

WOODPECKER SS060 Stereo Fiber Optic Stethoscope



Features

- Ideal for permanent installations
- Absolute EMI/RFI immunity
- Removes ambient noise in-wall by DSP 4-mode switch
- Completely passive sensor with no metal or electrical parts
- Stereo version improves target intelligibility and localization
- High reliability and environmental stability
- Optical fiber connection over extended lengths without signal loss
- Difficult to detect
- Cost-effective, long-term solution



Applications

- Listening through walls
- Remote monitoring of structure-borne audio signals
- Highly explosive areas
- High RF areas
- Severe electromagnetic fields
- Homeland Security
- SWAT Teams



The FOS stereo enables you to listen and record through concrete walls, windows, and doors without the need to be inside the room. The FOS is ideal for permanent installations in structures and walls, due to its light weight and waterproof design.

The FOS Stereo features built-in DSP noise reduction of up to 22dB of ambient noise.

The FOS Stereo system is comprised of two advanced fiber optic contact microphones and dual-channel electro-optic unit (EOU300) with built-in DSP, for digital-to-analog conversion of optical microphone output signals. The Dual Channel EOU300 supports monitoring with two sensors simultaneously. It features two pairs of ST-style fiber optic connectors; two 3.5 mm stereo sockets (one for stereo analog output, another for headphones); dual volume control knobs; green/red LED voltage indicator. DSP model provides up to 22 dB of real-time ambient noise removal (three levels: low, mid, high). Unit is powered either by internal batteries or external DC power supply.

Technology

The FOS stereo sense the microscopic vibrations results from sounds and noises inside the room and translates it into audio signals. The FOS stereo is based on a unique optical acoustic technology. The FOS head includes a safe arm to protect the sensitive sensor. ■

Technical Specifications

Device Type	Contact microphone
Frequency Response	10-5,000Hz
Conformity 10 - 200 Hz	±3.0dB
Conformity 200 - 5,000 Hz	±10.0dB
Sensitivity at 1mg (RMS)	10mV
Gain Control Range	>45dB
Equivalent Self-Noise	≤5µg
Self-Noise Density (200-5,000Hz)	<150 nano-g/sqrt(Hz)
Noise Reduction	Up to 22dB of ambient noise
Maximum Acceleration	0.3g
Supply Voltage	8-15V DC or 4x1.5V AA Battery
Current Drain (max.)	130mA
Output Impedance (Standard Line Output)	<100W
Amplitude Non-linearity	<5%
Operating Temperature	-20 to +60°C (-4 to +140°F)
Storage Temperature	-20 to +60°C (-4 to +140°F)
Water Resistant	Up to 10m
MTBF	>100,000 hours
Contact Microphone Head	
Material	Polycarbonate
Diameter	36mm (1.38")
Height	20mm (0.78")
Weight	16g (0.56oz) each sensor
Stereo Electronics Box	
Material	Anodized Aluminum
Headphone Output	Stereo
Dimensions	17.5(L) x 8.6(W) x 2.8(H)cm
Weight	330g (w/out batteries) 430g (incl. batteries)

Product Codes

WOODPECKER SS060 FOS-SB Stereo Stethoscope - Full System

3-299-644 SS060 FOS-SB Stereo Fiber Optical Stethoscope System, with 2x5m of 2x3mm zip cord optical fiber, Electro Optical Unit (EOU300) with built-in DSP, Audio cable with 3.5mm jack, headphones, 8-12V DC power supply, Needle Kit (Plaster Wall Needle & Butterfly screws), Guidance Manual & carrying case

WOODPECKER SS060 FOS-SB - Accessories

3-299-649 Extension Cable Type Indoor, 2x3mm Zip Cord (specify length from 10-100m) will withstand bending and stepping on it

3-299-667 Internal Digital Recorder (Micro-SD format) 2-16GB, 44.1kHz, 16bit, no compression > 10 hours / 4 days

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