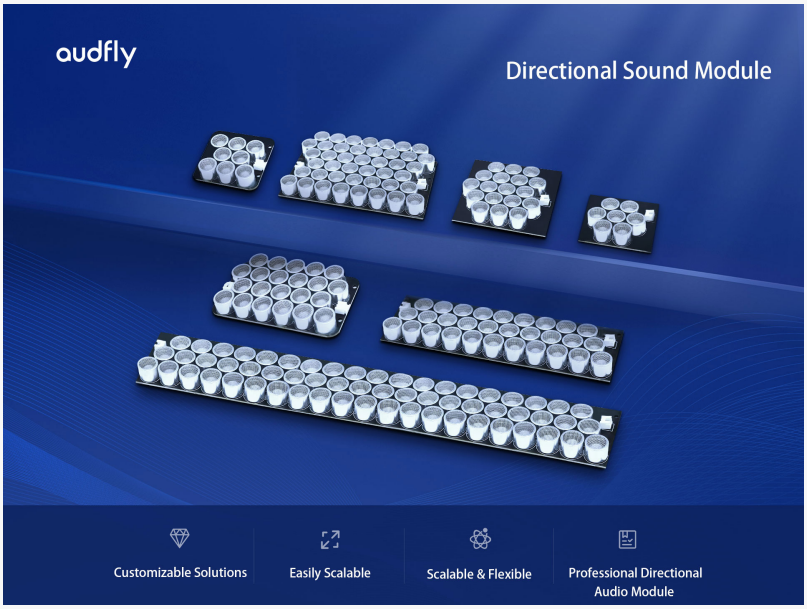
Audfly’s Modular Directional Sound Series Gains Momentum Among Embedded System Developers

SAN FRANCISCO, CA, UNITED STATES, July 9, 2025 /EINPresswire.com/ -- With interactive kiosks, AI terminals, and digital signage becoming more commonplace in public spaces, audio design has emerged as a key differentiator in user experience. As demand grows for smarter, quieter, and more personalized audio in public-facing terminals, Audfly Technology’s recently released Alpha series of directional sound modules — including models such as Alpha22 and Alpha43 — is receiving notable attention from developers and integrators for its adaptability, deployment efficiency, and real-world acoustic performance.



Whether in healthcare check-in systems, transport kiosks, or unmanned retail stations, embedded directional sound is increasingly seen as a tool not only for noise control but for enhancing user engagement, maintaining privacy, and creating spatially focused audio experiences. Audfly’s modular approach appears to be striking a balance between technical feasibility and deployment speed — a combination developers are actively seeking.

What Developers in China and Japan Are Saying
A kiosk integrator based in eastern China recently adopted the Alpha module in a smart city pilot program involving unattended digital service booths.

“We had struggled with creating a clear, private audio experience in noisy, semi-open environments,” said one of the engineers on the project. “The directional sound technology helped us create a focused audio zone directly in front of the interface — without disturbing adjacent booths or passersby. It allowed us to simplify the design and eliminate the need for external headsets or enclosed speaker chambers.”

Meanwhile, a self-service system integrator in Japan emphasized development efficiency as a key factor:

“With the Alpha43, the installation process was noticeably smoother. Its standardized interfaces aligned well with our existing terminal structure, allowing us to proceed without major hardware adjustments. The acoustic setup was finalized far more efficiently than is typical in embedded audio projects.”

How Directional Sound Enhances User Interaction

Beyond the hardware footprint, developers report that directional sound delivers meaningful enhancements to user interaction. Focused audio makes systems more intuitive, guiding users clearly through touchpoints while reducing cognitive load in noisy public environments. In retail and healthcare settings, it also reduces sound spillover, preserving privacy and improving accessibility.

To further elevate interaction quality, Audfly also offers complementary directional microphone modules, allowing for precise voice pickup even in high-noise environments. When used together, the dual-directional system enables hands-free, voice-guided interfaces — a feature increasingly adopted in AI-powered kiosks, digital concierges, and check-in terminals.

“The concept goes beyond directional playback — it’s about achieving full acoustic control,” noted Dr. Eva Müller, an independent consultant in HMI system design. “With directional pickup capturing voice inputs precisely, and directional sound projection delivering audio only where it's needed, the system minimizes noise spillover, protects user privacy, and significantly enhances speech intelligibility in busy environments. That’s where Audfly’s focused sound modular solution truly adds value.”

A Developer-First Architecture

Designed with integration in mind, the Alpha series emphasizes modular scalability, standard mechanical interfaces, and minimal tuning requirements. Developers can deploy a single unit or configure up to four modules in an array for broader coverage. This modularity, combined with plug-and-play operation, is helping teams reduce prototyping cycles and accelerate commercial readiness.

According to Leo Tanaka, a systems engineer at a Tokyo-based industrial design firm:

“Audio integration used to be one of the more time-consuming elements in our development cycle. With Audfly’s directional sound modular setup, we were able to move forward with acoustic validation much faster than expected — giving us greater freedom to fine-tune other aspects of the user interface.”

About the Alpha Series
The Alpha series from Audfly Technology includes a range of ultrasonic directional sound modules designed for rapid integration into kiosks, terminals, and digital signage. With focused sound projection, plug-and-play installation, and optional voice pickup modules for interactive systems, the Alpha lineup empowers developers to create targeted, immersive, and user-friendly audio zones across a wide array of real-world applications — including as a streamlined kiosk audio solution for retail, healthcare, and transportation sectors.

Wei Ke
Audfly Technology
email us here
Visit us on social media:
LinkedIn
