

App Uses Brainwaves To Direct Google Glass



A new app called MindRDR utilises a special headband to convert brain signals into instructions for Google Glass. The possibility exists to someday enable users to use their thoughts to take pictures and upload them to social media sites. It also has potential applications in the medical field, to help quadriplegics or people who suffer from locked-in syndrome.

Is MindRDR a Mind Reader?

Google Glass is most commonly controlled by voice or touch, via a sensory pad found on the arm of the wearable technology. With MindRDR, an electroencephalography (EEG) headband produced by third-party vendors measures brain activity and converts electrical signals into instructions for the Glass. At the moment, there are only two possible responses generated by the EEG measurements: 'yes' is a result of peaks in cerebral activity while 'no' is triggered by a lull.

Future developments should focus on a refinement of the commands to express more nuanced signals from the brain. The London company that created MindRDR, This Place, has acknowledged this challenge to EEG technology, and it could be years before more precise communications are translated. Hardware solutions for detecting brain activity, such as the NeuroSky headset which can work with MindRDR, are already priced competitively.

Medical Applications

Google Glass is already being used by surgeons to assist in operative procedures, and is contributing to Parkinson's research and treatment. By extending its capabilities through the addition of tools and apps such as MindRDR, patients afflicted with a variety of incapacitating conditions may be able to communicate using their brainwaves. The technology has great potential for those who are physically impaired, have speech problems or are otherwise less able to function due to physical or cognitive disabilities.

Aware of its current limitations, This Place decided to launch the MindRDR app on GitHub, a community of developers and programmers. In doing so, they are sharing their code with those professionals who are skilled to tweak it to increase its usefulness. The hope is that the technology will continue to be refined, so that measurements will reflect ever more precise broadcasts of brain signals.

Google Glass

MindRDR is not officially supported by Google, and the application is not offered in the Glass app store. Nevertheless, a spokeswoman for Google acknowledged the versatility of its wearable technology. "Of course, we are always interested in hearing about new applications of Glass and we've already seen some great research from a variety of medical fields from surgery to Parkinson's."

[Source and image credit: The Independent](#)

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