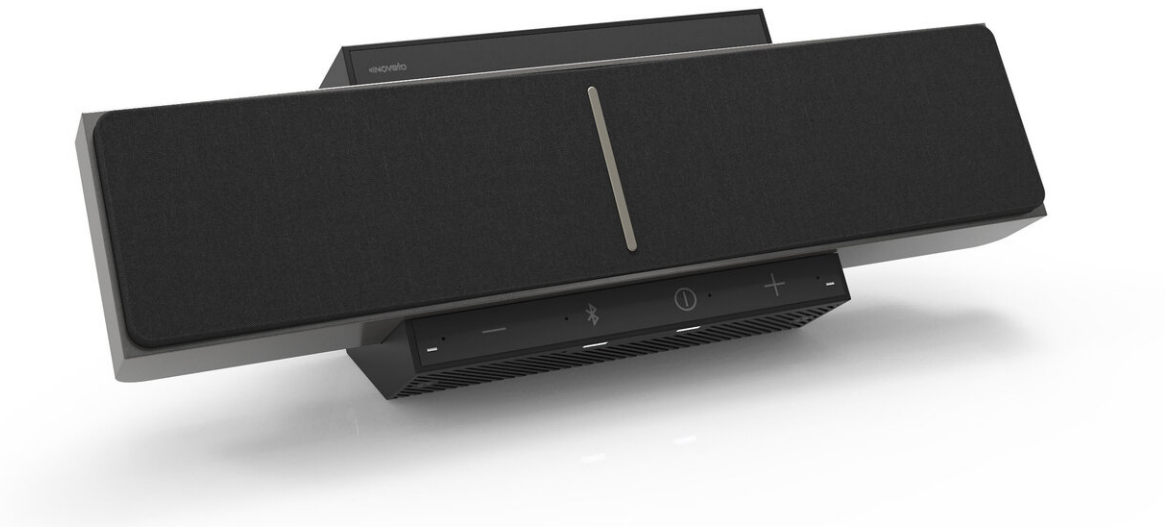


New device puts music in your head—no headphones required

November 12 2020, by Louise Dixon



This product image released by Noveto Systems shows the SoundBeamer which beams music and sounds straight into your head, without the need for headphones. The technology uses a 3-D sensing module and locates and tracks the ear position sending audio via ultrasonic waves to create sound pockets by the user's ears. Sound can be heard in stereo or a spatial 3-D mode that creates 360 degree sound around the listener, the company said. (Noveto Systems via AP)

Imagine a world where you move around in your own personal sound bubble. You listen to your favorite tunes, play loud computer games, watch a movie or get navigation directions in your car—all without disturbing those around you.

That's the possibility presented by "sound beaming," a new futuristic audio technology from Noveto Systems, an Israeli company. On Friday it will debut a desktop device that beams sound directly to a listener without the need for headphones.

The company provided The Associated Press with an exclusive demo of the desktop prototype of its SoundBeamer 1.0 before its launch Friday.

The listening sensation is straight out of a sci-fi movie. The 3-D sound is so close it feels like it's inside your ears while also in front, above and behind them.

Noveto expects the device will have plenty of practical uses, from allowing [office workers](#) to listen to music or conference calls without interrupting colleagues to letting someone play a game, movie or music without disturbing their significant others.

The lack of headphones means it's possible to hear other sounds in the room clearly.

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The demo includes nature video clips of swans on a lake, bees buzzing and a babbling brook, where the listener feels completely transported into the scene.

But even CEO Christophe Ramstein finds it hard to put the concept into words. "The brain doesn't understand what it doesn't know," he said.

In a Noveto demonstration conducted via Zoom from Tel Aviv, SoundBeamer Product Manager Ayana Wallwater was unable to hear the sound of gunshots on a gaming demo.

That's the point. But she does get to enjoy the reactions of people trying the software for the first time.

"Most people just say, 'Wow, I really don't believe it,'" she said.

"You don't believe it because it sounds like a speaker, but no one else can hear it...it's supporting you and you're in the middle of everything. It's happening around you."

By changing a setting, the sound can follow a listener around when they move their head. It's also possible to move out of the beam's path and hear nothing at all, which creates a surreal experience.

"You don't need to tell the device where you are. It's not streaming to one exact place," Wallwater said.

"It follows you wherever you go. So it's personally for you—follows you, plays what you want inside your head."

"This is what we dream of," she adds. "A world where we get the sound you want. You don't need to disturb others and others don't get disturbed by your sound. But you can still interact with them."

After his first listening experience Ramstein asked himself how it was different from other audio devices.

"I was thinking, 'Yeah, but is it the same with headphones?' No, because I have the freedom and it's like I have the freedom of doing what I want to do. And I have these sounds playing in my head as there would be something happening here, which is difficult to explain because we have no reference for that."

While the concept of sound beaming is not new, Noveto was the first to launch the technology and their SoundBeamer 1.0 desktop device will be the first branded consumer product.

Ramstein said a "smaller, sexier" version of the prototype will be ready for consumer release in time for Christmas 2021.

"You know, I was trying to think how we compare sound beaming with any other inventions in history. And I think the only one that came to mind is... the first time I tried the iPod I was like, 'Oh, my God. What's that?' I think [sound](#) beaming is something that is as disruptive as that. There's something to be said about it doesn't exist before. There's the freedom of using it. And it's really amazing."

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