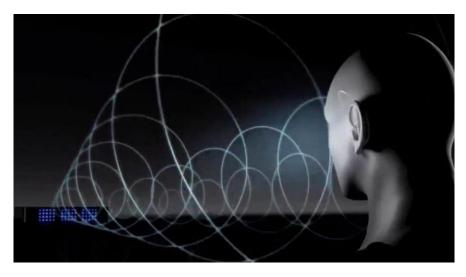
## New technology beams sound into your head

November 16, 2020



Audio technology to be unveiled this week sends music directly into your head without headphones or wires. The developers are calling it "sound beaming".

Israeli company Noveto Systems will launch its new audio technology on Friday. The SoundBeamer 1.0 is a desktop device that delivers 3-D sound that 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 family members play a game, movie or music without disturbing others in the home. The lack of headphones means it's possible to hear other sounds in the room clearly.

The technology uses a 3-D sensing unit 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 3-D mode that creates 360 degree sound around the listener, the company said.

The demonstration audio provided ahead of the launch 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, Israel, SoundBeamer Product Manager Ayana Wallwater was unable to hear the sound of gunshots in 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.

"You don't need to tell the device where you are. It's not streaming to one exact place," Ms Wallwater said. "It follows you wherever you go. So it's personally for you — follows you, plays what you want inside your head."

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 product for the public to buy. A smaller version of the prototype will be ready for release in time for Christmas 2021.

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

"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 that didn't exist before. There's the freedom of using it. And it's really amazing."

https://www.kidsnews.com.au/technology/new-technology-beams-sound-into-your-head/newsstory/bd5f41bc44469e85d85ba0f42ea45db9