

ShockTec SG-2

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- ◆ Solid state Piezo electric sensor
- ◆ Digital Microprocessor with Intelligent Digital Signal Processing
- ◆ Tri-color LED enables accurate and reliable calibration, with “over-sensitive” and “under-sensitive” indications
- ◆ Gross attack detection
- ◆ Encapsulated bi-morph piezo electric sensor
 - ◆ Dual stage adjustment potentiometer
 - ◆ Cover anti-tamper protection
- ◆ Compatibility with most control panels



SG-2 is a digital shock detector that provides reliable 24-hour perimeter protection. A break-in is detected as soon as the intruder attempts to force, smash, drill or even saw through the protected window, door, wall or roof. ShockTec employs an advanced digital microprocessor to analyze the vibration signal received from the piezo electric sensor. A unique feature of SG-2 is digital sampling of the signal simultaneously in two separate channels, each channel amplified at a different gain. This provides an extremely wide dynamic range of the sampled signal enabling precise measurement and analysis of the shock signal.

THREE OPERATIONAL MODES:

The LED of the SG-2 has three operational modes. The NC alarm contacts are non-latching in all modes of operation. On alarm activation, the alarm contacts open the circuit for 2-5 seconds.

1. Normal Operation Mode

- No voltage is applied to the LED Terminal. The LED illuminates while the ALARM contact is open in response to an input signal.
- GREEN indicates an alarm condition
- RED is an “under-sensitive” indication
- ORANGE is an “over-sensitive” indication.

2. Any to Latch Mode

12V is applied to the LED terminal causing it to be inhibited. Upon removal of the 12V the detector switches to a Normal Operation Mode and a continuously flashing ORANGE LED indicates if an alarm is detected (Alarm memory). Reapplication of 12V resets the latch (Alarm memory) and extinguishes the LED.

3. First to Latch Mode

12V is applied to the LED terminal via a 47K resistor (see Figure 2) causing it to be inhibited. Operation is the same as in Any to Latch Mode with the exception that only the first detector to detect an alarm is indicated by a continuous flashing ORANGE LED, whereas any subsequent detector is indicated by a steady ORANGE LED.

WARRANTY: One year warranty against workmanship, material and factory defects.

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DETECTION RANGE*

Surface Radius	Brick Wall	Steel	Wood	Concrete	Plywood	Glass
	8 ft / 2.5 m	9.8 ft / 3 m	11.4 ft / 3.5 m	4.9 ft / 1.5 m	13 ft / 4 m	11.4 ft / 3.5 m

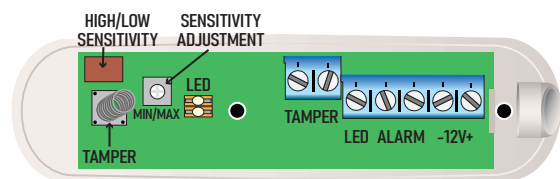
*The above values are typical and are subject to practical testing, which must be performed for each installation. In some environments, these values may differ from the values listed above.

TECHNICAL SPECIFICATIONS

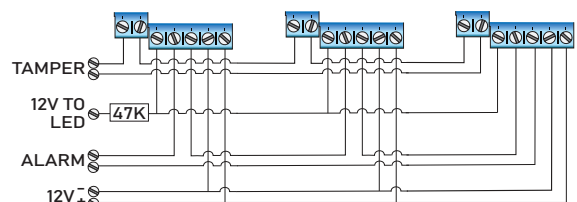
Supply voltage	9V - 16V DC
Current drain	8.5 mA Typical (17 mA Max)
Operational temperature	-20°C to +55°C (-4°F to 131°F)
Storage temperature	-20°C to +60°C (-4°F to 140°F)
Maximum humidity	95% non-condensing
Sensitivity settings	Dual stage potentiometer
Tri-color LED indicator	Orange: Over-sensitive Green: Alarm & correct calibration Red: Under-sensitive
Relay contact ratings:	
Alarm relay	100mA at 24VDC, NC, Opto relay
Tamper relay	500mA at 24VDC, NC
Time relay open in alarm	2.5 seconds
Latching modes	
Max. # of units on Any Latch loop	80
Max. # of units on First to Latch loop	10
False alarm protection	Digital microprocessor signal processing and noise reduction circuits with max. ground plane
Electrostatic discharge	No false alarms up to 8kV
RF immunity	According to EN 50130-4
Enclosure material	Flame retardant ABS
Enclosure dimensions	25x28x95mm - detector

TERMINAL WIRING

-12V+	12V power connection, reverse polarity protected
ALARM	NC Alarm output contact
LED	Connection for +12V remote latch control signal
TAMPER	NC Anti-Tamper and Anti-Magnet contact

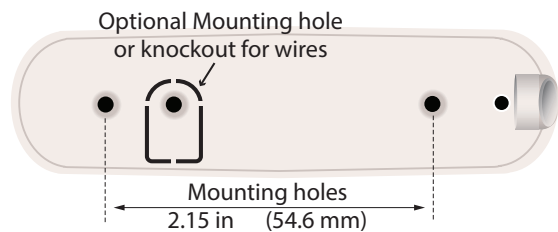
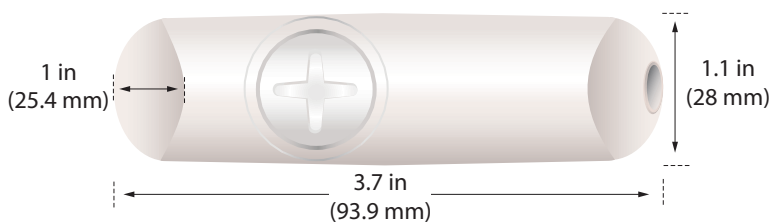


MULTIPLE UNIT CONNECTION PROCEDURE DIAGRAM



Please refer to Installation Instructions for complete directions and specifications.

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