



SCM Measurement Microphones



The SCM are robust, free-field microphones designed for the rigorous environment of a production line without compromising the accuracy, precision, and stability required for R&D. The 5.4 mm prepolarized condenser cartridge incorporates a gold vertically mounted diaphragm specially designed to withstand high humidity and temperature conditions often found in many production environments.

Individual calibration charts* are supplied with each microphone along with the calibration data on a 3½ inch floppy disk. The data formats are ASCII text and the DAT format used by the Listen SoundCheck™ software.



* NIST and other traceable calibration available upon request.

Specifications:

- Cartridge Type: Prepolarized condenser element, vertical diaphragm
- Directional characteristics: Omni-directional
- Frequency Response: 20 Hz – 20 kHz \pm 2 dB
- Nominal Sensitivity: 6 mV/Pa (SCM-1) and 20 mV/Pa (SCM-2)
- Equivalent Noise Level: 26 dBA (SCM-1) and 23 dBA (SCM-2)
- Max SPL: 144 dB (SCM-1) and 134 dB (SCM-2)
- Distortion: 123 dB SPL peak (<1% THD)
- Operating Temperature range: -30 to +70°C (-22 to 158 °F)
- Operating Humidity range: 0 to 100 % RH (without condensation)
- Output impedance: 30 – 40 Ohms (built-in preamplifier)
- Cable drive capability: Up to 300 m (-0.2V at 20 kHz with 114 dB SPL)
- Dimensions: Length: 9.3 cm (3.6 in) Diameter: 5.4 mm (0.21 in)
- Cable: 1.75 m (5.75 ft)
- Connector: 7-pin Lemo
- Weight: ~ 14 grams (0.5 ounces)
- Accessories: Wind screen, calibrator, microphone holder, extension cable

SCM On-axis frequency response:

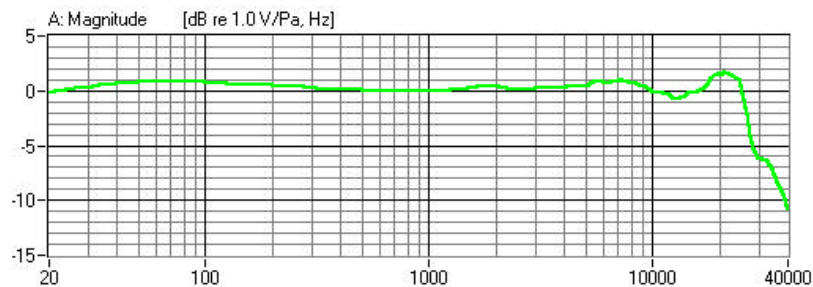
Microphone Calibration Chart



Test Info
 Model: SCM1
 Lot #: A
 S/N: 1041
 Sign: SFT
 Tue, Jan 23, 2001 10:44 AM

Test Parameters
 Start Freq: 40000 Hz
 Stop Freq: 20 Hz
 Step size: 1/12 Oct
 No. of Steps: 134
 Test Level: 100dB

Comments
*Accuracy: 0.5dB
 Barometer: 1020 hPa
 Temperature: 75°F
 Rel Humidity: 32%*



B: Results		Limits	
Sensitivity	5.6 mV/Pa Passed	Max/Min	5.6/4.4
Response margin	0.1 dB Passed	Tolerance curves	Floating Data
Self Noise [L]	25.0 dB Passed	Max/Min	30.0/20.0