**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: ¼”, ⅛”, ⅛” 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 ¾” 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 ± 0.2 dB SPL re: 20μPa (114.0 dB is the principal sound pressure level)
- **Equivalent Free-field Level**: -0.12 dB for 1/2" microphones
- **Frequency**: 1 kHz ± 0.7%
- **Harmonic Distortion**: < 2 %
- **Stability After Pressing On**: ± 0.1 dB after 2 seconds
- **Minimum Stabilizing Time**: 10 seconds after coupling microphone and calibrator
- **Reference Conditions**: 101.3 kPa, 23 ºC and 50 % RH

### Environmental
- **Static Pressure Range**: 65 kPa to 108 kPa
- **Temperature Range**: -10 ºC to +50 ºC
- **Humidity Range**: 10 % to 90 % RH
- **Storage Temperature**: -40 ºC to +60 ºC
- **Storage Humidity**: 0 % to 90 % RH

### Physical
- **Effective Volume of Calibrator and Microphone**: > 6.1 in³ (100 cm³)
- **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 1/8" 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
- EMG
- 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
- **IEC 61094-1:2000**: 1/4" WS3P, WS3F and WS3D microphones with ADP024 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.

**Microphone Adaptors**

ADP024 for 1/4" Microphones
ADP031 for 3/8" Microphones
ADP075 for 1/8" Microphones