TESTER FOR OTOPLASTICS, WITH BLUETOOTH® INTERFACE

Application

To be sure that a custom earpiece for hearing protection shows optimal behaviour one can perform a fast leak test.

A proper test provides certainty about a perfect fit of the earpiece. When there is a perfect fit, noise can only enter the ear canal through the noise filter and not outside to the earpiece.

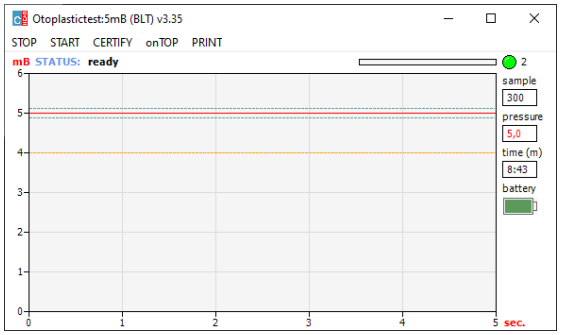
For that purpose the room in the ear canal, between eardrum and otoplastic, is brought to a small overpressure of 5mB (0,073 psi), by means of air.

When the pressure is reached, the air system is closed and when the pressure stays stable for five seconds the otoplastic has the perfect fit. The related software controls the earpiece tester and allows the user to analyze the pressure course, real time, by means of a graph.

Software

The software that controls the tester is available for the following platforms:

Windows 7, 8.1 and 10 (for 32- and 64-bit), an example is visible on the right (W10). The software is also available as an *app* for Windows10 UWP (Desktop, Laptop, Tablet (Surface Go)) as well as for Android smartphones and tablets (OTG) from v4.1.x (Jelly Bean, API 16); an Android example-screen is visible at the bottom right.



Specifications

Test pressure : 5mB (≡ 51mmH_2O of 500Pa)
Trip pressure : < 4mB
Test time : 5 seconds
Test duration : max. 10 seconds
Bluetooth® : version 2.1 (min.), class 2 (10m)
Power source : 4 x AA battery Alkaline or NiMH
Dimensions : 154 x 96 x 34mm
Weight : approx. 250 gr. (excl. batteries)
Enclosure : black, PMMA (UL 94 HB)

Features

The tester does not require any special care and does not need any calibration or adjustment on a regular basis. The enclosure can be provided with your own logo (dimensions max. 101 x 62 mm^2). The measurement screen can be scaled up by means of your mouse (desktop). The resulting graph can be filed and, later on, appended to a personal test document. A USB version is also available.