



## 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

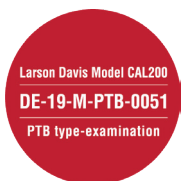
The Larson Davis CAL200 Sound Level Calibrator is a battery operated precision microphone calibrator used for the calibration of sound level meters and other sound measurement equipment with ½" microphones. It can provide an output level of either 94.0 or 114.0 dB (switch-selectable) at a frequency of 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<sup>[1]</sup>, worn consumables replaced at no charge<sup>[2]</sup>, and more. Contact us for details.

CAL200 PRECISION ACOUSTIC CALIBRATOR		
<b>Acoustic</b>		
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 $\pm$ 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	
<b>Environmental</b>		
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)	
<b>Physical</b>		
Effective Volume of Calibrator and Microphone	> 6.1 in <sup>3</sup> (100 cm <sup>3</sup> )	
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)	
<b>Power Supply</b>		
Battery	9 V NEDA 1604A or IEC 6LR61	
Battery Voltage Operating Range	6.7 V to 10 V	
<b>Traceability</b>		
Traceability	Traceable to National Institute of Standards and Technology (NIST)	
<b>Supplied Accessories</b>		
9 V Alkaline Battery		
Users Manual		
<b>Optional Accessories</b>		
ADP109	Adaptor for 1/4" microphones	
ADP031	Adaptor for 3/8" microphones	
ADP075	Adaptor for 1/2" microphones	
<b>Related Products</b>		
CAL250	Class 1 Precision Acoustic Calibrator (250 Hz)	
CAL150	Class 2 Precision Acoustic Calibrator (1000 Hz)	



COMPLIANCE	
<b>Acoustic</b>	
ANSI S1.40-2006, Class 1	
IEC 60942-2003, Class 1	
IEC 60942:2017, Class 1	
IEC 60942:2018, Class 1	
<b>Safety</b>	
IEC 61010-1:2001	
<b>EMC</b>	
EU directive 2004/108/EC	
IEC 61326-1:2005	
<b>Use with Microphones of Type</b>	
<b>IEC 61094-4:1995</b>	1/2" WS2P, WS2F and WS2D microphones; no adaptor required
	1/4" WS3P, WS3F and WS3D microphones with ADP109 adaptor
<b>According to IEC 61094-1:2000</b>	1/2" LS2P
<b>Other microphones</b>	3/8" with ADP031 adaptor
<b>For Use with Sound Level Meters and Noise Dosimeters</b>	
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.



ADP109  
for 1/4" Microphones



ADP031  
for 3/8" Microphones



ADP075  
for 1/2" Microphones

## Microphone Adaptors