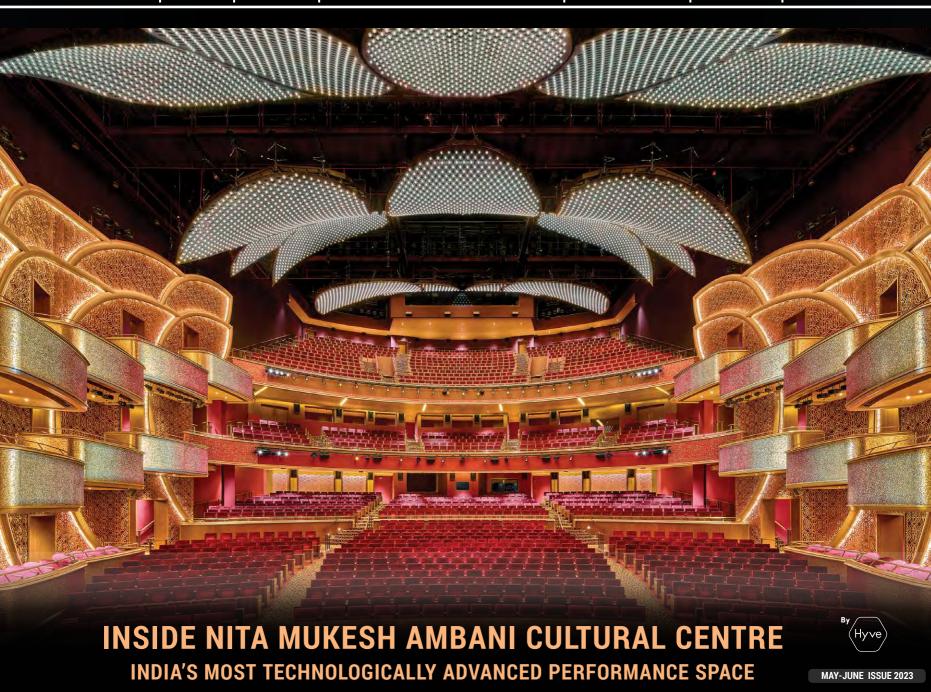


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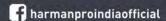


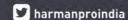




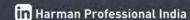
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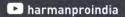
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# MESSAGE FROM ANIL CHOPRA, FOUNDING DIRECTOR, **PALM EXPO**

# **Determining the Future**

PALM Expo is a movement that was born with a mission to strengthen the pro audio industry. In 2001, it was besieged with a nascent marketplace and stupidly socialistic import duty. PALM was like a rising sun, and professionals and distributors loved it. We all know the PALM is a celebration of the "great Indian market". Today, PALM is a celebration by all the brands and market of the pro audio and pro sound industry represented by all the exhibitors and attendees.

AV-ICN is concurrent with the PALM. Creating the future was the vision and mission. Pro AV applications exploded with Integration, Communications and Networking (ICN) with Internet and then 2G, 3G, 4G, and now, 5G. Install Sound as a segment of PALM needed to be fulfilled in totality. Thus AV-ICN. Natural expansion.

Naturally, AV-ICN possesses similar ethos as the PALM expo, that is to primarily strengthen and expand the distribution and dealer network for Pro AV product and technology. The other ethos of AV-ICN is to be inclusive and provide an egalitarian, equitable, and independent show that is respectful of the mass market. The AV industry believes this, and thus, the expression of faith and participation in AV-ICN Expo 2023. Full kudos to all participants, for more reasons than faith and sharing the mission to establish AV-ICN, because of the determinate attraction from other Expos not to participate at AV-ICN and PALM.

Figure out why there is a show in Bangkok and Shanghai on the same dates! Announced much after PALM and AV-ICN dates. Blatant expression of utter disregard of the Indian market and as well the China industry and as well best interest of the professionals in the industry and totally against the interest of the companies and brands - Counterproductive and clearly with not the best intentions for India. They may profess, but in time, truth will prevail.

Now take a breath and once again, kudos to the participants in this year's PALM and AV-ICN. Kudos to all the speakers in the three-day conference. Kudos to all the brands for clearly giving a shoutout for the Indian market. Hurrah!

So, now back to work and the vision and the mission. I love it.

Creating the future new avatar is Determining the Future. We are going to tap the pinnacle of professionals in imparting full knowledge of design and integration in communications.

The CAVS Networking/IT has a faculty dude whose curriculum speaks volumes for his accreditation, such as BICSI Certified RCDD- Registered Communications Distribution Designer and BICSI Certified OSP - Outside Plant Designer (Networking). Satyanarayana Reddy, Narendra Naidu, and Arif Patil are faculty for CAVS. CAVS is going to grow from strength to strength.

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# PALM + AV-ICN Conference

Our Conferences too are going to go to Bengaluru and other important centres of pro audio and AV in the country in future.

Indian market is going to explode in AV communication. India's strength is in AV-IT. As industry moves into 8K, the real momentum in India's AV industry will emerge. Into design and product. We shall work with all global organisations like the AVBridge / SDVoE / AVAIliance to work with our exhibitors and advertisers.

We bring out the PALM + AV-ICN Magazine as of this show, and soon, we are going to launch a separate AV-ICN Magazine. Pump up information and connection with the global industry and organisations.

2023 has been a determining year, and we are now determined even more so in total disregard of the contra activity by associations and other established events to bring to Indian industry an even more progressive and industry-friendly show.



In regard to professionals, both our Award platforms are remarkable in their extremely high level of appreciation by the awardees and industry. The Sound & Light Awards recognise excellence in sound and light industry, including innovation, product, distribution, manufacturing, and vision. In 2024, we shall also recognise a range of product and technology. The AV-ICN Awards too will expand from the singular AV Architect of the Year to include product and technology.



IRAA (Indian Recording Arts Academy) Awards, recognise excellence in sound recording, and now, IRAA also recognises the Song of the Year and music.

This is second year running where nominations exceeded 1400, the most definitive categories and amazing talent recognised. In 2024, plans to have a standalone black-tie red-carpet event for IRAA.

'In 2024, the mantra is Determining the Future.'

Cheers!

**Anil Chopra** 





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# MESSAGE FROM GAURAV SOOD, GENERAL MANAGER – INDIA, AT HYVE INDIA PVT. LTD.

**Hyve India** is proud to organize the **PALM** Expo and the **AV-ICN** Expo from 25<sup>th</sup> – 27<sup>th</sup> May 2023 at the Bombay Exhibition Centre. The exhibition and conference is committed to advancing pro audio, pro sound and pro audiovisual knowledge and technology, thereby delivering sustainable improvements for the Indian industry.

International participation at the PALM Expo has always been supportive through their Indian distributors and even directly. We at Hyve take a lot of pride in having established a neutral and independent platform for the audio visual, networking and communications industry in India which was urgently needed.

Listening to what the industry wants is essential for the organisers of any successful trade show. The team has done a commendable job in creating the AV-ICN Expo over the last three editions despite global competition, delivering a meaningful platform for the AV industry in India. HYVE is committed to further strengthen the AV-ICN Expo and to make the participation of AV companies who have shown faith in us, a huge success.

One element of the exhibition that has expanded due to increased demand is its educational offerings. There are plenty of free-to-attend networking opportunities and educational sessions and conferences taking place at the expo. We continue to build a dedicated and knowledgeable team to put together all the wonderful features at the PALM and AV-ICN show, especially the Conference Programs. We are proud to deliver a Conference that is remarkable, it is the only Conference in India which is supported by the technology leadership in the country, with the leaders of the pro audio, pro sound and pro av industry most willingly participating.

We at Hyve believe in education, we believe in the CAVS platform and are committed to develop this education platform in the coming year. The advent of 5G and the responsibility of delivering 5G solutions to the AV industry in India is indeed a challenge which we at Hyve are more than glad to undertake as part of our commitment to the industry.

The 2022 Expo which took place after a gap of two years received rave reviews, and I am confident that PALM and AV-ICN Expo 2023 will be even better.

I recognize and acknowledge that the success of our annual event is due to the delegates, exhibitors, speakers, and Hyve's organising team, who work extremely hard in the background to bring it all together.

I look forward to welcoming all of you to this grand expo.

**Gaurav Sood** 





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# MESSAGE FROM RAMESH CHETWANI - PROJECT DIRECTOR, PALM AV-ICN EXPO

Welcome back to the 21st edition of **PALM AV-ICN Expo** – India's highly anticipated, business exhibition on pro audio, pro AV and lighting.

We are delighted to host all our exhibitors, media partners, and associations. I welcome every last visitor to three wonderful and fruitful business days. PALM AV-ICN Expo has always acted as a catalyst and has been recognized as the only platform, that is encouraging investment, training professional manpower, launching new products and supports Design in India and Make in India initiative. We strive to evolve the industry to latest technology, aim to provide growth inputs at our exhibition with innovative product display and are passionate to expand the markets.

Year on year, PALM has witnessed major growth in dealer distribution network and a lot of new entrants into the market. In this year's expo, you will witness over 50 new exhibitors launching their products and showcasing latest technologies and high-end solutions for the pro audio and pro AV industry.

PALM has, very strategically, envisioned the growth of the industry and categorized the exhibition in three complimentary industry segments, locating each segment in independent halls. Hall 1 hosts the pro audio, pro sound and accessories market, Hall 2 showcases Display, Digital Projection, Conferencing Equipment with other AV products while Hall 3 brings all the laser and lighting effects' companies under one roof. All the halls are interconnected with respective entries and exits for easy movement of the trade visitors.

This year, the **AV-ICN Expo** in Hall 2, is hosting over 40 exhibitors, with 100+ brands, showcasing top-of-the-class AV products. The AV segment in India is growing exponentially, and it is imperative to have India's own Pro AV Expo. AV-ICN delivers business to all its exhibitors by inviting India's top AV Consultants, Architects, System Integrators and strategically targeting the end user community. We are thankful to the AV industry and all our AV exhibitors who have entrusted faith in us and supported the expo.

PALM has been the largest gathering of 25,000 professionals and trade and talent. Our mission has always been to Deliver Business and it is our determination to give back to the visitors and delegates and professionals, their much-loved annual convention in Mumbai.

The exhibition boasts of its highly acclaimed CONFERENCE in Hall 2 with top notch speakers. The PALM HARMAN LIVE ARENA is back at its original location - Hall 2 Bay Area. Visitors can experience the DEMO QUBES hosted by Coda Audio and Pequod at the Parking Area opposite Hall 3. The LIGHTING DESIGN SHOWCASE will be once again hosted in Hall 3. You cannot miss the IMMERSIVE MAPPING DEMO in Hall 1 - a new world dimension designed and presented by Christie, MSS World, Pixera and Pixadoo.

The AV-ICN Expo, proudly announces its **4th Certified AV Specialist (CAVS) Course** that is being hosted in Hall 2. The CAVS Course is India's first AV education course that provides an independent neutral education forum, with accredited faculty and researched study information, suited to the Indian AV ecosystem.

Last but not the least, the IRAA AWARDS, in its 16<sup>th</sup> consecutive year, will continue to applaud the best in the Indian music recording industry. Winners across categories will be felicitated at the IRAA Awards that will be hosted on Day 1 at the HARMAN LIVE ARENA. The PALM SOUND & LIGHT AWARDS will also honour professional excellence in stage sound and light.

There is no way you can miss PALM AV-ICN Expo 2023.

Once again, we would like to thank all our exhibitors and valued partners, who have been instrumental in supporting the exhibition.

Wishing you a fantastic show and the year ahead!

All the best!!!

Ramesh Chetwani







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# MESSAGE FROM SMITA RAI, DEPUTY PROJECT DIRECTOR PALM EXPO

So, May is here, and it's finally the PALM Expo Season. The excitement, activity, bustle, and brouhaha behind the scenes has hit barometric levels. The PALM Expo organizing office is abuzz with a plethora of activities as it prepares for its 21st edition. The PALM is today a dynamic expo where diverse national and top international brands and brilliant minds from all over the world converge and share their vast reserves of technology, knowledge, and skills. The collective effort of the exhibitors and the organisers over the last two decades, is what has made the PALM Expo a grand success.

With the AV-ICN Expo taking place concurrently in the same venue since the last two editions, the organisers have ensured an excellent showcase, which allows the pro sound, pro lighting, and audiovisual industry to source all their integration and installation technology requirements under one roof.

Please ensure you have all information on conferences, trainings, workshops, awards, and demos taking place over the three days. You also don't want to miss out on an important knowledge session!

The PALM and AV-ICN Conferences taking place in Hall 2 (AV-ICN Hall) of the expo, provides a forum for discussion and advancement of the industry. The various Conference sessions, this year, on such relevant areas as, Invisible Loudspeaker Technology, Music Mastering, Artificial Intelligence and Machine Learning, Dynamics of Front of House, Innovative Lighting and Design Elements, Immersive Audio In Live Sound, Large Scale AV Integration at Monuments and Museums, Cinematic VR, the Metaverse and Virtual Production, Live Sound at Large Scale Shows, Dolby Atoms and Possibilities for Immersive Content Creation, will deliver fresh insights to delegates; additionally, networking at these conferences, I dare say, is priceless!

The response of key industry professionals and thought leaders showing their keen interest in the Conferences is highly motivating, stimulating us to organize such Conferences frequently in future. As the Conference Director, I sincerely offer my earnest gratitude to all our speakers who have contributed their time and efforts to the Conference. I am sure that the Conference will achieve its objective of providing a suitable platform for learning and progression of the industry. Speakers are leaders in their fields (find the speaker list on page 74 & 77) and have been strategically chosen to channel your business to the next level.

As AV-ICN Expo move towards its goal of expansion and elevation of the audiovisual industry in India, it acknowledges that it owes the industry technical manpower for meeting current and future demands of the industry. As part of this vision, the AV-ICN Expo will conduct its fourth Certified AV Specialist (CAVS) training in Hall 2 with accredited faculty – Narendra Naidu, Arif Patil, Sajan Joseph, and Satyanarayana Reddy, who will impart audiovisual and IT training suited to the Indian AV ecosystem. The three-day course with exams and certification is intended to upgrade companies' integration team on protocols and standards.

The IRAA Awards 2022 felicitation ceremony on 25<sup>th</sup> May will take place at the HARMAN Live Arena from 6:00 PM onwards. I thank K.J. Singh and the entire 2022 Jury (Find the jury list on page 82) for the gratuitous hard work and determination to find the right winner. IRAA is amazing, in that it has aspirational value for thousands of sound engineers from across the country. The IRAA website has the complete list of winners, chosen to get on stage this year at the HARMAN Live Arena. Thanks to HARMAN for all the support.

The cohesive efforts of a dedicated and committed team become necessary for organizing such highlight features. I'm fortunate to have by my side a hardworking *PALM + AV-ICN Magazine* team and the leadership and mentoring of **Anil Chopra**.

Speaking of the magazine team, Content Managers, **Pooja Shah** and **Ritika Pandey**, with able support from our new Ad Sales Manager, **Vartika Singh**, have put together a fantastic show issue. The key integration and install feature this month is a cover story on the **Nita Mukesh Ambani Cultural Centre**, which is a biggie! The spectacular pictures of the Grand Theatre are a testimony to the cutting-edge architecture and AV technology that formed the backbone of this project. Courtesy **Rasesh Parekh** of IES, the magazine team had the privilege of visiting the site and experiencing the **Sound of Music** musical, currently taking place at the venue. Much respect and admiration for **Mrs. Nita Mukesh Ambani**, who has given India a technologically advanced, much-needed cultural performance space that the entire country can pride on.

Additionally, within the pages of the magazine, read about the biggest Live Stage & Sound Event of the year, Lollapalooza India — where Viraf Pocha from Landmark Productions spills the beans on how the pro sound, lighting, and audiovisual talent involved in the planning and execution of the large-scale event brought the larger-than-life festival to life. PALM + AV-ICN Magazine also interviews Greg Beebe, Executive VP of Professional Audio at Sennheiser, in its '11 Questions' Series, where Beebe fields pivotal questions about the trends and technologies that are set to dominate the pro audio industry in the next five years and more. On page 50, read about Rhino Engineers' dynamic lighting installation at Indore's Rajwada Palace and Mahatma Gandhi Town Hall, along with a photo feature of several marquee projects undertaken by Narendra Naidu, MD & Chairman, Rhino Engineers, who was also PALM + AV-ICN Expo's AV Architect of Year 2021. The story has just begun. The PALM + AV-ICN Magazine is populated with many such cardinal features, news, and guest columns.

Please don't hesitate to get in touch if you've recently completed a major project that you would like to see covered in these pages. We would love to hear from you, visit these projects, and write about it. Drop me a line about the work you are doing. We would love to cover them.













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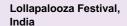
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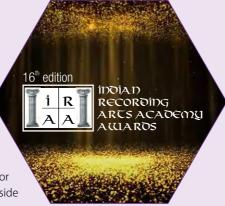


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# INSIDE NITA MUKESH AMBANI CULTURAL CENTRE

# India's Most Technologically Advanced Performance Space

Integrated Entertainment Solutions (IES) provides state-of-the-art pro lighting inventory for Nita Mukesh Ambani Cultural Centre.

The Best! The Biggest! The Brightest! The Nita Mukesh Ambani Cultural Centre opens doors to one-of-a-kind cultural space in India, and probably in the world, creating an inspiring space that is equally artistically galvanizing, and technologically superlative, facilitating a fabulous fusion of art and technology that can transcend all boundaries. In this feature, we find out what makes this art and culture space so technologically advanced and a class above the rest. The sound system of the venue has already received substantial coverage across various platforms. In this feature however, we shed more 'light' on the pro lighting technology that adds an exceptional luminance to every inch of The Grand Theatre. IES, spearheaded by Rasesh Parekh, illuminates the finest Grand Theatre with lights that spell resplendence.

The **Nita Mukesh Ambani Cultural Centre** is a labour of love for Founder and Chairperson **Nita Ambani**, whose first love till this day remains art and culture. Nita Ambani's vision for the Nita Mukesh Ambani Culture Centre is expansive — which stretches beyond showcasing the best of India to the world or bringing the best of the world to India. In Nita Ambani's own words, the Nita Mukesh Ambani Cultural Centre is "An ode to our nation, the Cultural Centre aims to preserve and promote Indian arts. I hope our spaces nurture and inspire talent, bringing together communities from across India and the globe."

The Nita Mukesh Ambani Cultural Centre was inaugurated on 31st March 2023 with India's biggest musical ever, The Great Indian Musical: Civilization to Nation, which has now concluded. The three-day inaugural event was elaborate, flamboyant, and star-studded, with the most famed names from India and abroad gracing



The Grand Theatre at the Nita Mukesh Ambani Cultural Centre is an architectural and technological masterpiece, elevated with state-of-the-art 8,400 Swarovski crystal ceiling, controlled entirely by MADRIX

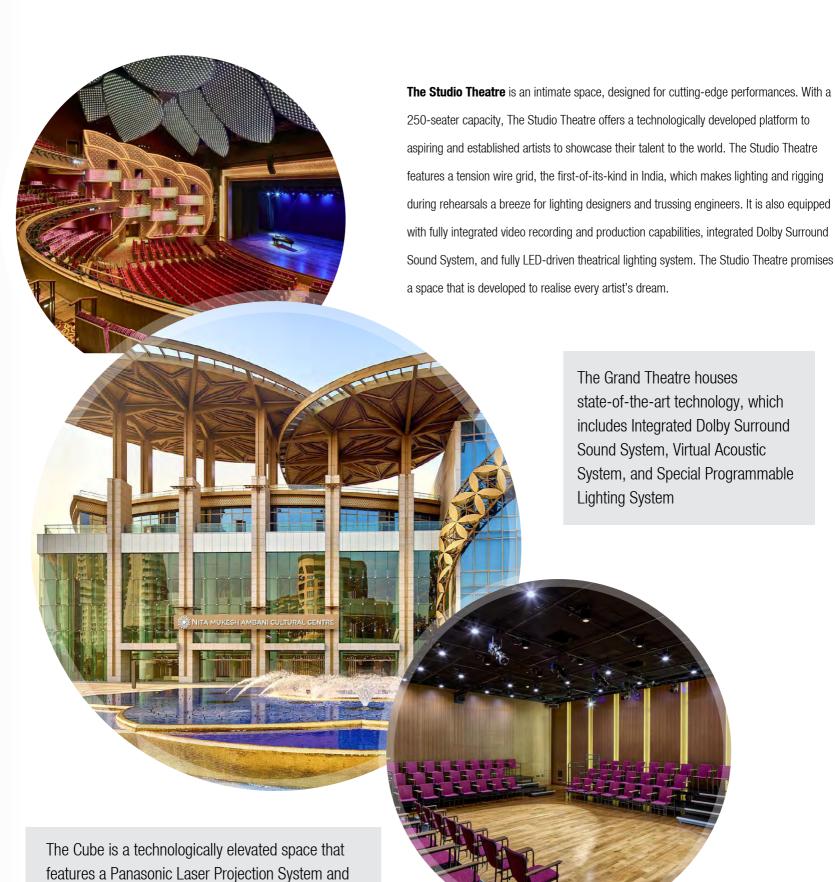
the opening ceremony. The vast ground on which the Nita Mukesh Ambani Cultural Centre is sprawled, itself is an indication that Nita Ambani and her team took the task of creating a vivid cultural centre very seriously. Within, there exist three diverse performance spaces—The Grand Theatre, The Studio Theatre, and The Cube.

The Centre's crowning jewel is **The Grand Theatre**, which opened its doors to the world with India's biggest musical ever - The Great Indian Musical:

Civilization to Nation. As one steps inside The Grand Theatre, it is like entering a universe so coruscating that hours pass like seconds — time comes to a halt. Of

course, this can be accredited to the intricately planned architecture, comprising 2,000 seats across three levels, and 18 Diamond Boxes for a dash of luxury. But there's more to the story. Meticulously designed for immersive experiences, **The Grand Theatre**, the most technologically advanced performing arts theatre in India, houses world-class integrated Dolby Atmos Surround Sound System, Virtual Acoustic System, Special Programmable Lighting System, which is enhanced by the presence of 8,400 Swarovski crystals on the ceiling for a multidimensional experience that steals the visitor's breath away. Not just that, The Grand Theatre is also equipped with integrated recording and projection facilities, which consists of translation booths and an inclusion of special absorbent wood that reduces the reflection of sound and makes the stage the centre piece of the listeners' ears.

Assisted Listening System with 5G connectivity



**The Cube** is labelled by the Nita Mukesh Ambani Cultural Centre is "an incubator of innovation, new talent, and ideas." A space created for upcoming artists and art forms such as plays, music performances, dance recitals, open mics, and spoken word, The Cube has a seating capacity of 125 people. It is a technologically advanced space that features a Panasonic Laser Projection System and Assisted Listening System with fully integrated video recording and production setup combined with 5G connectivity to make seamless live performance streaming and filming a reality.

The aspect, however, that this feature is focused on is—Which are these lights that are set to make the audience gasp in awe and wonder? What makes these lights dance the way they do? Who ensures the lighting system is in place at all times?

# INTEGRATED ENTERTAINMENT SOLUTIONS (IES) LIGHTS UP THE GRAND THEATRE

From conceptualisation to realisation, **Integrated Entertainment Solutions (IES)**, an Indian distributor of some of the leading pro lighting brands, such as **Robe Lighting, Avolites, Lumenradio, Anolis,** and more, provided pro lighting solutions to deck up the Nita Mukesh Ambani Cultural Centre Grand Theatre to deliver a grandiose luminaire experience to the audience.

**Rasesh Parekh**, Founder and Proprietor, Integrated Entertainment Solutions (IES), shares, "IES has been associated with the Cultural Centre from its early stages and this project is truly a labour of love. It has taken nearly a decade from conceptualisation to realisation, thanks to the zeal of the Ambani Family to ensure that India has a world class arts and culture destination."

A mammoth project such as the Nita Mukesh Ambani Cultural Centre requires immense dedication and commitment from a technical

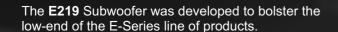


The Studio Theatre is an intimate performance space equipped with a tension wire grid, fully integrated video recording and production capabilities, Dolby Surround Sound System, and LED-driven theatrical lighting system

setup perspective to adapt to the ever-changing requirements with every passing day. Parekh affirms the same, and adds, "IES is responsible as a sole distributor of various top-notch brands such as ROBE, Avolites, Madrix, Lumenradio and many more, to assist and suggest the equipment that would fulfil the requirements of such a facility, where the technical specifications were ever changing as the project timelines changed."

Parekh also talks about the pro lighting brands and equipment housed within The Grand Theatre, "We suggested **MADRIX** for the control of 8,400 Swarvoski crystals in The Grand Theatre's ceiling and **ROBE** moving heads such as **MMX**, **T2** and **Avolites** for control systems. **MADRIX**, one of the leading LED control software and hardware companies, is also the favourite choice for lighting designers as it enables LED control with sophistication and ease. With changing timelines came newer and better technologies - from **discharge MSR lamps** in fixtures to **ROBE's T2**, which incorporates a multispectral LED engine as light source."





The **E119** Subwoofer was developed to bolster the low-end of the E-Series line of products.

The Adamson **E15** is a 3 way, true line source enclosure, incorporating proprietary transducer and waveguide technology which reduces weight and minimizes the footprint.

The Adamson **E12** is a 3 way line array enclosure, incorporating proprietary transducer and waveguide technology which reduces weight and minimizes its footprint.



E12

L200 PLUS
Power and control

The L200 Plus features SSL's next-generation of Optimal Core Processing (OCP) technology, offering greater DSP resource for allocation and extremely flexible I/O architecture. The console has up to 600 inputs and 600 outputs. It has 144 mix paths at 96kHz. These paths can be assigned as Channels, Stem Groups, Auxes and Masters to suit demands and configured as anything between mono, which use a single path, to 5.1 which use six paths. All 144 of the L200 Plus's mix paths are full processing paths. Insert Effects have their own dedicated processing which is also dynamically allocated.





# **LIGHTS GALORE**

A Nita Mukesh Ambani Cultural Centre's representative revealed more details about the pro lighting products installed within the Grand Theatre. The representative reveals that the Swarovski-encrusted ceiling is a custom RGBW-W PCB that has a blending light pipe (custom) that blends the colours coming from the PCB, so that they appear as a glowing lamp instead of individual pixels. The system is completely DMX controlled and is operated by MADRIX hardware (Luna 16) and MADRIX 5 software (Ultimate Licence).

100 ROBE Lights are included in The Grand Theatre inventory, and they are used in accordance with each production's requirements. The fixtures are used depending upon the requirements of the stage and the space. Some shows require most onstage fixtures, some have a combination of stage and audience fixtures. For instance, The Great Indian Musical: Civilization to Nation employed a combination of stage and audience fixtures. The show boasted of internationally celebrated, multiple award-winners such as Donald Holder (lighting design), Neil Patel (scenic design), Gareth Owen (sound design) and John Narun (projection design) and seasoned Indian professional artists such as Ajay Atul (music), Vaibhavi Merchant (guest choreographer), Mayuri Upadhya (lead choreographer), Samir and Arsh Tanna (choreographers), and Manish Malhotra (costume design).

The lighting dimming and control system at The Grand Theatre is by ETC (Electronic Theatre Controls) and the lighting consoles in The Grand Theatre are **ETC EOS Ti consoles**. The Grand Theatre also has a primary and a live tracking back up console. Among other things, the console and the control system help the technicians change the lux levels in the moment.

The Nita Mukesh Ambani Cultural Centre representative added that besides Robe, The Grand Theatre is also equipped with a wide inventory of conventional and moving lights from internationally acclaimed lighting manufacturers like ETC, Martin by HARMAN, Robert Juliat and Altman. ETC Source4 profiles and washes along with a large selection of ETC Lustre2 LED profiles complement the moving light inventory.



equipped with lighting technologies from international brands such as Robe, MADRIX, and **Avolites** 

# THE LIGHTS INSPIRE. **SO DOES THE SOUND:**

It is not just that lights at the Nita Mukesh Ambani Cultural Centre's Grand Theatre that serve as a source of appreciation and applause by the audience. The sound that traverses through the Grand Theatre invites goosebumps too. Gareth Owen, an Olivier and Tony Award-winning sound designer, who has previously worked on some of the biggest musicals such as 'Memphis', 'MJ The Musical', and 'Starlight Express', has been an integral part of the Nita Mukesh Ambani Cultural Centre, and provided his sound engineering expertise to 'The Great Indian Musical: Civilization to Nation'.

In Owen's words, the sound technology used in the Grand Theatre is "on par with the best theatres in the world." He concludes, "I can't think of any venue in New York that's of the same standard as this venue in Mumbai."

In essence the Nita Mukesh Ambani Cultural Centre is a technological marvel, and we propose to feature the audio component at the Nita Mukesh Ambani Cultural Centre's Grand Theatre in greater detail in one of our upcoming issues.



We suggested Madrix for the control of 8,400 Swarvoski crystals in The Grand Theatre's ceiling and ROBE moving heads such as MMX, T2 and Avolites for control systems...With changing timelines came newer and better technologies - from discharge MSR lamps in fixtures to ROBE's T2, which incorporates a multispectral LED engine as light source.

Rasesh Parekh, Founder and Proprietor, Integrated Entertainment Solutions (IES)



# **GREAT GIGGS ACQUIRES MARTIN AUDIO WAVEFRONT PRECISION**

**Great Giggs** has acquired a **Martin Audio Wavefront Precision** 

– WPS system. The Martin Audio WPS system provides clear and crisp sound quality, which is perfect for various events, including concerts, corporate events, and weddings.

Great Giggs' Martin
Audio WPS system configuration includes 12-WPS
Line Array units, 8-SX218
subwoofers, and 3-IK42
amps. This configuration
is carefully designed to
provide exceptional sound
quality and precision in
a variety of performance
settings.

The WPS Line Array units are highly versatile and can be configured to adapt to different venue sizes and shapes. They deliver exceptional clarity and precision, ensuring that every note and nuance of the performance is captured and conveyed to the audience. The SX218 subwoofers provide powerful, low-end support, adding depth and dimension to the sound. The IK42 amps offer advanced optimization tools, enabling Great Giggs to fine-tune the sound to the specific needs of each performance and venue.

"I highly recommend the Martin Audio WPS System for any event. This system is incredibly versatile and powerful, producing clear and crisp sound quality that is suitable for both indoor and outdoor venues. Its reliability and ease of setup make it a favorite among rental companies and event planners. Additionally, this system delivers consistent and powerful performance, even in challenging acoustic environments.

Great Giggs' Martin Audio WPS system configuration includes 12-WPS Line Array units, 8-SX218 subwoofers, and 3-IK42 amps

With its excellent coverage, every corner of your event space will receive top-notch sound. Trust me, the Martin Audio WPS is the perfect choice for any event," said **Avinash Banaulecar**, Great Giggs.

"For anyone seeking a reliable

and robust sound system, the Martin Audio WPS System is a fantastic option. This state-of-the-art system is a top performer at various events, such as concerts, corporate functions, and weddings. With its adaptability and versatility, it can cater to any occasion, be it a small gathering or a large event. The audio quality is exceptional, providing clear and crisp sound that is unmatched. Its dependable and straightforward setup makes it a popular choice for rental companies and event planners. If you want to ensure that every corner of the venue receives high-quality sound, the Martin Audio WPS Pro Audio System is the ideal solution," claims Aglen Fer-

# **CELESTION DEBUTS THE POWERPROX18 SUBWOOFER**

Celestion, one of the leading designers and manufacturers of professional audio drivers for sound reinforcement applications announced the debut of the 18-inch PowerProX18 subwoofer, whose relentless high-quality performance makes it ideally suited to applications including cinema sound, fixed install and touring sound reinforcement.

The subwoofer features an advanced cooling design that enables its voice coil to run 20°C cooler than comparable competitor drivers. This greatly reduces heat-related stress on the 4-inch glass-fibre voice coil former and other thermally sensitive parts. It also reduces the temperature-related rise in Re (coil resistance) that causes power compression. By operating at less severe temperatures, the subwoofer offers end users brand-new-out-of-the-box high performance throughout the product's lifespan.

Through detailed research, Celestion

has identified advanced adhesives that ensure additional driver performance and durability. In the interest of performance longevity, especially in outdoor applications such as concerts, the glass fibre-loaded cellulose cone is weather-proofed not only on the front side, but on the back as well.

With a nominal impedance of 8 ohms, the PowerProX18 subwoofer's power rating is a mighty 1200 watts nominal (AES) and 2400 watts continuous. Sensitivity, measured at 1W@1m in  $2\pi$  space is 97dB. Its BI (motor force) curve exhibits remarkable

symmetry, and ill

thanks to the cone's polysiloxane-laminated dual suspension, which provides greater stability and improves cone displacement symmetry, the K (stiffness) curve again reveals superb symmetry resulting in reduced distortion.

An aluminium demodulation ring reduces the inductance (Le) of the motor circuit — only 1.61mH at 1kHz — which also contributes to lowering power compression. The ring also reduces harmonic distortion as the voice coil and cone move in the gap toward either pole of the magnet.

The subwoofer has a usable frequency range of 35 to 1000Hz, making it suitable for any large subwoofer applications, and excels when delivering the deep, palpable lows of cinema audio. Xmax is calculated at ±9.3mm. Its chassis supports a 3.5kg ferrite magnet, while the overall weight of the subwoofer is 13.2kg (29.1lb.)

"The PowerProX18 a subwoofer designed for longevity of high perfor-

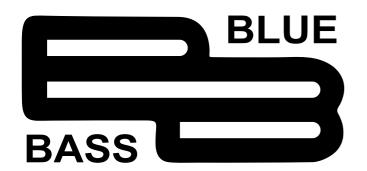
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mance, delivering maximum durability and reliability throughout the lifespan of each speaker," says **Ken Weller**, Marketing Manager at Celestion. "It is intended to surpass the performance of other 18-inch subwoofer drivers in its class, making it ideal for challenging sound reinforcement and cinema sound applications."

nandes, Great Giggs.

# PowerProX18 key features include:

- Reduced operating temperature voice coil runs at 20°C lower than leading competitor speakers.
- Reduced susceptibility to power compression and thermal stresses.
- 1200W (AES) / 2400W (continuous) power rating;  $8\Omega$  nominal impedance.
- High sensitivity 97 dB (1W @ 1m).
- Highly symmetrical BI (motor force) and K (stiffness).
- Cone weatherproofed on both sides.
- Xmax of  $\pm$ 9.3 mm.
- 18-inch diameter; 4-inch voice coil.









**XB-21** 2000W AES

**High Conex Fabric** 

**Nano Fibre Loaded Cone** 

Sandwich Suspension Dampler

4 Layer Copper 2:2 winding VC









4 x 800W @ 4 0hms

Powered by NX Audio

**SABRE-1404 Mk2** 

4 x 1440W @ 4 0hms





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# **DPA MICROPHONES LAUNCH THEIR FIRST-EVER DRUM MIKING SOLUTION AT NAMM**

**DPA Microphones (NAMM Show** Booth 14504) launched the DDK4000, the company's first ever Drum Microphone Kit, to help deliver a clear and natural reproduction of the low-frequency, high SPL instrument. Comprised of the brand's acclaimed 4055 Kick Drum Mic, as well as the new 2012 Cardioid and a stereo pair of the new 2015 Wide Cardioid, the kit also features three of the brand's renowned 4099 CORE Instrument Mics. With consideration for durability at the forefront of this solution, the kit has been rigorously tested to perform flawlessly for all types of music genres and is designed to withstand the demands of life on the road.

"We are ecstatic to offer sound engineers a perfect drum miking solution with the DDK4000 Drum Microphone Kit, comprised of several instrument mics with similar sonic characteristics that allows users to capture a uniform, uncolored sound of the entire drum setup," says Bo Brinck, Product Specialist/Sound Engineer, DPA Microphones. "Every mic in the kit is designed with linear on- and off-axis response, which helps the sound designer keep the natural direct sound as well as the organic bleed between the drums and cymbals. Beginning with the clear, true sound of the entire kit gives engineers the best starting point to shape the sound. We are very excited for the creative possibilities and high-quality sound that this microphone kit will provide to the industry, and we look forward to presenting it for the first time at NAMM."

With an intentional use for kick

drum-specific applications, the 4055 Kick Drum Microphone offers a very tight, natural, well-defined sound that is not pre-tailored like traditional kick mics. Also, unlike other kick drum mics, the DPA 4055 will provide different sounds depending on its placement relative to the kick drum. Owing to its condenser mic capabilities, the 4055 produces a tight, fast and clean



With an intentional use for kick drum-specific applications, the 4055 Kick Drum Microphone offers a very tight, natural, well-defined sound that is not pre-tailored like traditional kick mics

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sound even at very high SPL (max SPL is 164 dB). Additionally, its asymmetric design is easy to position both inside and outside the kick drum, making it quick and effortless to find the ideal placement. Its large housing and wind damping foam in front of the capsule, behind the grille, help minimize the pick-up of the air turbulence in front of the hole in the kick drum.

The 2012 Compact Cardioid Micro-

response of the 2012 allows it to cope with high SPLs while also capturing the most delicate of sounds.

phone acts as a reliable, all-around,

generalist pencil mic that can capture

crystal clear, single-instrument pickup

with ease. Unlike dynamic mics, the

2012 combines a robust design with

intricate sound pickup, extended

frequency range and flat frequency

response in a small-form factor for

accurate close miking on any live

Designed for use as an overhead stereo pair on drum kits, the 2015 Compact Wide Cardioid Microphone features uniform, wide cardioid directionality and a linear frequency response. This stereo pair can be positioned closer to the drum kit than normal and captures the balanced

sound of the entire instrument with less bleed from the stage. Additionally, the compact design of the 2015 allows for unobtrusive placement at venues of any size, while its durable, reinforced construction means it will last from stage to stage. Both the 2012 and 2015 are pre-polarized condenser mics, each with a specifically designed 17mm (0.67-inch) capsule that is perfectly tailored for its intended application.

Featuring the company's renowned CORE by DPA amplification technology, the award-winning 4099 CORE Instrument Mics are designed to minimize distortion and increase dynamic range — from the highest of highs to the lowest of the lows. The kit features the 4099 CORE "Extreme SPL" (109 dB dynamic range) version, which is perfect for drum miking applications. Known for its discreet size and versatile mounting/clip options, this longstanding member of the DPA microphone lineup is a great fit for a variety of applications ranging from the studio and theater to live performances.

Like most DPA solutions, the DDK4000 Drum Microphone Kit comes in a sturdy Peli case, which includes microphone holders and adapters. Additional accessories such as a stereo boom, gooseneck mount and corresponding shock mounts are also available. The complete DDK4000 Drum Microphone Kit can be seen in action at the NAMM 2023 show, where it will be shown at the DPA Booth (14504) and used on the Yamaha Grand Stage throughout the event.

# YAMAHA ANNOUNCES NEW DM3 SERIES

Yamaha, one of the world's largest manufacturers of musical instruments and audio solutions, introduced the DM3 Series, a professional audio lineup that makes it easy for users to build a mix in any situation, empowering musical expression. The new, compact digital mixing consoles are versatile for various applications and ideal for the most passionate musicians serious about turning their music into a career.

There are two DM3 mixers in the Series- the DM3-D features Dante audio networking for quick and flexible connection to a wide range of compatible audio devices, and the DM3 Standard without Dante. As the new standard in compact mixers, the DM3 Series offers up to 96kHz sound quality, powerful

features, a fast, simple setup and ease of operation in an ultra-compact chassis. The supremely portable mixers feature a combination unmatched by any other mixing console of this size.

Offering low latency and two high-quality processors featuring 18 types of effects, a simple, intuitive user interface is centered around a large, 9" screen with multi-touch control. Though small but thoughtful features can choose from multiple languages for channel names (using the DM3 Editor or DM3StageMix applications) displayed on the user's choice of a light or dark background, making the DM3 Series easy to use any space, lighting conditions and by users of different nationalities.

With custom fader banks and MonitorMix support for personal monitor mixing, it has various live sound applications, from simple presentations and conferences to live bands and multi-performer events. The DM3 is also ideal as a sub-mixer for a Dante-compatible main console.

"Whether performing live onstage or streaming online, it just makes sense to trust a company that lives and breathes music to ensure every note is heard as intended." Says Preston Gray, director

Yamaha DM3 Series of marketing for professional audio at

Yamaha Corporation of America.

The DM3 Series is a portable, full-specification music production tool that covers all the bases for recording and editing needs, thanks to an 18in /18out USB audio interface and DAW Remote functionality.



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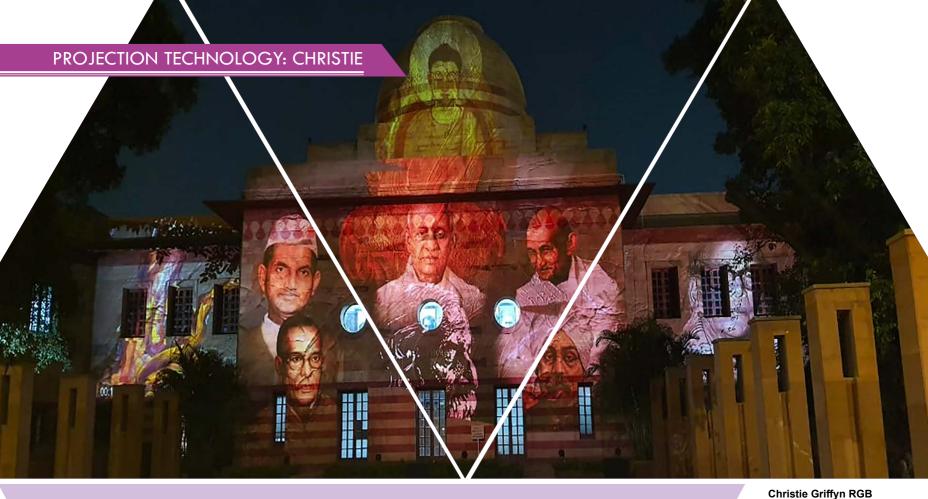


Beta Three Audio India Pvt. Ltd.



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# The Christie Griffyn Series Delivers Game-Changing Colution

Solution
For Large-Venue
Projections

Christie Griffyn RGB pure laser projectors lighting up the National Gallery of Modern Art in India (Image courtesy of the National Gallery of Modern Art)

he Christie Griffyn Series is an exceptional all-in-one solution for large-venue projection that prioritizes image quality and performance. Equipped with a proprietary RGB pure laser illumination architecture that includes integrated cooling and a sealed optical path, it is sure to impress even the most discerning viewers. In this article, a Christie representative explains why the Christie Griffyn Series is a class apart in the world of projection.

What sets the Griffyn Series apart from its competitors is its remarkable brightness, with lumen options ranging from 36,500 to 50,000, while also being among the smallest, lightest, and brightest RGB pure laser projector series available. Whether projecting on the ground or in the air, the Griffyn Series delivers vivid visuals that will enthrall audiences. Additionally, with a noise level as low as 44 dBA in quiet mode, audiences can immerse themselves fully in content without any distractions.



One of the most exciting aspects of the Griffyn Series is its ability to produce greater than 98% of the Rec.2020 color space. This means that colors are rich and true to life. However, it is not just its exceptional performance that sets the Griffyn Series apart. Christie has also made it incredibly user-friendly with TruLife+electronics, which eliminates the need for removable options cards and provides "all-in" connectivity. In addition, electronic color convergence (ECC) allows for perfect color alignment with just the touch of a button.

The Griffyn Series also includes integrated Christie Twist for warping and blending, and is compatible with Christie Mystique, an automated camera-based alignment and recalibration solution that can quickly install, align, calibrate, and maintain multi-projection systems. For higher frame



rate applications, optional Mirage and Mirage Pro upgrades offer 120Hz at 4K resolution or up to 480Hz at 2K resolution, respectively.

Sustainability is also a crucial consideration when designing the Griffyn Series. The Griffyn 4K50-RGB, for example, has an impressive brightness output of 50,000 lumens while being the most energy-efficient laser projector in its class, delivering just 15.9 lumens per watt-hour. Comparable projectors in the same category typically only manage to deliver an average of 10 lumens per kilowatt-hour.

# **Perfect For Large-Scale Applications**

The Christie Griffyn Series is the perfect choice for largescale venues and applications, from live events to projection mapping and theme parks.

In India, the Griffyn Series is chosen to deliver spectacular images at several outdoor venues. These includes the 3D projection mapping show on the façade of the National Gallery of Modern Art in New Delhi, which invites audiences to witness the walls of Jaipur House come alive with events that led to the making of this amazing art museum.

Over in Hyderabad, Griffyn Series projectors are employed for a mesmerizing projection mapping showcase on the Statue of Equality, which commemorates the 11th-century Bhakti Saint Sri Ramanujacharya. The Griffyn 4K32-RGB projectors are used to display captivating imagery on the gates and walls surrounding the statue that measures 66 meters (216 feet) in height, and is one of the world's tallest metallic statues in sitting position.

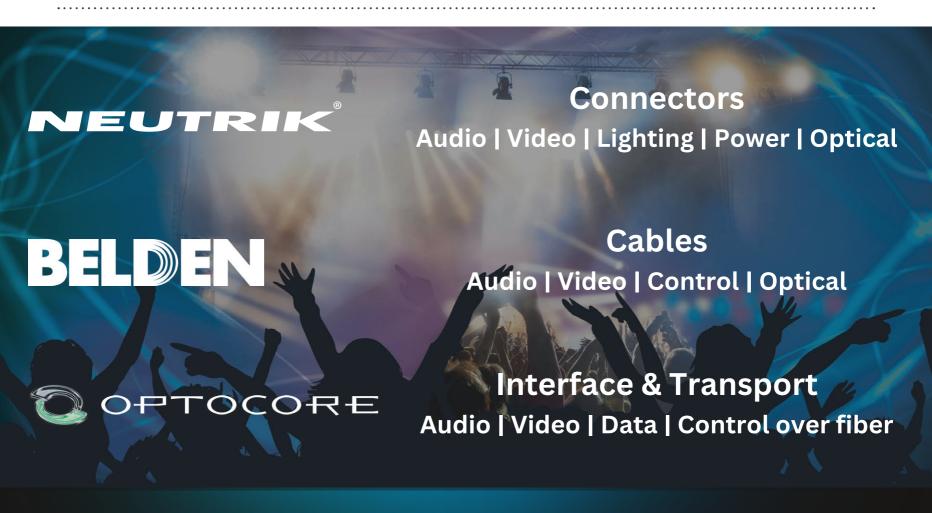
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tions.

The Griffyn Series is also ideal for indoor spaces that require bold, bright images to engage audiences. The Mackay Entertainment and Convention Centre in Oueensland is the first major facility in Australia to deploy this high-performance laser projection system in its 1,000-person main theatre to deliver vivid projections on a large 10-meter (33-foot) screen. Overall, the Christie Griffyn Series is a game-changing solution for anyone seeking outstanding performance and image quality in large-venue projection. With its proprietary RGB pure laser illumination architecture, exceptional brightness, and ability to produce greater than 98% of the Rec.2020 color space, the Griffyn Series delivers breathtaking visuals that will captivate

Furthermore, its user-friendly design, advanced features such as Christie Twist for warping and blending, and compatibility with Christie Mystique for automated camera-based alignment and recalibration, make it a top choice for large-scale venues and applications.

As demonstrated by its successful use in various outdoor and indoor spaces across APAC, the Christie Griffyn Series is an ideal solution for any event or installation that requires bold and captivating visuals. Put Griffyn to work for you today.



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AV Distributor & Stockist

# **ROLAND ANNOUNCES VR-6HD DIRECT STREAMING AV MIXER**

All-in-One Business Streaming Solution with HDMI Connectivity, 28-Channel Audio Mixing, LAN and USB Streaming, and Advanced Automation Tools

Roland's Professional A/V Division announced the VR-6HD Direct Streaming AV Mixer, a compact allin-one hub for business livestreaming. Offering core features from the flagship VR-120HD in a portable, go-everywhere format, the VR-6HD is ideal for corporate meetings, online sales presentations, worship services, and other professional applications. Video switching, audio mixing, and LAN/USB streaming encoders are integrated into a single streamlined unit, eliminating the hassle and frustration of connecting multiple devices. One operator can easily handle all production tasks with minimal study thanks to the smart interface, deep automation tools, one-touch macro sequencing, PTZ camera control, and more.

The powerful video capabilities in the VR-6HD make bringing high production values to business streaming productions simple. Users can connect multiple cameras and computers via six HDMI inputs for different views and incorporate

robotic PTZ cameras to change angles at the touch of a button. Sources can be assigned and switched on the fly, including camera inputs, presentation decks, still images, and video clips. Custom feeds for live and online viewers can also be created by assigning composition layers to multiple busses.

### **High-End Video Matrix:**

The VR-6HD features a high-end video matrix with three HDMI outputs, a USB-C streaming output, and an ethernet streaming output. Intuitive routing tools provide the flexibility to feed program displays, monitors, multi-view producer displays, and online audiences simultaneously.

Advanced technology in the VR-6HD makes livestreaming to the most popular platforms smooth and worry-free. With direct streaming over ethernet, computer streaming over USB, and Adaptive Bitrate support, users can deliver high-quality presentations to any audience. With simultaneous SDXC recording, it's easy to capture presentations for archiving and distribution.

### **Equipped With 28 Channels:**

The VR-6HD delivers world-class audio quality with 28 simultaneous channels and Roland's acclaimed sound mixing and effects. Six balanced XLR/TRS combination jacks feature high-quality mic preamps and phantom power, while stereo RCA inputs are available for line-level devices. Users can mix the embedded digital audio from sources connected to the HDMI and USB inputs and stream wireless audio from any mobile device with onboard Bluetooth audio support.

The unique Audio Player section on the VR-6HD panel allows users to enhance streams with custom sounds. Six assignable pads are available to trigger sound effects, theme songs, event announcements, and more.

### **Enhanced With Intuitive Workflow:**

Thanks to its well-organized interface and intuitive workflow, even novice operators will feel comfortable using the VR-6HD. Hardware knobs, faders, and buttons offer direct control for essential functions, while the 4.3-inch



Roland announces VR-6HD, ideal for corporate meetings, online sales presentations, and other professionl applications

touch display provides smooth access to deeper parameters and settings. Scene memory, macro, and sequencing features simplify operation even more, providing the ability to pre-program complicated actions and fire them off with simple actions.

The VR-6HD features extensive PTZ (pan-tilt-zoom) camera integration with native support for select Canon, JVC, Panasonic, Sony, PTZOptics, Avonic, and VISCA-compatible PTZ LAN cameras. Different brands can be mixed and matched, and up to six PTZ cameras can be operated simultaneously.

The VR-6HD includes tally light support, external control via footswitches and expression pedals, RS-232 and GPIO ports, and more.

# LYNX UNVEILS NEW KR SERIES FOR QUALITY INSTALLATIONS

Lynx Pro Audio introduces the new KR series, a line of passive two-way loudspeakers specially designed for installations where high volume is required whilst delivering excellent vocal clarity with low distortion.

The two full-range models belonging to the KR series feature two-way passive 10'' and 12'' versions, with a 1'' driver mounter on a  $90^\circ$  x  $60^\circ$  rotatable horn.

KR cabinets are ideal for a wide range of fixed applications, such as KTV rooms, conference halls, houses of worship as well as discos and clubs.

The double port located at the rear of the enclosure creates increased bass frequency response. When installed close to a wall, it creates a reflection that extends the low frequency response of the system, creating extra bass boost.

The KR-10 cabinet consists of a 10" (2.5" voice coil) LF transducer with Double Asymmetric Rolls Technology (DAR) and waterproof cone. The 1" HF compression driver delivers excellent sonic quality. It has an exceptional

dynamic range and produces even the most complex signals with depth and definition and is mounted on a 90° x 60° rotatable horn. With a 96 dB sensitivity and a max. SPL of 122 dB / 128 dB peak, rated power of 300W AES (600W program, 1200W peak). The fittings include





The new KR-12 consists of a 12" LF transducer with triple cloth surround, total waterproof cone treatment, and so much more

14 x M8, ergonomic handle on the back position, 4 x M6 U-bracket, 6 x M6 wall bracket and a 35 mm top hat.

The KR-12 consists of a 12" (3" voice coil) LF transducer with triple cloth surround and total waterproof cone treatment. The 1" HF compression

driver delivers excellent sonic quality. It has an exceptional dynamic range and produces even the most complex signals with depth and definition and is mounted on a 90° x 60° rotatable horn with a 97 dB sensitivity and a max. SPL of 124 dB / 130 dB peak, rated power of 500W AES (1000W program, 2000W peak). The fittings include 14 x M8, ergonomic handle on the back position, 4 x M6 U-bracket, 4 x M6 wall bracket and a 35 mm top hat.

Constructed from MDF and coated in high resistant polyurea paint, giving them greater durability. A wide range of dedicated accessories allows the installation of these loudspeakers in all types of set-ups: ceiling or wall mounted on a speaker stand or as a satellite with a subwoofer.

Although the KR series can be used without a processor, we recommend that the cabinet presets are applied for maximum optimization and performance. These presets are available on the full range of ARK processors and on the brand's amplifiers with built-in DSP.



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# SHARP/NEC TO LAUNCH LED FE SERIES 104" 21:9 PANORAMIC VIEW BUNDLE

In order to promote hybrid working scenarios, Sharp/NEC is launching the NEC LED-FE009i2-104 Panoramic View **Bundle** for corporate meeting rooms. The Indoor LED ultra-wide Full HD bundled solution holds a large scale for perfectly detailed imagery and fascinates viewers with an excellent visual due to a completely seamless design as well as high contrast and brightness rates. Due to the slim design, the LED modules can be integrated very close to the wall with minimal gap space necessary. The bundle contains everything users need for care-free installation as well as front access to the LED modules for easy maintenance. Customers can therefore, benefit from Sharp/NEC's long-lasting product quality.

With its 21:9 screen format, the NEC LED-FE009i2-104 is ideally suited for corporate meeting applications, panoramic video conferencing layouts or multiple window usage. It can also be

used with Microsoft Teams Rooms and the new Front Row layout, which makes it possible for everyone in a Teams Room – whether virtual or in-person - to see and react to chat comments during a meeting. Dynamic meeting



NEC LED by Sharp/NEC for corporate meeting rooms is Indoor LED ultra-wide Full HD budled solutions that holds large scale perfectly designed experiences

are. The 0.95mm fine pixel pitch of the NEC LED-FE009i2-104 means those joining remotely appear in perfect clarity as users take advantage of the Front Row lavout.

"As businesses seek ways to improve efficiency through skill and knowledge sharing, they need to make meeting interactions between virtual and inthe-room meeting participants more natural for their employees", said Nils Detje, Product Manager dvLED Solutions at Sharp/NEC Display Solutions Europe. "Sharp/NEC products are optimised to deliver the best possible user experience in corporate meeting rooms. Fine-pitch dvLED like the NEC LED-FE009i2-104 with its ultra-wide format provides more screen space over a stretched single canvas. Therefore, it is the ideal technology to create an immersive meeting room experience by offering larger, more flexible and brighter screen configurations."

# THREE NEW HALL TECHNOLOGIES PRODUCTS NOW SHIPPING IN INDIA

# Distributed by NTeck Systems in India, the three new products from Hall Technologies offer unique end-to-end AV conferencing solutions

Hall Technologies, one of the leaders in pro audiovisual industry for providing top quality, highly reliable end-to-end collaboration

HT-CALIPSO, HT-GEMINI, and HT-OD-YSSEY at Infocomm 2022 (USA) with an aim to revolutionize the world of conferencing. Distributed by NTeck

any video from the connected device to the connected display. Equipped with 4 MEMS digital microphone arrays at an angle of 180 degrees and with a range

views keep everyone connected to the

content, and with each other. Where

formal presentations are paired with

collaborative chats, digital canvases

unleash group creativity, and everyone

of 5 to 8 metres, 2 5W Stereo full range speakers, Acoustic Echo Cancellation, Automatic Gain Control, Automatic Noise Suppression,

Auto Framing, Speaker Tracking, and Presenter Tracking, HT-CALIPSO is designed to deliver effortless conferencing in huddle and meeting rooms from small-to-medium sized spaces.

**HT-GEMINI** is a 4K 6 multiformat Input Extender Switch with USB Extension for Soft Codec that offers AV switching, USB, HDMI, DP, VGA, and USB-C extension along with system control for meeting spaces using several PC-based conferencing codes. The HT-GEMINI kit is compatible with Ultra HD source up to 4K/UHD@60 Hz with 4:2:0 colour subsampling. The kit is designed for integration in classroom and small offices in spaces like conference tables and lecterns.

HT-ODYSSEY is an all-in-one BYOD conference speakerphone and video presentation device with a presentation switch, wireless casting, and an HDBT out

port, which delivers better audio clarity to participants in meetings. Supporting resolutions up to 1080P@60P, equipped with 360-degree 4x omnidirectional mic array, echo cancellation, active background noise cancellation, and speech enhancement for elevated



solutions, recently launched and showcased three new products - Systems in India, these three products are shipping in the country since April 2023



**HT-CALIPSO** offers all-in-one meeting collaboration videobar with a 4KAI camera, wired and wireless screen casting capacity, and a wide range of microphone and speaker features. With an in-built Wi-Fi module and multiple connection options, the user can connect to the HT-CALIPSO and seamlessly project

28

**HT-GEMINI** 

meeting performance. HT-ODYSSEY



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# DAVE G4X SERIES COMPACT 2.1 POWERED PA SYSTEMS

# **6-CHANNEL MIXER**

The built-in 6-channel mixer allows you to connect and mix a variety of sources, from microphones and high-impedance instruments to line-level signals and wired – or wireless – players.







# StageMix Technologies



Viraf Pocha, Director, Landmark Productions, on what it takes for the Indian prosound, lighting, and audiovisual industry to make Lollapalooza India a great success

Lollapaloo2a is where music fans, food fanatics, and socialites gather under a single roof to experience the best of what culture, cuisine, and creativity has to offer. The two-day Lollapaloo2a India, held on 28th and 29th January, 2023 in Mumbai, India, in addition to featuring a vibrant artist line-up, mouthwatering delicacies, and other colourful extravagan2a, was decked up with quality sound, visuals, and lights to mesmerize the visitors. Below, Viraf Pocha, Director, Landmark Productions, in his own words, breaks down the intricate audio, video, and lighting deployment by several big names in the pro sound, audiovisual, and lighting industry, and why, this collaborative, thoroughly planned and executed process made Lollapaloo2a a massive hit with the visitors.

**ollapalooza** was here. Can it get bigger than this?

Probably YES. Next time, maybe?
But, we had never hosted a Rock Festival on this scale, until Lollapalooza happened in India on 28th and 29th January, 2023.

Countless bands, Countless fans, Countless technicians, Countless crew. Countless on-ground support. Huge off-venue staff. Countless kilometers of cable, strung around the venue.

Does it matter? Just thinking about the numbers boggles the imagination.

And yet – every person I spoke with - musicians, crew, fans, infrastructure guys – all speak of a calm energy that just pushed everything along and ensured everybody had a great time.

What else can a Festival hope for?

The scope of the event was huge. I'm sure there is enough material around there to fill a book. Here, I'd like to put a spotlight on the technical setup that was the backbone of the ground event.



Lollapalooza was brought to India by BookMyShow. India's leading entertainment company spearheaded the India edition of the festival as the promoter and co-producer along with global producers, Perry Farrell, WME and C3 Presents.

The BookMyShow company has associated with Lollapalooza for the long term. As it was their first outing, both teams were committed to putting their best foot forward. Lollapalooza India had to match the Lollapalooza experience around the world, so that it can expose India to the best the world has to offer.

Lollapalooza around the world has a reputation of being a launchpad for some enticing new artists. So, it makes sense for Lollapalooza India to ensure all their artists are assured of a platform where they are encouraged to perform their best.

The Lollapalooza team that BookMyShow brought together was fortunate to have the experienced Vincent Samuel, Managing Partner, Greenstone Entertainment, available to put all the pieces into place. Samuel has served as the Production Manager to several foreign acts for their India concerts. His biography includes be parked and knowing the exact load that needed to be delivered at every spot, so his cable laying exercise was done in days.

Sounds simple. Remember, you only know your power requirements AFTER every stage's sound, light, video requirements are finalized with every band's tech team that's going to play on each stage. A slight miscalculation means – last minute angst OR massive wastage. None of that here.

Factor in backstage lights, working lights, hospitality areas, cameras and internet stations surrounding each stage. Then factor in demands of the VIP space with its own installations.

Now come to the food areas. Stages, you can plan. How do you plan for how many food warmers and mixers will be switched on at a time? Extra loads need to be made available. Redundancies need to be understood. Who knows how many pizzas will need to be served up at what time? Think about the upset guys who get cold pizzas - delayed!

The technology to be deployed to get something so simple, right.

The VIP zone, the food areas, and the experience zones form the center of the festival. From there, we can head to one of the FOUR main stages roughly laid out around the center.

Four huge stages. Roof Trussing provided by **Manish Mavani**, Director, **SNL Pro**. Mavani applauds the planning that the Lollapalooza India team put into the project

Each stage was sized and had its truss configured so that every band that would be performing would have ample space to be comfortable. Each stage was going to host between 10 - 15 acts over two days. Space was needed for both the installed artist – as well as the next artist's equipment ready to be rolled on.

# AUDIO

At Rock Festivals, sound probably needs maximum attention. All of Mumbai's leading companies were assigned a stage each, so their energies were focused on one area with minimum running between stages. Manish Mavani, Director, SNL Pro, Warren Dsouza, Founder & Managing Director, of SOUND.COM, Dave Drego,

All four of these companies are experienced in managing multi-artist stages. Their teams are practiced in handling quick changeovers. Each one spoke of it being critical to know what comes next. No surprises to trip them up. Even one damaged plug or shorted wire can create an unpleasant cackle. Every cable needs to be checked and re-checked. Every time it is handled, it must be handled quickly and firmly so that it can be reused.

Festivals must run like clockwork. Every delay has a cascading effect. It's embarrassing to ask an artist to cut his set short due to a technical glitch. They have spent a lot of time getting their act right. Their careers and image are on the line. Nobody wants that to be sacrificed over a frayed wire.

Dsouza stressed on the importance of discipline of the whole exercise. That discipline created an awareness that everybody must work together. Lollapalooza India was marked by an absence of individual sound checks. The production team had a certain set of high standards that each sound stage had to meet. That created a scenario where each artist could plug and play.

The sound team also spoke of the need for each band to create a 'festival patch' that could easily be integrated into the House PA system. Bands recognized that they are part of a larger exercise and that the more time they take to set up – the less time they have to perform.

This in turn led to the bands understanding the need for a good monitor engineer who knows the band's sound and stage monitor engineers who know how to mix the sound and send it to the PA Desk.

The House system sounds great. If you mess up, your band may not sound as good as the others. This creates healthy competition and adoption of good hygienic practices. The result? Bands sound good. Festival sounds good.

Audience is happy.

Dsouza also spoke of how wonderful it was for him to walk about and listen to all the different speakers brands and the configuration each stage had opted for. You rarely get a chance to go head-to-head in a 'real' environment. He learnt a lot, and that sentiment was also echoed by all three of the other sound companies.

Herman Lobo was particularly chuffed when a Lollapalooza International Official joined some of the acts to compliment the sound on his stage. They agreed that the speakers' systems were arrayed in a particular way to cater to the EDM heavy acts on his stage. All four of these hugely experienced sound guys unanimously confirmed that this was a great and novel experience. Given the combined number of shows that lot has on their resume – that's saying something.



Four major pro sound companies delivered end-to-end sound solutions for the Lollapalooza Festival to make it a grand success

**Herman Lobo**, Owner, **Audio Dimensionz** along with **Sean Lobo**, Head of Operations, **Audio Dimensionz**, were assigned one stage each.

Each professional shared a healthy interaction with the rest. Each stage installed the house sound to cover every artist's audio requirement - from full rock bands as headline acts to the EDM artists. Each of the sound guys were enthusiastic about the project. They all loved their jobs and were all personally pleased to be included in this amazing project.

### Electrocraft's Inventory:

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- · 4 nos. of Kara Down
- 24 nos. of L' Acoustics Kara
- 44 nos. of L' Acoustics SB28
- 8 nos. of L' Acoustics DV-DOSC
- 12 nos. of L' Acoustics X15
- · 2 nos. of L' Acoustics SB18
- · 2 nos. of DiGiCo SD10
- · 2 nos. of AVID S6L
- · 16 nos. of Sennheiser 2000 Series IEMs
- · 20 nos. of Shure AD4D + AXT400

## VIDEO

**Joshua Dmello** & **Jash Reen** Co-Founders, **Wolves Inc** were assigned the responsibility of managing all the visual content scheduled to be played across the four stages' LED screens.

They were entrusted with two roles. One, to create all new video content that was needed for the festival, including filling the screens for the bands that did not have their own engineers and / or content; and two, when the bands had their own video content / engineer, their task was to facilitate

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STAGE LIGHTING / TRUSSING / SOUND / LED SCREEN

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each stage.
As the prepa an arm and a stage and a stag

As the stages were outdoor and very close to the sea front, they had to prepare for high winds. Samuel's GreenStone team advised Ashish Saxena and Jay Mathuria, Co-Founder & Director, Spectrum Audio Visualz to import some specialized safety equipment. The area below the screens was kept clear. In case of high winds, the screens could be lowered, and the load taken off the Roof Truss and shifted onto the ground.

To bring the audience as close as possible to the stages, the **LED IMAGS** were cantilevered and flown from the front of the truss. The cantilever was balanced by a system of steel wires and water ballasts.

Saxena also was relieved to run the video signals through the servers and not directly onto the screens from each video engineers' laptop.

Different video playback softwares were used. A simple plug-in-and-screen resolutions could be adjusted to deliver a clean crisp image from every diverse input source a band carried.

# LIGHTS

Always the biggest element of a rock stage. However complex an audio or video setup is, the advantage is that usually all the technology is centered in two or three physical locations.

Consoles, speaker towers, and LED screens.

Lights are everywhere. Distributed over every corner of the stage. Sophisticated signal wire connected to each point and a separate power cable to each unit. One glitch and you lose a lot.

With love to my sound brothers – if one out of your many sound boxes decides to go to sleep – nobody really notices – apart from your feedback systems.

each engineer to install, play, test, and playback the content across

content sheduled for Lollapalooza at all of the festivals' four stages

The Wolves' teamwork was perhaps the most detailed and intricate work on the project. Each video screen had to be precisely detailed, and the tech specs were sent to each Video Jockey / Content Creator of every band on each stage. This enabled each band to work on their own visuals and create unique looks.

the Stages' installed screens during their set.

Each stage was set up to be plug-and-play. Each VJ could plug into their stages' video systems, and within a few minutes, check their entire set of visuals on the preview monitors. The system was robust, and each video engineer was confident that what he saw on the preview monitors during set up – was what he would see on the main screen during the show.

Joshua D'Mello raved about a bit of versatile equipment, the **Barco E2 switcher**, that had made their lives very easy, as it offers all the options needed for a visual guy to create magic in a festival environment.

Some bands did not have their own video guy, and one band's video technician could not make it to the city in time for the show. At the last minute, the team at Wolves was prepared to step into that role and create some wonderful images behind the band.

Dmello credited the **Notch** system that he's grown to love to be able to step up so quickly. Reen's passion for his work is also palpable.

The Wolves team also picked up whatever visuals and graphics they could get their hands on and created some wonderful visuals to be played on the screens when that was not active.

LED Screens were provided and installed by **Ashish Saxena** of **Spectrum Audio Visualz**. Ashish spoke of the challenges of flying almost two tons of LED walls on



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# **KF210**

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#### **KEY SPECIFICATIONS**

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- Isophasic Wave Guide
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- Freq. Response: 55Hz 18kHz
- Nom. Beamwidth: 90° x 12°





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One light goes out – 10,000 people notice, all at once. Same goes for a video

So, a big shout to the ever-smiling **Ashish Mehta** and his team for climbing up into every nook and cranny of the stage trussing, placing and wiring the lights.

Joyden, Akbar and Shamjyth set up the lighting systems and the two massive IMAGS that created the visual delight.

Cheers to Vikas Dalia of Stage Engage who set up lights on one of the four stages

The first thing Ashish said to me (with an even bigger than usual grin), was that he wanted NO generic lights, only branded lights as per specification of the Lollapalooza India team.

All software matches. All color wheel and channel matches.

That means 50 odd lighting programmers can patch this up remotely on their visualizers in the comfort of their own studios and dream up looks thousands of miles and months before the actual stage goes up.

Possibly that's the first time this has happened on this scale in India. The lighting inventory was generous by any standards. Yet, some bands asked to install additional inventory to make their set look a little different and stand out. All of this was handled by young Naveen Deshpande, Founder & Director, Ground Control along with his team. Deshpande's team designed the lighting layout over all the four stages. Then remained a direct point of contact for all guest lighting designers.

The lighting teams laid out kilometers of cable, labeled every one of them, and plugged every cable into the right universe and so, into the desk. Think about that - 300 odd lights multiplied by four stages.

Joyden spoke about the challenges he, Akbar and Shamjyth took up. They spoke of the risks and safety features employed to hoist some very heavy lighting high into the trusses. Some by brute force and some by using cherry pickers and other mechanical horses to reach the inaccessible spots.

#### GENERAL SUPPORT SYSTEMS

With so many people swirling about such a large venue, safety and security are at the top of the mind.

So, a shoutout to the planning and execution around the venue. The General Path Lighting from entry to the stage past all the food stalls, interactive areas, and experience zones to the CCTV camera teams that kept a watchful eye over every dark corner.

To the safety teams, fire marshalls, first aid teams, and infrastructure teams for staying vigilant to ensure everybody stayed safe and smiling.

A mammoth exercise. Planned well in advance. Executed flawlessly.

#### **PYROS**

The SNL Pro team sent 100s of pyros, confetti blasts, and smoke flares to keep all of us engaged and hooked onto the stage.

What a massive exercise. So many talented, committed people coming together to do what they absolutely love on a scale that was bigger than anything seen before in this genre.

The one thing that totally stands out is the TIME so well spent on planning every detail and relentlessly following it through to execution. Each experienced professional was contracted months in advance. Samuel was very clear with me on one issue. From the day he started his career a few decades ago he has insisted on our local vendors using local equipment to meet international standards. The production team worked closely with the local equipment owners to list and approximate their gear, be it lights, sound, video, truss, power, pyro, and the like. They then created packages per stage and took them to Lollapalooza International. It is a tribute to this thoroughness that all equipment was approved by the foreign teams. Contracts were negotiated, then came the mammoth task of figuring out where each piece of equipment would be installed. Drawings and layouts were made so that our local teams would know exactly where to place everything from generators – that would not move for weeks - which means refueling on site to dressing rooms for artists, restrooms and a conveniently located food tent that served the production staff on set for days. No precious man hours were lost as teams dispersed for food, and more importantly, teams felt cared for. The same drawings and layouts sent to all the foreign teams and the bands, so every artist's team knew exactly where to find what they were looking for. When their tech teams plugged into the house systems - everything was exactly where it was promised Across audio, video, sound, trussing, and pyros, these teams just did not have the luxury to say 'Mistake may cable yahan se to nahi jaa payega.' Lollapalooza India was indeed a great event. The learning for all

With a combination of cream-of-the-crop sound, video, and lighting solutions in place, Lollapalooza captured the visitors' attention in a never-seen-before manner

Most of all, you need - TIME to be GREAT.

Image Courtesy: Fleck Media

of us was this - All your skills, all your experience, all your talent can



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**Genelec Loudspeakers Enrich Home Theatre Project In Southern India** 

In Karur, the textile capital of the Indian state of Tamil Nadu, one of India's premier industrialists, made his fortune manufacturing high quality mosquito nets that are now exported all over the world – recently built a luxury mansion for his family that includes a high-class home cinema fully equipped with Genelec loudspeakers.

he mansion – including the cinema – was designed by the PR Design Group, well known for its work in the high-end residential market. However, when it came to equipping the cinema space, the client turned to entertainment and smart home automation specialists, **Cinespa** by **Mark Technologies**.

Cinespa owner, **P.R. Srenivasan**, aka **'Sreni'**, recalls that when he met the clients at the Genelec showroom – which features an impressive Genelec immersive loudspeaker system – they hadn't actually budgeted very much to equip the new theatre. However, once they'd experienced the demo, there was no going back. "The

immersive demo with Genelec loudspeakers was definitely a clincher," says Sreni. "The tonality, performance and the history of Genelec as a premium brand in prestigious global studio and AV installations – including home theatre applications – convinced our client that this was what he wanted for his home theatre."

#### The Challenges:

Nevertheless, Cinespa was faced with a number of challenges when it came to design and configuration. "The client would have preferred to implement both Auro 3-D and Dolby Atmos formats – but actually, due to the A/C duct positioning, we didn't have sufficient height for loudspeaker placement for Auro 3-D, plus there was no rack space available outside the room, so our only option was for an actively powered system. Genelec was therefore the ideal solution in a Dolby Atmos 9.1.6 format."

"The only place for any equipment was beneath the screen, so we had to do a lot of work to ensure there was sufficient ventilation," explains Sreni. "It wasn't easy but I'm very pleased with the final result."

#### **Equipment Installed In The Home Theatre:**

Cinespa installed a total of sixteen Genelec loudspeakers, including three S360s housed behind the screen which act as the L/C/R system. The S360's fusion of reference-quality performance, high SPL and compact size makes it perfect for demanding film, post and music production, including Dolby film mixing – and



Genelec sound system, which includes the S360 powered studio monitors, AIW26 in-wall loudspeakers, 8340 smart active loudspeakers, and 7382 subwoofers, raise the acoustic quality of the plush home theatre in Southern India

thus ideal for cinematic audio reproduction in a Dolby Atmos setup. Six powerful AIW26 in-wall loudspeakers blend seamlessly into the environment for transparent surround sound at the sides and rear of the room, whilst six 8340 smart active loudspeakers are installed in the ceiling to complete the immersive 9.1.6 configuration. The 7382 subwoofer can be found beneath the screen along with all of the processing and media automation equipment, neatly hidden behind an elegant wooden screen.

The rest of the room is equally high spec with state-of the-art acoustic treatment on the walls and ceiling from **Vicoustic** in Portugal, Sony projection equipment, intuitive media automation and control from **Casadigi** and lighting control from Lutron. Completing the experience is plush, raked seating from **Moovia** in Germany featuring electric adjustable footrests and backrests, finished in premium Italian leather.

"I'm very proud of what we achieved in this beautiful home theatre," concludes Sreni. "The Genelec sound system delivers a matchless immersive audio experience that does full justice to the luxurious, ultra-high-spec environment. During our first detailed meeting and demonstration at our immersive showroom, the whole family opted for the best configuration with absolutely no compromise – they loved the natural sound of Genelec loudspeakers and insisted that nothing else would do. The family was recommended the best solutions in the world – both from us and from the architect – and they approved everything. It was a privilege to work on such a prestigious project which is surely one of the best home theatre rooms in India."



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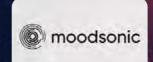












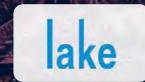












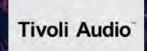


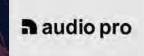














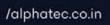






MICROPHONE | HEADPHONE | CONFERENCE SYSTEM | VOCAL PROCESSOR | MIXER | GUITAR PEDAL | DIGITAL SIGNAL PROCESSOR | AMPLIFIER | SPEAKER







/alphatecAV





#### LVPEI HEALTH INSTITUTE TRUSTS SHURE FOR BEST-IN-CLASS AUDIO FOR MEDICAL

**SESSIONS** 

LV Prasad Eye Institute (LVPEI), Hyderabad, a World Health Organization Collaborating Centre for Prevention of Blindness, has chosen Shure Microflex Advance Ceiling Array Microphone to ensure exceptional audio during live case discussions and practical sessions. The Shure Ceiling Array Microphone will enable doctors, surgeons, and practitioners to focus on the most critical situations, without worrying about any technical disruptions.

The Microflex Advance array line combines beamforming technology with advanced digital signal to deliver unmatched performance for AV conferencing. It also offers voice lift and camera tracking that helps medical teams to teach and practice with complete freedom. Thanks to the new audio system installed in the Institute, doctors will have exceptional audio without distractions such as holding a microphone, a runner boy for passing it, dealing with cables, or annoying echo sounds because in the healthcare industry, every detail matters.



LV Prasad Eye Institute (LVPEI), Hyderabad

The team in charge of upgrading the current equipment was impressed by the benefits the Shure Microflex microphones were bringing to the corporate environment. Their goal was to find a solution that could provide high-quality audio needed for discussing live cases and practical sessions, while respecting the aesthetics of the room. Shure's Ceiling Array Microphone surpassed their expectations and was the perfect system for their particular requirements.

Rathinam Thyagaraian, Head, Biomedical and Center of Technology Innovation at the LVPEI said: "We are highly satisfied with the Ceiling Array Microphone as it offers exactly what we needed: best-in-class audio, voice lift and camera tracking without negatively impacting the space. Our surgeons and doctors require the most innovative technology and Shure gave us the perfect solution. We cannot be more excited about it." Established in 1987, the LVPEI has ten active arms in its areas of operations: Clinical Services, Education, Research, Vision Rehabilitation, Rural and Community Eye Health, Eye Banking, Advocacy and Policy Planning, Capacity Building, Innovation, and Product Development. The Institute is managed by two not-for-profit entities - Hyderabad Eye Institute (HEI) and Hyderabad Eye Research Foundation (HERF).

"Our devices are built to be used and adapted to different applications. Shure Microflex Advanced Microphones have been very successful in the corporate and educational space, but we know they can deliver the best and most reliable audio when needed the most, regardless of the industry," said Devraj Panicker, Market Development Manager at Shure. "The LVPEI has an extraordinary mission to achieve, and we are glad that the Microflex Advanced Ceiling Array Microphone can help to make it happen".

#### CHRISTIE CRIMSON SERIES LASER PROJECTORS ILLUMINATE THE GATEWAY OF INDIA

Christie announced that its high-brightness Crimson Series 3DLP laser projectors are delivering big, bright visuals for a new light and sound show at the Gateway of India, an iconic arch-monument built in the early 20th century.

The mesmerizing spectacle has been put together to commemorate India's independence and 75th anniversary of the withdrawal of British troops from the country, as well as the contribution of Maharashtra in India's struggle for Independence. The projectors were installed and commissioned by **E Factor**, one of the leading event planners that provide end-to-end solutions for the creation of unique experiences in India. A total of eight **Christie Crimson WU31** laser projectors were used for this permanent installation.

"Over the past few years, Christie Crimson Series has breathed life into numerous landmarks across India, and we are well-versed with its exceptional specifications and capabilities," said **Jai Thakore**, co-founder and chief operating officer, E Factor. The projectors housed in enclosures are then fitted on towers positioned 100 meters (328 feet) away from the monument, ensuring that the projections are visible from a distance. To further enhance the visual experience, additional rolled-in screens are deployed on all three arches of the Gateway of India. This is the first time such an approach has been taken, resulting in a multi-dimensional and multi-layered experience that complements the existing façade of the Gateway of India.

**Rishubh Nayar**, Sales Director for India, Enterprise, Christie, commented, "We're thrilled that the Gateway of India



The Gateway of India is illuminated by five Christie Crimson WU31 laser projectors for this spectacular show

is illuminated using our Crimson WU31 laser projectors for this magnificent light and sound show, which commemorates Maharashtra's significant role in India's Independence movement. We extend our warmest congratulations to the E Factor team for creating an awe-inspiring spectacle that aptly showcases the full potential of our laser projectors, which have garnered a reputation for delivering exceptional results in various large-scale projection mapping projects across India."

Engineered to withstand the rigors of demanding, high-usage applications, the Christie Crimson Series projectors are built tough and feature an IP5X-sealed, solid-state laser light source providing years of reliable, low-cost and virtually maintenance-free operation. Equipped with 31,500 lumens, these high-brightness laser projectors produce bright and stunningly colorful images. Along with the ultra-fast processing of Christie TruLife electronics and built-in warp and blend capabilities of Christie Twist, they offer installation flexibility and amazing visual experiences.



# CONE SPEAKER



INDRA-1818 1800 Watts RMS 4.5"VC



**INDRA-155** 500 Watts RMS 3"VC



INDRA-751

100W RMS / Sens: 106dB±3dB







Booth NO: B-09

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# In A New Light: A Look At The Newest Revolution In THE INDIAN CINEMA PROJECTION INDUSTRY

# Additionally, a glimpse into the groundbreaking technology in making for the delivery system of film masters

Indian cinema has been a widely talked about, much written about topic, not just within India, but also globally. But the cinema projection market remains unseen, untapped, unexplored to a great extent. Think of it like talking about a monument's architectural beauty without mentioning the pivotal role its foundations play throughout the architectural process. This article explores the buzz surrounding the revolution in the Indian multiplex industry vis-a-vis cinema projection and offers a sneak peek into the latest disruptive technology that is set to metamorphose the way film masters are delivered to the theatres.



Alok Tandon, Co-CEO, PVR INOX Limited

ndia's first cinema hall started in 1907 in Kolkata by Jamshedji Framjee Madan, and was called the 'Elphinstone Picture Palace', to make movie-watching more accessible to the movie-loving crowd. This marked the birth of a theatre. With tickets priced at a fraction of a rupee to rocketing to sky-high prices, the business of movies has only bloomed over time, with single screen cinemas transforming and giving way to mammoth multiplexes for the ultimate moviegoing experience,



# **ELEVATE THE CLARITY OF SOUND**



courtesy a large portion of the crowd within the country who continue to profess an undying passion for the movies.

But this is just the tip of the iceberg. When one traces the evolution of the Indian cinema market, the demographics and the economics of it all, one finds that there is more than meets the eye. Inside a projection room that lies hidden in the corner of a theatre auditorium, every frame of a movie is transferred from the maker to the viewer via the projectionist, a medium who really brings a movie to life.

This projection room has singlehandedly witnessed a metamorphosis so massive, it deserves a story of its own. Which is why, this feature by *AV-ICN Magazine* intends to deliver a microscopic insight into the world of cinema projection, how it evolved, the present state of advanced projection that exists in the country, and how it ties into the evolution of the Indian cinema market, derived from the acumen of industry experts *Alok Tandon*, Co-CEO, *PVR INOX Limited*, *Sudhakar Danturi*, Technical Head, *Prime Focus*, and *Hariprasath*, Vice President, *Digital Cinema DNEG*.

#### **Bigger Multiplexes Need Advanced Projection Technologies:**

Cinema houses in India, especially single screen theatres, started out with analog lamp-based projectors. Apart from requiring regular maintenance of the lamps housed within the projectors, these lamp projectors were complex pieces, demanding master projectionists' attention and care at all times. But as the theatre business grew, multiplexes began replacing single screens across the country. It's not just the size of the theatre that increased manifold; as moviegoing gradually became a more immersive experience, the need for a better, more advanced projection system dominated the business.

Enter, laser projectors. Delivering a more stable light source than lamp projectors, requiring lesser maintenance than lamp projectors, and delivering an increased lifespan than lamp projectors as a result, laser projectors ensure accurate image clarity, a better visual experience, and most importantly, it provides a cost-effective option for multiplexes looking to offer more by investing less in the long run.

Explaining why a huge chunk of the cinema industry is gravitating towards laser

projectors over lamp projectors, Alok Tandon, Co-CEO, PVR INOX, shares, "Laser projectors can produce brighter images than lamp projectors and can maintain their brightness levels over time, whereas lamp projectors tend to dim as their lamps age. Laser projectors typically last longer than lamp projectors and require less maintenance and are sustainable, more energy-efficient than lamp projectors."

He further elaborates the reason behind PVR INOX leaning towards laser projection as against lamp projectors, "The cinema industry has started leaning towards laser

projectors instead of traditional lamp projectors in recent years. In lamp projectors, the light intensity diminishes over a period of time unlike laser projectors where it maintains consistency. Laser projectors are sustainable as they are efficient, reduce power consumption, minimize heat dissipation, and have a better operational efficiency. PVR INOX is regularly upgrading and replacing its projectors to keep up with advancements in technology to elevate the cinematic experience for audiences in India and part of its commitment to reduce the ecological footprint by pursuing sustainable activities towards decarbonization of its operations. The cinema chain made a conscious decision to migrate to laser projectors to provide a better viewing experience to customers and as part of its commitment to reduce its carbon footprint."

Hariprasath, Vice President, Digital Cinema, DNEG, echoes Tandon's response, stating that despite the initial cost consumption that laser projectors involve, when one looks at the larger picture, laser projectors are surely the better pick. "Maintenance-wise, laser projection is the better choice, despite the initial installation cost, which can sometimes be a little bit of a problem."

The story doesn't end there. Innovation is always in the churn within the Indian

cinema projection industry. With the advent of DCI-compliant laser projectors that replaced analog lamp projectors, laser projectors not only brought with them cost-effectiveness, sustainability, and longer shelf life, but also added security and expansive geographical reach with regards to movie streaming and distribution within the confines of a theatre. Tandon affirms, saying, "The projection technology has evolved from 70 mm and 35 mm analog projectors to state-of-the-art digital projectors. Within digital projectors, there are non-DCI and DCI compliant projectors. In DCI-compliant projectors, piracy can be more effectively monitored with robust copy protection, encryption and water marking processes. With the advent of digital projectors, the physical prints have become redundant as no 'Print' is required, making wider distribution of film content possible in a larger geographical area."

#### **Key Market Players In Cinema Projection In India:**

Advancement in cinema projection spurred from demand for better projectors, and this demand acted as a catalyst for the advancement of cinema projection. There is no denying that key market players within the projection industry stepped up to the task and disrupted the industry with newer, better innovations. According to both Tandon and Hariprasath, "Barco, Christie and NEC are the key industry players for Indian cinema market." With 4K laser projectors becoming the gold standard in cinema projection, the industry, on the surface, looks stable and prepared for future innovation in projection technology. But the reality is actually slightly different.

#### **Are LED Screens Making Projectors Obsolete?**

Today, LED is everywhere. From digital signage to corporate environments and residential TV screens, LED is captivating the imagination of individuals and businesses from all walks of life. How can the big silver screen be left untouched?

There is a general rule in the world of projection. Lamp is good. Laser is better. LED is the best. With arrival of LED screens in Indian theatres, the shine of laser projectors began to dim. **Samsung**, in the recent years, launched the Onyx Cinema LED, a high dynamic range LED theatre display, which ensures quality 3D sound

and images. The LED technology used delivers on-screen content at peak brightness level, better image consistency, and pitch-black colour, unparalleled power efficiency, space optimization combined with multi-sensory presentation and crisp, clear sound.

Does the rise of Onyx Cinema LED Technology mean that the future of laser projection is in the dark? The experts stand divided. While Tandon is all praise for LED screens and the revolution they bring with them, Hariprasath and Danturi is of a different opinion altogether.

Sharing more about PVR

INOX investing in cutting-edge projection technology such as the LED screens, Tandon states, "PVR INOX has always kept pace with the changing dynamics of technology globally and has LED screens in Delhi and Mumbai. The LED Screen is an innovative disruptive cinema technology, offering a projector-less cinema LED screen. The screen can deliver true colours with High Dynamic Range (HDR) support with greater vibrancy and accuracy with sharp contrast, higher levels of brightness and great viewing angles that are unaffected by ambient light."

As PVR and INOX, two of the largest theatre chains in India merge into a single entity, the future prominence of LED screens appears visibly bright. Tandon shares the roadmap ahead for PVR INOX post-merger, "For over two decades, PVR INOX have been at the helm of cutting-edge technology with auditoriums equipped with extra-large screens, surround sound and 3D systems, introducing viewers to world-class entertainment experience. As the largest cinema exhibitor in India and partnerships with international technology players in projection, sound, and 3D, PVR INOX would continue the culture of innovation for cinema bringing new technologies that are coming up in the global market."

The narrative, however, shifts, when Hariprasath and Danturi share their



Yes, LED screens have arrived. But in our market, they are few and far in between because they are not economically viable. The cost of installing LED screens is too high. For a normal projector, a theatre must spend INR 40-50 lakhs. But, to buy a single LED screen, the cost goes up to INR 1 crore. I am very doubtful that LED screens will catch up in the Indian cinema market even in the near future. Projectors are here to stay.

HARIPRASATH, Vice President, Digital Cinema, DNEG



thoughts on the emergence and threat of LED screens to the existing laser projectors, almost negating it, "Yes, LED screens have arrived. But in our market, they are few and far in between because they are not economically viable. The cost of installing LED screens is too high. For a normal projector, a theatre must spend INR 40-50 lakhs. But, to buy a single LED screen, the cost goes up to INR 1 crore. I am very doubtful that LED screens will catch up in the Indian cinema market even in the near future. Projectors are here to stay."

He justifies his point further, stating, "Even DCI-compliant lamp projectors these days are compatible with 4K shot movies. But, more than the compatibility, it is about the brightness and contrast of the projectors along with the distance from

the screen at which the projector is located. As per regulatory standards, nowadays, all lamp projectors should have a 14-foot lamp, but most of the theatres do not maintain that. Because, imagine if you reduce the length of the 14-foot lamp to a 12-foot lamp, the shelf life of that lamp will increase by 100 hours, and then you can save money by prolonging the replacement cycle of the lamp."

Speaks volumes about a theory that the only thing standing in way of Indian cinemas achieving peak projection perfection is the Indian cinemas' reluctant

nature of commitment towards investing more than 'just enough' in projectors – be it lamp-based or laser-based. Taking this into account, it is not a surprise that the future of LED screens in India is still a hot debate within the industry.

While the debate rages on, another game-changing technology is born to change the face of the Indian cinema industry.

#### A Technology For Wireless Transfer Of Film Masters:

Hariprasath is currently developing a technology that can facilitate wireless

transfer of film masters from server-to-server. Elucidating more on how the technology is set to transform the way movies are delivered to the theatre, Harisprasath explains, "The workflow and the technology that we're working on is more focused on the backend software. It's our proprietary software. Earlier, after the movie data was converted, they were sent to the theatres by a hard drive. So, essentially, the reels of a movie were copied into a hard drive and sent to every theatre by courier or cargo. Our new technology is developed in a box, like a server. We install this box in the theatres, and with the help of available wireless networks, we will upload the content present in the hard drive into a cloud server and then, into our software, which will be sent over to the theatre."

66

The projection technology has evolved from 70 mm and 35 mm analog projectors to state-of-the-art digital projectors. Within digital projectors, there are non-DCI and DCI compliant projectors. In DCI-compliant projectors, piracy can be more effectively monitored with robust copy protection, encryption and water marking processes. With the advent of digital projectors, the physical prints have become redundant as no 'Print' is required, making wider distribution of film content possible in a larger geographical area..

**ALOK TANDON, Co-CEO, PVR INOX Limited** 

Hariprasath shares how this technology is helping the movie distribution process financially, "Earlier, if the reels had to shipped from Mumbai to Delhi, it would take a day. But now, with this software in place, the entire process will be completed within two-three hours. So, economically and logistically, it saves a lot of time, money, and energy."

The technology is still under development, but Hariprasath is optimistic about the changes it will bring to the way the world ships, streams, and watches a movie. Once the technology is unveiled, AV-

ICN Magazine proposes to cover the technology in detail in one of the magazine's upcoming issues.

To summarize the evolution of the Indian cinema projection market is a mammoth task, as any reader with a trained eye for cinema projection systems will agree too. From analog lamp-based projectors and DCI-compliant lamp-based projectors to laser projectors to LED screens, and now, the emergence of wireless technology for a cloud-based transfer from film masters from one server to the other, the world of Indian cinema projection market is as vivid as the cinema itself – ever changing, ever evolving, and ever adapting to the demands of the customers it aims to entertain.







# BenQ LH730



#### - The Next Revolution In High Brightness LED Projection

Equipped with 4LED Light Source, the all-rounder projector ensures never-seen-before image clarity with increased lifespan

by Kairav Adhvaryu – Technical Manager, MNT Info Vision Pvt. Ltd.

enQ's 4LED High Brightness Projector – LH730 is a game changer in Education and the corporate customer segments. BenQ's 4LED Projection Technology which provides much better picture quality compared to what's currently available in the market.

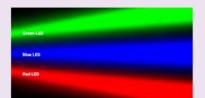
#### **Technology & Advantage of BenQ LH730**

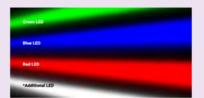
Majorly there are two three types of projectors commonly used in the Corporate and Education Segments – Lamps, LED and Laser.

Lamp-Based Projectors – This is one of the oldest technologies which reproduces images once the lamp is heated. The major challenge of using this technology was that it generates excess heat, has low Lamp life, is more susceptible to environmental factors such as Dust and Smoke and has low colour saturation and accuracy.

LED-Based Projector – To overcome challenges faced in Lamp based systems, LED projectors have many advantages such as better picture quality – high colour saturation and accuracy, longer Light Source life, and dissipates less heat compared to Lamp Projectors.

• The majority of the LED projectors come with a 3LED Projection system, while BenQ LH730 comes with its latest 4LED Based Projection system, which reproduces pictures using 4 LEDs rather than conventional 3 LEDs. These 4 LEDs are Red, Green, and Blue along with one additional green LED light source. With this, the projector provides an additional "Pump" LED to the 3LED ecosystem increasing the overall projection brightness by 8-12%.





3LED Projection system

BenQ 4LED Projection system

- Colours reproduced by LED Projectors are highly saturated and this gives rise to the Helmholtz–Kohlrausch Effect which increases the perceived brightness of the image by a factor of 1.5x 2.4x. As a result of the HK effect, the 4000 ANSI Lumens high brightness of LH730 is perceived as 6000-7000 ANSI Lumens high brightness by the naked human eye.
- BenQ LH730 comes with 20,000 hours of life span under normal usage conditions which even means the system will function perfectly for more than 7 years when used continuously for 8 hours a day. And when used in ECO mode the life span increases to 30,000 hours which means the system can function perfectly



#### **Key Highlights:**

- Up to 30,000 hours LED lifespan with no lamp replacement
- 98% Rec.709 colour coverage for greater colour saturation and precision
- Flexible Installation Features: 2D & Auto Vertical keystone, Corner Fit, and Digital Shrink
- Compatible with 4K HDR and HLG via dual HDMI 2.0
- Superior Contrast of 500,000:1
- Exclusive Picture Modes for Modern Presentations
- Image Calibration for Ideal Projection Alignment
- · Wireless Scalability for Enhanced Flexibility
- High Reliability, Easy Maintenance
- Centralized Remote Management

for more than 10 years when used continuously for 8 hours a day. This is almost 10 to 15 times the lifespan of traditional lamp-based projectors.

Considering the future, BenQ LH730 is equipped with 2 HDMI 2.0 Ports, an additional dongle to add a wireless casting functionality, LAN Port for controlling the projector through LAN Network with either BenQ's Patented Lan-based control System DMS Local or with other 3rd party Control processors like AMX, Crestron, and PJ Link Control systems.

#### **Conclusion**

- Excellent Picture Quality
- Suitable for Mid- large conference rooms and Smart Classroom Applications
- LED Based DLP Projector with very Less heat dissipation and low noise
- Wireless casting using an additional dongle
- Lightweight

#### **Suggested Improvement –**

• BenQ LH730 is majorly meant for the corporate and education segment, supports to pen drive, Hard disk through a USB port needs to be provided.

#### Wireless Conference System CS-W4C / CS-W4T



The microphone is of 108 MHz bandwidth. This feature allows more attendants to join the conference

#### CS-W4T

Power ON/OFF, Talk, Group, Channel, Fuequency, Sensitibity, RF Output, Key Lock REMOSET ID Pairing, REMOSET Setting



#### CS-W4C

Power ON/OFF, Group, Channel, Frequency, Sensitivity, Key Lock, Volume, Output Attenuation(XLR), Frequency Scan(ON/OFF), Antenna Power, Display Setting, Language, Remoset ID Number, Reoset Setting, Priority Setting





#### **Sonotone**

102, Savoy Chambers, Linking Road, Opp. Masjid, Santacruz (West), Mumbai 400054, India

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# HINO ENGINEERS Evoke The Glory of Indore's



Indore glows in a new light, as AV consultant Rhino Engineers and AV integrator Dhara Electricals, deploy dynamic lighting at Rajwada Palace and Mahatama Gandhi Town Hall

Two of Indore's historical landmarks – Rajwada Palace and Mahatma Gandhi Town Hall – have stood the test of time, attracting a massive number of tourists every year. This year, the two embodiments of Indore's cultural heritage were revamped with intelligent lighting, allowing visitors to actually view Indore's history in a new light. In this article, **Dip Patel**, Project Manager, Rhino Engineers, in a conversation with **AV-ICN Magazine**, reveals the technology and the team involved in the installation project.

ondly known as the Holkar Palace, as a tribute to the builders of the icon of royalty in Indore, the **Rajwada Palace** is an ode to the artistic intelligentsia of the Holkar dynasty, an embodiment of the dynasty's love and wisdom of their history, heritage, and culture. On the other hand, the **Mahatma Gandhi Town Hall** in Indore is a towering structure constructed in an Indo-Gothic style. The front façade of the Town Hall also functions as a Clock Tower, and the Central Hall of the building is massive enough to accommodate upto 2000 people, which serves as an exhibition venue for several Indian trades and arts.

The Indore Smart City Development Limited (IS-CDL), a civic body focused on redeveloping the city as a Smart City, aimed at increasing the tourist footfall at the above-mentioned historic destinations. AV consultant Rhino Engineers and AV integrator Dhara Electricals were tasked by the ISCDL to adorn the structures with intelligent, dynamic lighting and increase its appeal in the realm of Indian tourism.

**PALM + AV-ICN** explores the concept, the creation, and the execution of the project.

#### The Client's Brief:

**Dip Patel**, Project Manager, **Rhino Engineers** shares the brief the company received from the client, "The requirement of Indore Smart City Development Limited with regards to Rajwada Palace and Mahatma Gandhi Town Hall in Indore was to convert the structures into something filled with advanced, technological grandeur, with projects the likes of Statue of Unity in Gujarat serving as an inspiration. After sharing our initial designs, we were relieved that the client was on the same boat as us when it came to our ideas and concepts. Of course, the identity of our project is so different, and we think our installation takes into account the importance of the history, heritage, and culture that Rajwada Palace and Mahatma Gandhi Town Hall stands for."





Imbued with warm white light, the Mahatma Gandhi Town Hall looks every bit resplendent – as it should be

#### **The Initial Concept:**

**Narendra Naidu**, Chairman and Managing Director, **Rhino Engineers**, explains the significance and the impact the right lighting has on any venue. He comments, "The lighting concept for the Rajwada Palace needed to be illuminated with attractive and vibrant lights which have been developed with a glimmering array of installations, figures and optical illusions. For the Mahatma Gandhi Town Hall, Rhi-

no Engineers was tasked with decking the venue with warm white colour. He shares, "Lighting is an integral contribution in any architectural and façade/landscape environment design. Lighting is essentially a nocturnal makeup that can be used to bring attention to the façade of interest and turn potential eyesores into works of art. Lighting can create a unique and memorable experience. Well-planned lighting can connect places and stimulate night tourism."

The lighting pattern decided for the Rajwada Palace was as follows:

- Monday to Friday: To illuminate all the floors (from ground floor to the 7th floor) of the Rajwada Palace in simple warm white colour, followed by a full facade illumination for 5 minutes.
- On days of national importance: To illuminate the Rajwada Palace with the colours of the Indian Flag.
- On Saturdays and Sundays: To illuminate the façade of the Rajwada Palace with vivid colours and patterns, changing every 5 minutes.

#### **Challenges Faced During Execution:**

No big feat has ever been achieved without big challenges. Patel talks about the challenges the team at Rhino Engineers faced while executing the lighting installation for the venues, "There were a number of challenges for this project. Rajwada Palace was built in 1776, which makes it almost two centuries old. So, the luminaries' placement & fixing with cable/wire laying posed major challenges in the project. Also, as per the

ASI norms, we weren't allowed to drill within the structure."

He further shares, "A majority of luminaries designed are on different angle, wattage & lance angle, which did not suit the requirement. As readymade products did not satisfy our needs, we did R&D to get the optimized and desired product."

But the challenges did not end there. Patel goes on to elaborate about one more

(Continued on page 54)



(from L-R): Kapil Nama, Electrical Engineer, ISCDL, Dip Patel, Project Manager, Rhino Engineers, Narendra Naidu, Chairman & Managing Director, Rhino Engineers, Sunil Dubey, Executive Engineer, ISCDL, Minesh Mehta, Director, from Dhara Electricals, Arvind, Project Manager, Dhara Electricals

#### **LOCATION SOUND RECORDING**

#### **HOW I STAY PREPARED FOR MY OUTDOOR SHOOT**

By Cheerag Cama, Freelance Audio Engineer

was recently shooting in Agra for a Hindi feature film. Some thoughts and observations from my 40-day outdoor session.

Agra is quite a noisy city. The honking on the streets is very annoying. A lot of the locations are city streets which are very narrow and very noisy and as soon as the unit comes on location, the local crowd gets all excited and roads get clogged and cause a bottleneck, which in turn causes a traffic jam. And the honking just increases, which is exactly what we don't want! But that is life on a real

Now on this shoot. I have managed to get myself a wireless video monitoring system for the two Sony Venice cameras that are being used. Wireless video is a fantastic tool to have. We have the Vaxis wireless video receiver with a touch screen monitor. I can easily swap between the two cameras and I can see TC and audio levels going into my Sony Venice cameras. On playback, I can monitor playback audio coming off the cameras. It's superb. Even in crowded places, like markets and streets with lots of public, I can always have a picture reference in front of me. No need to lay BNC cables in crowded places. At times, on crowded streets, we shoot without calling for ROLL SOUND/ ROLL CAMERA/ACTION. So with my personal video monitor, I know when the cameras are rolling even if we are shooting discreetly. (Tip: I keep my audio buffer size to the max - 10 seconds - and that has saved me a couple of times).

In crowded locations, where it is sometimes difficult to communicate with other crew members, I mic the walkie to one of my recorder inputs, and keep the walkie on the direction/production channel. So, I know exactly when the artists are walking on set and when we are going for a take, because I'm listening to the walkie chatter on my headphones.

The current DOP is using two cameras at all times, so booming is difficult as one is normally wide. But these are the demands of the new way of working. Shooting with two cameras means productions are getting more shots captured in one day and having fewer issues with continuity.

So here are some other things that I am doing on set.

When I can't get the boom mic in po-

(MixPre10T) ready in a bag setup with one Lectro receiver. This recorder has helped me in difficult situations when I can't get my regular cart setup in small, confined spaces, or when the camera is rigged to a car and it's not really required to hook up the main recorder as we are only recording ambiences. So, the MixPre in the bag is prepped up at the start of day with folders made, tone

recorded and it's kept ready to go at

Over the years, the cart has become heavier and heavier with more and more gear being added. A trend which I want to change. I want just what I need to be in front of me - my recorder, my receivers, antennas, my IFB Tx, a TC generator, my headphones, my iPad, and my video monitor. And the batteries to power the gear.

sition over the artist, I use my two boom mics as a Left and Right Stereo pair and pick up the wide camera perspective and bleed that into my wireless lapels. And this stereo ambience with lapels panned centre sounds very good. Not everyone will agree with me on this though

I now also keep a small recorder

short notice.

When shooting across two days (e.g. 2 PM to 2 AM shift), it helps to create a CUSTOM project folder on the MixPre, rather than a DATE project folder, as recorded files of one shoot day then do not get spread over two folders which could lead to confusion in post.

I have a second IFB tx permanently

connected to my porta bag. So if I switch from cart to bag, all I need to do is switch off my cart IFB tx and switch on my porta IFB tx and the cameras and all ifb's start receiving a signal from the porta setup without any difference to them.

So, my porta kit is:

- MixPre10T
- One Lectro receiver
- All running on an NP battery with an Audio root distributor
- One headphone (permanently on porta setup)
- · One hand mic to record announcements to the mix pre.
- One IFB Tx (on same frequency as my cart ifb tx)
- One Deity TC1/Tentacle. (Better if we can have a dedicated TC device as the porta setup can be unused on set for hours at a time and then suddenly, you want to roll on it and if the TC which was jammed in the morning is reset, then we need to jam TC again.)

The whole point of this system is that you can quickly move from cart to porta set up immediately.

My porta Lectro receiver is an extra receiver that is tuned to my Boom mic plug on. So I can use my boom mics immediately from cart to porta without having to change anything.

If I could have extra receivers, then even my lapels could be ready on the porta setup.

Every morning, when the shift starts, I need to get my cart setup prepared, all mics checked, folders made, TC jammed, user bit set, space on cards checked, and I'm all ready to roll.

Then I have to set up my porta cart and do the same procedure, make folders, check space on cards, jam TC and set up user bits. Being prepared is the best way to begin the shoot.

There have been times when





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we are shooting with a moving vehicle. And though the vehicle is not moving a great distance, the receivers on the cart may go out of range. That is when the porta setup comes in handy as a backup safety recorder. If the porta setup is hidden in the moving vehicle, then it is always in range of the wireless mics and if the receivers on the cart lose range, you still have some back up recording happening.

I still need to get two Tentacle Track E recorders - something with the ability to record a lapel in 32-bit float - something small that can be hidden easily. No levels to worry about. Something small enough to put on talent (or hide somewhere nearby) during action sequences and not risk damaging the bulky Lectro Tx or hurting the artist doing stunts

On a film shoot, every other

department is normally focussed on getting the picture RIGHT. Once the camera is ready with lighting and actors are ready, no one wants to wait for anyone else. they just want to start rolling. Hence, the Sound team has to pre empt everything as far as possible.

So, one has to be constantly alert to things like:

- Are all wireless mics switched on?
- Are all batteries okay?
- Is mic placement okay?
- Is the boom position planned?
- Are any shadows going to come
- Are we disturbing the artist by being too much in his or her eyeline?
- Do any air conditioners / coolers etc need to be switched off?
- Is the lock up team ready to lock up the set?

All these things happen in the few seconds before a take and the sound

department should try its best to not cause the director and the artists to move out of their zone once they are ready for a take.

Since the time we have started shooting with digital cameras, one of the biggest problems we face on set nowadays is:

- no rehearsals.
- · let's try a take
- keep rolling

All these make life difficult for the PSM and his team to record good sound on set.

My focus now is to make my cart as lean and flexible as possible - something which can be moved easily. The trend has been to keep all the equipment needed by the PSM on his cart. Over the years, the cart has become heavier and heavier with more and more gear being added. A trend which I want to change. I want just what I need to be in front of me - my recorder, my

receivers, antennas, my IFB Tx, a TC generator, my headphones, my iPad, and my video monitor. And the batteries to power the gear.

I want all my other gear to be on a follow cart. All the wireless lapels and Tx, all the IFB receivers and headphones, all the shotgun mics, all the rigging gear - everything else that is needed on a shoot, I want to keep on a follow cart - always near me. I may not always need everything that I have in my kit all the time, but I definitely need it to be near me at all times, because you never know what gear you are going to need in a shot. In fact, things can change from take to take.

Film crews need to move fast, work fast! Being quick to react to ever changing situations on set is very important. It's this that can make a big difference between recording sound on set and recording GOOD and usable sound on set.

#### RHINO ENGINEERS EVOKE THE GLORY OF INDORE'S RAJWADA PALACE...

(Continued from page 51)

challenge – just this time, it was more human than technical. He says, "This project included a number of stakeholders such as the agency, government departments, and local authority. We had to make sure that all of them were on the same page when it came to strategic decisions, which required a fair bit of coordination. Also, the time period for the project is important, but we overcame the challenges and it was completed within four months."

#### **Words of Praise:**

The Rajwada Palace shines in all its glory, courtesy intelligent, dynamic lighting from Signify India that adorns the façade

Everyone involved in the dynamic lighting project seemed impressed with the conceptualization and execution of the same. **Pratibha Pal**, (IAS) Commissioner of Municipal Corporation, Indore, Madhya Pradesh found both simplicity and style in the way the lights transform the ambience of the structures, "I strive for two things in design: simplicity and clarity. Great design by Rhino Engineers is born of those two things."

**Divyank Singh**, (IAS), CEO of Indore Smart City Development Limited, corroborates Pal's words as he shares, "Tourism experiences utilize all human senses in a variety of different ways. Notably in the nightlife tourism industry, vision is integral as it accentuates the beauty and essence of the surroundings. Therefore, the understanding of lighting perception within the tourism industry can only provide a future where light quality and efficiency are utilized to provide the ultimate tourism experience. Rajwada Palace's and Mahatma Gandhi Town Hall's dynamic lighting installation can lead to discovering more about the importance and the impact lighting has on the tourist experience."

**Sunil Dubey**, Executive Engineer, Indore Smart City Development Limited, complimented the unique lighting design concept at both the venues. He shares, "AV consultancy Rhino Engineers has developed and installed a unique intelligent lighting design concept in collaboration with AV integration company Dhara Electricals while following all the guidelines laid out by the ISCDL, and still managed to execute the concept in practice in just four months."

**Kapil Nama**, Electrical Engineer, Indore Smart City Development Limited, elucidates how lighting can change the way a visitor views a façade, "Lighting affects everything light falls upon. How you see, what you see, how you feel about it, and how you hear what you are hearing – everything. The consultant and the integrator monitored the entire installation process very effectively and the fine result,

born out of team work, dedication, and hard work, reflects in the way Rajwada Palace and Mahatma Gandhi Town Hall's structure glows in the aura of intelligent, dynamic lighting."

**Kinjal Kumar**, Electrical Engineer, Indore Smart City Development Limited, concludes, "Design is defined by light and shade, and appropriate lighting is enormously important. Consultant Rhino Engineers and integrator Dhara Electricals have done the excellent work in this regard."

#### **Inventory:**

The inventory for intelligent lighting installed at Rajwada Palace and Mahatma Gandhi Town Hall included entirely of Signify India (previously known as Philips Lighting). However, numerous products from the brand were used to complete the lighting installation. They are as follows:

| DESCRIPTION  | QTY | OEM Make & Model |
|--|-----|------------------|
| Projector Light 15-Watt, 3000 K, 1000-1100 Lumens                  | 122 | BVP 323 24 LED   |
| Projector Light 22-Watt, RGBW, 1500 Lumens                         | 76  | BVP321 12LED     |
| Linear Wall Washer 12-Watt, 3000 K, 900 Lumens                     | 88  | BCP381 12LED     |
| Linear Wall Washer, 20-Watt, RGBW with Tuneable white (2700-4000K) | 371 | BCP386 60LED     |
| Linear Wall Washer, 30-Watt, RGBW with Tuneable white (2700-4000K) | 4   | BCP 382 24 LED   |
| Projector Light 50-Watt, 3000 K, 3000 Lumens                       | 82  | BVP 323 24 LED   |
| Linear Flexible 15-Watt with 1000 mm Rigid Profile 3000K           | 790 | BGC301 1100LM    |
| Surface Mounted Downlight 12-Watt, 3000K                           | 144 | DN590B           |
| Window Light, 12-Watt, 180 'C Window Light, 3000 K                 | 66  | BCP 390          |
| Track Based Spotlight 24-Watt, 4000 K                              | 40  | RCS 170 1C L1    |
| DMX Splitter & Amplifier   | 24  | RDM6-ZXP399      |
| DMX Controller   | 1   | Zxp 399          |
| Multi-Protocol Converter   | 8   | DMX 512          |

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**CROSSOVER FREQUENCY** 

AC POWER REQUIREMENTS INPUT CONNECTOR POWER CORD **NET DIMENSION (WXHXD)** 

1 Reflex 2500 5000 30Hz preset dependant 1x18 - 4 coil 137 / 143 half-space omnidirectional

2 x XLR with loop 5 / 16,4 606x700x720 143lb / 65Ka

**BUILT-IN AMPLIFIER LF/HF** BUILT-IN AMPLIFIER PEAK LF/HF FREQUENCY RESPONSE LOW FREQUENCY WOOFER HIGH FREQUENCY DRIVER MAXIMUM SPL CONT/PEAK **DISPERSION INPUT IMPEDANCE** 

CROSSOVER FREQUENCY

AC POWER REQUIREMENTS INPUT CONNECTOR POWER CORD NET DIMENSION (WXHXD)

600 / 300 1200 / 600 65Hz - 20kHz 4 x 6,5" / 1,5" coil 1 x 1,4" / 2,5" coil 128 / 133 90°x20°

640 VA XLR IN / OUT 5 / 16.4 612x360x397





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#### Pls Led Par 5403 Indoor

- Light source: 54PCS 3W LEDs (R12 G14 B14 W14) TX ultrabright LED'S
- Lens angle: 15º, 25º
- Channel mode: 8 DMX channel mode
- 0-100% linear dimmer
- Function: colour mix, automatic colour change, built-in program and strobe effect with adjustable speed
- Sound controlled via built-in microphone
- Adjustable sound sensitivity
- LED Display, easy to control
- Control: auto, sound active, DMX512, software (connect to
- Overheating protection



#### Pls Led Par 5403 Outdoor

- Light source: 54PCS 3W LEDs (R12 G14 B14 W14) TX ultra-bright
- Lens angle: 15º, 25º
- Channel mode: 8 DMX channel mode
- 0-100% linear dimmer
- Function: colour mix, automatic colour change, built-in program and strobe effect with adjustable speed
- Sound controlled via built-in microphone
- Adjustable sound sensitivity
- LED Display, easy to control
- Control: auto, sound active, DMX512, software (connect to computer)
- Overheating protection



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# EverGlow LED Experience Centre Opens Doors in Mumbai, India

Ushering the 'new age of visual communication', **EverGlow LED** has been at the forefront of LED display technology and LED display solutions in India. Conceptualized, designed, manufactured in more than 16000+ sq. ft. of factory space, EverGlow LED's LED offerings range from Indoor and Outdoor LED Display to Small Pitch LED Display and Creative LED Display to Transparent LED Display. With such innovation in LED display to offer to its customers, EverGlow recently opened a LED Experience Centre in Mumbai, India. **Inderjit Kataria**, Founder and CEO, EverGlow, **Ansh Ahuja**, Director, EverGlow, **Manmeet Singh**, Director, EverGlow step into a conversation with **AV-ICN magazine** to reveal more about the what the LED Experience Centre is poised to deliver to its clientele.

verGlow LED, a company defining the new age of visual communication with more than 15 years of experience in providing LED display solutions, launched the LED Experience Centre in Mumbai in April 2023. The new experience centre, located in SagarTech Plaza, Saki Naka, Andheri East, aims to provide world-class experience to the visitors with advanced indoor and outdoor LED display systems.

Commenting on the launch of the new experience centre, **Inderjit Kataria**, Founder and CEO, EverGlow, enthusiastically states, "With EverGlow expanding rapidly, we have introduced our new experience centre for the ease of our customers and clients to visit and get a realistic experience of our products. The experience center helps us to keep showcasing our new product launches in this rapidly growing market. Architects, AVSIs, consultants, as well as corporates can have a hands-on experience by visiting our Experience Centre."



As visitors enter the EverGlow LED Experience Centre, they witness some of the most essential products of the centre, namely, P2.5 Indoor Front Service, Size - 8x4 Ft, P3 Indoor, Size - 9x6ft, Cube Screen - Size -2 x2 ft, COB P1.5 indoor 135"



The EverGlow LED Experience Centre's highlight product is the COB P1.5 IN-DOOR LED SCREEN, SIZE - 135". Sizes available - 108", 135", 163", and 216"

Transparent P3.91 Indoor & Outdoor, Size - 7x7ft

The Experience Centre showcases several latest product categories for clients looking to expand their LED experience. "We are showcasing a variety of different categories of Indoor and Outdoor LED screens such as P1.5 (COB), P2.5 Indoor, P4 Outdoor, Transparent screen, Pixel Mesh screen, Cube Screen, Circular Screen, and Special Shape Screens. Our Outdoor Model LED Screens are available from 4000 to 14000 Nits Brightness," states **Ansh Ahuja**, Director, EverGlow.

"The aforementioned categories cater to Indoor, Outdoor, DOOH, Retail, Hospitality, Devotional, Educational institutes, Universities, Corporates, Home Theatre, XR for Studios, and more."

#### **Product Focus at LED Experience Centre**

The EverGlow LED Experience Centre's highlight product is the **COB P1.5 INDOOR LED SCREEN**, SIZE - 135". Available in sizes 108", 135", 163", and 216".

Emphasizing on the product in the spotlight at the EverGlow LED Experience Centre, Ahuja, states, "One of our USP product is the P1.5 (COB) indoor screen, being the latest in the industry offering high contrast, higher sharpness, wider viewing angle. It is available in sizes of 136", 165", and 216" in P0.4, P0.6, P0.9, P1.2, and P1.5. We also have on display special shape screens making the visitor understand the flexibilities we can offer."

Edging the current competition with confidence, the EverGlow LED Experience Centre provides an authentic LED viewing experience to the clients with the 'Make in India' practice. "Post Covid-19, we have expanded our 3000 sq. ft., assembly unit to a 10000 sq. ft. manufacturing unit in Vasai, producing almost 60% of the components in India and soon will be reaching our goal of 100% production. This will help us deliver the product in a much shorter time frame," says **Manmeet Singh**, Director, EverGlow. "Some of our major installs include 80 screens at the Balaji Temple in Tirupati, AIG Hospital in Hyderabad, Hotel Taj President in Mumbai, Coimbatore Airport, various locations of Mumbai Metro for TIMES OOH, Decathlon stores pan India, and more."

#### **EverGlow Experience Centre Roadmap for LED in India**

The EverGlow LED Experience Centre enables the company to deliver an unparalleled experience to the visitors with hands-on demonstration of the products and their key features in detail. Singh says, "It helps in representing a premium standard of personal contact and critical visual opportunities." Strategizing the roadmap for LED in India, Kataria concludes, "If you see, the purchasing power is increasing rapidly in India even after the pandemic, which gives a positive outlook for businesses overall.

Moreover, India is inclined to digitalize in every manner it can, and LED screens is a big part of the upcoming transformation. The experience centre will help us strengthen our progress to grow as the trust of the customer develops while understanding the product which is in front of them rather than online or just by explanation - that could be much more helpful."



### ams OSRAM Expands Product Range For Entertainment & Stage Lighting With Two New Lamps

Keeping in line with the incoming trends and technologies in the world of professional lighting, **ams OSRAM** one of the leading companies offering immaculate pro lighting solutions to customers globally, expanded its product range for entertainment and stage lighting with two new product profiles – the SIRIUS HRI PRO< VALUE, and CORE series of reflector lamps and NEOLUX 350W lamp and 380W lamp. In this article, **Antonio Marino**, Global Sales Marketing, ams OSRAM, reveals the value these two new products bring to the table, and why, they have instantly become a preferred choice for clients around the world.





Antonio Marino, Global Sales Entertainment, ams OSRAM

ams OSRAM aims to maintain the leading position in global entertainment lighting.

This is why the brand is back in the market, after more than three years of the pandemic, with new products and new solutions, to face the challenges that large events and professional applications pose.

In the century where everything is increasingly becoming digital, ams OSRAM continue to invest and introduce new products in traditional discharge technology, useful in all applications within the Entertainment market.

ams OSRAM continues supporting the entertainment industry and together with industry players and lighting designers, the brand continues to provide excellent experience and innovation to match the market requirement and the industry demands.

The world is finally getting back to normal, therefore, not only broadcasting market is stabilized and growing due to the request of streaming platforms such as Netflix, Prime, and Sky, but the entertainment market and show business is growing leaps and bounds. While the numbers of major events are not growing, the number of tickets for each individual show is growing significantly, making this business still very interesting.

For this, ams OSRAM has expanded its range of products suitable for each type of application.

#### The SIRIUS HRI:

The **SIRIUS HRI** reflector lamps can therefore, be used not only when a long life, high luminous efficiency is required, but also when a competitive price is a mandatory prerequisite, always ensuring that the clients receive impeccable service and support.

The pro lighting world stays imbibed with new trends and technologies, but when a show requires beam or hybrid luminaires, the efficiency generated by SIRIUS' light source is still the most effective, in terms of quality obtained and price paid, making it a preferred lighting technology, for several years to come.

With more than 10 years' experience, the SIRIUS HRI products lamps can deliver magnificent lighting, thanks to compact reflector lamps, with high light output for spectacular light effects, developed for small moving heads.

OSRAM SIRIUS HRI lamps bring innovative technology to entertainment lighting at different levels. With a variety of different applications and fixtures in

the market, the SIRIUS HRI has a comprehensive product portfolio providing three different versions with unique characters to fulfill different needs:

• SIRIUS HRI PRO: A line of ams OSRAM's premium products that offer maximum

- output with very stable light throughout its life, with the possibility of being able to dim the power for an even longer duration.
- **SIRIUS HRI CORE:** A line of ams OSRAM's standard products offering the best combination of performance and durability without additional control features.
- **SIRIUS HRI VALUE:** A line of ams OSRAM's standard products offering the best value for the price conscious buyer.

#### **NEOLUX Stage Lamps:**

With this family of lamps, ams OSRAM has created a line of products for an even more difficult market, where the use of the product is guided only by the responsibility and knowledge of the manufacturer. **NEOLUX** offers a range of complementary and compatible products with the most famous manufacturers of appliances in the power of 230W, 280W, and 330W, built with attention and reliability to offer the market a safe replacement over time. ams OSRAM has expanded by developing the NEOLUX Stage Lamps for two more powers. From now on, OSRAM's clients can also rely on NEOLUX's 350W lamp and the 380W lamp.

Engineered by R&D teams in Germany, NEOLUX is tested throughout the





production process and certified according a number of German and international standards such as RoHs, REACH, and ISO.

In essence, ams OSRAM's entertainment lamps deliver good performance at an affordable price.



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**CIM** OSRAM



# Tricolor India Schauspiel delivers pioneering audiovisual upgrade for the Cellular Jail in Andaman Islands

The Cellular Jail in Port Blair is a testament to the cruelty inflicted on the freedom fighters in India's colonial past. But the jail has been a witness to India's freedom struggle and victory since its existence, and now, the structure's façade, which bears the memories of the country's fight for Independence, is set to reflect India's colonial narrative, but in a new light – this time, with state-of-the-art 3D projection mapping, executed by Tricolor India Schauspiel. AV-ICN Magazine explores the story in greater detail

nown as *Kaala Pani* to the local residents, the **Cellular Jail** in Port Blair, Andaman Islands, is a surviving memory of the gruesome atrocity inflicted by the British colonizers on the Indian freedom fighters imprisoned within the four walls of the bleak prisons. But the union territory's government took the task of shifting the narrative of the oppressive site into a monument of tribute to the martyrs in order to attract increased tourist footfall into the Island. **Tricolor India Schauspiel** was handed over the responsibility to install modern, sophisticated, and hassle-free audiovisual equipment at the venue and deliver breathtaking immersive viewing experience to the visitors.

Himanshu Singh Sabharwal, Chief Creative Officer, Tricolor India Schauspiel and Garima Mishra, Managing Director, Tricolor India Schauspiel joins AV-ICN in an in-depth conversation, where they lay bare the concept, the challenges, the championing, and other minute factors involved in deploying a memorable 3D projection mapping at the Cellular Jail.



#### The Concept:

Every remarkable project has a remarkable beginning. Himanshu Singh Sabharwal shares how Tricolor India Schauspiel was approached for the Cellular Jail Project, "The Andaman and Nicobar State Government was seeking a turnkey solution which included artistic and hardware works which included all related E&M works as well as the successful installation and handing over of an upgraded show. Operation and maintenance of the show for a five-year period was also part of the package. A tender was invited for the same, where multiple bidders had applied for this project. After multiple stages of bid selection, Tricolor India Schauspiel was awarded the project on merit and experience in the field."

But this was, as mentioned above, just the beginning. Garima Mishra further elaborates on the brief given to the company for the Cellular Jail Project, "The specific objective of the project was to give a major facelift to the existing show, while maintaining the previous script which was duly approved by the government authorities. Also, we had to bring out the history, the turmoil, and the gruesome story of the Cellular Jail. This show was to be created in such a manner that would put Cellular Jail on the world map and further enhance the tourism in this archipelago."

Himanshu Singh Sabharwal, Chief Creative Officer, Tricolor India Schauspiel, remarks, "This immensely popular site in Andaman, with over 1,500 visitors every day, was to be given a facelift to enhance the tourist experience. Given our history of making spectaculars for more than a decade, we were entrusted to upgrade the existing conventional sound and light show to a multimedia son et lumière of international standards using the latest technology available, which would further enhance the tourist experience and support the local industry as well."

#### **The Challenges:**

The next step in any audiovisual installation project is a site recce. Sabharwal recalls the significant observations that the team at Tricolor made at the site, "As a mandate for each project, site recce is done to create a detailed plan and tackle shortcomings. With regards to this site, a strategy was created to utilize the given infrastructure for the most feasible solution. Existing old audio-visual equipment was to be enhanced and new technology had to be incorporated. A detailed site survey was done to identify the possible cable routes, placement of major hardware, features offered by the site which can be incorporated in the show to add more dynamics to the overall experience."

He adds, "Major findings were the 'V' shaped projection surface, limited existing lighting and audio setup which was only suitable for conventional Light and Sound shows and not as per international standard of Projection mapping, Sound and Light shows. Wide open space for seating with conventional audio equipment



With a rich sound system from JBL, MOTU, BSS Audio, vivid projection systems from Barco and Dataton, and innovative lighting technology from LBTPro, Tricolor India Schauspiel revamped the Light and Sound Show into a spectacular AV extravganza



The art of projection over Cellular Jail's 'V' shaped projection surface was difficult to master, but Tricolor India Schauspiel overcame the complex issue with projectors featuring dynamic lighting

which was inadequate for large numbers of attendees. Also, no availability of provisions for projection-based hardware and cabling."

This 'V' shaped projection surface posed a serious challenge with regards to the audiovisual installation. Sabharwal elucidates how the Tricolor team overcame the challenges to deliver a best-in-class audiovisual experience, "Every site is unique in its own way and always comes with its own set of peculiarities and constraints. One of the challenges we faced was the 'viewing angle'. The structure of the jail building is such that there are 'spokes' protruding outwards from a central point. This gives us a V-shaped enclosed space to project on. This was overcome by strategically placing the projectors along with the dynamic lighting, giving a seamless view from left to right of the structure."

He further states, "The lighting placement in itself was another challenge, as we had to keep the imagery seamless, wherein these dynamic lights were to compliment the projections and add to the drama and theatrics of the show."

#### **Equipment Used For Audiovisual Installation:**

The decision regarding which audiovisual equipment needed to be installed at the Cellular Jail relied heavily on the site's infrastructure. Garima Mishra, while enlisting the audiovisual inventory for the Cellular Jail, commented, The audiovisual equipment was planned according to the detailed recce. Detailed layout plan was made for the upgradation of the hardware for the show. Placements and strategy for major hardware was created, which not only involved the existing structure but also additional fabrication on site to enhance the visitor experience."

She goes on to illustrate the above-mentioned statement, "For instance, apart from the usage of the physical civil structure available at the site, we also made use of the elements from the landscape itself. One such example is the use of the tree in front of the facade as part of the show by projecting abstract audio equalisation visuals on it. These visuals are in sync with the narration, giving an illusion of a 'Speaking Tree'. Also, to add more dynamism and seamlessness to the show, we offered 'holographic projection' on the ground, thus creating multiple layers of projection surfaces to enhance the viewing experience of the visitor."

#### **Words of Praise:**

The Cellular Jail Project was truly a labor of love for Tricolor India Schauspiel. Filled with praise about how the end result of all the hard work turned out to be, Sabharwal concludes, "The revamped show at the Cellular Jail is a massive upgrade to the existing conventional sound and light show format. The old show comprised of basic lighting effects on the walls of the jail structure accompanied with a voice over on a conventional sound system. The upgraded show is a true visual delight with large scale bright projectors on the jail façade, catering to modern audio and video technologies while carefully remaining within the precincts of the existing old script and the theme around the history of the Jail."

#### The following products were included in the inventory for the Cellular Jail Project:

#### **Audio**

- 1 nos. of BSS Audio Soundweb London BLU-100 12x8 Signal Processor
- Multiple nos. of Crown Audio DriveCore Install Series Amplifiers
- 5 nos. of JBL AWC 595 Speakers
- 12 nos. JBL AWC129 Full-Range Loudspeaker System
- 2 nos. of JBL PD566 Horn-Loaded Full-Range Loudspeaker System
- 1 nos. of MOTU (Mark Of The Unicorn) 24Ao multi-channel Audio Interface

#### Video

- 3 nos. of Barco UDX-W32 DLP Laser Projectors
- 2 nos. of Barco G60-W8 DLP Laser Projectors
- 3 nos. of Dataton WATCHOUT

#### Lighting

LBT Hulk 311 Beam LBT Laser Lights

He continues, "The new show is a visual extravaganza with an amalgamation of various unique ways of projection mapping never before experienced in one place. **Ross Ashton**, Tricolor's Projection Designer, really pulled through on a very crucial song on our freedom fighters, creating beautiful visuals for this show. These were brought to life creating an extremely aesthetic and emotionally moving experience for the visitors. It is not only the visual appeal that sets this show apart but also the incorporation of a modern surround sound system, pinpointing audio references from all around and bringing action from each surface alive. This is new age storytelling at its best. We feel truly privileged to be selected as the custodians who bring out the history of these places alive for the current generation. As James Baldwin has rightly said, "History is not the past. It is the present. We carry our history with us. We are our history.""

Tricolor India Schauspiel is on a mission to leave no stone unturned when it comes to delivering AV extravaganzas to one and all, with projects such as SEL at Agra Fort, SEL at Chanderi Fort, and SEL at Gwalior Fort in the pipeline.

To feature your editorial in PALM + AV-ICN Magazine, contact: Pooja Shah at pooja.shah@hyve.group



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# **BMAX Smart World Introduces New LED Technology – The GOB (Glue On The Board)**

The Glue on the Board (GOB) technology opens new doors for LED displays to be installed in more complex environments



MAX Smart World Technology, a sister concern of Global Communication.com, was founded by visionary entrepreneur Jitendra J. Joshi. With a small beginning in the IT sector, Joshi's perseverance and hard work helped him grow into a prosperous businessman



Jitendra J. Joshi

hotel, and transportation.

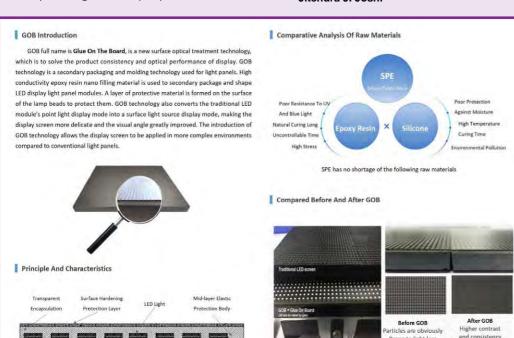
#### GOB (Glue on the Board) Technology – BMAX Smart World Technology's Upcoming Innovation

GOB (Glue on the Board) is a new surface optical treatment technology, which is

to solve the product consistency and optical performance of display. GOB technology is a secondary packaging and molding technology used for light panels, for which high conductivity epoxy resin nano filling material is used. The secondary packaging of the light panel greatly improves the service life and the impact resistance of the product during installation, transportation, and use, reducing maintenance costs and incalculable losses.

GOB technology also converts the traditional LED module's point light display mode into a surface light source display mode, making the display screen more delicate and visual angle greatly improved. The introduction of GOB technology allows the display screen to be applied in more complex environments compared to conventional light panels.

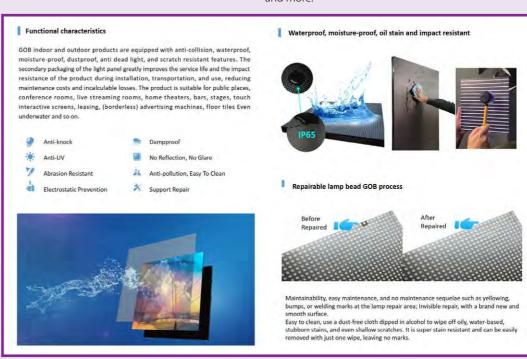
Equipped with transparent encapsulation, surface hardening protection layer, mid-layer elastic protection body, LED light, and anti-collision, waterproof, moisture-proof, dustproof, anti-dead light, and scratch resistant features, the product is suitable for public places, conference rooms, live streaming rooms, home theatres, bars, stages, touch interactive screens, leasing, (borderless) advertising machines, floor tiles (even underwater), and more



today. Renowned for his creative solutions and dedication to the 'Make in India' mission, Joshi is the proud proprietor of India's first-ever LED screen production facility, which is a reflection of his entrepreneurial vision and desire to help the nation's economy thrive.

With a LED manufacturing factory in India and offices in India and Dubai, BMAX Smart World Technology is one of the leading manufacturers and suppliers of LED products such as Indoor LED Display, Outdoor LED Display, and Custom Shape LED in India and around the world. Till date, BMAX Smart World has provided LED solutions for numerous events for The Government of Gujarat, Baba Ramdev (Yoga Guru), and many other prominent business houses and event management companies.

A significant player in the LED display business, BMAX Smart World Technology is also in charge of marketing LED displays and other related products. The company has made a name for itself as a leading supplier of digital display solutions in the area of specializing in interactive kiosks and touch displays. The need for the same has been stoked by the expanding use of digital displays across a range of industries, including retail,



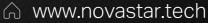


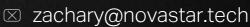
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#### **UNIFIED COMMUNICATION TRENDS**

# TOP TRENDS IN UC AND HUDDLE ROOM SOLUTIONS FOR 2023 AND AHEAD

By Nataraju Upputuri, Founder and CEO, Nteck Systems

Unified Communications as a Service is solidifying its presence in corporate sectors, educational sectors, and even retail sectors, especially during and post Covid, which witnessed an increase in remote working and placed emphasis on elevated work productivity rather than just following a strict 9 to 5 routine at work. As the world of AV continues to expand and evolve, the rise of Unified Communications as a Service becomes more and more predominant. Being a hot topic of discussion for AV professionals and even layman users, it becomes a necessity for the AV industry to analyse where Unified Communications is heading this year, and more importantly, what is it leading the AV industry to. In his guest column, Nataraju Upputuri, Founder and CEO, Nteck Systems, identifies the top trends in Unified Communications and Huddle Room Solutions for 2023 and ahead.



Communications used to be provided solely as products businesses would buy, host on-site and maintain on their own. This still works for many teams, but many more are seeing the benefits of maintaining a closer relationship with their provider, and UC software is playing a big part.

The past few years have seen a large shift towards Unified Communications as a Service (UCaaS). This means that as well as providing the application for a business' team, the provider will update and maintain it proactively throughout the course of contract with the business.

This can have a number of benefits for the business, not least of all security. Telecoms fraud is rising and knowing that the provider is continually monitoring the business' system can provide some real peace of mind.

#### **Uncovering Insights with AI**

Al (Artificial Intelligence) will play a broader role in the future of unified communications. It has already delivered advantages in terms of proactive security. One of the most valuable datasets to apply it to is customer interactions via contact center software.

Al can transcribe conversations and identify important ones that can provide value to organizations. Customers are often the greatest source of improving the business' products and adjusting contact center approaches. What leaders or managers find can impact support, product, sales, and marketing. With these capabilities, the business can turn a contact center from purely a cost center to one that drives innovation.

#### Remote Working, Continued

Calling remote working a trend for 2023 might raise many eyebrows. It's been around for a while now in India

office, anywhere. UC allows them to do this. Calls and messages are a given, but UC offers more than that.

Video conferencing is essential to remote working. Modern UC apps can integrate with the employee's work calendar, so they can easily schedule calls and manage workdays, along with being able to access all the saved contacts.

#### **Wider Integrations**

UC services currently bring together

It is easier than ever to rely on the tools that UC offers for sharing work and collaborating with employees and colleagues. During the pandemic, businesses even brought in remote sales strategies that cut out face-to-face communications altogether. This led to some great results for many teams, and is informing how UC services are improving in 2023.

and works ideally for many businesses. What has changed? Well, legislation may be on the way that could see remote working arrive in more roles than ever.

Remote staff really just need to be able to do everything they can from the

a huge range of different business technology, and in 2023, the list is only set to grow. This has led to UC services being able to integrate with a huge variety of different systems, from CRMs used by a vast number of businesses, like Hubspot or Zoho, to more industry-specific tools. 2023 is set to bring more of these

integrations to market.

#### Consolidation and Integration of Platforms

Many companies scrambled to set up cloud-based communication tools at the beginning of the pandemic. That urgency often resulted in multiple platforms for chat, video, phone, email, and file management.

The consequence of this is higher costs, employees having to use multiple systems, impacting productivity and resulting in other inefficiencies. The objective for 2023 will be to consolidate and integrate. Unified communications hubs include most of these already. A business will be in a much better place with the stack tech when they combine it with email, contact center software, CRM (customer relationship management), and other systems.

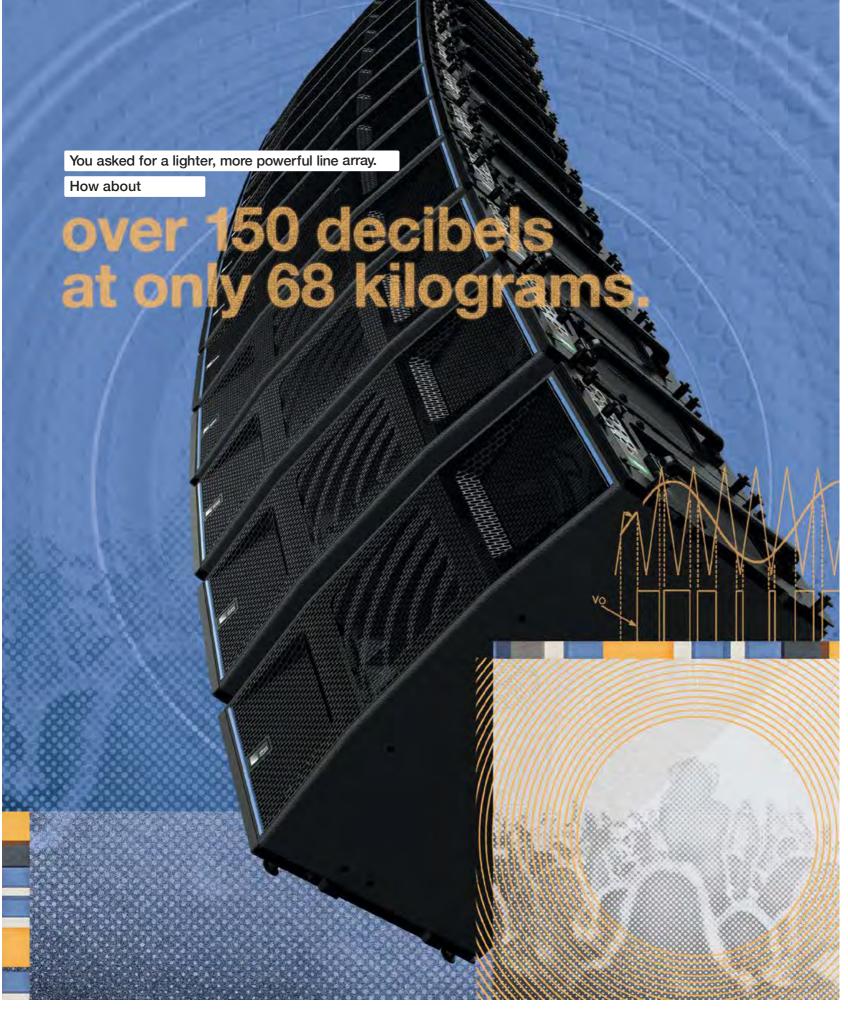
When this is done, tools are more flexible and simplified. It can boost productivity and user experience while reducing expenses.

#### **Collaboration Features**

It is easier than ever to rely on the tools that UC offers for sharing work and collaborating with employees and colleagues. During the pandemic, businesses even brought in remote sales strategies that cut out face-to-face communications altogether. This led to some great results for many teams, and is informing how UC services are improving in 2023.

For example, presence settings allow employees to share with their colleagues when they are busy in meetings or away from their desk. This way, they'll know when to contact or schedule time appropriately. Utilising presence setting limits wasted time from missed calls and maximises efficiency.

Instant messaging also allows





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You spoke. We listened. And then we went wild.









easy file sharing. A modern UC app recognises Office 365 files and lets employees open and edit the documents within the app itself. This feature is ideal for remote working and inter-site staff collaboration.

#### Need of Soft Codecs in Meeting rooms to support Multiple UC Software & Switching

Currently, people are content to use only 1 UC Software codec in meeting Rooms (Either Teams/Zoom etc). Since the same codec can also run multiple UC software, there is a need for Interface to Integrate in 1 single touch screen for multiple UC software & switch between Interfaces based on user selection.

Like, multiple incoming calls be popped up and allow users to switch between UC softwares. There is huge demand for this from customers and there is also vast development going on this front from multiple small to medium OEMs for this feature. Expect proven hardware solution kits in 2023 itself and larger developments on firmware/software updates on to these user interface touch screens.

#### UC Bridge Software as Long-Run Solution

Every company chooses their own UC Software based on their collaboration requirements. Hence, users are forced to use multiple UC softwares in their mobility/personal devices. Even though the communication becomes easier, this

creates more hassles for users to switch platforms to respond on text/audio/video calls.

Similar to initial days of the email, where it was never easy to send emails outside of a particular organization. As the email technology evolved, there were many developments and it became cost effective as well. Similarly, UC technology is fast evolving and there is already need for UC bridging software with cloud and subscription-based models.

#### Multiformat Switching Solutions

The exponential growth of online meetings and soft-codec conferencing have reinforced the importance of USB data in today's evolving AV workflows. The transition from shared devices to

BYOD also continues to accelerate, increasing the need for inconspicuous AV connectivity even in highly-visible locations.

Especially in Conference/Huddle rooms with multiple inputs, various new features like USB-C, Mini DP, HDMI, and USB 3.0/3.1 has to be a part of solutions. There is an increasing need of multi-format inputs switch with USB Extension for a soft codec, which provides AV switching, USB, HDMI, DP, VGA, and USB-C extension, plus system control for meeting spaces using PC-based conferencing codecs such as Microsoft Skype, Webex by Cisco and Citrix GoTo Meeting. These kits are offering video inputs shared between both devices for HDMI, Display Port, and USB-C video signals. To simplify conference room device management, the kit provides

The exponential growth of online meetings and soft-codec conferencing have reinforced the importance of USB data in today's evolving AV workflows. The transition from shared devices to BYOD also continues to accelerate, increasing the need for inconspicuous AV connectivity even in highly-visible locations... Already, many OEMs are putting lots of their efforts in research and development on this side.

68

four USB Type-B connectors for host computers.

Some systems moved one step ahead to provide built-in USB hubs with Extension kits, with some ports on the transmitter and some on the receiver which allows numerous Human Interface Devices (HID) as well as USB cameras and microphones as peripheral device ports. Some are also compatible with latest Ultra High-Definition source up to 4K/UHD@60 Hz with 4:2:0 colour subsampling. Using these kits, effectively all audio, video, data, control, USB, and Ethernet transmission between the two devices is carried over a single, ethernet-enabled HDBaseT link up to 100m/330ft. This can simplify system integration for installation beneath conference tables and in UC applications to provide localized presentation switching support.

Already, many OEMs are putting lots of their efforts in research and development on this side.

#### USB Camera, Content Switching and Mixing Solutions – Ongoing Demand

With specialized easy-to-use camera switching products have capabilities and support for bidirectional audio with videobars, facilitators can ensure all participants are given equal opportunities to speak and contribute to the conversation while some supporting use of whiteboard and document cameras as well for added collaboration and productivity.

These products use USB-Video and HDMI as their inputs for clean switching/mixing into a single video flow. This video output on USB-V goes into CODECs, matrixes, monitors or laptops for BYOM settings HDMI 2.0, which Instantly change camera and video configurations without interrupting the presentation. One video flow is equally perfect to enhance the experience of collaborative meetings. With these features, these products are ideal for remote education, collaborative meetings, webinars, and live streaming. These products are also controllable by RS-232 and IP, which can allow users to switch the camera via a videoconferencing pad or with the push of a button. These products are gaining popularity because of its cost-effective, reliable, and easy to install and connect (no drivers required) features.

#### SENNHEISER LAUNCHES EW-DP AND AMBEO 2-CHANNEL SPATIAL AUDIO

## The 5th generation of Sennheiser's popular wireless microphone systems for camera use is here: EW-DP

Sennheiser launched its 5th generation of Evolution Wireless systems for filmmaking and video applications. Purpose-built for content creators, filmmakers, and broadcasters, EW-DP is a fully digital UHF wireless microphone system with a new portable design and unmatched audio quality. At its heart is a compact, intelligent receiver that helps even novice users set up their audio with ease. The EW-DP EK receiver features an innovative magnetic stack-



transmitter and the ME 2 omni-directional clip-on (lavalier) microphone, while the EW-DP ME 4 SET includes a cardioid clip-on microphone for noisier environments. The EW-DP 835 SET contains a handheld transmitter with cardioid MMD 835 dynamic microphone head.

All sets come with a magnetic mounting plate kit, a **BA 70** rechargeable battery, two standard AA batteries, a locking 3.5 mm TRS to 3.5 mm TRS cable, a 3.5 mm TRS to XLR cable, and cable for the receiver.



a support hub with video tutorials and detailed manuals.

#### Sennheiser Launches AMBEO 2-Channel Spatial Audio for Live Production

Sennheiser has made AMBEO-2

Channel Spatial Audio
available for live production
applications. At the NAB
show, Sennheiser Pro Labs
demonstrated a prototype
of the AMBEO 2-Channel
Spatial Audio live renderer
– ready for immediate field
testing with broad-



they can reliably translate those mixes into a far better stereo experience than could be previously achieved."

Pellegrini continues, "Live broadcasting presents special challenges, and productions must operate with tight precision and coordination. The sound mix must be ready within a few video frames tools must fit within specific

limited its reach into homes - leading

stereo and immersive mixes. Now, using

our renderer, broadcasters can instead

focus on immersive formats and know

to a duplication of efforts between

precision and coordination. The sound mix must be ready within a few video frames, tools must fit within specific workflows, and gear must be dependable day-in, day-out. When we set out to build the live renderer, this environment was front of mind."

The first implementation of the AMBEO 2-Channel Spatial Audio live renderer is running on Merging Technologies' powerful AES67 devices, used in many broadcast environments. At the NAB show, Sennheiser showed a prototype plugin for the Anubis interface that extends the device's already powerful Monitor Mission to include AMBEO 2-Channel Spatial Audio processing.

The live renderer transforms, in real time, standard multichannel surround and immersive formats into two channels of audio that can be delivered anywhere stereo is delivered today. Patented controls, adapted for use in a broadcast environment, allow for finetuning of spatialization settings to maintain mix integrity and dialog intelligibility.

The compact, stackable EW-DP EK receiver is at the heart of the system. Its OLED display ensures optimal visibility regardless of placement, angle, or light

ing system, and can be conveniently controlled remotely via the Smart Assist app.

"On set time is the most valuable asset," says **Tobias von Allwörden**, head of Sennheiser's Audio for Video portfolio. "Therefore, we designed EW-DP such that it is intuitive and fast to set up and helps you to troubleshoot your system. EW-DP provides the reliability and consistency that you need in stressful filming situations and time-sensitive working scenarios."

#### The EW-DP series

Besides the stackable EW-DP EK receiver, the series includes a bodypack transmitter for clip-on mics (EW-D SK), a handheld transmitter (EW-D SKM-S) and a plug-on transmitter (EW-DP SKP) that will launch in October. As part of the larger Evolution Wireless Digital family, EW-DP inherits the family features such as the exceptionally low latency of 1.9 ms and a wide 134 dB dynamic input range, which ensures that everything from a soft whisper to a loud scream can be reliably captured without distortion.

Three sets are available now: The EW-DP ME 2 SET comes with a bodypack

#### Various powering options for long location shoots

The EW-DP receiver can be powered by a BA 70 lithium-ion rechargeable battery, two standard AA batteries, or via USB by a power bank, for example. Added to the variety of powering options is an exact read-out of battery runtime in hours and minutes to avoid surprises. Battery life is up to 12 hrs on the transmitters, and up to 7 hours on the receiver with the included BA 70 rechargeable battery.

#### Control via receiver or Smart Assist

Automated set-up, operation and monitoring can also happen at a distance from the camera receiver – conveniently via Bluetooth using the Smart Assist app on nearly any iOS or Android device. In the app, auto frequency coordination creates reliable wireless connections for up to 16 systems on set, no wireless expertise required. Videographers can quickly and discreetly alter system settings across the room, and remotely override an accidentally activated mute button on the transmitter. The app also includes

Pellegrini, Head of Pro Labs, Sennheiser: "Today's large, televised sporting events are increasingly produced in immersive formats. However, both distribution pipelines and viewer access to immersive speaker systems have



The AMBEO 2-Channel Spatial Audio live renderer unlocks investments into surround and immersive content for all viewers. Pictured is the prototype of the renderer interface for finetuning the spatially enhanced two-channel mix, controlled via the standard Anubis remote control software



# EYTE Technologies Pvt Ltd Brings AV Hybrid Classroom for Indira Group, Pune

**EYTE Technologies Pvt Ltd** transforms the learning ways with the installation of cutting-edge AV systems at Indira Group of Institutes Management College to allow both in-person and online learning. The hybrid classroom is dedicated to sustaining the new normal for interactive learning experience along with college's existing technology infrastructure.

ndira Group of Institutes Management College is a leading educational institution in Pune, India. The college has always been committed to providing the best learning experience for its students. To stay ahead of the curve and adapt to the

changing educational environment due to the pandemic, the college decided to create a hybrid classroom that would allow for both in-person and online learning. To achieve this, they hired **EYTE Technologies Pvt Ltd**, a leading AV integration company in India, to design and install the necessary AV technology.

#### **Challenges**

The college had several requirements for the hybrid classroom, including the need for an interactive display, high-quality video conferencing equipment, and an advanced sound system. Additionally, the installation had to be completed within a tight schedule of two weeks, with minimal disruption to the ongoing academic activities.

#### **Solution**

EYTE Technologies Pvt Ltd designed and installed a cutting-edge AV system that met all the college's requirements. The system included a Samsung professional display, Newline interactive display, Logitech Rally Teams MTR setup,

QSC speaker system, and a dual display setup for the lecturer.

The Samsung professional display used in the classroom is a 55" 4K UHD Professional LED Display, which is ideal for delivering high-quality visuals in a variety



EYTE Technologies Pvt Ltd designs and installs a cutting-edge AV system with metallic finish podium, keyboard slider, and a 21" touch screen monitor



The classroom is meant for both online and in-person learning with 1:4 HDMI Distribution Amplifier, wall mount bracket for 86" and 70" display, Lenovo Think Smart Core 11RXS0240V, Logitech Tap JumpStart Service, and more

of lighting conditions. Newline 86" 4K UHD Interactive Professional LED Display is also equipped with a touch-sensitive panel, which allows for interactive learning experiences.

The Logitech Rally Teams MTR setup is a state-of-the-art video conferencing system that provides crystal-clear audio and video. The system includes a Logitech Rally camera, a microphone, and a speaker that work together to deliver a seamless video conferencing experience. The system also supports multiple conferencing platforms, making it highly versatile. The QSC speaker system used in the classroom is a premium sound system that delivers high-quality audio for lectures, presentations, and video conferencing. The system includes QSC K10.2 powered loudspeakers, a QSC KSub powered subwoofer, and a QSC TouchMix-16 digital mixer, which work together to deliver a powerful and immersive audio experience.

#### **Installation**

The installation process was completed within the two-week timeline, with

minimal disruption to the college's academic activities. The installation team at EYTE Technologies Pvt Ltd worked closely with the college's IT team to ensure that the AV system integrated seamlessly with the college's existing technology infrastructure.

#### Result

The AV system designed and installed by EYTE Technologies Pvt Ltd has transformed the learning experience at Indira Group of Institutes Management College. The hybrid classroom allows for both in-person and online learning, providing students with flexibility and convenience. The Samsung professional display, Newline interactive display, Logitech Rally Teams MTR setup, and QSC speaker system have made lectures more engaging and interactive. The dual display setup for the lecturer ensures that they have all the necessary information at their fingertips. The sound system has enhanced the audio experience, making lectures, presentations, and video conferencing more impactful and immersive.

#### **Feedback**

The college's faculty and students have provided positive feedback about the AV system, reliability, and advanced features. The interactive display has allowed for more engaging and interactive learning experiences, while the video conferencing system has enabled seamless communication with students who are attending classes remotely.

#### Conclusion

The successful installation of the AV system at Indira Group of Institutes Management College is a testament to the expertise and professionalism of EYTE Technologies Pvt Ltd. The AV system has transformed the learning experience at the college and has set a new standard for AV integration in educational institutions. The use of high-quality brands such as Samsung, Newline, Logitech, and QSC has ensured that the AV system is of the highest quality, delivering an immersive and engaging learning experience to students.



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DMX192L



Photoelectric isolation ST-8



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Pilot 2000



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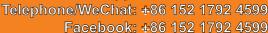


1024b



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## **PALM Conference 2023**

## A Symposium of Intelligentsia at PALM Expo 2023

rands, manufacturers, distributors, and resellers from in and outside India gather under one roof for three days at the PALM Expo to showcase their latest products, technologies, and innovations to the visitors – current and potential clientele in a bid to expand their reach while accelerating business growth. But that is not all. PALM Expo aims to not just display the latest and the best in product categories, but also to discuss the newest trends in technology, what do they mean for the industry and the professionals working within the industry, and the roadmap the technologically-keen trailblazers foresee for the audiovisual industry – all this, and more, happens over the course of three days at the PALM Conference

This year, the PALM Conference is set to witness a large gathering of delegates, paying keen attention to knowledge disseminated by industry thought leaders and trend setters on a spectrum of important topics gaining mileage in the industry. Curated and conducted by the PALM + AV-ICN Magazine, the PALM Conference is a place where the best minds come together to share, learn, network, and expand using expertise, genius, and wisdom gained from their respective fields. The PALM Conference, in essence, gives a platform to industry stalwarts and delegates to connect with like-minded people while also providing them an opportunity to open new horizons in their profession by discovering fresher perspectives to an age-old question: Where will technology take us from here?

The PALM Conference 2023, scheduled to be held from **25th May**, **2023** – **27th May**, **2023** in Hall 2, Bombay Exhibition Centre, Mumbai, will host 11 sessions, featuring more than 25 esteemed speakers, all ready to add to the existing pool of knowledge present within the pro sound, and lighting industry. The speaker line-up for the PALM Conference consists of some of the most well-known names in the industry. The listing provides an overview of PALM Conference's three-day schedule.

May - June 2023 72



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# PREVIEW: PALM CONFERENCE

### **PALM Conference Schedule**

#### DAY 1 - 25 MAY 2023

Time: 10.30 am - 11.30 am

Keynote Address by **ANIL CHOPRA** Founding Director, PALM Expo

Time: 11.30 am - 12.30 pm

### Title: UNSPOOLING MEMORIES OF SOUNDS & MUSIC WITH AVINASH OAK (PALM AES SESSION)

Synopsis: This session will explore the progress of music and sound recording which Avinash Oak experienced in his career and published in his recently launched book. From tape recording to DAW, from tape editing and foley recording to samplers and digital loops, Avinash will share his expertise to achieve the best take.

Moderator: VINAYAK B. DEO - Director, AVB Consultants

Panellists:

AVINASH OAK, Esteemed Sound Engineer
ANIL CHOPRA, Founding Director, PALM Expo

Time: 2:00 pm to 3:00 pm

#### Title: PUSHING BACK THE ANALOGUE BOUNDARIES

Synopsis: Mastering engineers Donal Whelan and Gethin John describe and discuss the improvements made to the analogue setup of their studio, Hafod Mastering, over the last 5 years, to share what they've learned and encourage others to experiment. Session will cover: what is mastering; how it helps music producers and engineers; difference between self-mastering and pro-mastering; importance of mastering room setup; upgrading the mains supply; upgrading the mains wiring; upgrading the mains earthing; installing a relay patch matrix; upgrading the audio wiring; unbalancing the mastering chain; new buffer amps in the mastering and monitoring chains.

Each of these upgrades has resulted in a small but noticeable sonic improvement for Hafod Mastering and these cumulative improvements have significantly enhanced the monitoring experience in the studio and the quality of the audio output delivered to clients.

Speakers:

**DONAL WHELAN, MD** and Mastering Engineer, Hafod Mastering **GETHIN JOHN**, Chief Engineer, Hafod Mastering

Time: 3:00 pm to 4:00 pm

Title: ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING FOR AUDIO ENGINEERS

Speaker:

SREEJESH NAIR, Avid Dolby Certified Audio Application Specialist

Time: 4:00 pm to 5:00 pm

## Title: A NEW FRONTIER IN RECORDING - THE FIRDAUS STUDIO BY A.R. RAHMAN

#### **Part of EXPO City Dubai**

Synopsis: This session will elaborate on Why and How a large format studio is designed in the modern times. How the technology is future proof, and makes the studio more decentralized, wherein there is a blurry line between the various spaces, and each space can be utilized the way the client demands. The session will demonstrate how Firdaus Studio is a home for the only Middle eastern all-female orchestra and will include some specifics about the orchestra.

Speaker:

ADITYA MODI, Designer and Head, Firdaus Studio by A.R. Rahman

Time: 5:00 pm to 6:00 pm

#### Title: PANEL DISCUSSION ON THE DYNAMICS OF FOH

Synopsis: This session will discuss critical factors to consider for optimum FOH delivery. This would include dealing with FOH Mix positions, better stage and FOH communication and this session will also take into consideration various others technical factors such as requirements from monitor mix, stage sound system design, Acoustics etc. for optimum FOH delivery.

Moderator

JAYAKRISHNAN NALINKUMAR – Live Sound Engineer & Founder, TAG Institute

Panellists:

VIJAY BENEGAL, Live Sound Engineer and Co-Founder, OdBle Consultants

MUJEEB DADARKAR, Audio Consultant and Co-Founder, OdBle Consultants

**FALI DAMANIA**, Live Sound Engineer & Market Development Manager, Shure Incorporated

**DWAYNE DAS**, Live Sound Engineer and Application Engineer, Alphatec Audio Video Pvt Ltd

#### DAY 2 - 26 MAY 2023

Time: 10.30 am - 11.30 am

#### Title: INSIGHT INTO THE WORLD OF A LIGHTING DESIGNER FOR CAREERS INTO LIGHTING DESIGNING

Synopsis: This session facilitated by International Institute of Event Design, will take you through the lighting controller and the use of innovative lighting and design elements in respect to different stage and set designs for grandiose events such as award ceremonies and inauguration. This session will also touch on topics like Basics of lighting, laws and physics of light, lighting plot, safety in the workplace etc., and is intended for both learned professionals as well as new beginners in the field of lighting.

Speaker:

**LLOYD ALBUQUERQUE**, Lighting Designer and Director

May - June 2023 7.

#### DAY 2 - 26 MAY 2023

Time: 11.30 am - 12.30 pm

#### Title: DEPLOYING IMMERSIVE AUDIO IN LIVE SOUND

Synopsis: This session will explore popular live object-based mixing platforms and will introduce the theory, walk through the production building blocks and present concepts that guide the designs for an Immersive Sound Reinforcement System.

RAHUL SAMUEL, Live Sound Engineer and Application Engineer for the Middle East and India, L-Acoustics

Time: 5.00 pm - 6.00 pm

Title: PANEL DISCUSSION ON THE FUTURE OF **LIVE SOUND IN BIG TICKET EVENTS** 

Synopsis: What is the growth trajectory for big stage sound systems. Is there now

PREVIEW. PALM CONFERENCE a demand for compact line arrays and smaller shows? What percentage of the rental industry is big sound and how many big-ticket shows take place in India each year? Session will give an understanding of the ROI. Should they invest in a big line array or on big sound? Should rental companies have four or five compact line arrays or should they have a big one?

**Moderator:** 

Dr. RAJESH KHADE, Sound Design and Optimization Engineer Panellists:

MANISH MAVANI, Director, Sound & Light Professionals (SNL Pro) WARREN DSOUZA, Founder & Managing Director, SOUND.COM GEORGE GEORGALLIS, Director Performance Audio, Harman International

#### DAY3 - 27 MAY 2023

Time: 10.00 am - 11.30 am

#### Title: EXPLOITING THE SOUND ENGINEERING TALENT OF THE VISUALLY IMPAIRED

Synopsis: Visually impaired persons have a heightened sense of sound and Stevie Wonder is not the only example. This session will give studios and sound production companies an idea of how visually impaired persons can perform the entire gamut of sound recording, editing, mixing and sound effects. Don't be surprised after this session if you hire one such talent for your studio.

Speakers:

ED GRAY, Director of Accessibility, Avid BYRON HARDEN, Founder, I See Music (ISM) IBRAHIM DAMMIE ONAFEKO, Multimedia Journalist JIJESH, Managing Director of Mookambika Foundation for Adaptive SUSHMA GAIKWAD, Co-Founder, Ice Global

This information is accurate at the time of going to press

Time: 11.30 am - 12.30 pm

#### IMMERSING YOUR AUDIENCE WITH THE DOLBY AT-**MOS EXPERIENCE**

Synopsis: Smart classes are equipped with a range of interactive edtech tools that allow students to learn, collaborate and innovate in incredible ways. This session will explore how smart classes facilitate virtual, interactive, and immersive teaching experience in the classroom with the help of innovative technology solutions which will revolutionize the future of education.

Speaker: BHASKAR PAL, Content Lead, India, ME, Africa at Dolby India

Time: 3:00 pm - 4:00 pm

#### FIRESIDE CHAT - 90 MINS IN AND 90 MINS OUT

Synopsis: Can we get an event tech setup within 90 minutes? And can we get out of there in 90 minutes? What do we need to do? What prep work? How to be efficient? How to train crew? How to arrange your gear? This session will discuss all these aspects and more!.

Speakers: SACHIT SUBRAMANIAN, Co-Founder and CEO, Circle Pro Audio; SANCHETH SUVARNA, Senior Engineer- NJSM, Touring Engineer, Co-Founder & Product Head - Circle Pro Audio; VISHRUT V. JOSHI, Head Operations, MEGA





## **AV-ICN Conference 2023**

## Converging Innovation at India's 2nd AV-ICN Expo 2023

V manufacturers, design consultants, and system integrators unite with the project buyers and distribution channels at the **AV-ICN expo**2023 for three days to seek pro AV solutions and expound the future of AV in India. To integrate the voice of Indian AV, this year's annual show aims to provide a new perspective to the audiovisual technologies. The AV-ICN Expo will showcase many latest products, technologies, and innovations from the audiovisual industry to equip the market with the most efficient AV infrastructure including enterprise, hospitals, corporate, retail, sports, and education sector. With the theme of Display, Digital Signage, Projection, AV-ICN expo preps the industry to establish the audiovisual trends in India.

The AV-ICN Conference, a part of AV-ICN Expo, will be held from 25th – 27th May 2023 in Hall 2 of Bombay Exhibition Center, Goregaon East, Mumbai, Maharashtra. The conference is set to change the way integrators and buyers perceive the audiovisual technology with true to the core mantras - equitability and transparency. Not just that, the conference is ready to offer exhibitors and visitors a deep dive into the AV industry with many enthusiastic industry stalwarts discussing trailblazing AV trends and technologies at the three-day event. With 7 informative sessions, the AV-ICN Conference encourages the visitors to learn about audiovisual concepts in depth and recognize the untapped potential of the AV market. Supported by the PALM + AV-ICN Magazine, the conference is directed at adding to the pool of knowledge during the Expo this year.

What will these discussions focus on? The AV-ICN Conference adds to the discussion threads including Sound in Visual Design, Large Scale

AV Integration of Visitors Attraction Venues, A Comprehensive Approach to The Immersive Industry, Holistic Museum Design and Integration, Education Smart Class, Architectural Mapping Projection and Outdoor Immersive Experiences, and other panel discussions. The listing provides an overview of the three-day AV-ICN Conference.

May - June 2023 76

### AV-ICN Conference Schedule

#### DAY 1 - 25 MAY 2023

Time: 12:30 pm - 1:30 pm

#### Title: SOUND IN VISUAL DESIGN – INTEGRATING INVISIBLE SOUND INTO AESTHETIC SPACES

PREVIEW. ALICA CONSERVENCE Synopsis: Sound and visual designers have always been at loggerheads, be It in the design of an upscale café or a heritage theater or even a simple living room. While visual design usually takes precedence, sound plays a vital role in the functionality of the venue. Architects and interior designers like clean undisturbed lines and beautiful flowing curves accentuating the visual aesthetic of a venue, led by the design brief from a client. Sound on the other hand is often an afterthought that is plugged into the space either by the AV consultant or the contractor. This invariably leads to some amount of conflict and heartburn, with fierce debates of "form over functionality" or "function beyond form", usually with both parties having to concede some space (the sound guys claim that they get the raw end of the deal always!).

Moderator

PRASHANT GOVINDAN, Director - India, Generation AV (India) Pvt. Ltd.

**GURMEET KAUR SACHDEV, Founder & CEO, Soul Inkk Worldwide Media ADRIAN ICKERINGILL, Director of Sales, Sonance RACHEL JACOB**, Architect, Munro Acoustics

#### DAY 2 – 26 MAY 2023

Time: 12.30 pm - 1.30 pm

#### Title: LARGE SCALE AV INTEGRATION OF VISITOR **ATTRACTION VENUES**

Synopsis: This session will throw light on the design implications and integration of large visitor attraction venues.

Speaker:

NARENDRA NAIDU, Chairman & Managing Director, Rhino Engineers Pvt. Ltd.

Time: 2.00 pm - 3.00 pm

#### **Title: PANEL DISCUSSION ON TOP DISPLAY TRENDS** IN 2023 - Flexible Displays, Immersive Displays, Digital Signage, Micro LEDs, LCDs, Projection Technologies, OLEDs, Quantum Dots, Laser-based Display

Synopsis: The panelists will give an overview of the emerging market for latest technology in display. The panel will visualize demand of new applications for innovative displays featuring the latest technology.

#### Panellists:

AMAN SINGH, Zonal Head, North & West India, Optoma Rohit AK, Head of Corporate Business, Maxhub **Anoop Chandran, Country Manager, AOTO Electronics ANIL CHOPRA, Founding Director AV-ICN Expo** 

Time: 3.00 pm - 4.00 pm

#### Title: A COMPREHENSIVE APPROACH TO THE IMMER-**SIVE INDUSTRY**

Synopsis: Cinema started in 1880s, TV started in the early 1920s and digital / OTT content in the 2000s. Each of these platforms has had an impact on both content creation and consumption. In this session, we will look under the hood of the fourth content platform – IMMERSIVE, and explore the various parts of the immersive world, including Cinematic VR, the Metaverse and Virtual Production to see how they have impacted content creation & consumption and how that will continue going forward.

CHAITANYA CHINCHLIKAR, Vice President, Whistling Woods

Time: 4.00 pm - 5.00 pm

#### Title: HOLISTIC MUSEUM DESIGN AND INTEGRATION

Synopsis: This session will give clarity on implications of Museum Design in India. In India the AV consultant's imperative is to deliver Audio Visual, Lighting, ICT and Acoustics. Amazing as this might sound, this broad-spectrum specialty is unique to Indian Audiovisual Consultancy. Kelvin King will bring his unique experience in executing Museum projects that demand solutions from audio visual to acoustics and integration, communication and networking (ICN) to project facility lighting. This session will cover design implications of museums as well enlighten the audience of AV professionals on developing a team of talent to deliver holistic solutions for museums, spanning Audio Visual, Lighting, ICT, and Acoustics.

Speaker:

**KELVIN ASHBY KING, Principal Consultant, Clarity Consulting** 

#### DAY3 - 27MAY2023

Time: 12.30 pm - 1.30 pm

#### **EDUCATION - SMART CLASS**

Synopsis: Smart classes are equipped with a range of interactive edtech tools that allow students to learn, collaborate and innovate in incredible ways. This session will explore how smart classes facilitate virtual, interactive, and immersive teaching experience in the classroom with the help of innovative technology solutions which will revolutionize the future of education.

KAIRAV ADHVARYU, Technical Manager, MNT Info Vision Pvt. Ltd.

Time: 2.00 pm - 3.00 pm

#### Title: ARCHITECTURAL MAPPING PROJECTION AND **OUTDOOR IMMERSIVE EXPERIENCES**

HIMANSHU SINGH SABHARWAL, Chief Creative Officer, Tricolor India Schauspiel

This information is accurate at the time of going to press

## THANK YOU TO ALL THE ROCKSTAR SPEAKERS AT THE PALM AV-ICN CONFERENCE 2023

































































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## Indian Recording Arts Academy Awards (IRAA) 2022 Winners Announced

IRAA 2022 introduces a new award category for 'Song of the Year' to recognize and celebrate the technical talent behind the best song of the year

On 15th April this year, the Indian Recording Arts Academy Awards (IRAA) took place virtually at Adjan Virtual Studios, Mumbai, streamed for the world to watch on the PALM Expo YouTube channel and Streaming Partner Sudeep Audio's YouTube channel. The ceremony once again recognized, celebrated, and applauded the genius that makes Recording Arts and Music Production in India the marvel that it is today. With 94 categories and 1400 nominations for the jury to choose from, this year's IRAA ceremony was an instant success, garnering acknowledgment and appreciation from the fraternity within the pro sound engineering and music production industry. This article offers a glimpse into the IRAA ceremony for individuals from this industry who missed out on the happenings on the day of, along with a list of categories and winners of IRAA 2022.

#### **Kickstart With A Keynote Address:**

**Anil Chopra**, Founder and Chairman, IRAA, in his keynote address, shared his excitement about how far IRAA has come since its inception, how the awards have played an instrumental role in recognizing and ushering the talent involved in professional sound recording, and how the visionary envisions the recording arts platform reaching newer, bigger, and better heights in the future. "We received 1400 nominations across 94 categories, and we have honoured 72 awards, 72 awardees, 72 sound engineers for their work across postproduction, music production for Film, OTT, and Music."

Chopra also affirms that independent sound engineers are now coming into their own, and the IRAA nominations reflect just the same, "Today, out of the 1400 nominations in IRAA that we received, nearly 40-45% have been from independent music producers or independent sound recording engineers, who submitted nominations for the 'Independent' categories. There's a huge population of sound recording engineers looking for a global breakthrough of their recordings."

Talking about a subject close to his heart, he says, "The last few years, I have been talking about a very important subject close to IRAA's objectives, which is about sound engineers



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9884304425 / 9884631886 vivin@promusicals.com SHOW HIGHLIGHTS: getting royalty for their work. Of course, we haven't made much progress in the last few years, but we intend to continue to persevere with regards to royalty payments to sound engineers for

#### Streaming Partner:



No other award gives this much weightage to the component of the sound recording, whether it is in sudeep audio

music, postproduction, or the inserting announce the addition of more categories and genres to acknowledge innovation. My idea for this year was to have a pan Indian representation and involve people

> with massive experience who have been part of the sound recording fraternity for a long time along with fresh talent who have newer ideas."

> Avinash Oak, Esteemed Sound Engineer, shared, "I am honoured to be a part of IRAA 2022 as one of the jury members. My excitement multiplied when I realized that there are more than 90 categories and more than 1000 nominations. It was a stupendous task to listen to all of the nominations, but we got together, we did it, and we had fun doing it. The best part of this year's awards is the 'Song of the Year' award. The sound quality and music production value was extremely fantastic and impeccable in all the nominations we received and choosing was like picking the best among the equals."

PA Deepak, Mix Engineer and Record Producer, shared, "For me, this was a really great experience because I have been a voting member for the Grammys for a long time and I have been listening to a lot of western genres for an equally long time. What I loved about being a jury for IRAA was, like Avinash Oak said, having more than 90 categories and more than 1400 nominations. Having so many genres in Indian music was really encouraging."

Talking about how the germ of IRAA was born, esteemed sound engineer **Daman Sood**, shared, "I used to go to AES every year and I used to see the people there be recognized in their respective professions and that's how I got the idea of an awards ceremony to recognize our Indian talent. I am overwhelmed to witness IRAA completing 16 years and receiving so many nominations and I am also thrilled to see the technology used in the studios for music making software and studio designing, which has touched international standards."

#### **Song of the Year Award:**

This year, IRAA introduced the 'Song of the Year' Award which was selected from among 30 songs nominated by the Jury. The award, in essence, aims at recognizing

Speaking about an important milestone he says, "An important milestone that IRAA has achieved this year is establishing the 'Song of the Year'. We all are very excited with IRAA taking the move to announce and declare the 'Song of the Year' for India and Indian music."

"India has made film into an art form which incorporates music to tell the story and it's no surprise that 'Naatu Naatu' won the award for the dynamism and the kind of music that it carried. In India, there has been an effort by so many independent singers, composers, lyricists, and recording studios to create that same magic in independent music. The journey is on. The journey will always go on with IRAA," he concluded.

IRAA 2022 was once again supported by HARMAN International India. Speaking on the occasion, Yogesh Nambiar, Country Marketing Director, HARMAN India said, "Thank you to the jury and everyone present here for having us onboard. It has been an honour to be a part of this journey. It has been a crazy time years ago, but I think we have come out of this in a brilliant fashion with all our sound engineers doing fabulous work over the last couple of years. I would just like to thank each one of you, who put out such brilliant music, such brilliant compositions, such brilliant music production - and it's not just us here in India - the recognition is global. It makes me and HARMAN equally proud to be a part of IRAA."

#### **IRAA 2022 Jury:**

The Jury for IRAA, comprising of seasoned sound engineers and music industry professionals, was headed by K.J. Singh, Honorary Vice Chairman, IRAA and included famed names such as Anindo Bose, Avinash Oak, Daman Sood, DJ Phukan, Goutam Basu, Nishant Padhiar, PA Deepak, S. Sivakumar, Sai Shravanam, Sita Raina, Vijay Rathinam, and Vijay Thomas Kurien.



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In his message to viewers, Singh shared, "I am very lucky to be involved with IRAA since its inception, and now, I am honoured to be the Vice Chairman of the 16th IRAA Awards. To encapsulate, the IRAA Awards, over the years, have built a credibility because it is an award by the Sound Community itself. There are no third parties involved, no voting process. The actual people who are working in the field are the ones who assess their colleagues' work."

He further comments, "IRAA is the only technical award in the subcontinent.

the best song from 2021, which resulted out of incredible sound mixing, recording, and mastering. The 'Song of the Year' Award this year went deservedly to the song 'Srivalli' from 'Pushpa: The Rise'. The award is nod to the technical genius of everyone involved in the mixing, mastering, and recording of the song – namely, Sid Sriram, the singer; Chandrabose, the lyricist; A. Uday Kumar, who mixed, recorded, and mastered the song; and T. Uday Kumar and Suresh Kumar Taddi, who also recorded the song.



#### **IRAA 2022 Winners:**

Here is a complete list of the IRAA categories and the winners in each category:

| CATEGORIES  | WINNER(S)  |
|---|--|
| RECORDING/MIXING/MASTERING<br>- ROCK / BLUES / METAL  | BEYOND YOUR BLUES PANODRAMA - RAAG SETHI (RECORDING), PROTYAY CHAKRABORTY (MIXING AND MASTERING)   |
| RECORDING/MIXING/MASTERING - ELECTRONIC               | OAFF x Kayan I So Good - Kabeer<br>Kathpalia, Ambika Nayak (Recording),<br>Prathamesh Dudhane(mixing), Matt<br>Colton(mastering)         |
| RECORDING/MIXING/MASTERING - POP                      | Duur - Kamakshi Khanna & Karun<br>Kannampilly (recording), Prathamesh<br>M Dudhane (mixing) & Jason Dsouza,<br>Graham Durham (mastering) |
| RECORDING/MIXING/MASTERING - PROGRESSIVE/ ALTERNATIVE | Le Chal (Western Ghats) - Jayakrish-<br>nan Nalinkumar & Sunil George<br>(recording), Jayakrishnan Nalinku-<br>mar(mixing and mastering) |
| RECORDING/MIXING/MASTERING - ACOUSTIC                 | I'LL FIND MY WAY TO YOU TOMORROW -<br>SIVANESH NATARAJAN (SINGER)  |
| RECORDING/MIXING/MASTERING<br>- RAP AND HIP-HOP       | THAR COAST - DEVANG RACHH (MIXING AND MASTERING), RAPPERIYA BAALAM & SHANKY (RECORDING)  |
| RECORDING/MIXING/MASTERING - WORLD/FUSION MUSIC       | Nava Malayalam - Harishankar V<br>(mixing and mastering)   |
| SONG RECORDING/MIXING/MAS-<br>TERING - HINDI FILM     | HUM DUM I SHIDDAT -GOURAV DASGUPTA(RECORDING) KOHINOOR MUKHERJEE (MIXING AND MASTERING)  |
| SONG RECORDING/MIXING/MAS-<br>TERING - REGIONAL FILM  | Adiye I Bachelor - Avinash Sathish<br>(Recording), Balu Thankachan (Mix-<br>ing), Shadab Rayeen (Mastering)                              |
| SONG RECORDING & MIXING WEB SERIES – HINDI            | KHELEIN MASAANE MEIN HORI DIGAMBAR<br>I AARYA 2 - AFTAB KHAN   |
| SONG MUSIC PRODUCER - HINDI                           | LEHARA DO I 83 - SUNNY M.R., ADITYA<br>N., DJ PHUKAN   |

| riy:  |  |
|---|--|
| CATEGORIES  | WINNER(S)  |
| SONG MUSIC PRODUCER - RE-<br>GIONAL                                     | TAKEY OLPO KACHHE DAKCHHI I PREM<br>TAME - SUBHADEEP MITRA |
| SOUND DESIGNER (FILM OR WEB<br>RELEASE) – HINDI                         | Mimi - Baylon Fonseca                                      |
| SOUND DESIGNER (FILM OR WEB<br>RELEASE) – REGIONAL                      | JUNE - BAYLON FONSECA                                      |
| MIXING (FILM OR WEB RELEASE) – HINDI                                    | SAINA - ALOK DEY   |
| MIXING (FILM OR WEB RELEASE) – REGIONAL                                 | SHYAM SINGHA ROY - SUREN G                                 |
| DIALOGUE EDITOR / ADR ENGI-<br>NEER (FILM OR WEB RELEASE)<br>– HINDI    | SAINA - ROBIN KUNJUKUTTY                                   |
| DIALOGUE EDITOR / ADR ENGI-<br>NEER (FILM OR WEB RELEASE) –<br>REGIONAL | JUNE - GOKUL K R, SEBY VARGESE, BAYLON FONSECA             |
| SOUND EDITOR EFFECTS & AMBIENCE (FILM OR WEB RELEASE)  – HINDI          | CHHORII - SIDDHARTH DUBEY, BAYLON FONSECA, NIRANJAN RASANE |
| SOUND EDITOR EFFECTS & AMBIENCE (FILM OR WEB RELEASE)  - REGIONAL       | JUNE - GOKUL K R, BAYLON FONSECA                           |
| FOLEY ENGINEER (FILM OR WEB<br>RELEASE) – HINDI                         | Mimi - Ram Kishan Nath                                     |
| FOLEY ENGINEER (FILM OR WEB<br>RELEASE) – REGIONAL                      | June - Ram Kishan Nath                                     |
| FOLEY ARTIST (FILM OR WEB<br>RELEASE) – HINDI                           | Mimi - Karan Arjun Singh, Anil<br>Pawar, Harish Nath       |
| CATEGORIES  | WINNER(S)  |
| FOLEY ARTIST (FILM OR WEB<br>RELEASE) – REGIONAL                        | 83 - Manik Batra   |

#### **IRAA 2022 Winners:**

| CATEGORIES   | WINNER(S)   |
|--|---|
| SYNC SOUND RECORDING (FILM<br>OR WEB RELEASE) – REGIONAL           | June - Vikrant Pawar  |
| SOUND DESIGNER FOR DOCU-<br>MENTARIES                              | THE BIG DAY: A FAMILY AFFAIR - BAYLON FONSECA   |
| DOCUMENTARY MIXING   | THE BIG DAY: A FAMILY AFFAIR - MO-<br>KASHI GANDHAR, BAYLON FONSECA                         |
| DIALOGUE EDITOR / ADR ENGINEER FOR DOCUMENTARIES                   | THE BIG DAY: A FAMILY AFFAIR - GOKUL K R, FIBIN   |
| SOUND EDITOR EFFECTS & AMBIENCE FOR DOCUMENTARIES                  | THE BIG DAY: A FAMILY AFFAIR - GOKUL K R, PRAVEEN PAUL                                      |
| FOLEY ENGINEER FOR DOCUMENTARIES                                   | SEARCHING FOR SHEELA - MANOJ YADAV,<br>ATUL SHASTRI   |
| FOLEY ARTIST FOR DOCUMEN-<br>TARIES                                | SEARCHING FOR SHEELA - MANOJ YADAV  |
| SYNC SOUND RECORDING DOCU-<br>MENTARY                              | House of Secrets: 11 Bodies - Baylon<br>Fonseca   |
| SOUND DESIGNER FOR SHORT FILMS                                     | THE FRUIT OF AN AUTUMN TREE - TEJA ASGK & JUBIN RAJ   |
| DIALOGUE EDITOR / ADR ENGI-<br>NEER FOR SHORT FILMS                | AT THE DOT -HAMZA DAGINAWALA  |
| SOUND EDITOR EFFECTS & AMBI-<br>ENCE FOR SHORT FILMS               | BRAL - THAMBI JOJU, JITIN DAVID   |
| SHORT FILMS MIXING   | THE FRUIT OF AN AUTUMN TREE - TEJA<br>ASGK, JUBIN   |
| FOLEY ENGINEER FOR SHORT FILMS                                     | Ankahi Kahaniya - Suraj Bardia  |
| FOLEY ARTIST FOR SHORT FILMS                                       | KHAALI PEELI TALES (LOOSEEND - FISHN<br>FRY AUR COFFFEE) - AAQUIB SHAIKH,<br>MOHAMMAD IQBAL |
| SYNC SOUND RECORDING FOR SHORT FILMS                               | SAVE THE DA(Y)TE) I FEELS LIKE ISHQ -<br>SIDDHARTH DUBEY                                    |
| MUSIC PRODUCER WEB SERIES –<br>HINDI                               | PAVITRA RISHTA REPRISE MALE VERSION -<br>ARPIT MEHTA  |
| SOUND DESIGNER FOR WEB<br>SERIES – HINDI                           | House of Secrets: The Burari Deaths - P M Satheesh & Manoj Goswami                          |
| SOUND DESIGNER FOR WEB<br>SERIES – REGIONAL                        | HELL IS MURKY/MANDAAR - ANINDIT ROY<br>& ADEEP SINGH MANKI                                  |
| DIALOGUE EDITOR / ADR ENGI-<br>NEER FOR WEB SERIES – HINDI         | MUMBAI DIARIES - YASH SHINDE  |
| DIALOGUE EDITOR / ADR ENGI-<br>NEER FOR WEB SERIES – REGION-<br>AL | FEELS LIKE ISHQ: ISHQ MASTANA - GOKUL<br>K R, FIBIN   |
| SOUND EDITOR EFFECTS & AMBI-<br>ENCE FOR WEB SERIES – HINDI        | FEELS LIKE ISHQ: ISHQ MASTANA - GOKUL<br>K R, FIBIN   |
| MIXING WEB SERIES – HINDI  | Break Point - Anish Poduval   |
| MIXING WEB SERIES – REGIONAL                                       | STORY DISCUSSION 2 EP 6 TO 10 - TEJA ASGK   |
| FOLEY ENGINEER WEB SERIES -<br>HINDI                               | Ishq Mastana - Ram Kishan Nath  |
| FOLEY ENGINEER WEB SERIES -<br>REGIONAL                            | HELL IS MURKY I MANDAAR - ANNREEJU<br>RAY   |

| CATEGORIES  | WINNER(S)   |
|---|---|
| FOLEY ARTIST WEB SERIES - HINDI   | ISHQ MASTANA - KARAN ARJUN SINGH,<br>ANIL PAWAR, HARISH NATH  |
| FOLEY ARTIST WEB SERIES - RE-<br>GIONAL                                 | HELL IS MURKY/MANDAAR - ARGHYA<br>CHAKRABORTY   |
| SYNC SOUND RECORDING WEB<br>SERIES - HINDI                              | Kathmandu Connection season 1 -<br>shreyas narendra srinivas  |
| RECORDING/MIXING/MASTER-<br>ING - INSTRUMENTAL MUSIC<br>(NON-CLASSICAL) | Time Wise - No One Fits - Raag Sethi<br>(Recording), Protyay Chakraborty<br>(Mixing &Mastering)   |
| MUSIC PRODUCER - INSTRUMENTAL MUSIC (NON-CLASSICAL)                     | Mahabharat Main Theme - Hemant,<br>Shreyash   |
| VOCAL RECORDING/MIXING/<br>MASTERING - INDIAN CLASSICAL<br>MUSIC        | Raag Dhani-Saade Naalve - Ashwin<br>Prabhath (recording, mixing and<br>mastering)   |
| INSTRUMENTAL RECORDING/<br>MIXING/MASTERING - INDIAN<br>CLASSICAL MUSIC | KHAYAL - RISHAB SHARMA (RECORDING, MIXING AND MASTERING)  |
| RECORDING/MIXING/MASTERING<br>- DEVOTIONAL / SPIRITUAL MUSIC            | Tu Hi Hai -Manasi Tare, Shashank Shekhar Sahu, Jonathan Joseph, Meghdeep Bose, Priyanshu Soni, Gautam Bharadwaj(Recording); Prasad Maha (Mixing); Alex Gordon (Mastering) |
| MUSIC PRODUCER - DEVOTIONAL<br>/ SPIRITUAL MUSIC                        | CHHATHI MAIYA BULAYE - GAURAV<br>VASWANI  |
| RECORDING/MIXING/MASTERING<br>- TRADITIONAL / FOLK / DANCE<br>MUSIC     | Hyund Ka Dina - Pranjal Borah (recording), Rushik Patel (mastering)   |
| MUSIC PRODUCER - TRADITIONAL<br>/ FOLK / DANCE MUSIC                    | Mahahetvali - Rachintan Trivedi   |
| MUSIC PRODUCER - ROCK /<br>BLUES / METAL                                | Panodrama - Chirag Todi   |
| MUSIC -PRODUCER ELECTRONIC  | Tu Saamne - Gibson George and Abhi-<br>jeet Srivastava  |
| MUSIC PRODUCER - PROGRES-<br>SIVE/ALTERNATE                             | Keys - Raag Sethi   |
| MUSIC PRODUCER - ACOUSTIC   | HOROSCOPE (COMPASS BOX LIVE SESSION) - RAAG SETHI   |
| MUSIC PRODUCER - RAP AND<br>HIP-HOP                                     | Underdog I by Sanjeev T & RANJ -<br>Sanjeev T   |
| MUSIC PRODUCER - WORLD-FU-<br>SION MUSIC                                | Mundu Venuka (Feat) Mylai<br>Karthikeyan - Ravi G & Sumesh<br>Narayanan   |
| RECORDING/MIXING - PODCAST  | PERMANENT ROOMMATES: HE SAID, SHE SAID (S2) - ANKUR KELKAR (RECORDING), ASHUTOSH WALKAR (MIXING)  |
| SOUND DESIGNER - PODCAST  | GANGISTAN WITH PRATIK GANDHI  |
| MUSIC PRODUCER - PODCAST  | PERMANENT ROOMMATES HE SAID SHE SAID SEASON 2 - RATNESH BHAGAT  |
| SOUND MIXING FOR ADVERTISE-<br>MENT                                     | THE SCHOOL - A PATRIOTIC FILM BY AMBUJA CEMENT LTD - LIJIN JOLLY ALEX   |
| SONG OF THE YEAR  | SRIVALLI (TELUGU) I PUSHPA: THE RISE  |

### indian recording arts academy awards

Recognition of Excellence in Sound Recording

## Felicitation Ceremony



85 Categories | 73 Awards

### Venue: HARMAN Live Arena at PALM Expo 2023

Bombay Exhibition Centre, Mumbai

25<sup>th</sup> May 2023 | 6:00pm - 7:30pm





## PALM Sound & Light Awards 2023

## A Nod to Distinguished Pro Sound, Lighting, and Audiovisual Talent in Innovation, Manufacturing, and Distribution in India

since more than a decade, **PALM Sound & Light Awards** is playing a pivotal role in recognizing and honoring professional excellence in stage, sound, and light. The award session celebrates industry stalwarts' unmatched contribution to the pro audio and lighting industry every year.

The awards ceremony aims to recognize ingenious work and effort of established and growing talent throughout the year with an opportunity for the exhibitors and VIPs to network. PALM Sound & Light Awards boosts the eagerness of live event organizers, rental companies, professional sound engineers, stage production companies, and even set designers to acquaint themselves with the market trends. This year's award ceremony caters to 20 categories comprising of outstanding pro sound, lighting, and audiovisual segments for commendable contribution to the respective industries.

PALM Expo aims to galvanize the pro sound, lighting, and AV industry and therefore, takes a step forward to support many accomplished and up-and-coming professionals and companies who have amazed the industry by delivering outstanding technologies and innovations.

#### **Advisory Committee:**

To ensure that the awardees are selected in a fair manner and the awards are not a product of bias, favourtism, and ignorance towards the unrecognized talent from the fields associated with the award categories, the esteemed advisory committee for the PALM Sound & Light Awards 2023 consists of reputed names from the pro audio, lighting, and audiovisual industry, such as Sushma Gaikwad, Ulhas Sahasrabuddhe, and Milind Raorane.

#### WINNERS OF THE PALM SOUND & LIGHT AWARDS 2023

| CATEGORIES   | WINNER(S)                            |
|--|--------------------------------------|
| OUTSANDING AUDIO FOH ENGINEER OF THE YEAR          | SUNNY M.R.                           |
| OUTSTANDING AUDIO MONITOR MIX ENGINEER OF THE YEAR | LEE BRAGANZA                         |
| OUTSTANDING AUDIO SYSTEMS<br>ENGINEER OF THE YEAR  | Dr. Rajesh Khade                     |
| OUTSTANDING LIGHTING DE-<br>SIGNER OF THE YEAR     | Sohail Mansuri                       |
| SOUND COMPANY OF THE YEAR                          | SOUND.com                            |
| OUTSTANDING SOUND RENTAL COMPANY (REGIONAL)        | SUGANDAR HOUSE OF SOUND AND LIGHT    |
| LIGHTING RENTAL COMPANY OF THE YEAR                | Soundmindz                           |
| VIDEO DISPLAY RENTAL COMPA-<br>NY OF THE YEAR      | SPECTRUM AV LLP                      |
| INNOVATIVE PROJECTION MAP-<br>PING OF THE YEAR     | VIBHORE KHANDELWAL, CREATIVE FACTORY |
| OUTSTANDING VISUAL CONTENT<br>ON STAGE             | Wolves                               |

| CATEGORIES   | WINNER(S)                          |
|--|------------------------------------|
| OUTSTANDING MUSIC FESTIVAL EVENT PROMOTER OF THE YEAR                        | BοοκΜγShow Live                    |
| EXCELLENCE IN SOUND DESIGN & INTEGRATION                                     | Neil Lean - ANSATA                 |
| OUTSTANDING CONTRIBUTION TO AV INTEGRATION                                   | KELVIN ASHBY-KING                  |
| MAJOR AUDIO BRAND DISTRIBU-<br>TION NETWORK                                  | HARMAN PROFESSIONAL SOLUTIONS      |
| BEST DISTRIBUTOR AWARD   | HI-TECH AUDIO & IMAGE LLP          |
| INDIGENOUS MANUFACTURING OF AMPLIFIERS                                       | HEMONA ELECTRO ACOUSTICS PVT. LTD. |
| LARGEST & INDIGENOUS MAN-<br>UFACTURER AND EXPORTER OF<br>SPEAKER COMPONENTS | Wizard India Pvt. Ltd.             |
| ACHIEVEMENT IN TRUSSING DESIGN & PRODUCTION                                  | DEVIL TRUSS                        |
| HIGH-END LIGHTING DESIGN SOLUTIONS AWARD                                     | INTEGRATED ENTERTAINMENT SOLUTIONS |
| VISIONARY INDUSTRY LEADER OF THE PRO AV INDUSTRY                             | DAVINDER WADHWA                    |

#### SAMSUNG'S NEW Q-SERIES AUDIO RANGE IS READY TO ENHANCE VIEWING EXPERIENCE

Samsung Electronics' flagship soundbar from the 2023 Q-Series audio range, HW-Q990C features 11.1.4 channel sound supporting Dolby Atmos. The soundbar allows you to hear the finer detail of whatever you are watching,

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enabling you to immerse yourself in the future of cinematic sound, all from the comfort of your own home. The HW-Q990C has 22 built-in speakers, perfectly tuned by the award-winning Samsung Audio Lab.



Samsung's Q-Symphony can play sound from both the TV and soundbar at the same time, providing the ultimate surround sound experience

Samsung's 2023 Q-Series range includes the following:

- HW-Q990C
- HW-Q930C
- HW-O800C
- HW-Q700C
- HW-Q600C
- HW-060C

Enhance your viewing experience with the benefit of great sound quality delivered from both Samsung TV and soundbar speakers without any complicated setup. **Samsung Q-Symphony** can play sound from both the TV and soundbar at the same time, providing the ultimate surround sound experience. Sit back, relax, and let Samsung Q-Symphony do the work for you so that you can get the audio experience you deserve.

Samsung's Q-Symphony Cinematic soundbar range feature Dolby Atmos, Wi-Fi, Alexa built-in and are equipped with state-of-the-art speakers. Easily control your smart soundbar and other compatible devices using Amazon

Alexa voice control. The special built-in feature allows you to play music, check the weather, ask the web and more, completely hands-free.

Featuring **SpaceFit Sound Pro**, Samsung's soundbars deliver optimised sound which is calibrated perfectly for your space. A built-in microphone listens to the acoustics of your room and improves the equalisation of your soundbar and subwoofer automatically. Always get the best sound experience tuned for your room.

"We are thrilled to announce the UK availability of our 2023 Q-Series cinematic soundbar range. Our new soundbars will enhance our customer's entertainment set-up, whilst creating a better together ultimate viewing experience with our Samsung TVs," said **Dan Hastings**, Director TV/AV at Samsung Electronics. "The new audio features are set to make the most personalized sound system and connected ecosystem to date."

To feature your **your Audiovisual solutions**in **PALM + AV-ICN** magazine, contact: **Pooja Shah - pooja.shah@hyve.group** / **Ritika Pandey - ritika.pandey@hyve.group** 



For more models please visit our website or showroom

#### NEUMANN AIMS TO EXPAND WITH THE MT 48 AND KH 120 II STUDIO MONITOR

#### The MT 49

Neumann, one of the world's premier manufacturers of studio equipment announced the launch of its first-ever audio interface, the MT 48. This product represents a significant milestone in the company's nearly 100-year history, as Neumann expands its portfolio beyond microphones, loudspeakers, and headphones to include the crucial interaction with the digital realm. The MT 48 thus, realizes refer-

remains available), the MT 48 features additional USB and ADAT connectivity, as well as a new user interface, optimized for maximum ease of use in studio and home studio applications. With a dynamic range of 136 dB (A) and mic preamps with up to 78 dB gain, the MT 48 sets a new benchmark in audio quality. It thus, captures the full sound potential of even the best microphones without any bottlenecks. The MT 48 has 4 analog inputs and 8 analog output channels (4 stereo outputs) and is



The MT 48 audio interface is the first product with Merging Technologies inside. The MT 48 has 4 analog inputs and 8 analog output channels, expandable features, and MIDI I/O is included too

ence class Neumann quality from input to output.

The MT 48 audio interface is the first product with **Merging Technologies** inside. The Swiss Brand is famous among audio professionals for its expertise in premium AD/DA conversion and networked audio. Based on the acclaimed Merging Anubis audio interface (which

expandable via ADAT (switchable to S/PDIF) and AES67. MIDI I/O is included as well.

The interface also boasts two extremely powerful headphone amplifiers with ultra-low output impedance, driving any headphones to peak performance. Onboard DSP effects include sophisticated EQ, complex dynamics processing, and reverb. Additionally, the

MT 48's unique Dual Output Technology allows users to record the pre-FX and post-FX signal simultaneously. Four independent mixers, one for each stereo output, allow for perfect monitoring, thus fostering creativity for inspired performances. An intuitive touchscreen interface allows users to change mixer levels, pan positions, and other parameters with ease. Monitor mixes and all settings can be adjusted directly on the unit. For users wishing to operate the MT 48 from their computer or tablet, a remote-control app and browser-based web control are available.

"The MT 48 represents a major step forward for Neumann," states Portfolio Manager **Sebastian Schmitz**. "By adding Merging Technologies' expertise in AD/DA conversion and digital audio to Neumann's deep knowledge in microphones and monitoring, we have created a product that is truly exceptional in terms of sound quality, functionality, and ease of use."

Neumann's CEO **Ralf Oehl** adds, "As a legendary microphone manufacturer, Neumann has always been synonymous with excellence in recording technology. Over the past decade, we have shown that Neumann can bring the same uncompromising quality to loudspeakers and headphones. The MT 48 completes the ideal signal chain: Finally, you can have Neumann quality throughout, from the sound source to your ear."

The MT 48 audio interface will be on display at NAMM 2023 (Demo room Anaheim Convention Center 17400) and will be available from Neumann

dealers worldwide in a few weeks.

#### Features:

- Class-leading AD/DA converters with enormous dynamic range
- Intuitive touchscreen user interface
- DSP processing (EQ, dynamics, reverb)
- 4 independent mixers with integrated talkback
- USB.
- MIDI, ADAT and AES67 connectivity

#### KH 120 II

One of the leading brands in pro audio, **Neumann** has announced the release of the **KH 120 II** studio monitor. Building upon the success of its predecessor, the KH 120 II offers improvements in all acoustic parameters for deeper bass, higher SPL capability, and increased resolution. In addition, its internal DSP engine allows for phase linear crossovers and room correction via Neumann's MA 1 Automatic Alignment.

When Neumann released the KH 120 in 2010, it was the beginning of an ongoing success story. Neumann monitoring has since become the reference of choice in countless studios around the globe. The KH 120 II follows the same philosophy as its predecessor and takes it to the next level: highest linearity, lowest distortion, no coloration, and perfect adaptability to any acoustic environment.

(Continued on page 90)

#### **AUDIX UNVEILS THE PDX720 SIGNATURE EDITION**

**Audix** introduced the **PDX720** professional dynamic studio microphone, an addition that expands its current studio microphone portfolio. The PDX720 is designed for the most demanding studio recording engineers and producers, vocal recording, high-end home studios, professional podcasting, and voiceover.

The PDX720 excels on lead and backing vocals and spoken word applications. Its sound signature finds its roots from the AUDIX distinctive ability to produce natural, smooth vocals with great low-end extension, even without active filtering.

The microphone's standard default gain level eliminates the need for pre-

amp boosts or cloud lifters. The PDX720 also features two unique three-position switches that enable users to quickly modify sound by adjusting the low cut and presence boost, minimizing the need for complex sound mixing adjustments.

"My favorite setting was with all the switches in the 'off' position, vocals. Sounded more natural and it gives you a great template to mix, very smooth on the top, great low-end extension without being boomy; it's very pleasant sounding," says **JC Fredrickson**, Audio Engineer/Theater Technician.

Beyond its excellence in vocal recording, the PDX720 is also a natural choice for drum and instrument recording,

with its warm low-end tones and clear, defined highs which produce great clarity without sounding harsh. The versatility of the PDX720 make is a must have for studio professionals and home recording applications.

#### Features of the new PDX720 include:

- Transducer Type: Dynamic
- Frequency Response: 50 Hz 20 kHz
- Polar Pattern: Hypercardioid
- Output Impedance: 280 ohms
- Sensitivity: 1.9 mV / Pa @ 1k
- Maximum SPL: ≥135 dB
- Power Requirements: None
- Connector: 3-pin XLRm

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· Polarity: Positive pressure on dia-



positive voltage on pin 2 relative to pin 3 of output XLR connector

- Materials/Finish: Aluminum/Black/ Gold Finish
- Weight: 869gm
- · Length: 212mm







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#### **BEYERDYNAMIC UNVEILS ITS REDESIGNED M SERIES MICROPHONES**

beyerdynamic - the preferred audio brand for live music and studio professionals globally - is unveiling a redesign of its storied M Series mics at NAMM 2023. The iconic M Series, which has recorded Jimi Hendrix's explosive guitar riffs and accompanied Dua Lipa's global 'Future Nostalgia' tour, is getting a design refresh to merge tradition with future. The new design keeps to the mics' core principles and retains the sound quality loved by generations of artists, but gains a new future aesthetic, in line with other beyerdynamic gear and perfect for today's emerging pro audio talent. Together with esteemed studio artists Steve Albini and Eddie Kramer, and exciting performances from several live musicians, beyerdynamic will celebrate this milestone with a booth at NAMM that pays homage to the history of its microphones and headphones and looks forward to the future of audio creation.

"For more than 60 years, beyerdynamic's created masterpieces like the M 160 in Germany, while musicians, producers, and sound engineers have been doing the same with our products around the world," said beyerdynamic's director of production, **Thorsten Bender**. "Now, our tradition of excellence in sound and build quality will continue to power the next 60 years of pro-audio creation."

#### Music's History: Composed in Germany

For decades, M Series mics have married excellent sound quality with precise manufacturing at the highest level.
Their audio quality continues to set the standard globally for professionals who consistently use the mics for their natural sound with little discoloration, excellent technical properties such as high impulse fidelity, and application-specific product designs. From the earliest stages of development through testing, M Series' quality has tradition-

ally been achieved through detailed production in Germany, accentuated by precision filigree work - handcrafted by a select group of brilliant craftspeople.

"Our two double-ribbon microphones - the M 160 and M 130 - are particularly difficult to produce," continued Bender. "We carefully select specialists who've undergone up to a year of training and have outstanding dexterity - which is why only a few employees are currently able to manufacture mics such as the M 160."

#### Music's Future: Composed in Germany

That tradition will carry on with the newly designed series but add the benefit of a more streamlined produc-

tion and build process to enhance everything from logistics to servicing. Without changing the beloved sound of the various M Series mics, this new design direction will make changes around the product to enhance the overall M-Series experience.

"When a product line is so beloved that it lasts 60 years on the market, it's critical to balance making nuanced changes with maintaining what makes the products beloved in the first place," said Bender

The newly refreshed mics will follow a uniform design language and product name strategy across the series - creating a simplified and visual expression of beyerdynamic's microphone DNA. Optimizing the way, the mics have been produced for decades will also create inventory stability and better serviceability.

Starting later this year, all beyer-dynamic online stores, dealers, and retailers will begin to exclusively sell the newly updated M Series mics. Servicing and support will continue for existing M Series models as the Pro-Audio world transitions with us into this next chapter of the beyer-dynamic M Series mics.



The new M series is designed to keep to the mics' core principles and retain the sound quality loved by generations of artists with a new future aesthetic and more

#### NEUMANN AIMS TO EXPAND WITH THE MT 48 AND KH 120 II...

"It is part of the Neumann ethos to never be satisfied with what has been achieved so far," says Portfolio Manager **Stephan Mauer**, "The KH 120 garnered hundreds of 5-star reviews, yet we knew that we could make it even better. For the KH 120 II we've developed a novel woofer design that reduces distortion audibly and allows for much higher SPLs. In addition to an exceptionally flat

frequency response from 44 Hz to 21 kHz (±3 dB), the KH 120 II also offers a linearized phase response. Which translates to clear mids with astonishing transparency as well as extreme accuracy in the time domain, i.e. precise impulse reproduction and finely resolved reverbs."

This is made possible by DSP-controlled electronics whose crossovers avoid the phase distortion caused by analog filters. The internal DSP also realizes new standards in tonal consistency. The KH 120-II is made to extremely low tolerances of no more than  $\pm 0.5$  dB. Stereo imaging, therefore, is razor-sharp. Digital electronics also allow for automatic room alignment using Neumann's MA 1 hardware/software solution (sold separately).

"Even the best studio monitor is dependent on its





Neumann KH 120 II ensures an outstanding performance with the DSP engine and automatic room alignment via MA 1

#### (Continued from page 88)

acoustic environment", explains Neumann's CEO Ralf Oehl. "So, being able to use the KH 120 II with Neumann's Automatic Monitor Alignment MA 1 is an enormous advantage in terms of real-world performance. Finally, you can work with reliable reference-class monitoring even in less-than-ideal environments such as small studios or makeshift control rooms for mobile

recording. But of course, the KH 120 II is also an excellent solution for professional studios, editing suites, and even immersive setups."

The KH 120 II is also an update in sustainability.
Neumann engineers took great care to develop a patent pending amplifier technology which combines superior audio performance with the energy efficiency of Class D. Although the amplifiers of the KH 120 II deliver up to 145 W to

the 5.25" woofer and 100 W to the 1" tweeter, they only consume 17 W at idle. Auto-standby reduces power consumption to 0.3 W when the KH 120 II has not been used for a while but can be deactivated.

The KH 120 II offers analog and digital inputs (S/PDIF). It will also be available in an AES67 variant with redundant AES67 audio network ports that are fully compliant with broadcast standards such as ST 2110, ST 2022-7 redundancy, and RAVENNA. At the same time, the KH 120 II AES67 is compatible with DANTE-generated AES67 network streams.

#### Features:

- Linear frequency and phase response
- DSP engine for outstanding performance and automatic room alignment via MA 1
- Deep low end down to 44 Hz and high SPL capability in a small format
- Analog and S/PDIF connectivity, optionally with AES67

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#### HOTEL SAFFRON'S DISCOTHEQUE RELIES ON LD SYSTEMS FOR IMPRESSIVE DJ SETUP

Hotel Saffron's discotheque is a popular destination for guests looking to dance the night away and enjoy a fun-filled evening. To take the experience to the next level, installing a professional DJ setup was essential. With the right equipment and setup, a DJ can create a

approached Audio Expert **Deepak Gupta** of 8mm Raipur and tasked him with an assignment to create an immersive audio experience at the discotheque.

Deepak Gupta is a highly skilled and experienced professional who specializes in audio system installations. He meticulously planned and executed the

sound quality. Deepak's attention to detail and expertise in audio engineering was critical in achieving a successful installation. His thorough understanding of the equipment and acoustics of the space allowed him to fine-tune the system for maximum impact, creating an immersive audio experience.

Testama ICOAAS (Bassius) anagkara IIPASAC2 subve



LD Systems ICOA15 (Passive) speakers, UB18AG3 subwoofer, SAT82G2 speakers, and LDDP4950 amplifier raised the bar of the acoustic quality at Hotel Saffron's discotheque

high-energy atmosphere to keep guests entertained and engaged throughout the night.

The promoters of Hotel Saffron

installation of the DJ system at Hotel Saffron's discotheque, ensuring that all the components were properly configured and calibrated to provide optimal Setting up a DJ system at Hotel Saffron's discotheque required careful planning and the right equipment. For a high-quality audio experience, Deepak chose LD Systems' ICOA15 (Passive) speakers, which provide crisp, clear sound and powerful bass. The system also features a SUB18AG3 subwoofer to enhance the bass response and provide a full-range sound. Additionally, he used SAT82G2 speakers to provide a wider soundstage and improve the overall sound quality.

To power the system, he used the LDDP4950 amplifier, which offers high-quality sound and ample power. To ensure optimal performance and flexibility, he used the DSP DPA260P processor to fine-tune the audio signal and optimize the system for the specific acoustics of the discotheque.

Finally, he chose the **Mackie ProFX-10v3 mixer** to control the sound and connect various audio sources. The mixer offers a wide range of inputs and outputs, including USB, which allows easy connection to laptops and other digital audio sources.

Deepak Gupta was impressed with the LD Systems loudspeakers, so much so, that he was confident that his client would have a topnotch audio experience that would leave them wanting more.

#### **LAKME CHOOSES BRITISH ACOUSTICS FOR AN IMMERSIVE AUDIO EXPERIENCE**

Lakme Salon, one of India's leading beauty and grooming brands, recently opened its doors in the vibrant suburb of Ghatkopar in Mumbai. The new salon is located in a prime area, easily accessible to residents and visitors alike. With its beauty and grooming services range, Lakme Salon is set to become the go-to destination for those looking for high-quality beauty treatments. The salon offers various services, including haircuts, hairstyling, hair coloring, facials, manicures, pedicures, makeup services, and more. The experienced and skilled team of beauty professionals at Lakme Salon use only the best products and techniques to ensure that every client leaves feeling refreshed, rejuvenated, and looking their best.

"I recently had the pleasure of experiencing **British Acoustics** Speakers in our salon, and I must say, I was blown away! The sound quality is exceptional, and



The VE 108 TC 8 is a high-quality full-range ceiling speaker from British Acoustics now installed in one of the prime locations of Mumbai with easy accessibility to professional services for a rejuvenating experience

the speakers themselves are sleek and stylish, perfectly complementing our salon's modern design," says **Kanchan Mahajan**, Lakme Salon.

"The installation process was smooth and hassle free, thanks to the skilled

technicians from British Acoustics who were very professional and efficient. They made sure that everything was set up correctly and worked perfectly before leaving," says **Anil Amre**, System Integrator, **Amruta Interior**.

#### **Installing British Acoustics**

Sound engineers and designers were thrilled to work on the installation of the sound system at Lakme Salon using top-quality products to create a unique and immersive audio experience for customers.

The **VE 108 TC 8** is a high-quality full-range ceiling speaker from British Acoustics. It is designed to provide excellent sound quality in a discreet and easy-to-install package. The speaker features an 8-inch full-range driver with a power handling capacity of 20 watts RMS and 40 watts peak. It has a frequency response of 70 Hz to 20 kHz, making it suitable for a wide range of audio applications.

The **Contract 270** is a high-quality mixer amplifier from British Acoustics that is perfect for commercial audio installations. It is designed to provide

(Continued on page 92)

#### POULT PICKS BRITISH ACOUSTICS, OHM FOR SOUND INSTALLATION IN AHMEDABAD

As sound engineers and designers, the team was thrilled to work on the installation of the sound system at Poult Ahmedabad. Using top-quality products like the OHM BRT-6 single 6" premium install speaker, the OSL M10 BT 4-Channel Professional DJ Mixer with Wireless and USB Inputs, and the British Acoustics 2XL-Channel High-Performance Amplifier Systems and Radial 205 TW Single 5" IP 67 rated 2-way Speaker System, they were able to create a unique and immersive audio experience for customers.

The OHM BRT-6 speakers were strategically placed throughout the restaurant to ensure even coverage and optimal sound quality. The OSL M10 BT mixer allowed for seamless integration of both wired and wireless devices, giv-



Poult, Thaltej, Ahmedabad, installs sound systems by British Acoustics

ing customers the freedom to connect their own devices and play their own

music.

The Radial 205 TW speakers feature a

5" woofer and a 0.75" tweeter, providing clear and accurate sound reproduction across a wide frequency range. They are also IP 66 rated, meaning they are dustproof, making them suitable for use in even the most challenging environments.

Finally, the British Acoustics 2XL amplifier systems provided ample power and control, allowing them to fine-tune the sound to perfection. The result was a dynamic and engaging sound experience that perfectly complemented the restaurant's lively atmosphere.

Overall, the sound installation created at Poult Ahmedabad was a success and the team is confident that customers will be delighted with the quality and immersive nature of the sound system.

## FAVELA, PUNE OFFERS VISITORS AN ENTHRALLING NIGHTLIFE EXPERIENCE WITH BETA3 SOUND SOLUTIONS

Favela, a rooftop nightclub located in Pune, India, is poised to offer not just an unforgettable dining experience to its visitors, but also deliver a nightlife experience that will last a lifetime. A club sets the gold standard in the world of clubbing through unique lights and sound. Which is why, when the club's management decided to envelope the venue in rich, booming sound to offer a gratifying party night, it turned to Beta3's Professional Audio Solutions.

#### **An End-to-End Sound Solution:**

The Beta3 professional sound system at Favela includes  $\Sigma$  J215-15" 2-way 15" Full Range speakers.  $\Sigma$  J Series is a performance speaker designed for high quality music reproduction. For great punch and bass effect, the speakers are complimented by  $\Sigma$  J218 Dual18" Subwoofer deployed on the floor. The entire sound system is powered by DT series Class D Amplifier with the standardized design and a complete product line. The DT



Beta3's end-to-end professional sound solution for Favela, Pune includes ΣJ215- 15" 2-way 15" Full Range speakers, ΣJ218 Dual18" Subwoofer, DT series Class D Amplifier, and ΣC2600U Digital Speaker Management Processor

series help meet the needs of diversification in the professional sound reinforcement industry. Comprehensive interface and simplified control functions are in place to contribute to convenient and flexible applications. Digital processing came from **Beta3 \Sigma C2600U Digital Speaker Manage-**





#### ment Processor.

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The  $\Sigma$  J series solutions deployed at Favela were both musical and powerful at the same time. "Everyone immediately appreciates the power of the Beta3"

system," concludes Favela's team,
"But more compelling is how music
has enhanced the ambience of the
lounge by melodic effect, which
came from Beta3's unique sound."

#### **LAKME CHOOSES BRITISH ACOUSTICS...** (Continued from page 91)

excellent sound quality and reliable performance in a compact and easyto-use package. The amplifier features a 270-watt power output and can drive up to 4 VE 108 TC 8 speakers. It also has four mic/line inputs and one auxiliary input for connecting external audio sources.

Overall, the VE 108 TC 8 Full Range Ceiling Speaker and Contract 270 270W Mixer Amplifier are an excellent combination for audio installations in commercial spaces like Lakme Salon Ghatkopar. They are easy to install, provide excellent sound quality, and are designed for reliable performance.



#### Commercial audio. Done differently.

Optimal Audio offers a range of on wall, ceiling and subwoofer loudspeakers for a full complement of commercial applications. Designed by world-class engineers, they offer a premium sound quality at a cost-conscious price point.

#### **APPLICATIONS**









Venues







Education Facilities



Houses of Worship



Corporate Offices

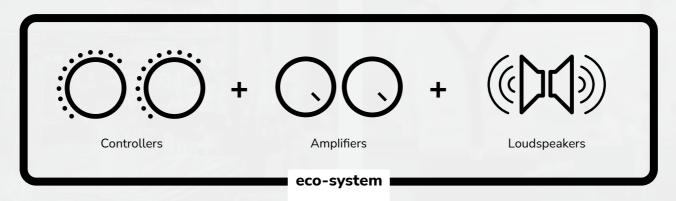




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**Cuboid** On-wall loudspeakers



**Sub** Subwoofers



**SmartAmp** Amplifiers with DSP



**Zone**Zone audio controllers with DSP and WebApp



**ZonePad**Zone wall controllers



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## THE HYBRID AGE: REINVENTING THE WORLD OF TECHNOLOGY



The world came to a halt with the spread of Covid-19 in 2020. Embracing the new normal, businesses introduced the hybrid age to adapt the virtual world. **Sachit Subramanian**, Co-Founder and CEO of Circle Pro Audio and **Sancheth Suvarna**, Co-Founder and Product head of Circle Pro Audio, talk about the trends of hybrid audio, video, and lighting setups followed by the virtual era and the integration of new age requirements in live events.

020 left the world of events in a huge standstill. The events Industry crashed down. It wasn't just social distancing that the industry had ever experienced. With loss of jobs and loss of businesses, it was a total doomsday situation. In such an unprecedented time, few event companies as well as rental outfits thought totally out- of-thebox. The virtual world was born! When it comes to technology, we as an industry know how to innovate. This gave rise to a host of warehouses that were once homes to high-end gear that power real-life events into studios that were giving experiences of a lifetime to people from the comfort of their own homes. We are sure the technical angle and the specifics of the virtual world have been discussed over the last two years in detail. In the second half of 2022 and beginning of 2023, we saw the light of events coming back. And WOW, it came back with a bang! The world moved back to the life of events. Things went back to what the world was two years ago

The life of hybrid era! What happened post pandemic was most of the clients, mainly the folks from the corporate world and some from entertainment, decided to amalgamate the concept of live events with the newly-found love for the virtual world, which means having a seamless streaming of high-end audio and video without the comfort of a stable internet connection or retakes that came with the studio life. How do we do this? We reinvent. Again.

#### **Streaming:**

This operation came with its own technical challenges as segmented in three parts – audio, video, and streaming. We relied on internet connections from a host of network operators using Subscriber Identity Module (SIM) based network routers that are used to harvest internet connec-

tion using 4G/LTE. We usually use two or three of these devices based on the venue; these routers are coupled with passive LPD Antenna's connected via RPSMA to try and ensure a much stable network. In most of the venues, a single line is provided by the venue, which is a fixed line offered by the local Internet Service Provider (ISP). All these lines are merged into a failover switch that provided a robust internet connection for this whole operation.

#### Video:

The next part of this operation was a robust video feed. To begin with, cameras are selected based on the comfort and ease of carrying within the space of a live show without distractions or trouble to the audience, and at the same time. Capable of capturing high resolution videos, since HDMI as an option has a lot of challenges and shortcomings. HDSDI is used to transport this feed. Unlike the comfort of virtual warehouse studios, this is executed within the comfort of a live environment. Wireless transmitters over HSDSI are used to transport these signals to the video mixer, which is used into a video capturing device that can record and transmit. These devices are meant to make sure high-end 4K feed is transported. One of the main reasons

for this is to combat the challenges that come with a live event scenario where massive cable runs aren't possible and the aesthetics of the event are kept in place, or in places where one has to go on stage and tripping over cables isn't an option, and hence, it becomes an important part of the hybrid feed. A very important part of the video feed is also to have the right feed with audio to rebroadcast if needed and hence, it's always recorded.

#### Audio:

Audio is the next big challenge in this era. In the live world, we were used to mixing within the live space that the environment expected, therefore, giving an experience of a lifetime. Similarly, we had a virtual setup with a dedicated PCR. Now in a hybrid environment, we had to cater to both. Hence, the audio signals were split to three separate consoles with dedicated engineers to operate the FOH (Live Space), MOH (Monitors), and PCR (Virtual Feed) with each of them responsible to make each audio sound channel the best to the right environment.

#### Lighting:

In a virtual setup, lighting was designed to the camera eyes. In a hybrid setup, lighting has to be designed to

the eyes of both the people watching it online and offline. Certain additions are made in this setup to make sure that the objects and elements that have to be highlighted are visually appealing. Since lighting, unlike audio, cannot be split, the communication between the Director of Photography (DOP), the person responsible for the visuals of the virtual feed and the Lighting Designer of the live show is of utmost importance. A pre-show and on-show communication between the two using wired or wireless radio with cue signs are implemented to make sure that its seamless.

All this converges into one basic concept.

#### **Execution:**

The crew who was trained into first ONLY live, then ONLY virtual, is now executing Hybrid. The complexities and simplicities are so well personified, from extended gear to maintaining different cables to additional load and exit times and what not! We made sure every crew member is trained well and is following cues on time ensuring a flawless execution. With such high tense jobs comes high rewards!

The world of hybrid is the new way of life in the world of events. We love challenges! What's most interesting is that each vendor or stake holder is ready for this challenge and is working with the innovative and modern techniques to make this happen. The vendors have resorted to solutions outside the world of events where the manufacturers have gone out of the box to understand this and have implemented solutions and launched products to solve these new problems. All things said, learning never stops in the world of technology, and that's what motivates each individual to perform and deliver a splendid experience to the audience, be it online or offline.



L to R: Sachit Subramanian, Co-Founder and CEO of Circle Pro Audio and Sancheth Suvarna, Co-Founder and Product Head of Circle Pro Audio

May - June 2023 94

## msswor o

#### **OUR KEY SOLUTIONS**

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## AN ALBUM OF THE MARQUEE PROJECTS



Rhino Engineers worked on the Dynamic RGBW LED Facade Lighting and Pixel Lighting at the Gora Bridge

AV-ICN awarded Narendra Naidu, Chairman and Managing Director, Rhino Engineers Pvt. Ltd. as the AV Architect of the Year Recognizing Excellence in Pro AV in 2021 for the best innovation and vision in architecture. Narendra Naidu has accomplished many prestigious projects including the shows around the Statue of Unity in Gujarat and more in India. With excellence in adopting latest technologies in AV architecture, Naidu focuses on visitor attraction projects that promote innovation in India.

Rhino Engineers Pvt. Ltd. is one of the leading 3D projection mapping and installation companies in India with the vision to inculcate stunning visuals in many big projects. AV-ICN is proud to celebrate Naidu's achievements with the exclusive photo feature shared by Rhino Engineers Pvt. Ltd. in this issue.





LED screen with dynamic HD content interests the visitors at Pole Motif Ekta Dwar to SoU Approach Road in 7 international and 10 regional languages



L to R: Dip Patel, Project Manager Rhino Engineers Pvt. Ltd. and Narendra Naidu, Chairman and Managing Director, Rhino Engineers Pvt. Ltd. at the Dino Trail



Cactus Garden Signage: One of the India's Largest Illuminated Signage of 5X57 meters



May - June 2023 96

## **OF AV ARCHITECT OF THE YEAR 2021**





The Valley of Flowers presents a dynamic panel with viewpoint 1 to entrance at valley with slogan of "Unity in Bio-Diversity - Valley of Flowers" and also from viewpoint 1 to flower of Kevadiya Jurassic Park





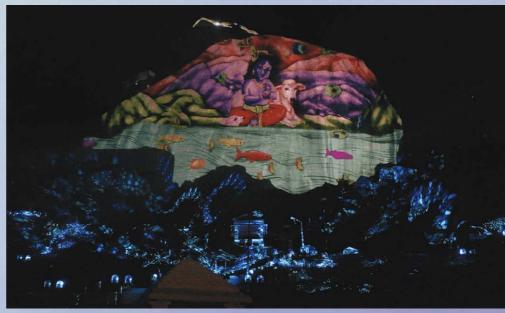
Butterfly Garden Signage: One of India's Largest Illuminated Signage of 5X67 meters



Innovative and cutting-edge LED Screens at the Maze Garden by Rhino Engineers Pvt. Ltd.



Shoolpaneshwar Temple Lighting held the attention of the visitors at the show with dynamic and attractive motif lights



Rhino Engineers designs one of the India's largest 3D projection mapping shows on Gabbar Hills, Ambaji

97



## **Xavier Institute of Management Gets State-Of-The-Art Audio System**

The sound system included trailblazing pro audio products and technology from Meyer Sound, Allen & Heath, and Shure

To install sound for an auditorium is not a child's play. The complexity only increases with the size of the auditorium, where sound plays a pivotal role. The case was the same at Xavier Institute of Management, Bhubaneswar, where the management sought to install an end-to-end sound solution for a 5000-seater auditorium with its University campus, touted to be the largest auditorium in Eastern India. Sun Infonet stepped up to the task, delivering fail-proof, unforgettable sound with Meyer Sound, Allen & Heath, and Shure. PALM Technology uncovers the technology used for the audio installation.

he Xavier Institute of Management, Bhubaneswar (XIMB), founded by the Jesuits in 1987, is a Catholic university that was authorized by the Odisha Legislative Assembly in 2013, making it the first Jesuit university in India. The vision of the university is to be a leading global Jesuit university, innovative in academia, grooming compassionate and resilient leaders to lead organizations for a just, equitable and sustainable society.



Eight LEOPARD linear line array modules, three 900 LFC control elements on each side of the stage, and four Ultra X20 compact loudspeakers from Meyer Sound ensured an impeccable audio quality throughout every inch of the auditorium

May - June 2023 98

#### #ExperienceHarman





#### **ARTIST SCHEDULE**

**DAY 1: 25 MAY** 

**DAY 2: 26 MAY** 

**DAY 3: 27 MAY** 

10.30 AM -11.30 AM **JBL VTX A6 Launch** 

& Demo

1.00 PM - 2.00 PM **Kabir Café** 

2.45 PM - 3.45 PM **Tabla Naari - Swarupa Ananth** 

4.30 PM - 5.30 PM **Paradigm Shift** 

6.00 PM - 7.30 PM IRAA AWARDS

10.30 AM -11.30 AM

Light it Up!

A Martin Workshop

1.00 PM - 2.00 PM

Taal Circuit featuring

Sridhar Parthasarathy,

Sriraam Subbaraman,

Sakthydharan,

Vishwanath KG and Hariharan Subramanian

3.00 PM - 4.00 PM **Hiyerama** 

5.00 PM - 6.00 PM Rhythm Shaw X Gino Banks 12.00 Noon - 1.00 PM

DHA feat. Dipesh Varma,

Hargun Kaur

& Amit Padhye

1.45 PM -2.45 PM To be Announced

3.30 PM - 4.30 PM **Daira** 

5.15 PM - 6.15 PM Ranjit Barot & Contraband

To attend the workshop visit Harman Live Arena



25 - 27.05.2023

BOMBAY EXHIBITION CENTRE,
GOREGAON (E) MUMBAI, INDIA



Six MJF-208 stage monitors were installed onstage to deliver undiluted sound even with a large number of people present on any occasion

Recently, the XIMB management invested in the biggest state-of-the-art auditorium in Eastern India, with a seating capacity of 5000, which has been designed for live performances, college programmes, cultural events, and more.

The state-of-the-art auditorium required an equally state-of-the-art audio system. **Meyer Sound** was chosen to fulfil all the sound requirements of this prestigious auditorium.

Inaugurated by **Shri Naveen Patnaik**, the Hon'ble Chief Minister of Odisha, this is one-of-a-kind auditorium which has been equipped with best-in-class audio equipment's supplied by **Sun Infonet Private Limited** in partnership with **Hudson**, the audio consultant for the project deputed by the management of XIM.

After few online interactions during Covid and direct meetings post Covid, Jayakaran, Sr. Product Manager, Sun Infonet and Hudson decided to go with **Meyer Sound, Allen & Heath**, and **Shure** for the complete pro audio solution.

Hudson, the consultant of this project, expressed his confidence on Meyer Sound, "Having known Meyer Sound as a brand for 20+ years and the true audio it gives, I'm happy to incorporate that true audio in one of India's largest Meyer Sound installation."

#### **Challenges:**

Since the auditorium required 180 degrees of coverage and multiple levels of seatings, the challenge with this particular project was covering every single seat



Allen & Heath's Avantis with GX4816 Audio Rack provided seamless control over every audio equipment installed with the auditorium

with pristine audio as most of the events which are likely to happen are speechbased and theatrical in nature.

The management wanted a system which can cater to varied types of events and address a large spectrum of applications.

The huge infrastructure also helped the integrators to choose from the long product portfolio that Meyer Sound offered when it came to loudspeakers.

"The LEOPARD system provides a high quality and unparalleled sound throughout the venue. We are glad that the audience is happy with Meyer Sound system. This would not be a success without the support from Sun Infonet," commented **Andrew Poh**, Technical Sales Support, Meyer Sound.

#### **Pro Sound Equipment Installed:**

Six **MJF-208** stage monitors were installed onstage to deliver undiluted sound even with a large number of people present on any occasion.

For the main PA system, the integrators installed eight **LEOPARD** linear line array modules and three **900 LFC** control elements on each side of the stage, four **Ultra X20** compact loudspeakers as stage fills to cover the VIP area. With the possibility of large numbers of artists onstage, six MJF-208 stage monitors were also provided.

In addition to this, to have an even coverage throughout the auditorium, seven Ultra X20 were used as fills in upper and lower balconies, all of which are being managed by two Galileo Galaxy Network Platform.

To handle 40+ inputs across the stage and multiple outputs, Allen & Heath's Avantis along with **GX4816 Audio Rack** was a perfect console to run the varied spectrum of events. With low latency and deep processing ready along with 96 KHz audio, the **Avantis** handles all of these inputs and outputs like a breeze in this facility.

Jayakaran B., Sr. Product Manager, Sun Infonet, who was involved from the inception of the project comments, "Once I understood the challenges and the significance of the auditorium from day one, my motto was 'no compromise', and that uncompromised audio experience is what makes this place an audio-visual treat."



Shure SLX-D Wireless System along with SM58 and Beta 58 capsules were installed at the auditorium to offer perennial clarity between speakers and presenters and the audience

Multiple Shure SLX-D Wireless Systems with combination of SM58 and Beta 58 capsules have been deployed throughout the auditorium and control rooms for the main presenter, audience, anchors, and performers. All Shure systems are networked and can be checked and controlled through the Shure Wireless Workbench application.

The system has been designed to cover the entire auditorium facility, enabling easy communication between audience members and guest speakers during panel discussions, and allowing interaction between the stage and control rooms.

Apart from the wireless microphones, top-of-the-line wired microphones series from Shure like KSM, Beta, and SM have been used for the various stage performances. MX series Gooseneck Microphone have been used on the podium to address the audience. SRH840 Series Professional Monitoring Headphones have also been added in the inventory for monitoring the events from main control room.

On the inauguration day of the auditorium, **Fr. George Fernandes**, Chief Administrative Officer, XIM University, expressed his joy for the completion of the auditorium, "The moment we had repeated appreciation of the audio at the inauguration of the facility, we realised we have invested into the best system we can have, thanks to Hudson for the recommendation and Sun Infonet for their never-ending support."



SHOW GUIDE

**EXHIBITOR LISTING** 

### **INDUSTRY ASSOCIATION SUPPORT**

M. Vasantji Pland Andheri (Elixt)



22/03/2023

PALM Expo 2023 Mumbai

#### Subject: Supporting letter by Professional Audio & Lighting Association (PALA)

Professional Audio & Lighting Association (PALA) representing the Sound, Lights, Events and AV Professionals in the 29 States and 9 Union Territories in India, is indeed glad to continue its valuable support to the PALM Expo 2023.

PALM Expo has been a great medium to nurture and grow professional audio knowledge and expertise through its multiple features including the PALM summit and conference sessions. It has been a catalyst in growing the investments in Sound and Pro Audio by creating a platform that attracts various technical people to the show, thus generating business for the trade and the Event & Entertainment industry.

PALA - Professional Audio & Lighting Association is pleased to endorse PALM expo 2023, a platform that brings together the entire pro audio and lighting trade, rental and events industry together on one platform. It is the networking ground for the rental, event & entertainment, music, and sound engineering fraternity from across the country.

PALA - Professional Audio & Lighting Association affirms that our members will be visiting the expo, showcasing their support towards the industry.

Thanking you

Yours Sincerely,

Professional Audio & Lighting Association (PALA)

PALA PROFESSIONAL AUDID & LIGHTING ASSOCIATION



Regd. No.: 27 / 2011

Subject: Letter of Support by Electronic Security Association of India (ESAI)

The Electronic Security Association of India (ESAI) is glad to announce its support to AV-ICN

ESAI believes in enhancing the growth and professional development of the Electronic Security, Life Safety, and integrated systems industry. The Association is indeed proud to be associated with AV-ICN Expo 2023 being held concurrently with PALM Expo, a platform that brings together the AV professionate - From AV manufacturers, design consultants, system integrators, who unite with distribution channels, project buyers and end users seeking pro

ESAI is excited about the possibility of associating with AV-ICN Expo and wishes the expo a grand success for its forthcoming edition held in Mumbai.









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\*Offer valid till 30-June 2023

















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15" Ferrite ultra low distortion midrange driver for use in high power linearry and fixed installation professional loudspeaker enclosures

#### 18FT-100SW

18" Ferrite ultra low distortion woofer for sub bass applications in bass Reflex/horn loaded enclosures

#### 19FT-115XB

19" Ferrite ultra low distortion woofer for high level subwoofer application in bass reflex/horn loaded enclosures



#### Sonotone

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## THANK YOU FOR THE SUPPORT

## **MEDIA PARTNERS**

























Worship 4/1

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25 - 27.05.2023 BOMBAY EXHIBITION CENTRE, GOREGAON (E), MUMBAI, INDIA



## DEMOQUBE







0

LOCATION: VISITOR PARKING GROUND,
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**Curated by:** 

**Ulhas Sahasrabuddhe** 

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25 - 27.05.2023 BOMBAY EXHIBITION CENTRE, GOREGAON (E), MUMBAI, INDIA



# PALM SOUND & LIGHTAWARDS

#### Categories of 2023

- OUTSTANDING AUDIO FOH ENGINEER OF THE YEAR
- OUTSTANDING AUDIO MONITOR MIX ENGINEER OF THE YEAR
- OUTSTANDING AUDIO SYSTEMS ENGINEER OF THE YEAR
- OUTSTANDING LIGHTING DESIGNER OF THE YEAR
- SOUND COMPANY OF THE YEAR
- OUTSTANDING SOUND RENTAL COMPANY (Regional)
- LIGHTING RENTAL COMPANY OF THE YEAR
- VIDEO DISPLAY RENTAL COMPANY OF THE YEAR
- INNOVATIVE PROJECTION MAPPING OF THE YEAR
- OUTSTANDING VISUAL CONTENT ON STAGE
- OUTSTANDING MUSIC FESTIVAL EVENT PROMOTER OF THE YEAR
- EXCELLENCE IN SOUND DESIGN & INTEGRATION
- OUTSTANDING CONTRIBUTION TO AV INTEGRATION
- MAJOR AUDIO BRAND DISTRIBUTION NETWORK
- BEST DISTRIBUTOR AWARD
- INDIGENOUS MANUFACTURING OF AMPLIFIERS
- LARGEST & INDIGENOUS MANUFACTURER AND EXPORTER OF SPEAKER COMPONENTS
- ACHIEVEMENT IN TRUSSING DESIGN & PRODUCTION
- HIGH-END LIGHTING DESIGN SOLUTIONS AWARD
- VISIONARY INDUSTRY LEADER OF THE PRO AV INDUSTRY

Advisory Committee: Sushma Gaikwad, Ulhas Sahasrabuddhe & Milind Raorane

Venue: Grande C
Opp Hall 1, BEC, Mumbai, India

26th May 2023 | 7:30pm

**Entry by Invitation only** 





# BOOTH BOOKINGS OPEN FOR 2024

30 MAY - 1 JUNE 2024 BEC, MUMBAI, INDIA

www.palmexpo.in







AV INTEGRATION COMMUNICATION NETWORKING EXPO

SHOW GUIDE

**EXHIBITOR LISTING** 



## **25 - 27.05.2023** BEC, MUMBAI, INDIA

## MEET INDIA'S TOP AV COMPANIES, SHOWCASING LATEST RANGE OF AV SOLUTIONS



































































































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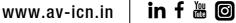












## Certified AV Specialist Course 2023

**Mumbai** Edition

### **BASICS OF AUDIO VIDEO INTEGRATED SYSTEMS**

After three successful runs, CAVS is back with a fourth edition at the AV-ICN Expo 2023, scheduled from 25th May - 27th May 2023 at BEC, Mumbai, India. The three-day 'Certified AV Specialist' certification course is aimed at equipping the attendees with a platform to upskill their knowledge of the pro audiovisual technology. The speakers, seasoned experts in their respective fields, will deliver a treasure house of knowledge about the basics of pro AV and how, ensuring that all participants leave armed with updated AV genius in their career trajectory at the end of the three days.



4<sup>th</sup> Edition

DAY 1 25th May 2023 (11:00am - 5pm) Pro Audio



#### NARENDRA NAIDU

Chairman & MD
RHINO ENGINEERS
PRIVATE LIMITED

What this day will cover:
Sensitivity, Sound Waves,
Impedance, Frequency Range,
Signal-to-Noise Ratio
and much more

DAY 2 26th May 2023 (11:00am - 5pm) Video



ARIF PATIL

Principal Consultant
EYTE TECHNOLOGIES
PVT LTD (CTS-I)

What this day will cover:
Screen Resolution, Aspect Ratio,
Viewing Angle, Refresh Rate and
much more

DAY 3
27th May 2023
(11:00am - 5pm)
Integration Networking



#### SATYANARAYANA REDDY

Technical Manager, SAARC, India

THE SIEMON COMPANY

What this day will cover: IP Networking, Basics of IP Address, IPv4 vs IPv6, Routers and much more

**VENUE: HALL 2** 



HALL 2, BOMBAY EXHIBITION CENTRE, MUMBAI



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## — VISIT HALL 1 | BOOTH J29 —



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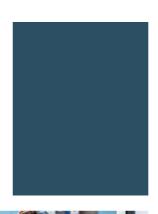


AV INTEGRATION COMMUNICATION NETWORKING EXPO













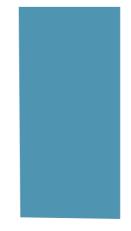






30 MAY - 1 JUNE 2024 BEC, MUMBAI, INDIA

www.av-icn.in







TO PARTICIPATE, CONTACT:

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## PALM + AV-ICN brings to you THE VOICE. THE VISION. THE VERITY

From pioneers at the apex of the industry



## 11 QUESTIONS WITH

- . Dave Haydon, Director Co-Owner, Out Board & TiMax Spatial Audio
- . Manuel Peris, CEO, DAS Audio Group SL
- · Michael Bosworth, Executive Vice President, Christie Digital Systems
- · Kalle Hvidt Nielsen, CEO, DPA Microphones
- · Josef Valchar, Commercial Director ROBE Lighting s.r.o.
- · Michele Noselli, Co-owner and Board Member, Director of

Communications - Outline

- · Amnon Harman, CEO, d&b audiotechnik GmBH
- · Pio Nahum, CEO CLAY PAKY
- . Joe Pham, President and Chief Executive Officer, QSC LLC
- . Aidan Williams, Co-founder and CEO of Audinate
- Eric Loader, Director of Sales, Elation Professional Lighting, Inc.
- . John Meyer, Founder and CEO, Meyer Sound
- Roland Stenz, CEO of Eve Audio & Kerstin Mischke, Sales and Marketing Director of Eve Audio
- · Wilfried Ehrenholz, Founder & Chairman, Dynaudio Group
- Wolfgang Fraissinet, Global President of Neumann GmbH
- Fuat Koro, Director of Global Sales & Marketing, Bose Professional
- Christian Hertel, Co-founder, Inoage GmbH
- Uli Behringer MUSIC Group Founder & CEO
- Ilpo Martikainen, Founder and Chairman of Genelec
- Dr. Andreas Sennheiser, Co-Chief Executive Officer, Sennheiser

To feature in our upcoming 11 Questions Series,

#### **BOSE CORPORATION TO SELL BOSE PROFESSIONAL TO TRANSOM CAPITAL**

Bose Corporation, a US-based multinational company and one of the global leaders in audio systems, has announced the sale of the Bose Professional Division to Transom Capital Group ("Transom"), a leading operations-focused middle market private equity firm. With this deal, Transom will assume ownership of the Bose Professional commercial installation

US-based operate for performance, commercial and conferencing applications, and has worked with AV integrators, system designers, installers and consultants to deliver these unforgettable audio experiences. Now, its systems can be heard worldwide – in workplaces, houses of worship, universities, restaurants, retail stores, hotels, performing arts centers, al installation



and conferencing businesses. Bose will retain its portable PA systems as part of its core consumer product business.

For more than 50 years, Bose Professional has developed audio systems that are easy to design, install and

stadiums, and more.

"We're proud of what Bose Professional has accomplished – its legacy in the professional AV market and the diverse list of amazing installations it

has completed all over the globe," said **Lila Snyder**, CEO of Bose Corporation. "The sale to Transom will provide Bose Professional the additional attention it needs to support the professional audio customer, and to continue to develop products and technologies that stand out in the industry. It will also allow Bose to focus more deeply on our core business – creating amazing audio experiences for on-the-go, at home and in the car."

"Bose Professional's tenure in the professional audio business, its standout product portfolio and customers, as well as its team dedicated to researching, engineering and delivering new and innovative products, made it a compelling business for us to bring into our portfolio," said **Russ Roenick**, Founder and Managing Partner at Transom. "We are working closely with Bose to ensure business continuity for Bose Profession-

al going forward, and we look forward to continued success for the business as an independent company."

"We're excited about the new opportunities this will enable us to explore," said **Michael Bennett**, CEO of Bose Professional. "Our customers are the key reason we develop systems that are easy to design, easy to install and easy to operate. As the pro-AV industry continues to evolve, our focus is on ways to help our customers be more successful and clear the path to great sound." Progress Partners acted as Bose's exclusive financial advisor in connection with the sale. Additional information, including financial and other terms of the transaction, will remain confidential.

Progress Partners acted as Bose's exclusive financial advisor in connection with the sale. Additional information, including financial and other terms of the transaction, will remain confidential.

## **D&B GROUP JOINS UN GLOBAL COMPACT**

**d&b Group** and its subsidiaries **d&b audiotechnik** and **d&b solutions** announced that they have joined the

**United Nations Global Compact initiative** — a voluntary leadership platform for the development, implementation,



.....

#### Modern Stage Services Shatters Records with Unprecedented Technical Mastery for World's Largest Projection Mapping Event

"Mann ki Baat", a program hosted by the Hon'ble Prime Minister of India, Shri Narendra Modi, completed its 100th edition on 30th April 2023.

**Mr. Davinder Wadhwa** Ji said, A special program was curated for this grand celebration, & more than 12000 people witnessed projection mapping on 13 different iconic monuments in 12 different cities across the country.





d&b Group is now a member of the United Nations Global Compact Initiative

and disclosure of responsible business practices.

As members of the Global Compact, d&b Group and its subsidiaries will have the opportunity to collaborate with other companies, civil society organisations, and UN agencies to exchange best practices and to contribute to collective action towards sustainable development.

The UN Global Compact is an initiative that calls on companies to align their operations and strategies with ten universally accepted principles in the areas of Human Rights, Labour, Environment, and Anti-Corruption (see notes below). By doing so, companies can make a positive impact on society while also supporting the UN goals and issues embodied in the Sustainable Development Goals.

"Corporate Social Responsibility and Environmental Social Governance have become key concepts in the business world in recent years, but for us are far more than just buzzwords, they are important guidelines and metrics that we have placed at the heart of our business," comments **Amnon Harman**, Chief Executive Officer at d&b.

"In line with our commitment to these principles, we are proud to join the UN Global Compact. Voluntary initiatives such as these have produced tremendous positive social and environmental outcomes and have improved the lives of millions of people in the workplace and in communities around the world, and we look forward to sharing the benefits of the program with our many industry colleagues and customers," he added.

# VOICE OF THE INDUSTRY POWER OF THE INDUSTRY





## India's only Pro Audio, Pro Lighting and Pro AV magazine

Delivering responsible, expeditious and factual company business news, product & technology updates, features & interviews, market reports, industry analysis and more. PALM AV-ICN is available in both print and digital versions, in totality reaching more than 60,000 professional industry readers.

www.palmtechnology.in www.av-icnx.com/magazine



## **DTEN D7X NOW CERTIFIED FOR MICROSOFT TEAMS**

DTEN, one of the leading providers of video conferencing solutions, announced that the company's DTEN D7X video conferencing & collaboration solution is now certified for Microsoft Teams. DTEN, in collaboration with Microsoft, is creating an easy to use out of the box Teams Rooms on Android collaboration solution.

DTEN's portfolio of video collaboration solutions, which feature built-in cameras, microphones and speakers, provide a seamless collaboration experience for hybrid teams for employees working from anywhere. The D7X touch capability makes the table console optional and enables collaboration with Microsoft Whiteboard. With the certification, the DTEN D7X now is a Teams Rooms on Android solution, enabling Teams customers to take advantage of DTEN's flagship products and Microsoft Teams' collaboration platform and features used by millions of people worldwide.

"DTEN is proud to have earned Microsoft's certification for our video collaboration solution for Rooms," said **Wei Liu**, CEO of DTEN. "Microsoft certification is simply further proof of the overall quality of our products. We

know customers need flexibility as they plan for hybrid work or learning. Working with the Microsoft Teams group has been exceptional, and we look forward to co-driving innovative Teams Room use cases. We're excited to bring our all-in-one experience to the Teams ecosystem."

The certification process involved rigorous testing of DTEN's collaboration solutions to ensure they meet Microsoft's strict standards for performance, security and compatibility. With this certification, DTEN customers can have confidence that their devices will work seamlessly with Teams,

providing a reliable and secure communication and collaboration experience.

"We're pleased to have DTEN join the ecosystem of devices Certified for Microsoft Teams," said **Albert Kooiman**, Senior Director of Microsoft Teams Devices Partner Engineering and Certification at Microsoft. "DTEN's collaboration displays combine Microsoft Teams with touch and inking through the Microsoft Whiteboard, and we'll continue to work with DTEN to bring these rich hybrid collaboration experiences to our customers."

#### **LG ELECTRONICS INDIA LAUNCHES NEW BUSINESS INNOVATION CENTER**

#### Business Innovation Center in Mumbai will showcase the latest technology solutions by LG India

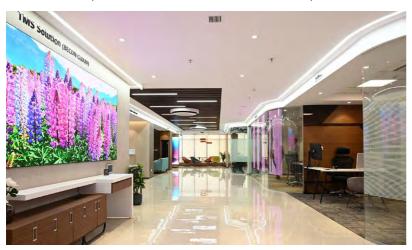
LG Electronics, one of the world's leading consumer durable brands and provider of innovative, customizable, state-of-the-art products & solutions for businesses, opened up its much-awaited Business Innovation Center (BIC) in Mumbai. The new facility is designed to offer customers & partners an immer-

Technology Solutions (Monitor, PC/ Laptop, Medical Devices & Projector), System Air Conditioning Solutions (SAC) and Consumer Electronics Products (Home Entertainment / Home Appliances / Residential Air conditioner). The facility provides a unique opportunity for B2B visitors to experience LG's latest customers and partners. The BIC will enable us to showcase our most modern offerings and provide a platform for collaboration and co-creation of customized solutions with our partners."

The BIC will also serve as a hub for training and development for LG's B2B partners' teams. Furthermore,

experiment with the products for LG's customers and partners.

LG Electronics India has been at the forefront of innovation in the Indian market, providing world-class products and services that cater to the needs of consumers and different businesses. With the launch of the latest BIC, LG is



LG Electronics' Business Innovation Center (BIC) In Mumbai opens its doors to offer B2B consumers end-to-end business solutions along with an immersive experience

sive experience and a one-stop solution for all their business needs.

The BIC is equipped with the cutting-edge technology-based products to showcase LG's latest innovations across various verticals. The BIC displays the top-of-the-line products & solutions by LG, such as Information display Solutions (Active LED, Signage, Commercial TV & related products), Information

offerings from all product categories for various business verticals.

Commenting on the launch of the new BIC, **Hemendu Sinha**, Sr. VP and Business Head, Business Solutions, LG Electronics said, "We are excited to launch our newest Business Innovation Center in Mumbai. This facility represents our commitment to providing innovative products & solutions to our



LG Electronics' Business Innovation Center (BIC) In Mumbai opens its doors to offer B2B consumers end-to-end business solutions along with an immersive experience

the facility will allow close interaction and demonstrate proof-of-concept for all of LG's innovations. It is an ideal business place to experience, learn, and poised to further strengthen its position as a leading provider of innovative solutions and technology in India.

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## SUDEEP AUDIO PARTNERS WITH MNSQ LEGAL, ANNOUNCES 'LEGALLY SAFE' LEGAL SERVICES FOR PRO AUDIO INDUSTRY

In a bid to protect and safeguard the professional rights and integrity of individuals engaged in the field of pro audio and music industry, Sudeep Audio, in conjunction with Mumbai-based legal firm MNSQ Legal – which consists of lawyers carrying over 30 years of work experience in the media & entertainment industry -announced an initiative providing patrons a 360-degree immersive experience of the media and entertainment industry within India and globally. Sudeep Audio announced the expansion of its services, called **Legally** SAfe, to now include legal matters (at special rates for Sudeep Audio customers) regarding intellectual property (IP), encompassing trademark (word mark and logo), and the copyright registration of any or all of the below -

- Literary works (including, but not limited to, lyrics, books, anthologies, journal and newspaper articles, reports, conference papers, working papers, computer software and programs, letters, emails, novels, poetry, databases, tables and compilations)
- Dramatic works (including, but not limited to, plays, screenplays, scripts, choreographic notation, choreographic shows, and scenarios for a film – but not the film itself)
- Musical works (song composition/ melody/tune, etc.)
- Artistic works (including, but not limited to, photographs, paintings, sculptures, maps, charts, graphs, diagrams, cartoons – static, but not moving animations)
- · Cinematograph films, including

- music videos (i.e. any kind of audio-visual clip provided for uploading onto mobile/digital platforms)
- · Sound recordings

Further, Sudeep Audio's panel of legal experts are available for reviewing of any kind of music-related paperwork related a label, director or producer, including, but not limited to:

- Consultation for legal advice or for preparation/review of any kind of written documents (e.g., any music-related paperwork [be it with a label, director or producer], Wills, leases, agreements, etc.)
- Mediation to help disputing parties to reach a mutually agreeable settlement
- Litigation for resolving disputes across various legal forums

## Legally safe

- Preparation/drafting/filing/registration/notarisation of legal documents
- Representation of clients in negotiations, arbitration, and in-court and other judicial/quasi-judicial platforms

Protecting your copyrights ensures that you have exclusive rights to your creative works, such as music recordings, corporate logos. This means that no one can reproduce, distribute, or display your work without your permission, giving you control over how your work is used.

Reviewing legal contracts can also help to identify any hidden fees or unexpected terms and conditions, allowing you to negotiate more favorable terms or avoid entering into a problematic agreement.

## **LAUTEN AUDIO APPOINTS PROMUSICALS AS THE INDIAN DISTRIBUTOR**

ProMusicals was appointed as the Indian distributor for Lauten Audio in April 2023. ProMusicals has shared expertise with more than 40 internationally renowned brands in India and is owning to the mission of providing musicians and audio professionals with the best tools and technologies.

Lauten Audio is a leading manufacturer of professional-grade microphones that are renowned for exceptional sound quality and innovative designs. The company was founded in 2011 by engineer and designer **Brian Loudenslager**, who set out to create a line of microphones that would offer a



unique combination of vintage warmth and modern clarity. Since then, Lauten Audio has become a go-to choice for recording engineers, producers, and musicians who demand the very best in microphone performance.

One of the hallmarks of Lauten Audio's microphone range is the

company's commitment to
using high-quality materials and
components in every microphone
they produce. From the custom-designed transformers to the
hand-selected vacuum tubes, every element of a Lauten Audio microphone is

carefully chosen to ensure optimal per-

formance and reliability. The brand's microphones are also known for innovative designs, which often feature unique capsule configurations and other proprietary technologies that help to set them apart from other microphones on the market. Overall, Lauten Audio's microphone range is a testament to the brand's commitment to quality and innovation and is a must-consider option for anyone looking for the very best in microphone performance.

## PROMUSICALS NOW SHIPPING FOCAL ST6 IN INDIA

ST6 by Focal introduced a new line inspired by the remarkable design of SM6 with three products Twin6, Solo6, and Sub12. These products are now available in India, courtesy ProMusicals, the official Indian distributor of Focal. The cutting-edge technologies are designed for high-performance and transparency across entire sound spectrum. Twin6 and Solo6 studio monitors, and Sub12 subwoofer, made in France. centre around full scope of Focal's sound savoir-faire. Sub12 subwoofer delivers unrivalled bass articulation and denth and what's more ST6 series boast exclusive technologies with 'W' cone for exceptionally precise and reliable sound. Some of the unique features offered by these products include disen-

gageable standby, high-pass crossover, Focus Mode, and more.

Twin6 and Solo6 are 2.5-way monitors made in France, offering unrivalled transparency, definition level, dynamics, and soundstage precision. As the industry-leading monitors, Twin6 and Solo6 inherit one of the best technologies in the market. Focus Mode of the two high-performing sound technologies use a two-way configuration, preserving the sweet spot when mixing, simplifying cabling, saving space on the console, and monitoring any modifications. The technologies boast an inverted dome Beryllium tweeter with an 'M'shaped protective grille and a woofer with a 'W'-shaped cone, as well as a frequency range of up to 10 kHz, specially

designed for its Focus Mode. Advancing the performance and technology, Twin6's design is on top with Focal's patented Tuned Mass Damper (TMD) technology, which reduces distortion in the 1kHz – 3kHz frequency range by 50%, as well as a high-pass crossover, a disengageable automatic standby mode and a 160Hz crossover for reflections from consoles, making Twin6 an industry-leading monitor. Twin6 and Solo6 are also designed for precise studio work with unique features like parametric crossover, disengageable automatic standby, and more. Lastly, to enjoy immersive listening experiences with Dolby Atmos and Sony 360RA installations, Solo6 includes inserts for attaching it to the wall and ceiling.



Sub12 is a professional subwoofer for producers and sound engineers looking for deep sub-bass.

Developed in Focal's own workshops in France, this subwoofer delivers unrivalled articulation, impact and depth. With the 13" (33cm) speaker driver with 'W'-shaped cone and very high excursion, as well as its BASH amplifier with 600W RMS and 1000W peak-topeak power, the sound reproduction is more impactful than ever. Additionally, there are optimised braces and a front vent inspired by Focal's Trio11 monitors, as well as internal and external vents to reduce noise and distortion.



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### **USHIO APPOINTS KOJI NAITO AS CHAIRMAN & CEO OF CHRISTIE**

Ushio Inc., one of the trusted leaders in light sources and optical equipment for industrial processing, visual imaging and life sciences, and parent company to Christie, the leader in audio and visual technologies, jointly announced the appointment of Koji Naito as the new chairman and CEO of Christie Digital Systems, globally.

Koji currently holds the position of

President and Chief Executive Officer for Japan's Ushio Inc., and will, effective April 1, oversee both companies. Koji succeeds Hideaki Onishi, who will transition into a new role as Christie's President and Chief Operating Officer. In addition, **Atsushi Kuroda**, formerly of Sharp NEC Display Solutions, Ltd and currently Senior Director of Christie's Strategy Office, has been appointed Christie's Chief Technology Officer and Chief Strategy Officer, suc-

ceeding **Zoran Veselic**, President and CTO.

"Constant innovation and deep core values, while making a difference in the communities we serve, are paramount to Ushio's vision to a sustainable future for everyone," says Koji Naito, chairman and chief executive officer, Christie. "I am pleased and honored to lead Christie into the future with a strong executive management team who shares Ushio's mission and vision."



Koji Naito, Chairman and Chief Executive Officer, Christie Digital Systems

## RAJESH MITTAL PROMOTED TO VP Q-SYS AND QSC PRO AUDIO SOUTH ASIA REGION

The Q-SYS and QSC Pro Audio divisions of QSC announced the promotion of Rajesh Mittal to Vice President SAARC. From the newly expanded regional sales, marketing and product development headquarters in Bengaluru, India, Mittal will oversee both the QSC Pro Audio and Q-SYS brands and continue to hold the position of Managing Director QSC India Pvt Ltd.

Mittal has been part of the AV and IT industry for almost 23 years, and since joining the company in February 2018 as Managing Director, India, he has played a vital role in driving SAARC's successful

growth. He has been instrumental in building a best-in-class sales, marketing and business team to enable the company to scale. He also established the vertical-oriented go-to-market strategy which is now a fundamental part of the business and will serve as a benchmark for other markets in the EMEASA region.

"Rajesh's vision for the India office has transformed the work environment and offers employees and customers a valuable opportunity to see new work in action," says **Markus Winkler**, Executive Vice President, EMEASA & APAC, Q-SYS. "The integration of alliance partner technologies has enabled and enhanced the region's hybrid work model, supporting positive work-life balance and positioning Q-SYS as a leading light for the future of AV. It is thanks to Rajesh's pioneering work that customers in the SAARC region now have access to knowledgeable Q-SYS and QSC Pro Audio colleagues at all points of the project chain."

"Rajesh has been a catalyst in transforming and scaling our organisation and business in India and SAARC," says Jatan Shah, President and Chief Operating Officer, QSC. "His business acumen, entrepreneurship and result-driven



Koji Naito, Chairman and Chief Executive Officer, Christie Digital Systems

approach has played a key role in our continued success in the region."

## ANDREAS RAPP TAKES OVER AS THE MANAGING DIRECTOR AT BEYERDYNAMIC

On April 1, 2023, **Andreas Rapp** took over the position of Managing Director of the renowned audio specialist **beyerdynamic**. He succeeds **Edgar van Velzen**, who has left the management board.

"We are pleased that in Andreas Rapp we have been able to recruit an experienced industry expert with a broad network for the company. We are convinced that he will make a major contribution to beyerdynamic's continued success and will continue to lead the company seamlessly on its positive growth path," comments **Prof. Wolf Michael Nietzer**, Chairman of the Board of Directors of beyerdynamic.

For the managing director, the new position is an affair of the heart. "I'm looking forward to returning to beyerdynamic after being responsible for the sales and product area of the consumer unit 20 years ago," emphasizes Rapp. "In the future, I will - together with the

entire team at beyerdynamic - focus on the strategic but also sustainable growth goals, expansion of the product portfolio with a view to future technologies, progressive internationalization and increasing brand awareness," he outlines his goals. "At the same time, we will work on becoming more agile as a company for high-quality audio products, so that we can react more flexibly to new customer and market requirements."



Andreas Rapp to serve as the Managing Director at beyerdynamic after Edgar van Velzen

## SHURE PROMOTES JOSÉ A. RIVAS TO VP OF GLOBAL SALES

**Shure** announced that **José A. Rivas** has been named to the position of Vice President of Global Sales.

Since joining Shure in 2004, Rivas has held several positions of increasing responsibility and geographic coverage, including Sales and Marketing Director of the International Americas Business Unit, Sales Director of the Americas Business Unit, Managing Director of the Latin America Sales Organization and most recently as Vice President of Sales for Emerging Markets.

"We're excited to elevate José to lead Global Sales," said **Chris Schyvinck**, President and CEO at Shure. "His experience with global customers and the extensive suite of Shure products will help us maintain our leadership in the audio industry. I know he will explore new growth in technology that addresses the evolving needs of end users."

Jose A. Rivas, Vice President of Global Sales, Shure





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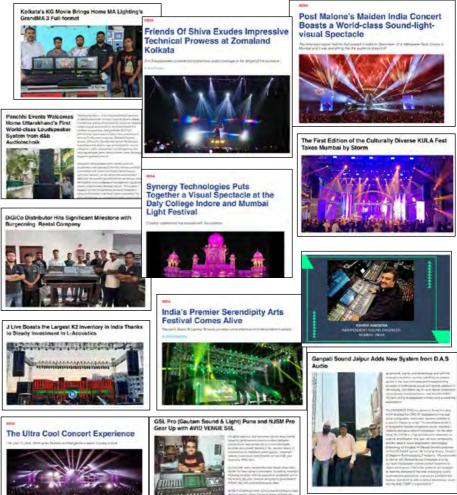


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## SENNHEISER APPOINTS NAVEEN SRIDHARA AS DIRECTOR OF SALES FOR BUSINESS COM-**MUNICATION IN INDIA**

Sennheiser, one of the preferred choices for advanced audio technology that makes collaboration and learning easier, announced the appointment of Naveen Sridhara as the Sales Director for Business Communication in India. Naveen joins the team with a wealth of experience and knowledge in the audio industry, having successfully driven growth and revenues in various leadership roles throughout his career.

Naveen brings with him more than 22 years of experience in the audio industry. He was previously with Beyerdynamic India where he progressed from a Sales Manager to the Sales & Marketing Director for SAARC Region

over his 12 years with the company, where he built and led strong sales teams and implemented sales strategies to drive growth. Back on 2009, Naveen was a Sales Manager for Professional Systems Division at Sennheiser prior to joining Beyerdynamic in 2011.

"I am excited to be part of the Sennheiser family again, and this time, with a very different role and objective. With my industry knowledge and experience over the years, coupled with the strong support from the team at Sennheiser, I am confident that we can achieve a lot more and better serve our customers in the India market." said Naveen Sridhara. Sales Director for Business Communication at Sennheiser India.

In his new role, Naveen will be responsible for leading Sennheiser India's Business Communication segment, with the goal of expanding our partnership network and growing our presence in the India market.

Petteri Murto, VP of Sales for Business Communication, APAC, said, "We are delighted to have Naveen join us at Sennheiser India, and we strongly believe that he will be an invaluable addition to our team. His appointment underlines our dedication towards delivering seamless conferencing and audio solutions to a wider range of corporate offices and educational



Naveen Sridhara, Sennheiser

institutions in the ever-growing Indian

### ADAMSON HEADQUARTERS FIND NEW HIRES WITH BROCK ADAMSON AND OTHERS

Headquarters of Canada's largest fully integrated speaker manufacturer has completed its strategic management initiative with key new hires and the return of **Brock** 

Adamson as CEO.

In the first quarter of 2023, Pieter van Hoogdalem accepted the new Business Development Strategist position, focusing on alignment between sales, marketing and product. Hoogdalem adds a unique blend of hands-on audio industry knowledge and market growth experience with Landr Audio Inc. and Proshop Entertainment Inc. Marketing Consultant, Kevin Alexander has also joined the team. His previous experience with TC Group and numerous

audio brands allows Adamson to launch strategic marketing initiatives

to support its sales network and ambitious product introduction



L to R: Fred Schleicher, Pieter van Hoogdalem, Duane Logan, and Paulo Guassi from Adamson

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plans. Finally, Paulo Guassi takes on a new Production Management role bringing extensive experience, including his tenure with Philips spin-off, Signify.

These additions were made following the addition of Fred **Schleicher** as Controller and Duane Logan as ERP Specialist in 2022. Schleicher and Logan bring enterprise operations experience from the automotive and pharmaceutical industries.

These new management positions allow Adamson headquarters to serve the sales network, including Jochen Sommer at Adamson Europe GmbH, Frank Loyko AMER, Jasper Ravesteijn EMEA, and Ben Milson ASIA PACIFIC.

## **VEGA GLOBAL APPOINTS NEW CEO**

Vega Global, one of the leading end-to-end providers of audiovisual and unified communications solutions and a portfolio company of Baird Capital, announced the appointment of its new CEO, Steven Medeiros. Vega's former CEO, Huaming Gu, will transition to the Executive Chairman role, ensuring the interests of the Vega's business and Vega Board are aligned.

Medeiros joins Vega with 30 years of Enterprise Software and Services (SaaS) leadership across APAC and North America. Most recently, Medeiros served as General Manager of Alida, one of the

leading providers of comprehensive experience management platforms, leading the expansion of the group's APAC business. Before that, he was CEO of NTT Ltd Hong Kong and Macau, one of the largest and most profitable business units in Asia Pacific. Before NTT, he held senior leadership roles at Kony (acquired by Temenos), SAP, and other prominent technology companies.

"I am pleased to join Vega to continue its 35 years of history as a leading AVI Systems Integrator in Asia and the Middle East while transforming the organisational focus on IOT, AI and Client



Steven Medeiros, CEO

Experience," said Medeiros. "I've been in Hong Kong for over 16 years, and Vega's reputation in the region is undeniable. I look forward to building upon the continued success in delivering superior solutions to our clients."

"We're delighted to have found Steven and to be expanding our leadership team," said Gu, "With his exceptional track record in the IT industry, coupled with the strong team we already have in place with deep experience in AV, I am confident we are best positioned to take advantage of this constantly evolving market."

## The Bright Spark

## SERVICE BEFORE SELF

Viraf Pocha

e are a country of a billion and a half with young population and are showing keen interest towards enterprising adding to the demands of employment in India. Our government encourages us to be Atmanirbhar, Our leadership inspires us to believe humble beginnings are no barrier to achieve great things. On the other hand, India is a proud country to get the work done by our hands. Artisans, handicraftsmen, and tradesmen do an amazing job with a range of techniques in the full range of materials including textiles, wood, and metal.

I'm not talking only about the decorative crafts but a massive resource of carpenters, masons, electricians, plumbers, painters, and glass workers. It's an endless list of the guys who shape things that make our lives comfortable. Dare I go on to say, even enviable!

What better arena to showcase these skills and create trends than in our entertainment/exhibition industry. Talented people can pick up any tradition and give it a boost or a twist making it relevant to TODAY's market.

Did you ever wonder? We need some or all their skills on almost every project we work on. Yet, if you talk to any one of them individually, almost invariably they will tell you that they are not encouraging their kids to enter their trade. Every one of them talks about some effort during their lifetimes to organize themselves into guilds or some loose organization to look after their collective needs. However, every such initiative collapsed just when it seemed like it was about to take off.

Why? What are we doing wrong? One possibility is that somebody somewhere feels insecure of disturbing their comfort zone and works against such ventures taking off. A vested interest in fearing that organization will lead to higher costs. Even a basic knowledge of human resources will contradict that. A secure, well trained work force will be far more productive.

A second possibility is that living facilities around the areas where this kind of work is required is scarce and expensive. In fact, travel is also inconvenient. That's one of the symptoms of our dismal town planning. Imagine if the rapidly growing smaller towns learnt from the mistakes the big cities made.

Just to clarify – I'm not talking construction. My focus here is solely on entertainment and exhibition services, though the parallels are obvious. Shouldn't something be done? A step in the right direction is the setting up of a few industry bodies around the country. Membership is still relatively small. Generally speaking, their aims are a little loose and so the larger population remains sceptical.

Please don't take that the wrong way. An Industry body must represent the needs of that industry. Your apex organization needs everyone to step up not be able to cling onto their lead for too many years. Owners must keep a constant look out where the next challenge will appear. Employees also have to cope with the tremendous development they see around themselves.

Unfortunately, in our business, linear growth opportunities are a bit limited. We are in a world which requires us to be present. This is a massive limitation in a world where we can stream a niche concert in Brazil if we so choose. The huge rebound after Covid-19 is very reassuring with the proof that humans crave human touch and feel. We can access the most hyped performances in the virtual world. However, there is a huge audience for a local live experience.

ing is that even if there is a short lull in the proceedings, immediately the phones come out and fingers start flying! Somewhere at the intersection of those two worlds we have to find a living. I think the opportunity is immense, especially in Tier II cities. India's entertainment habits are changing. Our exposure to social media and the PR machines are

ing around him. What's more alarm-

changing. Our exposure to social media and the PR machines are drawing us into the world of self-ful-filment. It seems to be the most sought-after quality. In the old days people studied the arts, understood the intricate details, and appreciated the subtlety of what was expressed. Perhaps, it had something to do with distribution. While the arts were exclusive, they were expensive to access and only the richer people could afford to buy tickets to concerts and shows. However, technology has changed that.

Earlier the entertainment available to the common man was more in the shape of 'carnivals' – Local groups gathering and self-entertaining. While somebody danced, somebody sang from a village or local group. I'm talking village games and 'Antakshari' style entertainment. Ours tastes have become both more sophisticated and more pedestrian. Today we pay good money to sit in a club and listen to fart jokes which seems a perfectly acceptable and desirable way to spend an evening. Both Hollywood and Bollywood rely more on the blockbuster superhero films rather than the 'common men in extraordinary circumstances' that were the staple only a few decades

Entertainment pervaded our lives. Canny marketing people wove amusement even into mundane activities like sports. You no longer

(Continued on page 164)

May - June 2023

Unfortunately, in our business, linear growth opportunities are a bit limited. We are in a world which requires us to be present. This is a massive limitation in a world where we can stream a niche concert in Brazil if we so choose. The huge rebound after Covid-19 is very reassuring with the proof that humans crave human touch and feel. We can access the most hyped performances in the virtual world. However, there is a huge audience for a local live experience.

and share their thoughts and concerns. If your peers hear you articulate your thoughts well, it's only a matter of time before they understand that at some point the issue will affect them too. Hence, a collective problem-solving approach will work best for everybody, but a catalyst is needed to drive into higher gears.

Who will drive that change? One of the markers of a successful business in our world is the ability to hold onto people after you have trained them. Our world is changing very fast. It has recognized that even established companies who have a huge head start today may

There's a huge relief to know that our jobs are safe but it's equally important to recognize that our habits of consuming entertainment have also changed. Attention spans are shorter when audience engagement is a MUST. Self-aggrandizement is an important part of our culture even when we live a significant part of our lives online. Perhaps, most important is that our audiences 'Boredom Tolerance' levels are zero. It's alarming to notice that in the middle of a hundred screaming fans, you will always spot one kid totally engrossed with his own phone screen, totally oblivious to all the energy flow-

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## CHAUVET PROFESSIONAL INTRODUCES INNOVATIVE NEW PRODUCTS AT PROLIGHT +

**SOUND 2023** 

CHAUVET Professional is all set to introduce the latest additions to its Maverick Storm series of IP65 rated fixtures at Prolight + Sound. Engineered to stand up to "nature's fury" as well as "man-made hazards," the new fixtures deliver outstanding, reliable performances in indoor and outdoor applications.

Joining the Maverick Storm 4
Profile, Maverick Storm 2 Profile
and Maverick Storm 2 BeamWash,
which made such an impression
at LDI, is a collection of Storm
products that will be making their
EU debut at Prolight + Sound. These



include the Maverick Storm 1 Beam, a compact, high output 310W fixture with CMY colour mixing, a gobo wheel, and two layerable prisms; as well as the 420W Maverick Storm 1 Hybrid, which also features CMY colour mixing, an animation wheel, two gobo wheels, and two layerable prisms, plus a very wide zoom range.

The new Maverick Storm 3 Beam-Wash delivers an impressive 19,062 lumens, more than any other fixture in its class of IP65 multi-cell wash lights. Combining brains with brawn, it also offers two zones of zoom as well as individual pixel control to open myriad creative

options to lighting designers.

Although the new Storm fixtures will be occupying centre stage at Prolight + Sound, CHAUVET Professional also has other exciting innovations in store for booth visitors, including the **Ovation Rêve E-3 IP**, which sets the standard for LED ellipsoidal with its 2800K to 8000K colour temperature presets, emulated "red shift" for a tungsten-like look, four 16-bit dimming curves, and adjustable yoke that makes it easy to mount in a wide range of

## **GURUGRAM'S BELLAGIO LIGHTS UP WITH A-PRO LIGHTING**

**Bellagio**, a fine dining restaurant in Gurugram, India is an exquisite spot that offers its visitors much more than just delectable cuisines. With a cottage-core ambience, Bellagio promises an unforgettable evening with loved ones. To envelope its atmosphere in vibrant, vivid hues, Bellagio required a professional lighting solution. The restaurant entrusted **A-Pro Lighting** to install a quality, outdoor-friendly professional lighting solution.

A-Pro Lighting, in turn, installed its

20R Sharpy, **ZENIA**, which features international-standard IP65 waterproofing range and the original Osram Lamp.

Key features of A-Pro Lighting's ZENIA include:

- Input Power: 600W
- Lamp Type: 382/371 OSRAM lamp
- Average Life Span: 1,500 hours
- Control Channel: 16 control channel modes
- Control Mode: Standard DMX512, Master/Slave control mode, Sound active, Auto Run

- Menu Display: OLED with touch buttons, English & Chinese
- DMX Signal Connection: 3-pin XLR input/output
- Optical Lens: High penetration coating lens
- Beam Angle:2°
- Working Temperature: -20°C 40°C
- IP Rate: IP65

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A-Pro Lighting's professional installation team worked according to the needs of the restaurant's management and ensured that the lighting fixture



works smoothly without any interruption. Post installation, A-Pro Lighting's ZENIA garnered positive client and customer reviews at Bellagio.

## The Bright Spark

#### **SERVICE BEFORE SELF**

watch a game and enjoy its athleticism and changing fortunes. Now, you must pick sides, buy T-shirts, wave banners, and maybe even bash in a few heads and drums for fun. Dining, shopping, and even transport are married with 'time pass' activities. You did not enjoy a meal unless it was presented on social media as worthy. Video busses learnt a lesson from airlines. So much enthusiasm has been created that even a trip down to the mall was seen as an outing. People competed to be seen in the right 'stores.' All of this leading to our lives being lived for social media

Some say it hollows out the emotion. When all is lost at the altar of living for other people's adulation; we lost our souls. No worries. A huge

class of new entertainment showed up – the self-help Guru. They showed up everywhere, teaching us how to live, how to be successful in all aspects of our lives, eat healthy, and drink responsibly. Suddenly, there was a 'right' way to engage with the world. Take notes guys. Look beyond my words. I'm offering you a million ways to make a buck.

Jesus said, "Go forth and multiply". Well guys – you are in the right business to multiply. People aspire in both their business lives as well as the limits of their social lives. This is where you tap into the vast talent pools of India's young generation and shape their messages and thoughts about 'How to Live the Life' and deliver them to an even bigger mass of kids looking for something more than what traditional society had envisaged for them.

They want more. They want bigger.

(Continued from page 163)

They want brighter. Look at the fashions of the day. Gone are the sober suits that spoke elegance. I don't want to mention names, but it's clear that the peacocks grab the headlines. The outlandish red carpet 'You can't wear that in public' Oscar looks are being increasingly seen at the local watering holes. The looks can be seen trawling the shopping malls and at the airports. I mean (this for us is older lot). 15 years ago, what would you be thinking if you saw a dude in a pink velvet track suit with an obscene suggestion stitched over his backside. Today, he's surrounded by a gaggle of green haired, chunky jewellery pierced into scary bits of their bodies, looking to grab a moment into their phones that cost as much as my parent's earnings in a good year. That's the market we must serve if we need a slice of the promised lifestyle.

If you can figure out how to shape all those tradesman's products into pieces that fit into this new way of living and consuming, you will be making a huge contribution to the country. You will put food on countless tables and weave a web of medical security around them. For me the true value comes when you give young people any ability to express themselves secure in their freedom that they will be heard.

Think about it. Most unhealthy lifestyles and habits are centred around a fundamental dissatisfaction of our own circumstances. If we can create a platform where young people's creativity and inner energy is released in a positive way, they will choose healthy options for themselves which should be good for the society they live in.



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## **ADJ LIGHTING ANNOUNCES ELEMENT H6 PAK FOR LIVE APPLICATIONS**

ADJ Lighting announced the expansion of its range with the new Element H IP. Offering many of the same features as the Mirage Q6 – including a custom road case with built-in charging – the new Element H IP features 6-in-1 colour mixing LEDs and comes in at a lower price point.

The Element H IP is supplied in sets of six, together with a UCIR24 remote control and durable flight case with on-board battery charging, as the Element H6 Pak. Designed to provide a versatile and practical all-in-one solution for uplighting of parties, events and brand activations, the system allows for quick and easy deployment of a truly wireless lighting system. The individual units are ideal for uplighting of structures, foliage, or décor wherever it is required, indoors or outside, in any weather conditions, and without the need to run power or control cables.

Each Element H IP luminaire features four 20-Watt hex colour LEDs, which each combine red, green, blue, amber, white and UV elements that can be dimmed independently. This allows for a huge gamut of colours to be mixed, from radiant primaries to subtle pastels, including vibrant UV-infused purples and pinks. In addition to full RGBWA+UV colour mixing, the fixture also features 63 built-in colour macros that aid quick programming by making it easy to instantly select popular options. Each LED has a life expectancy of approximately 50,000 hours, which essentially removes the need for lamp replacements, and the fixture also offers pulse and strobe effects with speeds variable between 0.2Hz and

11Hz.

A powerful 4000mAh lithium-ion battery is incorporated within each Element H IP unit. This will deliver approximately six hours of standard operation (normal mode) or up to 12 hours using the 'Saver' energy saving mode. Just 6 hours of charging time is then all that is required to return the battery to full capacity. The fixture delivers an output of 1117 lux (measured at 2M) and has a concise beam angle of 17.6° (28.7° field angle), which is ideal for stage uplighting and wall washing.

Each Element H IP fixture is also

equipped x with 19 of H ead de

ADJ Lighting Element H6 Pak

an ADJ's WiFLY EXR wireless DMX transceiver. This allows the unit to both receive and transmit a DMX control signal wirelessly from/ to other compatible ADJ WiFLY transmitters and fixtures. The fixture offers a choice of seven DMX channel modes (ranging from 6 to 17-channels) allowing customization depending on the level of control required and the number of channels available for a particular application.

With compact dimensions of 5.5" x 5.5" x 7.5" / 140mm x 140mm x 190.5mm (L x W x H) and a weight of just 5.3 lbs. / 2.4kg., the Element H IP is an extremely compact and easily portable fixture. However, despite its low weight and small

size, the fixture has a rugged metal construction and a sealed design rated to the IP54 standard. In addition, packaged together as the Element H6 Pak in a rugged flight case equipped with our innovative internal charging system, it offers a streamlined orkflow designed to make the

workflow designed to make the lives of busy event professionals easier."

## **AVOLITES ANNOUNCES T3 & T3-WING PROFESSIONAL LIGHTING CONTROLLER SOLUTION**

## After more than a decade of production, Avolites announced the arrival of its re-imagined iconic Titan Mobile professional lighting control surface

Avolites, one of the world leaders in the innovation of visual control systems, has globally announced its new T3 and T3-Wing professional lighting controller solution, designed and built as the lightest, smallest footprint, most affordable and exciting design look in the Avolites product range.

The new T3 has been designed for fast programming and accurate performance in a super-portable PC wing format, and offers high build quality and familiar ergonomics. This ensures whatever venue or programme requirements users have, they can afford to purchase, easily programme, easily transport and operate the solution across all their shows.

The T3 is the leading product in the newly named, PC powered, T- Series, comprising of the existing T1, T2, and now with the addition of the new T3 and T3-Wing. Taking design cues from

Avolites' Diamond 9 flagship console, its ergonomic design requires less muscle memory to operate, as well as having a lower height profile and being 20% lighter yet still as robust as its iconic predecessor.

The user can connect and power the T3 or T3-Wing via the USB-C port and use the four robust DMX ports and an LTC port to hook up the system to the full rig. The lighting controller solution also features an output up to 16 DMX universes from the host PC via Art-Net and sACN, with the option to upgrade to 32 or 64 universes if required. The T3 key features include 3 x Optical encoder wheels, 9 New Titan keys to match D9 layout, 10 playback faders, 12 Macro/ Executor buttons, 20 C&K flash buttons with custom cap, 92 Cherry MX Low Profile keys with blue backlit illumination and AVOKey security built in.



## Designed by Lighting Designers. For Lighting Designers

Designed with lighting designers for lighting designers to become their owned console of choice, the new T3 blends a user-centred design approach with high quality materials and components, reliability, comfort and ease of use. The T3 like its predecessor, is set

to appeal to a wide range of users, from students, enthusiasts and freelancers to entry level productions, events and rigged shows. Giving lighting professionals inspired creative control, allowing them to create, programme and control their shows wherever they need to travel to. The new T3 and T3-Wing and the custom carry cases they come with, can easily fit into a standard PC backpack along with a 15" PC and weigh well under the 15kg cabin baggage limit.

"The T3 has been built as the essential tool for every lighting designer and their busy life on the road." said **Paul Wong**, Managing Director, Avolites. "It underlines our commitment to innovation and ensures users can afford to purchase their own console, as well as create amazing live experiences wherever they need to travel to."

## 11 QUESTIONS WITH Greg Beebe

### Executive Vice President, Professional Audio, Sennheiser

In his 30 years of journey with premium pro audio brand Sennheiser, **Greg Beebe** has seen the company grow leaps and bounds, expanding its footprint to many parts of the world. Today, the brand is synonymous with reliable and unparalleled audio excellence in a wide range of applications. In **PALM** + **AV-ICN's** '11 Questions' Series, Beebe, currently the Executive Vice President of Professional Audio at Sennheiser, offers finer insight into Sennheiser's strategy to continue its prominence in the pro audio industry, the key trends and technologies that developed in the pro audio market in India in the last decade, the company's future plans to focus on the ever-evolving and increasingly mature pro audio scene in the country, and much more.



What is Sennheiser's strategy to focus on the professional audio business and maintain its leading position in the industry?

Focusing entirely on professional audio after more than 50 years has indeed been an important decision for Sennheiser, and one that was taken after a long review process. During this in-depth strategical analysis, immense potential was seen for all of Sennheiser's four business units – Consumer Audio, Professional Audio, Business Communications and Neumann. While Sennheiser would be able to grow pro audio, business communications and Neumann using its own resources, the consumer audio business would have more growth potential with a bigger, consumer partner at its side. In Sonova, Sennheiser has found this strong partner

With its new focus, Sennheiser can make even greater contributions to advance the art of creating, recording and performing. Be it in the pro field of theatres, rental companies and broadcasters, or in the fields of music and audio tools for content creation.

With regards to how we maintain our leading position in the industry - it almost sound too simple, but Sennheiser has a deep passion for customer intimacy. We really want to understand our customers' needs, pains, and gains. We are committed to working with our customers and partners to ensure that we exceed the expectations of our end users. You can have new products and a great marketing campaign but none of that matters if the customer is not satisfied. This is why we keep our customers at the core of what we do.

How would you describe your day-to-day duties and responsibilities as the Executive Vice President of Professional Audio at Sennheiser?

It is like wearing two hats. The first is running the business, and that involves everything from working with our partners

66

I was part of a five-person team who brought the **Evolution Series to life...** The second milestone is when we launched the wireless Digital 9000 Series in the late nineties, which really showed the world how we could revolutionize the transmission of wireless signals. It remains our flagship wireless product until today. I will not tell you about the third milestone because it is yet to come.

in the supply chain to ensure that we have the components to build a product, all the way through sales, marketing, logistics, and development to ensure that we cater to our customers and ideally exceed their expectations. All these require quite an extensive amount of collaboration. The second hat that I wear is the head of the executive management board. This involves taking group topics to manage the business on a global scale with key projects such as corporate social responsibility and digital transformation. Thankfully, for me no two days are the same.

You've been a part of Sennheiser's significant milestones. What, according to you, are the three main milestones in terms of product development in the history of Sennheiser?

The first milestone I would say is in the late nineties. I was part of a five-person team who brought the Evolution Series to life. Today, when we think about the Evolution Series - be it the wired or wireless product, we take for granted that they were always there, but they were not. There were five of us who worked really hard to transform our company to being a viable player in the music industry. The second milestone is when we launched the wireless Digital 9000 Series in the late nineties, which really showed the world how we could revolutionize the transmission of wireless signals. It remains our flagship wireless product until today. I will not tell you about the third milestone because it is yet to come. Stay tuned.

## Sennheiser announced the expansion of the Evolution Wireless digital family. Can you share with us something more about the expansion of the line and what activities on EW-DX can we look forward to in India?

Besides the EW-DX, we very recently launched the EW-DP which is also part of the Evolution Wireless Digital family. I'll answer the question from the perspective of the Evolution Wireless digital platform. Our intention was to digitize our Wireless Evolution Series that was already at its fourth generation. By digitizing the analogue system, it gives the end user more options for interoperability, ease of use, and workflows. In terms of EW-DX activities, we have an incredibly competent team who has done an amazing job of introducing the EW-DX in the India market. In our business unit, we often quote a management guru Zig Ziglar who said, "Success occurs when opportunity meets preparation." The team in India has done such an incredible job preparing the market for this digital wireless system. So, I think what you are going to see is an instant acceptance from the market and the demand will continue

## What is Sennheiser's philosophy when it comes to working with dealers and the dealer channels and is there anything that the dealer channel can do that would be helpful to Sennheiser as a company?

We view dealers as the conduit between the end customer and us. We can do a lot when it comes to marketing and creating demand, but if there's no outlet for end users to acquire our products, then we have accomplished nothing. Therefore, the relationship we have with resellers and dealers is critically important. Through close partnership with dealers, we also have the opportunity to educate them on our products. This is a fundamental step that I think many companies tend to overlook – but there are many choices out there and we need our dealers to be able to magnify the message of making the correct selection of products. Therefore, dealers are a fundamental component of our go-to market

#### You emphasized on education and training. Can you elaborate on the steps that Sennheiser is taking to drive the educating and training to the dealers and resellers?

Yes, we maintain a multifaceted approach towards training and education. Our product managers, who are part of the project from the very beginning until the product is ready for market, are responsible for educating our internal staff. We have a department called the Sound Academy team and these are colleagues who are dedicated to creating content to educate our dealers and partners. We provide dedicated training to our sales teams on how to train the dealers and additionally, we also have Technical Application Engineers who can go into the field to conduct in-depth, hands-on



I've seen a heightened level of understanding and appreciation for craftsmanship. I've seen the desire to continue to expand and grow. I've also seen the trend to move to digital...I'm really proud to see how much the Indian market has advanced in a short period of four years since I last visited.

trainings on selected products in different parts of the world. Last but not least, we have user generated content, which also helps to educate end users. To us, education is a key tenet of success.

# When you look at the size of Sennheiser's professional segment, what are you most proud of, and what would you say sets the company apart, not just from direct competitors, but also from all the companies in the professional audio and music industry?

I am most proud of the team at Sennheiser. It is easy to view work as just a job but what makes Sennheiser different are the people and the passion that they bring, to progress the company and to exceed the expectations of our customers. They say success can make you complacent, but in our case, success drives us even further because we see the things that we do actually make a difference, and that's what gives us energy to do more.

What makes the company stand out? The people stand out. We have a wonderful balance of highly tenured people and younger people joining our company and bringing in a fresher perspective with us. We are passionate to transfer our knowledge in creating premium products and we have people who are spirited to bring these solutions to the end user.

What motivates our team is seeing our products on stage, in a TV studio or at a community theatre. It gives us pride knowing that we have made a difference and have contributed to the art of creating, recording or performing.

## During Covid, did Sennheiser move the professional audio business to e-commerce sites as well?

Yes, during the pandemic we started selling some products through e-commerce platforms in India. Our successful e-commerce venture in

2020 and our growing online presence proved that some professional audio products such as headphones and plug-and-play microphones can be sold on digital platforms. However, for more intricate solutions such as a 12-channel wireless configuration with antenna combiners and splitters, the help of an informed reseller is necessary to ensure that the end user's requirements are met. Such specifications cannot be easily facilitated online and hence our offline partners plays a vital role and they remain our top priority.

## Do you feel India has a cost-conscious market compared to other countries?

The short and easy answer is yes, but it is not unique to India. In one of my earlier positions, I was responsible for our business in Latin America and the market there is very similar to India. There are markets that are more price conscious and that is why at Sennheiser we follow a good, better, best approach. We have entry-level products available at an introductory price point. When experienced audio professionals are ready to invest, we have a better solution to offer. And when that audio professional is ready to take his experience to the next level, we also have the best professional audio solutions to offer. We try our best to be approachable while staying true to our brand value, which relies on quality.

## What trends and technologies have you observed for the professional audio business in India in the last 10 years?

I've seen a heightened level of understanding and appreciation for craftsmanship. I've seen the desire to continue to expand and grow. I've also seen the trend to move to digital. I was at a studio yesterday and there was Dante in all the rooms, so one could mix and mingle as one wishes in different settings. I'm really proud to see how much the Indian market has advanced in a short period of four years since I last visited.

## What are your future plans for Sennheiser Group of Professional Audio business and growth in India in the next five years?

India is one of our four focus countries, which I pay close attention to. I intend to be very close to our team here who is doing an incredible job. I will continue to support them in terms of advocating the Sennheiser brand and digitizing our workflows for end users. We want to ensure that our products continue to be easy to use and interoperable. We want to take the workflow topic off the table and make it easy for our customers to find a Sennheiser solution for all kinds of platforms and events, be it a stage, a podium, or an award show.

To **feature** in **PALM AV-ICN's** next '11 Questions' series, contact: **Smita Rai** - **smita.rai@hyve.group** 



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## **RELOOP INTRODUCES FLUX FOR SERATO DJ PRO**

The **Reloop Flux** is a next generation USB-C interface for using Serato DJ Pro with turntables, CDJs, or other media players. The interface features superior audio qualities, a well-designed operating concept and a club-ready design. It can transform any conventional mixer into a professional digital vinyl system.

The Flux consists of three stereo inputs provide DJs with maximum flexibility. Turntables, CDJs and similar can be used in any combination. The settings are adjusted using discreet DIP switches, which virtually eliminates any chance of accidental switching in the club. The interface includes three stereo outputs, including an AUX out that can be routed to Serato DJ Pro's internal sampler. Gold-plated, corrosion-resistant RCA jacks ensure high-quality audio transmission.

It provides the best possible

routing overview thanks to clearly visible signal flow LEDs for all inputs and outputs and a Thru status indicator. Connection status (hub, PD, DC) LED indicators on the top of the interface provide additional control options. The Direct Thru buttons on the top of the interface enable the user to activate and disable Thru mode, which allows connected turntables and CDJs to be used conventionally quickly and easily. Navigation through the Serato software is no longer necessary.

The Flux includes a built-in 2-port USB-A hub for connecting MIDI controllers and other USB accessories. Aside from the expanded connection options, the hub reduces potential connection faults in a busy club environment by keeping the setup connected even without the laptop.

The device offers studio quality in the club and wherever it's needed with 24-bit/96 kHz, high-quality digital/analogue converters and ultra-low latency.



For this reason, it's a superior DVS interface which could also be used as an audio interface in the studio.

It is bus-powered by a computer, so there's minimal wiring required for audio and power cables. The DVS interface can also be powered by external power sources through the USB-C DC input, allowing turntables and CDJs to be used in Thru mode even without a computer connected. The Flux's second USB-C port provides Power Delivery support for other USB-C devices (max. 60 W), such as a MacBook.

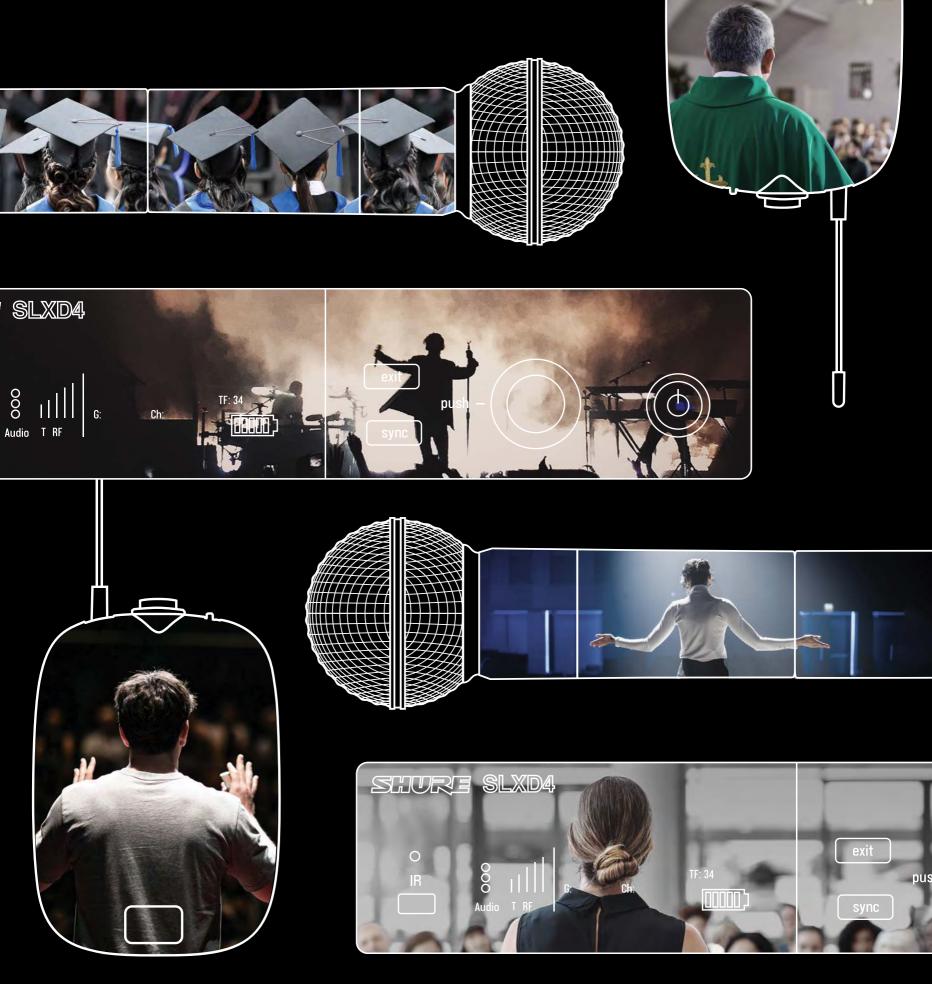
The interface has a durable metal housing with a scratch-resistant, black surface, ensuring a long service life even with heavy use. The extended edge design keeps the connections well-protected.

The Reloop Flux unlocks the full version of Serato DJ Pro and Serato DVS. This means DJs can get up and running with the market-leading digital vinyl system in no time. Additional licences are not necessary.

#### **Features:**

- Next-gen USB-C DVS audio interface for Serato DJ Pro
- Studio-grade 24-bit/96 kHz sound card with superior audio and ultra-low latency
- Heavy-duty club design with Power Delivery support and USB
  bub

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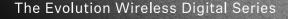
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