

SesMo™ Seismic Sensor

INSTALLATION INSTRUCTIONS

Item: 4772 (A5DS)

Description

SesMo is a combined seismic detector used to protect bank and media safes, strong rooms, automatic ticket machines (ATM), vending machines, walls, telephones post and cash dispensers. The SesMo react to all types of attack tools known today: Oxygen lances, steel and diamond bit drills, hydraulic pressing tools and explosives. The SesMo integrates three technologies for an efficient detection: Seismic (Bimorph sensor), light and heat (Oxygen lances effect). The seismic sensor covers approximately 15 meters/square (depends on the protected surface). Ordering: SesMo PRO; Housed in metal box, complies with EN-50131 Grade 4, refer to large installation manual. **HEAT_33**: Remote heat sensor housed in Aluminium case.

Installation Instructions

Step One: Location

Open the upper cover by removing the screw. Locate the SesMo in a hard to access location, far from light, heat and vibration. Use two (2) screws to attach the SesMo housing to a **solid surface**. Attaching the SesMo to soft surface or wall will cause false alarms.

Step Two: Wiring

1. Supply 12V DC Power.
2. Connect the relay (N.C. and C) terminals to a zone programmed as 24H or Day zone.
3. Wire the Tamper (the Tamper protects the box opening) from 'TMP' terminals to a Tamper zone in the control panel. It's recommended to add door opening detector for safe/protected object door.

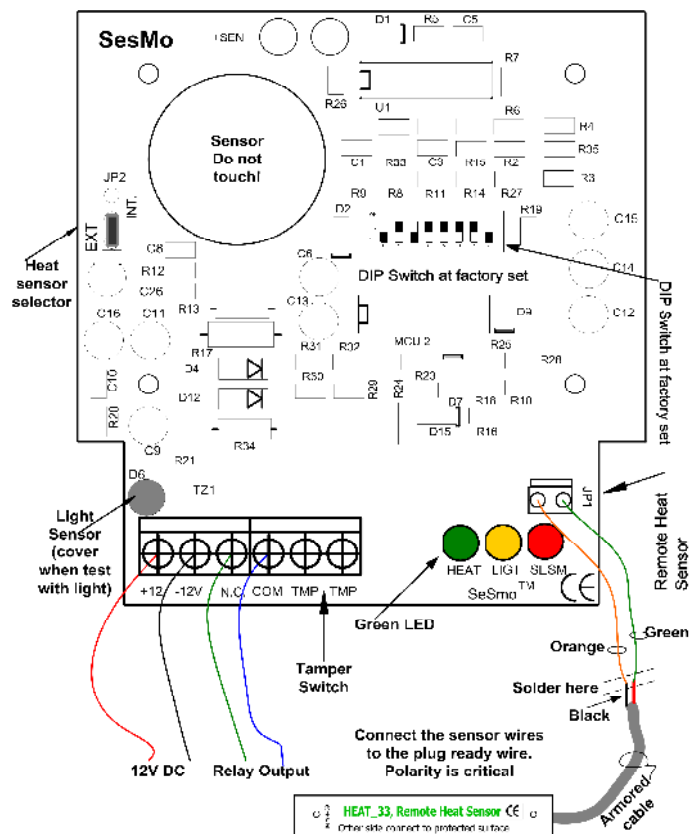


Figure 1: SesMo wiring diagram and indicators

Step Three: Adjusting and setting

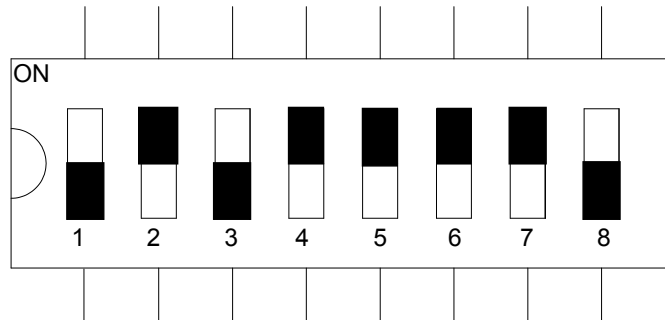


Figure 2: Switches array shown at factory default settings

The SesMo contains an internal heat sensor, with an option to connect HEAT_33 external heat sensor, to select one of them use JP2 jumper, refer to figure 1.

The switches array contains the SesMo sensitivity and function setting as detailed below. The description refers to the switch at ON state:

- | | |
|--|---|
| SW 1 – High sens. Seismic detection | SW 5 – Light sensor enabled |
| SW 2 – Medium sens. Seismic detection | SW 6 – Two pulses count to all sensors |
| SW 3 – Heat sensor high sensitivity | SW 7 – Enable seismic sensor |
| SW 4 – Heat sensor enabled | SW 8 – Three pulses count to all sensors |

Note: Lowest Seismic detection sensitivity when SW 1 and SW2 are at OFF.

If SW1 is ON, SW2 is not effective. SW6 and SW8 at ON sets pulse count to five. Note 2: Even if the sensor was disabled (via switch) the sensor LED is still active.

Step Four: Testing

Close the SesMo box, cover the light sensor and don't touch the SesMo box and surface mounted onto. Power-up, during first 1-2 seconds the self-test keep the three indication LEDs on, verify that the three LEDs are off during 60 seconds.

Generate alarm condition for each sensing criteria: Seismic, Light and Heat. Cover the light sensor for total dark. Keep it covered. For the seismic sensor test use a 200-grams hammer, knock once on the protected outside housing or barrier, if the Red LED alarmed, reduce sensitivity (pulse count and sensitivity). For heat source use a 500W fan during 1 minute, directed on the SesMo box, from a distance of approximately 0.5 meter – verify that the alarm is on. Light: Expose to day light for 2 seconds and verify alarm.

Alarm is triggered **if one** of the three sensors has been activated.

SesMo Specifications	
Operating Temp: -25 to +70 C°	Relay: N.C. Mode, 50 mA @ 12V
Humidity: 80%. MTBF=100,000	Tamper: 500 mA @ 24V
DC Input: 11 to 14V DC	Seismic: Bimorph (none mech. sensor)
Current: 25 mA @ standby, 50 mA alarm	Heat sensor: Semiconductor (min. 65°C)
Detection: Seismic, heat, light	Light sensor: Opto Cell (min. 20 Lux)
Indications: Three colored LEDs	Size: W=90, L=85, H=50 mm