

SQ-4.2

Electro-Acoustic Coupler



Applications

- ✓ Pressure chamber secondary calibration of microphones (IEC 61094-5) and dosimeters (IEC 61252)
- ✓ Pressure chamber secondary calibration of sound level meters and sound level measuring chains (IEC 61672)

Selected Data

- ✓ Wide frequency range: 31.5 Hz...20 kHz
- ✓ Low distortion, even at low frequencies
- ✓ Sound pressure level up to 134 dB at selected frequencies
- ✓ Symmetric small pressure chamber

Features

- ✓ True pressure chamber calibration of 1/2" microphones
- ✓ Calibration of dosimeters (diameter 1/2")
- ✓ Calibration of measuring microphones (capacitor and electrets microphones in the sizes 1/2" and with adapter 1/4")
- ✓ Supply of sound pressure level for the calibration of sound level meters and measuring chains
- ✓ Including microphone and sound level meter fixture
- ✓ Including power amplifier



Technical Data

Sound field	Pressure chamber	
Frequency range	31.5 Hz...20 kHz	
Max. electrical power of sound source	0.5 W	
Distortion factor at 94 dB (31.5 Hz...1 kHz)	< 3% (THD)	
Applicable microphones	½" microphones and 1/4" microphones (with adapter)	
Maximum sound pressure level (measurement with 1/2" microphone adapter)	31,5 Hz...< 100 Hz	124 dB*
	100 Hz...1.25 kHz	134 dB*
	> 1.25 kHz...3.15 kHz	124 dB*
	> 3.15 kHz...6.3 kHz	114 dB*
	> 6.3 kHz...12.5 kHz	94 dB*
	> 12.5 kHz...20 kHz	74 dB*

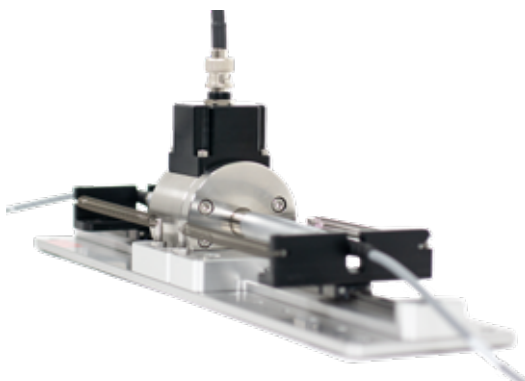
All specification are at room temperature unless otherwise specified. * Depending on frequency range and short-term peak value.

System Components

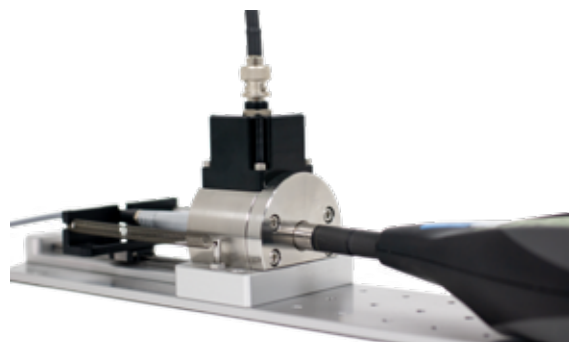
- ✓ SQ 4.2 active electro-acoustic coupler
- ✓ Power amplifier, including power plug and plug adapter
- ✓ Microphone and sound level meter fixture
- ✓ Microphone adapter ¼" to ½"
- ✓ LS adapter (Open cartridge adapter for typical 1/2" microphones)
- ✓ System cable

Accessories (optional)

Reference standards (recommended)
½" condenser microphone cartridge type LS1P or WS1P with amplifier
LS adapter (open grid for WS2P Microphone)
Optional calibration adapter
Calibration adapter for surface microphones



▲ **Application example:** Calibration of a typical measuring microphone using the SQ-4.2



▲ **Application example:** Calibration of a typical sound level meter using the SQ-4.2