







MODEL CAL250

PRECISION ACOUSTIC CALIBRATOR

Output level: 114 dB

Output frequency: 251.2 Hz

Standard: 1" microphone

IEC 60942-1:2003 compliant

Internal battery

Output level independent of battery condition

Adaptors: 1/8", 1/4", 3/8", 1/2" microphones

Array adaptor for 8 microphones simultaneously

TYPICAL APPLICATIONS

Field or laboratory calibration of:

Sound level meters

Noise dosimeters

Noise monitoring stations

Microphone arrays

IEC 60942 CLASS 1 CALIBRATOR

The Larson Davis Model CAL250 is a battery operated precision microphone calibrator for 1" microphones used for the calibration of sound level meters and other sound measurement equipment. The CAL250 delivers a full 114.0 dB level output signal at 251.2 Hz. A $\frac{1}{2}$ " microphone adaptor is supplied with the CAL250. Adaptors for $\frac{1}{8}$ ", $\frac{1}{4}$ ", and $\frac{3}{8}$ " 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 CAL250 features a stable sound pressure independent of the battery condition. In addition, the CAL250 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.

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CAL250 PREG	CISION ACOUS	STIC CALIBRATOR		
Acoustic				
Calibration Sound Pressure Level Initial After 1 Year		114.0 dB ± 0.1 dB re: 20 μPa ± 0.2 dB re: 20 μPa		
Equivalent Free-field Level		0.0 dB for 1/2" microphones		
Frequency		251.2 Hz ± 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 °C and 50 % RH		
Environmental				
Static Pressure Range		65 kPa to 108 kPa	SPL variation < ± 0.25 dB	
Temperature Range		-10 °C to +50 °C	SPL variation < ± 0.4 dB Frequency variation < ± 2 Hz	
Humidity Range		10 % to 90 % RH non-condensing	SPL variation < ± 0.4 dB Frequency variation < ± 2 Hz	
Storage Temperature		-40 °C to +60 °C		
Storage Humidity		0 % to 90 % RH (non-condensing)		
Physical				
Effective Volume of Calibrator and Microphone		> 6.1 in ³ (100 cm ³)		
Dimensions (L x D)		4.9 x 1.75 in (124 x 44.5 mm)		
Weight		8.8 oz (249 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 Access	sories			
ADP019 Adaptor	r for 1/2" Microph	one		
CCS003 Storage				
9 V Alkaline Batt	ery			
Users Manual				
Optional Access	ories			
ADP020		Adaptor for 3/8" microphones		
ADP021		Adaptor for 1/4" microphones		
ADP023		Adaptor for 1/8" micro	phones	

COMPLIANCE		
Acoustic		
ANSI S1.40-2006, CI	ass 1	
IEC 60942-2003, Cla	ss 1	
IEC 60942:2017, Cla	ss 1	
Safety		
IEC 61010-1:2001		
EMC		
EU directive 2004/10	8/EC	
IEC 61326-1:2005		
For Use with Microp	phones of Type	
IEC 61094-4:1995	1" WS1P, WS1F and WS1D	
	1/2" WS2P, WS2F and WS2D microphones; with ADP019 adaptor	
	1/4" WS3P, WS3F and WS3D microphones with ADP021 adaptor	
According to IEC 61094-1:2000	1" LS2P without adaptor	
Other microphones	3/8" with ADP020 adaptor 1/8" with ADP023 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 and	ural factory calibration. Limited to seven (7) years	

- [1] Requires regular annual factory calibration. Limited to seven (7) years. [2] Windscreen, O-rings, desiccants, fuses, for example.







ADP019 for 1/2" Microphones



ADP021 for 1/4" Microphones

Microphone Adaptors



079A31

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Aufgrund laufender Weiterentwicklungen sind Änderungen der Spezifikationen vorbehalten. Alle Angaben vorbehaltlich Satz- und Druckfehler.

Adaptor 8 1/4" microphone coupler

