



EchoTune

MetaMaterial Technology unveils EchoTune — a zero-power acoustic iPhone case that adds Natural Echo for clearer everyday listening

Japan — Sept. 18, 2025 — MetaMaterial Technology today announced **EchoTune**, a **passive** acoustic case-speaker for iPhone that enhances voice clarity and perceived richness **without electronics, batteries, Bluetooth, or apps**. Using **Fabry–Pérot–inspired resonant tubes** and shaped reflectors, EchoTune subtly adds a short, **Natural Echo** that helps voices “pop” in real rooms—ideal for speakerphone calls, podcasts, and dialog-heavy media.

“**Structure, not software.** EchoTune uses resonant tubes and an angled reflector to shape wavefronts and leave a tiny, natural echo—no DSP, no latency,” said **Dr. Kawamura**, who explains the principle in a companion A-roll interview. “It’s a physical design that anyone can verify quickly with a simple A/B comparison.”

What it is

- **Product:** EchoTune — an **acoustic iPhone case speaker** that conditions sound physically
 - **Power:** None (purely mechanical/passive)
 - **Tech:** Fabry–Pérot–inspired tubes + internal reflectors create controlled interference and a gentle, natural after-glow (**Natural Echo**)
 - **Use cases:** Speakerphone calls, podcasts/audiobooks, videos, casual music — **open-ear** and instant to use when attached
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How it works

Inside EchoTune, sound travels through **resonant tubes** and a **reflector (angled wall)**. Their geometry encourages **constructive interference** across key speech bands (≈ 200 – $8,000$ Hz) and produces a forward-biased projection with a **very short natural echo** (milliseconds). The result is **presence and articulation**—not an artificial bass boost—

delivered with **no mics, no DSP, no latency**.

Evidence & Demos (reflective room preferred)

- **A/B listening in reflective rooms:** We benchmark EchoTune in **real-world, reflective spaces** rather than anechoic chambers. Comparisons use our **supplied reference audio clips** for consistency.
 - On our site (<https://mmtechnology.jp/>):
A-Roll — Interview with Dr. Kawamura (design intent & context)
B-Roll — Screen-recorded A/B playback using the supplied reference clips
 - **What to listen for:** With EchoTune attached, note **higher perceived loudness** and a **wider, natural reverb-supported space**; then try the same in your own room with speech or music to confirm.
 - **Audio packs:** Short **preview clips** can be bundled with press assets; the **full A/B audio pack** (OFF/ON pairs, 2-minute concatenations, playlists, metadata) is provided as a **separate ZIP** on request.
 - **Press demo kit:** Hardware loaners + reference tracks + measurement notes are available.
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Design, variants & compatibility

- **Prototypes** for **iPhone 13/14** at announcement; support for **iPhone 15/16** will be prioritized based on backer demand.
 - **Variants:** **Standard** and **Skeleton Edition** planned for Kickstarter; **Skeleton Edition** is **exclusive to Kickstarter backers**.
 - **Weight/Dimensions:** approx. **40 g**; footprint comparable to iPhone 13/14 cases (final dimensions TBA).
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Launch plans

MetaMaterial Technology is targeting a **Kickstarter** campaign in **late 2025** (exact date TBA). **Supported models, pricing, and preorder details** will be announced at launch. Embargoed **review units** and **briefings with Dr. Kawamura** are available upon request.

Not a medical device

EchoTune is an acoustic accessory. It is **not** intended to diagnose, treat, cure, or prevent any disease.

Press materials

A press kit with **hero images** (lifestyle + Skeleton Edition), **tech diagrams** (Natural Echo waveforms; tube & reflector schematics), **B-roll**, and a **one-pager** is available. **Full A/B audio** is provided separately on request.

About MetaMaterial Technology

MetaMaterial Technology develops **passive acoustic accessories** that make everyday listening clearer through **physical design** rather than electronics.

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