

# Avegant plans to show headset with virtual retinal display at CES

December 19 2013, by Nancy Owano

---



(Phys.org) —Ann Arbor, Michigan-based Avegant on Wednesday announced that a Kickstarter campaign will launch on January 22 on behalf of its product Glyph, a \$499 headset. Glyph is also to go on display at the upcoming Consumer Electronics Show in Las Vegas from January 7 to 10. The shipped version will have one HDMI/MHL cable, and onboard battery power. The Glyph is a headset that integrates video display and audio experiences in a flip-down form factor. The result is a

wearable display doubling as a set of headphones. The form factor, however, is not the most notable aspect of the product. CEO Ed Tang explained what he thinks is so special about Glyph, and that is a technology called virtual retinal display.

While the headset looks like another member of the goggles crop breaking on to the digital scene, where users attach some sort of wearable screens to their face, the Glyph stands out as the Glyph [display](#) projects light directly into your eye. He said the reason why they adopted that concept is because they are actually mimicking natural vision. Images just seem more realistic, vivid, natural and comfortable, unlike watching a cellphone or notebook computer all day, he remarked, "When I put this on," he added, in placing the Glyph on his face, "the amount of depth is incredible....feels like I am looking out a window."

A Virtual Retinal Display uses a micromirror array and combination of optics to reflect an image directly onto the retina; the "screen" becomes the back of the eyeball. The picture comes across as sharp and vivid, and 3D images are exceptionally clear. One of the FAQ listed on the company's site asks, "Is it safe?" Yes, is the given answer. "The light source is simply a low powered Light Emitting Diode (LED) – something like you would see at the end of a keychain light. The micromirror array and optics together create the unique image."

Looking into the device, the user sees an image that appears as an 80-inch screen eight feet away from the user. That translates, according to Avegant, to about a 45-degree field of view.

Tang described his company as a startup intent on bringing out a "portable media platform." According to the company, "Glyph can plug into any HDMI source and display any current content natively. This means sources from an XBox to a Playstation to a MacBook to an iPhone to an Android may be used while content from Blu-ray DVDs to

video games to streaming movies can be watched."

**More information:** [www.avegant.com/avegant-intro...-display-technology/](http://www.avegant.com/avegant-intro...-display-technology/)

© 2013 Phys.org

Citation: Avegant plans to show headset with virtual retinal display at CES (2013, December 19)  
retrieved 19 September 2024 from  
<https://phys.org/news/2013-12-avegant-headset-virtual-retinal-ces.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.