



Automated Diagnostic Hearing Evaluations

Accurate, efficient, affordable diagnostic audiometry designed specifically for military use.

Portable with a compact footprint and telehealth applications, the Otoqram ML4000 offers a solution for connecting patients and providers for hearing related conditions across varied military environments.

The Otoqram™ is a patented, automated diagnostic audiometer that utilizes sophisticated algorithms to perform a battery of audiometric tests. Tests can be administered by a trained technician with clinical oversight, making the Otoqram a cost-effective tool for increasing productivity without compromising efficacy.

Automated Diagnostic Testing and Monitoring

- Programmable diagnostic test battery
- Screening and monitoring protocols
- Administered by technicians with clinical oversight

Screening Questionnaires

- Hearing Loss
- Balance
- Optional Customized Screening Protocols (Tinnitus, Traumatic Brain Injury)

Information Management

- Track and compare results
- Centralized database
- EMR compatible

Telemedicine Enabled

- Remote testing
- Remote hearing aid fitting and follow-up



CONFIGURABLE TEST BATTERY

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|------------------------------|
| • Air Conduction |
| • Bone Conduction |
| • Speech Reception Threshold |
| • Speech Discrimination |
| • Tympanogram |
| • DP Otoacoustic Emission |
| • Acoustic Reflex |
| • Stenger |

TECHNICAL SPECIFICATIONS ML4000 Model

Tympanometry	Probe tone: 226 Hz +/- 2% at 85 dB Total harmonic distortion: <5% Total range: 0.2 cm ³ to 6.0 cm ³
Acoustic Reflex	Reflex stimuli: Pure tone Ipsilateral and contralateral stimulation PT freq: 500 Hz, 1000 Hz, 2000 Hz, 4000 Hz Freq accuracy: +/- 3% Total harmonic distortion: < 3% Level: 500 Hz-4000 Hz; 80 dB HL to 105 dB HL Air pressure sweep: Forward or backward
DP Otoacoustic Emissions	45-70 dB SL stimulus level 2 stimulus channels 1000, 1500, 2000, 3000, 4000, 5000, 6000, 8000 Hz
Audiometry	Channels: 2 Channel Input: Tone, external, narrow band noise, speech noise Channel Output: Insert phones Left/Right, headset phone Left/Right, bone Frequency Range: 125 Hz to 8000 Hz
Testing & Instruction Languages	American English, British English, Australian English, Spanish, Russian, Portuguese, Italian, Korean, Vietnamese, Arabic, Cantonese, Simple Mandarin Chinese, Traditional Mandarin Chinese
Dimensions	Closed: 12.25"W x 13.25"D x 5"H (31.1cm W x 33.7cm D x 12.7cm H) Open: 12.25"W x 13.25"D x 14"H (31.1cm W x 33.7cm D x 35.5cm H)
Weight	15.5 lbs (7.6 kg) - Otogram 4.5 lbs (2.0 kg) - Otovest and accessories 35.5 lbs (15.9 kg) packaged shipping weight <i>Weights are approximate</i>
Power	Line voltage: 100-240 V AC (+/-10%) Frequency range: 50 – 60 Hz (+/-5%) Line voltage current audiometer: 0.2 amps at 120 V or 0.1 amps at 240 V AC, 1.25 amp maximum Line voltage current computer: 1.4 amps at 100 V or 0.7 amps at 240 V Power consumption: 150 watts maximum
Environment	Operating: 60° F to 105° F (15° C to 40° C) Storage: -40°F to 140°F (-40°C to 60°C) Humidity: 5% to 90%
Calibration & Standards	ANSI S3.39 – 1987 (Type 3) IEC 60601-1-1 Medical Electrical Equipment Requirements for Safety IEC 60601-1-2 EMC emission and immunity