**MEPA3**
Wideband Immittance System for Middle-Ear Power Analysis

A MEPA measurement from a normal-hearing ear, made in seconds with a wideband chirp stimulus

**MEPA3: Wideband Immittance System for Middle-Ear Power Analysis**

- Extended immittance measurements from 200 to 6,000 Hz
- Does not use pneumatic pressure
- Uses immittance CPT billing codes
- Improved sensitivity for many conductive disorders such as:
  - Otosclerosis
  - Ossicular disarticulations
  - Otitis media with effusion
- Safe and effective for newborns and adults
- Can be combined with DP to reduce SNHL false-positive rates
- Normative data
- Measures in seconds
- Artifact rejection for use in hospitals and clinics

[Image of a normal-hearing ear measurement graph]
HearID 5 + MEPA3 Module - Technical Specifications
Wideband Immittance System for Middle-Ear Power Analysis

HearID + MEPA3 Specifications
To run HearID + MEPA3, you need a HearID software and hardware system with the MEPA3 Module and the Mimosa Acoustics probe calibrator. Measurements include Power Reflectance, Power Absorption, Power Transmittance, Acoustic Admittance ($Y_a$), Acoustic Conductance ($G_a$), Acoustic Susceptance ($B_a$), Acoustic Impedance ($Z_a$), Acoustic Resistance ($R_a$), Acoustic Reactance ($X_a$), and Equivalent Volume ($V_{ea}$).

- Frequency range: 200 to 6,000 Hz.
- Intensity Range: 0 to 80 dB SPL.
- Sample Time: 0.1 to 10 seconds per point.
- Stimuli: Chirp and pure tone.
- Artifact rejection.
- Real-time display of signal and noise.
- Normative data.
- State-of-the-art Calibration.

Special Features
- Customizable measurement protocols.
- Customizable display parameters.
- Capability to retest at a single test point.
- Allows overlay of up to 8 measurements at once.
- Provides example results typical of otitis media with effusion.
- Reflectance Area Index for enhanced diagnosis.

Environmental Requirements
For valid measurements:
- The air temperature must be within +59°F to +95°F (+15°C to +35°C).
- Relative air humidity must be between 30% and 90%.
- Ambient noise should be minimal; however, a sound-treated booth or room is not necessary.

Regulatory
HearID MEPA3 is a legally marketed device (FDA 510(k)).

HearID + MEPA3 Hardware
- 24-bit proprietary USB Audio Processing Unit.
- ER10C sound probe from Etymotic Research.
- Disposable foam and rubber ear tips for comfortable, stable probe insertion. Seven sizes available, suitable for infants to adults.
- Mimosa Acoustics probe calibration cavity set.
- Cutoff 2-cc syringe, for use as a test cavity.
- Laptop computer not included but must meet the minimum requirements below.

Computer System Minimum Requirements
- IBM™ compatible laptop.
- Windows 7™ or Windows 10™.
- At least 1GB free hard drive space.
- One available USB 2.0 port or better.
- Recent version of Adobe Reader (for displaying the electronic manuals).
- EN60950 (IEC950)-compliant power supply.

Order Information
Product Identifier: HearID+MEPA3

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