CAL200 Precision Acoustic Calibrator

IEC 60942 Class 1 Handheld Sound Level Calibrator for ½" 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.



CAL200 Precision Acoustic Calibrator		
Acoustic		
Calibration sound pressure level	114.0 dB and 94.0 dB \pm 0.2 dB SPL re: 20 μPa (114.0 dB is the principal sound pressure level)	
Equivalent free-field level	-0.12 dB for 1/2" microphones	
Frequency	1 kHz ± 1%	
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 °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 < ± 0.4 dB Frequency variation < ± 7 Hz
Humidity range	10 % to 90 % RH non-condensing	SPL variation < ± 0.3 dB Frequency variation < ± 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 ³ (0.253 in. ³)	
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)	

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)



3425 Walden Avenue, Depew, NY 14043-2495 USA

Phone 716-926-8243

Toll-Free in USA 888-258-3222

Fax 716-926-8215 E-mail sales@larsondavis.com

Web Site www.larsondavis.com

ISO 9001 CERTIFIED

© 2009 PCB Group, Inc. In the interest of constant product improvement, specifications are subject to change without notice. PCB, and ICP are registered trademarks of PCB Group Inc., SoundTrack LXT, Spark and Blaze are registered trademarks of PCB Piezotronics, Inc. HV Manager is a trademark of PCB Piezotronics, Inc. All other trademarks are properties of their respective owners.

LD-CAL200-0209

For environmental noise monitoring and building acoustics, Larson Davis offers a full line of instruments, accessories and software. For personal noise and vibration exposure monitoring, Larson Davis complements this with sound level meters, personal noise dosimeters, human vibration meters, audiometric calibration systems and hearing conservation programs.

> Visit www.larsondavis.com to locate your nearest sales office