USound MEMS Technology Powers the Kiwi Ears Halcyon, the World's First Tribrid IEM

USound Enables Next-Generation Hybrid Audio Architecture in Kiwi Ears Halcyon IEM

The Kiwi Ears Halcyon integrates USound MEMS technology in a hybrid 1DD + 3BA + USound MEMS configuration, delivering high-performance in-ear audio.

GRAZ, STYRIA, AUSTRIA, April 30, 2026 /EINPresswire.com/ -- USound announces its role in enabling the Kiwi Ears Halcyon, a new in-ear monitor developed by Kiwi Ears, a brand of Linsoul, and positioned as the world's first tribrid IEM, combining an electrodynamic driver, balanced armature drivers, and MEMS speakers in a single system.

At the core of this architecture is USound's MEMS speaker technology, integrated within a two-way audio module alongside three balanced armature drivers and an electrodynamic speaker. The resulting configuration brings together three distinct transducer technologies, each contributing specific acoustic characteristics—low-frequency foundation from the electrodynamic driver, detailed tuning and resolution from balanced armatures, and fast transient response with consistent wideband reproduction from MEMS speakers.

Designed for demanding listeners, the Halcyon targets a reference-oriented sound signature, prioritizing clarity, speed, and precision. The combination of driver technologies enables high levels of separation and control across the frequency spectrum, supporting a detailed and balanced listening experience.

"With the Halcyon, our goal was to explore how different driver technologies can complement each other to achieve a highly resolving and balanced sound signature," said Stephen Du Linsoul, CEO of Linsoul/Kiwi Ears. "Integrating MEMS speakers alongside dynamic and balanced armature drivers allowed us to refine speed, clarity, and control in a way that aligns with the expectations of today's audiophile community."

By combining an electrodynamic speaker, balanced armature drivers, and MEMS speakers in a single system, the Halcyon reflects a shift in IEM design toward technology-driven architectures, where performance is defined by how different transducer principles interact rather than by driver count alone.

Kiwi Ears Halcyon tribrid in-ear monitors combining a dynamic driver, balanced armature drivers, and USound MEMS speaker technology, shown with a desktop audio setup.

This approach marks an important step in the evolution of in-ear audio: instead of optimizing individual drivers in isolation, manufacturers are beginning to design fully integrated acoustic systems that leverage the strengths of multiple transducer technologies. In this context, MEMS speakers introduce new capabilities in terms of speed, consistency, and miniaturization, making them a natural complement to established driver types in advanced IEM designs.

“The Halcyon shows how MEMS speakers can be used as a core element in high-performance IEM design, not just as an alternative driver,” said Ferruccio Bottoni, CEO of USound. “Their fast transient response, wide bandwidth, and compact form factor enable a level of control and consistency that is difficult to achieve with conventional transducers alone. Integrating MEMS speakers into a tribrid architecture like this opens new possibilities for how IEMs are designed and tuned.”

USound’s MEMS-based audio module enables a compact, highly integrated platform in this multi-driver design. Its ultra-thin form factor supports efficient space utilization, while its compatibility with automated assembly processes enables scalable manufacturing. Its wide bandwidth capability further aligns with the requirements of high-resolution audio playback and supports precise system integration.

With the Halcyon, MEMS speaker technology continues to expand into performance-driven IEM designs, supporting a new class of hybrid architectures in the audiophile segment.

The Kiwi Ears Halcyon is available through its Kickstarter campaign starting April 30, 2026, giving early adopters access to a new tribrid IEM architecture that combines electrodynamic, balanced armature, and MEMS speaker technologies in a single system.

About USound
USound is a fast-growing MEMS loudspeaker and AI-based acoustic solutions company enabling customers to bring revolutionary audio products to market. Its unique value proposition is based on radical miniaturization, power reduction, and production efficiency. USound's technology is protected by more than 500 patents. Learn more at www.usound.com

About Kiwi Ears
Kiwi Ears is a leading audio brand of Linsoul dedicated to crafting innovative, high-quality audio solutions for audiophiles, music enthusiasts, and professionals. From IEMs to Headphones, Kiwi Ears combines cutting-edge technology with a passion for sound to create products that inspire and delight.
Learn more at Kiwi Ears: https://www.linsoul.com/products/kiwi-ears-halcyon

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