Continental Introduces a Display You Can Hear: Ac2ated Sound Turns Vehicle Display into a Speaker



Material properties make the display surface an ideal resonance box for high-quality audio output

- Ac2ated Sound technology from Continental saves up to 90 percent of the weight and space required compared with conventional speaker systems
- Pavel Prouza, head of the User Experience business area:

By integrating sound actuators into the display, we have succeeded in using the entire display surface as a sound chamber to resonate sound within the vehicle – saving valuable space and weight in the interior.

Babenhausen, Germany, March 26, 2025. With its Ac2ated Sound display, technology company Continental has integrated the speaker function directly into the display unit – the first of its kind in the industry. The ingenious use of the display surface as its very own sound box paves the way for a completely new user experience where audible feedback, speech or other audio content is output directly from the screen, eliminating the need for conventional speakers. The system uses actuators that are installed invisibly behind the display surface and induce audible vibrations in the glass.

By integrating actuators into the display, we have succeeded in using the entire display surface as a sound chamber to resonate sound within the vehicle – all in exceptional quality. Not only does this save valuable space in the vehicle interior, but it also reduces weight compared with traditional speakers. The system leverages our full expertise as a system integrator for the benefit of our customers – combining visual and audio

output in a single package without compromising on quality,

explains Pavel Prouza, head of the User Experience (UX) business area at Continental.

Acoustic localization: breaking new ground in user experience

Humans have an intuitive ability to precisely identify the origin of a detected sound in three-dimensional space – known as "sound localization." In other words, when we hear a sound, we turn our head immediately in the direction the sound came from.

This offers a decisive advantage in automotive applications: when audible feedback, speech or other audio content is emitted, your gaze is intuitively drawn to the relevant display instrument, directing attention to where it is needed. By outputting sound though the imaging surface itself, the Ac2ated Sound display creates a lifelike immersive user experience.

Continental Engineering Services boasts a team specializing in vehicle acoustics and psychoacoustics who are responsible for combining innovative technologies and scientific findings with our extensive experience in automotive technologies and outstanding expertise in audio solutions.

Numerous advantages over conventional speakers

The display surface is particularly well suited for use as a sound box: thanks to its unique structure and composition, it offers optimal acoustic properties measured in terms of factors such as internal damping, stiffness of the material and the induced vibrating surface weight.

The Ac2ated Sound technology from Continental offers numerous advantages for automotive applications. The actuators, measuring just a few centimeters in size, take up very little space when integrated into the display unit. This saves time and money in assembly compared with a conventional speaker, since no separate components are required.

In addition to its use in displays, the technology can be integrated into almost any existing flat component of the vehicle interior. By installing additional actuators in door trims, headrests, A-pillars or the roof

lining, for example, the entire vehicle audio system can be converted to Ac2ated Sound technology to induce vibrations in existing surfaces throughout the vehicle – dispensing with the need for conventional speakers. The visual benefits are compounded by advantages in terms of space and weight, with the audio system requiring up to 90 percent less space and being up to 40 kilograms lighter than conventional speaker systems.

Media Spokesperson User Experience

Press release distributed by Wire Association on behalf of Continental AG, on Mar 25, 2025. For more information subscribe and follow us.

Media Assets

Embedded Media

Visit the <u>online press release</u> to interact with the embedded media.

https://wireassociation.eu/newsroom/continental-ag/releases/en/continental-introduces-a-display-you-can-hear-ac2ated-sound-turns-vehicle-display-into-a-speaker-2447

Continental AG

Newsroom: https://wireassociation.eu/newsroom/continental-ag

Website: https://www.continental.com/ Primary Email: silke.bernhardt@conti.de

Social Media

Facebook - https://www.facebook.com/Continental

Twitter - https://twitter.com/Conti Press

Youtube - https://www.youtube.com/c/ContinentalCorporation

Instagram - https://www.instagram.com/continental_career/

Linkedin - https://www.linkedin.com/company/continental

 $Glassdoor - \underline{https://www.glassdoor.com/Overview/Working-at-Continental-}\\ \underline{El_IE3768.11,22.htm}$