

Sound Level Calibrator

DB10-4221

This Sound Level Calibrator is small In size , light in weight , easy to carry . Although complex and advanced , it is convenient to use and operate . Its ruggedness will allow many years of use if proper operating techniques are followed . Please read the following instructions carefully and always keep this manual within easy reach .

1.Application

- * Handy sound source for quick and easy calibration of sound level meters and sound measuring systems .
- * The Calibrator employs solid state integrated circuitry that provides accurate and stable performance.
- * Sensitivity calibration of microphones.
- * Suitable for field and laboratory use .

2.Properties

- * Sound pressure level 94dB and 114 dB .
- * Class: 1
- * Frequency of 1000±0.01% Hz allows calibration with A,B,C or D weighting networks or linear .
- * Extremely low influence of static pressure .
- * Conforms to IEC 942 and GB/T15173 .
- * Calibration of 1" and 1/2" microphones.
- * Battery operated .

- * Temperature Range: -10 to +50°C operating .
- * Storage (with batteries removed) -40 to +50°C .
- * Temperature Coefficient: 0 to 0.01 dB/°C .
- * Altitude Effects: Approximately 0.1dB decrease for each 2000 feet increase in altitude from sea level to 12,000 feet elevation, or comparable atmospheric pressure change (approximately every 50 mm of Hg decrease).
- * Power Source: 2x1.5V AAA(UM-4) Battery.Battery life approximately 100 hours.
- * Size: 52x62x95mm 2.0x2.4x3.7inch
- * Weight: 150g (Not Including Battery) 5.29oz

3.Front panel descriptions



FIG-1 Main Structure



FIG-2 Bottom Structure

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Fig-1 Information Form

3-1	Microphone Cavity
3-2	Microphone adaptor
3-3	Indicator
3-4	Battery Cover
3-5	Power/Function Key

4.Operation

The Calibrator is designed to check the accuracy of many types of sound instruments, not only our equipment. Our instruments commonly use the standard 1/2-inch diameter ceramic microphone which fits directly into the calibrator coupler cavity. When testing an instrument with a 1-inch microphone, the proper adaptor ring must first be taken out. This keeps a close tolerance fit around the

microphone head. Be sure the microphone fits down inside the adaptor and rests on the lower rim. This rim supports the microphone and forms the necessary inner seal.

5.Operation procedure

- 5.1 Press the Power Key, then press the Power/Function Key again to select demanded parameters. A 1000 Hz tone should be heard. Each time pressing the Power/Function Key, the parameter converts between 94dB and 114dB. The Indicator is green in 94dB, While it is red in 114dB.
- 5.2 Turn on the sound level meter which is to be calibrated.
- 5.3 Carefully insert the microphone into the calibrator coupler .Be sure the microphone is down inside the coupler resting flush on the lower coupler rim .
- 5.4 When calibration has been made ,

carefully remove the microphone and press the Power/Function Key for 3 seconds to turn it off.

6.Battery replacement

When the supply voltage is lower than the specified value, the Indicator will not be bright or dim, at this point, the battery need to be replaced, the method is as follows: First turn the power off, and then transferred to the Instrument bottom, open the power supply cover, take out two 1.5 V batteries. Finally put new batteries, mount the power supply cover. If the calibrator is not to be used for a period of time, remove batteries, avoid the possibility of battery leakage.