GENELEC: A LEGACY IN STUDIO MONITORING **EXCELLENCE**

In the world of professional audio, studio monitors serve as the ultimate reference for recording, mixing, and mastering sound. Unlike most consumer speakers, studio monitors are designed to deliver a flat and neutral response, allowing audio engineers to hear every detail in a mix, whether good or bad. Among the various types of studio monitors, nearfield monitors have become widely adopted for their ability to provide precise sound at short distances. Positioned closer to the listener, these compact monitors deliver more 'direct' sound, minimizing room reflections and ensuring that the audio you hear is a truer representation of the source material. For our Studio Recording special for the months of September and October, PALM **Expo Magazine** brings you the one name that consistently rises to the top amongst **Studio** Monitors in the industry: **Genelec**.

ince its founding in 1978, this Finnish company has been a trailblazer in the field of professional audio, setting the bar for precision, durability, and technological innovation. From its early analogue monitoring systems to its modern DSP-driven Smart Active Monitoring (SAM) technology, Genelec has shaped the way audio professionals approach

THE IMPORTANCE OF NEARFIELD **MONITORING**

As studio sizes have reduced over the years, nearfield monitors have become more critical for audio professionals because they deliver an uncoloured and detailed sound which is focused directly on the listener. This makes them invaluable in smaller studio environments, and particularly those with more challenging acoustics, which can adversely affect the listening

The goal of any professional studio monitor is to ensure that the sound heard in the studio will translate accurately to different playback systems, whether it's in a car, on home speakers, or through headphones. Genelec's monitors have long been revered for their precision in this area, and their nearfield monitors, in particular, have become the gold standard for studios around the world.

GENELEC'S INNOVATION THROUGH THE DECADES

Genelec's commitment to accuracy, innovation, and adaptability has solidified its position as a leader in studio monitoring. From the company's very first S30 model to the sophisticated SAM series, Genelec has consistently delivered cutting-edge technology that meets the needs of modern studios. With both two-way and threeway models in a wide range of sizes, complemented by a family of subwoofers, Genelec's nearfield monitors are a benchmark for anyone serious about achieving the highest sound fidelity. Their ability to blend form and function, along with features like auto-calibration and durable construction, ensures they remain a top choice in professional audio environments.

Whether you're mixing, mastering, or producing, Genelec offers a solution that's reliable, adaptable, and precise, helping you hear the truth in every track. Genelec's evolution of products across four decades is layered and inspirational, and here we'll guide you through some of the key models that have helped keep Genelec at the forefront of innovation over the years.

SUSTAINABILITY: A CORE VALUE AT **GENELEC**

Sustainability is woven into the fabric of Genelec's ethos, and it



Aerial view of Genelec's state of the art factory nestled by Porovesi

has been an integral part of their operations since the company was founded in 1978. As **Siamak Naghian**, Genelec's Managing Director, pointed out in an earlier interview with PALM Expo Magazine, "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." and this belief has guided the company's approach to product design and manufacturing. Genelec monitors are built to last, with many early models still in use decades after they were first released. This long product life reduces waste and ensures that users get the most out of their investment. Naghian eloquently states, "Every Genelec design process focuses on sustainability as one of the key starting points and requirements." This dedication to quality, reliability, and environmental consciousness has kept the company at the forefront of sound monitoring technology for over four decades.

Genelec has also incorporated environmentally friendly practices into its manufacturing processes, using sustainable materials and minimizing the environmental impact of production.

THE PHILOSOPHY OF GOOD DESIGN

In an interview with PALM Expo Magazine, Genelec's late Founder Ilpo **Martikainen** states his approach to designing studio monitors was always grounded in the belief that "the monitor shall tell the truth about the signal being reproduced." For him, the key to a good monitor was its ability to faithfully replicate the electrical signal in an acoustic form, ensuring that what the listener hears is as accurate as possible.

September - October 2024 September - October 2024 But Martikainen's philosophy didn't stop at sound quality. He also believed that monitors should be highly reliable and serviceable over a long period of time. "The reliability and serviceability issues are relatively straightforward engineering issues," he explained, but achieving accurate sound reproduction was far more complicated. This belief in long-term durability and precision extended to every Genelec product, aligning with the company's environmental goals by promoting sustainability through long-lasting designs.

Raag Sethi the Founder of **Compass Box Studio** feels that Genelec embodies superior design, quoting to *PALM Expo magazine* at the IRAA Awards, "So, what I think Genelec does really well, is accuracy. Genelec does a good job of making sure there is accurate representation of audio so that it is translated in multiple mediums. Which is great for an engineer. The impact of high-quality audio is very important in our line of work, Genelec is one of the world's premier brands when it comes to high-end audio. So, it's great to have Genelec as one of the main sponsors of the IRAA Awards as well."

WHAT MAKES GENELEC MONITORS STAND OUT?

Active Technology

Since day one, Genelec has pioneered the use of active monitoring technology. In combination with active crossovers, each transducer is driven by its own integral power amplifier stage, for completely optimized audio performance. This also permits the inclusion of sophisticated protection circuitry and rear panel room response controls – providing a bulletproof monitoring solution that can adapt to any room.

Minimum Diffraction Enclosure (MDE) and Directivity Control Waveguide (DCW)

Genelec's modern nearfield monitors are designed with the distinctive curves of the **MDE** to minimize sound reflections and diffraction. This, along with the **DCW**, ensures that sound is evenly distributed, creating a clear and accurate soundstage both on and off axis. The marriage of these two design philosophies has remained consistent throughout Genelec's product line for 20 years.

Auto-Calibration and GLM Software

One of the defining features of Genelec's SAM series is the tight integration between internal **DSP** and **GLM (Genelec Loudspeaker Manager)** software. GLM's AutoCal calibration algorithm automatically adjusts the monitors' performance to suit the room's acoustic properties, ensuring that Genelec monitors deliver truthful sound, even in more difficult room conditions.

Durability and Reliability

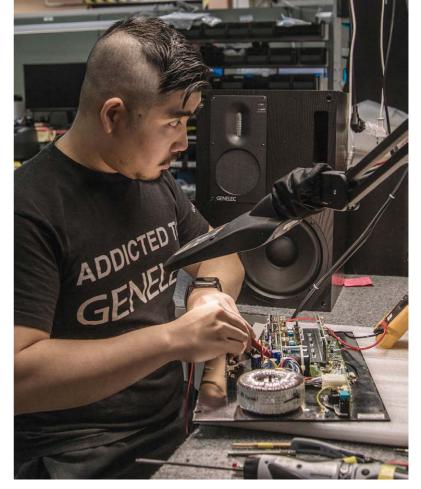
Genelec monitors are known for their rugged construction, which ensures long-lasting performance even in demanding professional environments. Their drivers and amplifiers are built to last, making them a reliable choice for audio professionals.

Protyay Chakraborty the Chief Sound Mixer, Compass Box Studio recalls his early experiences with Genelec monitors. "One of my first pro-studio experiences was with Genelec monitors, and I was blown away by their detail, transparency, and frequency coverage. I've been in many studios where Genelec is the standard. For a mix engineer, high-quality equipment with the highest possible accuracy is critical, and Genelec consistently excels at this."

Chakraborty admires Genelec's range of products, noting that no matter what size or range you choose, you're guaranteed a high-quality experience. This versatility makes the brand a trusted choice for engineers looking for reliable performance in both small and large studios.

Sreejesh Nair the Solutions Specialist, Avid Technology reflects on how Genelec provides assurance in his work: "One of the best features of Genelec is its accent response. With most speakers, there's an adjustment period where you need to get used to the sound. With Genelec, that curve is smooth and short, so you can get used to them quickly. As an engineer, the most important thing is the translation part, mixing to a point where the speakers become invisible."

Nair emphasizes the "organic" quality of the sound produced by Genelec monitors, saying, "High Quality audio equipment is a necessity, in the sense



Servicing a legacy Genelec S30 monitor, one of the early models that set the standard for studio recording

that, when you do your work, even though most people listen to 80%, how the next 20% performs is what matters. The next 20% stands the test of time. There are things that can be straight-forward and sterile, and there are things that are organic. Something as high-end as Genelec gives you the feeling that you are mixing something organic. And as long as something is organic, it will stand the test of time and have a better shelf-life. That is what Genelec offers you."

EARLY MODELS: LAYING THE GROUND-WORK FOR PRECISION

Genelec's early nearfield studio monitors were instrumental in defining their reputation for sound clarity and accuracy. These models marked the beginning of a legacy that would influence the audio industry for decades.

S30

Genelec's first studio monitor, the S30 set the bar for sound accuracy during the late 1970s. This model was revolutionary for its time, providing sound

TENAPOZA.

engineers with tools that offered a previously unmatched level of detail in the sound spectrum and the ability to be optimised for the room's acoustics.

1022

Often known as the 'Darth Vader' model due to its distinctive aesthetics, the three-way 1022 model pointed the way to Genelec's future use of contoured enclosure designs. Delivering clarity both on and off axis, the 1022 provided true reference quality even at high SPLs.

1035

In the era of large commercial

Affectionately dubbed the Darth Vader model, the 1022 paved the way for Genelec's future revolutionary industrial designs studio spaces, the 1035 further cemented Genelec's presence by delivering high-SPL main monitor performance, with truthful accuracy. Designed for flush mounting in big control rooms, the 1035 combined power with precision

THE 1031: A TRUE ICON

Among Genelec's growing line-up of models, inevitably some monitors paved the way for innovation faster than others. No conversation about Genelec can omit the legendary **1031 nearfield monitor**, which was released in 1991. This model quickly became a favourite among top studios and audio engineers, thanks to its compact size and neutral, unbiased frequency



The Genelec 1031, a legendary nearfield monitor that set a new standard for studio sound, known for its precision and reliability in professional audio environments

response. The 1031 was designed to tell the truth, no matter what, and this commitment to transparency made it an indispensable tool for mixing and mastering.

The front-ported design of the 1031 featured the **Directivity Control Waveguide** (DCW), which ensured precise sound directionality and created a wide, uncoloured sweet spot for the listener. Additionally, the active crossover technology ensured that the sound from the woofer and the tweeter were perfectly aligned, resulting in a seamless audio experience.

Ilpo Martikainen described the **1031** as a

fan favourite saying, "The 1031 is a favourite for both exemplary rapid product development and excellent performance, and so it became the mother of all modern two-way monitors, leading it to the **TEC Hall of Fame**."

The 1031 was adopted by some of the world's top studios, including **Abbey Road Studios**, **Capitol Records**, and **Sony Music Studios**. Renowned producers and engineers such as **George Martin**, who worked with **The Beatles**, and **Chris Lord-Alge**, one of the most celebrated mixing engineers, were vocal advocates for the 1031. It even earned multiple awards, including the **TEC Award for Outstanding Technical Achievement**, further solidifying its legendary status.

After almost fifteen years in production, the 1031 was eventually discontinued in 2005. But its influence is still felt in Genelec's current product line, and its design philosophy has been carried forward in newer models.

TWO-WAY SYSTEMS: ESTABLISHING GENELEC'S INDUSTRY DOMINANCE

Two-way systems have been integral to Genelec's success, offering a balance between size and performance that caters to studios with space constraints. These models became staples in professional settings.

1030

The 1031's smaller sibling, the 1030 was an ultra-compact and reliable solution that became favoured among engineers who required accurate sound in smaller studio spaces. Its balanced frequency response and compact build made it a go-to monitor for nearfield applications.

1029

The small-but-mighty 1029 nearfield model was the very first Genelec design to use a die-cast aluminium enclosure. As well as providing a supremely rigid structure, the 1029's thin-walled aluminium enclosure allowed a much

larger internal volume, helping it to deliver a huge sound that belied its compact size.

8030

The iconic 8000 series really put the curved MDE aluminium enclosure design on the map, and the 8030 has become ubiquitous in both home studios and professional facilities. Succeeding the 1029, the 8030 is still in production and continues to be one of Genelec's most popular models.

THREE-WAY SYSTEMS: PUSHING THE LIM-ITS OF SOUND REPRODUCTION

Over the years, Genelec's three-way systems have taken monitoring to a new level by incorporating a dedicated midrange driver. As a result, each of the three drivers has a narrower frequency range to handle, leading to even greater clarity and accuracy across the frequency spectrum, and making these models ideal for high-SPL critical listening environments.

1037

Launched in 1992, the 1037 was designed for mid-to-large control rooms and was equally at home being flushed mounted or used in free-standing mode. With both the MF and HF drivers being incorporated into the DCW, the 1037 was renowned for its wide sweet spot and ability to produce an accurate sonic reference, even at higher playback levels.

1036

Until 2015, the 1036 represented the pinnacle of Genelec's main monitoring technology. Operating right down to 19 Hz and producing a staggering 131 dB of short-term SPL, the 1036 was designed for large control rooms with multiple listeners. It provided all the vibe and energy you could possibly want, with detail to match.

SMART ACTIVE MONITORING (SAM) SE-RIES: GENELEC'S MODERN MASTERPIECES

In 2006, Genelec introduced its groundbreaking **Smart Active Monitoring (SAM)** series, which redefined studio monitoring with its integration of advanced **digital signal processing (DSP)** and GLM calibration software. SAM models quickly and intelligently adapt to the room's acoustics to produce mixes that translate consistently. SAM technology can now be found in the vast majority of Genelec's professional monitoring solutions.

8240

As one of the first generation of SAM models, the compact two-way 8240

nearfield model took an important step in minimising the ability of the room's acoustics to colour the listening experience. In conjunction with GLM software, the room's acoustics could be analysed and the frequency response, playback level and distance delay of each 8240 monitor could be optimised accordingly.

8351

The 8351 was Genelec's first three-way coaxial monitor and heralded the birth of The Ones family of point source SAM monitors. With amazing directivity and a wide, uncoloured sweet spot, the 8351 allows fatigue-free listening – even on long sessions.



The SAM 8381, a revolutionary five-way point source monitor



Genelec's GLM Calibration Software, an advanced tool designed to optimize monitor performance



Genelec's new 8550 Headphones are at the heart of UNIO

8381

The newest SAM model, the 8381 is a five-way point source main monitor with huge headroom and high-resolution imaging. Designed for high end music recording, mastering and audiophile listening, the 8381 creates a free-standing full range monitoring solution with unrivalled LF control.

The SAM series took Genelec's already celebrated sound quality to the next level by providing a versatile tool set for modern studios. Whether it's recording, mixing, or mastering, these monitors can adapt to any room and maintain their legendary sound quality. The inclusion of DSP in these monitors allows for fine-tuning and room optimization, ensuring that every detail in the audio is heard clearly.

Farhad Dadyburjor, the National Business Head, Studio Solutions at **Alphatec**, in a talk with PALM Expo Magazine shares his long-standing association with Genelec and how it has revolutionized his approach to sound: "I started using Genelec during the mixing of *Kaminey*, and I've never looked back. I was probably one of the first to adopt DSP monitors in the 8000 range, and the first coaxial monitors too. I think the way Genelec has integrated its software and hardware is the most refined in the market." Dadyburjor takes pride in being an early adopter of Genelec's DSP monitors, praising the brand's innovation and maturity in delivering world-class audio solutions. For him, Genelec has set a high bar for other manufacturers in the industry.

As **Naghian**, pointed out, "The SAM family has brought DSP and auto-calibration into the mainstream, paving the way for new innovations like our **UNIO platform**." This relentless pursuit of technological advancement has enabled Genelec to stay at the forefront of the industry, constantly raising the bar for studio monitoring.

Genelec's UNIO ecosystem, a cutting-edge audio integration solution

UNIO: BRIDGING IN-ROOM AND PERSONAL HEADPHONE MONITORING

Looking to the future, Genelec has recognised that more and more audio professionals are seeking the freedom to work anywhere, anytime – and that often involves moving seamlessly between monitors and headphones. So, the new **UNIO monitoring ecosystem** addresses that need by using the 9320-reference controller as a hub to control SAM monitors and Genelec's new 8550 reference headphones. Given that SAM technology already provides extremely accurate in-room loudspeaker monitoring, UNIO now provides additional headphone calibration features available within GLM Software – plus the power of Aural ID 2 binaural headphone monitoring technology – to bring users the most personal and truthful headphone monitoring experience ever.

GROWING PREFERENCE FOR GENELEC IN

India's nearfield monitor market has evolved, reflecting the global trend of embracing more portable and affordable studio equipment. The growth of independent music, YouTubers, and home studios has created demand for studio monitors that offer professional-grade audio quality within smaller spaces. The key advantage of nearfield monitors is that they are designed to be positioned close to the listener, offering clear and accurate sound that is less affected by room acoustics.

Genelec has also made significant inroads into the Indian market, where its monitors are used in some of the country's leading studios. In particular, the S360, with its high-SPL capability, is popular for sound design and post-production work, while the 1237 and 1238 models are favored by professionals for their three-way design and superior sound accuracy.

Additionally, models from **The Ones Series**, such as the 8331, 8341, 8351 and 8361, are well-regarded in Indian studios for their compact coaxial designs and exceptional sound reproduction. These monitors provide an ideal solution for smaller studios that require nearfield monitoring that can intelligently adapt to the room's acoustics.

Protyay Chakraborty highlights the aspirational nature of Genelec studio monitors because of their unparalleled quality, "Someday, I would like to own a Genelec monitor. I'm a mix engineer by profession, so my work depends critically on high-quality equipment giving the highest possible accuracy, and I think Genelec does a great job at that. Worldwide, there are so many studios that have Genelec as their go-to monitors. So, I cannot understate the value of high-quality accurate sound in my line of work."

Mona Shetty the Managing Director of **Sound and Vision Studios** notes how Genelec monitors have become a natural choice for engineers in her studio: "Our engineers feel at home using Genelec speakers. They don't have to second-guess things, which makes Genelec a no-brainer for us. When working with high-profile projects—whether it's for feature films, television, OTT platforms, or audio – we need the best equipment to produce the best quality sound."



innovation, reliability, and environmental responsibility. From the iconic 1031 to the cutting-edge SAM series and UNIO ecosystem, the company has consistently delivered products that meet the evolving needs of the audio industry while staying true to its core mission: to deliver the most accurate and truthful sound reproduction possible.

As India's audio landscape continues to evolve, Genelec remains at the forefront, offering unmatched accuracy, detail, and transparency. From small studios to large-scale productions, its ability to cater to diverse needs makes it a preferred choice for engineers, mixers, and producers alike. With testimonials from leading figures in the industry, it's clear that Genelec's monitors are not just a tool, they're an essential part of the creative process, ensuring

that sound is delivered with precision and clarity

across every project.

Farhad Dadyburjor speaks of the evolution of Genelec studio monitors since he first started using them and the company's ethos thus far, stating, "I think the way the software and hardware integration of the DSP has taken place is the probably the oldest and most refined one there is. There are a lot of manufacturers out there that do it.

but the way other manufacturers implement it is not as mature as the way Genelec does it. And I'm very proud of how far Genelec has come in 15 years."

Whether in the world's top recording studios or a small home studio setup in India, Genelec monitors continue to define what professional sound should be, setting a benchmark that others strive to meet. For audio professionals who demand precision, reliability, and innovation, Genelec remains the undisputed leader in studio monitoring technology.

Genelec's The Ones Series with an ultra-compact, three-way coaxial design, are a strong preference among Indian Recording Professionals

For Shetty, Genelec's reliability and ability to meet the demands of high-profile productions make it an indispensable part of her studio's toolkit.

GENELEC'S ENDURING LEGACY

Genelec's legacy in studio monitoring is unmatched, with a history of