Bose invented a noise-canceling system for your car

Bose wants to bring its acclaimed noise-canceling technology from your headphones to your car. The Framingham, Massachusetts-based company just unveiled a new technology called QuietComfort which claims to measure your vehicle's vibrations in order to eliminate noise from your daily drive.

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As noted by Bose, this type of noise-canceling technology is likely to gain more prominence as vehicles get lighter and more electric. Sitting inside a whisper-quiet electric car, a driver is exposed to more road noise than they would typically hear in a noisy internal combustion engine car. Bose is framing its technology as looking toward a future when there are many more EVs on the road than there are today.

So how does it work? Conventional noise-canceling methods include thick insulation or specialized tires to minimize noise from driving over rough roads or uneven pavement. But these fixes can increase vehicle weight and drive down fuel efficiency. This is not that.

[embedded content]

Bose uses a combination of accelerometers, proprietary signal-processing software, microphones, and the vehicle's built-in audio system to "electronically control unwanted sound." According to the company:

> *Accelerometers mounted on the vehicle body enable a Bose algorithm to continuously measure vibrations that create noise. This information is then used to calculate an acoustic*

> *cancellation signal, which is delivered through the vehicle's speakers to reduce the targeted noise. Microphones placed inside the cabin monitor residual noise levels, allowing the system to adapt the control signal for optimized performance over different road surfaces, while automatically adjusting over time as the vehicle ages.*

It sounds incredibly high-tech, but we would need to test it out before passing judgment. Bose has certainly made a name for itself in the world of noise-canceling headphones, but a car is a much different, and more complex, environment. The company notes that since 2010, its automotive division has provided carmakers with EHC, a highly targeted technology for reducing undesirable engine noise. Now it's trying to do the same for the in-car experience.

Bose says it will collaborate with automakers during the vehicle development process to install its tech during production. The first QuietComfort-enabled cars are planned to be in production models by the end of 2021.

https://www.theverge.com/2019/1/9/18175748/bose-noise-canceling-system-car-ces-2019