

Indiegogo project NANOPLUG – Offering the world's smallest hearing aid

December 23 2014, by Bob Yirka



A small team of researchers and engineers has developed the Nanoplug and have created an Indiegogo project to further develop what they describe as the world's first invisible hearing aid. First conceived by Nevena Zivic and then brought to fruition by industrial designer, Jongha Lee, audio engineer Mladen Stavri and electromechanical engineer Zoran Marinovic, the Nanoplug is meant to be less intrusive than other hearing aids, less noticeable (the team claims it cannot be seen by others) and less expensive.

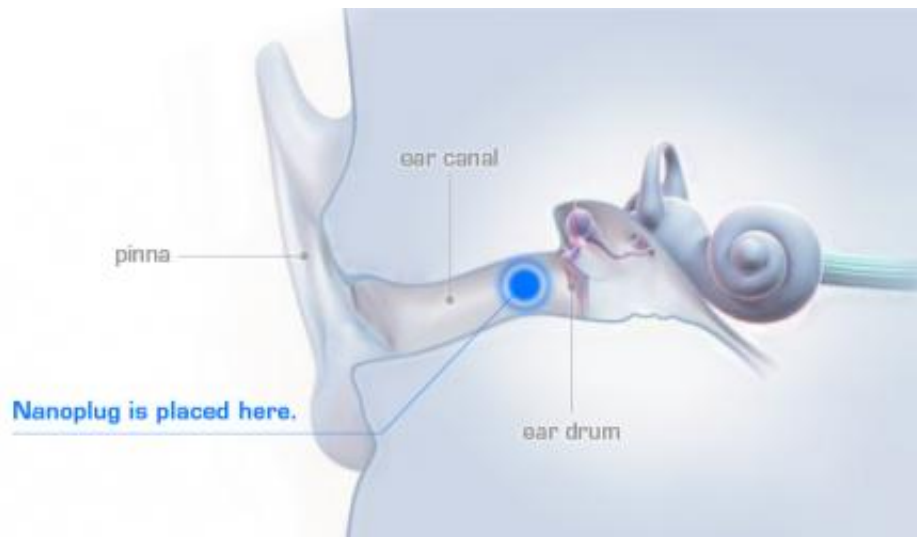
As its name implies the Nanoplug is tiny—its parts are even tinier. The whole thing is just 7.1mm x 5.7mm x 4.17mm which, the teams says is half the size of any other hearing aid, and was made possible by advances in nanotechnology, most notably in the US Photonics Endure nanobattery (just 0.85x1.357x0.3mm in size) which Lee describes as about the size of a grain of sand and able to go six days between recharges. On their Indiegogo page, the team claims the [hearing aid](#) has no toxic chemicals inside, nor heavy metals. It does however, offer feedback cancelation and adaptive noise reduction.

The Nanoplug can be programmed using software running on a computer, the results of which can be downloaded directly to the [device](#) via a cable. Those that order the device will also send in their hearing prescription which will be programmed into the device prior to shipping. Individual preferences for different environments can also be programmed and downloaded onto the device, e.g. for listening to the television, versus conversation in a restaurant. Options can be selected by the wearer by simply tapping on the ear once the Nanoplug has been put in place.

The Nanoplug is shaped roughly rectangular—before insertion into the [ear canal](#), it is placed inside a mushroom shaped sleeve (three sizes are available) which allows for comfort and as an aid in keeping the hearing device securely in place. A tool is provided for removal.

The Nanoplug does not entirely fill the ear canal which means it allows sound to be localized, overcoming a problem with other hearing aids, the team claims.

The team has already met their goal of \$80,000 in pledges (and sold out their limited supply) which implies that the Nanoplug will very soon be made as a general consumer product.



More information: www.indiegogo.com/projects/nanoplug-the-worlds-smallest-hearing-aid

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