



# palm + AV-ICN

## EXPO MAGAZINE

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

## AV INDUSTRY CONVENES AT INFOCOMM MUMBAI

## FEATURED STORIES



Bringing Futuristic AV Ideas To Life at the Wadala Monorail Depot Boardroom



Roger Drego on Creating Fail-Proof Sound for Mega Live Events



Exploring the Dynamics of India's Pro AV market with Renkus-Heinz



Anil Chopra - AV-ICN, In Conversation with Krishna Tripathi - NEC



7 New Trends in AV Conferencing to look out for



Product Review of Audient iD14 and ASP800 by Raag Sethi

SEPTEMBER - OCTOBER ISSUE 2022



**AV-ICN PLANS  
CAVS CERTIFICATION COURSE  
IN AHMEDABAD**  
Rhino Engineers Supports  
CAVS Ahmedabad Edition

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## MEET THE NAKYMATONE INDIA SALES TEAM!

### EAST INDIA

Anindya Bhattacharya,  
+91 865 786 4920  
anindya@vmt.in

### NORTH INDIA

Anurag Khanna,  
+91 865 786 4921  
anurag.khanna@vmt.in

### WEST INDIA

Kekul Seth,  
+91 865 786 4922  
kekul@vmt.in

### SOUTH INDIA

Vishwanath MB,  
+91 865 786 4908  
vishwanath.mb@vmt.in

### National Sales

Jeff Mandot | jeff@vardhaman.net  
+91 865 786 4948

### Pre Sales & Design Support

Dharam Kohli | salespro@vmt.in

### Tech Support

Vicky Perreira | tech@vmt.in

# PALM AV-ICN

## CONTENT CHIEF

Anil Shiv Raj Chopra  
achopra@palmexpo.in

## CONTENT ANCHOR

Smita Rai  
smita.rai@hyve.group  
Mob: +91 9289368200

## CONTENT MANAGER

Pooja Shah  
pooja.shah@hyve.group  
Mob: +91 9920071909

## EDITORIAL CONTRIBUTOR

Abdul Waheed  
CTS, Managing Director  
Eyte Technologies Pvt. Ltd.  
abdul@eyte.sg  
Mob: +91 9702877087

## GRAPHIC DESIGNERS

Peter Pereira  
peter.pereira@hyve.group  
Mob: +91 9311378568

Moiz Lokhandwala  
moiz.abbas@hyve.group  
Mob: +91 98204 31229

## WEB DEVELOPER

Fauziya Aansari  
fauziya.ansari@hyve.group  
Mob: +91 88797 44991

## DISTRIBUTION

Komal Jadhav  
komal.jadhav@hyve.group  
Mob: +91 9311378566

## CONTENT PRODUCTION & RESPONSE OFFICE

Hyve India Private Limited  
(CIN no. U92490DL2004PTC124343)  
5, Workafella,  
AK Estate, Off Veer Savarkar Flyover,  
Next to Radisson Blu Hotel, SV Road,  
Goregaon (West), Mumbai – 400062.  
Maharashtra, India.



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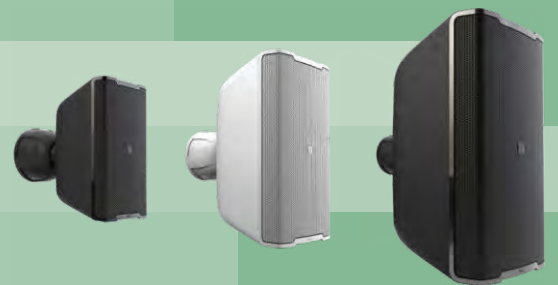
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## AV-ICN PLANS CAVS CERTIFICATION COURSE IN AHMEDABAD

### Rhino Engineers Supports CAVS Ahmedabad Edition

**Anil Chopra**, Founding Director, AV-ICN and CAVS, announced a plan to host the **Third CAVS Edition** in Ahmedabad. "Ahmedabad is an appropriate choice since numerous marquee AV projects are now originating in Gujarat. There is a dire need to provide CAVS course to prospective participants from the AV industry," said Anil Chopra.

The first two CAVS Editions were held at **PALM AV-ICN Expo**, which witnessed many participants stepping in to explore and understand the ever-evolving dynamics of the AV industry from several certified AV Specialists and Consultants from around the country. At the end of each CAVS Edition, certificates were issued to all the participants. Till date 50 CAVS registrants have availed of the certification.

**Narendra Naidu**, Chairman & Managing Director, **Rhino Engineers Pvt. Ltd.**, was awarded the **AV Architect of the Year** in 2022 for his leadership in making the Statue of Unity project an outstanding success in AV Technology adoption



**Narendra Naidu**, was awarded the **AV Architect of the Year** for his leadership in making the **Statue of Unity** project an outstanding success in AV Technology adoption at the **AV-ICN Expo** in May 2022

and showcasing highly innovative AV solutions. The awardee expressed at the

AV-ICN Expo in May 2022 his intention to support CAVS Education in Gujarat.

Anil Chopra commented, "CAVS course curriculum designed by AV-ICN is aimed at imparting basic principles of AV to provide the candidate an understanding of AV -related standards, protocol, and best practice. The vision of CAVS indeed is to have this course in dynamic centres where AV integration is happening in important projects. We want to contribute to the AV industry therefore we are more than encouraged and dedicated to having not just one CAVS course in Ahmedabad, but we look forward to having more CAVS courses in Gujarat, where we find lot of companies investing in AV technology."

The Ahmedabad Management Association Facility is decided to be the venue for the CAVS Ahmedabad Edition. "CAVS Ahmedabad Edition will attract the AV industry in Gujarat for sure and Rhino Engineers will support it and rest assured, the AV education program will be a success," said Narendra Naidu.

## ROE VISUAL CELEBRATES MILESTONE OF THE FILM-CENTRIC BLACK PEARL 2

### 100,000 Pieces Sold in Virtual Production Applications

**ROE Visual** announced the news of over 100,000 panels of their **Black Pearl 2 series** in Virtual Production use around the world. This figure represents a major milestone for the team and marks the undisputed market position of ROE Visual in this market segment. The latest model in the series, the BP2V2, is world-renowned for its on-screen performance, quickly solidifying it as **"The Gold Standard in Virtual Production."**

Ever since virtual production technology came of age, ROE Visual has played an instrumental role as an LED partner for its development. The BP2 and BP2V2 LED panels were at the core of this global revolution. In addition to using the series on-set, the Black Pearl 2 line has been used for theatre, live events, broadcasting, XR showcases, touring, and art installations due to its high-quality performance.

#### Worldwide Application of BP2V2

ROE Visual's BP2V2 panels have

been featured in production studios globally, and now make up a significant market share. The Black Pearl series has won the trust and reputation of various clients throughout North America, Europe, and the Asia-Pacific region, based on its standout performance. Studios equipped with BP2V2 displays offer filmmakers new ways to optimize their production workflow, creating flexible and cost-effective shooting solutions.

The Black Pearl series has supported a number of ground-breaking projects within various application fields. From TV and film productions to the rental stage for concerts and exhibitions, one-of-a-kind displays have been produced on the BP2V2 LED canvas, such as *Star Trek: Strange New Worlds*, *KIMI*, *MJ: The Musical*, *ABBA Voyage* concert, and many more.

The ROE Visual team witnessed the global success of the Black Pearl series thanks to the trust and support from its



customers and partners. As the virtual production space continues to grow, so does the demand for high-quality components. Receiving various industry awards, praises, and recognition, the BP2V2 proves to be the optimal solution in LED display technology around the world.

#### Technology Behind the Black Pearl Series

Beyond the panels' specs, the technology behind the BP2V2 has been instrumental in solving the limitations in virtual production. Pixomondo and ROE Visual recently demonstrated ac-

(Continued on page 07)

## AVI-SPL INDIA OPENS NEW OFFICE IN BANGALORE

### Third India location signals continued growth in region

**AVI-SPL**, one of the world's leading digital enablement services provider, today announced it has opened a new office in Bangalore, its third location in India. With over a decade of experience serving clients in India, AVI-SPL formally established operations in country with

The Bangalore office will serve as a hub for customer development, audio-visual (AV) and unified communications (UC) engineering, project management, and managed services. The new service location will support increasing local market demand from organizations of

to be a truly reliable partner to local organizations transforming how people and technology connect for elevated customer and employee experiences that create value in the new digital workplace.

"AVI-SPL's expanded presence in India

of communications and collaboration technology at work for them."

AVI-SPL India sees great opportunity in Bangalore. Many of the world's major financial services and IT companies operate from the city and 40% of India's IT industry is located there. AVI-SPL globally has a strong reputation as a trusted partner for these same companies and the real estate management firms like CBRE and Jones Lang LaSalle (JLL) that support them. It's also earned accolades for its customer experience through third parties like TrustRadius. Bangalore is the third most populous city in India after Mumbai and National Capital Region, including Delhi and Gurgaon, where AVI-SPL India also has established offices.

"The AVI-SPL India team are exceeding expectations in their efforts to introduce the AVI-SPL brand. We're excited to see the opening of Bangalore as another step forward in mobilizing local expertise and resources quickly in support of our customers," says **Tim Riek**, executive vice president of technology solutions.

As AVI-SPL India grows in Bangalore, it will be hiring premiere talent to deliver superb customer value. The company invites interested parties to reach out to AVI-SPL India to build connections that build great companies and rewarding careers.



the incorporation of AVI-SPL India Private Limited in January 2022. This latest office opening reaffirms AVI-SPL's commitment to growth in India by providing customers with consistently high-quality delivery of digital workplace solutions backed by expert, local support.

all sizes for collaboration technology enabling emerging ways of working from anywhere with anyone. With teams in Gurgaon and Mumbai already driving AVI-SPL India expansion, backed by the extensive global resources of AVI-SPL, the company is well positioned

is accompanied by significant growth in our team and local customer base," says **Mala Prasad**, regional director of AVI-SPL India. "The Bangalore-based team will focus on working with the local technology and services sectors to help businesses unlock the full potential

## ELECTROSONIC AND HOLOPLOT ENTER GLOBAL STRATEGIC PARTNERSHIP TO CREATE IMMERSIVE AUDIO ENVIRONMENTS

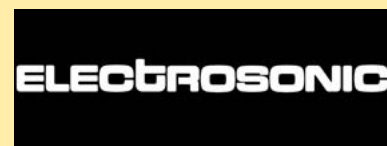
**Electrosonic**, the leading experiential technology company announced a new strategic partnership with Berlin-based pro audio company **HOLOPLOT** to create revolutionary immersive audio envi-

ronments in experiential spaces around the globe.

Together, HOLOPLOT's unique audio technology and Electrosonic's rich history of using technology to create world-class experiences combine to

create a unique design, build and support offering that further enhances Electrosonic's ability to create immersive environments.

HOLOPLOT's X1 product line has brought an entirely new category of



sound system to the table, granting users a previously impossible level of control over sound. HOLOPLOT technology provides a broad range of practical and creative capabilities - whether solving challenging acoustics in complex environments or adding stunning authenticity and depth to immersive spaces.

"Partnerships with companies as well regarded as Electrosonic are vital to the continued international growth of HOLOPLOT and the fulfillment of our mission to push the boundaries of what is possible

*(Continued on page 42)*

### ROE VISUAL CELEBRATES...

tive viewing angle correction in virtual production with the panel's viewing angle data. The system improves the colour performance of LED volumes by tracking the camera's position and adjusting the colour of the LED pixels accordingly. The innovation in colour correction marks a new shift in virtual production technology.

"We are grateful for the trust and

*(Continued from page 06)*

support of our clients, partners, and friends. This is a time for celebration and recognition as the team continues to lead with its values and mission in delivering optimal LED solutions for every application. We can't wait to see new projects utilize the power of the Black Pearl series, exciting audiences everywhere," states **Grace Kuo**, Sales Director at ROE Visual.

"Everyone at ROE Visual is elated to see how far the Black Pearl 2 series has come. The widespread acceptance of the BP2V2 panel on film & television stages around the world has been a point of pride," says **Frank Montero**, Managing Director at ROE Visual US. "The future of virtual production is still being defined and ROE aims to be a part of that history in the making."

## CLAYPAKY ANNOUNCES BIG TURNOUT AT MUMBAI'S PALM AV-ICN EXPO 2022

Claypaky announced big turnout at the recent PALM AV-ICN Expo 2022 in Mumbai, India's foremost trade show for the professional sound, audiovisual and lighting industry, where it exhibited in the booth of the company's Indian

"Meeting in person at PALM Expo with clients, customers and partners after a gap of two years due to the coronavirus pandemic was really exciting," says **Pankil Ahuja**, Claypaky Sales Manager for India and the subcontinent. "The exhibition was an example

which everyone in India has a lot of respect for and recognizes as delivering premium quality products in the market for a really long time. Rental players aspire to buy Claypaky products; they have absolutely no doubt about the products. Sharpy X Frame, Xtylos, Arolla

product availability, competitive pricing and attractive terms." **Rajan Gupta** and **Nirdosh Aggarwal** headed Hi Tech Audio and Image's presence at the show.

PALM Expo introduced attendees to Claypaky's new Sharpy X Frame multifunction luminaire, a compact, lightweight fixture that takes the best features of the popular Sharpy line and integrates a four-focal plane shutter system. It can produce beam effects or serve as a spot, profile or wash unit. Its powerful 550-watt arc source makes Sharpy X Frame extremely bright and produces deep and vivid uniform colors.

Also coming in for its share of attention at PALM Expo was the **Mini Xtylos**, the compact version of the revolutionary Xtylos with an RGB laser source. The Mini Xtylos maintains the same output and color consistency of its big brother but in a small footprint that weighs just 9kg.

Claypaky representatives from Italy attended PALM Expo and were impressed by the gathering and the potential of the vibrant Indian market. "Events and shows in India are very colorful and joyful," says **Dylan De Matteo**, Claypaky's Sales Support Engineer. "Imagine what happens when the creativity of Indian lighting designers meets the

*(Continued on page 10)*



Claypaky witness massive footfall at PALM AV-ICN Expo 2022

distributor, Hi Tech Audio and Image Pvt. Ltd. Claypaky launched its **Sharpy X Frame** multifunction luminaire during the event and highlighted its **Mini Xtylos RGB laser source** fixture, among other products.

of how our industry is coming back very strongly; there will be more events, concerts and shows which we are very thrilled about and eager to support our customers in any way we can."

Ahuja notes that, "Claypaky is a brand

Profile MP and Mini B, particularly, are catching the eyes of our customers. We received quite nice feedback about these products at PALM Expo, and we are supporting our customers with the help of Hi Tech Audio and Image with

## AUDIOTONIX ACQUIRES PLUG-IN SOFTWARE SLATE DIGITAL

**Audiotonix** has announced the acquisition of **Slate Digital**, one of the world's leading software plug-in developers for audio creation and production. With a brand portfolio that includes Allen & Heath, Calrec, DiGiCo, DiGiGrid, Group One Limited, KLANG:technologies, Solid State Logic, and Sound Devices, the transaction further enhances the groups significant presence in the professional audio creation and production markets.

Slate Digital was co-founded in 2008 by **Steven Slate** and **Fabrice Gabriel**, with a mission to create outstanding digital audio tools for professional producers, mixers, and engineers. Since then, the company has successfully developed many industry-favourite software plug-ins, mixing and mastering audio processing

software, virtual microphone modelling, audio samples and video courses.

"The Slate Digital team share many of the key attributes we have across all our brands; great technology combined with committed staff with a real energy and passion for what they do" comments **James Gordon**, CEO of Audiotonix. "Their history and reputation for building stellar software tools is second to none, and from a business perspective their success in building a strong subscription model adds another bow in how we grow in the audio creation market. Personally, I'm looking forward to working with the Grenoble and US teams, to support them with their aspiration to continue to innovate technically and commercially, and to have some fun along the way."

Steven Slate, Co-Founder, Slate Digital, states, "I'm so proud of what our team has been able to achieve over the past decade, and as part of Audiotonix, Slate Digital will have the resources to think



even bigger and offer way more value to our customers. Audiotonix shares the passion for pushing the boundaries within the industry, and I look forward to seeing how Slate Digital unlocks even more possibilities for music creators. The products that will soon be released

in this new chapter are the company's most bold and innovative to date. I believe our loyal Slate Digital customers will be thrilled at what is to come."

"Over the last few years, I have been working with the development team to pass on the skills and approach we have always had to our DSP work. Now having access to additional technology resources from Audiotonix will no doubt inspire the development team to new heights. This is truly an exciting prospect, and one of the core reasons we felt Audiotonix is the right partner for us to pass Slate Digital to" adds **Fabrice Gabriel**, Co-Founder, Slate Digital. "Personally, I am going to be working with the wider Audiotonix DSP teams to continue our knowledge share and algorithm development."

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## JOHN MEYER HONoured WITH SAMUEL L. WARNER MEMORIAL MEDAL

### SMPTE Award Recognizes a Lifetime of Contributions to Excellence in Cinema Sound

SMPTE, the international society for media professionals, technologists, and engineers, has awarded the 2022 Samuel L. Warner Memorial Medal to **John Meyer**, the co-founder, President, and CEO of **Meyer Sound**. According to a SMPTE statement, the honour was bestowed "in recognition of his contributions to the design, measurement, and analysis of cinema speaker electronics

for cinema mixing, review, and exhibition facilities." Formal presentation of the award will take place at the **SMPTE Awards Gala**, to be held on October 27 at the Loews Hollywood Hotel.

"I am deeply grateful for the industry recognition that comes with this medal," says John Meyer. "Certainly, it acknowledges my personal commitment to excellence in film sound,

which is a passion that goes back to my childhood. I always enjoyed the experience of good movie sound – and I was annoyed when it was bad, which was too often the case. I always thought it could be better, and making that happen has been a major focus of my life's work."



## BETA3 HOSTS SOUND AND LIGHT PERSONNEL AFFECTION MEETING CEREMONY IN LUCKNOW

On 14th September, 2022, Beta3 hosted the **Sound and Light Personnel Affection Meeting Ceremony** in Lucknow. Attended by some of the most prominent audio industry professionals, the Ceremony took place to felicitate Beta3 India Audio Pvt Ltd's sound personnel. At the Ceremony, the team was rewarded with certificates as a way to acknowledge their tireless endeavors at the back end to help Beta3 leave a mark as a globally recognized and respected choice for reliable pro audio equipment, technical support, and after-sales service.

"At Beta3, we're just amazed at how far the team, consisting of our sound personnel, has come in under a year after pandemic. This is all due to the team's endless dedication, enthusiasm, and selflessness to work behind the scenes and stay with us through the thick and thin in order to proactively expand the reach of Beta3 pro audio products. Our team is the cornerstone of our company strategy, and we're sure that with their incredible efforts, our products will be 100% powered by industry experts one day," shares



**Beta3 Audio India Private Limited Hosts Sound and Light Personnel Affection Meeting Ceremony In Lucknow**

Nawal Agarwal, President, Beta3 Audio India Pvt Ltd.

This occasion was graced by Kazmi Sound, Tathastu Entertainment Pvt. Ltd., Harman Electronics Engineers, Narang Sound & Light House and Aks The DJ - five pillars of Sound and Light Association - and numerous big names in sound rental industry shared their

vision and experience on formation of the group's exciting new venture, which is set to be a benchmark in the audio industry.

Both vendors and experts came together to introduce more Beta3 audio products in their inventories, such as Professional "D Class" Amplifiers, Exclusive Line Arrays, and much more.

Courtesy the incredible effort and continuous support on behalf of the several rental companies, local vendors, event organizers, and sound engineers in Lucknow, the team at Beta3 looks forward to map new milestones and growing leaps and bounds with every achievement.

## CLAYPAKY ANNOUNCES BIG TURNOUT AT...

(Continued from page 08)

world's best lighting brand, Claypaky! The market needs some pointers on differentiating quality lighting equipment – their effects, colors, precise movements – from cheaper fixtures.

But with the help of our partner in India, Hi Tech Audio and Image, constant training and seminars will educate and uplift the market and boost the industry in the country."

PALM Expo actually gave Claypaky Sales Director **Alberico D'Amato** a chance to meet with partners whom he's known for more than 25 years. "It was very exciting and emotional

too," he reports. "Certainly, the market is improving in terms of shows and events. A very good sign is the number of international events that have started coming to India – events driven by specified lighting equipment in which Claypaky is a really strong player."



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## YEALINK AND AMX BY HARMAN COLLABORATE TO DELIVER A SIMPLE AND QUALITY TEAMS MEETING EXPERIENCE

Yealink, a leading global unified communications (UC) solution provider and **HARMAN Professional Solutions**, the global leader in audio, video, lighting, and control systems together announce the integration of Yealink and AMX by HARMAN control systems that brings a convenient connection and simple control when users are meeting and presenting in the meeting rooms.

With the combination of Yealink's Microsoft Teams Rooms system and AMX's devices including central controllers, video switchers and Hy-

draPort connectivity solutions, meeting attendees can enjoy a simple switch between table inputs to determine which laptop will be shared in the Teams meetings. Moreover, the integration of Yealink and AMX allows users to control not only the camera on the Yealink MTouch II but also the lighting and room temperature.

"The partnership between Yealink and AMX brings users a simpler and more friendly meeting experience," said **Alvin Liao**, Vice President of Product at Yealink. "The integration enables meeting participants to focus on engaging with each other, not adjusting the



devices."

"Solving for the complexities of room control is a shared goal of AMX and Yealink's, so integrating our respective technologies make for the perfect collaboration to give users an easier way to interface in the meeting room environment," said **Jamie Trader**, Vice President, video and

control, HARMAN Professional Solutions. "We are excited by the opportunity to continue bringing together AMX control systems and Yealink's user-friendly Teams Rooms devices for a new level of capability to a Teams Rooms solution without adding unnecessary complexity."

## PPDS, TP VISION, MMD MONITORS AND DISPLAYS AND AOC JOIN FORCES FOR 'TPV CARES' TO SUPPORT AND INSPIRE CHANGE IN LOCAL COMMUNITIES

A collective initiative between TPV's business divisions (TP Vision, MMD Monitors and Displays, AOC and PPDS) 'TPV Cares' combines the group's visual and sound experience products, as well

the talents of its teams and its technologies to bring life-changing help and support to people and communities in more than 200 countries. Part of an ongoing and accelerated

Available now in all countries in which TPV – the exclusive licensee of Philips global monitors, TVs and AV products – is present (including EMEA, APAC, ASIA and North America), the platform will provide a variety of volunteer, financial and in-kind support for deserving community projects\* around the globe that have a lasting and positive effect on society, benefitting current and future generations.

**Stefan van Sabben**, Global CSR and Sustainability Manager at **TP Vision**, said: "Across all divisions here at TPV, we believe in the power of technology to create amazing and meaningful digital experiences. Our products and our people are at the heart of everything we do, and together we continuously explore meaningful ways to help people and communities reach their full potential – every single day."

**Martijn van der Woude**, Global Head of Business Development and Marketing for **PPDS**, added: "Having led the sustainability drive at PPDS for some years now, I have seen the positive impact we can make as a company first hand, and there are many opportunities

ahead with TPV Cares. Our support can take many different forms, from providing state-of-the-art technologies to facilitate education and social integration within communities, through to fundraising for local and global causes."

The announcement of TPV Cares further accelerates TPV's already proud history in supporting an ever-growing number of important societal projects and charities in recent months and years, with those related to health and wellbeing, education, nature and climate among notable beneficiaries.

TPV Cares will expand to cover an even greater remit of initiatives, with TPV aligning the platform with the United Nation's Sustainable Development Goals, which include addressing the global challenges around poverty, inequality, climate change, environmental degradation, peace and justice.

*\* Projects seeking support have to meet a number of conditions. These include clear, measurable objectives, a business-like approach and an ambition to achieve a significant, lasting impact.*



as financial and volunteer support to support and progress deserving community projects.

TPV – the world's leading supplier of displays and the group behind PPDS, TP Vision, AOC and MMD – is excited to announce the launch of 'TPV Cares', a brand-new foundation that harnesses

giving-back mission to help people of all backgrounds, ages, and abilities to reach their full potential, 'TPV Cares' is the new dedicated home for all TPV's social and environmental impact initiatives, uniting all business divisions to deliver enhanced benefits and opportunities.

## LIGHTWARE OPENS NEW OFFICE IN BENGALURU, INDIA

**Lightware** announced a new office opening in Bengaluru following its remarkable growth in India.

Lightware's core value is to impart great knowledge on high fidelity signal

management in new and ever-emerging digital video technology. It has attributed a dedicated training facility equipped with Lightware Technology to share global best practices and cut-

ting-edge technology to its customers.

Lightware has introduced several industry-first products such as TAURUS, UBEX, and many more. In the new experience center, the company plans

to showcase the afore-mentioned technologies first-hand to the customers.

The new office is the representation of Lightware's sustainable growth in India market and its commitment to serve the customers better in India.

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Single 15" Active subwoofer

- T-shaped cabinet and easy installation with lock pin, 10° adjustable cabinet angle range.
- Single 15inch low inverted active subwoofer.
- Built- in high power amplifier module with DSP controller.
- 2pcs VR206 and 1pcs VR206a subwoofer make up excellent point source system.

# Exploring the Dynamics of India's Pro AV market with Renkus-Heinz

*Renkus-Heinz is a professional loud-speaker company known for its innovative technology that redefines sound to empower its audience. PALM+AV-ICN got in touch with **Karan Kathuria**, Renkus-Heinz's Director of Sales and Business Development, Asia, Oceania and SAARC, to learn more about the company's plans for India and its strategy to stimulate growth across different verticals.*

## **C**an you elaborate on Renkus-Heinz operations in India?

Renkus-Heinz has been in India for more than a decade, but our presence was limited to certain projects and customers. Currently, we are a very boutique and niche brand, and we are representing very selective markets, but this might change in the future. When I got this opportunity to represent Renkus-Heinz for Asia and Oceania, India was of course one of the major focus markets. My knowledge and presence in the market for more than 15 years, probably assured the company that we could get the product closer to the customer than ever before. Renkus-Heinz strongly believes in post-sales service, and we wanted to consider how we can best serve the customer rather than simply selling the product. The best model for Renkus-Heinz in India, we reckoned would be a on a platform which is already established with a strong post-sales solution and a coun-

try-wise presence, so we approached some unique influencers in India to seek their opinion. Basis of our research, we concluded that the best partner for us, would be Mumbai-based **Alphatec**, one of the most recognized distribution entities in India. Alphatec's presence geographically in India through regional distribution makes them very strong in the business. Companies like Gigatronics, Premier, MRH and others are regional distributors for Alphatec across India. My relationship with the company goes back to more than six years, so I fully trust their business model and structure. Alphatec has an amazing technical, sales and service team and almost 15 service centers across India and this was one of the most convincing reasons for me to consider Alphatec. We are in the process of helping Alphatec establish Renkus-Heinz in the market, and we will be supporting them through our teams in US and Singapore.

**What is the strategy that you're adopt-**

## **ing to penetrate the market?**

We have a unique approach, not only for India but for Asia and across the world. We are analysing our data deeply because we want to understand how Renkus-Heinz is being perceived as a brand by customers from different sectors in the last ten years. We also understand that rather than launching a product and approaching every market, we need to start focusing on specific vertical market. As an organization, we agree that the best way to approach the market is by verticals. When you start understanding your brand and bifurcating the markets into verticals like hospitality, education, transportation, and enterprise, for instance, you realize that all these markets have their own unique set of requirements. Hence, we are now analyzing each vertical deeply and structuring our sales accordingly. Finally, every vertical has key influencers - consultants, integrators, and customers who drive the market's demands. Once we understand these verticals, our next aim would be to collaborate with these influencers and understand what they, as customers, expect from Renkus-Heinz to deliver. The review from these influencers helps the company analyze the need to improve, learn or scale up operations.

**According to you, how developed is the Indian distribution for pro-audio per se and what kind of challenges are you facing (if any)?**

India is for sure one of the most inspiring markets in Asia after China, not only because it is a big-scale market but also because most of the companies across US or Europe are investing heavily into India. Distribution of pro audio in India has been quite unorganized for a long time. But lately, with lot of brands directly present in India this sector is more organized than what it was. We now know the customers and the market, and we really understand how to reach them in the right way, and I believe now, India is much more evolved. The technology demand that the customer has in India, is at par with the US or Europe. The spending power has gone up considerably now and I personally feel that the pro audio industry in India is doing quite well.

In terms of challenges, I believe the Indian customers rarely believe in POCs i.e. Proof of Concept, which means they will not simply buy a brand or solution because it is selling in the US. They want to understand and be a part of the technology. When you see them taking that kind of an interest, it's important and imperative for us as a company to give them that opportunity. The challenge till recently has been that most brands have been operating through satellite offices without a direct presence, in terms of a professional team.

The other challenge is the learning; so, while a lot of brands are present in India, not every brand puts a lot of focus on learning and education,



training, and demos etc. Customers today want to be very technologically adept, and they do not want to pick up the phone every time they have a problem with an equipment. Customers want to have a complete self-sustained team who can address an issue at any hour. Hence, we as manufacturers must take the onus and teach them about all the solutions and ensure that they're comfortable using it.

**Do you think that India is still a price sensitive market? And what is the demand for international brands like Renkus-Heinz vis-a-vis the local brands?**

One thing is for sure, it's not just India, the entire world is price sensitive, whether it is America or Europe, India, Vietnam, Thailand, Japan or Korea. I have been managing Asia for six years now and have worked closely with the European and American markets and I haven't seen a customer, barring a very few, who will say, I have an open cheque book. Every customer has constraints because every investment you make, especially in pro AV, is all about ROI. Yes, India is price sensitive compared to other markets, but it is awakening to the fact that we cannot be penny wise and pound foolish. What are they saving money for? Is it for short term or do they have to look at the big picture, is something customers are weighing carefully now. If they really see a unique USP in a particular technology, that will enhance their employee's experience or the customer experience, they are happy to go a step further and pay for it, but expense must be justified. No one wants to bear more costs just because I am an American brand. They want to know what I bring in terms of technology. Renkus-Heinz is a company known for its beam-steering technology and we take a lot of pride in it. We are into our sixth generation of products, unlike our healthy competitors who still have the same product that they started with, maybe five years ago or ten and fifteen years ago. At Renkus-Heinz, beam-steering is an important technology solution, and it generates 90% of the revenue. So, beam-steering is a technology that needs to be properly communicated to the customers. They know about this technology, but they need to know what Renkus-Heinz is doing very differently. We are in our 6th generation when we could have simply given the 1st generation. Also, we have different beam steering products for lifestyle and different ones for corporates, and large venues etc. Educating the customer on the need for different speakers and different solutions for different applications is what is going



**Karan Kathuria with the team at Renkus-Heinz headquarters**

to make a difference for us. Through our partners we will be explaining what value as a company we have added to beam steering and once we have done that, I'm very confident customers will understand the value and quality of the products that Renkus-Heinz offers.

**What is the product portfolio you have for the pro AV market?**

We have a range of loudspeakers and we also have selected amplifiers and subwoofers range. To put it plainly, we are a loudspeaker company, and aside from loudspeakers we don't have many other products. We don't till today have the entire range of loudspeakers as well, for example we don't have ceiling speakers and a lot of the passive modules and that is what we as a company are now deep-diving into. We are analysing what is the need of the hour and what is expected from Renkus-Heinz in terms of different applications. Do we add value if we come out with ceiling speakers and passive modules, is something we are considering now.

**What is the most popular loudspeaker from Renkus-Heinz in India today?**

Renkus-Heinz is globally known for Iconyx, which has been a flagship product since 2006. In India also we are known primarily for Iconyx, which is good, but Iconyx itself in the last ten years has evolved tremendously. In the last ten years, the Iconyx family has emerged and grown horizontally and vertically, and we have enhanced the value of the family with our live sound range of speakers which is the ICLive and we launched the compact version of ICLive called Iconyx Compact. These are new to the Indian markets. It is our endeavour now to mainly understand where and how have we grown in terms of new markets and applications

**In which segment do you see maxi-**

**mum growth going forward?**

I believe that basically every market has its own potential. If I must answer in terms of GDP, I'd say Vietnam is the biggest market. If I talk in terms of infrastructure growth, I will say China and India are one of the biggest markets for us. With regards to sectors, our early analysis indicates that the biggest of the verticals for us right now would be large venues, house of worship, education, followed by transportation, enterprise and retail. We are in the world's largest airport in Istanbul, we are in Bangalore International Airport, we are in Los Angeles, we are in Qatar and Dubai as well. Renkus Heinz has a strong presence in the cruise market as well and we have a huge presence in train stations in Europe and even some in India.

**Do you feel the Indian market understands quality Now?**

Yes, big time! A prime example is the Jio Convention Centre in Mumbai, which has some of the best technologies in the world, that many of the convention centres in Europe also may not have. With globalization, lots of data is available on social media and the end user has become very intelligent today. It takes a minute for them to go and understand on Google what DSP is all about for instance. Customers today are wise in terms of investments and are very proactive before they go out and spend. They have become very research-oriented and they're intelligent in terms of how they can get more learning and evolve. Customers now have exposure to shows like ISE, PALM, KOBA, InfoComm and all this make them very well informed. A lot of Corporates, IT companies and customers from the Education sector can be seen networking on these national and global forums.

**You have a huge legacy with Music Group, are you leveraging that legacy**

**here?**

I think irrespective of what brands you're representing, it's eventually the confidence and the trust you bring as a person to the customer, integrator, and consultant which counts. Whichever brand you represent, you must ensure that you are giving the best, and the relationship is not for the short term. I have a lot of regards for Uli and I'm very proud of the scale that Music Group has achieved with all its brands. In the process of establishing Music Group in India, the relationships that I was able to nurture (which of course started with my connections in HARMAN), helped me because the customers or integrator or the consultant that I went to, believed me and they already knew that I would deliver what I committed to, irrespective of which brand or company I am representing. I strongly feel that if you have established a certain level of knowledge, clients will trust you more and that is the kind of leverage I have. I try to strive towards committing and delivering and people are understanding and try to accommodate.

**What is your vision for the Indian market? The short term and long-term goals?**

We're not here for the short term, we are not here for few months or just few years. We are here for a long term. The number one vision for India would be learning and education, followed by investments into the market.

**When you say learning and education, it will be through Alphatec?**

We are not a company that believes that it's our partner's responsibility to educate. Renkus-Heinz believes in teamwork. I have tech-savvy colleagues in Singapore and Portugal who are keen to travel and are always on the roads with me. I know there isn't a lot of travel happening now, but normally you'll see all of us travelling and conducting demos.

**Any notes for your customers?**

I want to let our customers know that you will see us much closer, approachable and much more easily understandable than ever before. For us India is top priority and we have taken some giant steps in one year and you will start seeing a lot of good quality products in the near future. We will be executing some mega projects and we have full trust in our partners Alphatec and together I believe we will do whatever is required for Indian customers. We will focus on education and training and roadshows, and we will come a lot more closer to our Indian customers.

## SENNHEISER EXPANDS ITS EVOLUTION WIRELESS DIGITAL FAMILY WITH NEW EW-DX

**Sennheiser**, audio specialist expanded the Evolution Wireless Digital family of radio microphones. Named EW-DX, the new microphone systems will simplify professional workflows by utilizing refined technologies to deliver a digital UHF system that can be scaled with ease. The complete set of new EW-DX products includes handheld, bodypack and table stand transmitters, two two-channel receiver versions in a half 19 rack space (one with and one without Dante®) as well as a four-channel Dante-enabled receiver in a full 19 format. The first flight of products and software will become available towards the end of 2022, with more items following in the first half of 2023.

"Expanding our successful Evolution Wireless Digital family, the EW-DX products will inherit family features such as lowest latency on the market, equidistant frequency spacing and ultra-wide input dynamic range – and add new, compelling capabilities. These include additional transmitter and receiver options such as Dante versions, automatic multi-channel RF set-up, scalable remote control and monitoring as well as AES-256 encryption for secure transmission of contents", says **Vipin Pungalia**, Country Manager & Director- Sales Pro Audio at Sennheiser India

### The new system components at a glance

As part of the Evolution Wireless Digital family, EW-DX takes the

complexities out of wireless and has been carefully engineered to not generate any significant intermodulation products. Therefore, a simple press of a button is all that is needed for the Auto Scan function to automatically assign frequencies using an equidistant tuning grid that allows more channels to be packed into a given frequency window. Transmitters are conveniently synced via Bluetooth® Low Energy.

### Two-channel and four-channel receivers

Adding to the single-channel receiver in the family, EW-DX offers three receiver versions: a two-channel receiver in a



half-rack size, one with and one without Dante; and a four-channel Dante receiver with full 19" rack size. The Dante versions offer various network modes to flexibly integrate into existing workflows. The receivers have a switching bandwidth of up to 88 MHz, which can translate – thanks to Sennheiser's equidistant spacing – to up to 146 channels in standard mode and up to 293 in link

density mode.

### e-ink and programmable mute switch: The EW-DX transmitters

EW-DX offers a choice of two bodypacks, two handhelds and two table stand transmitters. Their output power of 10 mW ensures a range of up to 100 metres (328 ft). All units benefit from the same wide audio input dynamic range as the existing EW-D models, with the handhelds and bodypacks additionally featuring a trim control to adapt individual transmitters alternating on the same receiver channel, for example when multiple guitars are used.

The handheld and bodypack trans-

mitters will be the first on the market to feature e-ink displays. Even when a transmitter is switched off, users will still be able to read all essential device data. Both transmitter types will be fitted with in-device charging contacts. Using the dedicated BA rechargeable battery pack, they will have an operating time of about 12 hours.

The bodypack will be available with either a 3-pin or a 3.5 mm (1/4") jack microphone connector, enabling it to be used with all digital-proof Sennheiser clip-on and headset mics, Neumann miniature mics as well as instrument cables. The bodypack is fitted with a programmable mute switch and features cable emulation for guitarists and bassists.

The handheld transmitter will also be available in two versions, one without and one with an optional, programmable mute switch (RF mute, AF mute, no function). It will be fitted with Sennheiser's standard capsule interface, ready for use with a total of 14 Sennheiser and Neumann microphone heads.

### Software

There are also two versions for the table-stand transmitter: The version with XLR-3 connector takes standard gooseneck microphones; the version with XLR-5 connector is for gooseneck mics with a light ring. The table stands can be recharged inductively with the CHG 2W charging unit and will run for 11 hours on a single charge.

EW-DX will be integrated into the Sennheiser Control Cockpit software, Wireless Systems Manager desktop software and Smart Assist App. There will also be plug-ins for leading third-party control software. More information on these new members of the Evolution Wireless Digital family will be made available on launch. Please also visit [www.sennheiser.com/ew-dx](http://www.sennheiser.com/ew-dx) for updates.

## OUTLINE UPDATE: MAJOR REVISION OF PRESET LIBRARY (NOW WITH MANUFACTURER EQ)

Thanks to a massive process of revision, optimisation and overall re-adjustment, the preset library for Outline loudspeaker systems powered by amplifiers of both the **GTA** and **TTM** platforms has recently been upgraded and enriched by numerous "Manufacturer EQ" functions, bespoke to both **point-source** and **line-array** products of every range and series.

There's an immediate substantial improvement within easy reach of all users, which makes for easier optimisation of



complex systems, maximised response consistency (and one instrumentally assessed, way beyond the "I'd say" and "well, there, instead"), augmented by a tangible increase of components' reliability when driven "in the field" at real-life SPLs and mains voltages.

"In terms of pure performance, it's almost like upgrading a sports car with the next more powerful engine, without having to undo a single bolt, and without even

(Continued on page 18)

# AVA AVOLITES

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## NX AUDIO EXTENDS RANGE OF POWER AMPLIFIERS WITH ROCK1400-XB

Nx Audio recently added the **Rock1400-XB** to its range of power amplifiers. Rock1400-XB builds on the incredible legacy of the Nx Audio range of power amplifiers, the best-selling power amplifiers in the Indian pro audio industry. The tradition of Nx Audio oversized power supplies also features in the ROCK1400-XB, giving it the massive power reserves needed for deep and impactful bass response, which translates into a more natural sound quality that will excite the audience. With an output power of 1400 watts, the ROCK1400-XB is the perfect amplifier for public spaces such

as places of worship, medium-sized clubs, and even mobile PA systems.

The simple yet sophisticated front panel controls of the amplifiers display vital sound signs at a glance. After flipping the main switch, the power LED lights up when the amplifier is ready for use. Added to it is the gain control plus bass as well as mid and high controls to control and tailor the sound, clip LEDs that indicate when the signal is distorted, and when the gain needs to be reduced.

The Rock1400-XB is stable at 2 ohms, allowing users to connect a pair of Dual

15"tops, and due to its heavy power supply, it can even drive 4 x 18" (4"Voice coil) woofers. It has separate 2 ohms

for safer operation of driver units, Ideal for large installations or live events where a high power output



and 4 ohms Speakon sockets for easy connectivity and reliable, strong grip terminal connectors for COM-70-100V. There's a Driver Unit Switch to cut bass

is required on 100V, ROCK1400-XB features Line Input 200mV/1V switchable for connecting a mixer or another amplifier.

## DPA MICROPHONES TO SPOTLIGHT LIVE SOUND MIKING SOLUTIONS AT AES NEW YORK 2022 INCLUDING ITS FIRST-EVER KICK DRUM MICROPHONE

DPA Microphones will showcase its esteemed studio and live sound microphone solutions at the 2022 AES New York Show in mid-October. These mics are ideal for any audio professional working in the live production sphere, as well as in the studio. Offering both

instrument and vocal mics for a variety of applications, attendees can view DPA's newly released **4055 Kick Drum Microphone** alongside the company's 2028 Vocal Microphone. The company will also highlight its 4006 and 4011 Pencil Microphones and 4099 Instru-

ment Microphones, which is suited for in-studio and on-stage.

Designed without a pre-tailored sound, the company's new 4055 Kick Drum Microphone allows sound engineers to shape the sound of the instrument exactly as desired for any application — be it pop, rock, jazz, folk or other genres. The mic's asymmetric design makes it easy to position when slid into any size drum without risking a tear in the drum skin. It can be placed both inside or outside the kick drum, so finding the ideal placement is quick and effortless, without worry of compromising sound pickup or quality. Being a condenser mic, it is also fast and produces a tight and clean sound even at very high SPL (max SPL is 164 dB). Although specifically designated for use with a kick drum, this mic can be used on many instruments found in live house bands on loud stages, such as electric guitar cabinets, bass and horns due to its flat frequency response and ability to bring the uncolored sound to

the next level.

Borrowing elements from the company's renowned d:facto™ 4018 Vocal Mic, the 2028 is perfect for everyone from indie artists to international touring singers, and needs no EQ to sound just like you are standing next to the singer listening to their performance. This enables the artist to hone-in on their vocals, while the mic's transparency allows engineers to spend their time shaping the sound experience rather than covering up issues caused by artifacts. The mic also features a fixed-position capsule, as well as a specially designed shock-mount and pop filter, for extreme durability and ruggedness on the road.

To further combat the expected wear-and-tear of live performances, the mic's outer grille and inner pop filter can be detached and rinsed. Additionally, the 2028 is offered in three variants; a wired XLR with handle and two wireless mic configurations that are compatible with the industry's most widely used wireless microphone systems.



### OUTLINE UPDATE: MAJOR REVISION... (Continued from page 16)


having to stop at the garage: who on earth would ever want to miss this, if the intervention is carried out in DIY mode, without even having to shell out a penny?" — explains **Paolo Calza**, Outline's Pro Application Engineer and Array Trainer.

"A great help for a quicker, easier optimisation process, safeguarded

against potential pitfalls", adds Calza, "that comes complete with Manufacturer EQ, which implements ad-hoc filters for each of Outline's speaker systems: there are functions to compensate low-end coupling in arrays of multiple product-specific sources, as well as that in mid- and treble range to mitigate air absorption with

different throws... or, at the other end of Outline's product range, you can even out the response of the tiniest Architectural Series speakers when deployed mono, stereo, free-standing or wall-mounted... it's like having the competence of an expert tech's hands and ears, when she or he has gone on holiday!"

**To Book Your AD Space in  
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### **CS-1DU** **Delegate Unit**

- Control Mic with ON/OFF Push Button
- Listen through Internal Loudspeaker or External Headphone

### **CS-1CH** **Chairman Unit**

- Same Function as Delegate Unit
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### **CS-1CUR** **Control and Power Supply Unit**

- Designed with USB Recorder
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## KV2 AUDIO LAUNCHES 500 SERIES ELECTRONICS RANGE

**KV2 Audio** has announced the launch of the **500 Series** range of high-quality processors which, for the first time ever, are available directly from KV2's online store.

The range comprises three models the TCL thermo-compressor/limiter; the QD8 stereo 8-band master EQ with line driver and the MPA microphone preamplifier.

The TCL is an analog thermo audio compressor featuring a natural RMS detector and dynamic voice bass enhancement control. In another KV2 first, its patented design offers an exceptionally musical and natural compression that is a component part of its real-time input, rather than a typical side-fed gain reduction circuit attempting to either follow or anticipate compression demands. Its additional Bass balance control circuit allows the user to smooth out and minimise any proximity effects from a changing microphone position, giving the perfect voice color to every performance, from beginning to end. It also features source intelligent attack and release times.

QD8 is a revolutionary George Kramp-era 8-band stereo equaliser specifically designed to highlight a desired band without adversely affecting the overall sonic landscape. Whilst not intended for tuning out room modes, the frequency bands and filter types have been precisely chosen after extensive research, to perfectly align with the science of human hearing and our perception of achieving the ultimate spectral balance.

In a live scenario, faced with a number of different sources, program types, or performance genres at a festival or concert, the equaliser is very musical, intuitive and provides an exceptionally quick way to shape any mixed content to the sound you want to hear. In the studio, it can be either the simple enhancement of an instrument/vocal track, or the final mastering polish.

The MPA is a very high-definition

microphone and musical instrument preamplifier with Class-A circuitry and a high-quality transformer balanced output. A stepped input gain selector is provided for easy and precise repeatability of settings. The preamplifier features adjustable high and low pass filters, with an adjustable limiter to control clip level and a transformer isolated high impedance line input. It also has a further auxiliary transformer balanced isolated output, meaning a number of these units can be used together to create a multi-channel stage preamp for splitting FOH and monitoring outputs, or for broadcast and recording duties - delivering them all through line drivers in pristine audio quality. Phase reverse and an in-built headphone amplifier, which doubles up as a third output, completes the rich feature set. With the exceptional quality of all KV2's analog outboard electronics, the MPA can replace a preamplifier, DI-box/Splitter, line driver and headphone amplifier all in one box.

All three units are shipping and available from KV2's e-shop.



## ADAMSON'S CS-SERIES IS NOW MILAN CERTIFIED

**Adamson Systems Engineering** announced that its **CS-Series** line of intelligent loudspeakers is now **Milan™ Certified**, ensuring interoperability with all other Milan certified devices on the same network, regardless of manufacturer.

Due to the complexity and innovation of the CS-Series network topology, which was designed to allow end users to set up their system in a manner similar to current industry-leading passive systems,

certification required the advancement of the Avnu Test Tool, of which Adamson has been a key partner in developing over the last 18 months.

"We're thrilled to be a part of the group that defined the parameters of the Avnu test tool," states **Brian Fraser**, Head of Product and Technology with Adamson. "With the approval of the CS-Series line of products using this tool, we can now offer the industry's first Milan Certified line array products that allow the user to daisy-chain

networked audio between enclosures, while adhering to defined presentation time limits."

Adamson CS-Series intelligent loudspeakers include switch fabric allowing control data and the Milan Audio Network to be daisy-chained cabinet-to-cabinet while still meeting specified presentation times. This creates lower cable counts required to connect to arrays of loudspeakers giving fewer potential failure points, less cable weight, easier setup, and an overall cleaner look.

Adamson has been a major benefactor behind the development, verification, and validation of the Milan compliance test tool known as **Avnu Express Test Suite (AETS)** for Milan Advanced Certification. The work behind this has included participating in weekly review meetings in a work group, running interim releases of AETS on in-house test benches, validating tests that passed, analyzing packet capture logs for tests that failed, bug reporting, and updating working Avnu documents. Adamson has received two certificates of recognition for its contributions toward the development of the AETS.

Adamson's Brajendra K. Singh has been integral to the development of the Avnu Express Test Suite "It has been a great experience working with everyone in the Avnu test tool and Beta testing workgroups over the last one and half years. I am happy to have taken part in the evolution of new standards and tests. I, and everyone at Adamson are appreciative to be a part of such an important initiative. Everyone was quite supportive in solving the issues that were identified during verification and validation of test cases for Milan Advanced Certification."

Milan is a standards-based deterministic network protocol for real time media, created and maintained by Pro Audio market leaders including Adamson Systems Engineering. A significant improvement over Milan 1.0 Certification, Milan Advanced Certified products must pass 180 tests including comprehensive testing of Milan redundancy and Milan AVDECC (Audio Video Discovery, Enumeration, Connection management and Control protocol).



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# InfoComm India 2022: Pro-AV Tradeshow makes a Comeback after Two-Year Hiatus

*3 days. 15+ countries. 160+ exhibitors. 11,000+ unique visitors. At InfoComm India 2022, held from 5th - 7th September, 2022 at the Bombay Exhibition Centre, Mumbai, the pro-AV industry came together with nouveau exhibitors, manufacturers congregated with distributors and dealers, and the three-day event, held after a two-year forced hiatus, offered an opportunity for pro-AV industry to shine, thrive and flourish as it was always meant to. AV-ICN magazine reports on the tradeshow's highlights.*

## Returning Exhibitors and Debutant Entries

InfoComm India 2022 witnessed the resurgence of returning exhibitors, which included key AV industry players such as Harman, Vega, Crestron, Delta, Aero, and more. Breathing new life into the already vibrating AV industry were debutant exhibitors at InfoComm India 2022, Anixter, Fore Excel, Prama Hikvision, NEC, and LG, just to name a few.

"AR/VR is still a new technology in India, and we are excited to be able to be able to showcase our solutions at InfoComm India. Many visitors were very interested in our AR/VR products and we received hundreds of leads during the show," shares **Pratik Agrawal**, Director of **Fore Excel**.

Returning exhibitor, Crestron witnessed substantial footfalls, increased productive client interactions, and an overall successful exhibition over the three-day event. **Joel Mulpeter**, Director, Product Marketing Asia shared, "InfoComm India is a fantastic show. It brought the industry back together. The Show is a great way for us

and our partners to demonstrate our technology and solutions to our customers in person."

**Vega**, another returning exhibitor, seconded the praise for the fruitful show. **Matthew Deayton**, Deputy Chief Executive Officer, said, "The calibre of visitors at InfoComm India is higher than before, and so is the quality of engagements that have taken place at our booth."

## AV Leaders Connect – A Three-Day Exclusive, Invite-Only Summit Programme

A by-invite only gathering of intelligentsia from the Pro-AV industry, AV Leaders Connect got off to a great start with a Keynote Address on "Investing in India's Digital Infrastructure", delivered by **Tilak Raj Dua**, Director General of Digital Infrastructure Providers Association (DIPA).

The **Avixa Seminars** followed the Keynote Address, which witnessed key AV



**HARMAN** showcases their range of AV products at InfoComm India 2022

experts, which included the likes of **Amit Chowdry**, Founder & CEO of **PeopleLink Unified Communications**, **Koreth Matthew** and **Sathya Kumar**, Director and Chief Solution Architect of A&T Video Networks Pvt Ltd respectively, sharing insights and wisdom on Pro-AV technical skills.

On day 1, CIO KLUB co-organized the **Corporate Industry Forum**, Federation of All India IT Association (FAIITA) co-organized the **IT Industry Forum**, Computer Society of India (Mumbai Chapter) co-organized the **Government Industry Forum**, Indian Institute of Interior Designers (IIID) co-organized the **Retail Industry Forum**.

On day 2, ICT Academy co-organized the **Education Industry Forum**, All India Institute of Local Self-Government (AIIILSG) co-organized the **Government and Urban Authorities Industry Forum**, and Safe Secure Magazine co-organized the **Security Industry Forum**.

Day 2 of the InfoComm India 2022 Summit witnessed **AV Managers Day**, where notable AV experts talked about managing Pro-AV projects. The first session was heralded by **Rod Brown**, CTS-D, CTS-I and Volunteer Instructor, AVIXA, where he spoke on **"Project Management for AV"**. The session was followed by a talk on **"Fundamentals of Acoustics"**, delivered by **Roopa Krishnamurthy**, Freelance Acoustical Consultant, **Soundscape India**.

The AVIXA Seminars concluded Day 3 of the Summit, where **Rod Brown** discussed **"AV Protocols"**. The above-mentioned **Mradul Sharma** and **Sandeep Kandalwar**, Chief Operation Officer, **BluecoinIoT** shared thought-provoking insights on **"Building Technologies and AV"**. **Abdul Waheed**, Managing Director, **EYTE Technologies**, discussed **"Change in Design Philosophy"**. The afore-mentioned Roopa Krishnamurthy took the stage once again to share her insights on **"Small Room Acoustics"**. **Mridul Jain**, Director for Business Communication, **Sennheiser Electronics India**, expounded on **"Hybrid Communication in Education"**. The AVIXA Seminars were brought to a close with a discussion on **"Network Audio Best in Practice"**, delivered by **Urmil Vaidhya**, Principal AV & Acoustics Design Consultant, **Group Seven Kuwait**.

## Turnkey AV Solutions and Groundbreaking Technologies

InfoComm India 2022 offered a platform to AV manufacturers, dealers, distributors, consultants, seekers and buyers and empowered each of them to demonstrate and analyze revolutionary technologies and solutions from the ever-evolving world of AV.



**Christie** showcases the futuristic Inspire Series & Core Series II LED Video Wall

**See Lay Eng**, Senior Director of **InfoCommAsia**, commented, "India is expected to be the world's fastest growing Professional AudioVisual market, and it is also expected to be world's fastest growing economy. With its robust economy, a huge market hungry for disruption-driven solutions, and a population always seeking innovation, India is the place for Pro-AV technology to flourish. This is reflected in the high energy levels on the show floor since the opening day of InfoComm India."

At InfoComm India 2022, this statement was personified in its truest sense.

Global leaders in the AV industry, such as Q-SYS, Christie, Kramer, OSRAM, Crestron, and more came forth with groundbreaking launches and jaw-dropping upgrades to their products and solutions, proving once more that the Indian AV landscape is currently undergoing a cataclysmic transformation.

**Q-SYS** displayed the **Core Nano**, an audio, video, and control processor designed to fulfil the processing needs of applications with either lower network channeling capacity or targeted processing requirements. The global AV company also exhibited the **SPA-Q Series Network Amplifiers**, including the convection-cooled **Q-SYS SPAQ 100-2f** and **Q-SYS SPAQ 200-4f** amplifiers, to deliver perfectly sized amplification while offering audio/control I/O options to accommodate the requirements of a spectrum of spaces.

**Sennheiser** exhibited the **EW-DX Microphone System**, an addition to its Evolution Wireless Digital Family, which included handheld, bodypack as well as table stand transmitters, two two-channel receiver versions and one four-channel Dante-enabled receiver in half 19" rack space and full 19" format respectively.

Among **Christie's** highlights was the full-featured **Inspire Series**, a professional-grade 1DLP laser projector for small-to-mid-size environments. The laser illumination system offers up to 20,000 hours of reliable, virtually maintenance-free operation for a low total cost of ownership. Also on show was a **Core Series II LED video wall** that produces vivid, clear and detailed images at 800 nits calibrated brightness. Available in a range of pixel pitches from 0.9mm to 2.5mm, Core Series II video walls are ideal for small- and large-scale installations where price is a factor.

**A&T Video Networks** showcased a range of video conferencing systems with advanced features. On display was **Klick U1** – world's smallest PTZ camera, **PTC 20MN** – powerful 20X zoom sensors that capture crystal clear images from 20 metres away, **IKON 300** - video soundbar with speaker tracking, and **UBT 800 Pro Bluetooth speakerphone** with expansion microphones.

**Cyviz** displayed the **Cyviz Easy Controller** that provides a native Teams user experience and assures a rich and immersive meeting for all attendees, both in room and external participants. Also showcased was the **Cyviz Easy Platform**, that further enriches the Teams in-meeting participation and supports multiple input sources to inspire information sharing, discussion and in room decision making.



**Beta3 Audio** display the VX12a at their booth



**Pink Noise Professionals' team pose for a group photo at their booth**

Delta introduced a new and state-of-the-art series of **Active LED Displays** with a pixel pitch ranging from 0.7mm to 10mm covering indoor and outdoor applications. Delta's Active LED Displays based on SMD & COB technologies are high performance and reliable products that provide a seamless, high-resolution, high-contrast display solution for indoor and outdoor areas with short and long viewing distances. Its compact and lightweight design guarantees easy and quick installation. With contrast ratios of up to 10,000:1, light output of 600 ~10,000 nits, 18-bit color processing, advanced image processing technology, the New Active LED series ensure an excellent, flicker free viewing experience.

**Pink Noise Professionals** showcased the very first product of **Erthpot, Keyer 0808D** (8 Channel Audio DSP meant for Conferencing Application) along with its wall mount controller accessory. Erthpot, developed by the team of engineers at Pink Noise Professionals to create sustainable and future ready products in the field of Audio-Visual Industry, uplifts the ethos of the honourable Prime Minister's vision of 'Make In India' campaign.

**Nteck Systems** exhibited a wide range of products, including but not limited to, **INOGENI TOGGLE, INOGENI 4KX-PLUS, INOGENI SHARE2U, IPEVO VZ-R, IPEVO V4K-Pro, IPEVO Totem NX-180, HALL TECH EMCEE200, HALL TECH APOLLO TRK-1, HALL TECH USB3-33H4, SONETONIX DIN RAIL Series of Lighting Controls, and SONETOX-IC RETROFIT Series of Lighting Controls.**

**NEC** displayed **DVLEDs**, also called Active LEDs, at the Expo. On exhibition was also **Microsoft Certified Team Collaboration Software**, which helps integrate everything, right from the cameras to the microphones. Another highlighted product was a wide range of **DCI Projectors**. Commenting on the USP of the same, **Krishna Tripathi**, General Manager, Display Solutions, NEC Corporation India Pvt Ltd, shared, "NEC is at number two position in the world when it comes to DCI projectors. they feature a really good range, starting from 7,000 lumens and going up to 35,000 lumens. We are heavily focusing on India as well with regards to DCI projectors."

**Altop** launched **Interactive Flat Panel** with **Altop Smart Suite**, Enclosure for Interactive Flat Panel Sliding Writing Board & Up Down Writing Board for blended learning. Also introduced was **Digital Signage Kiosk** in 43", 55" & 65". The company also focused on Audio Lectern and Digital Lectern, which included a height adjustable lectern in a slimmer version along with AIO Digital Lectern.

**Ceeco** showcased **Philips PSE0800**, a speaker tracking Video Bar with integrated camera, microphones and speakers. Its 4K resolution, super wide field of view and strong sound pickup function make virtual meetings feel like face-to-face and establish it as the best choice for small and medium-sized meetings. Also exhibited was **Philips PSE0600 PRO**, a high-quality speaker tracking PTZ camera that comes with 12X Zoom and is an ideal choice for mid and large size meeting rooms and boardrooms. It allows extended audio coverage by integrating a Philips microphone and offers controls via pre-sets / remote control and RS 232. A very robust performance makes it a good choice for various AV / VC integration projects in wired or



**Delta Exhibit its State-of-the-Art Active LED Display**

wireless modes.

**Beta3 India Audio Pvt Ltd** displayed the **VX12a**, 12" Two-Way Full-Range Active Speaker, composed of a 12" LF woofer and a 1" HF compression driver with Titanium diaphragm, designed for various applications requiring sound solutions of high durability and portability. VX12a adopts the design of combining the horn with the cabinet, with rigging points surrounding the cabinet, and there are mounting holes at the bottom of the cabinet to facilitate the formation of an array. Standard hosting structure and 2-way XLR/TRS input mode ensures ease of use and simple installation.

**Kramer** set the benchmark for next-level AV-over-IP Solution Installations with its new **KDS-10 transceiver**, which is an end-to-end 4K60 (4:4:4) transceiver offering



**Altop displayed the Interactive Flat Panel**

smooth streaming, unrivalled flexibility, and exceptional Multiview functionality (picture-in-picture and picture-aside-picture) with user-controlled H.264/H.265 compression switching and backward compatibility with H.264.

**Yamaha** showcased the new **VXH Series Pendant Speakers**, featuring two models, the **VXH6** and the **VXH8**, an amalgamation of high-quality music and seamless design, that offers an evolved audio solution to massive, high, open-structure commercial spaces with sloped ceilings.

On display was **Optoma's ZU2200 Ultra Bright Professional Installation Projector** to support high-end installations with 2200 lumens and eight interchangeable lenses along with 4K HDR compatibility, pure engine video processing and color matching that delivers minutely-detailed, life-like images that are equally visually



**Crowds gather outside Sennheiser booth to view latest launch – EW-DX**



**NEC displays Active LEDs at the InfoComm India 2022 booth**



**Ceeeco showcase Philips PSE0800 & Philips PSE0600 PRO amongst other product**

striking.

Added to **Optoma's DuraCore Laser Projector Range** are two new fixed lenses, the **Optoma ZU920T** and the **Optoma ZU920TST**. The new additions feature 4K and HDR compatibility, 9,800 lumens and a 3,000,00:1 contrast ratio, which enables it to masterfully deliver precise color reproduction and high brightness with a short throw ratio of 0.65:1.

On **Neat's** display was **Neat Bar**, **Neat Board**, and **Neat Frame**, designed to support a multitude of collaboration settings – be it an intimate meeting in a start-up or a mammoth group collaboration in a massive enterprise. Neat video solutions are Zoom certified, and with one-cable set up, the entire video room can be deployed in a matter of minutes.

**ClearOne** displayed the **BMA 360**, an advanced beamforming microphone array ceiling tile with voice lift capability. Being the industry's first and only ultra-wide-band, frequency invariant beamforming microphone array with FiBeam, DsBeam, Voice Lift Technology and an uniform gain enables the BMA 360 to deliver an unparalleled audio performance via a superlative reverb and noise rejection even in the most difficult of spaces, irrespective of room size.

Also displayed at ClearOne's booth was **Versa Mediabar**, an integrated AV device that supports superior quality audio and video conferencing and offers compatibility with various UC applications for a simpler, better solution that requires virtually zero



**Attendees visiting CDM Technologies booth discuss NewTeck's product exhibits**

setup. With a built-in 4K Ultra HD camera with ePTZ and a four-element mic array with acoustic echo cancellation and automatic noise reduction, the Versa Mediabar is sure to deliver superior audio clarity while automatically auto-framing the presenter even when they move around the space.

On display was **OSRAM P-VIP Projector Lamp** that offers 30% increased initial luminance and 30% lesser electrode gap than counterfeit lamps. Capable of perfectly integrating into every projector system, OSRAM P-VIP Projector Lamp also ensures a uniform, stable, optimized optical output, something that cannot be replicated by counterfeit lamps.

On display was **Crestron's Flex Video Conferencing** that offers ease of deployment and use for hybrid workplaces and global industry headquarters in equal measure.








**Genelec** displayed **Smart IP**, powered by PoE and compatible with Dante as well as **AE567 IP audio streams**, that seamlessly integrates into every AV application for a premium loudspeaker performance.

Once again this year, InfoComm India 2022 provided a platform to manufacturers, dealers, distributors, and users of Pro AV to invent, innovate, upgrade, understand, and explore the Pro AV market, its current trends, its projected growth, and its foreseeable future in form and function. The reputed tradeshow is set to return from **25th – 27th October, 2023** at Jio World Convention Centre, Mumbai.



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## AUDIENT'S UPGRADED ASP4816 – HE & NEW LOOK ASP4816 – SE READY FOR SHIPPING

Audient is delighted to announce that the **ASP4816 Heritage Edition** console is ready for shipping. Previewed back in June at this year's NAMM show, it features a brand new look and a few more tricks up its sleeve, inspired by its larger counterpart: Audient's flagship console, ASP8024-HE.

Marketing director, **Andy Allen** says: "Designed from the ground up by David Dearden and featuring his legendary analogue circuitry, the ASP4816-HE is the perfect centre-piece for production studios." Upgrades include Vintage Mix Bus processing, John Hardy Op Amps on the mix bus output, powerful new additions to the Mix Bus Compressor – and much more.

"The addition of the Vintage Mix Bus gives our customers the flexibility to add that much coveted analogue colour to their mixes and when utilised in tandem with the Mix Bus Compressor, they are the perfect tools to add the finishing touches to your mix," explains Andy. Featuring a real Transformer Drive alongside a Low Bump and High Lift EQ – inspired by classic mastering equalisers of yesteryear – they allow for wider, more spacious mix bus tones.

Another enhancement – also

found on the ASP8024-HE – is the bus compressor Bass Expand feature. According to Andy, "This brand new high pass filter in the compressors' side chain tightens up your mixes and adds punch without destroying your low end."

The mix bus summing amplifiers have also been significantly upgraded to the renowned American John Hardy 990 discrete transistor amplifiers. "These offer increased dynamics, sweet spot and punch, ensuring your mix bus benefits from total clarity with a little bit of character," says Andy.

Further improvements to ASP4816-HE include the addition of a monitoring grade headphone amplifier; latching footswitch triggers for remote,

hands-free talkback; an all-metal main output pot and a gain reduction VU meter.

Shipping at the same time is the standard ASP4816-SE, which has had its own aesthetic redesign. With 48 inputs and 16 Console mic pres – the same as those in ASP8024-HE and across the entire Audient range – both of these inline consoles provide the versatility and sound of a large format recording console but in a compact, space-conscious package.

"They both sport a new colourway, all-new cool-white metering, easy to read labelling and a stylish, UK hand-made wooden armrest," explains Andy, indicating their new looks and ease of

navigation. "With ASP4816-SE we wanted to add value to our smallest console and provide a better user experience, without affecting its affordability."

Audient is also showcasing the new desks with a series of high-quality Feature Overview videos, which give potential buyers a clear idea of the desk before committing to a purchase.

As well as their versatile array of connectivity, the signal conditioning, routing, summing, processing and monitoring capability of both the HE and SE make them suitable for both professional and project studios.



## AUDIO-TECHNICA INTRODUCES THE AT2040 – A MICROPHONE FOR THE PODCASTERS

Podcasting is the new media on the block, taking over the industry. The podcast has become a choice of media for entertainment, news, education and more. Podcast audiences have increased exponentially in the last two years and continue to rise – reason enough to celebrate International Podcast Day on September 30th.

Other than the talent & content of the podcaster, one element that determines the quality of a podcast is the microphone – it can be the decider – of a clear and enjoyable podcast or one that is tuned off after listening to for 2 seconds.

Finding the microphone that adapts to the podcaster's style and delivers faithfully is a challenge, more so as the market has suddenly flooded with options.

**Audio-Technica**, understanding the challenge and the market need, came up with the perfect answer. Adapting



**Audio-Technica Unveils The AT2040 – A Microphone For The Podcasters**

its tried and tested and hugely popular broadcast microphone BP40 to a podcast microphone, Audio-Technica introduced the **AT2040** for podcasters.

The AT2040 hyper-cardioid dynamic

podcast microphone delivers on its promise of elevating the listener's experience.

AT2040 brings professional broadcast-quality sound with exceptional

vocal reproduction to podcasters and other content creators at an affordable price.

Featuring a stylish yet rugged all-metal construction, the AT2040 excels at isolated/up-close vocal reproduction and rejection of unwanted room noise due to its tight hyper-cardioid polar pattern, ensuring professional-quality podcasts.

The AT2040 provides a smooth, warm, natural sound. The specially designed integrated shock mount prevents unwanted noise by attenuating vibration from a boom arm or mic stand. At the same time, the mic's multistage windscreens combined with a non-woven filter with foam mesh provides superior internal pop filtering.

AT2040 uses a professional-grade XLR output for versatility. Available on Amazon at Rs. 8,999.

For more information, please visit [www.audio-technica.co.in](http://www.audio-technica.co.in).

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## NEUMANN.BERLIN ANNOUNCES M 49 V, A REISSUE OF LEGENDARY M 49 IN THE INDIAN MARKET

German studio specialist **Neumann.Berlin** announced a reissue of the legendary M 49, today in the Indian market. Ever since its introduction in 1951, the M 49 has been regarded as a studio microphone par excellence. With its continuously remote-controlled polar pattern, it revolutionized studio technology and its incomparably silky sound has graced countless recordings, from the cool jazz of the 1950s until today's chart toppers. As a result, the M 49 is in great demand not only among collectors, but also as a vital recording tool. The digital age has made its characterful sound even more desirable.

The M 49 V is a reissue according to original specifications and design documents from the Neumann archive. It uses the same circuitry as the last and most popular historical revision, the M 49 c, but with an even lower noise, hand-selected subminiature tube."

Detail improvements have been made to the pattern control unit, which now automatically adapts to the mains voltage and is also compatible with old M 49 microphones. Instead of the old bayonet connector, the M 49 V uses the RF-tight connector of the historic

broadcast version M 249. In addition, the M 49 V can be configured via internal switches, either as a made-to-order option or post-sales by Neumann Service.

The infrasonic filter, which protects the BV11 output transformer from unwanted distortion, can be lowered from 30 Hz to 12 Hz, resulting in the frequency response of the early M 49 (without suffix) up to 1957. Like the historical M 49 b model variant, the M 49 V can be set to fixed cardioid pickup pattern, which improves the signal-to-noise ratio by about 3 dB. This option is useful if the M 49 V is to be used exclusively in cardioid mode, for example for vocals and speech.

"The M 49 is a very special microphone not only for a large number of our customers, but also for me personally. It is an icon of recording technology and is inextricably linked to some of the most extraordinary voices and instrumentalists of the last 70 years.



Its physical presence alone, and even more so its incomparable sound, lend that magic and authority for which the Neumann name has become synonymous," explains **Vipin Pungalia**, Country Manager & Director- Sales Pro Audio at Sennheiser India. "That gleam in the eyes of our mostly Grammy-awarded

testers, after they sang or played into a new M 49 V for the first time, cannot be put into words. But it touched me incredibly every time. That's exactly what we work for so passionately."

Regarding availability, Ralf Oehl, CEO of Georg Neumann GmbH states: "Less than 48 hours after the official sales launch, we already have more than 200 orders. That's overwhelming. Especially when you consider that we can only hand manufacture about 25 pieces per month with three specially trained employees. We must therefore hope for your patience. I promise ... it will be worth the wait!"

The M 49 V comes as a set with remote pattern control unit, microphone cable, and the classic "yoke" swivel mount, delivered in a high-quality, handcrafted case. The list price is INR 849,000 and this is a limited production model which will be produced against order.

## IZOTOPE RX 10 LAUNCHED WITH MANY NEW FEATURES

iZotope's modular audio repair tool just came out with upgrades and additions such as speech detection, a newly rebuilt processor, and many others.

Plenty of new features are introduced with the latest incarnation of iZotope's comprehensive modular audio-repair suite and editor. As usual, what sets it apart is the fact that much of it is powered by artificial intelligence.

There is an RX 10 avatar for every kind of user: Advance, Standard and Elements. Advance offers all the benefits and features. Standard is shy of some of the post-production features, however, it is a solid unit for most needs. Advance and Standard give many modules in plugin form. Budget-friendly option is Elements, which still has enough power to improve production.

The text navigation feature which comes along with Advance and Stan-

dard is going to be loved by podcasters and those in post-production as it can do a transcription of what is being spoken accurately at a fast pace. It will sync with the audio waveform and will be displayed on top of the screen while in use. Moreover, RX Advance can efficiently detect different speakers and colour code it to ease the work.

iZotope has put in a lot of effort to



completely rebuild the Repair Assistant, which is available in plug-in format in Advance, Standard and Elements. It offers the convenience to choose from audio types such as Voice, Musical Audio, Percussive Audio or Sound Effects. According to the artist's preference, it will monitor sound during playback and create a setting to enhance it. It comes with powerful processors for De-Reverb, De-Click, De-Clip, De-Ess, De-Harsh and De-Noise.

Spectral Recovery, available with Advance, is completely rebuilt. For real-time streaming, it replaces frequencies that get removed by audio compression. The previous version only could handle high frequencies, but the RX 10 incarnation also replaces missing low-end information.

New Adaptive mode (Advance and Standard) designed in De-Hum Module

can speed up workflow. It gives the option to remove hum without first running the Learn process. Static mode is still available as an alternative.

New RX 10 considerably improves the list of modules and processors. Depending on what is opted, Advanced, Standard or Elements, the new iZotope RX 10 offers Music Rebalance, Voice De-Noise, Guitar De-Noise, De-Click, Breath Control, Spectral Repair, Dialogue Isolate, Variable Time, and Variable Pitch, among many others.

RX 10 also comes along with the Music Production Suite Pro subscription program and selected bundles. Until October 11, 2022, iZotope has announced low introductory pricing for RX 10.

Buy RX 10 products from Ansata now and avail no cost EMI on orders valued above Rs. 15,000.

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# 7 New Trends in AV Conferencing to look out for this year

Gone are the days of physical meetings, where people gathered in a single room, sat on leather-laden chairs, and used static whiteboards for their brainstorm sessions. Gone are the days when meeting with your co-workers face to face equated to enhanced productivity. With hybrid working now the new normal, holding meetings seamlessly, flawlessly, and flexibly is now the need of the hour. Developments in the world of AV are bringing an uninhibited revolution in the conferencing technology.

## Augmented Meetings:



While video conferencing works well when it comes to attending a meeting without even leaving the house, the biggest AV trend in conferencing is the introduction of VR conferencing, which allows users to put on a pair of headphones and meet/interact in 3D, almost as if they are meeting in-person. This delivers a more customized, personalized experience for teams working from remote locations. With eye tracking, head tracking, and gesture tracking, VR conference meetings are set to create immersive holographic experiences in real time, without glitches or errors.

## Interoperability:

One of the most critical AV conferencing trends to look out for is interoperability. Interoperability is no longer a dream for the distant future, interoperable devices are becoming a present-day reality. With compatibility between software and solution becoming more commonplace by the passing day, and more and more vendors ensuring (or trying to ensure) that their respective video conferencing apps support a wider expanse of meeting apps, the day isn't far when BYOD-based meetings won't



*From augmented meetings and interactive whiteboards to LED video walls and seamless acoustics – Pooja Shah, Editorial Assistant at PALM AV-ICN, reports a comprehensive roundup of the biggest AV conferencing trends to keep an eye out for in 2022.*

require intensive end-user support and everything will become hassle-free.

## LED Video Walls:



With the very space meetings are held in undergoing a transformation, it is now more paramount than ever to give that ever-transforming space an edge. Again, the ability to install a video wall without an ounce of hassle makes it an easy choice for businesses looking to reshape the way meetings take place. Apart from that, LED video walls are being preferred by businesses with a vision because they come with LED backlighting and slim bezels, which doesn't disrupt the viewing experience from any angle or even when viewed at from up-close. By allowing multiple users to interact with the interface at the same time, coupled with the non-invasive cooling systems, LED videos walls are key to having an effective audiovisual conferencing at its finest.

## Interactive Whiteboards:

Typical whiteboards worked just fine when meetings used to be physical in





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nature, under a single roof. Now, with the idea of a productive workplace rapidly metamorphosing in form and function, the usual whiteboards just aren't ideal to bring result-yielding meetings to fruition. That's where interactive whiteboards enter the picture. They are easy to install, and not just that, interactive whiteboards offer the freedom to engage with the content and material being discussed, for instance, allow multiple participants to draw or edit the content in real time, making everyone feel included and valued, thereby paving the way for increased collaboration equity and productivity.

#### Seamless Acoustics:

Many neglect the significance of sound, done right in a conferencing room. Average acoustics were tolerable when meetings would only take place face-to-face. But today, where meetings have turned into collaborations and businesses from one corner of the world can connect with businesses from the other corner of the



AI-powered video conferencing devices are now also capable of suggesting points of discussion and debate before and during the conferencing to help speakers and participants hold better collaboration equity. This also helps corporate sectors to understand areas of improvements for participants within the meeting, enabling enhanced productivity as the end goal.

#### Rooms As A Service:

Just like SaaS, the AV industry is now witnessing the emergence of RaaS. Also known as Room As A Service, this technological AV trend aims at creating and powering a collaborative workspace with cutting-edge conferencing technology and equipment. These one-touch collaborative spaces takes the afore-mentioned trend of interoperability to new heights by seamlessly connecting every single equipment in the conferencing room. This trend will soon become a norm, as it offers a



world in a single click, it won't do if sound becomes a barrier. Therefore, a major AV trend in the world of conferencing is seamless acoustics, a marvel of technology that allows sound to travel from one person to another in a flawless manner, no matter where they are sitting. Courtesy an evolution in the family of microphones, right from ceiling-mounted microphones to pendant microphones, and more, a transformation in the acoustics of a conferencing room will guarantee a more efficient, a more result-oriented meeting.

#### AI-Powered Conferencing:

The technology has now evolved to a point where not just attending meetings, but also setting up meetings will become less and less of a manual or physical task. With the process of conferencing becoming more and more AI-powered every passing day, video conferencing devices can now automatically face-map, identify non-verbal cues, and analyse body language of the speakers and attendees to suggest if, and who, needs to be invited to the meeting/conference. Not only that,

cost-effective solution in the long run by reducing 'technology refresh' time, since all the software and hardware in the room is interconnected and buying it as a part of a service ensures that they stay up-to-date without any manual effort.

The audiovisual world is always changing, always evolving, bettering itself day by day. And with it, the business of conferencing is always upgrading too. The integration of the two is set to change the way people meet each other for business.

## VISUAL INNOVATION SEMINAR SUPPORTED BY ROE VISUAL LED DISPLAY

It was a perfect wrap-up of the **2-day Visual Innovation Seminar** at **NIPA** (National IT Industry Promotion Agency) in South Korea. Hosted by **ARK Ventures**, **LIVE-LAB**, and **YOUNG DO B&C**, the seminar delivered the latest updates on virtual production techniques, featuring **ROE Visual** screens on the stage.

Gathering Brompton, MVR, Pixera, ARRI, BlackTrax, and ROE Visual, the seminar brought the advanced innovations in XR and ICFX related to processors, media servers, cameras, trackers, LED displays, and more.

Also, VA Corporation, NP, disguise, and many other famous enterprises in the ICFX industry showed their presence at the session. Highlighting current market trends and best practices accordingly, the seminar offered an excellent opportunity for participants to share ideas and discuss the future direction of virtual production in South Korea.

Having built a solid and strategic partnership with ROE Visual, ARK Ventures applied the Black Pearl and Black Marble series for the session. The ROE team member introduced ROE Visual's culture and talked about some fantastic

points about the panels as the ideal display solutions in the virtual production process. In front of the screen composed of the **ROE Visual Black Pearl BP2V2** and **Black Marble BM4** panels, the expert teams from industry-leading companies delivered their discovery and exclusive technology to the audiences, presenting the merits and creative shooting options available.

Together with Brompton, the presenter from ARK Ventures showcased the Frame Remapping Technology, which made it possible for multiple cameras to each see different content

when viewing the same LED screen simultaneously. He also demonstrated the GhostFrame Technology in content production, along with MVR and AGS. As a powerful suite of features, GhostFrame creates simplified, faster workflows in the application of virtual production technology for film and broadcast productions, raising efficiency.

Especially exciting is that this is the first time for Frame Remapping and GhostFrame Technology to be shown in South Korea. "It's our pleasure to host such an awesome seminar! Attendees could see various advanced techniques and wrestle with unfamiliar ideas at the session," states **Oh David**, Managing Director of ARK Ventures Korea, "Supported by outstanding ROE Visual LED displays, we hope to demonstrate the latest updates in those great projects, with the expectation to create more interesting content for South Korean audiences."

"We feel pleased to participate in the Visual Innovation Seminar. This is a remarkable opportunity for us to make connections with so many partners and friends. We really appreciate it, and it's been a great time together with all!" states **Sam Sang**, Sales Manager at ROE Visual.



ROE Visual LED Display empowers Visual Innovation Seminar at NIPA

## Q-SYS EXTENDS ACOUSTICDESIGN SERIES TO ADDRESS CHALLENGING SPACES

*New ceiling loudspeakers extend the range of the popular loudspeaker series with purpose-built specifications for more challenging spaces*

**Q-SYS** announced two new AcousticDesign Series™ 6.5-inch two-way ceiling-mount loudspeakers, which offer higher-power handling for challenging environments. The AD-C6T-HC is ideal for high ceilings or reverberant spaces such as ballrooms, airports, atriums and lobbies, while the AD-C6T-HP offers higher SPL at standard ceiling heights, ideal for high-energy restaurants, retail spaces or larger meeting facilities.

The AD-C6T-HC and AD-C6T-HP offer a sleek aesthetic design, as well as the same premium, consistent tonal quality as the rest of the AcousticDesign portfolio, allowing users to mix-and-match between form factors. In addition to the blind-mounting, integrators can take

advantage of Q-SYS Intrinsic Correction™ to simplify the tuning process with custom Q-SYS loudspeaker voicings via the Q-SYS cloud-manageable audio, video, and control Platform further enhancing performance and speed of installation.

"We designed these new loudspeakers to address specific pain points integrators experience when looking to deliver the best audio experience in those more challenging spaces," says **Daniel Saenz**, Product Manager, Amplifiers & Installed Loudspeakers, Q-SYS. "Built as a variant of the popular



AD-C6T, the two models are a natural addition to the AcousticDesign Series and

give users more options and flexibility to fine-tune their environment."

## POWERSOFT BOLSTERS INSTALL RANGE WITH NEW DSP+ MODELS

**Powersoft** has further enhanced its fixed-install product range by introducing AES67-compatible versions of its popular Duecanali and Quattrocanali amplifier platforms.

The new models, called Duecanali DSP+ and Quattrocanali DSP+, are able to receive audio-over-IP (AoIP) streams compliant with the AES67 standard, which allows high-performance streaming AoIP interoperability across different networking systems.

The new Powersoft DSP+ models –

comprising the Duecanali 804 DSP+, 1604 DSP+, 4804 DSP+ and 6404 DSP+ and Quattrocanali 1204 DSP+, 2404 DSP+, 4804 DSP+ and 8804 DSP+ – can receive AES67 streams natively by connecting the dedicated AoIP networking port to an AES67 network.

The new Duecanali DSP+ and Quattrocanali DSP+ amplifiers are supported by a new version of ArmoniaPlus, Powersoft's system design, control and monitoring software, which is available now.

The introduction of the new DSP+ models will enable systems integrators to take advantage of the growing number of AES67-native audio products, says Powersoft product management specialist Giorgio Carminati, while the v2.4 update to ArmoniaPlus will streamline the configuration process by allowing users to configure both the AES67 inputs and DSP settings of the amplifiers in the same software.

All Powersoft amplifiers featuring a

Dante card, including Duecanali DSP+D and Quattrocanali DSP+D models, can also be configured to work with AES67 audio streams by enabling AES67 mode in ArmoniaPlus or Dante Controller.

Suitable for larger installed sound reinforcement systems, the two-channel Duecanali series offers low power consumption and heat dissipation, superior audio quality, and reliable performance in a compact, lightweight unit. With four channels, Lo-Z and 70V/100V distributed lines and low

operating costs, Quattrocanali is perfect for small- to medium-size installations where flexibility is key. All Duecanali and Quattrocanali DSP+ and DSP+D models also benefit from state-of-the-art built-in signal processing.



## CHRISTIE EXPANDS MICROTILES LED LINE-UP WITH NEW PIXEL PITCHES

**Christie**® announced the launch of two new pixel pitches of its award-winning **MicroTiles® LED**. The new 0.75mm and 1.0mm models add to the existing line-up of 1.25 and 1.5mm pixel pitches, and offer increased reliability, efficiency, and enhanced durability.

Shown in technology previews at ISE 2022 and InfoComm 2022, the two new models continue the tradition of the original MicroTiles LED by combining state-of-the-art mechanical design with the development of the most advanced LED technology available.

"Attendees to ISE and InfoComm were able to get up close to our new models and see what a difference the finer pixel pitch makes in resolu-

tion, color saturation and seamlessness," says **Chris Kee**, executive director of product management, Christie. "MicroTiles LED can be configured in near-limitless ways – from curves and corners to architectural displays – and these new models are especially ideal for up-close and highly-detailed viewing with brightness up to 2000 nits."

Reliability of the new models has been improved with flip-chip technology, which is easier to maintain and increases the life of the LEDs by dissipating heat more efficiently, and common cathode technology reduces power consumption resulting in Christie's most energy efficient MicroTiles design to date.

The new 1.0mm model features LED encapsulation, which provides a protective surface that improves optical

performance for improved black level performance and perceived contrast, and protects the display from dust, dirt and scratches. The increased durability gives the option to design an interactive touch wall.

Christie MicroTiles LED deliver superior visual performance with powerful processing including 12-bit input sources, 4K@60Hz, and HDR10 compatibility. The proprietary QuickMount™ system reduces installation complexity, while the proprietary cabinet-free Click-n-Go™ LED tiles can be arranged in near unlimited configurations. MicroTiles LED are ideal for environments including mission critical control rooms, corporate lobbies and meeting rooms, auditoriums and event spaces, and premium hospi-



tality and retail applications.

Christie MicroTiles LED 0.75mm and 1.0mm models are available for order now and will ship in early 2023.

## AMATE AUDIO PRESENTS THE S26 SPECIAL 50Y EDITION: A COMMEMORATION IN SOUND AND STYLE

**Amate Audio** presents the **S26 Special 50Y Edition**, a signature commemorative version of its very latest Nítd S26 state-of-the-art, 2x6" self-powered, active loudspeaker system; with a one-time limited run of just 50 pairs.

This '50th Anniversary edition' model is distinguished by its varnished matt walnut finish and special grille that highlights the beautiful appearance of

the dual custom carbon-fibre drivers. On the rear of the cabinet is a gold badge bearing the signature of the company's President and Founder Juan Amate.

Technically, the S26 50Y shares all of the amazing performance and features of the S26 including 'next generation' colour touchscreen operated 2-channel DSP, 450 W bi-amplification and an exceptionally high quality 121 dB con-

tinuous output level; for a unique sound experience. Disappointingly for many, following the announcement of the S26 50Y the entire production run sold out in less than 24 hours.

Amate Audio's new S-series S26 installation loudspeaker system is now shipping.



## CHRISTIE LAUNCHES NEW HS SERIES 1DLP PROJECTORS

Christie® announced the launch of the next generation of its popular **HS Series 1DLP® projectors** with three new models. Ranging in brightness from 15,750 lumens to 23,650 lumens, the new models feature enhanced color performance for bright, bold visuals with new Christie BoldColor+™ technology.

The **DWU15-HS**, **DWU19-HS** and **DWU23-HS** are 15,750, 19,150 and 23,650 lumens respectively, increasing the range of brightness while maintaining the legacy of reliability, quiet operation, and cost-efficiency of the original HS Series. With the addition of new BoldColor+, colors in the new generation of HS Series projectors are brighter and bolder with deeper blacks and more natu-

ral and realistic on-screen images.

The DWU19-HS and DWU23-HS models support passive polarized 3D out of the box, and all models include onboard Christie Twist™ for warping and blending and are compatible with Christie Mystique™. Mystique is an automated camera-based alignment and recalibration software solution to quickly install, align, calibrate and maintain multi-projector systems. Additionally, accessories for the first generation of HS Series, including lenses and mounts, are compatible with the new models.

Christie HS Series projectors are ideal for markets including live events, hospitality, themed attractions and museums, as well as projection mapping, and have been trusted in projects around the world, from the set of the television



show The Masked Singer Vietnam and projection mapping onto India's iconic Red Fort to lighting up the grand ballroom in the super-boutique hotel The Londoner and exhibits and galleries at

the Shanghai Astronomy Museum.

Christie DWU15-HS, DWU19-HS and DWU23-HS are available for order now and will ship late 2022, and the Christie DWU1400-GS will begin shipping in October 2022.

## LUMENS LAUNCHES THE VC-TA50 AUTO TRACKING PTZ CAMERA

Lumens® Digital Optics Inc. launched the **VC-TA50 auto-tracking PTZ camera**. The VC-TA50 is a single-lens HD tracking camera, suitable for use in education, worship, studio production, business presentations, and unified communications. Featuring AI-powered human face recognition, the VC-TA50 can follow a subject smoothly and reliably, with no need for tracking software, 3rd party hardware, or the use of tracking dongles.

**Steven Liang**, VP of Product Development for Lumens commented: "This year has seen a surge of interest in auto-tracking cameras across all sectors of the market. AV teams and video producers are increasingly relying on automation to deliver dynamic and

engaging images without the need for additional camera operators. Lumens' auto-tracking cameras deliver excellent results, without the need for server-based control software or tracking dongles that were required with earlier generation cameras."

Lumens VC-TA50 features programmable in-camera tracking modes which give users the flexibility to track a subject automatically and only within user-specified zones. Equipped with Lumens' Smart AF technology, VC-TA50 intelligently maintains focus on the subject's face to deliver sharp and well-framed pictures.

The VC-TA50 supports multiple streaming protocols, compliant with



most video production, video conference, and streaming applications, including Zoom, Teams, WebEx, Google Meet, Wowza, YouTube, OBS, and Wirecast. The camera's HDMI and 3G-SDI ports enable users to integrate the

camera with video production, lecture capture, and live event workflows.

## SHURE UNVEILS UNIPLEX: THE NEW CARDIOID SUBMINIATURE LAVALIER MICROPHONE FOR SPEAKING APPLICATIONS

Shure introduced **UniPlex**, its new 5mm subminiature cardioid lavalier microphone engineered to be the ideal, discrete solution for speaking applications where rejection of stage noise, an audience, or close-proximity presenters is essential to conveying your message. Offered in four colors and three connector types, UniPlex joins the award-winning line of subminiature lapels and headsets from Shure, including the omnidirectional **TwinPlex™** and **DuraPlex** product portfolios, while providing

a unique, directional polar pattern.

Designed for corporate presentations and guest speakers in conference rooms, lecture halls, theaters, and arenas, UniPlex's UL4 unidirectional lavalier microphone delivers excellent, isolated audio capture, minimizing feedback with its custom-tuned cardioid element.

UniPlex provides the performance of larger lapel microphones in a significantly smaller design, simultaneously outperforming the audio quality of similarly sized, subminiature lavaliers. This

makes UniPlex the perfect solution for speaking applications where sound-quality-for-size cannot be sacrificed, even in the noisiest environments.

"We knew that the market needed a strong lavalier option that prioritized high-stakes speaking environments with a directional pattern, in a much smaller, cleaner form factor," said **John Born**,



(Continued on page 35)

## OPTIMAL AUDIO EXTENDS CUBOID LOUDSPEAKER SERIES

**Optimal Audio** has announced new additions to its Cuboid line up of loudspeakers, with four models introduced, available in black or white as standard.

The new additions comprise **Cuboid 3**, **Cuboid 3TX**, **Cuboid 5** and **Cuboid 5TX**.

Cuboid 3 is a full range, two-way, passive 3" loudspeaker, designed to give exceptional sound quality in a very small form factor, for distributed applications with high quality background music and speech reproduction.

With its attractive design and included mounting hardware, Cuboid 3 can be fixed in either portrait or landscape orientation for simple and flexible installation. A weatherproof terminal cover is available as an aftermarket accessory for

outdoor use, bringing the rating to IP54.

Cuboid 3 features a 3.5" low frequency driver and a 0.5" PEI dome high frequency driver mated to a shallow wave guide for consistent HF distribution.

Cuboid 3TX adds a transformer, enabling the speakers to run on a series of 70 or 100V taps or at low impedance. Tap selection is via a rotary switch on the rear of the cabinet.

Cuboid 5 and Cuboid 5TX follow in similar fashion and feature a 5.25" low frequency driver and a 0.75" high frequency driver.

The new Cuboid additions will start to ship in APAC from November, EMEA from December, and the Americas in the new year.

Managing Director **Dom Harter** said:



"We're delighted to extend the popular Cuboid series – these new additions open the brand to additional indoor and outdoor applications with sound

quality that will delight. When coupled with the Zone series and the WebApp, setting up a system and end-user control is then also simple and intuitive."

## MEYER SOUND EXPANDS RANGE OF MILAN-CERTIFIED LOUDSPEAKERS WITH FOUR NEW MODELS

**Meyer Sound** has announced the immediate availability of four more loudspeaker products that are now certified as stand-alone endpoints for direct connection to any AVB network compliant with the Milan interoperability protocol. Orders are now being accepted for new Milan input versions of the **ULTRA-X20**, **ULTRA-X22**, and **ULTRA-X23 full-range loudspeakers** and the **USW-112P compact subwoofer**.

Already proven in the field with Meyer Sound's PANTHER linear line array, the Milan input modules accept audio signals from any Milan-certified source via a certified switch. A single RJ45 connector carries high-resolution digital audio along with telemetry data for remote monitoring, resulting in simplified installation and reduced costs.

"The debut of these four Milan-certified loudspeakers marks a major milestone in the evolution of networked AV systems built around a user-driven protocol based on IEEE

open standards," says **Andy Davies**, Senior Product Manager at Meyer Sound. "Designers of installed systems for new construction can save on cabling and installation labour costs, while system renewals can utilize cabling already installed for existing Gigabit Ethernet networks — all with the inherent routing flexibility of digital networks."

The availability of Milan-certified loudspeaker systems enables complete network AV solutions which not only offer simplified management and control but also are more cost-effective to deploy using IT industry infrastructures. Network solutions also maintain a fully digital workflow all the way to the end point, eliminating conversion stages that add latency and degrade performance.

"Milan is rapidly becoming the preferred digital transport solution because of its reserved bandwidth as well as guaranteed latency and presentation time," adds Davies. "Indeed, for many applications, it is the only digital transport solution that meets the technical requirements. In addition, as an open



standard, it will be supported for the life of the product. Meyer Sound products last for decades, and the network technology must do the same."

Meyer Sound Milan-certified loudspeakers now offer the advantages of end-to-end networked solutions across a full range of applications, including but not limited to corporate and hospitality installations, theme parks and themed spectacles, houses of worship, and retail spaces.

The ULTRA-X20 family offers three coverage pattern options, coupled with rotatable horns and a wide selection of accessories. The result is a flexible range of systems equally at home in rental or permanent installs. Bringing this family into the Milan ecosystem, along with the powerful USW-112P, further enhances the flexibility and range of deployments possible with Meyer Sound solutions.

## SHURE UNVEILS UNIPLEX...

Associate Director, Microphones, Global Product Management, at Shure. "UniPlex builds on the portfolio by featuring the same Plex technology cable for enhanced durability, yet it focuses on

(Continued from page 34)

creating clear, isolated sound, ideal for speakers, presenters, and educators alike. We're excited to introduce UniPlex to our growing suite of exceptional lavaliers and headsets."

UniPlex's 1.6mm Shure Plex Cable technology ensures long-lasting durability and comfort for the wearer, while making it easy for crews and engineers to apply the mics effectively and efficiently. The cable is immune

to kinks and memory effects, resulting in unmatched performance thanks to innovative spiral construction with redundant shielding. The cable is also a fully paintable, versatile solution suitable for any speaker or wardrobe.

## CANON UNVEILS NEW RANGE OF INNOVATIVE TECHNOLOGY AT THE BROADCAST INDIA SHOW 2022

**Canon India**, a leading digital imaging player in the country has unveiled its all-new broadcasting technology along with showcasing its robust cinema line-up at the **Broadcast India Show**.

Canon exhibited its extensive imaging technology line-up through unique booth concepts to guide visitors about product potential and various innovative aspects. Keeping in mind the recent surge in OTT, mainstream cinema, documentaries, music albums and the all-time high being witnessed for streaming technology, Canon has introduced four professional-use camcorders **XA75, XA70, XA65 and XA60** that feature a range of flexible recording options that can seamlessly fit into multiple professional workflows. Two new remote cameras have also been added to Canon's portfolio, namely the **CR-N500 and CR-N300**, that perform smooth and precise pan, tilt, and zoom movements providing both workflow support and ease of operations. All the broadcasting solutions are perfect for everyone ranging from corporates to houses of worship, documentaries and education institutions and event management, making recording and streaming easier than ever. The company also showcased the latest **Flex Zoom Full-Frame CN-E20-50MM T2.4 L F/FP Lens** for greater versatility in production.

**Manabu Yamazaki**, President and CEO, Canon India, said, "In the

post-pandemic world, the broadcasting industry in India has been witnessing several transformations and it is extremely crucial for filmmakers to be in tune with new age trends and technology. At Canon, it is our endeavour to bring our valuable customers closer to the very best imaging solutions and experiences that provide innovation par excellence. Along with showcasing our new products for the first time to the Indian audience, we aim at creating a stronger connect with customers and getting first-hand feedback from the industry."

Canon's new technology brings with it an array of advanced features capable of transforming the production landscape. The compact and lightweight XA75, XA70, XA65 and XA60 cam recorders can deliver both high image quality and high mobility required for on-location broadcasting, reporting, documentary and event shooting. When it comes to providing outstanding optical performance and offering breath taking cinematic experiences, there is the CN-E20-50MM T2.4 L F / FP as part of its Full-Frame Flex Zoom Series that has already made its presence felt in the global market.

**C Sukumaran**, Senior Director, Imaging Communication Business and Consumer System Products, Canon India said, "We aim to always deliver technology that is inspiring, accurate and cutting-edge. By unveiling our latest products at the show that incorporate new-age technologies, we strive to position Canon as the ideal



**Canon's Manabu Yamazaki and C Sukumaran Unveil Futuristic Technology At Broadcast India Show 2022**

choice for ambitious cinematographers and broadcasters who want to carve a unique mark for themselves in the industry. Showcasing the prowess of our products, we take pride in having set up creative experience zones for customers to have an in-depth hands-on experience as well as make informed

purchase decisions by understanding the imaging magnificence that can be created using our technology. Be it our VR solutions, products for live streaming or cinema, we are confident that we will be able to engage both existing as well as attract new customers."

## HALL TECHNOLOGIES CONTINUES ITS FOCUS ON COMMUNICATION AND CONNECTIVITY WITH ATLAS

**Hall Technologies** debuts **Atlas**, a conference speakerphone with video presentation and BYOD. Voyager Dongle is a USB-C wireless dongle supporting sharing content from screen sources.

Hall Technologies, a global AV company specializing in unified communications application, debuts Atlas their all-in-one conferencing solution. This meeting collaboration system includes microphone, speaker, and a built-in presentation switch for a superior audio and video experience whether across

the room or across the globe.

Atlas works seamlessly with all soft-codec conferencing solutions and is compatible for Windows, Mac OS, Android, as well as UC platforms like Zoom, WebEx, and Teams. The Atlas complete conference system including BYOD is easy to use and deploy and provides a consistent high-quality audio and video experience with every use. The audio includes an omni-directional microphone array with echo cancellation and noise reduction paired with an advanced 10W conference speaker.

Presentation options include a USB-hub (resolution up to 1080P@60Hz), HDMI (up to 4K@30Hz), HDBaseT and wireless casting.

"Historically speaking, Atlas is said to hold the globe on his shoulders, in Hall's case, Atlas holds conferencing participants attention with its premium audio-visual experience," says Hall Technologies Vice President of Technology **Ken Eagle**. "Atlas powers lies with its casting capabilities that are ideal for conferencing scenarios in corporate, education, hospitality, healthcare, remote

workspaces and more. And when paired with our HIVE control room solutions, Atlas becomes a perfect tool for any UCC application."

Atlas is in-stock and shipping now.



# Roger Drego on Creating Fail-Proof Sound for Mega Live Events



*In a session titled 'Performance Guarantee Of Mega Scale Live Sound Projects', Roger Drego, Managing Director, Electrocraft, took to the stage at PALM Conference 2022 to share invaluable challenges and insights with regards to guaranteeing fail-proof sound reinforcement during showtime. The 45-minute information-laden session, brought to you by PALM Expo 2022, paved the way for rental companies to understand the dynamics of delivering quality sound for events catering to lakhs of people, covering thousands of square meters, and requiring immense planning and expertise. Read on for the highlights of the talk.*

With his engineering ingenuity and technical acumen, **Roger Drego** is a man with a trained eye for recognizing the best-in-class sound equipment. When **Electrocraft** first purchased the Line Array in 1999, the technology wasn't a popular choice for big event management companies. Drego remembers, "A lot of companies still did not realize that line arrays were here to stay. They nicknamed the line array, a banana array. And the Americans said, 'a banana here, a banana there'. But nobody realized that the line array is here to stay."

What really helped Roger Drego in cementing Electrocraft's reputation as one of the leading live sound solutions company was his foresight. Talking about how Electrocraft stood out in a sea of competition in the market, and how the company was chosen time and

again to do sound for major events and rallies in Delhi, Drego says, "We became popular because other people failed. And why the other people failed, is because a lot of companies did not keep up with technology. For instance, the Rajiv Gandhi Rally in Bremen stadium for the Congress Centenary Celebrations was managed by Chicago Radio, which was an established company for many years. Their system failed. Amitabh Bachchan recommended my

name to Rajiv Gandhi. 20 police vans came that night to my warehouse. That's how I first got in touch with Delhi and with the Prime Minister."

He continues, "From then on, we were called to most of the major happenings in Delhi. Be it the Russian President coming to Delhi, the Sri Lankan President coming to Delhi, the Apna Utsav Festival, you name it. One year, we also provided sound solutions on Republic Day with cordless mics, when cordless mics were

very, very rare to find."

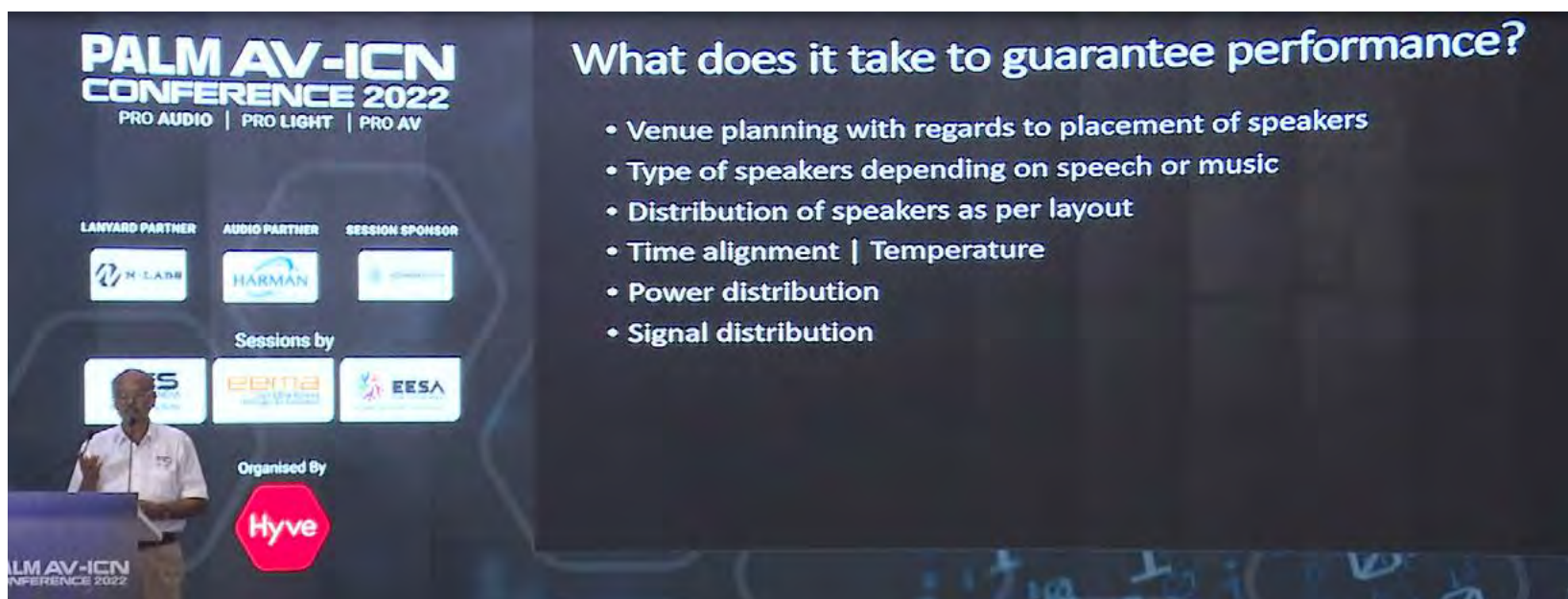
## Scaling New Heights in Sound Reinforcement

This was just the beginning. With the arrival of the line array, for the first time with analog signal and a wireless network, Electrocraft successfully executed Benny Hinn's major event in BKC, Mumbai, where the stage measured 800 metres by 300 metres and the crowd amounted to 600,000 people.

In 2005, Electrocraft repeated its flawless live sound execution at Jakkur Aerodome in Bengaluru, where the stage spread at one kilometre by one kilometre. "It took me one month just to do the mains cabling and the signal cabling," Drego shares.

"The next big event that we had in 2016 was for Sri Sri Ravi Shankar which

**"We became popular because other people failed. And why the other people failed, is because a lot of companies did not keep up with technology."**



**Roger Drego explaining the recipe for success for delivering effortless sound solutions for large-scale live events**

was done in Delhi. Now, this was a major challenge, because I think this was one of the biggest stages that India has ever seen - 1200 feet long and 50 feet high. If you stood at one end of the stage, you could not see the other end of the stage. 14 trucks of equipment were used and 100 small liner cabinets were made just for this event. On stage, we had 8000-9000 musicians."

However, it wasn't all smooth sailing for Drego and Electrocraft. The ace sound technician recalls, "It started raining before the show. And as the show started, it came down and the LEDs stopped working, the lights stopped working, but the sound went on. It rained for eight minutes, non-stop. Cordless mics got wet, some got damaged, but nothing failed."

## Delivering Fail-Proof Sound Solutions – Venue Planning

But what is the recipe for success with regards to delivering effortless sound solutions for large-scale live events? Drego reveals, "We should first look at the venue planning. The venue planning is how big the ground is. Into how many blocks are you going to break up the ground? And if it's a speech, or if it's music, what kind of equipment are you going to use? If it's speech, obviously, it will be a smart, smaller box. But if there's music involved, then you will use line arrays in the front and double 15-inches and a horn to carry on the equipment at the back or double 9-inch liner array to continue the sound going downward down the line. The type of speakers will depend on the event that you're doing. A musical event has to have low end and some kind of quality. Think a few K2s, maybe two or four arrays in the front, and a delay of that. And then you start with delay of Wi Fi, 8-inch line arrays."

**“It’s important that when you’re planning your positioning of your speakers, you position the speaker in such a way that the next delay stack comes and takes over from the first line array that you’ve installed.”**

## Creating Flawless Sound with Balanced Speaker Distribution

How the speakers are distributed around the venue also plays a crucial role in ensuring fail-proof sound solutions. "One line array can cover only a certain area. If you take a big land area you can cover maybe 250 feet to 300 feet maximum down the line, the coverage of the width will be another 150 feet to 200 feet as you go further away from the box. So it's important that when you're planning your positioning of your speakers, you position the speaker in such a way that the next delay stack comes and takes over from the first line array that you've installed. You will go on adding on your delay stacks in that manner, so that the sound reaches right till the end," explains Drego.

**“When you’re doing a big event, you must have a backup. Power can fail any time. If you don’t have proper power, you lose your mixer, you lose a lot of information. If that information is not stored, and you start rebooting your mixer again, you’ve lost time, and you’re going to be in a big problem.”**

## Ensuring Zero-Error Time Correction with Time Alignment

Time alignment is another important factor, and Roger Drego stresses on the significance on performing a fine tune before the event for the error-free time correction. He says, "In the morning, when it's cold and it's humid, sound travels at a different speed. And when it's hot in the evening, you will find the sound is also traveling at a different speed. So please be aware when you're doing a big event, the best way of time aligning a system is to physically hear the system and do your final correction."

## Taking Care of Power Distribution at A Mega Event

Roger Drego also advises to not take power distribution lightly. He says, "To make sure your system works, your

amplifiers must be driven properly. To make sure your amplifiers are driven properly, you need power distribution to be proper. If the power distribution generator is at one end and the whole ground is a one kilometre long, you're not going to run mains from one side and start routing the main down the line, you have to bring your main supply to the centre. From the centre of the heavy-duty cable, you will go left and right. That's the best way of doing your mains distribution."

A successful end-to-end sound solution cannot be executed unless there is backup, says Drego. He adds, "I think when you're doing a big event, you must have a backup. Power can fail any time. If you don't have proper power, you lose your mixer, you lose a lot of information. If that information is not stored, and you start rebooting your mixer again, you've lost time, and you're going to be in a big problem."

## Learning The Essentials of Crew Management

Crew management, according to Drego, is of equal essence when it comes to ensuring uninterrupted sound at live events. He concludes, "You don't want to send the speakers in the first truck. Your first truck that will reach the ground will obviously be cabling, because you're going to start the event with cabling in the ground. Then your next trucks should come with the speakers, so your speakers can be flown. Lastly, the trucks with the mixers and all the processing gear arrive because this part of execution comes at a much later stage."

To put it briefly, the talk at PALM Expo 2022 by Roger Drego was filled with industry insight, technical know-how and an underlined exploration of the history of Electrocraft in the wider world of sound solutions in India, and in the end, it was an occasion that amassed appreciation and applause in equal measure.

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## COLOUR AND SOUND AS HEALING



**H**ow is the New Normal treating you? How different is yours from your Old Normal?

Crazier and more stressful?

It's said that if you have a normal life, 30 minutes of meditation and self-reflection is a healthy tonic.

If, however you are super busy and lead particularly stressful lives, you need at least 60 minutes of the same.

To uncross the tangled wires and cluttered messages inside your head.

On one side they tell me that if you don't sleep enough – you will die. Now another hour wasted on meditation. Tell that to my boss / client who demands 25 hours a day.

What if I told you that there is a kind of meditation that is associated with our work?

Yup – It's called smoking and cheap biryani pizza.

Recently a DJ friend was extolling the virtues of a 'sound bath.' Ya Ya – Loco Koko was my reaction. 'Is that why you go to the bathroom every time you play your Techno Crap?' I had laughed.

That was until I chanced upon a sound bathing experience. I must confess it was the pretty lady's eyes that got me to sign up more than any curiosity or need for more cacophony in my head.

We were led into a room, in the centre of which were a set of strange looking pipes and bowls. Nothing even vaguely musical. Not a speaker in sight. There were a few mats radiating out of the central cluster of metal and gongs. We were invited to lie down with our heads towards the middle, so our feet looked like rays emanating from the sun.

Now I can't even look at her through my 'therapy'. In a gentle voice, she invited us to close our eyes and open our ears and senses (if you've ever worked with me – this must have been barked at you a million times). I giggled and followed instructions. This lady then started creating some soothing sounds for about 5 minutes (I thought) and then in the uncomfortable silence, I opened my eyes. I was the only one left in the room and the pretty lady was just finishing up packing all the jingle and jangle stuff.

'Huh?' I asked. She smiled as only a deep Yogi can smile – from

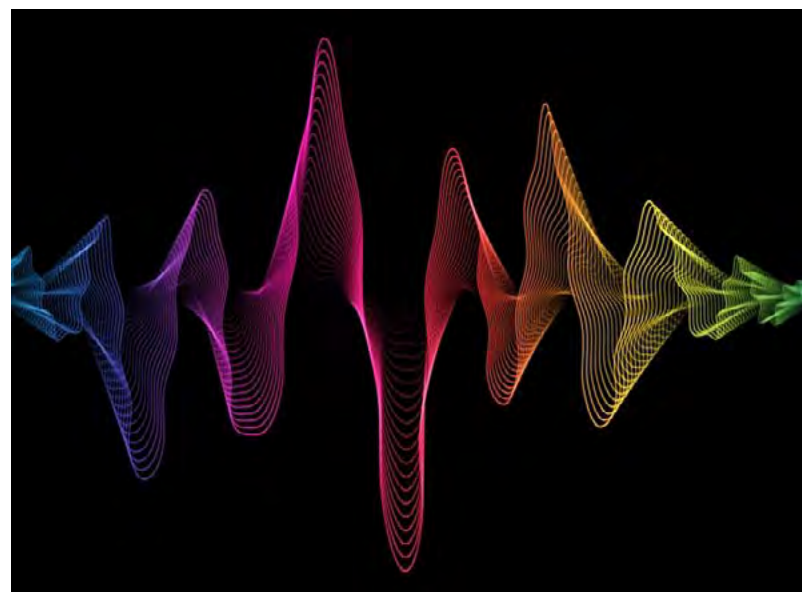
her belly. 'It was a 45-minute experience that ended 15 minutes ago. You seemed so relaxed I let you be.'

I could not get up. Really. I was in such a state of stupor that not a single muscle responded.

'Was I asleep?' I asked. 'No,' she said, 'your body was responding to every sound. You took in every sound and it's clear that it resonated within you on a deeper level than anybody else.'

Over a simple meal after, she revealed some amazing ideas. I must confess. I would have probably dismissed them as mumbo jumbo if I was not in this exuberant, ready-to-receive state.

Apparently, the entire Universe is in a state of vibration. This includes human beings. Every organ, cell, bone, tissue and liquid of the body, and the electromagnetic fields which surround the body, has a healthy vibratory frequency. If we are not resonating with some part of ourselves or our surroundings, we



become dissonant and therefore unhealthy, our naturally healthy frequency becomes a frequency that vibrates without harmony, creating illness.

Sound Healing is the application of Healing frequencies to the physical and subtle energy fields around the body. These healing or therapeutic frequencies and sounds are delivered via live sound therapy sessions employing the Voice, Overtone Singing and a variety of sound healing tools such as Tuning forks, Tibetan singing bowls, Quartz crystal bowls, Monochords as well as those from more Shamanic Sound Healing traditions, such as Didgeridoo, Native drum, Native flute, Rattles, and other Acoustic instruments.

Healing frequencies are often based on Natural Cycles. When these cycles are in tune with our own personal and unique Bio-rhythms, we are in optimum good health. This is because sound is measured in cycles per second, any cycle can be converted to a human-audible sound by raising it or lowering it many octaves. Healing Sounds are those that through Sympathetic Resonance, bring the listener into harmony with their surroundings, with Nature, with the natural rhythms of Creation and therefore into a relaxed state of health and well-being.

I persuaded her to gift me some tiny rattles and got her to agree to send me a set of her chimes that I seemed to have particularly responded to. I must confess to spending a few minutes every morning lightly tapping those chimes to just listen. I can honestly say those few sounds every morning are as cleansing as any bath you will ever have.

Of course, finding what sound you respond to must be a journey you must make for yourself.

"So, what do you do?" she asked at the end of our conversation. "I'm a lighting designer." I sheepishly said. Immediately she brightened up. "So, what do you know about colour?"

"Well, if you mix blue and red you get purple. My favourite colour." I replied.

"Yeah. Do you know the meaning?"

"Don't tell me that colour too has energy?"

"You are the guy. Do your reading." So, when a pretty lady asks you to do something, you follow instructions.

Everybody knows that Red is Anger, Blue is Peace, White is Emptiness and

Black? Well, a tiny dress at a nightclub.

Here's where I started. Black is Nothingness. That's true of most nightclubs (Now that I'm an evolved human, I can make these wise statements).

But White? Emptiness. White is a combination of every colour on the spectrum.

Then I found that a life lived in its fullness brings peace. Peace is a state of being in harmony with yourself and your surroundings. So your body and your mind and dare I say, soul, receives so much stimulus from around us. Now it's up to us to process all these inputs. Keep what is healthy and what we need. Discard the rest. Sounds simple?

Look around at all the stress and anxiety around us. Somehow, we have lost our way amidst the clutter. So, I read. Found a few wonderful books on the pursuit of the perfect colour. This lady went in pursuit of the perfect Blue, Yellow and Orange. She never explained why those three colours, but told me it was an amazing journey through flowers, violins, and the sea. Loved her experience.

Google Ma filled in the facts. Dr. Axe website offered the simplest and clearest introduction to our response to colour around us. I urge you to browse through.

You remember that wonderful ad on the environment where parents were asked to choose paints to colour their world. They use up all the colours so that only the Blacks and Browns are left for their children to paint with.

Fortunately, unlike petrol and certain metals, the world will never run out of colour – Unless you drain it off yourself.

(Continued on page 42)



*MMRDA, responsible for promoting, monitoring, and developing various sectors in Maharashtra, including, but not limited to transport, housing, water supply and more, entrusted EYTE to revamp and upgrade Wadala Monorail Depot's Boardroom with state-of-the-art AV infrastructure. Abdul Waheed, Managing Director, EYTE Technologies Pvt Ltd, in conversation with PALM Technology, reveals how his team transformed the visage and acoustics of the boardroom and managed to execute the impossible feat in a matter of seven days.*

# Bringing Futuristic AV Ideas To Life

## *How EYTE upgraded Wadala Monorail Depot's Boardroom in a week*

When **Abdul Waheed** and his team first stepped into Wadala Monorail Depot's Boardroom, it looked like, in Waheed's own words, "a typical looking old government office which needed a revamp." But when EYTE Technologies Pvt Ltd set out to accomplish the mammoth task, obstacles and hurdles presented themselves almost instantly.

### Transforming The Boardroom's Aesthetics &

### Acoustics - From Square One

The world of AV is ever-evolving, always updating. Keeping up with the latest AV trends and technologies is not a cakewalk, and the Wadala Monorail Depot's Boardroom, according to Abdul Waheed, was no exception. He shares that the boardroom just had "an old projector, projecting on a concrete wall." He adds, "Though the meeting room was extensively used, it was never upgraded with time to meet today's

design needs with regards to productivity and efficiency."

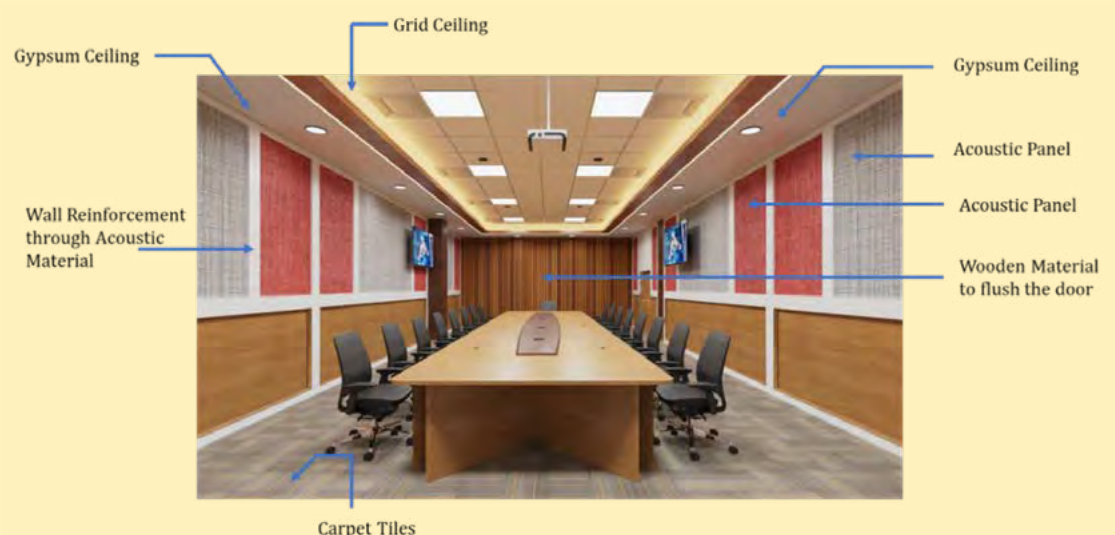
The MMRDA invited EYTE Technologies Pvt Ltd to redesign the boardroom and equip it with the latest AV tools and technologies. Waheed recalls, "Various rounds of discussion took place to explain to the client the importance of having a good AV system at the venue. The basic requirements which were shortlisted included local speech reinforcement for the 20-seater meeting room, local presentation and video conferencing system using soft

codec, and designing the 45ft x 22ft space with open windows on the side with wall-centred acoustical treatments and enhance the sound reinforcement in the space."

EYTE performed acoustical tests and used ease simulation to acoustically treat the space's walls. The results strengthened MMRDA's confidence in EYTE's capabilities to deliver the best-in-class AV set-up and it asked EYTE to overtake the entire AV design of the boardroom. But the challenge had just begun.



The Wadala Monorail Depot's Boardroom in need of a revamp



EYTE Technologies Pvt Ltd upgrade the Wadala Monorail Depot Boardroom with state-of-the-art AV infrastructure



Behind the scenes at the Wadala Monorail Depot Boardroom's AV revamp

### Inventory:

- BenQ Projector
- Liberty fixed screen
- Sennheiser Microphones
- Aten Switches
- Audio-Technica DSP
- AUDAC amplifiers
- Legrand Cable Management Systems

## Getting The Boardroom AV-Ready In 7 Days

Over a period of one month, EYTE conducted several site surveys, attended countless discussion rounds, collated inputs from various departments at MMRDA, and presented the company's POC for numerous solutions related to AV and acoustics. But the shocker was yet to kick in. Waheed shared, "Never imagined that after this long, time-consuming process, in view of forthcoming festival, the Commissioner may demand the inauguration in one week's time."

But EYTE was determined to not be deterred by challenges such as this one. Instead, the team looked at the challenge as an opportunity to showcase its expertise and experience in the field of AV. Abdul Waheed comments, "EYTE team prepared the project schedule for approval from the project team, which

showed a plan of 20 days. The MMRDA team wanted to go with Commissioner's word to complete the entire project that involved the change of ceiling, AC work, acoustical treatments of wall and flooring, lighting and AV works. EYTE accepted the challenge and planned the entire project completion accordingly."

### And So, It Began...

AV installations at the Wadala Monorail Depot's Boardroom included a projection screen for video conferencing and presentation, video displays to support video reinforcement, cameras to track and capture participant movement, ceiling-mounted speakers to enhance programmed audio and local speech reinforcement, table microphones along with handheld microphones to use for audio pickup, AV switching devices inside AV racks to ensure effective operation of the entire AV system.

The acoustic installations involved wall reinforcement of the left, right, and backside wall, grid and gypsum ceiling, acoustic treatment on glass wind and carpet flooring. Apart of this, 2x2 lighting fixtures were placed in grid ceiling and 8" lighting fixtures were placed in gypsum ceilings along with profile and cove lights on ceiling borders.

How long did it take for the entire revamp to finish? Abdul Waheed recounts, "It took 3 days to complete the interior work, 2 days for acoustic & lighting, and 2 days for AV installation. It was such a great boost for EYTE Technologies, to be able to complete a project in a week's time. The continuous day and night work efforts of the team at EYTE made the project completion possible in 7 days and on the 8th day, the site was inaugurated."

Waheed continues, "The entire MMRDA team was stunned to see this happen, as many of their seniors visited

the site during construction, and based on their prior experience, every single person said that the task is impossible."

### Final Words

Working on a government AV project is massively different from working on a corporate AV project. Waheed agrees and adds, "In India, a government project is different in comparison to a corporate project since the project decisions, installations, and the hierarchical processes are very time consuming. The complete government project timelines are sometimes 5-10 times slower than a corporate project. The success stories of EYTE in corporate areas are already known in the AV industry, but our experience in this government project is phenomenal too."

Congratulating the team at EYTE at the massive success, Waheed says, "Converting ideas into experiences always gives one the sense of achievement. But this task gave the entire EYTE team a mesmerising experience. The entire Monorail team thanked team EYTE for its outstanding commitment and wished success in all its future endeavours."

EYTE's tireless dedication and outstanding expertise in the field of AV reflects well in the Wadala Monorail Depot's Boardroom Revamp. The results are a testimony to the excellence and innovation that EYTE brings to the table, every single time.

## The Bright Spark

### Colour and Sound as Healing

(Continued from page 40)

So, the next time at work, set up a colour. Any colour you like, that you respond to, just stare at it single-mindedly for a few minutes. Quietly and by yourself. I tried it (after 40 odd years of staring at stages) and it was a truly unique experience.

If we have worked together, you know my preference for clean lines. Never having more than two or three colours on stage at a time. Reduce that now. Pick one light, one colour, and just stare at it for a bit.

Here's what you may expect – though of course you will have your own unique take.

Red energizes, Green relaxes, Yellow brightens the mood, Orange brings both happiness and hunger. I've deliberately left Blue out (at least initially), because Blue causes varied responses. To some it brings relief, but it also creates anxiety and pain to an equal number. Be careful.

Blue Light that emanates off our device

screens, we all know the harm that it causes.

Right now, I am reading up on our ancient wisdom of associating colours with the various chakras within our bodies.

In my journey, I've come across other interesting use of colour in medicine. Of course, it's a pseudo-science, so nothing is proved and so cannot be prescribed – But it may help.

Blue LED light stimulates hair growth.

Red LED light dissolves skin conditions.

Athletes use it to enhance performance.

Students use it to focus on learning.

People use it to control breathing and blood pressure.

I've given enough people increase in blood pressure. Now maybe it's my time to lower it.

Enjoy the Journey.

## ELECTROSONIC AND HOLOPLOT ENTER...

(Continued from page 07)

with professional audio. Their experience providing the right technology and services for complex audiovisual deployments makes them a perfect match for HOLOPLOT as we develop our hardware and software to solve otherwise unsolvable challenges for partners worldwide," said **Ryan Penny**, Head of Sales at HOLOPLOT.

By deploying previously inaccessible capabilities to the world of audio, Electrosonic and HOLOPLOT are working together to create rich, immersive experiences for visitors of all ages at entertainment and attraction venues.

Previously, the two companies cooperated on the build-out of Illuminarium, a next-generation immersive entertainment venue, along with other partners. Illuminarium has been recognized throughout the industry as a ground-breaking entertainment venue, having been named a finalist for five AV Awards, including Venue Project of the Year and Events and Entertainment Project of the Year. Illuminarium was also previously recognized by the Mondo-DR and Digital Signage Awards.

"HOLOPLOT's revolutionary technology combined with our experience delivering immersive environments creates a unique advantage in the industry," said **Ryan Poe**, Director of Technology Solutions at Electrosonic. "When we work together, our combined expertise will provide unique and memorable experiences for any guest."

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- |                                      |                                    |
|--------------------------------------|------------------------------------|
| ● Films (Theatrical)                 | ● Spiritual Music                  |
| ● OTT                                | ● Traditional / Folk / Dance Music |
| ● Instrumental Music (Non-Classical) | ● Independent Music                |
| ● Indian Classical Music             | ● Podcast (Audio)                  |
| ● Devotional                         | ● Broadcast                        |

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## *Categories*

### **FILMS [THEATRICAL] – FEATURE FILMS**

- ▶ Song Recording/Mixing/Mastering - Hindi
- ▶ Song Recording/Mixing/Mastering - Regional
- ▶ Song Music Producer - Hindi
- ▶ Song Music Producer - Regional
- ▶ Sound Designer (Film or Web Release) - Hindi
- ▶ Sound Designer (Film or Web Release) - Regional
- ▶ Sound Designer for Foreign Films
- ▶ Mixing (Film or Web Release) - Hindi
- ▶ Mixing (Film or Web Release) - Regional
- ▶ Mixing (Film or Web Release) - Foreign
- ▶ Dialogue Editor / ADR Engineer (Film or Web Release) - Hindi
- ▶ Dialogue Editor / ADR Engineer (Film or Web Release) - Regional
- ▶ Sound Editor Effects & Ambience (Film or Web Release) - Hindi
- ▶ Sound Editor Effects & Ambience (Film or Web Release) - Regional
- ▶ Foley Engineer (Film or Web Release) - Hindi
- ▶ Foley Engineer (Film or Web Release) - Regional
- ▶ Sync Sound Recording (Film or Web Release) - Hindi
- ▶ Sync Sound Recording (Film or Web Release) - Regional

### **FILMS [THEATRICAL] – DOCUMENTARY**

- ▶ Sound Designer for Documentaries
- ▶ Documentary Mixing
- ▶ Dialogue Editor / ADR Engineer for Documentaries
- ▶ Sound Editor Effects & Ambience for Documentaries
- ▶ Foley Engineer for Documentaries
- ▶ Sync Sound Recording Documentaries

### **FILMS [THEATRICAL] – SHORT FILMS**

- ▶ Sound Designer for Short Films
- ▶ Dialogue Editor / ADR Engineer for Short Films
- ▶ Sound Editor Effects & Ambience for Short Films
- ▶ Short Films Mixing
- ▶ Foley Engineer for Short Films
- ▶ Sync Sound Recording for Short Film

### **FILMS [THEATRICAL] – ADVERTISEMENTS**

- ▶ Advertisement Mixing - Hindi
- ▶ Advertisement Mixing - Regional
- ▶ Advertisement Sound Design - Hindi
- ▶ Advertisement Sound Design - Regional

### **OTT – WEB SERIES**

- ▶ Song Recording & Mixing Web Series - Hindi
- ▶ Song Recording & Mixing Web Series - Regional
- ▶ Music Producer Web Series - Hindi
- ▶ Music Producer Web Series - Regional
- ▶ Sound Designer for Web Series - Hindi
- ▶ Sound Designer for Web Series - Regional
- ▶ Dialogue Editor / ADR Engineer for Web Series - Hindi
- ▶ Dialogue Editor / ADR Engineer for Web Series - Regional
- ▶ Sound Editor Effects & Ambience for Web Series - Hindi
- ▶ Sound Editor Effects & Ambience for Web Series - Regional
- ▶ Mixing Web Series - Hindi
- ▶ Mixing Web Series - Regional
- ▶ Foley Engineer Web Series
- ▶ Sync Sound Recording Web Series

### **INSTRUMENTAL MUSIC [NON-CLASSICAL]**

- ▶ Recording/Mixing/Mastering
- ▶ Music Production

### **INSTRUMENTAL MUSIC [NON-CLASSICAL]**

- ▶ Recording/Mixing/Mastering
- ▶ Music Production

### **INDIAN CLASSICAL MUSIC**

- ▶ Vocal Recording/Mixing/Mastering
- ▶ Instrumental Recording/Mixing/Mastering

### **DEVOTIONAL / SPIRITUAL MUSIC**

- ▶ Recording/Mixing/Mastering
- ▶ Music Production

### **TRADITIONAL / FOLK / DANCE MUSIC**

- ▶ Recording/Mixing/Mastering
- ▶ Music Production

### **BROADCAST – ADVERTISEMENT**

- ▶ Sound mixing for Advertisement
- ▶ Broadcast Mixing (Dialogue Oriented) - Hindi
- ▶ Broadcast Mixing (Dialogue Oriented) - Regional
- ▶ Broadcast Mixing (Music Oriented) - Hindi
- ▶ Broadcast Mixing (Music Oriented) - Regional

## INDEPENDENT MUSIC-RECORDING/ MIXING/MASTERING

- ▶ Rock / blues / Metal
- ▶ Electronic
- ▶ Pop
- ▶ Progressive/ Alternative
- ▶ Acoustic (Singer/Songwriter)
- ▶ Rap and Hip-Hop
- ▶ World/Fusion Music

## INDEPENDENT MUSIC-MUSIC PRODUCER

- ▶ Rock / blues / Metal
- ▶ Electronic
- ▶ Pop
- ▶ Progressive/ Alternative
- ▶ Acoustic (Singer/Songwriter)
- ▶ Rap and Hip-Hop
- ▶ World/Fusion Music

## PODCAST [AUDIO]

- ▶ Recording/Mixing
- ▶ Sound Designer
- ▶ Music Producer

## JURY AWARDS

### SONG OF THE YEAR

- ▶ Composer
- ▶ Lyricist
- ▶ Singer
- ▶ Recording/Mixing
- ▶ Mastering

### EDUCATIONAL INSTITUTE

- ▶ For doing exemplary work in the field of audio education

### HALL OF FAME

- ▶ A person who has done path-breaking or dedicated work in the field of audio engineering



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## CHRISTIE LIGHTS UP GUJARAT'S SMRITIVAN EARTHQUAKE MUSEUM

Christie® announced that its laser projection systems are delivering vibrant and immersive visuals in India's largest memorial and museum, dedicated to those who perished in a major earthquake more than two decades ago.

provides specific attractions to visitors through the use of AV technologies, including projection mapping, to showcase its focused theme. These include Gujarat's topography, rebuilding initiatives and success stories following the disaster that claimed more than 13,000

ing experience to visitors. Among the highlights of this sprawling museum – which occupies 11,500 square meters (123,785 square feet) – is a special theatre where visitors can experience an earthquake through immersive projections and environmental effects.

Christie. "Not only will visitors be informed about the 2001 earthquake, they can also learn more about Gujarat's culture, the Harappan civilization of this region, the science of seismology, and how the people of Kutch triumphed against adversities after the earthquake. These have been accomplished by highly engaging and immersive projections that elevate the visitor experience to a whole new level."

The HS Series laser projectors are used to display bright and lifelike images around the GEODOME total immersive chamber to create a realistic earthquake experience, complemented by surround audio as well as vibration and motion effects. "With its high brightness, color accuracy, compact footprint and omnidirectional capabilities, the HS Series offers a powerful, reliable and cost-effective option for almost any high-use application such as museum spaces," said Nayar.

The GS, Inspire and Captiva Series laser projectors have also been ingeniously installed in various exhibition blocks to support multimedia presentations, interactive exhibits, as well as a holographic projection and virtual reality demonstrations.

"Our 1DLP laser projection systems with 20,000 hours of low-cost operation, small footprint, low-weight and quiet operation are designed to deliver premium performance and reliability in high footfall venues like Smritivan Earthquake Museum," Nayar added. "The projections have added poignancy to this historical event and at the same time, exemplified the courage and resilience of the people in rebuilding their homeland."

Christie's comprehensive lineup of 1DLP laser projection solutions comprising the HS Series, GS Series, Inspire Series and Captiva Series offer long-lasting laser illumination and rich features that meet the needs of a wide range of applications. Some models are also compatible with Christie Mystique™, an automated camera-based alignment and recalibration solution. Christie 1DLP laser projectors are the perfect choice for night tourism, museums, planetariums, training and conferences, education, themed entertainment and live events.



Christie HS Series laser projectors are used for a massive wall for guests to pay respects to earthquake victims

The new Smritivan Memorial is spread over 470 acres on Bhujio Hill near Bhuj town in Kutch District, the earthquake's epicenter. It houses a state-of-the-art **Smritivan Earthquake Museum** that consists of eight blocks named Rebirth, Rediscover, Restore, Rebuild, Re-think, Relive and Renew. Each block

lives. Smritivan Memorial was officially inaugurated by Indian Prime Minister Narendra Modi during a visit to Bhuj on August 28.

Close to 100 **Christie 1DLP® laser projectors** comprising the HS Series, GS Series, Inspire Series and Captiva Series have been installed in various exhibition blocks to offer a dynamic and engag-

In another block, multiple projections are displayed on a massive wall where guests can pay their respects to the earthquake victims.

"The Smritivan Earthquake Museum is a world-class facility that offers a unique experience unlike any other museums or public spaces," said **Rishubh Nayar**, director of sales for India, Enterprise,



Christie HS Series laser projectors are used for 360-degree projections in the GEODOME total immersive chamber



# In Conversation with Krishna Tripathi, NEC at InfoComm India 2022

Anil Chopra of PALM AV-ICN  
with Krishna Tripathi of NEC  
at the company's booth at  
Infocomm India

**Krishna Tripathi**, General Manager, Display Solutions, NEC Corporation India Private Limited, joins **Anil Chopra**, Founding Director, PALM AV-ICN, for a quick conversation, where he talks about fail-safe display solutions for mission-critical applications, the rise of Micro LED and DV-LED, and the revolutionary products on display at the NEC Booth at InfoComm India 2022

**W**hen it comes to very critical applications and zero possibility of failure, for example, the power plants or the space launches, NEC is reputed for safe display solutions. What can you say about the long-term safety with reference to the new displays exhibited here?

That's a very good question. NEC is a company with a strong history, innovation, and legacy of more than 100 years. We are known for our best quality products in the industry. When we talk about NEC products, all the products, including LEDs and LCDs, have a failure rate of less than 0.7% - the lowest in the industry. The products which we offer are of the best quality. NEC never compromises on quality. Be it any

highly reliable, mission-critical applications - oil refineries, control rooms, even banking applications, all NEC products are meant for applications where the lines never experience any failure or downtime.

**The latest and the biggest wave in LED technology today is the Micro LED. How is NEC able to guarantee a fail-safe usage of Micro LED technology?**

NEC has acquired a company called S[Quadrat], it's a German company, a leader in Space and Micro LEDs we are using the same technologies for our active LEDs, and our products are bundled and integrated with all the solutions and all of this comes with a controller. We also offer an installation kit. Nobody's doing that. Think of it, for

the customer, this makes it very easy to install and repair the technology. The life of the Micro LEDs which we offer is 100,000 hours. So, there's the 'wow' factor and good reliable products, for retail applications, meeting rooms, or control rooms.

**Apart from the long-lasting, critical applications, which is the key product that you would like to talk about today?**

dvLEDs or Active LEDs. NEC has three variants in dvLED - these are the dvLEDE series, FE series, and FA series which is the most superior series having all the components redundant.

Another key product that we are talking about is Microsoft Certified Team Collaboration Software, where

everything is integrated - right from the cameras to the microphones. It is very good for meeting rooms, huddle rooms, and six-to-eight-seater rooms. It can be installed in all the offices and is highly secure. Just plug it in with a type C cable and bring your meetings to any place.

When it comes to projectors as well, we have a very wide range of projectors for all businesses e.g. Corporates, Higher Education, E Cinema (5K to 20K lmn) & especially Digital Cinemas projectors. We are focusing heavily on DCI projectors. Of course, they feature a really good range, starting from 7,000 lumens and going up to 35,000 lumens. NEC is at the number two position in the world when it comes to DCI projectors..

### LD SYSTEMS & P.AUDIO DELIVER MESMERIZING MUSICAL EXPERIENCE AT TRUNKS & LEAVES

Kandivali is now home to its first multi-cuisine open air vegetarian restaurant **Trunks & Leaves**. Trunks & Leaves is a spacious outdoor and indoor restaurant with an alluring wooden aesthetic and a lush green ambience - staying true to its name. Impressive **LD Systems** and **P.Audio** speakers elevate this experience for the customers with live music.

The comprehensive audio setup was installed by **TRX Audio Visual Systems** based in Kalyan, and consists of 4 LD Systems DQOR 8 B two-way passive speakers, and a P.Audio SW-181S high-output subwoofer, powered by a LD Systems DEEP2 4950 amplifier for the outdoor area and 2 SAT 62 G2 two-way monitors driven by a SUB 10 A active subwoofer for the indoor space.

**Pradeep Chaubey** of TRX Audio shares, "The LD Systems speakers blend elegantly with the restaurant's

surroundings, and thanks to their clever slide-and-lock wall mount with concealed integrated connections, there is no need for unsightly cables. Their wide coverage angle and balanced sound provide an inviting ambience, encouraging customers to linger for longer with great sound! Moreover the DQOR 8 Bs make an ideal choice for the outdoor area with an IP55 rating and corrosion-resistant aluminium front grille. Even the P.Audio SW-181S has an IP44 rating with a UV-resistant and water-proof enclosure that also protects against moisture intrusion and humidity, allowing it to be used permanently in outdoor environments. All in all, the system produces clean, soothing sound across the entire venue, and the management is delighted with the audio quality and how easy it is to use and maintain the system."



### LN COURTYARD INSTALLS BETA3 SOUND FOR ENHANCED ACOUSTIC EXPERIENCE

**LN Courtyard**, Ajmer's leading boutique hotel, installed **Beta3 Audio India** sound system at Sky Lounge to create a mesmerizing auditory experience for the guests.

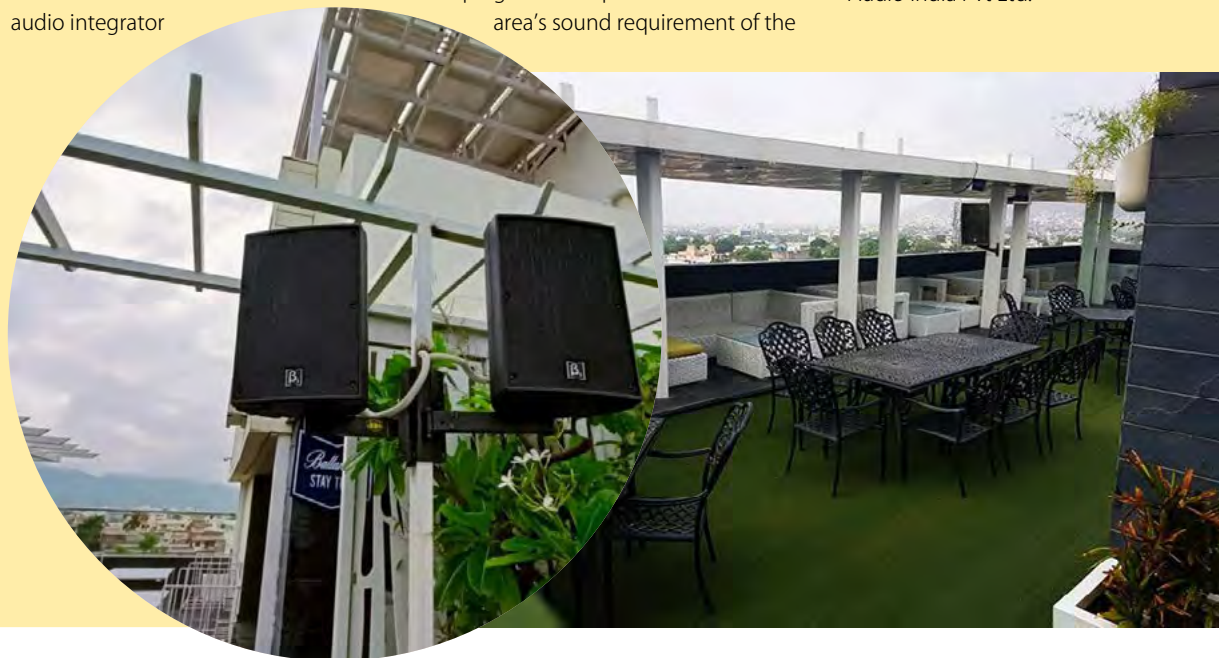
The Sky Lounge at LN Courtyard was installed with 6 units of NF10 all-weather proof speakers with wide dispersion to cover the open area, TW118B subwoofer to create a more natural, more clear sound, and the entire system is powered by DT Series Class D Professional Power Amplifier.

Sky Lounge, a relaxing space designed to help the guests at LN Courtyard unwind with ease, is essentially a rooftop restaurant and bar. A mix of open-air and covered area meant that the space is acoustic-sensitive, and this in

turn, demanded a sound solution that can cater equally well to both kinds of areas. "Our audio integrator

designed and installed a cutting-edge Beta3 Professional Audio Solution keeping in mind open and covered area's sound requirement of the

rooftop bar and lounge." shares **Nawal Agarwal**, President, Beta3 Audio India Pvt Ltd.



**AV-ICN**  
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# Compass Box Studio's Raag Sethi Elevates His Recordings with Audient iD14 and ASP800



*Ahmedabad-based **Raag Sethi** is a man of many talents. He is a music producer, a music composer, an engineer, bassist, and guitarist with his own studio, named Compass Box Studio. Having collaborated on one-take, live sessions with renowned artists, musicians, and labels, Raag Sethi understands the gravitas behind working with the best-in-class sound equipment. In this article, courtesy Audient, we deep-dive into Raag Sethi's in-depth review of Audient iD14 and ASP800, two top-notch work horses that help elevate his recordings to new heights. A more detailed interview with Raag Sethi can be sourced at [www.audient.com](http://www.audient.com).*

**W**hen Raag Sethi, founder of Compass Box Studios, first got his hands on iD14 and ASP800 from Audient, he wanted to record a Live Session at his studio by pairing the two Audient equipment. He was mesmerized by just how much colour and depth the equipment added to the already highly clean Audient pres.

He shared, "After my deep-dive review of the ASP800, I really wanted to record a Live Session (a series of one-take live recordings of some of the biggest indie artists in India, that Compass Box Studio undertakes) using the ASP800 paired with the iD14, for a total of 10 inputs. As you've heard, it sounds amazing! We ended up using the iron circuit for the mono overhead and the HMX for the vocals — and, no surprise, it adds so much depth and colour to the already super clean Audient pres."

Raag Sethi talked about his first impressions of Audient iD14 and ASP800, and how it has catapulted his recording sessions to newer, better heights.

"The units were so easy to test, compare and work with. I remember opening the boxes for the first time and seeing the new clean Audient aesthetic, knowing right then and there that these would be some good interfaces to use and track with." Sethi commented.

But, for Raag Sethi, why is Audient iD14 and ASP800 a cut above the rest in the world of audio and music production?

Talking about the iD14, Sethi answered, "Aside from the new pres and AD/DA conversion, the look, feel and build quality really stood out to me. Having ADAT is so important to be able to grow a space or studio — the fact that you can add up to 8 more channels to extend your multi-track recording capability is an extremely vital feature for a professional producer/musician/engineer.

Moreover, what really sets this interface apart from its competition, is having an additional stereo out for an alternate monitor, the JFET inputs, and

of course, the iD button."

The music producer raved about Audient ASP800, and said, "A majority of the ADAT expanders that I have used throughout my professional career, seemed, for lack of a better word, entry-level. However, the ASP800 is in another league as a means to expand your existing I/O easily with ADAT or through DB25."

He further added, "The first 2 channels rocking the HMX and IRON circuits give engineers a great opportunity to test what it would be like to work with outboard gear; to be able to commit to saturation and colour is an important part of working with outboard gear, and those channels gives you a taste of what that process and sound is like... when paired with the iD14, you can comfortably record a full band live without having to bust the bank."

For the multi-faceted, ardent music lover, Audient iD14 and ASP800 is the mainstay of his home studio. Sharing that the units are his go-to for excep-

tional recordings, Sethi concludes, "The iD is my main interface at my home studio, and I have routinely used the ASP800 to track drums, as it gives me a consistent recording image of the full kit by having the same pres. A fun thing to try is to use the first 2 channels either on overheads or rooms, or using them for the kick and snare, we have got some real punchy results using the IRON, and a really nice harmonic saturation with the HMX."

Raag Sethi's usage of Audient iD14 and ASP800 in his Live Session titled 'Mali – Horoscope' caught the attention of VH1 and the channel decided to air it too, which, in Sethi's own words, "is a testament to just how good those pres sound."

Raag Sethi has been chosen as the voting member of the Recording Academy. In addition to this, the Ahmedabad-based music producer has been a part of the Jury for IRAA 2021 and has a few jazz tracks, neo soul projects, and progressive rock songs in his pipeline.

# In The Mix

## Six latest DJ Headphones to check out this year

In the list of things a good DJ must own, quality headphones are usually at the top. Be it at a club, at a studio, or even at home, a good set of DJ headphones is the number one requisite when it comes to creating or dissecting an unforgettable mix. From active noise cancellation to top-notch bass quality, DJ headphones are designed to deliver exceptional sound at every step. This article covers six recently launched DJ headphones that can help enhance a DJ's mix to elevated finesse. This feature is intended only as a guide and does not endorse any product.

### V-Moda Crossfade 3 Wireless

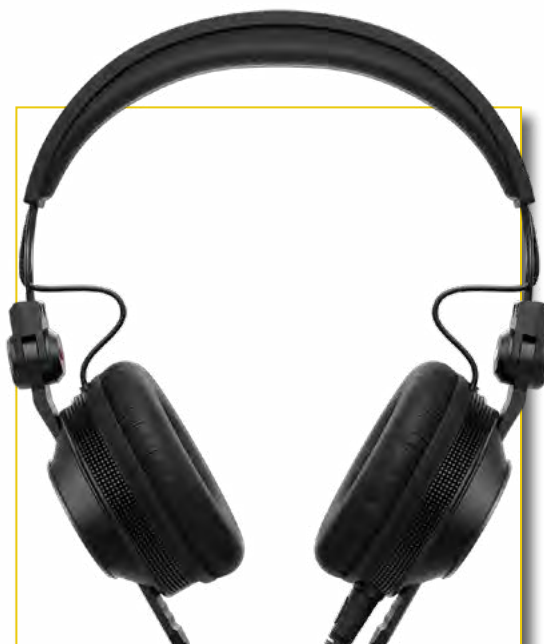
V-Moda Crossfade 3 Wireless is a set of next-generation Bluetooth-enabled headphones that offers DJs evolved sound, an extended battery life, and improved codec support. Designed for enhanced punch and impact, better midrange and highs, as well as quality bass, and available in gunmetal black, bronze black, and matte black finishes, the Crossfade 3 Wireless is a great pick for DJs looking to uplift their mix.

#### Main Features include:

- Up To 30 Hours Battery Life Per Charge
- Exoskeleton Carry Case
- Carabiner Clip
- SpeakEasy 1-Button Cable
- 1/4" Pro Adapter
- USB-C Charging Cable
- Flexible Metal Headband
- Memory Foam Cushions
- 1-Year Warranty
- Immortal Life Replacement Program
- Customizable Shields

#### Technical Specifications::

- Type: Over-Ear wireless/wired headphones
- Driver: 50mm dual diaphragm
- Frequency response: 5 - 40,000 Hz (Wired) / Hi-Res Audio
- Speaker sensitivity: 107  $\pm$  3 dB @ 1kHz 1mW
- Microphone sensitivity: -42  $\pm$  3 dB @ 1kHz 1mW
- Impedance: 32 $\Omega$
- Codecs: Qualcomm apt-X HD, AAC, SBC
- Noise cancelling: Passive
- Weight w/o cable: 315g
- Bluetooth version: 5.1
- Battery life: 30 hours
- Charging cable: USB-C



### Pioneer DJ HDJ - CX

This pair of on-ear DJ headphones from Pioneer DJ are extremely lightweight to offer complete comfort and exceptional sound quality for mixing as well as monitoring music. Featuring a minimalist, sturdy design with wide-ranging audio capacity, the HDJ - CX is primed to change the DJ game.

#### Main Features include:

- Lightweight, flexible design
- Wide-ranging sound and superlative insulation
- Sturdy construction
- Interchangeable cables

#### Technical Specifications:

- Type: Closed, dynamic
- Driver Units: 35 mm dynamic type
- Plug: 3.5 mm stereo mini-plug
- Cable: 1.2 m side mount coil cable (3 m extended length), 1.6 m straight cable
- Frequency Range: 5 - 30000 Hz
- Weight (without cable): 136 g
- Maximum Input Power: 2000 mW
- Sensitivity: 103 dB
- Impedance: 32  $\Omega$
- Included Accessories: HDJ-CX 1.2 m Coiled cable (extended length 3.0 m), 1.6 m straight cable, 6.3 mm stereo plug adapter (threaded type), Plug adapter holder, Spare ear pads (1 pair), Instruction manual

### Korg NC-Q1

Korg offers the NC-Q1, smart noise cancelling DJ headphones, enabled with Bluetooth technology, built keeping in mind ear protection even in the loudest of environments and harshest of sounds, and designed with active noise cancelling and noise-less sound monitoring to ensure superior sound delivery. With a simple tap, it is super easy to activate and deactivate the functions on either or both ears. Compatible with a range of Bluetooth codecs, the Korg Nc-Q1 makes it convenient for the users to access Google Assistant or Siri, benefit from audio clarity during hands-free calls, or stay connected to the world, digitally.

#### Main Features Include:

- "Smart Monitoring" and "Sound Enhancing" functions allow external sound customization with EQ preset
- Comes with detachable, replaceable, swappable earpads
- Compatible with SoundID Reference

#### Technical Specifications:

- Colors available: Black / White
- Dimensions: 158.5 x 204.0 x 84.0
- Weight: Approximately 321 gms.(without cable)
- Type of headphone: Dynamic / Closed headphones
- Diaphragm materials: 5 layers of PEEK&PU
- Frequency response: 10 Hz - 25000 Hz



*DJ headphones are the gateway to clean, clear, accurate audio – sound in its finest, purest form. From Pioneer DJ to V-Moda, PALM Technology reports on six latest DJ headphones that are poised to change the game for DJs around the country.*

- Compatible Bluetooth codecs: SBC, AAC, aptX, aptX-HD
- Types of EQ available: 6 (High Boost / High Cut / Low Boost / Low Cut / Mid Scoop /Flat)
- Type of cable: 1.5 m long cable
- Type of plug: Stereo minijack
- Internal battery: 1,200mA Lithium Polymer Battery
- Charging time: 3.5h approximately
- Autonomy: 36h (maximum)
- Connectivity: USB 2.0 (to charge the battery), Bluetooth 4.1
- Included Items: Minijack stereo cable, 3.5mm → 6.35 mm stereo converter plug, Carrying bag, USB cable

**OneOdio Pro-10 Over-Ear Wired Headphones**

A pair of over-ear DJ headphones with a dynamic bass sound, courtesy 50mm neodymium driver, the OneOdio Pro-10 Over-Ear Wired Headphones is an ideal pick for DJ digital mixer, turntable, studio sound recording, and mixer panel, the Pro-10 comes with rotatable ear-cups, a detachable spring cable with 3.5mm and 6.35mm plugs at both the ends.

- Main Features include:**
- 50mm dual diaphragm drivers
  - No Adapter Required
  - High-Res Audio Verification
  - Extra Bass Sound

- Technical Specifications:**
- Model: Pro-10
  - Speaker: 50mm
  - UPC: Pro 10 Black – 721703737870, Pro 10 Pink – 721703737863
  - Impedance: 32 Ohms



- Sensitivity: 110dB +-3dB
- Frequency Response: 20Hz-20kHz
- Max input power: 1600mW
- Plug type: 3.5mm/6.35mm stereo
- Cable 1: 2m-3m 9.8ft 3.5mm to 6.35mm coiled cable
- Cable 2: 1.2m 3ft 3.5mm to 3.5mm cable with microphone

**CLAW SM50 Professional Studio Monitoring DJ Headphones**

The CLAW SM50 Professional Studio Monitoring DJ Headphones come with two cables – a 2.8m coiled cable when the user is in the studio and a 1.2m straight cable with mic and in-line control when the user is on the go. The 40mm drivers enable the headphones to deliver a vibrant bass along with detailed mids and highs for a perfect symmetry between each frequency. With a 90-degree ear cup swivel to allow one-ear monitoring, the design is equal parts aesthetic and portable. Protein leather earpads provide maximum noise cancellation and ensures wearer’s comfort.

- Main features include:**
- 40mm dual diaphragm drivers
  - Dual-sized output ports
  - Two detachable cables
  - Cable locking system with gold-plated PINs
  - Foldable design for portability

- Technical Specifications:**
- Brand: CLAW
  - Model: SM50
  - Headphone Driver: 40 mm



- Plug type: 3.5 mm & 6.3 mm
- Frequency Response: 20 – 20,000 Hz
- Sensitivity: 105 ±3 dB
- Impedance: 32Ω
- Item Weight: 299 g
- Package Dimensions: 23 x 19 x 9 cm
- Compatible Devices: Mobiles Phones, Tablets, Laptops, Desktops, Gaming Consoles, Music Players and Audio Sources with 3.5 mm output
- Number Of Items: 1
- Microphone Form Factor: In-Line
- Batteries Required: No
- Connector Type : Wired

**Pulz DJ-3500**

Designed to deliver it all in form and function for DJ mixing and monitoring applications, the Pulz DJ-3500 is a sturdy set of headphones that features a closed back construction, that allows the DJ to monitor the mix in isolation even in the noisiest of environments. Expect loud, clean audio with smooth monitoring functions from these headphones every single time, courtesy a powerful bass, higher-than-ever-before SPL, and high dynamics..

- Main features include:**
- 50 mm driver unit
  - Foam-cushioned earpads for a comfortable listening experience
  - Foldable design and 45-degree swivel
  - Spiral extendable signal cord for hassle-free use
  - Single sided detachable cable
  - Available in black and silver

- Technical Specifications:**
- Frequency Response: 10Hz - 20KHz
  - Impedance: 24Ω +/- 15%
  - Sensitivity: 96 +/- 3dB
  - Driver unit: 50 mm
  - Weight: 278 +/- 10 g



# Sound, Uninterrupted

## Six Pendant Speakers to invest in this year

Sound. The proof of existence. The purveyor of language. The resonance of life. In so many ways, it is impossible to think of the surrounding world in absence of sound. After all, even meaning cannot exist in a vacuum. This stands true, especially in a world that is increasingly reliant on sound to communicate, work, and live. With the entry of pendant speakers in the AV market, the vision of uninterrupted sound crystallized. Designed to capture and disperse sound effortlessly, pendant speakers are aesthetic and effective in form and function. This article covers some latest pendant speakers that are ideal for commercial installation in office spaces, conference venues, retail stores, and restaurants. This feature is intended only as a guide and does not endorse any product.

### Yamaha VXH6

Yamaha's premium pendant speaker, measuring at 6.5 inches, features a low-impact, ergonomic design to make it as visibly less intrusive as possible. The speaker, available in black and white has a magnetic grille with a contoured profile that is paintable, making it an ideal fit for any kind of ceilings (be it sloped or open) and décor.

#### Main Features include:

- IP45-rated to support a wide range of applications and environments
- Gripple suspension hardware + wire kit for easy installation and adjustment
- Supports high impedance and low impedance
- Easily switchable speaker wattage (even after installation)
- Comes with an in-built carrying bag for enhanced portability
- Feature paintable grilles

#### Technical Specifications::

- Speaker Type: Coaxial 2 way, Bass reflex type
- Frequency Range: 55 Hz – 20 kHz (Full Space:  $4\pi$ )
- Nominal Coverage: 120° conical (Full-space:  $4\pi$ )
- Crossover Frequencies: 3 kHz
- Components: LF: 6.5" (16 cm) Cone, HF: 1" (2.5 cm) Soft Dome
- Power Rating: NOISE: 75 W, PGM: 150 W, PEAK: 300 W
- Nominal Impedance: 8  $\Omega$
- SPL: Sensitivity (1W; 1m on Axis): 93 dB (Full-space:  $4\pi$ )
- Peak (Calculated): 118 dB (Calculated, 1 m)
- I/O Connectors: Euroblock (4 pin)  $\times$  1 (input: +/-, loop-thru: +/-): Min. wire size



AWG 24 (0.2 sq), Max. wire size AWG 12 (3.5 sq)

- Dimensions: Diameter: Ø341 mm (13 - 3/8"), D: 379 mm (14 - 1/2")
- Net Weight: 5.7 kg
- Certificate: UL1480A, NFPA70, CE, RoHS

### SoundTube NextGen MM43- BGM

Available in signature NextGen colours, featuring adjustable tap settings, and a sleek, modern interface, the MM43-BGM is the updated version of SoundTube's OG Pendant Speaker. With redefined aesthetics and form-meets-function evolution, the MM43-BGM is the next step in the world of pendant speakers – better and bolder than before.

#### Main Features include:

- 3-way pendant speaker with 5.25" dual-chamber, .75" BroadBeam® ring tweeter, and 4" woofer
- Only full-range pendant speaker featuring built-in band-pass subwoofer
- Built-in 30-watt transformer
- Features a UL-listed hanging hardware
- Comes with SpeedClamp™ self-locking wire grip for easy, secure installation

#### Technical Specifications:

- Frequency Response ( $\pm$  10 dB): 37 Hz - 27 kHz
- Frequency Response ( $\pm$  3 dB): 62 Hz - 24 kHz
- Max. Continuous Power RMS: 30 W
- Weight: 14 lbs
- Height: 22"
- Diameter: 7.4"
- Max SPL @ 1M: 103 dB
- Max. Program Power: 60 W
- Nominal Impedance ( $\Omega$  Ohms): 8  $\Omega$
- Tweeter Driver: .75" Synthetic Soft Dome
- Woofer Driver: 4" Polypropylene Cone with Butyl Rubber Surround



- Subwoofer Driver: 5.25" Polypropylene Cone w/ Rubber Surround
- Sensitivity dB @ 1W/1M: 84 dB
- Sensitivity dB @ 2.83V/1M: 84 dB
- Tap Selector: Rotary Switch
- Transformer Options: Included 70.7 / 100 V transformer (30 W maximum)

### JBL Control 68HP Two-Way Pendant Loudspeaker

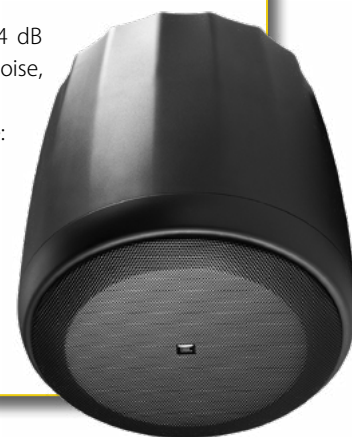
For acoustically-challenged spaces requiring high SPL capability, open architectural ceilings, and huge indoor locations, the JBL Control 68HP Two-Way Pendant Loudspeaker is the ideal pick.

#### Main Features Include:

- Coaxial design with 200 mm (8 in) Kevlar™ reinforced woofer with 50 mm (2 in) voice coil, 25 mm (1.0 in) titanium-dome compression driver
- 250-watt high power capability (1000W peak) and high SPL of 114 dB (120 dB peak)
- Hanging hardware with 4.5 m (15 foot) galvanized steel cable and easy to adjust clamp
- 8 ohm and 70V/100V operation
- Extremely consistent constant-directivity 110° conical coverage
- Color options available in black and white

#### Technical Specifications:

- Frequency Range (-10dB): 52 Hz - 17 kHz
- Frequency Response (+/-3 dB): 72 Hz - 16 kHz
- Power Rating: 150 Watts Continuous Pink Noise Power (600 Watts peak, 100 hrs), 250 Watts Continuous Pink Noise Power (1000 Watts peak, 2 hrs), 500 Watts Continuous Program Power (2 hr)
- Sensitivity: 90 dB
- Maximum SPL: 114 dB continuous pink noise, 120 dB peak
- Nominal Coverage: 110° conical (+30° / -30°)
- Directivity Factor (Q): 7.8
- Directivity Index (DI): 8.9 dB



From Yamaha to JBL and Extron to Bose, pendant speakers have reimagined, restructured, and revolutionized sound in commercial spaces. PALM AV-ICN reports on the six investment-worthy pendant speakers from the AV industry.

- Nominal Impedance: 8Ω
- Transformer Taps: 70V: 68W, 34W, 17W, & 8.5W
- 100V: 68W, 34W, 17W
- Drivers: 200 mm (8 in) Kevlar(tm) reinforced cone, 50 mm (2 in) CCAW voice coil on fiberglass voice coil former, 25 mm (1.0 in) compression driver, titanium dome, ferrite magnet assembly, Kapton(tm) voice coil former
- Terminals: Two removable locking euro-block 2-pin connectors with screwdown terminals for bare wire. Connectors paralleled for input and loop-thru. Max. wire 12 AWG (2.5 mm2). Rubber terminal covers included.
- Enclosure Material: High impact polystyrene
- Color: Black or white
- Dimensions: 333 mm (13.1 in) diameter x 344 mm (13.6 in) height to top of cabinet. 369 mm (14.5 in) to top of suspension bracket
- Net Weight: 5.9 kg (13 lbs)
- Shipping Weight: 14.1 kg (31 lbs)

**Extron SF 28PT – SoundField 8” Two-Way Pendant Speaker**

For high-ceiling and open-ceiling applications in contemporary structures, the Extron SF 28PT two-way pendant loudspeaker delivers superior audio quality coupled with an architecturally clean, suave design that can blend well in any interior ambience. Unobtrusive, clean, and concealed, in installation and application, the SF 28PT Pendant Loudspeaker is here to take the AV industry in an entirely new direction..

- Main Features include:**
- 8” (203 mm) long throw woofer
  - 1.1” (28 mm) silk dome tweeter
  - Frequency range: 58 Hz to 22 kHz
  - 8 ohm direct or 70/100 volt operation
  - 80° conical dispersion
  - 90 watts continuous pink noise
  - 180 watts continuous program
  - Architecturally clean, unobtrusive design using Extron exclusive PendantConnect speaker cable
  - Available in black and white colours. Paintable to suit any décor.
  - UL-listed for safety

- Technical Specifications**
- Speaker type: Pendant speaker with plastic back can



- Frequency range: 58 Hz to 22 kHz, –10 dB, full space (per IEC 60268-5)
- Power capacity: 90 W (rms) continuous pink noise, 180 W (rms) continuous program
- Rated maximum input voltage (MIV): 26.9 V (90 W at 8 ohms) (per AES2-2012)
- Maximum SPL: 103 dB, 1 m (based on MIV), 105 dB, 1 m (linear)
- Nominal sensitivity: 86 dB SPL, 1 W, 1 m, full space
- Nominal impedance: 8 ohms per speaker
- Crossover frequency: 2.5 kHz
- Nominal coverage angle: 80° conical coverage (1 kHz to 4 kHz)
- Drivers: Woofer: (1) 8” (203.2 mm) polypropylene cone with moisture resistant coating, Tweeter: (1) 1.1” (28 mm) silk dome
- Rotary switch taps: 70V: 64 W, 32 W, 16 W, 8 W, 8 ohms direct, 100V: null, 64 W, 32 W, 16 W, 8 ohms direct
- Overload protection: Full range power limiter with the 8-ohm direct input only, protecting the tweeter, woofer, and crossover
- Input connector: (2) 2-pole splicing connectors, (2) 3-pole splicing connectors, for 1 input and 1 loop-through
- Height: 18.25” (46.4 cm)
- Width: 30.63” (77.8 cm)
- Depth: 15.75” (40.0 cm)
- Weight: 32.0 lbs (14.51 kg)

**Bose DesignMax DM3P Loudspeaker**

A coaxial two-way pendant loudspeaker, the Bose DesignMax DM3P Loudspeaker offers clear sound and premium aesthetics for every kind of commercial installation. Available in both black and white colour options, the pendant loudspeaker features a recessed single-point suspension system that gives it a sleek, eye-catching appearance. .

- Main features include:**
- No DSP or EQ required
  - Consistent sound quality with Dispersion Alignment System
  - Removable logos and minimum bezel-grilles, available in black and white colour options
  - Comes with Euro-block connectors for easy, secure installation
  - Recessed single



- point suspension system to hide hardware and service loop
- Technical Specifications:**
- Frequency Response (+/-3 dB): 80 - 20,000 Hz
  - Nominal coverage (H x V): 130° conical
  - Power Handling, peak: 100 W
  - Maximum SPL @ 1m: 99 dB
  - Frequency Range (-10 dB): 75 - 20,000 Hz
  - Power Handling, long-term continuous: 25 W
  - Sensitivity (SPL/1W @ 1 m): 84 dB
  - Nominal Impedance: 8 Ω (transformer bypass)

**Origin Acoustics PPSUB8 Pendant Loudspeaker**

One of the boldest pendant loudspeakers in the market, the PPSUB8 Pendant Loudspeaker offer superlative bass and dispersion in any setting, especially any highly-modern enclosure. The PPSUB8 Pendant Loudspeaker is available in both black and white to add to the architectural aesthetic of any indoor commercial environment.

- Main features include:**
- Rear-facing tuned bass radiator
  - UL-listed for safety compliance
  - Gripple suspension kit included

- Technical Specifications:**
- Woofer: 8” Polypropylene
  - Power Handling (Program Power): 200 Watts
  - Power Handling (Cont. Pink Noise): 125 Watts
  - Frequency Response: (- 10dB): 40Hz-250Hz, (- 3dB): 55Hz-250Hz
  - Nominal Coverage Angle: 180 Degree Conical Coverage
  - Sensitivity @1m: 90dB
  - Rated Maximum SPL: 110dB
  - Impedance: 8 ohm Nominal
  - Transformer Taps: 70V -120W, 60W, 30W, 15W; 100V - 120W, 60W, 30W
  - Diameter: 10” (254mm)
  - Length: 16 1/4” (412mm)
  - Feature: 8” Passive Radiator
  - Colors: Black, White



## MARTIN BY HARMAN INTRODUCES MAC AURA XIP INDOOR/OUTDOOR PREMIUM WASH LIGHT WITH FILAMENT EFFECT

**HARMAN Professional Solutions**, the global leader in audio, video, lighting and control, introduced the **Martin MAC Aura XIP**, premium moving head wash light raising the bar for optical quality, featuring an even wash field with soft edge, minimal stray light, and high intensity mid-air beams. It has a radical aura filament effect, with improved light engine control and a first-in-its-class outdoor rating with close to zero compromises in weight, size and aesthetics.

"In developing the MAC Aura XIP, we set out to build a true workhorse," said **Wouter Verlinden**, Product Manager Creative LED, Lighting and Control. "Our smart outdoor-capable design intelligently seals away vital electronics

while exposing the cooling system to the elements which allows for a lighter, quieter and more versatile unit that can be used anywhere, at any time, reinventing the universal indoor/outdoor-rated concept."

MAC Aura XIP's 12 Radical RGBW filaments deliver a brighter aura back-light effect as well as the ability to show iconic aura filaments, promising new and exciting stage effects. The extensive feature package covers both indoor and outdoor applications with optional high CRI / TM-30 / TLCI modes, LED frequency control for a flicker-free even wash light, RGBW color mixing and multiple control options. Also included are variable calibrated color temperature



control, 200+ built-in FX macros, rapid movement and 8.8 – 49.3° zoom range, and weighing just 8.9 kilograms.

"The MAC Aura XIP is truly a wash light workhorse," added Verlinden. "It works equally well in a range of applications; from quiet and demanding theater, broadcast and other indoor applications to brutal working applications such as outdoor festivals and touring." While the MAC Aura XIP offers lighting designers a range of possibilities with its aura filament effect, narrower beam and better wash quality with improved light engine control; rental customers will appreciate a workhorse that is lighter and more versatile with optical improvements and a sealed design, allowing the product to be used virtually anywhere and require less maintenance.

## CLAYPAKY MYTHOS 2 FIXTURES SHINE AT HIGH-ENERGY ALAN WALKER EDM CONCERT IN BENGALURU, INDIA

British-Norwegian DJ, YouTuber and record producer **Alan Walker** returned to India for a four-city Sunburn Arena Tour last April that turned out legions of fans in Mumbai, Bengaluru, Hyderabad and Gurgaon. His Bengaluru show fea-

tured 28 **Claypaky Mythos 2** hybrid lights provided by **Reynold's Sound & Lighting Service** where **Felix Remedios** is the Director.

"Alan Walker is super energetic so to match



## APRO LIGHTINGS LAUNCH MORGAN LED PAR LIGHT

Apro Lightings launched the Morgan LED Par Light. The product has a total input power of 200 watts. It provides stage lighting with spectacular brightness and vibrant colours with a combination of 18pcs x 10W (4-IN-1) RGBW / 54pcs x 3W (Warm White) LED light

and IP65. This stage light uses the latest LED technology where each bulb can produce red, green, blue, and white colours. It also allows users to have different colours in different occasions. Morgan LED Par Light is also a versatile bright DJ stage disco LED Light. It is perfect for stage lights, dance lights, concert lights, stage party lights, club lights as well as wedding lights.

### Highlighted Features:

- Body Material: Aluminium Alloy Die-Casting
- Input Power – 200W
- Lamp Type 18pcs x 10W / 54x3W
- Colour System : RGBW 4 in 1 / Warm White
- IP Rate: IP65



key lighting with the artist Claypaky Mythos 2 fixtures were chosen for their powerful beam and amazing mid-air effects," says **Pankil Ahuja**, Claypaky Sales Manager for the Indian Sub-Continent. "The fixtures helped to create something really cool and eye catching that conveyed the feel of EDM to Alan's fans."

The complement of Mythos 2 key lights was positioned on the main stage where they fulfilled several functions. "As hybrid fixtures the Mythos 2 not only served as key lights; their versatility enabled the Lighting Designer Kenneth Tangen to switch to beam mode when desired and spot mode to highlight Alan," Ahuja explains. "Mythos 2 fixtures

are also packed with amazing effects and colors offering even more advantages to the designer. They proved to be as dynamic as Alan's performance on stage!"

**Shipra Venkatesh**, Technical Producer, concludes, "As a touring LD, Kenneth is open to and works at making most of the features any substitute has to offer. With bright lamps, cool gobos and good functionality, the Clay Paky Mythos is a solid hybrid fixture. The Bangalore show took place in the midst of a complete downpour and we didn't lose a single light. That was a huge highlight for all of us and will always be special. Shoutout to the entire crew."

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## ELATION LAUNCHES PROTEUS BRUTUS™ LED WASH FX LUMINAIRE, AN ALL-WEATHER 70,000-LUMEN POWERHOUSE

Elation Professional expands its award-winning Proteus line of IP65-rated luminaires with the extraordinary **Proteus Brutus™**, a powerful 70,000-lumen LED wash FX fixture capable of high intensity washes and piercing narrow beams that can cut through at tremendous distances. Available now and shipping, the Proteus Brutus is the brightest lighting fixture that Elation has ever produced.

"When real brute-force power is needed, the Proteus Brutus can deliver," states Elation Product Manager **Matthias Hinrichs**. "It provides designers the power to cover huge areas across long distances but it also houses gorgeous colours, a complete FX system and even optional framing so it has everything you want in a real designer's tool. It partners perfectly with the Proteus Maximus™ LED Profile and the long-throw Proteus Excalibur™ beam for a trio of compatible, high-power luminaires and outperforms anything in the market in an IP65 housing."

The Proteus Brutus is flexible at

any distance or field of projection from tight beams to wide, smooth washes for use in a variety of applications. Coupled with a 5° to 50° zoom and impressive 220mm (8.7") front lens, it is ideally suited for use on the largest outdoor stages, but has application anywhere powerful beams and powerful wash coverage is desired. Its high-quality lens optics and 70,000 total lumen fixture output make it an ideal solution for any high-output application.

The Proteus Brutus houses a high-efficiency 1200W 6,500K White LED engine. The custom peak-field engine with 2-to-1 center to edge ratio gives powerful, high center intensity beam and wash throws while allowing for more unique air FX. Together with a full spectrum CMY color mixing system, the Brutus is capable of creating a virtually unlimited variety of shades. With the addition of linear CTO color correction, as well as a fixed 6-position color wheel for added color customization, including UV and high CRI options, the Proteus Brutus offers color combinations to satisfy even the most critical designer.

An optional 4-blade, full blackout



framing module with +/-45° indexing allows for beam shaping and accurate light control at any angle. The entire framing module is rotatable, allowing the beam to be shaped and angled as required for accurate highlighting. Designers can also use the flexible framing system to create outstanding projection or mid-air effects.

The fixture provides the designer a comprehensive FX system with 5 rotating / indexing (interchangeable)

beam shaping and FX gobos plus a rotating multi-color glass gobo. A 360° bi-directional animation wheel can be engaged to bring graphics to life and a variable frost filter can be employed any time a designer wishes for softer gobo or wash effects. A high-speed iris with variable pulse effects and high-speed electronic shutter and strobe can be engaged for further impression. The unit dims smoothly all the way to zero with variable 16-bit selectable dimming curves included.

The Proteus Brutus has the power to cut through in any outdoor concert or special event and its fully dust and waterproof design makes it an optimal fixture for theme parks and cruise ships. Thanks to quiet operation, flicker-free functionality and DMX-controllable LED refresh rate, its on-camera impact will be welcome in TV and other broadcast environments.

Like all Proteus series luminaires, it can weather anything. It has a IP65 connection and Hibernation Mode for power savings.

## ADJ'S NEW IP65-RATED HYDRO SPOT 2 IS SHIPPING NOW

The **Hydro Spot 2** is the latest addition to **ADJ's Hydro Series** of IP65-rated moving head luminaires, which also features wash, beam, and profile models. It combines its powerful output and expansive feature set with a robust IP65-rated construction to deliver a fixture that is ideal for temporary event production both indoors and outside in any weather. It is also suitable for permanent installation within all kinds of venues, from concert halls to nightclubs, theatres to churches, where its sealed casing design protects its internal components from dust and grime to allow for a reduced maintenance schedule and prolonged operational life expectancy.

At the heart of the Hydro Spot 2 is an efficient 320-Watt cool white LED engine with a colour temperature of 6600K and life expectancy of 50,000 hours. Its light is focused through precision-engineered optics and out through a high-quality front glass lens to deliver a crisp, punchy 15,000 lumen output. Motorized zoom allows for a beam angle variable between 8 and

41-degrees, while motorized focus can be used to ensure sharp pattern projections and aerial beam effects or to deliberately blur projections to create more ambient effects. In addition, two variable frost filter options – medium and heavy – can be used to further blur GOBO images or to generate a soft-edge wash output.

Lighting designers using the Hydro Spot 2 have the creative freedom to select any colour they desire thanks to variable CMY mixing, with 16-bit fine-tuning. In addition, variable CTO colour temperature control allows for white light illumination between 2700K and 6600K (with 40 preset macros providing easy selection between a range of different options). The fixture also offers an additional color wheel loaded with seven dichroic filters comprised of five primaries (red, blue, green, amber, and orange) together with CTB 5600K and High CRI filters.

Weighing in at 57.2lbs (26kg) and with measurements of 11.42" (290mm) x 16.70" (424mm) x 23.51" (597mm) [L x W x H], the Hydro Spot 2 is a substantial

fixture. However, for an IP65-rated moving head of this type and boasting such a comprehensive feature set, it is remarkably portable. Pan and tilt locks prevent unwanted movement of the head during transportation, while convenient side bar handles aid with lifting and rigging. Large rubber feet means that the unit can be placed directly onto a stage or riser, while the supplied pair of omega brackets can be easily attached to allow for truss mounting.

"Since we launched the Hydro Series four years ago, bringing IP65-rated moving heads into the realms of affordability for small-to-medium-sized production companies for the first time, it has proved extremely popular," enthuses ADJ USA's National Sales Manager, **Alfred Gonzales**. "However, right from the start we've consistently been asked to add spot fixtures to the range. Instead of rushing a product



to the market to meet this request, our product development team have invested a huge amount of time developing the IP65-rated spot fixtures that truly deliver the combination of output, functionality and reliability lighting professionals need. Sitting in the Hydro Series alongside the recently announced super-compact Hydro Spot 1, the new Hydro Spot 2 is a punchy, feature-rich, and robustly constructed mover that is ideal for touring, rental, and event production applications."

The Hydro Spot 2 is shipping now from ADJ distributors and dealers worldwide.

## AUDIO-TECHNICA INTRODUCES AT-LP3XBT, A NEW AUTOMATIC WIRELESS TURNTABLE

Audio-Technica announced the release of its **AT-LP3XBT automatic wireless turntable**. A successor of the popular AT-LP3 turntable, the new turntable offers all the benefits of vinyl with the freedom of Bluetooth® connectivity.

Available in black or white, the fully automatic belt-drive turntable operates at two speeds: 33 1/3 and 45 RPM. The AT-LP3XBT connects wirelessly to speakers and other Bluetooth® devices or to wired audio systems and powered speakers via an included dual RCA output cable. The turntable's dampened base construction offers a reduced low-frequency feedback coloration and comes equipped with an anti-resonance, die-cast aluminum platter, and

felt mat.

Additional features include wireless compatibility with the high-quality Qualcomm aptX™ audio codec and an external AC adapter that handles the AC/DC conversion outside of the chassis, reducing noise in the signal chain. The AT-LP3XBT is compatible with any of Audio-Technica's VM95 series styli, offering a wide range of options for every budget and application.

Included accessories: an AT-HS3 universal headshell, detachable RCA output cable (Dual RCA male to dual RCA male with ground), 45 RPM adapter, removable hinged dust cover, and detachable power cable.



## NX AUDIO LAUNCHES XM5U - 5 CHANNEL CLUB MIXER WITH COMPUTER INTEGRATION

Nx Audio announced the launch of the XM5U, a 5-channel club mixer with computer integration. XM5U's club style design is compatible with four standard audio sources, including turntables and CD players, and it also has a USB computer connection. The mixer allows direct

plug-and-play from PC or Mac, and lets users mix in audio from a music software and record sets into virtually any sound recording app. The XM5U has stand-out features like 3-band EQs & LED graphs per Ch, an assignable crossfader with slope control and balanced XLR outputs.

The new Nx Audio XM5U gives the freedom to perform with pro-level connections. It lets users easily connect to any DJ gear of choice. The device also provides an accessible crossfader that causes fading between sources effortlessly and smoothly.

The Nx Audio XM5U has a solid build providing reliable performance and durability. It is also compatible with a device featuring multiple inputs. It also gives you 3-band EQs and a USB connection.

The Nx Audio XM5U is a magnificent quality mixer at a low price compared to its attributes. Here are the factors that make XM5U a stand-out choice in the market:

- **Multiple Inputs:** The Nx Audio XM5U has 3 inputs - phono, mic, and line. Therefore it can handle multiple signals of microphones and musical instruments. Courtesy multiple inputs, this mixer is an all-rounder workhorse. It lets users play their preferred mixes using music player software and also permits recording mixes to computers. Each Channel has Individual Gain, Bass/Mid/High 3-Band EQ (+12/-26dB) and 10-LED VU Meter with Smooth Dual-Rail 60mm Channel Faders. There is a full featured Microphone input with Combo Jack to accept XLR or Jack connectors with a 3-Band EQ and "On Air" Switch too.
- **Crossfader:** The MX5U comes with a

fully-assignable 45mm Dual-Rail Crossfader with Steep/Flat Curve Switch slope management.

- **Top-Notch Quality & Durability:** The Nx Audio XM5U features a sturdy build of solid steel. This hard-core build allows not only great performance but also long-term durability and reliability.
- **Multiple Outputs:** The fully featured Analog Output Section has a Master with Level Control and Dual 10-LED VU Meter with XLR Balanced and RCA Unbalanced connectors, Additional RCA Unbalanced Booth Output and a RCA Unbalanced Record Output too. The XM5U has a powerful headphones output with 6.3mm stereo jack and a PFL Section with PFL/Main Mix Control and Blend/Split Option.
- **Affordable Price:** If a user has limited resources to spend on a mixer, then the Nx Audio XM5U is the best choice. Because compared to the attributes it provides, it comes at a reasonable price.
- **Excellent Sound Quality:** The XM5U has a balanced output. Because of this, the sound quality of this equipment is not only clear, but also of the best quality one will find on the market.



### DAVID ANGRESS JOINS QSC PRO AUDIO DIVISION AS SENIOR VP & GENERAL MANAGER

QSC announced that **David Angress** has joined the organization as Senior Vice President and General Manager of the company's new Pro Audio division.

"Throughout the years, I have always had the greatest respect and admiration for QSC – its people, its culture and its portfolio of innovative, market-leading products," says Angress. "The Pro Audio division is gearing up for an incredible phase of transformative growth and I couldn't be more excited about the opportunity to serve as its leader going forward."

Angress, a seasoned veteran of the music and pro audio



**David Angress, Senior Vice President and General Manager QSC**

products industry, brings a wealth of experience in senior executive leadership with roles at pre-eminent brands including ADAM Audio GmbH, Guitar Center, Harman, and AKG. As principal at Angress Consulting for the last 12 years, he has utilized his extensive international experience in marketing, product management, and international distribution to develop business relationships for its clients throughout the US, Europe, and Asia.

"We are thrilled to have David Angress take the leadership of our Pro Audio division," states **Jatan Shah**, President and Chief Operating Officer, QSC, LLC. "David's decades of expe-

rience in the MI and pro audio industries - in retail, manufacturing and as a trusted and accomplished advisor to a number of organizations - makes him the ideal individual to take the helm of our Pro Audio business. Our leadership team of Perry Celia, David Fuller, Ray van Straten, Linda Lee, and now David Angress, will most certainly guide our business to great success in this next, exciting period of growth and innovation."

Angress will oversee the division working from the company's headquarters in Costa Mesa, Calif. as well as from his remote office in Portland, Ore.

### LIGHTWARE APPOINTS CLINT HOFFMAN AS THE NEW VP OF BUSINESS DEVELOPMENT

Lightware named **Clint Hoffman** as Vice President of Business Development to champion global customer relationships and support business development.

Lightware Visual Engineering announced Clint Hoffman as Vice President of Business Development for the Americas. Hoffman will establish and build customer relationships and support business development with global enterprise partners.

Hoffman has more than 35 years of success in sales, marketing, operations, and product development in the professional AV industry. Hoffman has worked with many industry-leading manufacturers, including Sony, Panasonic, Mitsubishi, and Kramer Electronics. Most recently, Hoffman served as the

president and country manager for Kramer North America. During his two decades at Kramer, Hoffman was instrumental in channel and brand development strategy and product development success.

Hoffman brings a background in promoting and championing the professional audiovisual industry through his leadership at AVIXA International. Hoffman is currently an adjunct faculty member of AVIXA International. Previously, he has served as chairman of the AVIXA Membership Committee, a member of the steering committee of the AVIXA Exhibitors Committee, a member of the AVIXA Foundation Board, and vice chairman of the AVIXA Manufacturers Committee.

**Jason Tirado**, President of Light-



**Clint Hoffman, Lightware**

ware Inc., shared, "I am delighted to welcome Clint to our team at

Lightware Visual Engineering. Clint is well-recognized throughout the AV industry for his leadership over the last three decades. He will be instrumental in supporting Lightware's continued growth and business success globally."

Clint Hoffman, Vice President of Business Development, commented, "Lightware has grown exponentially over the last few years. World-class signal management products are designed to deliver unparalleled quality and reliability in AV applications. Their investment in innovation and product excellence has positioned Lightware for continued accelerated growth. I am thrilled to bring my experience and deep relationships in the AV industry to grow and support Lightware's ever increasing number of global enterprise partners."

### NIK GLEDIC JOINS ADAM HALL GROUP AS NEW GLOBAL SALES DIRECTOR

The **Adam Hall Group** has appointed **Nik Gledic** to a newly created global management position. Since 1st September 2022, Gledic has been responsible as Global Sales Director for the strategic orientation and implementation of Adam Hall's worldwide sales division.

With the newly created position of Global Sales Director, the Adam Hall Group is positioning itself even more strongly for the



future. Among the focal points of the position are the strengthening of the core market, the expansion of international business, and the successful implementation of the AV installation segment. Before joining the Adam Hall Group, Nik Gledic gained many years of experience at Shure Germany and Shure Europe – among other things, in management positions in sales and marketing and, most recently, as Senior Director

Retail for the Western European business of the US pro audio manufacturer.

"The development of the Adam Hall Group as an international key player in the field of event technology has impressed me for many years. For this reason, I am all the more pleased to follow this path and to shape it even more successfully in the future. At

**Nik Gledic, Adam Hall Group**

*(Continued on page 59)*

## Q-SYS PROMOTES MARKUS WINKLER TO EXECUTIVE VICE PRESIDENT, EMEA & APAC

*Markus will continue to manage the business and operations in EMEA & APAC*

Q-SYS announced the promotion of **Markus Winkler** to Executive Vice President, EMEA and APAC. In this new role, Winkler will continue to manage the growing business and expand capabilities and operations in both regions.

"Under Markus' leadership the past six years, Q-SYS has significantly increased its business in EMEA, APAC and SAARC by building high-performing



and talented sales and support teams and expanding our footprint with headquarters in Europe and Asia as well as seven regional offices," says **Joe Pham**, Chairman and CEO, QSC, LLC. "These efforts have been instrumental to better serve our customers and partners in these regions, and I look forward to the continued expansion of Q-SYS in key markets as we become a truly multi-national business."

**Markus Winkler, Executive Vice President, EMEA and APAC, Q-SYS**

"I am incredibly proud of our team who has worked tirelessly these past six years to bolster the strength of the Q-SYS brand in EMEA and APAC," says Winkler. "I am confident in our business strategy and look forward to riding this wave of momentum as we continue to proliferate Q-SYS and its innovative technology and partnerships."

## NIK GLEDIC JOINS ADAM HALL... (Continued from page 58)

Adam Hall, I encounter an extremely human, modern and open corporate culture with a highly motivated team that is eager to continue driving growth and success with passion. This ultimately convinced me that the newly created position of Global Sales Director at Adam Hall is the right challenge for me," shares Nik Gledic.

**Markus Jahnel**, COO, Adam Hall Group, commented, "Nik is an extremely experienced sales profes-

sional with whom we can implement our strategic vision for the global sales area even more comprehensively in practice. We have ambitious goals and want to make the Adam Hall brand – as well as our individual Cameo, LD Systems, Palmer and Gravity brands – synonymous worldwide with innovative event technology solutions, reliable partnerships and customer orientation. In his role as Global Sales Director, Nik Gledic will be a key part of this."



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ramesh.chetwani@hyve.group

