

Vibration Calibrator

BSWA VC01 Vibration Calibrator

is suitable to detect the sensitivity of acceleration, velocity and displacement sensors. The electromagnetic exciter of VC01 is driven by an independent reference source (159.2Hz/1grms) with feedback control through the embedded accelerometers to maintain a constant and accurate vibration level and frequency.



VC01 is supplied with 9V rechargeable battery and charger. The battery needs to be charged when the indicator light turns from green to orange. VC01 will automatically shut down after approx. 50 seconds to save battery power.

Features

- Hand-Held vibration calibrator
- Small size and light weight
- Rechargeable battery powered with low power detection
- Self-contained 159.2Hz/1grms vibration reference
- Automatic shutdown

Application

- Sensitivity measurement of acceleration / velocity / displacement sensors
- Rapid judgment of measurement system integrity

SPECIFICATIONS

Vibration Calibrator	
Model	VC01
Acceleration (rms)	9.81 m/s ² (1g) ±3%
Velocity (rms)	10 mm/s ±3%
Displacement (rms)	10µm ±3%
Frequency	159.2 Hz ±0.5% (1000rads)
Signal output waveform	sinusoidal wave
Distortion	≤ 5%
Load	< 120g
Battery	9V rechargeable battery (150 mAh/Ni-Cr)
Low-battery warning LEDs	no mA: green; Low-battery: orange
Automatic Shutdown Time	≈50s (±10s)
Environmental Conditions	Operating Temperature: 0°C ~ 50°C
	Storage Temperature: -55°C ~ 85°C
	Operating Humidity: 0%RH ~ 95%RH
Dimensions	Φ50 mm x 148 mm
Weight	≈500g
Installation Method	10 – 32 UNF, 1/4-28UNF, M5 screw.
Sensor	inside mounted reference Accelerometer

Sound Calibrator

BSWA CA111 Sound Calibrator is small sound source for calibrating measurement microphones, sound level meters, and other sound measurement equipment. The calibrator can be used on 1/2-inch and 1/4-inch microphones with adaptor.

CA111 conforms to IEC 60942:2003 Class 1, ANSI S1.40-1984 and GB/T 15173-1994.



Application

- Calibration of measurement microphones, sound level meters, and other sound measurement equipment
- Checking the linearity of equipment

SPECIFICATIONS

Sound Calibrators	
Model	CA111
Standards	IEC60942: 2003、ANSI S1.40-1984GB/T 15173-1994
Sound Pressure Level	94.0dB ±0.3dB re 20 µPa and 114.0dB ±0.3dB re 20 µPa
Frequency	1000 Hz ±0.5%
Microphone Diameter	According to IEC61094-4: 1/2" & 1/4"
Harmonic Distortion	< 2%
Stabilization Time	< 10s
Equivalent Free-field Level	0.2 dB for 1/2" Microphones
Equivalent Random Incidence Level	+0.0 dB for 1/2", 1/4"
Reference Conditions	Ambient Temperature: 25°C (77°F) / Ambient Pressure: 101.3 kPa/ Humidity: 55% RH / Effective Load Volume: 250 mm ³
Environmental Conditions	Temperature: -10°C-50°C (14°F -122°F) Pressure: 65 kPa to 108 kPa Humidity: 10 to 90%RH (non-condensing)
Power Supply	Batteries: 1.5 V LR6 (AA battery) x 2 Lifetime: Typically 40 hours with alkaline batteries at 25°C (77°F)
Dimension	48 mm x 70 mm x 70 mm
Weight	≈180g (include attery)