

Japanese gadget controls iPod in blink of an eye

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The gizmo -- called the "Mimi Switch" or "Ear Switch" -- is connected to a micro-computer that can control electronic devices, essentially making it a hands-free remote control for anything.

"You will be able to turn on room lights or swing your washing machine into action with a quick twitch of your mouth," said its inventor, Kazuhiro Taniguchi of Osaka University.

"An iPod can start or stop music when the wearer sticks his tongue out, like in the famous Einstein picture. If he opens his eyes wide, the machine skips to the next tune. A wink with the right eye makes it go back.

"The machine can be programmed to run with various other facial expressions, such as a wriggle of the nose or a smile."

The Mimi Switch could also store and interpret data and get to know its user, said Taniguchi, chief researcher at Osaka University's Graduate School of Engineering Science in western Japan.

"It monitors natural movements of the face in everyday life and accumulates data," Taniguchi told AFP in an interview. "If it judges that you aren't smiling enough, it may play a cheerful song."

Some may use the device for relaxation -- perhaps by changing music hands-free while reading a book -- but Taniguchi said it could also have more serious applications to make people's lives safer and easier.

"If the system is mounted on a hearing aid for elderly people, it could tell how often they sneeze or whether they are eating regularly," he said.

"If it believes they are not well, it could send a warning message to relatives."

The device could also serve as a remote control for appliances for physically disabled people, from cameras and computers to air conditioners, or alert medical services if a person has a fit, he said.

The Ear Switch follows on from an earlier device called the Temple Switch that was small enough to fit inside a pair of eyeglasses and also read the flick of an eyelid.

"As the ear switch is put in the ears, its optical sensors are unaffected by sunlight," Taniguchi said.

He said he was planning to patent his new device in Japan and abroad, work on a wireless version, and seek corporate funding to market it for practical uses -- something he expected might take two or three years.

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