



06.03.2012



## **“intendiX-SOCI”**

# **g.tec introduces mind-controlled computer gaming, featuring Blizzard Entertainment's World of Warcraft<sup>®</sup>, at CeBIT 2012**

In 2009, g.tec introduced the intendiX-SPELLER, the first commercially available brain-computer interface (BCI) system for home use. Since then, g.tec released numerous upgrades, including the first dry EEG electrode system that provides high quality signals usable for BCIs. Soon, g.tec will release the intendiX-SOCI (screen-overlay control interface), allowing people to control PC-applications such as computer games with a brain-computer interface practical for home use.

Although this system will not be commercially available until later in 2012, g.tec will host the first public demonstration of the pre-release version at CeBit 2012. Booth visitors can watch videos and attend live demonstrations of intendiX-SOCI used to control Blizzard Entertainment's World of Warcraft<sup>®</sup>, one of the most popular online computer games in the world. People can perform a wide variety of tasks using brain activity alone, including moving through the game world, obtaining and turning in quests, fighting monsters, and casting spells. intendiX-SOCI does not require any movement whatsoever, leaving the hands and voice free for other tasks. The intendiX-SOCI module can allow people to use a keyboard, mouse, or other interfaces at the same time as the BCI, which could ultimately provide more control than competing gamers have.

This breakthrough in gaming uses a type of brain signal called the steady-state visual evoked potential, or SSVEP, which is picked up by a few electrodes mounted on the head. When people pay attention to a flickering item on a monitor, the visual cortex, a region in the back of the brain, responds at the same frequency. g.tec's technology can detect this brain activity and use it to determine which item the user considers important. Therefore, people can send commands within the game just by paying attention to different items on the monitor. The system can also detect the “no-control” state in which the user is not paying attention to any stimulus, which is a problem in many other BCIs. Using its advanced sensors and recently upgraded signal processing algorithms, the intendiX-SOCI can detect these different brain signals with an accuracy of 98%.

Visitors at our booth will have the opportunity to try the system on their own. Our staff will mount the electrodes and instruct people how to control the game with only their thoughts. Such a demo will take 20-30 minutes.

At our booth visitors can also see other products like new electrode systems, biosignal amplifiers and software tools widely used by the worldwide BCI-research communities. We will also demonstrate the intendiX-SPELLER, where people can write words just by thinking.

For more information about intendiX and g.tec, including pictures, videos, upcoming events, and scientific publications, please visit our booth at the CeBIT 2012, Hannover, Germany

06. – 10.03.2012 Hall 9 Booth A17, **Live demonstrations of the BCI: at 11 a.m. and 3 p.m.**

Contact:

Armin Schnuerer, [schnuerer@gtec.at](mailto:schnuerer@gtec.at)

g.tec Guger Technologies OG

e-mail: [office@gtec.at](mailto:office@gtec.at)

phone: +43 7251 22240

Information about g.tec:

[www.gtec.at](http://www.gtec.at)

Information about intendiX:

[www.intendix.com/](http://www.intendix.com/)

Download of text & pictures:

[www.gtec.at/News-Events/Press](http://www.gtec.at/News-Events/Press)

