

Put your thinking cap on and type with your mind (w/ Video)

March 3 2011, by Katie Gatto



(PhysOrg.com) -- Guger Technologies, an Austrian-based company, has developed a computer interface that can work directly with the human brain. The interface allows a user to "type" short messages by staring at letters on the screen. Those messages can then be translated with text to speech software, giving a voice to those who cannot speak for themselves, a funky, robot voice. If speech isn't on the users mind the messages can be sent the same way any other text would be over the web.

Since the system only requires the movement of the eyes in order to function it could be used by people with severe spinal cord injuries or other conditions have the rendered arm movement and [vocal cord](#) use impossible or impractical.

The device, which has been named intendiX, was shown off at [Cebit](#) .Labs. For those of you who are not familiar with the event Cebit.Labs is a section of the Cebit trade show that is devoted exclusively to showing off research projects.

IntendiX features a tight-fitting skull cap that has a number of electroencephalograph (EEG) electrodes attached to it. These are the Wet style of electrodes, so they do require a gel to function properly, though there is a dry version of the cap in the works. There is also a pocket-sized brainwave amplifier, and a Windows-based application that is designed to analyze the brainwaves received and translate them into letters on the screen. The setup can be connected via a Bluetooth [wireless signal](#).

Currently the fastest in-lab time has been .9 of a second per character, but that is after the users have been trained on the system. Untrained users testing the device have been a slow as 40 seconds per character. No word yet on when the device will be available to the public.

More information: www.intendix.com/

© 2010 PhysOrg.com

Citation: Put your thinking cap on and type with your mind (w/ Video) (2011, March 3) retrieved 4 August 2024 from <https://phys.org/news/2011-03-cap-mind-video.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.