

LEMI-55 Apparatus of Measuring Hearing and Hearing Threshold



LEMI-55, apparatus of measuring human hearing and hearing threshold, is a kind of experiment instrument used in subject of medical physics. It is suitable for related courses of medical physics for medical undergraduates and graduates. This apparatus uses sound wave parameters of sound intensity, loudness, loudness level and auditory curve and other physical knowledge to complete the measurement experiment on hearing threshold of human ear, and to make a good foundation for the correct use of a clinical hearing instrument.

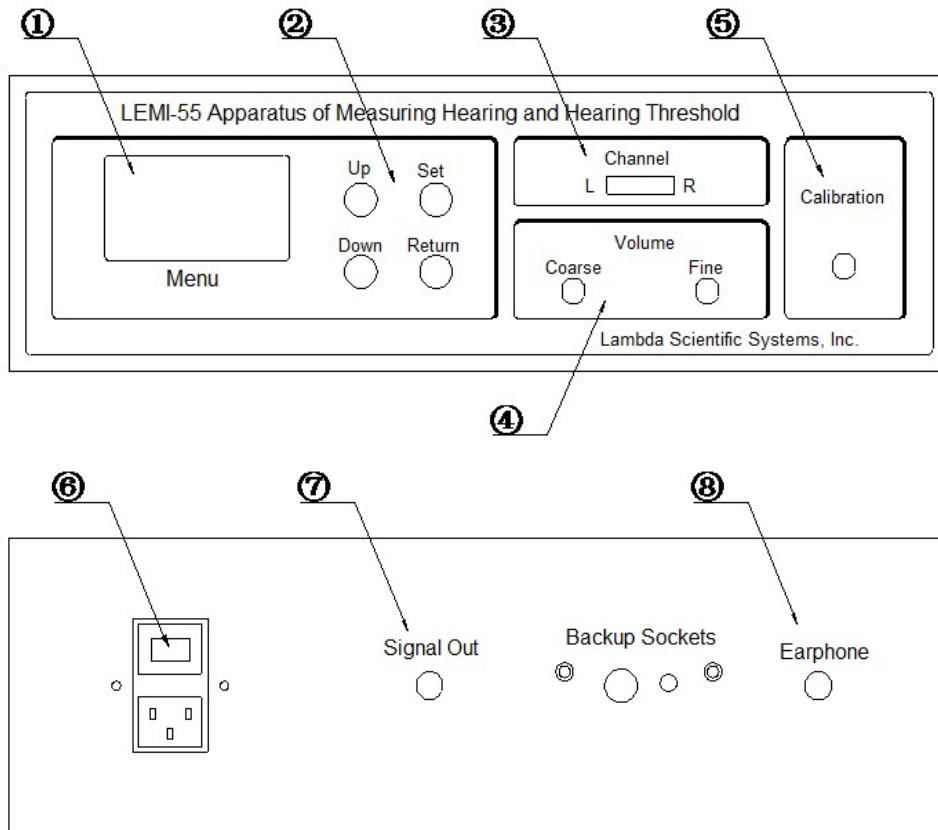
This auditory experimental apparatus consists of a dedicated signal generator, an audio amplifier, and a full-frequency-band headset. The signal generator can be key-controlled to produce a sine signal at any frequency ranging from 20 Hz to 20000 Hz at a resolution of 1 Hz. The power amplifier is adjustable by using a coarse knob and a fine knob to achieve different decibel sound levels. This apparatus can be used to measure the hearing of the human ear (left or right) for different frequencies and different sound levels.

Through performing experiments using this apparatus, students can achieve following objectives:

1. Master the measurement method of hearing and hearing threshold;
2. Determine the hearing threshold curve of the human ear.

Parts & Specification

Description	Specifications
Signal source	Frequency range: 20 ~ 20 kHz; standard sine wave (smart key controlled)
Digital frequency meter	20 ~ 20 kHz, resolution 1 Hz
Digital sound strength meter (dB meter)	relative -35 dB to 30 dB
Headset	monitoring grade
Power consumption	< 50 W
Instruction manual	electronic version



1. Menu display
2. Setting keys
3. Channel selection
4. Volume adjustment
5. 0 dB calibration
6. Power switch
7. Signal output to oscilloscope
8. Headset socket

Front & back panels of the apparatus