

Use case brief

Active Noise Cancellation and transparent hearing using XENSIV™ MEMS microphones

Hear only what you want to hear with better Active Noise Cancellation. Be aware of everything around you with transparent hearing.

Differentiate your headphone with additional features to give your customers the best possible listening experience. Our XENSIV™ MEMS microphones capture audio with stunning clarity, which, combined with the right software, improves Active Noise Cancellation (ANC) that blocks out ambient noise – to enjoy quiet or the music, and nothing but the music.

When wearing headphones and earbuds, it is often needed to let outside sounds through – to hear your environment or interact with people. Transparent hearing that uses microphones with low self-noise mimics one's own ears, allowing you to hear your surrounding without any additional noise.

Take this to another level by adding smart features that only allow certain ambient noises through. Algorithms can be used to detect approaching cars or children crying and trigger full transparent hearing mode to alert the wearer of a headset or earbuds.

Our XENSIV™ MEMS microphones are a great choice for devices with ANC and transparent hearing. With their low self-noise and high dynamic range, the microphones capture all the audio signal that needs to be cancelled, while providing very natural transparent hearing functionality.

Use case's and product's benefits for your application

- › High performance ANC through high SNR and wide frequency response
- › Transparent hearing that sounds like your ears
- › MEMS technology advantages over electret condenser microphones (ECMs)

