bookshelf Loudspeakers

Designed as a scaled-down version of the award-winning L82 Classic, the L52 Classic is a two-way design utilizing a 0.75-inch titanium dome tweeter mated to an acoustic lens waveguide and a 5.25-inch white cone, cast-frame woofer. A crossover network design ensures optimum system performance, while a front-panel HF level attenu-

“The L52 Classic is such a compelling proposition, with its big sound, small size, and attractive pricing,” said **Jim Garrett**. “The ProSource Summer Conference is the perfect place to introduce this new model to our customers.”

“ProSource members have enjoyed great success with selling the Classic Series to their customers since its inception,” said **David Workman**, “We



**L52 Classic bookshelf loudspeaker features HF level attenuator for tailored sound**

ator allows the sound to be tailored to its environment. Enclosure tuning is bass-reflex via a front-firing tuned port and a set of binding post speaker terminals that provide secure connection to speaker cables. The enclosure includes a pair of threaded inserts on the rear panel for use with third-party wall-mount brackets.

are proud to have the opportunity to introduce the newest member of the family with the first live industry demonstration of the product at our Summer Conference. Our group is bound to embrace a product that has been engineered to broaden the market with an affordable, premium audio solution.”



## LYNX TECHNIK ANNOUNCES SEVEN NEW YELLOBIK ETHERNET | FIBER TRANSCEIVERS & CONVERTERS

**LYNX Technik**, provider of modular signal processing interfaces has launched **seven new Fiber Yellobriks**. These new models offer a cost-effective solution to convert fiber to copper Ethernet, copper to fiber, fiber to fiber, or simply to extend electrical Ethernet signals over a bi-directional single fiber; with support up to 10Gbit/s.

By using the LYNX Technik yellobrik Ethernet | Fiber conversion solutions, facilities can take advantage of fiber optic cabling to extend the reach of 10Gbit/s Ethernet signals over a greater distance – up to 20 Km / 12 miles. These converters enable the connections of copper-based Ethernet equipment to single and multi-mode fiber optic cable, all while offering a stable and high-speed signal connection between locations.

The new yellobriks provide a variety of connectivity solutions where cabling



**Designed to Extend the Reach of Ethernet Signals**

may be a challenge, or where long-distance signal distribution is required. They are hot swappable and hot pluggable, user-friendly with all the instructions and indicators printed directly on the units themselves. Their ease of use facilitates easy setup and quick troubleshooting.

The OET 1910 models offer fiber to copper as well as copper to fiber conversion and include two 10Gbit/s ports per module with a maximum throughput of 20Gbit/s in full duplex mode. The OBD 1910 models provide a 10Gbit/s Ethernet extension over a bi-directional

single fiber, also including two ports per module with a maximum throughput of 20Gbit/s in full duplex mode. The OET 1940 models are multi-functional in

that they provide fiber to copper, copper to fiber as well as fiber to fiber conversion. They also support CWDM fiber transmission for the full 18 wavelengths of coverage. In addition, a variety of SFP fiber transceiver modules are available as add-ons depending on the application and the distance of transmission required.

All these new modules can be used as standalone units or mounted onto 19" yellobrik rack trays to build a larger conversion system and offer optional fiber adapter kits for adding ST or SC fiber connections on the yellobriks.

## DAKTRONICS UNVEILS NARROW PIXEL PITCH PRODUCT LINE

**Daktronics** has released the **NPN-6400**. This product leverages a new LED technology that increases both contrast and durability while also featuring the tightest pixel pitch at 0.7- and 0.9-millimeters.

Pixel pitches of 0.7- and 0.9-millimeters are ideal for very close viewing where 4K can be achieved in 138" and 165" diagonally, respectively. Pixel pitches of 1.2- and 1.5-millimeters are also available in this new product line to achieve 4K in 220" and 275" diagonally, respectively.

"We're seeing customers looking to achieving a greater resolution in a smaller physical footprint," said **Adam Gilliland**, Daktronics Product Manager. "This latest innovation allows the possibilities of 4k and 8k to become a reality in pixel pitches that are below one millimeter as LED technology rivals LCD technology in that realm."

Applications where this technology is best suited include command and control rooms, conference and board rooms, auditoriums, and any setting where the audience may be within an arm's reach of the display and rich contrast is valued. The product was built with the professional audiovisual industry in mind and is Buy American Act (BAA) compliant.

"As pixel pitches become tighter and tighter, a dark, matte canvas allows for impressive video quality in any indoor lighting condition," said Gilliland. "The added durability allows for more effective, faster installations while also mitigating the risk of damage from touch or impact. This allows the display to be positioned closer to the viewing audience."

The NPN-6400 product line is built on Daktronics proprietary Pure Pixel Processing signal platform and uses Daktronics-engineered DI-6000 display interface.

"Not only do we design, develop and build the display technology, we do the same with the DI-6000, our proprietary architecture and display interface," added Gilliland. "This technology provides benefits in grayscale and color reproduction as well as extra capacity for image refinement capabilities."

## RENKUS-HEINZ IC SERIES ADDS DANTE INTEROPERABILITY

**Renkus-Heinz**, manufacturer of professional loudspeakers, has announced the latest products in its new **Iconyx Compact Series**: the ICC 12/3-RD1, 24/3-RD1, 36/3-RD1 and 48/3-RD1.

The new **-RD1 lineup** completes the Iconyx Compact Series portfolio – a line that first launched in 2020 as a response to integrators seeking coherent and steerable sound solutions in highly problematic acoustic spaces. With its compact footprint, the series brings performance and directivity to spaces where even the classic Iconyx arrays might be too large. The -RD1 models add improved interoperability and flexibility through Dante audio-over-IP functionality. They also bring new control options with integration into Crestron's remote control solutions and environments.

"The -RD1 versions allow for quick, cost-effective, and easy integration using Audinate's highly integrated Dante Ultimo chip," said **Graham Hendry**, Vice President of Strategic Development at Renkus-Heinz. "The Ultimo platform is perfect for the smaller footprint Iconyx Compact Series where the diminutive dimensions also mean there is a need for more space-constrained

network devices featuring a lower channel count. The -RD1 ICC family supports all the features that have driven widespread adoption of Dante technology: auto-discovery of devices, label-based routing of signals, true plug-and-play operation, and superb audio performance over standard networks." The very narrow profile allows the Iconyx Compact Series to blend into nearly any environment, while exceptional directivity helps control even the most challenging acoustics. This brings the premium performance of beam-steered line arrays to even the most architecturally sensitive spaces and provides more opportunities for integration in the house of worship, corporate, transportation, education, and government markets.

The new products also offer full RHAON II beam-steering with the latest U.R.G.O beam algorithms, a movable acoustic center, multiple beam opening angles and high-pass filtering of individual beams. That means all the fidelity and musicality expected of a Renkus-Heinz product – just found in a footprint 40 percent smaller than the classic Iconyx.

The included wall-mount brackets make mounting easy and are nearly invisible behind the arrays. Standard RN units have analog and AES inputs.



**RD1 lineup features beam-steering with U.R.G.O beam algorithms**

## PRYSM SYSTEMS REVAMPS LARGE-FORMAT DISPLAYS WITH THE 225" INTERACTIVE LPD 6K SERIES

**Prysm Systems** has announced the **225-inch LPD 6K**, an interactive large-format display with a panoramic image uninterrupted by seams and bezels. Powered by the Prysm Application Suite, the LPD 6K empowers collaboration and elevates presentations by enabling users to present multiple content platforms and third-party applications into one display solution.

Prysm Systems has modernized the concept of transporting and integrating large-format displays by producing a bezel-free, seamless picture with a rollable front panel that can fit into virtually any room with a standard door. As displays become larger, Prysm Systems has streamlined large-format video displays while providing a high-quality, impact-resistant surface. The LPD 6K produces vivid colors presented in 7K resolution with a deep contrast to deliver stunning picture quality. With a 178-degree viewing angle, the high-quality display can be viewed at any distance or angle. It also reduces the traditional eye fatigue viewers experience to create an unparalleled experience.

With the Prysm Application Suite, users can maximize the technology by creating an interactive, durable



**LPD 6K offers 7 K resolutions with impact-resistant surface**

touch-screen display that is specially formulated to offer smooth touch interaction. Prysm Application Suite is a digital workplace platform that unifies people, content and ideas to promote collaboration and elevate presentations. The platform combines video streams, web applications, documents, presentations and images from laptops, tablets or mobile devices.

"Large format displays typically have

been hindered by high-power consumption and limited applicability," said **Roger Hajjar**, Ph.D., chief technology officer of Prysm Systems. "Prysm Systems is transforming the large-format display industry by creating a high-quality solution with low-power consumption and scalability. As our screens become larger, we continue to incorporate seamless picture and bezel-free designs while promoting collaboration through a cloud-based

interactive suite. The LPD 6K is designed to be an eye-catching focal point while promoting interaction across different environments." Designed for corporate, education, hospitality and retail environments, the LPD 6K offers luminance up close and far away, with a 90% fill factor for best-in-class sharpness and crisp fonts. It boasts energy efficiency and reliability to support sustainability and operating budgets.

## SHARP NEC ADDS NEW MODELS TO DESKTOP DISPLAY FAMILY

**Sharp NEC Display Solutions** has announced the availability of the AccuSync **AS271F** and MultiSync **E273F**, the newest additions to its desktop display family. Suitable for corporate, financial, entertainment, and education environments, the new desktop displays offer flexibility and value.

NEC's AccuSync line is now complete with the addition of its largest model, the AS271F, providing a sleek design and updated connectivity. The wide-screen display features three-sided narrow bezels and a thin cabinet, internal speakers, and mounting ability on an arm or wall mount. The AS271F connectivity offers flexibility and meets the many demands of work environments with HDMI, DisplayPort, and VGA connection. The display also features a tilt adjustable stand for added comfort and works well for side-by-side display usage. NEC's AccuSync

Series monitors have set a new standard in value for the flat-panel monitor category, offering the latest display technology at an affordable price point.

"The 27-inch AS271F desktop display offers a large workspace with eco-friendly benefits. This monitor includes features such as ECO Mode to extend the life of the display, LED backlights for less energy consumption than its predecessors, Intelligent Power Manager, and compact packaging," says **Horacio Alzate**, Desktop Monitor Product Manager for Sharp NEC Display Solutions.

Another desktop display making its debut is the MultiSync E273F, a 27-inch enterprise and ultra-narrow LED-backlit desktop monitor ideal for corporate environments. Designed to enhance work performance, this widescreen model features IPS panel technology with wide viewing angles and ergonomic adjustability including dual-direction pivot. The comprehensive, digital-only input panel, including DisplayPort, HDMI and



**AS271F & E273F offers HDMI connectivity**

USB Type-C, connects with the latest peripherals with digital connections and future-proofs your investment.

"Building on the success and core feature set of the E243F, the E273F

offers added USB-C connectivity, strengthening the competitiveness of the MultiSync display while still meeting the needs of the cost-conscious corporate buyers," said Alzate.



## PIONEER DJ ANNOUNCES EXCLUSIVE OFF-WHITE COLLABORATION, DDJ-1000-OW

AlphaTheta Corporation has announced the release of the limited-edition **DDJ-1000-OW** from its **Pioneer DJ brand**. This exclusive DJ controller made in collaboration with **Off-White** will be available in limited quantities globally.

As the founder of Off-White and one of the most important artistic directors in the fashion scene, Virgil Abloh had a deep desire to create DJ equipment that explores the unity and harmony of music with Pioneer DJ. Based on the concept of "Sound Engineering," Pioneer DJ and Off-White completed "DDJ-1000-OW" through a determined artistic process.

The DDJ-1000-OW is a special model with a unique collaborative design. The fluorescent orange and matte white asymmetrical colors and tagline printing bring a unique look to the DDJ-1000 DJ controller, which offers both high performance and portability. The controller inherits the layout of the CDJ-2000NXS2 and DJM-900NXS2 setup, which is widely regarded by professional DJs as the club standard for DJ gear.

In line with the release of the

DDJ-1000-OW, Off-White plans to launch a "SOUND ENGINEERING" capsule collection of clothing, also in collaboration with Pioneer DJ.

"As with the skeleton CDJ and DJM I designed with Pioneer DJ, I wanted to take this opportunity to bring together technology and human interaction," says **Virgil Abloh**, CEO, Off-White. "And this time we took it one step further

with "SOUND ENGINEERING" bringing together this medium that unites so many of us with a fashion element. Both music and fashion, in my opinion, are these intense forces that have the unique power to bring people together while letting you make your own statement all at the same time."

**Yoshinori Kataoka**, President and CEO of AlphaTheta Corporation said,

"DJing is a truly unique artform; its ability to evoke strong emotions and create deep connections between music and people is incredibly powerful. Virgil's capacity to connect a myriad of artforms is a fearless display of unlimited creative potential. We hope that this collaboration inspires creativity amongst our community."

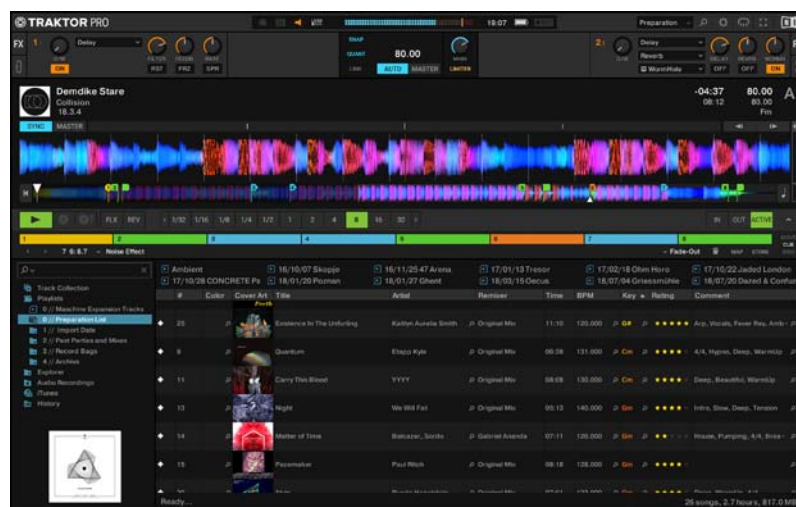


Pioneer DJ DDJ-1000-OW

## NATIVE INSTRUMENTS RELEASES FREE TRAKTOR PRO 3.2 UPDATE

Native Instruments has released a free update to their flagship DJ software, **TRAKTOR PRO 3**. The update is designed to help users mix in key and make their sets more musical – choosing tracks that share compatible keys, and using key changes as a way to creatively program their sets.

To coincide with the release, TRAKTOR have teamed up with **Chris Liebing** to create a video where he gives his take on harmonic mixing, and take users through what's new. Dubbed 'The Harmonic Mixing Update,' the free update integrates the new Elastique 3.3 keylock algorithm for sharper transients and more presence when pitching up



Native Instruments Traktor Pro 3.2 Update

or down. There's also a new dedicated control for pitching up or down by semitones, with an integrated display of the resulting key.

The update means DJs can much more easily extend the range of tracks that match harmonically. Tracks which match the track on the master deck are now highlighted in the browser section, meaning it's much faster and easier to mix in key.

The update also sees a +6dB boost to the headphone output on the TRAKTOR KONTROL S4 across the entire range of the Cue Mix. TRAKTOR PRO 3.2 is available to all TRAKTOR PRO 3 users, and can be installed via Native Access.



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## RANE DEBUTS LIMITED-EDITION SEVENTY A-TRAK SIGNATURE EDITION BATTLE MIXER

Rane has announced the release of an exclusive collaboration with internationally renowned DJ, Turntablist and Producer, **A-Trak**. The **Seventy A-Trak Signature Edition** is a meticulously designed remix of the popular Rane Seventy DJ mixer. A-Trak himself played an integral part in the mixer's creation, handpicking the features, signature sound, and look of what he considers to be the ultimate mixer for the future of turntablist performance.

The exterior of the Seventy A-Trak Signature Edition features a silver finish that gleams beneath the aluminum-capped rotary-styled knobs and encoders. Custom font-faces and elements adorn the mixer, but the real magic lies beneath the surface. The sound curve and frequency response of the mixer was crafted by A-Trak himself, increasing the depth of the low-end to



ensure that the high-quality audio matches his signature sound.

"I'm a big believer that every classic piece of kit should have a signature feature," says **A-Trak**, "something that sets it apart from the rest." Enter **Fader FX**, a new mixer feature that transforms the channel volume faders into linear controllers for performance effects like Filter, Roll, Pitch, Ring-Modulator, and four types of Oscillators. DJs can dive deep into the settings of these Fader FX options to change root keys, octaves, and more, crafting a personalized set of tools to take with them to their next

**The Seventy A-Trak Signature Edition features Mag Four faders and MPC-style Performance Pads.**

performance or battle.

The Seventy A-Trak Signature Edition was built upon the solid foundation of the Rane Seventy, known for its intuitive layout and best-in-class performance. The same solid-steel construction that makes the Seventy a battle-standard mixer is found in the Seventy A-Trak Signature Edition along with the same premium Mag Four faders and MPC-style Performance Pads. All of the other features that make the original Seventy the mixer of choice for discerning DJs are in the Seventy A-Trak Signature Edition as well, including easy access to Serato's Scratch Bank, external cross fader tension adjustment, and six post-fader internal Flex FX (including Fader FX) which can be layered with Serato DJ Pro's Software FX. The SEVENTY A-TRAK SIGNATURE EDITION mixers sets a new standard of what a championship battle mixer should be and will undoubtedly bring a new level of creativity, artistry, and style to DJ performances and battles across the globe.

### Promotion Index

Name	Page No.
H V & Company, Gujarat	31
MZ Audio Distributions (India), Mumbai	21
NEC Technologies India Pvt. Ltd., Noida	01
PALM Expo 2022, Mumbai	IFC, 49 & BC
Sennheiser, Gurugram	IBC
SK Pyro Special Effects, Thane	07

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