



MODEL CAL200

PRECISION ACOUSTIC CALIBRATOR

- Output level: 94 or 114 dB
- Output frequency: 1 kHz
- ½" microphone opening
- IEC 60942-1:2003 compliant
- Internal battery
- Output level independent of battery condition
- Adaptors: ⅛", ¼", ⅜" microphones

TYPICAL APPLICATIONS

Field or laboratory calibration of:

- Sound level meters
- Noise dosimeters
- Noise monitoring stations

IEC 60942 CLASS 1 CALIBRATOR

The Larson Davis CAL200 Sound Level Calibrator is a battery operated precision microphone calibrator used for the calibration of sound level meters and other sound measurement equipment with ½" microphones. It can provide an output level of either 94.0 or 114.0 dB (switch-selectable) at a frequency of 1 kHz. Adaptors for ⅛", ¼", and ⅜" microphones are available as optional accessories.

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

The Larson Davis CAL200 features a stable sound pressure independent of the battery condition. In addition, the Larson Davis CAL200 will turn off automatically to preserve battery and guarantee a stable output.

In addition to precision acoustic calibrators, factory calibration services for Larson Davis products are available through the CAL+ program. CAL+ service is provided with all Larson Davis calibrations and includes a complete multi-point factory test, free firmware upgrade to the latest version where applicable, labor warranty extended for one year⁽¹⁾, worn consumables replaced at no charge⁽²⁾, and more. Contact us for details.

CAL200 PRECISION ACOUSTIC CALIBRATOR

Acoustic	
Calibration Sound Pressure Level	114.0 dB and 94.0 dB \pm 0.2 dB SPL re: 20 μ Pa (114.0 dB is the principal sound pressure level)
Equivalent Free-field Level	-0.12 dB for 1/2" microphones
Frequency	1 kHz \pm 0.7%
Harmonic Distortion	< 2 %
Stability After Pressing On	\pm 0.1 dB after 2 seconds
Minimum Stabilizing Time	10 seconds after coupling microphone and calibrator
Reference Conditions	101.3 kPa, 23 °C and 50 % RH

Environmental		
Static Pressure Range	65 kPa to 108 kPa	SPL variation < \pm 0.25 dB
Temperature Range	-10 °C to +50 °C	SPL variation < \pm 0.4 dB Frequency variation < \pm 7 Hz
Humidity Range	10 % to 90 % RH non-condensing	SPL variation < \pm 0.3 dB Frequency variation < \pm 7 Hz
Storage Temperature	-40 °C to +60 °C	
Storage Humidity	0 % to 90 % RH (non-condensing)	

Physical	
Effective Volume of Calibrator and Microphone	> 6.1 in ³ (100 cm ³)
Dimensions (L x W x H)	4.18 x 2.5 x 1.02 in (106.1 x 63.4 x 25.9 mm)
Weight	5.5 oz (156 g)

Power Supply	
Battery	9 V NEDA 1604A or IEC 6LR61
Battery Voltage Operating Range	6.7 V to 10 V

Traceability	
Traceability	Traceable to National Institute of Standards and Technology (NIST)

Supplied Accessories	
9 V Alkaline Battery	
Users Manual	

Optional Accessories	
ADP024	Adaptor for 1/4" microphones
ADP031	Adaptor for 3/8" microphones
ADP075	Adaptor for 1/2" microphones

Related Products	
CAL250	Class 1 Precision Acoustic Calibrator (250 Hz)
CAL150	Class 2 Precision Acoustic Calibrator (1000 Hz)



COMPLIANCE

Acoustic	
ANSI S1.40-2006, Class 1	
IEC 60942-2003, Class 1	
IEC 60942:2017, Class 1	
IEC 60942:2018, Class 1	
Safety	
IEC 61010-1:2001	
EMC	
EU directive 2004/108/EC	
IEC 61326-1:2005	
Use with Microphones of Type	
IEC 61094-4:1995	1/2" WS2P, WS2F and WS2D microphones; no adaptor required
	1/4" WS3P, WS3F and WS3D microphones with ADP024 adaptor
According to IEC 61094-1:2000	1/2" LS2P
Other microphones	3/8" with ADP031 adaptor
For Use with Sound Level Meters and Noise Dosimeters	
ANSI S1.4 Type 1	
ANSI S1.25	
IEC 61672 Class 1	
IEC 61252	

[1] Requires regular annual factory calibration. Limited to seven (7) years.
 [2] Windscreen, O-rings, desiccants, fuses, for example.



ADP024
for 1/4" Microphones



ADP031
for 3/8" Microphones



ADP075
for 1/2" Microphones

Microphone Adaptors



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