

# 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 ½" microphones
- ✓ calibration of dosimeters (diameter ½")
- ✓ calibration of measuring microphones (capacitor and electrets microphones ½" and ¼" with adapter)
- ✓ 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 ¼" 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