

## Class 1 Sound Calibrator 94/114 dBSPL



The battery-operated Class 1 Sound Calibrator is classified for the calibration of class 1 measurement microphones, sound level meters and other acoustic measurement equipment. This precision microphone calibrator delivers 94 or 114 dB at a frequency of 1 kHz.

The Sound Calibrator has been designed for both field and laboratory use. The accuracy has been calibrated to a reference traceable to the National Institute of Standards and Technology (NIST).

The Precision Calibrator features a stable sound pressure independent of the battery condition. It will turn off automatically to preserve battery and guarantee a stable output.

Sound Calibrator Class 1



Optional 1/4" Adapter for M4261 Measurement Microphone

## **Key Features**

- Output level: 94 dBSPL or 114 dBSPL
- Output frequency: 1 kHz
- 1/2" microphone opening
- Compliant with standards IEC 60942-1:2017 and ANSI S1.40-2006 (R2016)
- Battery-powered
- Optional adapter for the 1/4" measurement microphones M4261 and M4260

## **Applications at Sound Level Measurement**

- Ensure accurate measurements
- Adapt the measurement microphone to the local environmental conditions, such as temperature, humidity, and air pressure
- Proving traceable measurements to national references
- Verify the stability of the sound level meter



## **Specifications**

Calibration sound pressure level	114.0 dBSPL and 94.0 dBSPL ±0.2 dB reference to 20 μPa
Equivalent free-field level	-0.12 dB for 1/2" microphones
Frequency	1 kHz ±1%
Harmonic distortion	< 2 %
Stability after pressing On	±0.1 dB after 2 seconds
Effective volume of calibrator and microphone (WS2P)	4.15 cm <sup>3</sup> (0.253 inch <sup>3</sup> )
Minimum stabilizing time	10 seconds after coupling microphone and calibrator
Reference conditions	101.3 kPa, 23 °C and 50 % RH
Static pressure range	65 kPa to 108 kPa, SPL variation < $\pm 0.3$ dB
Temperature range	<ul> <li>-10 °C to +50 °C (14 °F to 122 °F)</li> <li>SPL variation &lt; ±0.4 dB</li> <li>Frequency variation &lt; ±2 Hz</li> </ul>
Humidity range	<ul> <li>10 % to 90 % RH, non-condensing</li> <li>SPL variation &lt; ±0.3 dB</li> <li>Frequency variation &lt; ±2 Hz</li> </ul>
Storage	<ul> <li>Temperature: -40 °C to +60 °C</li> <li>Humidity: 0 % to 90 % RH (non-condensing)</li> </ul>
Dimensions L x W x H	106.1 x 63.4 x 25.9 mm (4.18" x 2.5" x 1.02")
Weight	156 g (5.5 oz.)
Battery	<ul><li>9 V NEDA 1604A or IEC 6LR61</li><li>Battery Voltage operating range 6.7 V to 10 V</li></ul>
Traceability	<ul> <li>Traceable to National Institute of Standards and Technology (NIST)</li> <li>PTB approved</li> </ul>
Standards	<ul> <li>IEC 60942:2017, class 1</li> <li>ANSI S1.40-2006 (R2016)</li> <li>Safety IEC 61010-1:2001</li> <li>EMC 2014/30/EU, IEC 61326-1:2005</li> </ul>
Accessories included	<ul><li>Battery</li><li>Manufacturer Calibration Certificate</li></ul>
Optional	1/4" Calibrator Adapter, NTi Audio # 600 000 391
NTi Audio #	600 000 388

All information subject to change without notice. Manufacured for NTi Audio by PCB Piezotronics, USA, type CAL200.