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", ⅜", ⅝" 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 ¼", ⅜", and ⅝" 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, worn consumables replaced at no charge, and more. Contact us for details.
### CAL200 PRECISION ACOUSTIC CALIBRATOR

**Acoustic**
- Calibration Sound Pressure Level: $114.0 \, \text{dB}$ and $94.0 \, \text{dB} \pm 0.2 \, \text{dB} \, \text{SPL re:} 20 \, \mu\text{Pa}$
- Equivalent Free-field Level: $-0.12 \, \text{dB}$ for $1/2''$ microphones
- Frequency: $1 \, \text{kHz} \pm 1\%$
- Harmonic Distortion: $< 2 \, \%$
- Stability After Pressing On: $\pm 0.1 \, \text{dB}$ after 2 seconds
- Minimum Stabilizing Time: 10 seconds after coupling microphone and calibrator
- Reference Conditions: $101.3 \, \text{kPa}$, $23 \, ^\circ\text{C}$ and $50 \, \% \, \text{RH}$

**Environmental**
- Static Pressure Range: $65 \, \text{kPa}$ to $108 \, \text{kPa}$
- SPL variation: $< 0.3 \, \text{dB}$
- Temperature Range: $-10 \, ^\circ\text{C}$ to $+50 \, ^\circ\text{C}$
- Frequency variation: $< 0.4 \, \text{dB}$
- Humidity Range: $10 \, \%$ to $90 \, \% \, \text{RH}$
- Frequency variation: $< 7 \, \text{Hz}$
- Storage Temperature: $-40 \, ^\circ\text{C}$ to $+60 \, ^\circ\text{C}$
- Storage Humidity: $0 \, \%$ to $90 \, \% \, \text{RH}$

**Physical**
- Effective Volume of Calibrator and Microphone: $> 6.1 \, \text{in}^3 (100 \, \text{cm}^3)$
- Dimensions (L x W x H): $4.18 \times 2.5 \times 1.02 \, \text{in} (106.1 \times 63.4 \times 25.9 \, \text{mm})$
- Weight: $5.5 \, \text{oz} (156 \, \text{g})$

**Power Supply**
- Battery: $9 \, \text{V} \, \text{NEDA} 1604A$ or IEC 6LR61
- Battery Voltage Operating Range: $6.7 \, \text{V}$ to $10 \, \text{V}$

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

**Supplied Accessories**
- 9 V Alkaline Battery
- Users Manual

**Optional Accessories**
- ADP024: Adapter for $1/4''$ microphones
- ADP031: Adapter for $3/8''$ microphones
- ADP075: Adapter 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

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

**Use with Microphones of Type**
- IEC 61994-4:1995
  - $1/2''$ WS2P, WS2F and WS2D microphones; no adaptor required
  - $1/4''$ WS3P, WS3F and WS3D microphones with ADP024 adaptor
  - According to IEC 61994-1:2000
    - $1/2''$ LS2P
    - $1/2''$ L52P
- Other microphones: $1/2''$ 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.

---

Larson Davis offers a full line of noise and vibration measurement instrumentation such as Class 1 and 2 sound level meters, outdoor noise monitoring systems, personal noise dosimeters, human vibration meters, audiometric calibration systems, microphones and preamplifiers, and data analysis software. Instrumentation is used in community and environmental noise monitoring, measurement of building acoustics, managing worker exposure to noise and vibration, and various automotive, aerospace, and industrial applications. Larson Davis is a division of PCB Piezotronics, Inc., a wholly owned subsidiary of MTS Systems Corporation.