

XWave for iPhone lets you read your own mind

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The XWave can sense and detect human brainwaves, interpret them and connect it to everyday technology.

(PhysOrg.com) -- A new application for the iPhone, the XWave, lets you read your own mind via a headset clamped to your head and connected to the phone's audio jack.

The plastic headband, which costs around \$100, has a sensor that presses against the user's forehead and communicates with a free XWave iPhone application that then shows your brain waves graphically on the iPhone screen. As you focus your mind on a task the graphics are changed — a

ball may move higher for instance, or your state of relaxation may be indicated by changes in a pulsating color, which moves towards blue as you become more relaxed.

Brainwave detection is powered by an NeuroSky eSense dry sensor, which provides a brain-computer interface (BCI) to sense even faint electrical impulses in the brain and convert them to digital signals that are sent to the iPhone. Previous applications of the NeuroSky technology include computer games and toys. In XWave an algorithm is applied to the brain rhythms to convert them to graphical representations of attention and meditation values.



XWave enables you to manipulate a number of other iPhone graphical applications and objects in games using only your brain waves, providing your rating in attention or meditation is high enough. At present you cannot text or browse the web using XWave, but you can use the device to train your mind to relax and focus on command. The list of applications for the device is likely to grow rapidly.

XWave, developed by PLX Devices, is meant to be used purely for entertainment, but the implications for the future are enormous, and may be particularly important for people who are disabled since they may be able to have much more control in their lives using their [brain waves](#) alone to control their phone and potentially other applications. According to PLX, the headset device is also open for use with applications from other companies.



XWave iPhone app screen.

XWave is compatible with the [iPhone](#), iPod Touch and iPad. Wireless versions are also available for WiFi and Bluetooth devices. The free XWave application is available for download via iTunes.

More information: XWave - www.plxwave.com/

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