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SOUND & VISION STUDIOS' STATE-OF-THE-ART EXPANSION

Features:

Studio Showcase

A Photo Feature Of India's Latest Studios

11 Questions

With Siamäk Naghian, Managing Director, Genelec Oy

Sound Mixing, Recording, and Music Production

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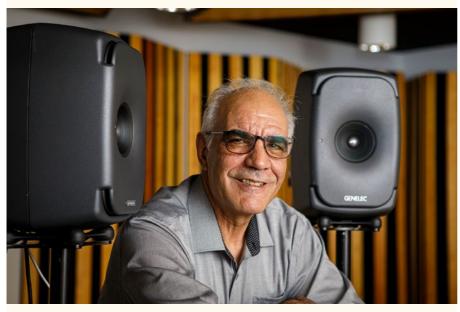
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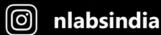
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INDIA GROOVES TO BORIS BREJCHA

Reynold's delivers stage and sound design to the Boris Brejcha concert in Bangalore

Reynold's Sound & Lighting
Services added to the acoustic
experiences at the Boris Brejcha
concert held in Leela Bhartiya City,
Thanisandra. Performing a thorough
recce of the venue, the well thought
installation by Reyonld's was a success, providing powerful sound to

2. The PA feeding the auxiliary audience areas does not disturb Boris' monitoring system."

To this effect, Boris' monitoring system comprised of **6 x KSL8** and **4 x KSL-Subs** from pro audio manufacturer **d&b audiotechnik**. This was deployed as a Left-Right ground-stacked system



signal distribution to all amps via the Dante network. It also included a custom-built rig that converts Ethernet to Multimode Fiber and redundantly feeds all the amps in the system."

Besides this, a 6 x CDJ3000 + 6 x CDJ2000 NXS2 + 3 x DJM900 NXS2 was assigned for Boris and the other opening acts. RF microphones were all **Shure Axient Digital**.

The concert was also a chance to showcase the new inventory of lighting fixtures, namely the Collider FC and DiamondBack by EK Lighting. These new IP rated devils are equipped with wide colour temperature, perfect colour blending, stunning strobes and other effects to make programming a breeze. Notably, they also have a selectable PWM frequency to ensure flicker free video with all cameras.

Apart from the above-mentioned lighting fixtures, lighting inventory for the Boris Brejcha concert provided by Reynold's also consisted of:

- 32 x PR 480 Aqua Beams
- 6 x Cyan 6000XE Moving Head Wash
- 14 x LED Blinders
- 2 x Smoke machines from Look Solutions
- 4 x Haze machines from Look Solutions.



Reynold's deploys monitoring system by d&b audiotechnik, FOH equipment by DiGiCo, an audio focus system, PA system, RF microphones by Shure, and the latest lighting inventory at Boris Brejcha concert

old's Chief Audio Engineer and recently appointed Technical Director, commenting on the deployment of sound at the Boris Brejcha concert, stated, "The Boris Brejcha concert was interesting and unlike other typical EDM setups. The brief was to have a "boiler room" like setting, with VIP guests and top fans surrounding the DJ on all sides. This entailed a higher level of planning, as we had to ensure two things: The audience around the DJ has great

coverage and experience powerful

sound as the rest of the venue.

the concert with a huge audience.

Sohel Alexander Dantes, Reyn-

to give Boris an uncompromised monitoring experience."

He adds,"An Audiofocus system consisting of 16 x Ares8 boxes, reinforced with Audiofocus' single 18" subwoofers (B-18a) fed the auxiliary audience areas. This was split into 4x Flown arrays of 4 tops each, with the subs cleverly placed between overlapping audience areas to get the best coverage. I designed a steerable cardioid sub stack on either side behind the DJ. This enabled us to steer the null (cancellation) to Boris' listening position and ensured that the low-end from the Auxiliary Audience system did not interfere with his monitoring. The d&b system being

inherently cardioid ensured that Boris' monitoring levels did not interfere with what the audience was listening to."

Dantes continues,"At FOH, the audio for the show was controlled using a **DiGiCo SD10** with dual redundant Waves Servers. Waves Superrack was put to use, which helped with bus processing for the outputs. I must say that this did make a massive impact when the headliner hit the stage!"

He further states,"The PA system comprised of 32 x KSL tops, 16 x SL-Subs, 4 x KSL-Subs and 8 x XSL Tops for center fill. Outline's flagship processor – Newton – was at the heart of the system, providing control and

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ASHOKA AVI SOLIITIONS INVESTS IN ADAMSON S10 PERFORMANCE SYSTEM

Ashoka AVL Solutions Pvt Ltd,

one of the leading audio, video, and lighting rental companies from Kochi, Kerala recently purchased a sizable inventory of Adamson \$10 medium format line array. The system comprises 16 nos of Adamson S10 compact line

array speakers, 12 nos of Adamson E119 all powered by Lab Grupen PLM 20K44 and PLM 12K44 amplifiers.

The Adamson S10 is a 2-way, full range line array cabinet containing 2x ND10-LM Kevlar Neodymium drivers and an NH4TA2 1.5" exit compression

pattern of 110° x 10° (H x V) and a frequency response of 60 Hz - 20 kHz. The E119 subwoofer enclosure is loaded with a light weight, long excursion, 19" SD19 Kevlar Neodymium driver utilizing Adamson's Advanced



Adamson \$10 line array for exceptional power handling for stage events

driver. It has a nominal dispersion

Cone Architecture and Symmetrical Drive Technology. The driver employs a dual 5" voice coil for exceptional power handling, with a dual-spider suspension system for extra stability even under extreme excursion.

Adamson S10 line array for exceptional power handling for stage events

Arun Ashok, Director, Ashoka AVL Solutions, commented on the investment, saying, "I chose the Adamson S10 as it is a versatile and powerful line array system that is ideal for a wide range of applications from corporate events to larger concerts. It offers excellent sound quality, consistent coverage, and a lightweight and compact design."

Karan Nagpal, Stagemix, authorized distributor for Adamson systems in India remarks, "S10 is a popular choice for rental and touring companies, as well as for permanent installations. Its high performance and reliability makes it a valuable addition to any sound system."



In picture: Arun Ashok, Proprietor, Ashoka Sound Systems

REYNOLD'S CONDUCTS SEMINAR & DEMO FOR LEADING BRANDS

Reynolds INC, Stagemix authorized dealer for Karnataka region, recently conducted a live demo of line arrays, point source speakers, and install speakers from LD Systems, DAS Audio, Mackie, Dynatech and JTS mics. The event held on 1st. Aug in Bangalore drew audience of 200 people from rental companies,

churches, and system integration firms across Karnataka

Systems showcased included DAS EVENT 212A, EVENT 201A, EVENT 26A, and EVENT SUB218A. From LD systems there was the MAILA series array, MAUI series column PA systems, CURV series modular curved arrays and point source / monitor speakers of ICOA & stinger series. LD MAILA series, a modular ultra compact array system from LD systems was the highlight of the event with the system comprising of 4x MAILA SUB (Dual

15" bandpass design), 12x MAILA Satellites (6.5" mid with 5x 1" HF drivers) and 2x MAILA Column (4x 6.5" for low end extension with built in amplifier to power upto 8 satellites).

Felix Remedios, Director, Reynolds INC was instrumental in conceptualizing and organizing the event, supported by Mr. Christopher and Mr. Raj from his

sales team. "Our idea was to showcase the full range of products available for the audio & AV rental market available with us. This was a first of a kind event where our customers got to really listen to the DAS Audio & LD Systems speakers being played in a large size venue, similar to where they will be deploying them during events. The chance to test

Live demonstrations by Reynold's Sound and Lighting with line arrays, point source speakers, and install speakers from LD Systems, DAS Audio, Dynatech, and JTS in Bangalore

the systems with their own reference tracks, use different configurations, definitely helped customers to make informed purchase decisions," Remedios informs.

Conclusion:

Reynold's Sound and Lighting Services has established itself as one of the pioneering forces in the

> Indian entertainment and music industry. With its cutting-edge technology, world-class audio and lighting systems, and dedication to customer satisfaction, the company continues to revolutionize entertainment experiences across the nation.

Through its partnership with renowned brands like LD Systems, DAS Audio, SSL Console, and Chamsys Lighting, Reynold's attempts at staying at the forefront of innovation, providing artists and organizers with the tools they need to create truly memorable events.

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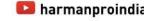












PINK NOISE LAUNCHES THE ALL-NEW EAW KF210 IN DELHI

Pink Noise Professionals Pvt.

Ltd, Delhi based distributor of a range of products and technology catering to many industries like corporate, broadcast, live sound, public sector, hospitality, studios etc., recently hosted an exclusive invite-only launch event of the EAW KF210. A target audience of approximately 140-150, which included experts and professionals from the field of audio including sound engineers, owners of PA rental companies, professional audio consultants & integrators attended the launch event.

The launch event that took place at the **Ocean Pearl Retreat, Chattarpur, New Delhi** on 13th September 2023 provided an opportunity for the audio industry professionals to come together to network, gain knowledge and experience the latest products and technology from EAW.

During the launch event, the EAW KF210 was introduced. This was the first time that the invited audience got to hear the medium format 2-way passive line array, designed to support a wide range of applications in a small and easy to deploy package.

The immersive sound experience



EAW 12 nos of KF210 Line Array Speaker with 6 nos of SB828 Subwoofer

of EAW's KF210 Line Array Speaker, is designed primarily for live performances. Weighing only 60lbs approx, EAW's KF210 is ideal for small crews operating out of medium to large outdoor festivals, performing arts centers or theaters. The speaker delivers crystal-clear audio and exceptional coverage. It boasts of EAW's patented Isophasic Waveguide which allows each cabinet in the array to combine seamlessly providing even sound to every seat in the listening

area (See Technical Specs in adjoining box). Whether you're a musician, event organizer, or audio enthusiast, the new KF210 is a must-have speaker for your next event.

With new launches and new patented technologies under its belt, EAW hopes to regain its leading position in India.

James Bamlett, Director of Sales, APAC – EAW was present at the event to lead the demonstrations. "I was very impressed with the event that Pink Noise Professionals organised, and with the number of engineers, integrators and consultants that attended. The reaction of the attendees was extremely encouraging, especially considering that EAW have been mostly absent from the Indian market in recent years. With the latest products from EAW and Pink Noise Professional's talented team, I'm confident that we have the right combination to re-establish EAW as one of the leading loudspeaker brands in the Indian market," he said.

Vijay Sinha, Co- Founder of Pink Noise Professionals Pvt Ltd. added, "A big thank you to all our esteemed guests for making it to this exclusive launch event. Together with EAW, we are committed to providing our customers with exceptional technical expertise and support while offering innovative products from the EAW range of products."

This maiden event of EAW to launch the new KF210 was a great success with the Pink Noise team planning more such events in the West & East region of India. In the next five years, the company is committed to bring the best products to Indian customers.



Team Pink Noise Professionals with James Bamlett (Sales Director APAC)

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PHOENIX NETWORKS MAKES A 'QUANTUM LEAP'

Phoenix Networks has invested into bringing home the current industry favourite DiGiCo Quantum 338 digital mixing console, coupled with the SD-Rack; and this also happens to be the first ever Quantum 338 system in Central India. Alongside, the company has also made a significant addition to their line up of the industry-leading Meyer Sound loudspeaker inventory with the acquisition of a brand-new comprehensive system comprising the **LEOPARD** modules complemented by the powerful 900-LFC Low-Frequency Control Elements.

64 +64 I/O for enhanced connectivity, this combination empowers us with an unparalleled capacity to deliver an extraordinary level of audio quality for any event. Leveraging fiber-optic technology, the system as a whole ensures low-latency, high-channel-count audio transmission; while also facilitating seamless integration with diverse stage configurations and accommodating a wide range of audio sources. Plus, the redundancy options embedded within the system guarantee uninterrupted reliability, thanks to the SD-Rack's harmonious compatibility with the

efficiently cater to an extensive array of events ranging from intimate gatherings to sprawling concerts. Mishra elaborates on this stating, "The LEOPARD modules are a technological marvel, packing extraordinary power and precision. Additionally, the 900-LFC subwoofers provide the essential low-frequency punch required for crafting an immersive audio experience. With their high output and minimal distortion, they perfectly complement the LEOPARD modules. Together, the system's remarkable frequency response,



Animesh Mishra (L) and Team Phoenix Networks with their newly acquired DiGiCo Quantum 338

Animesh Mishra, Owner, Phoenix Networks, explains that the sheer power and adaptability of the Quantum 338 and SD-Rack setup was so impressive, that he was convinced it would be the perfect addition to Phoenix Networks' already impressive line-up of digital mixing consoles. He elaborates, "The DiGiCo Quantum 338 digital mixing console is technical powerhouse and an absolute marvel of audio engineering. Offering a staggering 128 input channels, 64 busses, and a 24x24 matrix, all operating at a pristine 96kHz sample rate; it boasts its audio quality, versatility, and an array of advanced features like Mustard Processing channel strips, Spice Rack plugin style native FPGA processing options which provides a plethora of effect options, Nodal Processing and True Solo – all of which make it a top choice in the industry. When paired with the SD-Rack, which incorporates the Optocore

Quantum 338 The system as a whole is absolutely magnificent, and it enables us to handle the most intricate live sound setups with unbelievable grace and precision"

Speaking about the acquisition of the new Meyer Sound Leopard system, Mishra adds, "Phoenix Networks' addition of Meyer Sound's LEOPARD line array modules accompanied by the formidable 900-LFC Low-Frequency Control Elements, exemplifies our determination to push the envelope of auditory excellence" he asserts.

Affording a better insight into the motivations behind this expansion, Mishra shares, "We were the first ones in the entire country to invest into the revolutionary Meyer Sound PANTHER

Mishra notes that the LEOPARD and 900-LFC combination affords remarkable scalability and adaptability thereby empowering the company to

exceptional phase coherence, and expansive horizontal coverage make it the ideal choice for delivering pristine sound across a wide spectrum of venues"

He adds, "One of the most exciting aspects that comes with these purchases is our ability to seamlessly adapt to diverse venues and event scales. The Ouantum 338's expansive channel count and its remarkable processing capabilities, paired with our newly expanded Meyer Sound inventory complete with comprehensive LEOPARD and PANTHER systems, now allows us to cater to intricate productions with ease. This means that whether it's a massive outdoor music festival or an intimate corporate event, we have the tools to deliver flawless sound. Moreover, the compatibility and scalability of these systems enable us to extend our services beyond borders."

GENELEC TO LAUNCH UNIO AUDIO MONITORING PLATFORM AND 9320A REFERENCE CONTROLLER AT IBC

New 9320A Reference Controller provides a single touch point to Genelec's UNIO Service Platform, plus a wealth of integrated in-room and headphone monitoring features

Genelec, one of the global leaders in professional monitoring solutions, has chosen the upcoming IBC exhibition in Amsterdam to unveil the 9320A Reference Controller as a bridge to its brand new UNIO Audio Monitoring Serof Smart Active Monitors, GLM and Aural ID, the 9320A provides a compact hub for both static and mobile professional audio monitoring applications.

At the heart of the UNIO platform is Genelec's range of Smart Active Monitors, which utilise auto-calibration

The 9320A provides a compact hub for both static and mobile monitoring applications

vice Platform. UNIO brings together all the benefits of Genelec Smart Active Monitors, GLM 5.0 calibration software and Aural ID 2.0 technology to create seamless integration between professional in-room loudspeaker and headphone monitoring services. With flexible connectivity, a reference grade headphone output and tactile hardware control

and cloud computing to enable the production of accurate, reliable mixes that translate consistently to other rooms and systems. For professional headphone users, Genelec's Aural ID technology provides a completely personal and truthful headphone listening experience with the natural sense of space and imaging provided by good in-room monitoring. By combining a

calibrated Smart Active Monitoring system and professional headphones with Aural ID, the user can enjoy mixes that translate reliably between monitors and headphones – for a smooth, uninterrupted workflow.

With the introduction of UNIO and the 9320A, users can integrate these technologies and services via a single intuitive mobile desktop device, and view the entire system via the user's own MyGenelec account. As a bridge to UNIO, the 9320A offers management of multiple Smart Active Monitoring systems from stereo to immersive and beyond, and comes complete with a factory-calibrated reference microphone to allow automated system calibration and control of key GLM software features.

The 9320A can control up to three separate monitoring systems plus headphones, and each system can operate at a calibrated listening level, according to EBU R128, ATSC A/85 or SMPTE RP200 standards. While the 9320A can support any active loudspeaker system – such as one or two ALT stereo sets – it provides instant one-click access to a vast number of extra monitor control features built into Genelec's Smart Active Monitoring family.

The reference-grade headphone output of the 9320A features excellent linearity and dynamic range, and allows users to combine their choice of professional quality headphones with the

latest Aural ID 2.0 headphone plugin. Users can therefore experience accurate, reliable and completely personal headphone monitoring while simultaneously measuring sound exposure, to ensure safe listening

Additionally, the 9320A allows integration with any DAW or audio interface, and with its analogue, AES/EBU and USB connectivity, the 9320A can connect directly to stereo monitoring systems (with and without subwoofer), providing monitor control and doubling as a high quality A-D and D-A converter for both monitors and headphones.

Heralding the launch, Genelec Managing Director Siamäk Naghian comments, "Audio professionals in music, broadcast, post-production and game audio are increasingly wanting the flexibility to work wherever and whenever they want, even if that sometimes involves unpredictable and challenging acoustic environments. To be able to switch instantly between well calibrated in-room and headphone monitoring without any interruption in workflow is crucial to this way of working, and so we see UNIO and the 9320A as powerful tools in creating a truly next-generation reference quality monitoring system."

AUDIENT INTRODUCES WORLD'S FIRST VIRTUAL CONSOLE BUILDER

Audient has created the world's first **virtual console builder.**

Navigating using a simple interface, users start by selecting the number of channels from 12 to 72. By answering a few simple yes/no questions, they can easily add a Patchbay, Producer Desk or Dual Layer Control - or all three. To tailor the console to suit their workflow and studio setup more precisely, further extras such as an extended depth top shelf upgrade, VESA mount or extra-deep armrest are also available.

Each decision is illustrated on screen in real time, allowing customers to view

an image of 'their' console changing before their eyes, as they add and remove modules. When satisfied with the layout, it's easy to download their bespoke configuration to keep for reference.

The launch of Console Builder coincides with a cosmetic refresh of the desk itself. New customers of the ASP8024-HE will still enjoy all the same features of the British brand's flagship desk, but now with an aesthetic redesign. "We've made it easier to navigate the console, with a view to providing a better user experience," says **Andrew Allen**, Product and Marketing Director, Audient.



The world's first Virtual Console Builder by Audient allows the users to view an image of their console change in real time





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CAPTURING SONIC PERFECTION

Pramod Chandorkar On Creating His First Gold-Plated Microphone

Creating a microphone is no easy feat. But **Pramod Chandork-ar**, a renowned Sound Engineer from Soundldeaz, created a pair to capture sonic brilliance in its finest form. As he sits with **Smita Rai**, Deputy Project Director, PALM Expo, he reveals what drove him to building his microphones and how they are designed to deliver natural, quality sound.

Talking about how he is a sound engineer by profession but an avid electronics genius by passion, Pramod Chandorkar shares about his foray into the field of audio after a stint in the world of electronics, "Before I became a sound engineer, I was interested in electronics. I learnt it all in my family home at Pune, where we had a small workshop of one of my father's friends, manufacturing Stepper Motor Drives and Temperature Controllers."

Chandorkar adds, "I then ventured into the audio electronics field, where I made a transistor Radio, an Audio Amplifier & eventually an 8 Channel Powered Mixer (Live Sound). It was quite different as I had to actually draw the circuit diagram on a tracing paper, define how links will be under the circuit board, get the circuit board printed,

go and buy the components and then install it. My knowledge in electronics really helped me understand the whole routing and signal flow."

Building A Microphone From Scratch:

Reflecting on his decision to build a microphone from the ground up, Chandorkar shares, "I had the desire to create something again. I had understood the importance of a good microphone, which is the first component in the Sound recording chain. Incidentally I was also facing a lot of issues with our collection of microphones, which requires costly maintenance due to exposure to humidity. I thought of sourcing all the parts and make a microphone myself rather than repairing what I have."

He continues, "I gathered the parts from several places around the world. Some amazing advice from talented engineers across the globe. I took some great suggestions from them and did some changes in the design. This is based on the Neumann U87 design."

Chandorkar also shares the microphones' technical specifications, "The microphone has three polar patterns, the figure of eight, cardioid and omnidirectional, a -10-db pad & a High



Prmaod Chandodkar, Sound Engineer

Pass Filter@ 60 Hz. They are slightly bigger in size than the U87, because the cards are different and the way they fit requires more space. The transformers are different and slightly modified – these microphones have a gold-plated diaphragm. There is a 1.5 Db. boost on the midrange (1.5K), and a 1.5 Db. cut on the Highs (5K)."

Warm Reviews For The Microphones:

Chandorkar recalls the positive reviews he received from his audience on social media, "I shot and posted a video while making the new pair of microphones. We got a really warm response."

As Chandorkar recorded two songs with famed singer Sonu Nigam, he too was able to testify the quality of the microphones, "I use a Manley on his [Sonu Nigam's] vocals and after the vocals are recorded, I process it with an EQ, to make it sound the way I want but, with this microphone, I was getting the desired tonality without doing any EQ."

Chandorkar hasn't assigned a model name and number to the pair of microphones he designed. Sharing the reason behind the same, he concludes the conversation, "I am not sure

if I will ever put a model name or number to these microphones. I am not making a product in terms of catering to the market. I am not a genius scientist who can build microphones; but if I require a couple of them, I might end up building them again."

UNIVERSAL AUDIO RELEASES NEW APOLLO TWIN X USB AUDIO INTERFACE

Universal Audio Inc. (UA), one of the leaders in audio production tools including the popular Apollo and Volt audio interfaces, UAD plug-ins, and UA microphones, released Apollo Twin X USB. Featuring elite-class A/D and D/A conversion inherited directly from the award-winning Apollo X rackmount interfaces, and USB 3 connectivity for Windows, Apollo Twin X USB is a potent sonic update to the world's most popular professional desktop audio interface.

Available in UAD-2 DUO Core format for running acclaimed UAD plug-ins in real time, this 10x6 USB 3 audio interface improves upon the original Apollo Twin's gold-standard audio quality with completely redesigned A/D and D/A conversion — giving recordists increased dynamic range and ultra-low THD.



Apollo Twin X USB gives Windows-based musicians and producers elite-class audio conversion with the tone, feel, and flow of analog recording

Key Features of the Apollo Twin X USB Audio Interface:

• Desktop 10 x 6 USB 3 audio interface

for Windows with next-generation 24-bit/192 kHz audio conversion

- UAD-2 DUO Core Processing for tracking through vintage compressors, EQs, tape machines, mic preamps, and guitar amp plug-ins with near-zero latency, regardless of audio buffer size
- Unison technology offers stunning models of classic tube and transformer-based preamps, guitar amps, and stompboxes
- Built-in talkback mic for communication with studio talent and recording slate cues
- Improved monitor functionality including Mono, Mute, DIM, and ALT monitor controls
- 2 premium Unison mic/line preamps; 2 line outputs; front-panel Hi-Z instrument input and head-

phone output

- Up to 8 channels of additional digital input via optical ADAT or Optical S/ PDIF
- Includes Heritage Edition UAD plugin bundle, featuring Teletronix LA-2A and 1176 compressor collections, 610-B Tube Preamp & EQ Collection, Pultec Passive EQ Collection, Pure Plate Reverb, and more
- Runs UAD Powered Plug-Ins via VST & AAX in all major DAWs
- Works with your Windows DAW via rock solid ASIO drivers
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Building A Sonic Paradise For Recording Artists

How Firdaus Studio, part of Expo City Dubai, redefines the power of collaboration

The **Firdaus Studio** by **A.R. Rahman**, located at Expo City Dubai, is a state-of-the-art recording space and home to the trailblazing all-female Firdaus Orchestra. Led by Her Excellency Reem Al Hashimy, UAE Minister of State for International Cooperation and the CEO, Expo 2020, the studio is nestled within Expo City Dubai. The Firdaus Studio by A.R. Rahman stands as a beacon of innovation in the world of music production. In this article, **PALM Magazine** explores the making of the musical maestro's magnus opus in the recording landscape.

nvisioned by Oscar-winning composer A.R. Rahman, the facility represents a significant milestone in Dubai's journey towards becoming a cultural epicenter.

Once the idea of Firdaus Orchestra started coming to life, Rahman anticipated the need for the ensemble to have a recording and show venue, the largest in the Middle East, equipped with the finest technology – modern-day, spacious, and multipurpose. The vision for the Firdaus Studio came into existence. He wanted to create a space for artists that was boundary-less, a center of creativity. "I wanted to create a space that would inspire performing and learning as well as serve as an interactive hub for music expression," says A.R. Rahman.

Building The Studio From Scratch:

Modi Digital, led by **Aditya Modi**, along with his partner, Rolins Thomas Ray, infused Rahman's vision with life. "The studio was being built in a brand-new city that

Dubai was developing as a part of Expo 2020, now Expo City Dubai. The timeline to complete and handover the project was extremely stringent (under one year of build time)," shares Modi, Designer and Head of Firdaus Studio. "This was the main challenge we faced - apart from this, since it was a ground up purpose-built facility - we designed it from scratch with all things considered."

Reflecting on his team's resilience, Modi continues, "Dubai is an extraordinarily fast city - a city that has developed to its current state in 50 years. Given the timeline within which they have achieved everything, the studio build timeline was something they were completely used to and, to my surprise - it was easily achieved. Their efficiency and resources are amongst the best I have ever come across, and this was how we overcame this hurdle."

The core idea behind the acoustic design at Firdaus Studio was versatality and adaptability. The Studio needed to stand as a true representation of Dubai, UAE and needed to be multi-cultural and diverse in all ways. "We wanted to reflect this diversity in our design approach by being capable of adapting to all styles of music, use cases, and modes", says Modi.

Sound Design & Acoustic Treatment:

The first and one of the only studios in the Middle East to be Dolby Atmos HE-certified, the facility boasts of a variety of international associations within two years since its inception. The 12,000 sq. ft studio space includes a Live Room, a Control Room, two Green Rooms and two Lounges. Using a tightly integrated IP based audio/video system, the rooms in the studio allow for flexibility of unique working

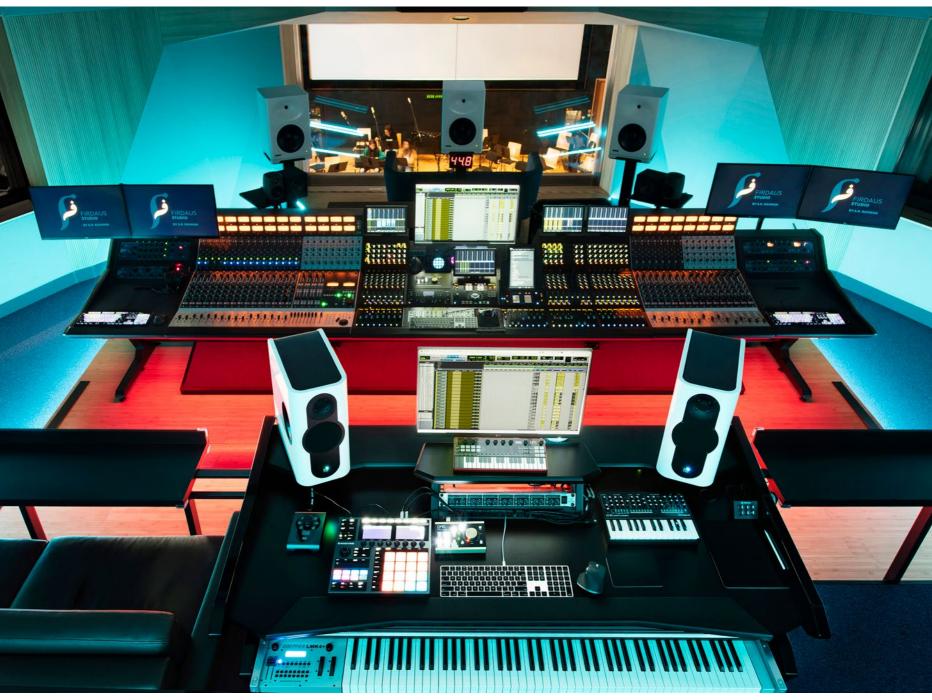
modes specific to artist requirements.

The Firdaus Studio is designed to have an adaptive acoustic system, based on electro-acoustics and mechanical-acoustics, where motorised panels, ceilings, drapes, and DSP can modify the rooms tonality to adapt to any kind of music requirement, or shift between various modes such as Cinema mode, Event mode, Shoot mode, or Recording mode.

Equipped with state-of-the-art recording/mixing/mastering equipment, Firdaus Studio is designed to deliver efficient seamlessness for recording artists, sound engineers, mix/mastering engineers, and more.

An avant-garde recording facility, the studio caters to international audiences, and artists of all musical styles with state-of-the-art equipment. The Main Control Room includes a state-of-the-art analogue input stage with the flexibility of digital control with a unique hybrid desk consisting of a 40-channel Neve 5088 analogue console, embedded with an Avid S6 control surface. The last 5088 console by Rupert Neve himself, this hybrid mixer allows artists to use the best of both worlds for superior sound. The Studio stands as one of the most technologically updated studios in the world.

The unique Scoring Stage/Live Room accommodates up to 80 musicians, offering variable acoustics with moveable panels, truss, and drapes to adapt to various modes. With its world class equipment, the studio swanks a range of over 300 microphones, some of which include top-of-the-line models of **Myburg, Chandler, AKG, Neumann, Sennheiser** and **Shure** to name a few. Multiple inbuilt and remote controllable PTZ Cameras enable remote collaborative real time sessions, as well as



Equipped with state-of-the-art recording/mixing/mastering equipment, Firdaus Studio is designed to deliver efficient seamlessness for recording artists, sound engineers, mix/mastering engineers, and more



Emanating an ethereal aura, the Live Room expands into a multipurpose venue for concerts and events, elevated in form and function with microphones from Myburg, Chandler, AKG, Neumann, Sennheiser and Shure, PTZ cameras, a Christie 4K projector and a Seymour screen

seamless communication across facility and online sessions, and capture sessions for archival & posterity. The studio team comprises of skilled in-house Audio Engineers from around the world with diverse musical backgrounds, equipment mastery and precision of art.

Emanating an ethereal aura, the Live Room expands into a multipurpose venue for concerts and events, elevated in form and function with microphones from Myburg, Chandler, AKG, Neumann, Sennheiser and Shure, PTZ cameras, a Christie 4K projector and a Seymour screen.

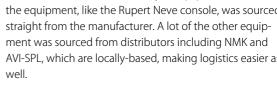
The Live Room extends beyond a recording space with its multimedia capabilities becoming a venue for events, concerts, film screenings and filming. Fitted with a Christie 4K projector and a Seymour Screen, the studio can be turned into a cinema mode, with theatre style seating. "The Firdaus Orchestra did a full live digital performance out of the studio using studio, streamed on YouTube.

The Control Room forms the heart of the Firdaus Studio, a space fitted with cutting-edge, hybrid desk consisting of a 40-channel Neve 5088 analogue console, an Avid S6 control surface, and more.

The audio was managed in the main Control Room, and the video production was setup in the Auxiliary Control Room. "Our versatility and adaptability to the needs of the artists is what makes us unique", comments Modi, "The screening of Firduas Orchestra's docu-concert, The Relnvent Series was held at the Studio,

> which hosted influencers and media for a classic movie experience." Apart from film screenings, this mode is also great for recording film scores as it enables composers and producers to hear their movie prior to release as the audience would.

The studio is made of a variety of equipment. Some of the equipment, like the Rupert Neve console, was sourced straight from the manufacturer. A lot of the other equipment was sourced from distributors including NMK and AVI-SPL, which are locally-based, making logistics easier as



The Future Roadmap For The Firdaus Studios:

This sonic paradise is ideal for advanced production and mixing sessions, offering multiple monitoring formats including **Dolby Atmos**. The studio's integration seamlessly blends audio, video, and networking technologies to create a dynamic and flexible creative environment. Firdaus Studio's forward-looking approach extends to cloud solutions, enabling intercontinental recordings and data backup. "An artist can sit in any of the rooms at the studio and record music and talk back to and from the live room", says Modi.

"The Firdaus Studio stands as a representation of Dubai, UAE, the studio intends to be a space with no boundaries for artists and cultures from across the world", continues Modi

The Firdaus Studio intends to act as the catalyst to support that dynamism, and for the Middle East overall, to be the first point of contact for artists. To become the home venue for recordings, events, workshops, and artists. For it to



The Control Room forms the heart of the Firdaus Studio, a space fitted with cutting-edge, hybrid desk consisting of a 40-channel Neve 5088 analogue console, an Avid S6 control surface, and more

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System output (Peak)	1460 W
Max. SPL (Peak)	125 dB
Woofers	2 x 1" tweeter / 6 x 3.5" mid / 2 x 8" sub
Overall height	2052 mm / 80.8 inch
Weight	30.7 kg / 67.7 lbs

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System output (Peak)	2060 W
Max. SPL (Peak)	127 dB
Woofers	2 x 1" tweeter / 12 x 3.5" mid / 12" sub
Overall height	2052 mm / 80.8 inch
Weight	35.4 kg / 78 lbs

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become a place to create and to learn. The portfolio of the Studio includes artists including **Coldplay, Ben&Ben, Illaiyaraaja, Netflix, Lindsey Lohan** and more.

Looking ahead, Firdaus Studio envisions a strong educational component,

Firdaus Studio's Inventory:

CATEGORY	BRAND	ITEM	QUANTITY
MICROPHONES	AEA	AEAR84A	2
	ASTON	ELEMENT, SPIRIT BLACK BUNDLE, STARLIGHT, STEALTH	2
	AKG	C414 XLS (STEREO SET), D12 VR, C451B (STEREO SET)	1
	AKG	C1000 S	2
	SE ELECTRONIC	HARP BLASTER, VKICK	1
	SE ELECTRONIC	X1S	2
	DPA	4011A 2X + 3X 4006A	1
	NEUMANN	M149, U87, KM 184 STEREO SET	1
	NEUMANN	TLM 103 STEREO SET, U67 SET, TLM 107 BK STUDIO SET	2
	AUSTRIAN AUDIO	OC818 LIVE SET (MATCHED STEREO PAIR)	1
	PELUSO LABS	P12 (ACOUSTICALLY MATCHED)	2
	FLEA	FLEA 47 TUBE	2
	FLEA	FLEA 50	3
	TOWNSEND LABS	SPHERE L22	1
	SLATE	VMS ML-1 VINTAGE EDITION, VMS ML 2	1
	SCHOEPS	FLEXI SET CMC6 + MK4 + MK, FLEXI SET CMC6 + MK4 + MK, CMC6 + MK5 STEREO SET	1
	SCHOEPS	CMC1 U Preamp	3
	SENNHEISER	MD421II, MD441U, E906	2
	SENNHEISER	E908B, E908B EW, E908 D, E602 II, AMBEO, E901	1
	SENNHEISER	MKH800 TWIN	3
	SHURE	SHUBETA57A, BETA 56, SHU- BETA58A, SM 57, SM 58-50th Anniversary	3
	SHURE	BETA 52, SM7B	1
	SHURE	MX418SC, KSM 137 (MIC), KSM 32 (MIC), ULXD 1 w Bolt Pack, P10R	4
	SHURE	KSM8 NICKEL, BETA 57A (MIC), BETA 56 (MIC), SM 57 (MIC), SM 58-50th Anniversary, UL X D 2 w KSM8, ULXD 2 w BETA 58, ULXD 4 w Receivers, P10T	2
	SHURE	SM81LC, PA 821B Antenna Combiner	1
	SHURE	BETA 98 A B/C, RPM 626 (PREAMP)	5
	SHURE	BETA 98 HC (MIC)	6
	ROYER	R122 MKII	2
	MOJAVE	MA1000	3
	MOJAVE	MA 300	2
	TELEFUNKEN	ELA M 260 Tube Condenser Stereo Set	1
	COLES	4038	4
	LINE AUDIO	CM4, OM1	6
	MANLEY	MANLEY SILVER	1
	OKTAVA	ML52-02 MATCHED PAIR	1

including workshops, sound engineering courses, and collaborations with cultural institutions worldwide. With its vision and unwavering commitment to excellence, Firdaus Studio aims to be at the forefront of the global music recording industry, shaping the future of music production.

CATEGORY	BRAND	ITEM	QUANTITY		
	GRANELLI AUDIO	65700			
	LABS	G5790	2		
	SONY	ECM100U	2		
	CHANDLER	REDD	2		
	SOLOMON MI- CROPHONES	LOFREQ DARU JONES Edition	1		
	BEYERDYNAMIC	M88 TG (MIC)	2		
	AUDIO TECHNICA	ATM350A, PRO 35	4		
	EARTHWORKS	DK7 FULL SET	1		
	ELECTROVOICE	RE-20	2		
	MESANOVIC	MODEL 2A	2		
MONITORING		CONTROL ROOM			
	ATC	ATC SCM300ASL PRO (IN WALL)	2		
	GENELEC	S360 (White) DOLBY ATMOS 7.1.4 SETUP	11		
	GENELEC	7382A (SUB), 7380A (SUB)	1		
	EVE AUDIO	SC 3070 (NEAR FIELD)	4		
	EVE AUDIO	TS 112 (SUB), TS 110 (SUB)	1		
	KII	KII THREE WITH KII CONTROL	2		
		LIVE ROOM			
	JBL	THEATRICAL SPEAKERS 9.1.6	22		
	YAMAHA	CONFERENCE TALKBACK SPEAKERS	2		
	BOSE	SHOWMATCH LINE ARRAY (6 Tops, 2 Subs)	1		
		HEADPHONES & COMS			
	AUDIO TECHNICA	ATH M70X	2		
	AUDEZE	LCD-4	1		
	SENNHEISER	HD600	2		
	HEAR TECHNOL- OGIES	HEAR BACK PRO MIXER	40		
MIXING CONSO	LE				
	RUPERT NEVE	40 CHANNELS 5088	1		
		24 CHANNELS OF SHELFORD 5052	32		
		16 CHANNELS OF 5012 (8x2 stereo)	16		
	AVID	S6	1		
	WAVES	E-MOTION LV1	1		
MIC PRE/CONVI	ERTER				
	RUPERT NEVE	24 CHANNELS OF SHELFORD 5052	40		
	RUPERT NEVE	16 CHANNELS OF 5012 (8x2 stereo)	16		
	AMS NEVE	16 CHANNELS OF 1073 OPX	16		
	MERGING	64 CHANNEL HORUS	64		

- * Outboard Gear is from Tube Tech, Rupert Neve, and MCDSP
- * Instruments are from Steinway, Yamaha GTR, Amplifiers are from Kemper, Fender, Orange, and Mesa Boogie
- * For the software, the DAWS are from AVID, Apple, Ableton, and Steinberg. The Plugins are from Sonible, Kazrog, Vienna Symphonic Library, Waves, Softube, Izotop, Audeze, Antares, Universal Audio, Slate Digital, Native Instruments, Dolby, and more.
- * Lights and Cameras are from Newtek, Hedgehog, Ayrton, and Christie



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SHURE PROMOTES KEY LEADERS

Shure has announced the following leaders have all been promoted to Associate Vice President and named officers at the Company:

Tom Doran has been named Associate Vice President of Credit and Treasury. Tom joined Shure in 2017 as Director of Global Credit. Three years later, he accepted additional responsibility for the Company's Global Treasury and Risk Management group.

Mike Maselbas was named **Associate Vice President within** the Finance Division. He joined Shure in 2011 and is responsible for its Corporate Accounting func-



(L) Tom Doran, Associate VP, Credit & Treasure; (R) Mike Maselbas, Associate VP, Finance Divison



(L) Tom Doran, Associate VP, Credit & Treasure; (R) Mike Maselbas, Associate VP, Finance Divison

tion, month-end and year-end closing processes, global audits, plant and cost accounting, and payroll.

Erin Mollohan has been promoted to Associate Vice President of Global **Security**. Since joining Shure in 2019, she developed the Company's security program, including a global strategy and multi-year roadmap.

Associate Vice President of Corporate Quality. Eduardo joined Shure in 2015 as Director of Corporate Quality Engineering and Reliability and was later promoted to Senior Director. Eduardo implemented the Shure Quality Planning (SQP) philosophy and led the



Eduardo Vives has been promoted to



Reliability Engineering team, engaging CQE by incorporating Product Validation engineering, enabling quality findings to be considered in the beginning stages of development and prioritizing customer use cases.

Shure Appoints Associate Managers For South Asia

Shure Incorporated announced that Arpan Dhyani and Vijay Kumar. R have joined the company's team in South Asia as Associate Market Development Manager for North and South India, respectively. In this role, Arpan Dhyani and Vijay Kumar will create awareness and develop the market for Shure.

Arpan Dhyani has 12 years of experience in the industry, previously working for companies such as Harman India, Honeywell India, Yamaha Music India Vijay Kumar. R comes with 16+ years of experience in the industry, previously working for various companies and the most recent one was Yamaha Music India Pvt Ltd.

"Shure's steadfast presence in the Indian market has yielded exceptional results in recent years. It is evident that our customers, consultants, and integrators place unwavering trust in Shure's product quality. As a company, we prioritize customer satisfaction above all else. With our new resources, I am highly confident that we will not only deepen our roots but also expand our influence within the dynamic Indian market," said Ravi Kant Sharma, Associate Director of Shure for South Asia.

"I am very excited to be appointed as Associate Market Development Manager and happy to have this opportunity to work and assure to fulfil my respon-



Arpan Dhyani, Market Development Manager, North India, Shure



Vijay Kumar. R, Market Development Manager, South India, Shure

sibilities efficiently and effectively. Being confident that I will be able to contribute to the Shure team & look forward to contributing to the company's success," affirmed Arpan Dhyani.

"I am delighted to be part of Shure as Associate Market Development Manager. The team members are passionate and co-operative for me to settle into the role and organization. This gives me a sense of feeling to be part of an amazing community. I am confident to deliver the results by addressing the client's need effectively with technological advancement happening in the field of Audio and Shure," affirmed Vijay Kumar.R.

AUDAC APPOINTS MAHESH BALIGA AS SALES MANAGER FOR INDIA

AUDAC announces the appointment of Mahesh Baliga as the Sales Manager for India. In this role, Baliga will be responsible for driving AUDAC's growth and expansion in the Indian market, working closely together with the company's Indian distributor, AV Essentials & AUDAC's APAC Sales Manager,

Sebastian Chong.

With over 10 years of extensive experience in the audio video industry, Mahesh Baliga brings a wealth of expertise in channel sales management and business development to his new position. Prior to joining AUDAC, Mahesh

Baliga held various managerial positions at reputable companies within the industry. Notably, he served as Regional Manager for Install Sales at Alphatec Audio Video Pvt Ltd and as Regional Sales Manager at AWAN India Pvt. Ltd.

Sebastian Chong, the APAC Sales Manager at AUDAC, expressed enthusiasm for Mahesh Baliga's appointment, stating, "We are thrilled to welcome Mahesh to the AUDAC team as the Sales Manager for India. His wealth of experience in the AV industry and strong track record in sales management make him a perfect fit for this



Mahesh Baliga, Sales Manager, AUDAC

role. We are confident that his leadership and strategic vision will further strengthen our position in the Indian

In his new role, Mahesh Baliga will be responsible for expanding AU-DAC's presence across India, fostering strong partnerships with AV Essentials, and driving the company's products and solutions to meet the diverse needs of customers in the region. His expertise and passion for the industry will undoubtedly be instrumental in shaping AUDAC's growth trajectory in India."





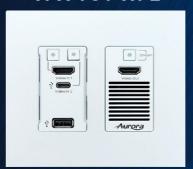
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LEWMINADIO DEPLOYS SOUND SYSTEMS FOR ADIYOGI ALAYAM AND SPANDA HALL

Resounding Tunes at Adiyogi Alayam

LewminAdio, an audio solution provider in India, recently added to the reverberations of **Adiyogi Alayam**, Coimbatore. The team aimed at providing consistent coverage all the way from the front to the back of the 70m x 90m large auditorium

LewminAdio's experienced team understood the requirements of Isha Foundation and deployed the products as provided in the in the JBL VTX lineup, it was perfect for this application. The team was able to achieve a mere 1dB variance in SPL from front to back.

Sudarshan Srinivasan shares his experience, stating, "The client was very happy with the system as there have always been problems with how reverberant the hall sounds due to its massive size. We made sure not to excite any of the surface in the room to keep the amount of reverb to a minimum. In the past, the venue had more speakers up front and a delay system to reinforce at 40m. After hearing the systems performance, the

Coimbatore was treated with immersive audio throughout the venue. Specific products by LewminAdio were chosen to reduce the reverberance in the hall and increase the direct to reverberant sound ratio. This helped increase the speech indelibility in the room.

The Intellivox-DSX180 is ideally suited for smaller less reverberant environments where improved speech intelligibility is required. It is powered by a sophisticated switched mode power supply, all of which combine to ensure years of reliable operation.

The CBT 200LA-1 JBL represents a

Inventory Used at Adiyogi Alayam:

- JBL VTX A6 * 36
- JBL VTX B15 * 12
- Crown IT4x3500HD * 4
- Crown IT12000HD * 2
- EC4BV * 1

Inventory Used at Spanda

- 4 x Active beam shaping column speakers Intellivox DSX180

 IRI
- 2 x Line Array CBT 200LA-1 JBL
- 1 x Crown DCI 4X1250N Crown

Hall:

4 x Line Array CBT 70J-1 JBL

inventory box (see top right). The inventory included 36 JBL VTX A6 boxes put up to achieve consistent

inventory box (see top right). The inventory included 36 JBL VTX A6 boxes put up to achieve consistent coverage across the venue which was 90m wide. Furthermore, end fire sub configuration of JBL VTX B15 allowed the team to effectively reduce the low frequency energy behind the arrays and tilt the beam down to reduce reflections from the ceiling.

Sudarshan Srinivasan, Co-Founder & Director, LewminAdio, commenting on the installation, said, "It took us only three days to finish the install, from getting the rack ready to flying the speakers and tuning the system."

The JBL VTX A6 packed a lot of punch. Though it is the smallest box

client is taking the delays speakers out as the main array is covering all the way to the back."

Bringing Resonance to the Spanda Hall

The audience at the Spanda Hall in

breakthrough in pattern control consistency and coverage options, utilizing complex analog delay beamforming and amplitude tapering to accomplish superior, consistent coverage without the inconsistent vertical beaming, uneven coverage, and out-of-coverage lobing that are typical of both powered

and nonpowered column speakers. The CBT 70J-1 JBL helps pattern control consistency, utilizing complex analog delay beamforming and amplitude tapering to accomplish superior, consistent vertical coverage without the narrow vertical beaming and out-of-coverage lobing that are typical of straight form-factor column speakers.

The new DriveCore installation series amplifiers, Crown DCI 4X1250N are a complete line of high-performance installation amplifiers based on the proprietary DriveCore technology. Versatile, compact, and highly energy efficient, DCi Series amplifiers continue the unbroken Crown tradition of leadership in professional and commercial power amplifier technology.

Sudarshan Srinivasan, Co-Founder & Director, stated, "The project not only fulfilled our intended purpose but also exceeded user expectations. Thus, delivering superior audio experience."

The client, witnessing the team's efforts, stated that the community shared their satisfaction with the efforts in terms of sound quality and coverage. Moreover, the system sounds amazing by taking the room out of the equation, this along with the placement of the speakers creates an immersive audio experience.

To feature your **Audio Install** stories in **PALM Expo** magazine

contact: Pooja Shah - pooja.shah@hyve.group or Ritika Pandey - ritika.pandey@hyve.group



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MODERN STAGE SERVICES IMMERSE STEIN AUDITORIUM IN HARMAN ATMOS AUDIO

SYSTEM

The Stein Auditorium, located in New Delhi, is considered one of the best auditoriums in the country. Known for being a popular venue for events such as film screenings, live performances, art events, theatre productions, and cultural performances, the auditorium was recently equipped with a cutting-edge HARMAN ATMOS Audio System, installed by Modern Stage Service Projects.

The immersive sound system aims to provide a seamless 3D audio experience for the audience, eliminating gaps and ensuring smooth transitions. Dolby Atmos Music enhances song details and depth, letting listeners connect with artists' vision without compromise. It captures every nuance and emotion, making it feel like hearing your favourite songs for the first time.

For the Cinema Surround Sound, the JBL Surround 9300D Loud-speaker, a 2-way passive speaker with a 1" HF and 10" Woofer (2" VC), has been installed at Stein Auditorium. The JBL Surround 9300D Loudspeaker boasts a high 250-watt power handling capability, sensitivity, and extended bass response, specially designed for studio-quality performance in



New Delhi's Stein Auditorium is fitted with HARMAN ATMOS Audio System for a 3D audio experience, JBL Surround 9300D Loudspeaker, JBL AM7215/26 and AM7215/95 speakers, JBL 9300D ceiling loudspeakers and JBL ASB6128 subwoofers

modern theatre setups.

Key Equipment:

Apart from the loudspeaker from JBL, the Stein Auditorium has been fitted with several key equipment.

The LCR front channel consists of **JBL AM7215/95** speakers

in a bi-amped configuration, powered by Crown **DCI4x1250N** and **DCI2x 2400N** amplifiers. Fourteen surround channels utilize JBL 9300D speakers, with two additional JBL 9300D units for height, along with JBL 9300D ceiling loudspeakers and **JBL ASB6128** subwoofers.

The audio setup includes a BSS BLU-100, 12x8 signal processor with BLU link and a Dolby Digital Processor CP 950A – DS-16 for a 16-channel audio output for DCI Projection System.

MSS WORLD TRANSFORMS PUNJAB TOURISM SUMMIT AND TRAVEL MART 2023

Modern Stage Services Pvt.

Ltd. managed every facet of the prestigious Punjab Tourism Summit and Travel Mart 2023, a three-day extravaganza taking place from 11th to 13th September 2023 at the esteemed Amity University in Mohali, Punjab. This grand event, orchestrated by the Department of Tourism and Cultural Affairs, Punjab, stands as a monumental endeavor to catalyze tourism growth, unveils Punjab's latent tourism treasures, and unite policymakers, investors, industry mavens, and small and medium enterprises in one dynamic forum.

MSS added to the acoustics and audiovisuals of the Summit with the deployment of the following



Unique 360 Degree Immersive Zone experienced by visitors at the Punjab Tourism Summit and Travel Mart 2023

solutions:

360 Degree Immersive Zone

10 x Optoma 10k laser projectors, 4 x Pixera media servers, JBL Audio

CM Welcome Area

8 x Christie 20k laser Projector, 3 x Pixera media servers, Bose L1 speakers

Main Auditorium

4 x Pixera media server, 1 x Lightware Matrix switcher, 1 x Switcher Analog Way, 2 x 4k Prime Led Processor, 1 x Cue Commander, LED Wall Screen 2.6mm, Lighting: Mac Aura - 18 nos, Sunlite 15r beam - 16 nos, Sunlite led 3*54 led pars - 40 nos, Sunlite blinders - 10, and L Acoustics A12 audio and Global

MSS's commitment to meticulous planning and flawless execution ensured that every facet of this event was seamlessly orchestrated. From engaging international buyers, speakers, and investors to harnessing the power of media and influencers, the company left no stone unturned. The event's main

(Continued on page 28)









LUCKNOW'S CLUB MOMENTZ CHOOSES MARTIN AUDIO & BRITISH ACOUSTICS AS THEIR

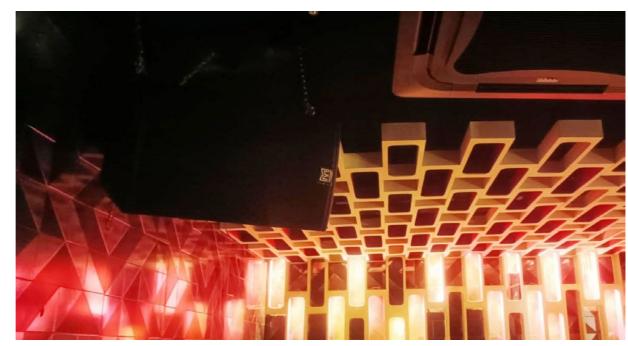
SOUND PARTNER

Club Momentz, a distinguished initiative by the renowned Crazy Balls group, stands as a beacon of luxury and hospitality in Lucknow. Martin Audio and British Acoustics come together to provide Club Momentz with immersive sound experiences.

Recognizing the indispensable role of social clubs in modern life, Club Momentz aspires to bridge this gap, offering a haven amidst the city's bustling rhythm. In today's fast-paced urban life, everyone seeks a brief escape, and this club emerges as the city's perfect sanctuary.

Club Momentz's management sought more than just sound; they wanted an immersive audio experience that would leave an indelible mark on every visitor, aligning with the club's reputation for unparalleled luxury and sophistication.

The intricacies of Club Momentz's architecture presented a unique set of challenges. Ensuring a seamless blend of technology within the venue's design, while maintaining consistent sound quality across varied spaces, was a task that demanded meticulous



Club Momentz, Lucknow, India with Martin Audio's Blackline X15 and V.12, British Acoustics' Delta 928 S subwoofer, and amplifiers

planning and precision.

To rise to this challenge, a curated selection of products was chosen.

Martin Audio's Blackline X15 and

V.12 were pivotal, known for their exceptional clarity and adaptability to diverse spaces. British Acoustics' of-

ferings, including the Delta 928 S subwoofer and XP 12H powered speaker, provided the depth and richness essential for a holistic sound experience. The inclusion of British Acoustics' TK 9000 and TK 6000 amplifiers ensured that the sound output was not only powerful but also intricately detailed, catering to the discerning ears of Club Momentz's clientele.

"The installation was expertly done, and I'm impressed. The sound quality

(Continued on page 29)

MSS WORLD TRANSFORMS PUNJAB TOURISM SUMMIT...

attractions include a 360-degree immersive zone, captivating anamorphic content, selective performances by local artists, and a stunning array of 120 customized stalls.

The primary goal of this Summit is to cultivate a vibrant exchange of ideas and to foster collaborative

synergies amongst businesses, as well as between businesses and the government. Furthermore, a captivating Travel Mart, intricately woven into the Summit, will serve as a captivating platform for forging strategic alliances and showcasing the rich tapestry of Punjab's tourism offerings.

Here's a snapshot of the Summit's



Modern Stage Services Pvt. Ltd. perfectly deploys audio solutions at the summit

(Continued from page 26)

itinerary:

.....

Day 1: The Grand Inauguration

The Summit commenced on the 11th of September with a grand inauguration graced by the presence of the Hon'ble Chief Minister of Punjab, S. Bhagwant Singh Mann, alongside influential industry leaders. Subsequently, a series of compelling panel discussions on diverse sub-themes within the tourism sector will ensue:

- Amritsar 1: Religious and Wedding Tourism
- Amritsar 2: Amritsar Hinterland and Culinary Tourism
- Eco & Farm Tourism (including Water and Adventure Tourism)
- Wellness Tourism
- Heritage Tourism
- Media and Entertainment

The inaugural day will culminate in a spectacular cultural evening, a vibrant ode to Punjab's tradition and culture.

Day 2 & 3: The Punjab Travel Mart

Throughout the entire Summit, the Punjab Travel Mart was in full swing, showcasing the indigenous, tradi-

tional products, culinary delights, and myriad tourism offerings of the state. The Travel Mart also offered invaluable opportunities for pre-scheduled B2B meetings with over 85+ foreign buyers from approximately 50 countries and 150+ Indian buyers. A mesmerizing cultural evening coupled with a soul-stirring musical performance that further elevated the Summit's allure.

Moreover, the company meticulously curated familiarization (FAM) trips to Amritsar, Anandpur Sahib, Kapurthala, and Pathankot during the 13th and 14th of September. These journeys immersed participants in the enchanting vistas of Punjab, offering them a firsthand glimpse of the state's incredible tourism potential.

Modern Stage Services Pvt. Ltd. extends its heartfelt gratitude to the Department of Tourism and Cultural Affairs, Punjab, for bestowing this invaluable opportunity.

BETA THREE DEPLOYS LIVE ARENA WITH IMPECCABLE INVENTORY

Beta Three Audio India hosted Live Arena at the latest edition of the **Bharat Soundlight Expo** at Science City, Kolkata, from 1st - 3rd September 2023. Beta3 hosted the event with versatile artists delivering jaw-dropping performances during the three days.

On Day- 1, Rock band Morphine-India provided wonderful entertainment with the Beta Three Professional sound equipment.

On Day-2, DJ Kashish Rathore and her team delivered an outstanding performance with the Beta Three Professional sound equipment.

On Day-3, very talented, famous, and versatile Bangali Singer, Mansi Ghosh weaved magic with her melodious voice with the Beta Three Professional sound equipment.

Beta3 was one of the exhibitors at Bharat Soundlight Expo 2023 displaying Line Arrays, Cinema and Install series at

the exhibition. Beta Three experienced warm delegate response both in numbers and the anxious O&A sessions from enthused professionals.

Beta Three showcased a mesmerizing display of sound that was a tremendous success with buyers thronging the Live arena on all three days of the show.

Beta Three enhanced the experience of the Live Arena's audience deploying the following models:

Line Array Systems:

- TLA121
- Sla12H
- VR112
- VR206 PL308F

VX Series: Active Monitors:

Vx10a, Vx12a & Vx15a

Launched Class D Power Amplifier:

- DT5000HP
- Small PA Systems:
- Meline S15

Beta3 Launched Professional Mixer Series

- AN Series- 3CH/ 5CH/8CH/ 12CH
- BM Series-8CH/12CH/ 16CH/20CH











Beta Three's team sparks the venue with Line Array Systems, Active Monitors, Amplifiers, PA Systems, and Professional Mixers

LUCKNOW'S CLUB MOMENTZ CHOOSES MARTIN AUDIO...

(Continued from page 28)

is fantastic, and I'd certainly recommend it to others. The team was both helpful and professional," Jugal Sachdeva, Director, Club Momentz.

"Working with the VMT team on Club Momentz was a rewarding experience. Together, we've crafted an audio environment that's top-notch and acoustically resonant. It's a proud showcase of what seamless integration can achieve," Manish Chandel, Systems Integrator, Auxible India.

"Club Momentz's installation is a stellar example of how meticulous design meets impeccable execution. The sound quality achieved here resonates with the venue's ethos, creating an unparalleled experience for its

patrons," Wicky Pereira, Pre-design & Sales Engineer, VMT Enterprise.

"The sound dynamics achieved at the venue are a testament to our team's dedication and the superior products we represent. Every feedback we've received has been a nod to the immersive sound experience we've curated," said Rahul Verma, Regional

Sales Manager, VMT Distribution.

"The installation at Club Momentz, however, holds a special resonance. It's not just about the sound; it's about crafting an experience. And with the feedback we've received, it's evident we've hit the right note," Anurag Khanna, Deputy General Manager -North India, VMT Enterprise.



How Sound & Vision Studios Is Elevating Its Oeuvre Through Expansion

With continued excellence as its cornerstone, Sound & Vision Studios has built an entirely new studio with state-of-the-art pro audio technology in Versova and revamped and transformed its current recording facility in Andheri East to an entirely dedicated mixing facility. PALM Magazine Team explores the newly-built studios in detail

estled in the lap of nature in a quiet nook at the end of an arterial lane in Versova, Mumbai, **Sound & Vision Studios** stands as a creative haven for recording artistes, sound engineers, and sound directors. Occupying the first and the second floor of a residential building, an untrained eye would look at it as a challenging development for studio professionals to work in. But leave it to the studios' Managing Director **Mona Shetty**, Technical Director **Shantanu Hudlikar**, and Acoustic Consultants Munro Acoustics, driven in this endeavour by Shetty's husband **Mohit**, to design a seven-room studio in Versova, fitted with the latest equipment and modern technology. It sits well in a residential complex, catering to the needs of production houses, film studios, and streaming service platforms. Moreover, to reflect the team's commitment to unceasing excellence, a two-room recording facility in Andheri East was transformed into a six-room mixing facility.

An enormous undertaking such as this deserves a spotlight. *PALM Magazine Team* explores the design philosophy behind the studios, the concept behind maintaining a seamless configuration across all rooms, the innovations employed during the acoustic design and treatment, and more.



The Beginning:

"This is where it all started. This is where the original studios were. It has always been only ADR and Dubbing (Localization)," remarks Shantanu Hudlikar, standing with us at the entrance of the Sound & Vision Studios' original space on the second floor, as he is just about to guide us for a walkthrough. He further reveals that the studio's main focus was, is, and might always be on voice recording.

Delving a little deeper into the history of Sound & Vision Studios, Hudlikar states that the facility at Versova has been subjected to quite a bit of transformation.

Originally, the Studios at Versova had four studios and one mixing room. The facil-



The corridor and walls of Sound & Vision Studios, decked with all-white interiors, crafted under Shetty's supervision, exude calmness and serenity



The Studio 7's Dub Room, like the rest on the premise, offers a delicate balance between being an acoustically dead room, yet delivering a bit of liveliness to create experiential sound

ity across the road from Versova studios consisted of two studios and one mixing room, which is now transformed into an administrative space.

Mona Shetty added to the conversation, weaving an attention-gripping narrative about the origins of the Sound & Vision Studios, while talking about her own journey from being a child voice actor to an entrepreneur passionate about voice recordings, "I have been a voice actor since I was child. I have performed voice acting for many areas - from advertising to radio to film to television. I used to help my mother with running the company when she started it in 1993. Because she was so good at her work, she kept getting more projects. What started as a creative

endeavour turned into a business."

She further comments, "My mother soon realized the need to have her own studio, and so, the recording studios in Andheri East and the studios across the road in Versova came into existence. I took over the studios after she passed away. I was pregnant at the time, and it was becoming very difficult to run things which were all over the place by commuting from Andheri West to Andheri East almost every day. So, just to make it more convenient for myself, we started building and expanding. Today, I have gone from being a voice actor, to a dubbing director, to an entrepreneur."

Shetty elaborates on the idea behind expanding Sound & Vision Studios, "The idea was that now we need to expand, because we need more infrastructure for the kind of work we are getting, and also, our work is erratic. We wanted to have a better arrangement of resources, so that we can manage better and the run cost can be contained."

Sound & Vision Studios already functioned with four studio rooms on the second floor. But, when the team sought expansion, they fortunately found just the space they desired for maximizing capacity on the first floor of the same building.

Shetty affirms, "This was ideal, because all the studios are just a floor apart. We just had to add on to the infrastructure as opposed to building a new facility altogether. This area is also very artist-friendly, parking-friendly, and it is accessible as well."

Hudlikar stresses on the fact that in a rapidly changing recording landscape, a studio should avoid being too specialized in a particular area. "Our studios are designed in a way that they can take on any eventuality, except orchestra recordings. But here, we can do music, foley, sound design, and more."

The studios' expansion and transformation is more external and technical in nature, while the internal workflow of the studios, even when updated to cater to modern-day standards, remains the same. "We are doing no different. The work structure is exactly the same." Hudlikar remarks, "The volume has increased. The



Sound & Vision Studios' Reception Area creates a symphony of a cosy, homely ambience, making visitors feel at home in an instant



Studio 8's Control Room is fitted with monitors from Genelec and consoles from SSL, among other prominent equipment

technology is better. We are able to incorporate more microphones since the world of dubbing and ADR requires a different kind of workflow. So, the new studio rooms are built to adapt mainly towards that."

As we step into the first studio, Hudlikar explains, "If you notice, I have taken the old-fashioned, traditional route, which I feel is absolutely necessary, because this leaves it flexible for everyone. There is a mixer and console, a patchbay, where you can interpatch all the equipment – external preamplifiers, external compressors, really high-quality A to D and D to A converters, and a very comfortable working environment, with ergonomically designed custom tables."

Hudlikar comments, "These are not just bought off the market, I sat down with Kapil, and we designed these tables ourselves. Being an engineer myself, I know that sometimes, companies design tables and hand them over to the engineers to work. When the engineer starts working, problems begin to crop up. With these tables, everything is within an arm's reach – the engineers don't have to bend or move much. Everything is absolutely comfortable over here."

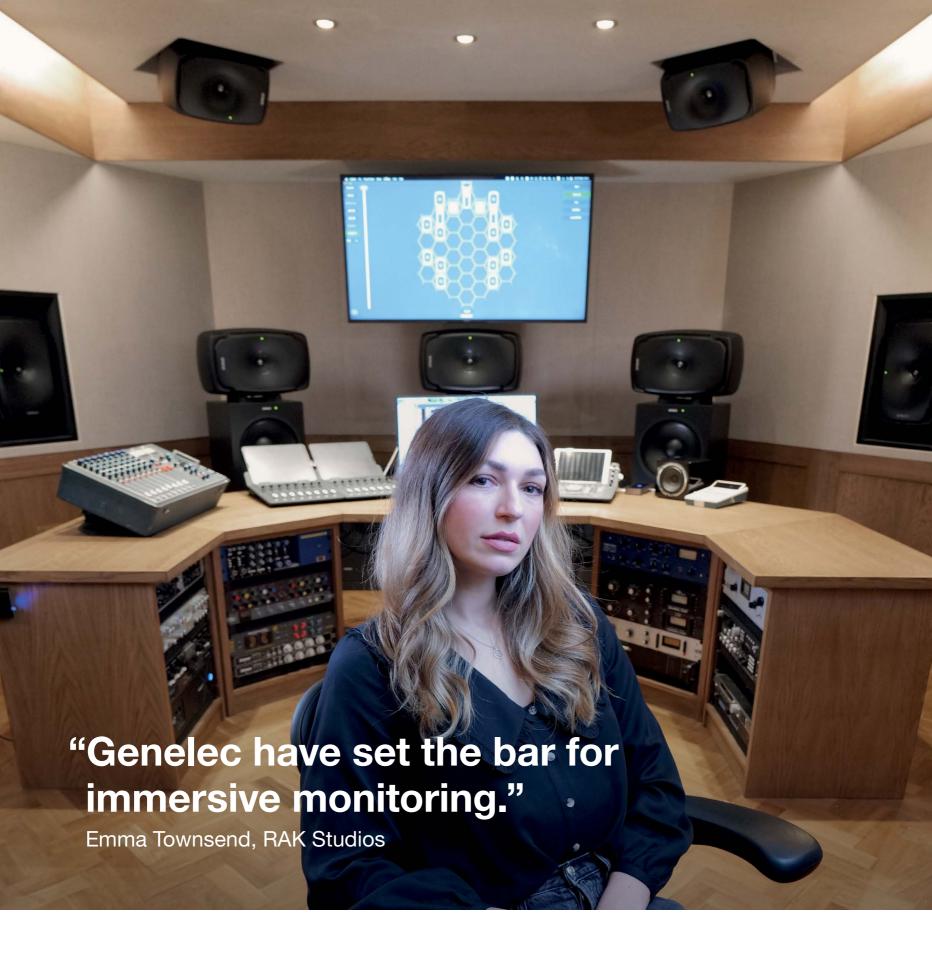
As we move into the other rooms, we begin to notice room standardization. Hudlikar confirms, "All the rooms are built to a particular specification, and they are all absolutely consistent with each other, in terms of sound. Everything is exactly the same, everywhere, except two studios where there is an addition of external preamps, which we need to record music for songs, voice recording for songs – this is essential, especially when we have more than two artists or four artists or a chorus."

Hudlikar adds, "We now have 11 studios, and on an average, we have around 20 projects going on at any time, in multiple languages. As a result, it can become a logistical nightmare trying to assign studios to engineers and directors. We decided to keep the configurations similar so that regardless of the size of the room, moving from one room to another would be seamless."

The Acoustic Design:

Hudlikar shares the reason behind relying on professional acoustic design consultants to design an impeccable studio, and why Munro Acoustics was chosen to design the studios at Versova, "One place you can never compromise on is room design and acoustic treatment. Which is why we chose to go with Munro Acoustics. In the end, acoustics is a science."

He further expands on the need to rely on acoustic consultants to get the science behind the sound right, "In acoustics, for instance, you always have to follow the Rule of Thirds principle. In the middle of the room, you always get into room modes, which means early reflections from all sides, the centre of the room



When London's legendary RAK Studios responded to demand and went immersive, they wanted the most truthful monitors available. So they chose The Ones Smart Active Monitors, finding them unbeatable for neutrality, imaging, fatigue-free listening and consistent mix translation.

RAK now enjoys a flawlessly cohesive and scalable immersive system that's also pinpoint accurate in level, distance and frequency response alignment, thanks to our GLM calibration software.

So, if you're serious about going immersive – whatever your room size – explore our industry-leading solutions online. Visit **www.genelec.com/immersive-hub**





is actually the worst spot to monitor – because you get random reflections from all parts of the room. So, when I am sitting at the desk, my main monitoring has to be my LCR. Anyone can build a studio. But can we really do this scientifically? Which is why, I prefer to go to a person who knows this science."

Hudlikar adds, "We had to make it very clear that our focus is mainly going to be on the recording of voice. For voice, you need the rooms to be acoustically dead, not completely dead, but not as live as you need it for instruments. When we say we want a good recording studio in terms of acoustics, we mean to say there should not be an unnecessary disturbing waves and frequencies."

Elaborating further on the acoustic design of the rooms, Cyril Thomas, Senior Acoustic Designer, Munro Acoustics, tells us, "All the rooms were designed with respect to different aspects. The control rooms were a little bit more live and the booth rooms were as acoustically dead as possible, but the client did want a little bit of liveliness to the room as well, since they had a few ideas with respect to how he wanted to room to sound in terms of reverberation."

Thomas reveals that the studios' acoustic design presented its own set of obstacles, "The main challenge was fitting in seven studios in that space. The other challenge was, due to limited space, if we go ahead with a traditional form of construction, where we build a frame, then do layers, and then add another frame just for the acoustic treatment, it doesn't work. So, we went for an inverted frame approach – where the layers are on the outer side. Basically, the frame that is built for the outer shell, for soundproofing, covers the acoustic treatment as well. Technically, we are accomplishing two things in one go."

From an acoustic design standpoint, another massive challenge awaited Munro Acoustics. Thomas states, "There were two feet massive beams that hampered the ceiling height as well. Traditionally, a frame is suspended via an anti-vibrational element and then, on that frame, layers and treatment are added."

Explaining how the team overcame the issue, Thomas says, "Here, we had to ensure that along the beam, we take up as minimal space as possible. To do this, we make sure that the frames are on either side to support the load and the sound-



All control rooms, which includes Studio 10's Control Room, are equipped with ergonomically designed tables to ensure sound engineers can work with ease



To combat the challenge of fitting seven studios in limited space, acoustic consultant Munro Acoustics went for an inverted frame approach - building a frame to cover the outer shell as well as cover the acoustic treatment

proofing layers go below the beam with minimal depth of treatment."

Equipment:

Sound & Vision Studios take voice dubbing and recordings seriously. Their choice of equipment is a definitive proof. Hudlikar informs us that they have created a two-mic setup and sometimes, using a large diaphragm condenser for a three-mic setup in order to give the audience an experience of the actual scene, "The large diaphragm microphone can be used to manipulate the sound – maybe for a special effects film – or you want to mangle the sound, distort it, or just have fun with it. All our rooms are capable of handling a maximum of six microphones. There is no dubbing studio in this country that actually gives this facility right now."

The studios are fitted with microphones from top-of-the-line brands such as Sennheiser, Neumann, Shure, and Sanken, monitors and subwoofers from Genelec, consoles, preamps, converters, and compressors from SSL, Cloud Lifter, Universal Audio, Lynx Aurora, Klark Teknik, and Manley.

More Than A Typical Studio:

It isn't just the modern-day technical upgrade that gives Sound & Vision Studios at Versova an edge, but also the sophisticated aesthetics that captures the onlooker's imagination. The studio rooms enveloped in fabric of soothing hues and floral prints running across the walls at the back offers a cozy atmosphere. As we step out from each room within the studio, our attention is captivated by the calm all-white interiors with accents of dazzling gold shining upon our eyes by occasional luxurious chandeliers along the way. Hudlikar tells us that every inch of the interiors were decided on by Mona Shetty. The architecture of the Studios was completed by arcitects Malhar Ambekar and Rachel Jacob from Munro Acoustics.

Mona shares, "During the process of designing our studios, I visited another studio, and the interiors were all white. I made up my mind right there and then that I wanted my studios' interiors to be all-white as well."

Even the acoustic fabric wasn't chosen purely out of fancy. Shetty made the final call on which fabric would drape the seven rooms of the studio. Thomas states, "When it comes to the treatment, we used a combination of perforations and membrane absorbers, but the fabric was chosen in consultation with the client, as they had a lot of say in the way the studio looks."

As we sit with Mona in her serene cabin, she elaborates on the idea behind creating a sophisticated yet cozy interior design for her studios, "We are running this studio as a home where so many of us work for 10-12 hours a day. I have

always personally hated being in the studios for too long, even though I have been a voice actor, and I feel that the workplace needs to be a little more breath-easy, little more calming, less dark and dingy, and more enjoyable to work in, so that you don't feel like running away all the time. I think comfort was a very important factor."

Aar Pee Centre Studios:

Elucidating the reason behind turning the Studios at Aar Pee Centre into a mixing facility, Shetty states, "We only had three or four mix rooms and we needed more. Everybody, artists especially, were finding it very difficult to travel to Andheri East, where our other facility originally was. So, we decided to turn into a complete mixing facility, where all our mix engineers can work in one place."

The dimensions for the six mix rooms varied in range – from the smallest room standing at $9'5'' \times 6'9.5'' \times 8'$ and the biggest room sized at $12'4'' \times 7'4.5'' \times 7'10''$. The rooms are named based on the colours of the interiors in each room.

The Grey Room is the tiniest room of the lot, "This room is really tiny, but even then, it is still symmetric. Due to space constraint, the speakers are a little smaller, however, we have maintained architectural geometry and symmetry, because of which, the size of the room is unimportant here," explains Hudlikar.

Fleshing out the technical configurations of the rooms, Hudlikar shares, "Five rooms here are 5.1



The Mix Room 6 at Sound & Vision Studios, located at Aar Pee Centre in Andheri East, is designed to be Dolby Atmos compliant with monitoring system from Genelec

Inventory (Sound & Vision Studios, Versova):

Microphone Pool:

- Sennheiser MKH 8060
- Sennheiser MKH 50
- Neumann U 87 i
- Neumann KMR 81 i
- Neumann TLM 102
- AKG C414 XLS
- DPA 4060
- Sanken COS-11D
- Shure SM58
- Shure SM7B
- Mojave MA-300
- Sennheiser MKH 416

Monitoring:

• LR - Genelec 8340A

Console + Preamps + Convertors + Compressors:

- SSL BiG SiX
- Cloud LiŌer
- Universal Audio 710 Twin-Finity
- Lynx Aurora 8 I/O
- Klark Teknik KT-2A
- Manley ELOP+

System:

• Apple Mac Studios

Inventory (Sound & Vision Studios, Aar Pee Centre):

Mix Room 1- Mix Room 5:

- (5.1)
- S1 x 1
- 8 Fader
- LCR Genelec Co-Axial Monitoring
- Surround: Genelec SAM with Genelec SUB
- Lynx Aurora 16 I/O

Monitoring:

- LCR Genelec 8341A
- Surround Genelec 8330A
- Sub Genelec 7370A

Mix Room 6:

- 7.1 / Atmos (7.1.4); S1 x 2
- 16 Fader
- Dock
- LCR, Surround, and TOPS: Genelec Co Axial Monitoring, Genelec SAM with Genelec
- Genelec SAM with Genelec SUB
- Lynx Aurora 16 I/O

Monitoring:

- LCR Genelec 8341A
- Surround Genelec 8330A
- Top Genelec 8330A
- Sub Genelec 7370A

configured and one room is 7.1.4 which is Atmos compliant, is equipped with superlative monitoring system from Genelec and Lynx Aurora. All equipment across the six rooms is standardized. We have used the new Genelec One Series, which

is the new coaxial series, because we wanted a high-quality monitoring environ-

As we walk into the Atmos compliant room, Mix Room 6, Hudlikar draws out the difference in configuration between this room and the rest in the studio, "In this room, all the LCR are the same, except the LS/RS, four tops and rears. Instead of one S1, we have two S1s and a dock, which gives the engineers more tactile control. All deliverables are requested by the client, and we have to be prepared to give them every format that is required. But since Atmos is developing slowly, we decided to keep one Atmos room here and another one at the Versova facility. The rest of the rooms in both the facilities are Atmos-Ready."

Hudlikar informs us that the monitoring team from Genelec, along with Shiv Sood and his team from The Sound Team supported the acoustic design of the Atmos compliant room by performing external calibration."

All the six rooms in this studio are also equipped with ergonomically designed tables. "I personally sat there so that the designers can take measurements all around me to ensure a comfortable sitting space for all the sound engineers. I find this imperative since I believe 99% of the studios built in India are built by somebody who is not going to be working in there," remarks Hudlikar.

What's Next For Sound & Vision Studios?

Elucidating on what the future holds for Sound & Vision Studios, Shetty concludes, "We are building across the country, especially in South India. We have built six studios in Chennai and six in Bengaluru to stay connected with the local industry. We have three studios in Kochi, and the fourth one is in process. We have two studios in Hyderabad, but we need to build a completely new facility in Hyderabad. We are moving into Phase II. The upcoming studio in Hyderabad is the most important project for us now."

With expansion as its linchpin, Sound & Vision Studios is poised to not just grow spatially, but also broaden its horizons in the ADR/Voice Dubbing landscape to deliver bigger and better projects for its clients at every step of the way.

AVID TECHNOLOGY ENTERS INTO DEFINITIVE AGREEMENT TO BE ACQUIRED BY STG AFFILIATE

Avid (NASDAQ: AVID), one of the leading technology providers that powers the media and entertainment industry, announced that it has entered into a definitive agreement to be acquired by an affiliate of STG in an all-cash transaction valuing Avid at approximately \$1.4 billion, inclusive of Avid's net debt. Under the terms of the agreement, Avid stockholders will receive \$27.05 in cash for each share of Avid common stock. The cash purchase price represents a premium of 32.1% over the Company's unaffected closing share price on May 23, 2023, the last full trading day prior to media speculation regarding a potential sale of the Company.

"Since our founding over 30 years ago, Avid has delivered technology that enables individuals and enterprises who create media for a living to make, manage and monetize today's most celebrated video and audio content across

the globe. We are pleased to announce this transaction with STG, who share our conviction and excitement in delivering innovative technology solutions to address our customers' creative and business needs," said Jeff Rosica, Avid's Chief Executive Officer and President. "STG's expertise in the technology sector and significant financial and strategic resources will help accelerate the achievement of our strategic vision, building on the momentum of our successful transformation achieved over the past several years. This transaction represents the start of an exciting new chapter for Avid, our customers, our partners and our team members and is a testament to the importance of Avid and our solutions in powering the media and entertainment industry."

John P. Wallace, Chairman of the Avid Board of Directors, said, "This transaction is the result of a comprehensive review of strategic alternatives for Avid. Upon closing, this transaction will deliver immediate,



significant and certain value to our stockholders. After carefully evaluating a variety of options, the Board determined that this transaction is in the best interests of Avid and its stockholders."

William Chisholm, Managing Partner of STG added, "STG has admired Avid's heritage as a category creator and pioneer in the media and entertainment software market for many years. We are excited to partner with Jeff and the management team to build on the Company's history of delivering differentiated and innovative content creation and management software solutions. We look forward to leveraging our experience as software investors to accelerate Avid's growth trajectory with a deep focus on technological innovation and by delivering enhanced value for Avid's customers."

Transaction Details

The transaction was unanimously approved by Avid's Board of Directors and is expected to close during the fourth quarter of 2023, subject to Avid stockholder approval, regulatory approvals and other customary closing conditions. The transaction will be financed through a combination of equity and debt financing and is not subject to a financing condition. Upon completion of the transaction, Avid will become a privately-held company, and its common stock will no longer be traded on Nasdaq.

SHURE ANNOUNCES AGREEMENT TO ACQUIRE AB WAVEMARK OY

Shure, one of the leading global manufacturers of audio solutions, has announced that an agreement has been reached for it to acquire Ab Wavemark Oy, one of the leaders in software products for theatre, film, TV, broadcast, and content streaming applications. The acquisition will add Wavemark's products to Shure's professional audio portfolio.

"The acquisition of Ab Wavemark Oy will further underscore Shure's commitment to providing our professional audio customers with innovative solutions that enhance workflow," says **Nick Wood**, Senior Director, Wireless Category, at Shure. "We are excited to expand our portfolio with cutting-edge and customer-centric solutions that enable creative productions across theatre, broadcast, and content creation."

The forthcoming acquisition further strengthens Shure's strategic investment in software by providing audio technicians with the tools needed to inspire confidence and remove guesswork. The newly expanded software offering will be positioned alongside award-winning applications in Shure's

SHURE

portfolio like Wireless Workbench (WWB) 7. Together, WAVETOOL and WWB provide audio engineers with a comprehensive set of tools to manage RF and monitor all audio sources throughout a production, from pre-show planning to monitoring and listening during the show for flawless audio performance.

WAVETOOL's Revolutionary Audio Monitoring Capabilities

WAVETOOL is an audio and listening application that provides critical, comprehensive monitoring for audio professionals. WAVETOOL's early detection of potential audio problems, streamlined communication capabilities with the sound team, and its centralization of monitoring functionalities, helps professionals monitor high-stakes productions with confidence.

1. **Centralized Monitoring.** Compatible with the most popular RF receivers from multiple manufacturers, users can effortlessly monitor up to 128

channels from one screen.

- 2. Made for High-Stakes Productions. The custom-built algorithm automatically highlights faulty sound sources, so technicians can identify and rectify issues immediately. Audio professionals rely on WAVETOOL for the most demanding productions, including West End and Broadway plays, along with top-tier live sound, reality TV, and sporting events.
- 3. **Optimal Convenience.** The WAVE-TOOL mobile app enables audio engineers to move freely around the stage while streaming audio directly to their iOS devices. The chat functionality encourages front of house and stage technicians to quickly and effectively communicate transmitter issues with one another so they can be addressed in real time.
- 4. **Compatible** with several Shure systems, including Axient Digital, ULX-D, SLX-D, Axient Analog, and UHF-R.

Innovation with WTAUTOMIXER V2

For podcasters, content creators, and broadcast audio engineers, the

WTAUTOMIXER V2 plug-in offers seamless sound-mixing capabilities and automatically balances volume across multiple microphones while intuitively turning down non-active microphones for crystal-clear audio. It's the ideal choice for talk shows, discussion panels, and houses of worship, as it ensures excellent audio recording and streaming experiences, no matter the number of speakers.

This upcoming acquisition aligns with Shure's continued focus on delivering cutting-edge audio software solutions that meet the diverse needs of the professional audio market.

To feature your **Editorial** in **PALM Expo** magazine

contact: **Pooja Shah pooja.shah@hyve.group** *or*

Ritika Pandey ritika.pandey@hyve.group

DPA MICROPHONES OPENS HEADQUARTERS IN DENMARK

DPA Microphones, one of the leading manufacturer of high-quality miking solutions, has opened a new headquarters in Kokkedal, Denmark, a convenient suburb of Copenhagen. The modernized space will put an emphasis on the brand's research and development (R&D) facilities, with significant upgrades and new studio spaces that encourage more creativity.

"DPA continually aims to inspire

sound professionals looking to improve their solutions, and we are confident that the new headquarters will further enable this growth," says DPA Microphones' CEO, Kalle Nielsen. "The facility offers a great environment for close collaboration across the organization and with outside partners, which is the foundation we need to provide strong solutions. This high-tech environment will be the homebase for some of the

world's best microphone specialists, enabling them to create even better microphones and provide more education to the pro audio community."

The new facility offers significant upgrades for R&D, which will soon have access to a full anechoic chamber that will aid in the creation of DPA's precisely accurate mics. Additionally, a planned multi-room space will feature a video studio and controlled listening area for

live and recorded demonstrations. The new location, which will have members from sales and marketing, finance, customer service and management, offers an improved climate, as well as an architectural and interior design style that better aligns with the DPA brand.

In addition to the creative spaces and visual upgrades, the new 1,700-square-meter facility implements green and environmental solutions such as WindowMaster climate solutions, energy-conscious LED lighting and electric vehicle charging stations. The new user-friendly and high-tech environment provides employees with the tools and comfort necessary to continue crafting the brand's award-winning microphones and accessories.

"We wanted to create a modern and motivational work environment for our great employees," Nielsen shares. "I truly believe we've been able to accomplish that. There is so much to look forward to in this space, from new product development to welcoming partners to tour our facilities. I'm most excited to see how the new headquarters will serve not only our employees, but the pro audio community as a whole."



The new DPA Microphones facility offers significant upgrades for R&D in Denmark

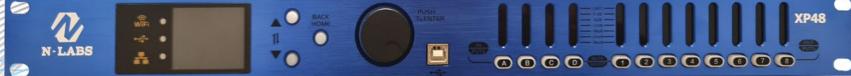






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MATTHIAS JUNG, GLOBAL SALES MANAGER SHARES INSIGHTS ON AMS OSRAM'S POSITION IN THE CURRENT MARKET

ams OSRAM elaborates on the focus towards the current entertainment lighting market conditions with Matthias Jung, Global Sales Manager, ams OSRAM

As **Matthias** joined **ams OSRAM** in 2007, their most important products like **SharXS**, **Lok-it!** and subsequently **SIRIUS HRI** were introduced, and these products still steer the entertainment business today.

With so much to learn, Jung sparked passion for understanding the needs of the diverse base of customers and for bringing that knowledge back to the development teams. He stated, "Where my passion for entertainment lighting has not changed over these years, the market certainly has! In the early

years, our competition was clearly other lamp manufacturers, and we focused on building our product portfolio with high performance products of the best quality to take the No. 1 position in our markets."

The strong family brands like **Lok-it! SharXS, SIRIUS HRI,** and **XBO**, along with ams OSRAM's strong halogen portfolio are a testament of that focus, hard work, and dedication to the customer. The company has kept a global focus to ensure strong development and sales teams in growing areas such as China.

It's clear that LED products continue to grow and play a strong role in various

areas of entertainment lighting, specifically at the OEM level. The industry also knows that traditional lamps are still critical to the customers with many stationary fixtures and moving heads for studio and touring purposes are still in wide use with a significant demand for replacement lamps.

"So, our mission is still clear - to maintain a No. 1 position in entertainment lamp sources and continue to support our customers with a broad portfolio to meet their needs," says Jung.



Matthias Jung, Global Sales Manager, ams OSRAM

A-PRO LIGHTS UP G-20 SUMMIT AT BHARAT MANDAPAM

The 2023 G20 New Delhi Summit was the eighteenth meeting of the G20 (Group of Twenty). It was held at Bharat Mandapam International Exhibition-Convention Centre, Pragati Maidan, New Delhi on 9 and 10 September 2023. It was the first G20 Summit held in India

"As an Indian organization, it was an honor and a privilege to be a part of this wonderful moment and invaluable history for A-Pro Lighting to install XMLite LLP 450 during these three days," shares **Nawal Aggarwal**, CEO, A-Pro Lighting. This installation marked a significant milestone in the journey of A-Pro Lighting and further reinforced the



A-Pro Lighting sparks Bharat Mandapam International Exhibition-Convention Centre, New Delhi with XMLite LLP 450

commitment to providing sustainable and efficient lighting solutions. **Highlighted Features of XMLite LLP**

450:Lamp Color Temperature: 7400K

- Total luminous flux2: 5600 lumens
- Lamp lifespan: 1500 hours
- Voltage: 110-240V,50/60Hz
- Power: 550W
- Beam angle: 2.0°
- Gobo Wheels: Fixed GOBO: 14+
 white
- Color Wheels: 14 colors + white
- Color chip: special high temperature resistant raw material, bright color.
- Prism System: 16facet prism+18facet prism (6+12 double layer)

PROLIGHTS INTRODUCES ECLPAR IPMFC

Prolights introduced the **EclPar IPMFC**, a revolutionary compact LED Par with IP65 passive cooling, exceptional output brightness, and advanced colour control.

The EcIPar IPMFC is waterproof (IP65) and fan-free, ensuring reliable performance even in wet and dusty conditions. Its die-cast aluminum alloy construction guarantees durability, with a lightweight design of just 4.1 kg and efficient heat dissipation.

This Par delivers a powerful 3500 lumens in high-output mode (35 lm/W), thanks to its 100 W Spektra RGB+Warm White LED source. In High Quality (HQ) mode, it achieves impressive scores on CRI (>94), R9 (>95), and TLCI (>81), optimizing the spectrum (SPD) for advanced lighting experience.

The unit boasts interchangeable optics, allowing for quick replacement with a Snap-&-Turn mounting system. The optics can be easily and swiftly



installed in front of the tempered glass for an easier configuration or behind it for long-term outdoor installations, preventing lens deterioration. Designed to excel in any setting and event, the EclPar IPMFC meets the requirements of dry hire and rental companies, theatres, TV studios, and trade shows.

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LIGHTING DESIGN: LIVE EVENTS

A recent phenomenon that has been turning heads in the ever-evolving realm of live events is the groundbreaking use of world-class lighting design to breath new life into the world of stand-up comedy. And **Naveen Deshpande**, a renowned trailblazing lighting designer from India, stands at the forefront of this revolution as he sets out on a mission to redefine the audience experience at comedy shows through his unique lighting design expertise. This endeavour was fruitfully realized through his recent collaboration with India's leading stand-up comedian, **Zakir Khan**, during the latter's immensely successful international tour.



Naveen Deshpande Revolutionizes Stand-Up Comedy with Truly Bespoke Lighting Designs

Inspiration and genesis of a bold vision

The journey began when Naveen and his team were exploring ways to disrupt the traditional lighting setup at comedy shows. Their initial experiment was with Amazon Prime's stand-up special "Bas Kar Bassi," featuring Anubhav Singh Bassi – a beloved artist within the Indian scene today. The experience ignited Naveen's curiosity about blending lighting as an integral part of set design to amplify the show's atmosphere.

"The concept was simple; how do we move away from the conventional set up of just having a curtain at the back and by up lighting it to utilising lights as part of the set design and enhancing the look and feel of the show" quips Naveen, as he reveals that a fateful connection with Ankur Bharadwaj, Zakir Khan's manager, transformed this idea into reality. Hailed as India's most successful and most sought-after comedian; Zakir's ambitious World Tour, with shows scheduled at iconic venues such as the Sydney Opera House and Melbourne Palais Theatre, provided the perfect canvas to showcase Naveen's innovative approach.

Naveen also confirms that since this was the first instance in history that an Indian artist was booked to perform and headline an event at the **Syndey Opera House** and **Melbourne Palais Theatre** respectively; it was absolutely imperative for the entire team to treat the audience to a truly seamless and world-class performance experience.

Conceptualization and considerations

The journey from concept to execution demanded meticulous planning and understanding. Naveen's first step was immersing himself in Zakir's upcoming show – dissecting the script, anticipating movements,



Zakir Khan creates a joyful ambiance with his stand-up comedy





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A view of Naveen Deshpande's trailblazing visual spectacle at Zakir Khan's stand-up comedy

and identifying pivotal moments. The challenge then was to seamlessly integrate his lighting vision with the existing architectural structure. "Honestly, this was my first time trying something so unique, and I wasn't really sure what to expect. I was certain about one thing though; that it was imperative for the lighting design to uplift the energy in the room right from the get-go," confesses Naveen.

Choice of lighting fixtures and technology integration

The success of Naveen's design hinged on the synergy between his vision and the available technological arsenal; with both, the Sydney Opera House, and Melbourne Palais Theatre, thankfully boasting top-tier fixtures from renowned lighting manufacturer Martin; the likes of which included the Mac Viper, Quantum Wash, Quantum Profile, and Rush Blinders. On the other hand, Naveen's floor package relied on the versatile **Mac Aura XB fixtures**, as he informs, "I wanted a good and tight arrangement of zoom washes placed in a semi-circle format as part of my floor package. So, for this I went with the Mac Aura XB fixtures." At the same time, Naveen shares that the multitude of high-performance architectural lighting at the Sydney Opera House helped to add a layer of elegance to the overall design, while also

Inventory List

Lighting Rig At The Melbourne Palais Theatre

12x Martin MAC Aura XB 1 x Robert Juliat MERLIN Followspot

16x Martin MAC ERA Performance

23 x ROBE ROBIN LEDWash

4 x SGM Light X-5 White LED Strobes

7 x EK Lights LED Molefay Duet 4 x MARTIN RUSH BLINDER 1 WW

1 x Concept CO2 Hazer (DMX)

1 x Variable Chrome Smoke Fan

1 x GrandMA3 Full Size Lighting Console

Lighting Rig At The Sydney Opera House

30 x Robert Juliat ZEP 661SX

8 x Martin Encore Performance

4 x High End Systems SolaSpot Pro 1500

16 x High End Systems SolaFrame Studio 12 x ETC Lustr II

C. FTC L. str. II

6 x ETC Lustr III

12 x Lumascape Banner fixture

10 x ETC Lustr III 19-degree profiles

96 x ETC Pro Multi cell 8 37 degrees 6 x Martin Quantum Wash for floor

6 x Martin Quantum profile

7x Martin MAC Viper performance

6 x Martin MAC Viper profile

11 x Martin Quantum wash (top)

8 x Martin MAC 101 CT

2 x Unique Haze 1 x GrandMA2 light

2 x Robert Juliat MERLIN Followspot

affirming that the shows at both venues were meticulously orchestrated using the **grandMA3 control system**.

Overcoming challenges and realizing the vision

Executing a groundbreaking vision like this, within a tight timeframe posed its share of challenges. Naveen, who joined the planning process of the tour relatively late, had to quickly comprehend the available resources and tailor his requirements accordingly.

"These shows came to me while I was already on a tour in Australia with Lucky Ali and we had literally eight days in hand to execute these shows. The promoters and management team had already locked in the lighting packages at the respective venues. So, to have a quick understanding of what is already available and then to specify what we needed additionally based on the show, was quite challenging" reveals Naveen. Thankfully, the professional and cooperative teams at both venues played a pivotal role in aligning their efforts with Naveen's vision.

Having said that, Naveen does confess the Sydney Opera House posed a unique challenge due to a pre-scheduled Sydney Symphony Orchestra show, leaving Naveen's team with a narrow window to set up. "We only had 2 hours 30 mins to load in our gear, rig it based on our plot, program and be show ready before the doors opened," Naveen informs, as he clarifies that careful coordination, and an efficient rigging plan ensured the eventual smooth execution of the entire lighting plan at the venue.

An innovative approach to create emotional resonance

While working at the Melbourne Palais Theatre and the Sydney Opera House, Naveen was presented with an array of lighting fixtures that would make any lighting designer's heart skip a beat. At the Melbourne Palais Theatre, he had hundreds of fixtures at his disposal; and this number more than doubled at the Sydney Opera House, courtesy of the venue's already impressive in-house rig. "For me it was like being a kid in a candy-store!" exclaims Naveen.

The situation though enticing, demanded Naveen to bring his unmatched expertise and innate understanding of the intricate world of lighting to the fore as he curated the perfect combination of fixtures to elevate the visual appeal of the respective shows. This approach, as Naveen explains, delved deep into the realms of color theory and lighting principles, with a view to captivate the audience on a subliminal level.

For instance, Naveen's strategic thinking came to the forefront when considering follow-spots. At the Melbourne Palais Theatre, he opted for a single follow-spot strategically positioned at the absolute center of the stage, which not only seamlessly harmonized with the venue's dynamics but also ensured the most precise and immersive spotlighting experience. In contrast, the Sydney Opera House demanded

(Continued on page 58)



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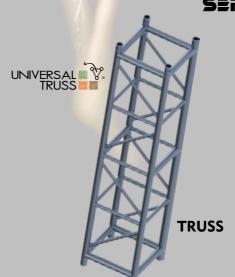
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In Conversation With Donal Whelan From Hafod Mastering

Donal Whelan calls himself as a mastering engineer "first and foremost". A seasoned mastering engineer with over 25 years of expertise in sound mastering, Whelan has worked with reputed artistes from the world over, along with mastering major Bollywood music chartbusters from movies such as Pathaan and Adipurush. In this interview, Whelan sits down for a conversation with the PALM Technology Magazine Team and discusses his foray into the world of mastering, whether he prefers a digital setup or an analogue setup, his unique experience at the PALM Conference 2023, and more.

Mastering The Art Of Sound



onal Whelan has always been an avid lover of music. So much so, he even enrolled in a course for Music and Sound Recording at the Surrey University. From that point onwards, there was no looking back for Whelan, "I studied music and sound recording at the prestigious Tonmeister course at Surrey University and there was an opportunity to take a year out in industry part way through the course."

He adds, "There was a mastering house called Chop Em Out in the list of placements, and they had one of the first two digital audio workstations in London. That sounded futuristic and exciting so I applied for that placement and got it. After graduating, I was offered a full-time post there and that's where my mastering career started."

Whelan founded **Hafod Mastering** in December of 2004, an endeavour in helping his clients bring their artistic, sonic vision to life, which continues till date. Whelan has stepped back from front-line mastering, but his passion for sound engineering and recording finds a reflection in the way he carries out day-to-day administrative activities at Hafod Mastering. Whelan affirms, "Since stepping back from front-line mastering to focus on running the business, my main responsibility is taking care of our clients. I deal with enquiries, bookings, billing, and co-ordinating mastering sessions for **Gethin John** and **Levi Owen**, our two main engineers. I also deal with book-keeping, accounts, social media and studio maintenance and upgrades. Every now and then, I step back into the studio to master a high-profile project, but most days, Gethin and Levi take care of the mastering."

He further cements that his desire to show up at work every day is driven by his very nature of work, "My main motivation to work is helping clients realise their musical visions. We get a lot of positive responses from our clients and each one makes me happy. Occasionally, we get an emotional response from a client saying their song sounds just how they imagined it could and that they're grateful we helped them get there. Those moments lift me and they're why we do this work. Music is a mysterious and powerful force that makes the world a better place and I feel privileged to be a part of the process that builds bridges between the musician and the music listener."

For Whelan, music is universal. Sound belongs to every single human being. Which is why, Whelan established Mastering World in conjunction with Hafod Mastering in 2005. Mastering World, an online mastering portal consisting of a network of independent mastering studios, is Whelan's brainchild, which allows him to leverage the playing field for independent music artists around the world, "I've always felt that the online mastering portal has helped to democratise mastering. Today, pretty much every mastering studio offers online mastering, but back in 2005, we had one of the first online mastering services on the Internet. Clients from all over the world were sending us their music to master - people who lived nowhere near a decent mastering studio, were also really excited to be able to do so. By now, every artist knows they can use pretty much any mastering studio, as long as they can save up for the fee."

A mastering engineer is as good as his/her mastering room. Whelan agrees, and talks about the most pivotal factor every mastering engineer should keep in mind while setting up a mastering room, "The most important part of a mastering room is the listening environment. You need to be able to hear exactly what is going on with a mix, you need to hear exactly what changes you're making to a mix and, most importantly, you need to hear when to stop changing it because it's right."

According to Whelan, a mastering engineer also needs to have a holistic approach when it comes to choosing the right equipment. He confirms, "Everything in our room has a part to play in making great sounding masters - the mains power supply, the mains wiring, the audio interconnects, the monitoring system, analogue equipment choices and the contents of the digital toolkit."

Donal Whelan On The Current Sound Engineering Landscape:

With the advent of digital audio setups, a widespread debate has surfaced in the pro sound recording/mixing/mastering industry regarding the viability of digital audio setups against analogue setups. But for Whelan, it's all about looking at the glass half-full in both the scenarios. He responds, "Digital audio has given every musician the ability to have a fully equipped recording studio at their disposal. This is a remarkable achievement and the power of the tools available to everybody is stunning. Even for professional mastering engineers, digital algorithms can do things we could never do in the analogue domain. Conversely, there is a certain sheen and quality to the sound of a well set up analogue processing chain and that is simply not achievable in the digital domain. In our studio, we use the analogue chain to shape the overall sound ad we use digital processing to zoom in on the details that the analogue equipment can't reach. We think of it as the best of both worlds."

The recent trend in the Indian pro sound mastering landscape has been to outsource mastering projects to studios in London. While it raises a question on the capacity of mastering studios in India to deliver quality projects, Whelan isn't pessimistic on his part. Reflecting on the probable reason behind huge mastering projects being undertaken by studios overseas, Whelan comments, "I think India has some excellent mastering studios and mastering engineers. Perhaps the reason we get called is that we specialise in mastering whereas our Indian counterparts are mostly mix and master engineers. From our point of view at Hafod Mastering, I believe our clients appreciate the artistic sensibilities we bring to a master and also the fastidious attention to detail we've given our room and the extra sonic subtleties that adds to their music."

At the recently organized **PALM Conference**, a key feature of **PALM Expo 2023**, held at the BEC, Mumbai, India, Donal Whelan and Gethin John addressed the audience with a session on sound mastering, where they spoke at length about the major differences between self-mastering and pro mastering. Adding onto his ses-

"I think India has some excellent mastering studios and mastering engineers. Perhaps the reason we get called is that we specialise in mastering whereas our Indian counterparts are mostly mix and mastering engineers." "The most important part of a mastering room is the listening environment. You need to be able to hear exactly what is going on with a mix, you need to hear exactly what changes you're making to a mix and, most importantly, you need to hear when to stop changing it because it's right."

sion, Whelan shares what sets self-mastering and pro mastering poles apart, "Firstly, as pro mastering engineers, we bring fresh ears and fresh perspective to a mix – it's impossible for the mix engineer to hear the song for the first time and they know the mix in so much detail. A pro mastering engineer hears the song for the first time and can make better judgements based on that first impression. Secondly, a mastering room is set up specifically for the task of mastering, so it's likely to have a more accurate listening environment and more optimal outboard and signal paths than a room optimised for mixing and mastering."

Having said that, Whelan doesn't believe that mastering is superior to mixing when it comes to creating music that listeners can immerse themselves in. He believes in allocating equal weightage to mixing, mastering, and even songwriting, and production, "I don't think mastering is more important than recording or mixing. In fact, I'd also give equal weight to production and arrangement. You need good people making good decisions all the way through the songwriting and production process to get an excellent sounding song at the end of it."

Whelan's enriching experience at the PALM Expo Conference was met with warm response and further elevated with seasoned mastering engineers in attendance. Speaking about the same, Whelan quips, "Gethin and I had a lot of fun at the PALM Expo Conference. We were humbled with a packed room with some senior engineers visible in the ranks. Our seminar was well received, and although the Q&A Session was cut a little short, we had some interesting questions from the audience."

He adds, "We spoke about the attention to detail we've put into our room design - the mains electricity supply and wiring, and the analogue audio configuration and connectivity – and about how those factors can significantly improve the quality of the room's audio output. The most common response we got when talking afterwards to engineers was that these points are not often discussed and that they appreciated us raising the issues. The second most common question was 'Tell us more about your buffer amps', which are our prototype 35V Brook amplifiers. These are currently being developed by an R&D team in New Zealand, led by our studio designer, Murray Harris."

Becoming a successful mastering engineer isn't an overnight process. It takes years and years of practice, persistence, and passion to 'master' the art. But most importantly, it takes communication and compassion to ace the career trajectory. Talking about some of the key qualities every mastering engineer must possess, Whelan stresses, "Apart from the obvious listening, technical and musical skills, any aspiring engineer should work on their people and communication skills. Be respectful, be kind, be open and be authentic. People work with people they like and good communication skills are a superpower."

For aspiring mastering engineers, Whelan has three key advices. He elaborates, "To all aspiring mastering engineers, my technical advice, always listen to your before-and-after comparisons at the same volume. My people advice, listen to your client and their needs and do your best to get under the skin of the song and really feel what the songwriter is trying to convey. My listening advice, trust your ears. Do whatever it takes to make your ears happy and your soul sing."

Conversing about his pipeline of recent projects, Whelan concludes, "Gethin and I recently finished mastering the songs from The Great Indian Family. Gethin recently mastered the songs from *Pathaan* and *Adipurush*. We never know what's in the pipeline, we just get a call when a mix is finished and heading our way!" Now, that's a marriage of spontaneity, professionalism, and passion that makes a mastering engineer a mastering engineer!

The Bright Spark

DESIGN THINKING VS THINKING DESIGN

Viraf Pocha

hat is Design? The word is bandied about so easily these days. Everything is 'designer this' and 'designer that'. The word allows you to charge a premium on the simplest of products.

In today's world, most simple things have probably reached a certain threshold in form and functionality. (Obviously I cannot use a word that limits future innovation.)

Let's take a simple electric kettle. Takes some engineering to fulfil a simple need. Fill, press a button, and in minutes, you get hot water. For coffee, maggi, hot water bags, soup, cleaning stains – endless uses. Every home & hotel room installs one.

It is reasonably simple to replicate the engineering. Manufacturers and marketing people rush to fulfil the need. How do they make a connection and make a transaction?

One unit for each home. Bulk buying for hotels.

Let's understand the design process.

First, some engineer will assemble the electrical components and get that part working safely. No over heating etc. Then a product guy will choose materials that will ensure the user does not harm himself. Enter the 'designer' who will now shape the handle, sculpt the body, angle the spout to make the unit as appealing and as aesthetic as he can.

His work does not end there. A Graphic designer will now design the packaging so that it looks attractive on both the shelf as well as on online platforms.

Still another professional will design a sales and marketing strategy to induce wholesalers to push that kettle above all others.

Yet another designer will arrange the logistics to move the kettle from factory to depot to end user.

Finally, a bean counter and the tax guy will sit around all night figuring out ways to arrange figures, so each gets maximum benefit.

That's when each home and room can sit around admiring this new bit of technology that makes life easier.

Repeat this for every item in your life and that's how important DESIGN is.

This simple word that encapsulates an idea that some master

supervises an arrangement of materials. Makes a plan that decides what to include and what to leave out so that the actual construction team or assembling team can fit diverse parts into making a whole.

Today, the word DESIGNER ignores all these complex activities and focusses only on one aspect of Design. The outlandish and the unique.

A simple shirt. World Population - 7 billion. So, there are probably 70 billion shirts of some shape or form around the world. (Lord Knows how many in Landfills).

It is impossible that not more than a few thousands can be identical – colour, pattern, or size. I suspect that some with the words 'Messi' or 'Sachin' may be the most popular.

On the other hand, a fashion designer strives to make a unique piece to fit every budget. A maximalist will include every embellishment and sell the shirt for a million.

A DE constructer will hold two bits of cloth with safety pins and sell it to the poor for paisas or in boutiques for thousands.

That's the power of design

Apple is the poster child of design. It has an aura. Every other brand shouts itself hoarse on how their product beats Apple on every other parameter of price and performance.

But Apple stays comfortably at Number One.

Is that proof that the world prefers form to function? Doesn't that sound vain and fickle?

Could that be the most basic reason why we all turning selfish and insular? Or is that a symptom of a world economy that has become so large and complex that few can even make sense of it?

Don't understand. Don't want to understand. Look down and mark out boundaries to protect yourself.

On the other hand, Asian hotels and airlines design a far more luxurious environment than their European or American counterparts. Yet they are usually available at a discount.

Is that because travellers are uncomfortable with losing their independence? Or because they are afraid of being pampered?

We, in the design profession, need to grapple with these ideas and create a

backbone for ourselves.

Let's now become relevant to the Light, Sound, and Video Industry in India.

We serve many markets. Weddings, Corporate, and Government. The equipment is the same. Each one has different approaches to quality, timelines, and what they wish to achieve from an event experience or a permanent installation.

By and large, structures are built and then technology is retrofitted into the space. Sadly, we hear of dozens of interventions where the purpose, form, and very essence of a structure undergoes many iterations even while it is being constructed.

In my opinion, that is because the founder has a grand plan, but does not want to sweat the details at the beginning. That's sheer design laziness.

Of course, we must be future ready, but can't that be incorporated into the initial design? Why are we running in circles?

On events, we seem to have lost a central focus. Every element is tossed into the mix. We love bhelpuri. Problem is we never progress beyond bhelpuri to a gourmet meal.

In my mind, that strangles creativity and the development of individual artists and technicians who all rush to do the familiar and the expected.

We are a country of 1.5 billion people who thrive on diversity. Our cultural differences and languages define us. Why are we rushing to be generic?

Intelligent Design can bridge this

To create a language that separates institutions, new art forms, textiles that is unique and stand out. India has so many ancient techniques for doing many things - true they are outdated. Take a leaf out of fashion design today.

That's one profession that includes traditional handicraft and artwork into modern design aesthetic that appeals to the Apple buyer. Great fashion brands are being built.

Why can't we see more of that in music, dance, and the visual arts? It will stimulate what lies buried within our DNA, but in a modern context.

That way the sacred word of Design will stay in the realm of the art world.

Think Design first. Then fold all your resources into making something unique and lasting.

We need to be quick.

The corporate boys are also watching the design space. Salivating over Apples profits.

Design Thinking is a new buzzword, it's a body of thought that is tailor-made for corporate committees to follow a path marked with set principals. A path marked with Standard Operating Processes.

Useful perhaps, profitable I'm sure, and disciplined. To my mind, the death of creativity. It takes the risk out of the equation. Great ideal for business. Death of creativity.

There you have it, fellow artists and designers. Do you want to be 'Another Brick in the Wall?'

OR do you want to be 'Learning to Fly.' Please don't miss the Pink Floyd metaphors. Probably the most creative band in the world.

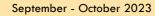
Four guys. Diverse in their thinking and their talents. Yet similar in upbringing and background kind of flow together and complete each other's musical passages. Every album has incredibly creative inputs from each member, but when they come together, the sum is greater than its parts.

Each instrument shines and gives way to the next seamlessly. They build on each other.

Result - Genius.

That's what I'm urging for all of us who tag designer onto our professional labels. Factory, workshop, and arena. Produce something unique that 'captures our moment in time' (another music idiom), that expresses what OUR generation feels and give vent for a billion aspirations to be unleashed.

Design an Experience that rivals an Apple in scope. Remember, all those guys started from a garage, and from there, took over the world.





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OING Recording Studios expanded and future-proofed its Mumbai facility with two extra rooms, to handle both stereo and immersive projects. While a variety of options were explored for the new spaces, it was the combination of Genelec Smart Active Monitors and 9301B multichannel digital audio interface that delivered the ideal hybrid monitoring solution for the studio.

Founded in 2013 by Mayur Tekchandaney and Jiten Solanki, BOING has been an active player in Mumbai's vibrant studio market, working closely with a number of advertising production houses. With acoustic design by the legendary Sam Toyoshima, BOING started life with two recording suites. Its flagship main production studio, Studio One, is equipped with Genelec 1038CF main monitors paired with a 7071 subwoofer and 8341s for nearfields. Meanwhile, Studio Two was created to be a workhorse space to handle down edits and occasional tracking.

"When we started, we were a one-of-a-kind modest recording studio, with a pool of excellent talent," recalls Jiten Solanki, CEO and Senior Engineer at BOING. "We were easily able to cater to our clients' requirements. As time passed by and requirements grew, we realised that we desperately needed more studios. Post the disruption of Covid in early 2022, we were presented with an opportunity to expand our facility, on a higher floor in the same building."

While the need for more space was demanded by existing clients, it was the experiences from the pandemic that led to a new direction for the studio. "The disruption of Covid taught us that we needed to build another vertical in our business model, something complementing our advertising work," explains Solanki. "So we decided that in the expansion project, we'd make one of the two new studios an Atmos room. The room would be able to do OTT broadcast work along with advertising."

scape, Covid was a gamechanger. When BOING Recording Studios' CEO, JITEN SOLANKI, recognized the increasing demand for stereo and immersive studio setups for advertising and OTT post Covid, the need for a two-studio-room expansion within the current premises became imminent. In this article, Solanki recalls the complications and challenges he and his team encountered on the way to expansion, and reflects on how they found an ideal solution in Genelec

This decision meant that **Studio Three** would be a relatively straightforward project – cloning the flagship Studio One – but with **1238DFs** as the mains, **8351s** for nearfield work, and a **7380 subwoofer**. However, **Studio Four** would prove to be a much more complicated project.

"We were able to build the room to our requirements with some extensive design expertise from Bharat Reddy of Dolby, but deciding on monitoring was a challenge," recalls Solanki. "Advertising meant a stereo setup, whereas OTT meant a 7.1.4 setup, so we needed a hybrid monitoring system. As we were taking our first steps into immersive monitoring, which was to run hand in glove with a high SPL stereo production environment, we were trying to understand what monitoring to go with."

After discussions with **Shiv Sood** from local Genelec distributor **Sound Team**, who had supplied BOING's original Genelec system back in 2013, they found an ideal solution in the 9301B multichannel digital audio interface.

"The 9301B provides seamless multichannel audio to the AES input of the subwoofer," continues Solanki. "This became the basis of the monitoring setup in Studio Four. For the main 2.1 monitors, we chose the 8351 three-way coaxials along with a 7380 subwoofer. This gave us the SPL required for advertising work. For the centre channel we chose the 8341; a fantastic match with the 8351s – tonally the same but with an SPL which suited our Atmos requirement. For the surrounds and overheads, we went with two-way 8330s – and the 9301B handles the bass management of all monitors. Finally, we use Genelec's GLM calibration software, which manages our workflow seamlessly."

With the expansion project complete, Solanki reflects on the positive relationship that the studio has with the manufacturer. "Genelec and BOING have a symbiotic relationship. Our monitoring is almost exclusively Genelec, and this has helped establish BOING as one of the best studios in India."



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Nx Audio Celebrates 20 Years Of Pro Audio Craftsmanship



Founded in 2003, **Nx Audio** completes 20 years of delivering pro audio products for the ever-flourishing Indian pro sound industry. This article covers

Nx Audio's journey over the

x Audio laid its foundation in the Indian pro sound landscape in September, 2003 with the launch of the MT Series, under the brand called Proton. The MT Series was not just well received, but also became an iconic product for sound engineers across the country. Many satisfied Sound Engineers complimented the product, stating that innove the MT1201 has the tightest bass response and woofer control they've ever heard.

This success in pro sound engineering is a testament to Nx Audio's undying passion to serve its consumers with superlative pro audio products even 20 years since its inception. Nx Audio is on a constant journey to consolidate its position as one of India's favourite Power Amplifier brands.

The MT Series' Evolution Over The Years

The MT 1201's enhanced version, the MT1601, launched in June 2012, with a damping factor of >1000, is considered as one of the 'tightest bass amplifier' in India. Nx Audio's overbuilt power supplies ensure superb damping and slew rates for solid bass. Nx Audio's amplifiers are built solid like a rock and the MT1201 amplifiers, which first broke ground in 2003, are still running, with several rental companies attesting to their reliability.

The MT2201, launched in February 2021, builds on the reliability of the MT Series to deliver 3600+3600W @ 4 Ohms, providing more watts for the buck with Class D efficiency. The MT2201 uses Pulse Width Modulation to rapidly switch the output devices between off and on states at a switching rate of

50MHz. Class D uses less heat sinking and is usually lighter than other amplifiers, through the MT2201 uses the same rugged chassis as its siblings.

Manoj Motwani, Director, Nx Audio, affirms, "We designed the MT1201 to fit the rough Indian conditions and meet what audio profes-



sionals were looking for, and each following MT
Series launch has aimed to fit the new demands of
the industry – most recently, this was the MT1801, which
is a definite answer to the demand for speakers with more
and more increasing power. At Nx Audio, we strive to continuously
innovate and the MT series has been a major part of it."

When the MT1601 launched in 2012, the popular YouTuber **Vki Van** nicknamed it "The Beast" because it gave consumers' higher power and bass while maintaining the 99% stability the MT series are famous for. Speakers are getting more powerful and voice coils are getting bigger – and the MT1801, launched in March 2022, also known as "The Brute" is here to answer the consumers' demands for all this additional power. The internal hardware is strong to handle the rigors of transportation, it has a strong bass, and when coupled with NX audio 18" bass drivers, has one of the highest quality to value-for-money ratio.

Technical Specifications of the MT1801

MODEL	MT1801	
2 ΩEIA 1kHz 1%THD	3300 W	
4 ΩEIA 1kHz 1%THD	2450 W	
8 ΩEIA 1kHz 1%THD	1850 W	
8 Ω Bridge Mono	4600 W	
4 Ω Bridge Mono	5800 W	
Distortion (SMPTE-1M)	<0.01%	
S/N Ratio	103 dB	
Damping Factor	>1200	
Frequency Response	20 Hz - 20 kHz	
Class	Н	
EIA Rack Space 3		
Dim.(W X H X D) mm	482 x 132 x 483	
Weight (In Kgs) 48		

The MT1801 delivers 3300+3300W RMS (in comparison to the 3000+3000W RMS of MT1601) at 2 ohms load per channel, with a stable performance and precise workmanship that allows for low power consumption of less than 0.1A when working without load and zero noise.

Charting constant growth trajectory since its inception 20 years ago, Nx Audio has developed a concrete consumer base in India, with professional sound engineers relying on the brand's pro audio products for a spectrum of industry-specific needs and demands. 20 years on, Nx Audio shows no signs of stopping – the proof is in its continuously evolving line of products.



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Damping: > 1200 in MT 1801 / > 1000 in

MT2201 / MT 1601 & > 800 in MT 1201 & MT-701

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IRAA JURY REFLECTIONS ON SOUND MIXING, RECORDING, AND MUSIC PRODUCTION

Indian Recording Arts Academy (IRAA) Awards recognises exceptional talent in music, soundtrack recording, and mixing in Indian music. The annual event organised by *PALM Magazine* brings forth IRAA Jury's fresh perspective on the bigger questions posed in the music industry like AI for music production, the status of mega consoles, emerging trends in sound recording and mixing, and more. IRAA Jury shares their experiences and viewpoints on sound recording and mixing in this feature.



KJ Singh

Are you using AI for music production?

Some 30 years ago I was using a software called Band-In-Box to create genre specific musical parts, which was rudimentary form of Al. Then came some advancement with engineers using plugins to learn a noise and clean it or reference our mixes to a prescribed genre format, created from machine learning. The full-blown impact of Al will become apparent in the coming year or so.

Do you feel status and power of mega consoles brought recording engineers prestige? If yes, then why? If no, then why?

During the era of big consoles, studios were considered dark magic places and working on such an intimidating console was nothing less than witchcraft! Of course, the prestige of an engineer, who could easily glide over such a huge, knob-filled console, and create wonderful sound combinations, was immense. And I think it still remains. Though they are looked upon as dinosaurs of the industry as the young generation has no clue what those large format consoles did or what it meant to learn and creatively use it.



Anindo Bose

What makes a great Music Producer?

Someone that can complement the vision of the composer with all honesty and not be afraid to push the musical boundaries as and when needed.

Are you using AI for music production?

We are all using it in some form or the other. If you look at most restorative plugins one can see how wonderfully it can salvage at least part or sometimes majority of recorded parts. But this should not encourage bad recording practices in the first place just because there are tools to better it in post. Basics will always be the first and foremost thing to work on.



Avinash Oak

Do you feel status and power of mega consoles brought recording engineers prestige? If yes, then why? If no, then why?

Yes, Mega consoles were a mark of a status for studios and sound engineers. They were an essential and obvious entity in a pro studio. But no more.

The ways of music production have changed to make the big format consoles entirely dispensable. Moreover, they are expensive.

What is the emerging trend/technology in song recording and mixing?

CBMP - Cloud Based Music Production is the emergent trend worldwide. And apps with Artificial Intelligence is the name of the game - something like 'Naadsadhana' for Indian Classical Music.



DJ Phukan

What is the emerging trend/technology in the music production industry?

As the cultural environment is changing due to new technologies coming in and connectivity has become much faster throughout the world (mainly because of internet), the taste of people as well as the means (and the tools) of creating music is changing rapidly. I think we are on the verge of a paradigm shift where music production is concerned. Also, I think we are approaching a global music where, all cultures around the globe are going to merge into a single one. The music in coming days may involve more intelligence, more complexity, less organic, extensive use of AI, and become shorter in length.

What makes a great music producer?

Knowledge and sense of music, creativity, vision, good taste, and ability to translate it to technical parameters to successfully present the whole idea into a sonic domain can play vital role in making oneself a great music producer.



Goutam Basu

Do you feel status and power of mega consoles brought recording engineers prestige? If yes, then why? If no, then why?

No, because I feel that Mega console, which is not the power of an engineer, is good for live programs, live recording, and for your profile picture. In my sonic experience, I would say, without you feeling the sonic soul and breathe, it's not going to come out as a subject. It doesn't matter if you mix it 'in the box' or in 'mega console'. Feel the audio project's fragrance and it will come out as good sonic value for the audience.

What is the emerging trends/technologies in song recording and mixing?

Day by day, the technology is updating and becoming pure. But sometimes too much purity cannot be digested. Good sources, good listening rooms, and patience are required along with updated technology.



Nikkhil Beri

Are you using AI for music production?

I have not yet started using AI for music production. I am still relying on old school methods of music production where I like to call my musician friends and discuss musical ideas and come up with a song. But I would love to explore AI in times to come as it's an emerging trend and in some areas of music production it can get some jobs done quickly.

What are the emerging trends/technologies in the music production industry?

- The most promising and a significant emerging trend is using machine learning & Al tools for music production.
- Spatial audio is also emerging strongly. Due to fast growing development in AR & VR, the importance of Spatial Audio and immersive audio experience is also fast growing.
- Cloud Based Collaborations (Specially post Covid)
- BlockChain & NFTs for transparent Royalty Tracking

What makes a great Music Producer?

I can go on and on with this one. But I will just mention a few key points:

- Well educated in Music and Literature
- Good understanding of various genres of music
- Good sense of music technology
- Must be an artist at heart
- A keen observer of constantly changing musical trends
- Knowledge of how to make a hit song. After all, it's also about getting the song to the masses.
- Having good knowledge of music business
- Great understanding of lyrics. Only then he/she would be able to do justice to the song at the production stage.



PA Deepak

Are you using Al for your work?

In my career, I have always benefited from embracing technology in audio mixing. For years I've leveraged machine learning to process vocal recordings, movie dialogues, and distorted audio, taking the sound from the noise of the room and leveraging that signal as a filter to get to a clean recording. Audio software has ultimately led to better listening experiences for the user, and I see AI as a path to accelerating that, so folks like me can spend less time editing and more time being creative.

Do you feel status and power of mega consoles brought recording engineers prestige? If yes, then why? If no, then why?

Previously the big consoles were a must have as they had to record all the musicians in one go. Having a big console eases the workflow and instead of searching for 270th track in a DAW, one could use a physical channel on a console easily. Nowadays, most of the big consoles are Hybrid (Analog+Digital) and are being used in the Orchestral Recording Studios, Film Mix Rooms, and Live Sound (PA).

What are the emerging trends/technologies in song recording and mixing?

Whatever technologies emerge, the person who is operating the console is more important. Then the DAWs, Software Plugins, and Hardware Effects processing are considered to be the only tools. It's like having a \$10k Camera that won't take pictures by itself.

The art of recording, mixing, and mastering is always the same.



Sai Shravanam

Are you using AI for music production?

Al is in a way part of many of our recordings where we tune vocals using Auto-Tune or even pick resonances in recordings by automated plugins like Soothe.

Do you feel status and power of mega consoles brought recording engineers prestige? If yes, then why? If no, then why?

Mega consoles do bring a sense of not merely prestige but sensitivity to the productions. Working on consoles help our ears focus on the sound and the intention rather than the feedback our eyes are given using the DAW. Nevertheless, the world has moved in the box owing to the ease and recall that is required for all the current productions. There are times where we edit and make changes until a few hours prior to release. Both have their pros and cons.

What is the emerging trend/technology in song recording and mixing?

Emerging trend is how every artiste feels empowered by the ease of technology at their home. It's promising to see youngsters create content without dependency for their basic needs. But trend doesn't mean professionalism. For professional sound, there is no trend, it's about the truth in our understanding of sound & its intention.



Vijay Kurien

Do you feel status and power of mega consoles brought recording engineers prestige?

According to my perspective, it's 90% human and 10% machine. Let's look at two scenarios assuming that the final output is on an audio Compact Disk (CD), audio cassette, and uncompressed raw digital audio data.

Mega consoles, which are large, high-end mixing consoles with an array of high-quality preamps, frequency controls, dynamic controls, and other processing tools with a legion of channels, offer recording engineers advanced capabilities for shaping or manipulating audio. Clients and musicians may perceive these consoles as symbols of professionalism and a commitment to quality, further enhancing the engineer's reputation. However, it's essential to note that the recording industry has evolved significantly in recent years.

Digital Audio Workstations (DAWs) and software plugins have become increasingly powerful and accessible, making it possible to achieve high-quality recordings without relying on mega

consoles. Many independent and home-based recording engineers now produce professional-level work using digital tools.

In the case of lossy compressed format like the MP3 or AAC files, the audio is compressed to reduce file size, which inherently involves some loss of audio quality. Using a mega console for this purpose might be overkill because the subtle nuances and high-end features of such consoles may not be fully utilized or noticeable in the compressed MP3 format.

What are the emerging trends/technologies in song recording and mixing?

- Mixing using Al
- More realistic Instrument Sampling Technology like the Virtual Studio Technology (VST),
 Audio Units (AU), etc.
- Remote Collaboration Tools
- Spatial (Immersive) Audio



Vijay Rathinam

Are you using Al for post-production (soundtrack merging, dubbing, foley engineering)?

Yes. I am a Reaper user and reaper supports Lua scripting natively. So off late, I have been using ChatGPT to write Lua scripts for reaper that makes my workflow more efficient. This has given me amazing results to automate any mundane and repetitive tasks.

What are the emerging trends/technologies in post-production in general?

Immersive audio: This is certainly a trend. The fast adoption of immersive audio by major platforms has made it necessary for audio professionals to modify their existing workflows to accommodate the immersive audio needs. Also, sound library companies such as Pro Sound Effects are releasing immersive sound libraries which are quite helpful for sound editors.

Al driven audio restoration is another trend that's catching up. Several top brands are coming up with new plugins to make this possible. So certainly, this is an interesting space to look forward to.

Remote collaboration tools: The Pandemic made the necessity for remote collaboration ever more important. Tools that allow sound designers, editors, and mixers to collaborate have become even better than ever before and certainly there is a lot of scope for improvement. So, I am keeping a close eye on this trend as it continues to evolve.

Integration of Sound Design and Music: There is an increasing trend to blur the lines between sound design and musical score, creating seamless transitions to help support the film's narrative. Several film makers are taking this up into new and interesting directions.

Do you feel status and power of mega consoles brought recording engineers prestige? If yes, why? And if no, why?

The power of mega consoles doesn't bring recording engineers prestige in my humble opinion: **Skill Over Equipment:** A skilled audio professional can achieve a great result on a smaller,



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simpler setup. The quality of the final product is largely dependent on the artist's skill, taste, knowledge, and ear for sound.

Evolution of Technology: With the advent of digital audio workstations (DAWs) and high-quality plugins, many of the functions of a large console can be replicated in the digital domain. In many cases, DAWs offer even more flexibility and precision than analog equipment.

Modern Production Trends: Bedroom and home studios have produced many high-quality films and shows in recent years. These are often made with minimal equipment, highlighting that it's the creativity and talent of the individuals involved, rather than the equipment, that makes something stand out.

Portability and Flexibility: Smaller setups, including mobile rigs, allow audio professionals to work in a variety of environments and capture sounds that might not be achievable in a traditional studio. This flexibility can be a unique selling point for an artist. Imagine recording in a busy train station incognito!

Cost-Effectiveness: Mega consoles are extremely expensive. By achieving comparable results with more cost-effective gear, audio professionals can reduce overheads and potentially offer more competitive rates, making them more attractive to potential clients.

Maintenance: Large consoles require significant maintenance and can be more prone to issues simply due to the number of components. An engineer spending more time on maintenance might have less time for actual creative work.

Relationships Over Gear: Much of a sound designer's reputation and prestige comes from their ability to foster positive relationships with film makers, producers, and other crew members. Good communication, understanding a film maker's vision, and creating a comfortable working environment can be more valuable than having the most advanced equipment.

In conclusion, while mega consoles can be valuable tools in certain scenarios, the prestige of a sound designer comes from a combination of their good taste, skills, relationships, results, and reputation, rather than the sheer power or size of their equipment. The size doesn't matter.

Naveen Deshpande Revolutionizes Stand-Up Comedy...

a nuanced touch, as the team deployed two follow-spots that were thoughtfully rigged on the sides of the stage. This configuration not only offered the optimal spotlight angle but also provided a subtly nuanced experience for the artist himself, thereby further enhancing the visual spectacle.

Naveen's ability to navigate the vast array of lighting fixtures and select the perfect combination showcased not only his technical prowess but also his artistic sensibility.

Diving into the details of it all, Naveen explains that his approach was less about elaborate effects and more about crafting an emotional atmosphere and using lighting to accentuate Zakir's presence and create the right mood. He notes, "Unlike the music shows I do; this show was not about any movements or effects for me, but it was more about the aerial looks and the right colour and mood. I sat on different seats in every area of the room to ensure there was no glare on anybody's eyes. I ran a cue specific during the entry sequence of Zakir with a fade in time with all the floor lights congregating at the focal point where Zakir would eventually come and stand. It was nice to see the cue sit in quite accurately with his walk. I could really feel the audience react when this happened which was an amazing experience. Another idea at Melbourne Palais Theatre which I thought worked well was to play

(Continued from page 42)

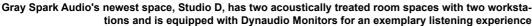
with the texture of the walls. These walls were built in the 1950's, and obviously had a very royal finesse to them. So, I thought it would be nice to light up some of it using the phenomenal gobos that the **Martin Mac Era 800** performance offered. We also managed to bring in a decent sized video wall where we projected Zakir's logo with a blue background and it was great to have this as a contrast to his jacket colour which was green."

A bright future on the horizon

"It was fantastic. I think everyone in the room, including Zakir, felt a wonderful energy, and it is safe to say that the lighting played a pivotal role in elevating the overall experience for everyone," enthused Naveen. With newfound conviction, he added, "Moreover, I am thrilled that I can now champion the unexplored potential of lighting in the world of stand-up comedy to anyone who questions its feasibility."

However, this groundbreaking initiative extends far beyond the confines of a single tour as Naveen firmly believes that its resounding success not only illuminates the untapped potential of lighting design in stand-up comedy but also ignites a spark of inspiration. "For the Indian industry, this marks the inception of a promising avenue for lighting designers," he affirmed.







In 2010, two Pune-based recording engineers, **Ronak Runwal** and **Harshad Sathe**, established **Gray Spark Audio** to provide a platform for aspiring and seasoned recording artists and sound engineers to experiment with their craft in a spacious facility in Pune, India. Today, Gray Spark Audio has expanded into a space with four studios, catering not just to the needs of several music and film production houses, but also helping students of Gray Spark Academy learn audio engineering on the ground. **PALM Technology Magazine Team** talks to Ronak Runwal, to explore how the newly-designed **Studio D** is poised to become a haven for the students



The History:

Talking about the history of **Gray Spark Audio, Ronak Runwal** shared, "Gray Spark Audio started as a recording studio in 2010 with the goal of creating a space that could handle all ranges of projects and clients and has finally evolved into a recording complex comprising four studios. The studio attracted a lot of newer engineers from various audio schools who were again trained at our facility as Assistant and Associate Engineers; what struck us was that though these bright engineers were coming into the studio, they lacked a sense of practical knowledge which in a field like this is a must. This is where the idea for Gray Spark Audio Academy was born."

Runwal shares more details about the existing studios at Gray Spark Audio, "Gray Spark Audio is a complete Music Production and Audio Post-production Facility based out of Pune, housed in a massive 4000 sq. ft facility with state-of-theart equipment and an acclaimed team of audio engineers."

He adds, "Studio A is the prime mixing mastering suite with ample space for recording 25 musicians. The equipment and gears range from everything in analogue and digital, with a wide range of microphones and preamps. Studio B is a smaller version of Studio A with digital gears and selective microphones. This space has been created to enable solo instrument tracking, vocal tracking, film dubbing, voiceovers, ad mix, and sound design. Studio C is a writing/tracklaying room with Neumann Monitors and digital interfaces that are perfect for mixing/mastering or a producing and programming space dedicated to our students. Studio D has two acoustically treated room spaces i.e. a control room and a massive live room which is big enough to track a 5-piece band and conduct regular classes for 30 students. This space has two workstations and is equipped with Dynaudio Monitors for the best listening experience and a range of interfaces and preamps."

Creating A Studio-Within-A-Studio For The Students:

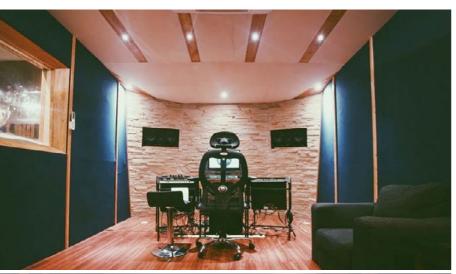
Elaborating on the reason behind creating a studio-within-a-studio at Studio D in Gray Spark Audio, Runwal comments, "The main reason was to provide a dedicated space for students to work and a classroom in the form of a studio. The secondary reason was to have different spaces dedicated to carrying out different jobs, which increases the efficiency of the space's utilization.

Runwal illustrates, "Let's say a band's album recording would be carried on in Studio A, as it's well equipped to carry out a multichannel recording session, while for a film dubbing or foley session, Studio B is well equipped. Students who need to work on a mixing assignment can utilize Studio C, while other students can record a band in Studio D (a mix of control room as well as a live room), which also is equipped with adequate preamps and mics. The best part about this is that all of these can be carried on all at once, side-by-side, without any hindrance."

The Acoustic Design:

Fleshing out the acoustic design of Studio D, Runwal, who helmed the project, informs, "When it came to designing acoustics for the new place, the goal was pretty clear. It had to be different from the other spaces i.e. Studio A, B, and C in

The Live Room was designed in a manner where it was not too dead but also had a little bit of liveness and room character, hence the diffusers were calculated







Gray Spark Audio original studio room, Studio A, is a mixing and mastering suite designed to accommodate 25 musicians, equipped with analogue and digital equipment, microphones, and preamps.

and built and placed accordingly. The control room was designed to give a fuller sounding and balanced experience for mixing and mastering. There is only one reflective surface in the control room, and live room and that is the see-through glass, which is also calculated and angled in a way so that it does not cause any issues for monitoring. Studio D's design is unique in the shape of the room, there are no parallel walls in Studio D, and the room has the right balance of a tight vs. live-sounding room."

He continues, "As the space was meant for students, the acoustics were done in a way where the setup can be dynamic while still retaining the same sonics of the room. While there are two systems and workstations, they can easily be moved or replaced accordingly with different monitors or interfaces. The spaces were created to have pristine recordings, and well-balanced sonics for mixing, mastering, and producing."

We have two

MAC-based systems

in this studio, with a Lig-

uid Saffire 56 and an Audi-

ent iD14 being used as the

primary converters. We also

have Dynaudio LYD5 and Kali

Audio LP6 for monitoring in

this space. Other than this,

we also have an entire mic

locker available to be used

in this space.

At Gray Spark Audio, Runwal believes in integrating state-of-the-art technologies to elevate the workflow and make it all seamless. He affirms, "Over the last year, we have worked with a few artists to release their music through Apple's new "Spatial Audio" format. Spatial Audio is an immersive audio experience that also allows for features like head tracking, which allows the mix engineer to place sounds around

Taking A Holistic Approach Towards Pro Audio Edu-

Runwal places emphasis on utilizing the studio-within-a-studio layout at Studio D to deliver an educational platform for aspiring sound engineers and mastering engineers, "We believe in learning audio by practicing, making mistakes, and learning from them under experienced engineers and producers. The whole idea of having a separate studio is so that students get a dedicated space and playground for experimenting with their sounds, making mistakes, understanding where they went wrong, and improving upon them."

Sharing more insight into how Studio D is poised to go beyond just technically training students, Runwal adds, "Recognizing that more musicians want autonomy in the creation process, we have focused more on training students in our academy from a more holistic approach to audio engineering and music production. Now, as technology is evolving and as the needs of the market are also evolving, these two job roles are getting more and more blurred. Today, it is imperative for anyone who is coming in this industry to have technical as well as creative skills. At Gray Spark Audio Academy, we have curated a 15-month-long course aiming to equip and mentor the audio professionals of tomorrow."

The Inventory:

At Gray Spark Studios, the inventory consists of microphones, cables, headphones, headphone amplifiers, MAC-operated systems, and more. Runwal shares, "We have two MAC-based systems in this studio, with a **Liquid Saffire 56** and an Audient iD14 being used as the primary converters. We also have Dynaudio LYD5 and Kali Audio LP6 for monitoring in this space. Other than this, we also have an entire mic locker available to be used in this space."

All the equipment was sourced from Pro Audio Brands, The Inventory, and Bajaoo.

What's Next For Gray Spark Audio:

Runwal concludes by sharing the project pipeline for Gray Spark Audio, "A few of the big names we have worked with are Easy Wanderlings, Aswekeepsearching, F16s, Raman Negi, Sanjeev Thomas, Piyush Bhisekar, Vinay Kaushal, Celestial Teapot, Xander Naylor, etc. In the coming year, we are looking forward to the release of Adi Rao's debut EP and we'll be starting mixes for a few EPs by Palindroma, Derric & Nida, and more."

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INTEGRATING MASS MARKET DYNAMICS

HOW MOBILE PHONE APPS CAN SAVE A PRODUCTION SOUND MIXER (PSM)





By Cheerag Cama, Freelance Audio Engineer

n one of my columns, I had mentioned about being alert and attentive on set at all times. I find that it's easier said than done. And it got me thinking. Why is it so difficult to be attentive on set?

I was born in the sixties. When we went to see movies in the 60's and the 70's, we were excited. Going to the theatre was an occasion for us. We dressed up. We bought tickets. We invested 3 hours of our time. We gave our undivided attention for those three hours to the movie.

When we came back home, the images stayed in our mind and we could mentally replay the scenes and the shots in our head.

Today, we have so much video content staring at us at all times. At home, we have a 40-inch TV playing something or the other, even if no one is watching. Then we have a laptop screen that takes our attention away from the TV. Then we may have a Tab or an iPad to distract us away from the laptop. And finally, it's the smallest screen which is the most dangerous, in my opinion. We can't seem to get enough of it. THE CELL PHONE SCREEN!!!

Go on a film shoot and look around. Whenever there is a short break, people are glued to their mobiles. This malady is so addictive, we just can't seem to put our phones down and can't escape its clutches.

This addiction to the small screen is not something new. In 2007, I went to Singapore for a multi cam television shoot. And I saw the entire Singaporean crew glued to a play station or some handheld gaming device during breaks. At that time, I wondered, what is it that is making them so addicted to this device? Because these devices were expensive, they were not a craze in India at that time.

What I am witnessing now on our sets is addiction, but to social media. Cheap data rates are fuelling this addiction.

Coming back to the earlier

problem of the CELL PHONE MALADY, I myself am guilty of not leaving my cell phone alone. I find myself constantly checking my phone for Instagram stories, Facebook discussions, or Google News items to read. In fact, there are times when I fish my phone out of my pocket because I have something important to do with it, like write down a note or download a user manual, but the minute the eyes look at the notifications on my screen, I forget what it was that I wanted to do, and I am completely distracted. This is scary!

On shoots, it's very important to be alert at all times. The Director and the DOP are always very busy and fully engrossed in their respective work. But the sound crew can get complacent and lazy and DISTRACTED by this cell phone.

The next thing you notice is that the artists have performed differently in the next take. Because the Director has given fresh instructions to the artists during the three-minute lighting break. And since you were busy with your phone, you did not know about this, and you have messed up. Be alert to what is happening on set! LEAVE THE PHONE ALONE!

2nd example.

Let's say, we have finished one scene and are now moving to the next scene. The Director and DOP along with the actors will do the blocking. And then the DOP takes over the set to do his Lighting. The art team may also be working simultaneously. The sound team may have placed a plant mic on a table, because it looks like a good place

the unit is moving on to the next setup, THE PSM HAS FORGOTTEN TO PUT THE FADERS DOWN ON HIS RECORDER ···. MAYBE DUE TO A DISTRACTION FROM HIS CELL PHONE

The most dangerous thing on set nowadays is an OPEN LAV MIC ON THE IFB. And it could have serious repercussions on the career of a PSM. If there is one learning to take from this article, it is to never leave any open lav mics on the IFB, once a shot is done.

But can a bane turn into a boon for a PSM?

The cell phone is not to be blamed for everything. In today's day and age, no PSM can work on set without a cell phone. It is an extremely useful tool at our disposal. I use it to download manuals, keep a log of my crew working hours, as a remote app for recorders and wireless microphones and as a tool for communication between crew members - call sheets, location pins,

I also use it very often to jot down notes, especially for stuff to be done at the end of day, or for the next day. In fact, there have been times when an idea for an article comes to me on a shoot, and I start making notes for it - on my cell phone.

The cell phone is an invaluable tool and no PSM can function without it. But a balance has to be struck between useful time and distractions caused by the cell phone.

The PSM as head of the department should ensure that his entire crew stays alert AT ALL TIMES.... but to instil this discipline, the PSM himself should be alert at all times and not be lost in wasteful activity on his cell phone!!!!

Most Social Media companies try their best to keep you glued to the screen. Make a conscious decision to not fall prey to them. DON'T GET DISTRACTED BY THE CELL PHONE, ESPECIALLY WHEN YOU ARE ON SET!

In today's day and age, no PSM can work on set without a cell phone. I use it to download manuals, keep a log of my crew working hours, as a remote app for recorders and wireless microphones and as a tool for communication between crew members - call sheets, location pins, etc.

And that is dangerous, because you will suddenly find that the shot is ready, and the sound crew is not prepared. Honestly, this has happened to me a couple of times and I blame myself for not being alert enough. So, a conscious decision to leave the DAMM CELL PHONE ALONE is now my top priority on shoots.

Why Do We Need To Be Alert? 1st example.

We have started shooting one scene. Now, the DOP might want to change his lighting a bit after a take. So, his team starts adjusting some lights. It looks like a 3-minute job. So, you fish out your phone. And start watching some Instagram stories.

to hide a mic. And now since there is time before the shot is ready, you relax. And you fish out your cell phone!

At this point, it is very important for the sound department to always be alert on set when art, setting, and lighting are working. Because a plant mic placed in position can suddenly be moved because the art department decided to change a prop for a better-looking prop. Props can change. Position of furniture can change. THINGS KEEP CHANGING ON SET ALL THE TIME. BE ALERT TO WHAT IS HAPPENING ON SET! LEAVE THE DAMM CELL PHONE ALONE!

3rd example.

When a shot has been ok'ed and

STUDIO SHOWCASE









In the pro audio recording landscape, times are changing. With the rise in remote recordings and at-home recordings, it might look like traditional studios are on the brink of extinction. However, all is not as it seems. Recently, the country has witnessed a spurt in recording studios in various regions (not just in metropolitan cities!), adapting, expanding, and evolving with the lastest technologies in place. From A.R. Rahman's studio in Mumbai to composer Raag Sethi's first Dolby-compliant studio in Gujarat, PALM Expo Magazine's Studio Showcase features four such latest studios.

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For more models please visit our website or showroom

STUDIO SHOWCASE



Inventory Used:

Studio Monitors:

- JBL 708i 8" Master Reference Monitor (Passive)
- JBL 705i 5" Master Reference Monitor (Passive)
- JBL 705I 5" Master Reference Monitor Passive

Headphones:

- 6 x Audio Technica M50x Headphones
- 2 x AKG K812 Pro Headphones

Microphones:

- 2 x Shure SM57
- 2 x Shure SM58

Talkback Microphones:

1 x Shure MX418D/C

Switch for NAS:

 Cisco SG250 Giga ethernet 10 Port PoE and Smart Managed Switch

Subwoofers:

• 2 x Genelec 7380AP 15" Driver

/ 800W. 7.1 Analog XLR Inputs. Single Stereo AES/EBU In/Out Connectors

Talk Back Systems:

 2 x Hear Technologies PROHB4 Hear Back Pro Four Pack

Gooseneck Microphones:

 8 x Hear Technologies AM12 Ambient Supercardioid Microphone with 12" Podium-Style Gooseneck for PRO Mixer

Condenser Microphones:

- Manley Refsilver Reference Silver Microphone
- AKG C411PP Condenser Microphone

Stereo Microphone Set:

• AKG C414XL II Stereo Set

Drum Kit Microphone Pack:

 AKG Drum Set Session I - Highperformance complete Drum Kit Microphone Pack

Stereo Microphone Preamps:

 1 x NEVE AMS Eight Legendary 1073 remote-controlled Preamps with Marinair Transformers, USB and Dante digital connectivity with 1073OPX Digital Option Card

Mixing Consoles:

- 2 x Avid S6 Modules (Knob module),
- Processing Module with interconnecting CAT6 patch chords
- 2 x Display Modules
- 2 x Fader Modules
- Jog Module
- Master Module

Audio Interface:

- MTRX WITH 32 inputs and 24 outputs / 1 signal processing card
- Avid HDX with chassis

- 2 x DigiLink cables
- iMac Pro

Amplifiers:

- 2 x 9000W AMP W/OMNIDRIVE-HD Processing
- DCi 8|600N 8 Ch Power Amplifier with BLU Link
- DCi 4|600N 4 Ch Power Amplifier with BLU Link

Monitor Controllers:

• BSS BLU - 8V2 BLK

AV Receiver:

• ARCAM AV40

Sound Card:

 Presonus Studio 68c Sound Card

POE Switch:

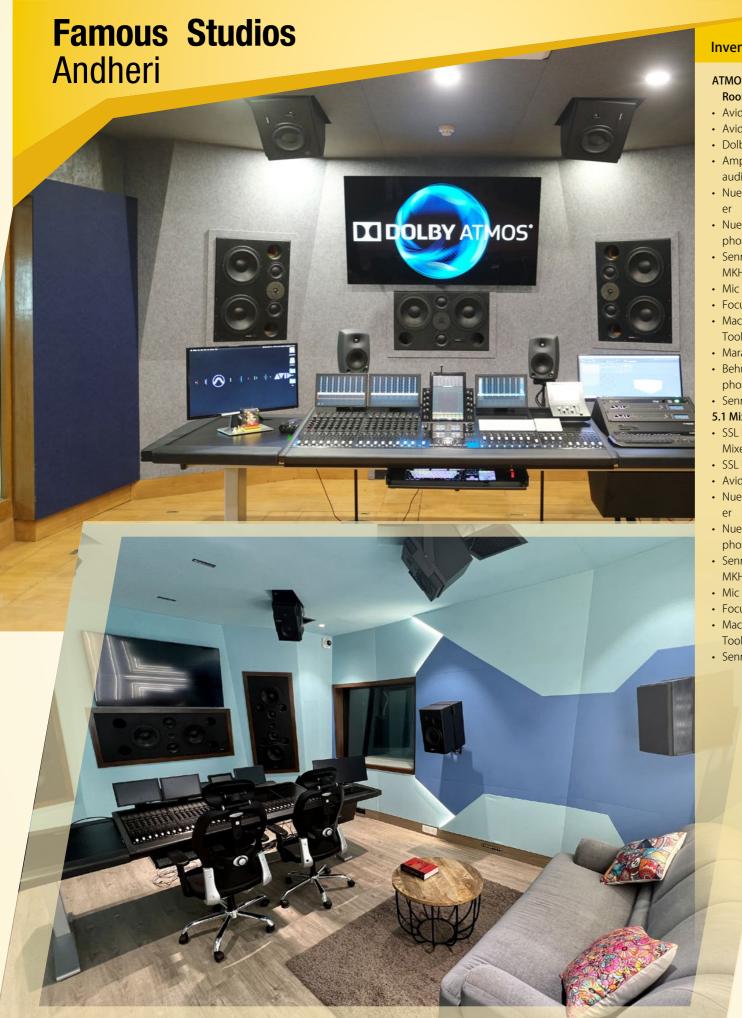
Netgear GS108LP POE Switch

TV (Dubrooms):

• 2 x Samsung 1m 08cm (43") 4k

TV (Control Rooms):

• Samsung 50Q60A



Inventory Used:

ATMOS 7.1.4. HE Mix & Dub

- Avid S6 M40-32 Mixing Console
- Avid MTR XI/O & HDX
- Dolby RMU
- Amplifiers & Speakers: Dyn audio; Chord Audio
- Nuemann-Speakers & Subwoof-
- · Nuemann-Condenser Micro-
- Sennheiser 416 BoomMic & MKH50 Boom
- Mic (U87)
- Focusrite Audio Equipment
- Mac Pro with Pro Tools(Version2020.7.0)
- Marani Digital Crossover
- Behringer Powerplay Headphone Amp
- Sennheiser Headphones

5.1 Mix & Dub Room:

- SSL Big Six Super Analogue Mixer
- SSL USB Control Surface
- Avid HDI/O & Omni
- Nuemann-Speakers & Subwoof-
- Nuemann-Condenser Micro-
- Sennheiser 416 Boom Mic & MKH50 Boom
- Mic (U87)
- Focusrite Audio Equipment
- Mac Pro with Pro Tools(Version2020.3.0)
- Sennheiser Headphones

STUDIO SHOWCASE



STUDIO SHOWCASE





Inventory Used:

Microphones:

- Sennheiser MKH 416
- AKG C414
- Neumann U87
- DPA 4060 Lavalier

Monitoring:

- Genelec Co Axial Monitoring LCR, Surround and TOPS
- Genelec SAM with Genelec SUB

Console:

• SSL BiG SiX

Preamps:

• DiGigrid IOC

Converter:

• Console SSL BiG SiX

Compressor:

SSL XLogic Alpha Channel

In any studio, the best sound gets produced when captured the right way. Which is why, not every microphone is designed to deliver true studio-created sound. But the ones that are designed to do so, accomplish the feat in an impressive manner. In this issue, PALM Team has curated a list of six latest studio microphones to check out in 2023.

Audix PDX720 Professional Dynamic Studio Microphone

According to the Audix website, the PDX720 Studio Microphone is "designed for the most demanding studio recording engineers and producers, vocal recording, high-end home solutions, professional podcasting, and voiceover." That sums it up. This studio microphone from Audix works well in a spectrum of settings with its sound signature, delivering smooth, natural vocals without active filtering.

Main Features include:

- Dynamic Microphone
- High-pass filter switch at 120Hz and
- Presence boost switch +1.5db and 3db
- Hyper Cardioid
- Plug & Play brilliant sound with excellent default gain level
- Frequency response optimized for vocal performance
- Great versatility for drum and instrument

Technical Specifications::

- · 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 Require-
- ments: None
- · Connector: 3-pin XLRm · Polarity: Positive
- pressure on diaphragm produces positive voltage on pin 2 relative to pin 3 of output XLR connector
- · Materials/Finish: Aluminum/Black/ Gold Finish
- Weight: 869gm
- Length: 212mm

Universal Audio UA Sphere DLX **Modeling Microphone**

The Sphere DLX Modeling Microphone features 38 mic models from brands such as Neumann, Sony, AKG, Telefunken, and more. With its dual-capsule design, the Sphere DLX allows users to record musical instruments in stereo and use Dual Mode to blend the sound of two mono microphones together. Crafted with dual gold-spluttered diaphagram, the Sphere DLX Modeling Microphone is built to last for a wide range of recording applications - from music recordings to podcast recordings, and more.

Main Features include:

- Dual-output
- 38 mic models
- · Shockmount included
- 25' cable
- 7 dR self-noise
- Stereo recording

Technical Specifications

- · Mic Type: Model-· Polar Pattern: Vari-
- able Dual Output • Diaphragm Size: 1"
- (25.4mm) · Frequency Response: 20Hz-
- Output Impedance: 200 ohms

20kHz

- · Connector: 5-pin XI R
- Weight: 772 gms
- · Included Accessories: Mic shockmount, stand mount, 25ft Mic Cable, Hardshell
- Suggested Applications: 38 Virtual Modeled Microphones available



Sennheiser Profile USB Microphone

Sennheiser Profile USB Microphone is a USB-C microphone featuring a cardioid condenser capsule and several integrated features for elevated recording applications. With three fundamental controls, namely Gain Control (to adjust the microphone's level), Mix Control (to balance the microphone with the device audio), and Volume Control (to set the monitoring level of the headphones), the Profile USB Microphone, an adjustable tilt function coupled with a self-locking joint, a table stand or a boom arm for optimal positioning, the Profile USB Microphone is designed for end-to-end recording needs.

Main Features Include:

- USB-C powered
- Cardioid condenser capsule
- · Adjustable tilt function with self-locking
- · Soft-touch mute button with LED ring
- Gain control with LED ring
- 3.5 mm headphone output for audio monitorina
- · Robust metal housing and premium finish

Technical Specifications:

- · Transducer principle: Pre-polarized con-
- denser microphone · Pick-up pattern:
- Cardioid · Sensitivity at max. gain: -10 dBFS at 80 dr SPI
- · Sensitivity at min. gain: -50 dBFS at 80 dB SPL
- Max. sound pressure level: Min. gain: 125 dB SPL; Max. gain: 85 dB SPL
- Frequency range: 20 to 20,000 Hz
- Equivalent noise level: Min. gain: 34 dB(A) SPL; Max. gain: 28 dB(A) SPL • Cable length: 1.2 m
- (Profile) Power supply: 5 V



From Lewitt Audio's Pure Tube Microphone to Sennheiser's Profile USB Microphone, these studio microphones offer precise audio quality to the users and deliver crisp, clear sound every single time.

RØDE NT1 5th Generation Studio Condenser Microphone

The NT1 5th Generation Studio Condenser Microphone from RØDE couples the signature sound of the classic NT1 with new-edge, revolutionary technology in sound recording. Featuring the brand's Dual Connect output, XLR and USB connectivity, world's first "unclippable" 32-bit float digital output, and advanced digital signal processing, the NT1 5th Generation Studio Condenser Microphone is a studio workhorse in every sense.

Main Features include:

- · Large-diaphragm cardioid condenser microphone
- HF6 1-inch true condenser capsule
- · Smooth frequency response, high sensitivity and high SPL handling
- Exceptionally low noise (4dBA)
- · Patent-pending Dual Connect output
- · World-first 32-bit float digital output
- Ultra-high-resolution (up to 192kHz) analog-to-digital conversion
- On-board DSP for advanced APHEX audio processing · Studio-grade shock mount and pop filter,
- XLR and USB cables included Available in black or silver

Technical Specifications:

- Acoustic Principle: Pressure gradient
- Capsule: 1.00"
- Polar Pattern: Cardioid
- · Frequency Range: 20Hz - 20kHz · Output Impedance:
- 100Ω · Maximum SPL: 142
- dB SPI · Equivalent Noise (A-
- Weighted): 4dBA • Sensitivity: -32 dB re 1 Volt/Pascal (25 mV
- @ 94 dB SPL) +/- 2 dB @ 1 kHz · Analogue Power Re-
- quirements: Via XLR: P48 Analogue Output
- Connection: 3-pin · Sampling Rate (kHz):

48 / 96 / 192

· Processing: APHEX digital signal processing (only available at 48kHz / 24-bit)



Sony C-80 Condenser Microphone

The C-80 from Sony is an unidirectional condenser microphone that is ideal for use in a variety of applications, from music recording and vocal recording to instrument recording in a studio. The C-80 features a high-resolution large capsule inspired by the C-100 from Sony, which allows users to benefit from a characteristic peak of 13kHz. Equipped with a low-cut filter and pad-switch, the C-80 eliminates unwanted frequency and minimizes distortion.

Main features include:

- · Large 25-mm microphone capsule emphasises the presence of sound
- · Rich mid-range characteristics ensure a precise vocal pickup
- Dual-diaphragm structure suppresses proximity effect for stable recording and broadcast
- Extended low-end and natural sound provide a realistic reproduction of instru-
- · Precision resin backplate, for reduced acoustic impedance and high sensitivity

SONY

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• Switchable low-cut filter reduces the pickup of low-frequency and ambient noise.

Technical Specifications:

- · Capsule Type: Con-
- denser Microphone • Frequency Response: 20Hz - 20kHz
- · Directivity: Uni directional
- Sensitivity: -30 dB
- · Dynamic Range: More than 125.5 dB
- · Signal-to-Noise Ratio: 81.5 dB
- Connector: XLR-3-12C (male) • Power Requirements:
- DC 44 to 52 V Dimensions: Approx 40mm x 158mm
- · Weight: Approx. 215
- · Supplied Accessories: Cradle Suspension (1), Operating Instructions (1), Carrying Case (1)

Lewitt Audio Pure Tube Studio Microphone

Accented by gold condenser capsule, the Pure Tube Studio Microphone by Lewitt Audio features a cardioid pattern and comes with a transformative circuit and a semiconductor-free, capacitor-free puristic signal path that helps users achieve a low noise floor of 7 dB.

Main features include:

- Studio microphone for premium sound
- 1" true condenser capsule · Optimized for vocals
- Revolutionary circuit design
- Puristic signal path Hand-selected 12AU7/ECC82 tube
- Ultra-low self-noise of 7 dB (A)
- Cardioid polar pattern

10-year LEWITT warranty **Technical Specifications:**

- Type: Condenser, externally polarized
- Acoustical operating principle: Pressure gradient transducer
- Diaphragm: 3 micron gold sputtered
- Transducer Ø: 25.4 mm. 1 in
- Polar pattern: Cardioid
- · Frequency range: 20 ... 20,000 Hz
- Sensitivity: 28.2 mV/ Pa, -31 dBV/Pa
- Self-noise: 7 dB (A)
- Max SPL: 132 dBSPL · Signal / noise ratio:

87 dB (A)

- Dynamic range: 125 dB (A)
- 110 V, 60 Hz Connector: 7-pin
- XLR connector Microphone enclosure. Zinc die cast
- · Microphone dimensions: 196 x 65 x 45mm, 7.7 x 2.6 x 18 in
- Microphone net weight: 692 g, 24.41 oz

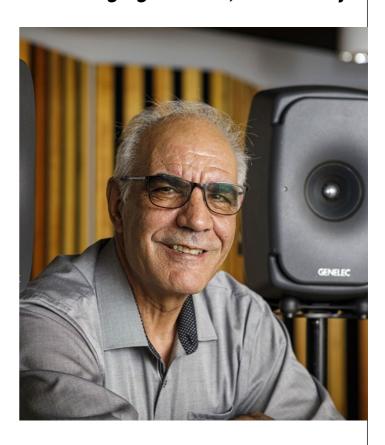


September - October 2023 September - October 2023

11 QUESTIONS WITH Siamäk Naghian

Managing Director, Genelec Oy

Siamäk Naghian, Managing Director, Genelec Oy, isn't just an iconic individual with an iconic role for an iconic brand - his journey at Genelec is marked with cultural and artistic resonance, a deep affinity towards the creation of true sound, and a desire to make the world experience the richness that true sound can deliver. In PALM Magazine's '11 Questions', Siamäk Naghian shares insights into his journey with Genelec, the pivotal role sustainability plays in the brand's core values, and the legendary pro audio brand's growth trajectory for the Indian market.



1. How did your journey begin with Genelec?

It was just a great accident, one of the best in my life. I was working at Nokia in Finland when I learned that Genelec co-founder Topi Partanen – who was leading the R&D team – was about to retire. So I joined Genelec as R&D Director in 2005.

2. How would you describe your day-to-day responsibilities at Genelec as the company's Managing Director?

While a company's MD is responsible for whatever the company does, at Genelec we have a very flat organisational structure and a great culture of creating new innovations together. So, the most important part of my daily job is to help people to flourish, learn, and grow.

3. You once mentioned, "The value of the brand [Genelec] is many times bigger than the turnover." Can you elaborate on some key values that set Genelec apart from its competitors in the industry?

Unfortunately, the tangible values found on income statements, balance sheets and so on are too often the main criteria in assessing the value of a company. However, the most important company asset is what is in the mind of its users, people, and partners. For more than four decades, Genelec has built a reputation of being an innovation leader within our own very specialised industry and community. We have kept on inspiring users by focusing consistently on the essence of

sound and how it's monitored, creating new solutions based on long-term research and development work.

4. In terms of research and development, what have been the three major milestones in Genelec's 45-year trajectory in terms of studio sound?

The first was undoubtedly the 1031 two-way

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We think that monitoring technology will continue based on its current foundations, but the role of software and digital technology will continue to grow. This will create even easier access to music and content production for a wide number of users in the future, and our intent is simply to be part of this development by strengthening our presence in India.

nearfield monitor, which back in the 90s really set the standard for compact active studio monitors for years to come. The second was our Smart Active Monitoring family, which in 2006 brought DSP and auto-calibration into the mainstream and has paved the way for our new UNIO platform, and more recently 'The Ones' series of coaxial point source monitors have raised the performance bar even higher.

5. How does Genelec ensure sustainability in its product design?

Sustainability has been an essential part of Genelec right from its birth in 1978, because the founders of the company grew up and lived in the countryside, surrounded by nature. Their principle was simple: nature can live without us, but we can't live without nature. So, we should respect nature and take care of our planet. This philosophy was later officially written into our company strategy by stating that "sustainability is as important as audio quality and profitability," and this principle is evident in all the models that we have designed and manufactured since 1987. Even the S30, our very first loudspeaker, is still in daily use around the world. This is quite an achievement, of which we are very proud! In essence, every Genelec design process focuses on sustainability as one of the key starting points and requirements.

6. How important is the Indian market in the Genelec scheme?

Genelec has already been present in India for many years since the country has such

an important role in both music and film production. As music production technologies become more democratised and widespread, we believe that developing societies like India – with its rich musical culture and young educated generation – will play a key role in the future of the audio industry. So, we'd like to play a part in this development and try and contribute to it.

7. What traction and leverage (in product and technology, sales and brand supremacy) does Genelec envision from Indian market?

We believe that India has the potential to become one of the top countries in our future roadmap, and our clear intention is to be the most highly desired studio monitor brand in the country.

8. What role do Genelec's distributors and dealer channels in India play in this regard?

With many decades of experience in global co-operation and success, we have learned that nothing can be achieved without a professional and reliable network of distributors and dealers who are passionately committed to audio and the search for excellence. We believe this is valid both now and in the future.

9. In your opinion, what are some of the key differentiating factors that make

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We see a perfect match between our heritage and future strategy, and the role of the IRAA. We strongly believe that our partnership with IRAA is the perfect way to contribute to the development of the audio community in India, helping to inspire and encourage the next generation as they start shaping the future of art and sound.

the pro audio market in India valuable to Genelec?

These factors would include a long tradition in music and film production, a new and growing generation of audio professionals and creators, India's continuous development as a society, and it's wonderfully rich and diverse culture.

10. What trends or technologies do you see emerging in India in the next five years and what is Genelec's strategy to capitalize on the same?

We think that monitoring technology will continue based on its current foundations, but the role of software and digital technology will continue to grow. This will create even easier access to music and content production for a wide number of users in the future, and our intent is simply to be part of this development by strengthening our presence in India.

11. Genelec recently announced its partnership with the Indian Recording Arts Academy Awards (IRAA). Can you elucidate how this strategic step ties into Genelec's long-standing association with the music recording, mastering, and postproduction industry in India, as well as the company's roadmap in increasing its international expansion in the Indian market?

Recording, mixing, mastering and postproduction have been a focus for Genelec for decades, and this will remain our strategic focus in the future. So, we see a perfect match between our heritage and future strategy, and the role of the IRAA. We strongly believe that our partnership with IRAA is the perfect way to contribute to the development of the audio community in India, helping to inspire and encourage the next generation as they start shaping the future of art and sound.



MARTIN AUDIO ANNOUNCES THS POINT SOURCE LOUDSPEAKER

Martin Audio announced the release of the THS Point Source Loudspeaker. Capable of 135dB peak, the THS combines very high output with extended frequency response. It joins the wider TH series and is ideally suited to medium-scale DJ club applications and installations which call for exceptionally high sound levels from a compact, standalone loudspeaker system.

Packing three high-technology drivers into a relatively small trapezoid enclosure, its innovative threeway triaxial configuration delivers enhanced output for its size and gives it the edge over comparable two-way systems in terms of superior mid- and high-frequency performance. Adding a compact Martin Audio SX subwoofer to

extend low frequency output creates a dynamic, four-way set-up with a small footprint.

To ensure the most effective use of amplifier count, THS is designed to be bi-amplified, with an internal passive network performing the mid/high crossover function.

The THS triaxial driver's LF section comprises a reflex-loaded, high-specification 15" LF driver with a 4" coil, waterproof cone and neodymium magnet structure. A 4" midrange ring radiator and a 2.5" HF ring radiator, both with high temperature polymer diaphragms, are arranged coaxially at the rear of the LF driver and integrated into a 1.4" exit. This transitions through the magnet structure of the LF driver into an 85° x 50° horn. The horn itself is user-rotatable, with a large

mouth to maintain pattern control down through the midrange.

The durable birch plywood enclosure is finished in hard-wearing textured paint and incorporates multiple threaded inserts to facilitate a variety of portrait and landscape mounting options—including eyebolt, yoke, pole and truss mounting. Twin handles assist installation and deployment, while a steel grille, with triple-layer polyester backing, protects the drivers and resists dust and water ingress.

Dom Harter, Managing Director, commented, "This has been a stellar year for Martin Audio product launches with the addition of TORUS 8, Flex-Point series and now this stunningly powerful compact triaxial loudspeaker THS. It's been thoroughly road-tested with our friends at the Bug Club over the summer."



Martin Audio's newly released THS Point Source Loudspeaker delivers 135dB peak, high output with extended frequency response, and high sound levels best-suited for medium-scale DJ club applications and installations

SERATO DJ PRO 3.1 BETA EXPANDS STEMS PERFORMANCE

Serato has updated its flagship software to 3.1, adding the usual ream of bug fixes as well as expanding Stems Performance Pad mode. The update allows users to isolate stems like vocals, drums, bass, etc from a mixed track using pads on an official Serato controller.

Previously, it was only possible to replace an unused Pad Mode with stems on your dedicated controller, such as the **Pioneer DJ DDJ-FLX4** or **RANE ONE**. With Serato DJ Pro 3.1 beta, you can enter Stems Performance Pad Mode via popular Serato controllers like Pioneer DJ's SP1, Denon DJ S6000 and the CDJ-2000nxs2 and 3000 models. This means you could have a dedicated controller for stems while you use traditional HID mode for mixing.

Stem separation first came to DJ software via VirtualDJ 2020 and has grown to become a key part of new updates, including in rekordbox and

Algoriddim djay. It allows anyone to create acapellas and instrumentals from fully mixed stereo tracks, even if the official stems aren't available. For turntablists and open-format DJs, it's a game-changer, making it easy to create mashups on the fly or avoid vocal clashes when mixing shorter pop records.

Serato DJ Pro 3.1 beta also introduces stability and performance improvements, minor GUI updates, as well as

updated keylock detection algorithms for Pitch 'n' Time when scratching on a motorised platter.

Earlier this year, Pioneer DJ's parent company AlphaTheta announced the acquisition of Serato. That acquisition was since challenged in court by Pioneer DJ's competitors inMusic, who own the Denon DJ and Numark brands. The acquisition is still pending approval from the New Zealand Overseas Investment Office.

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