Subject: Re: Best Headphones?
Posted by Wayne Parham on Fri, 17 Apr 2026 14:19:25 GMT
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Since noise-cancelling headphones inherently modify the sound - by design - they interfere with the source material.

Not saying that as an attack, merely a point of fact.

So my thought is that noise-cancelling headphones are kind of like MP3 players. They provide an advantage that is not fully compatible with highest fidelity but that makes an attractive trade-off. Noise-cancelling headphones can sound nearly as good as purely analog passive headphones, and they also reduce ambient noise.

Active noise cancellation (ANC) creates "anti-noise" waves to counteract external sounds, the process involves an additional layer of digital signal processing (DSP) that can sometimes interfere with the pure audio source. They do so by digitizing the music, applying a filter to add the anti-noise, and then converting it back to analog. This extra step can introduce minor distortions and artifacts.

Some listeners notice a faint electronic "hiss" when ANC is engaged in quiet rooms, which is caused by the electronics themselves. And cancellation waves are most effective at low frequencies. This focus can inadvertently alter the bass response, sometimes making it feel thinner or artificially boosted by the manufacturer to compensate. ANC headphones also tend to create an artificial soundstage, reducing the perception of depth and space.