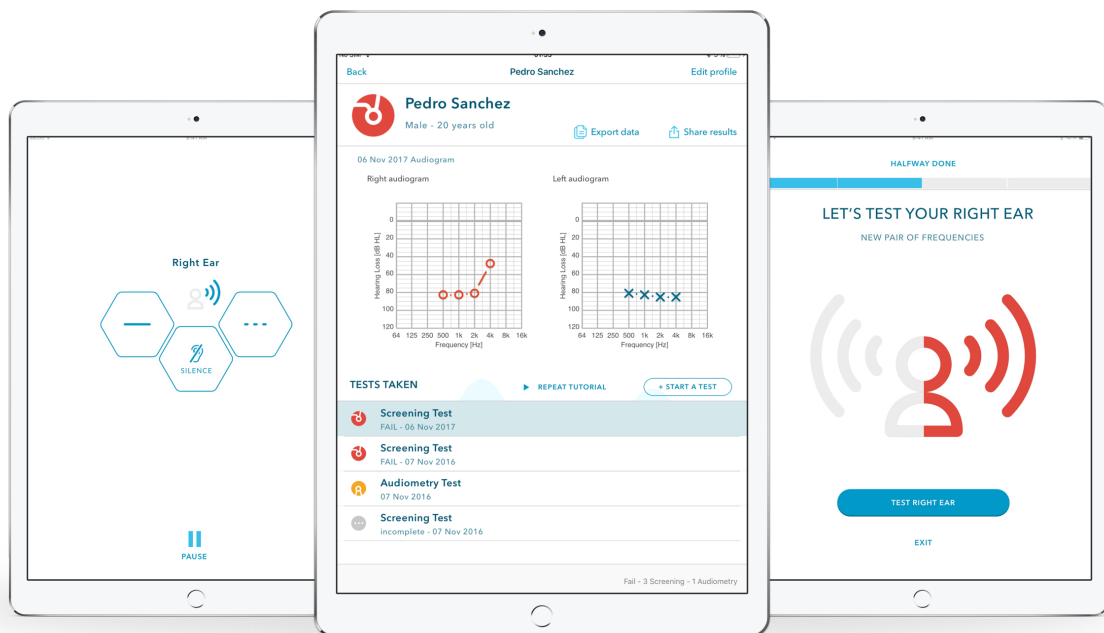




Jacoti HearingCenter PRO

Portable audiometer for health care professionals.



Overview

Jacoti Hearing Center Pro is an audiometer application for the iPad that performs clinically valid hearing assessments in a matter of minutes without an audiological booth. It works alongside headphones models which have been calibrated, validated technically and bench tested to demonstrate consistency in output levels (i.e. limited variability across different devices from the same model).

Jacoti Hearing Center Pro provides accurate results for users ranging from "No impairment" (10 dBHL) to "Severe impairment" (85 dBHL) per the WHO Hearing Impairment Grades.

Technical Specifications

- Test suitable for normal hearing to severe hearing loss: 10dBHL to 85dBHL.
- Calibrated for Beyerdynamic DT 770 32 Ohm and Sennheiser HDA 300 headphones.
- Automatic noise monitoring.
- DuoTone[®] procedure. Pure tones generated for selected frequencies between 250 and 8000Hz.
- Compliant with ISO and ANSI requirements.
- Built with Jacoti HearingKit[®] and Jacoti earCloud[®].

Software components

DuoTone® procedure

DuoTone® is a patented pure tone audiometry procedure that employs pairs of pure-tone stimuli at different frequencies. Different frequency pairs are tested (along with an additional silent condition) which determine pure-tone thresholds for up to 6 frequencies per ear (from 250Hz to 8000Hz).

Noise monitoring algorithm

During the threshold tests, the ambient noise level is continuously monitored via the microphone on the iPad. If, at a certain frequency, the noise level exceeds a maximum permissible level, the application rejects the obtained threshold and repeats the test at that frequency. If the ambient noise level remains too high for accurate results, the user is instructed to move to a quieter environment.

Calibration framework

Jacoti Hearing Center Pro is capable of obtaining consistent measurement with the Apple iPad and supported headphones. The appropriate calibrations required to maintain the consistency of the measurements are performed and validated per relevant ISO/ANSI standards on Jacoti premises.

Jacoti earCloud® platform

Jacoti earCloud® serves as a place for the expert to visualize their patients' data and as a place for third-party future implementations if needed. As it stands it functions as a server for synchronising the latter data.

Regulatory and clinical information

Jacoti Hearing Center Pro is a Class IIa medical device, per Rule 10 of Annex IX of the Medical Devices Directive 93/42/EEC, and a Class II FDA listed Medical Device, classified under product code EWO in the U.S.

As a medical device, Jacoti Hearing Center Pro has undergone a clinical study which has confirmed that the DuoTone® procedure is a valid procedure to measure the pure tone hearing thresholds.

Further evaluation shows that:

- Jacoti Hearing Center Pro can make use of statistically calibrated equipment (as opposed to individually calibrated).
- The ambient noise at the level of a quiet room does not affect the validity of the measured hearing thresholds: if the ambient noise is too high, then the measurement is discarded.
- A tablet-based hearing test can be performed as a self-assessment (i.e. without supervision of a practitioner).

Available for iPad: Pro 12.9 inch model, Pro 12.9 inch 2nd generation model, Pro 9.7 inch model, Pro 10.5 inch 2nd generation model, Air 2, Mini 4, Mini 3, Mini 2, 5th generation iPad running iOS 11 or iOS 12.

Jacoti Hearing Center Pro is Calibrated for Beyerdynamic DT 770 32 Ohm professional audio headphones and the Sennheiser HDA 300 audiological headphones.

Jacoti HEARING WITHOUT BARRIERS

Jacoti's hearing solutions can be deeply embedded in consumer electronics devices such as headphones and earbuds. Our technology enhances audio experiences tailored to every customer's individual needs & preferences.

Contact us: business@jacoti.com | press@jacoti.com