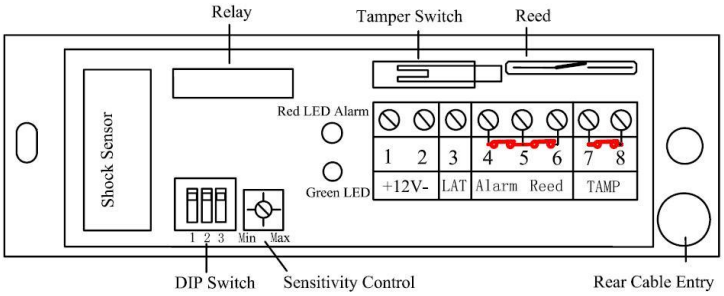
Guardoff® Shock Detector - WSD02A

Main features

1. Mass inertial shock sensor – highly reliable over all building materials
2. Gold plated contacts – highly resistant to corrosion
3. Suitable for both horizontal and vertical mounting
4. Wide range of sensitivity control
5. Pulse counting
6. Non latching (momentary) or latching option
7. Dual LEDs indicting power and alarm
8. Independent relay output; NC fail safe operation
9. The relay is protected by metal cover – more resilient to magnetic interference
10. Built in reed switch & tamper
11. Moisture repelling rubber grommet is included



Terminals

1&2 12V power; reverse polarity protected
3 Latching: +12V applied to reset
4&5 Shock alarm: NC; opens when alarm occurs
5 Common between shock alarm and reed switch output
5&6 Reed switch: NC; opens when door is open
7&8 Tamper: NC; opens when cover is removed

Mode of Operation

- Non–latching: Latching terminal unconnected. Upon alarm activation, the relay will open circuit and red LED will illuminate momentarily for a minimum time of 1 second before automatically resetting.
- Latching: The LED can be inhibited by +12V applied to latching terminal. The latter requires latching terminal to be connected.

In all modes the relay contact is always NOT latched.

DIP Switch Setting

	1 Pulse Count	2 Latching	3 Power LED
On	One	Non	On
Off	Two	Latching	Off

LED Indication

Green LED = Power indication only when DIP3 is set to ON
Red LED = Shock alarm

Installation and Testing

1. Make sure the mounting surface is clean and flat.
2. If side cable entry is being used, remove the knockout from the cover, and replace it with the rubber grommet provided.
3. Fix the base in position using the screws provided. Ensure the base is in complete contact with the mounting surface.
4. Power the unit and go to Testing.
   a) Select pulse one or two via DIP Switch Setting.
   b) Band or tap the protected area, observing red LED response.
   c)Adjust sensitivity.
   d) Repeat the process until it only responses to the desired impact.
5. Magnet must be aligned with the built-in reed switch.

Specifications

Power	9-16VDC
Current	Standby 15mA; Alarm 10mA
Operating temp	-10 to +55°C
Relay rating	500mA 100V; 10 Ohm in series
LED indication	Red=Alarm; Green=Power
Pulse counting	One or two
Reed switch gap	28mm
Dimension	100 x 29 x 24mm

Detection coverage

Surface	Brick	Steel	Wood	Concrete
Radius, m	2.5	3.0	3.5	1.5

Surface	Plywood	Gyproc	Glass	
Radius, m	4.0	2.5	3.5	

The above values are subject to testing which must be made for each installation.