



# CAL200 Precision Acoustic Calibrator

IEC 60942 Class 1 Handheld Sound Level Calibrator for 1/2" microphones at 1000 Hz  
Used for Sound Level Meters and Other Sound Measuring Equipment

## Highlights

- Output level: 94 or 114 dB
- Output frequency: 1 kHz
- 1/2" microphone opening
- IEC 60942-1:2003 compliant
- Internal battery
- Output level independent of battery condition
- Adaptors: 1/4", 3/8", 1/8" microphones

## Applications

Field calibration or laboratory calibration of:

- Sound level meters
- Noise dosimeters
- Noise monitoring stations



CAL200 Portable Sound 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. It can provide an output level of either 94.0 or 114.0 dB (switch-selectable) at a frequency of 1 kHz.

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.



ADP031

ADP024

3/8" and 1/4" Microphone Adaptors

**CAL200 Precision Acoustic Calibrator****Acoustic**

Calibration sound pressure level	114.0 dB and 94.0 dB $\pm$ 0.2 dB SPL re: 20 $\mu$ Pa (114.0 dB is the principal sound pressure level)
Equivalent free-field level	-0.12 dB for 1/2" microphones
Frequency	1 kHz $\pm$ 1%
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 < $\pm$ 0.3 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 (WS2P)	4.15 cm <sup>3</sup> (0.253 in. <sup>3</sup> )
Dimensions	Length 106.1 mm (4.18 in.) Width 63.4 mm (2.5 in.) Height 25.9 mm (1.02 in.)
Weight	156 g (5.5 oz.)

**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)
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**Compliance****Acoustic**

- ANSI S1.40-2006, Class 1
- IEC 60942-2003, Class 1

**Safety**

- IEC 61010-1:2001

**EMC, CE**

- EU directive 2004/108/EC
- IEC 61326-1:2005

For 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

**Order Information**

CAL200 Acoustic Calibrator (94 or 114dB at 1 kHz, 1/2" microphone opening)

**Standard Accessories**

- 9 V alkaline battery
- Users Manual

**Optional Accessories**

- Adaptor ADP031 for 3/8" microphones
- Adaptor ADP024 for 1/4" microphones
- Adaptor ADP075 for 1/8" microphones

**Related product**

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



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LD-CAL200-0209

Printed in U.S.A.

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