Product Description

SS-10X/SS-10 are shock sensors designed specifically for applications such as ATM machine in banking sector,glass/window protection,warehouse protection etc...

SS-10X is a shock sensor incorporated with our proprietary piezo shock sensor ,whereas SS-10 is a dual technology shock sensor incorporated with our proprietary piezo shock sensor and Gyros detector that not just detects shocks but also detects tilting of objects that is under protection.

Sensitivity can be adjusted through dip switch setting(ex-factory:low sensitivity, dip switch to "Off" position)and fine tuning through trim pot (ex-factory : minimum,or MIN).

Alarm output is through N.C. dry contact relay,alarm indication through a dual color LED,the LED alarm indication can be momentarily in Red or flashing in Red and blue when set to Alarm memory.

Alarm memory can be reset directly from the device or remotely through a remote reset switch connected to terminal #1.

LED indications: Dual color Red and Blue LED

Operating Mode:
Red LED indicates alarm status. Blue only LED indicates shocks detected but the shock is not strong enough to trigger alarm output. Flashing Red and Blue LED indicates alarm memory.
Relay output is N.C. (normal closed), open for 3 seconds on alarm.

Alarm Memory Setting and Operation:
When the Alarm memory switch (dip switch 4) is set to ON,LED flashes in red and blue until it is being reset when alarm is triggered. A total of up to a maximum of 10 devices can be connected in parallel (see drawing 1).

When the Alarm memory switch(dip switch 4) is set to OFF, LED flashes once only in Red.

Manual reset of Alarm memory:
Terminal# 1 is not connected,open the cover of the device, switch alarm memory switch (dip switch 4)from ON to OFF and then back to ON to manually reset the alarm memory.
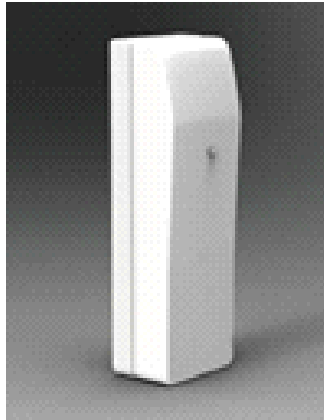
Remote reset of Alarm memory:
Terminal#1 is connected as per drawing 1 or drawing 2,close the switch to reset the alarm memory, open the switch to resume alarm memory.

Warning:
If the remote reset switch remains in the "close" position after resetting the alarm memory, the LED will lit in steady Red instead of flashes red and blue when the alarm is triggered.

Detection range :

	Brick	Steel	Wooden	Concrete	Composite	Drywall	Glass
Radius	2.5M	3M	3.5M	1.5M	4M	2.5M	3.5M

(For model SS-10 only)	Low Sensitivity	High Sensitivity
Tilting Angel	10°	5°

Note: The above are typical detection range and are for references only, a testing after installation is necessary to confirm the actual detection range.

Specification

Operating supply voltage:9-16 VDC

Housing material:ABS

Standby current: Maximum 5-6 mA

Dimension:91.95mm x 29.95mm x 25mm

Operating current: Maximum 12-16 mA

Operating temperature:-20 - 60 degree C

Alarm output: Dry contact relay, 150 mA, 24V,10 Ohm,1/4 Watt.

Relative humidity:10-90% RH
EMI:compliance to EN50132-1

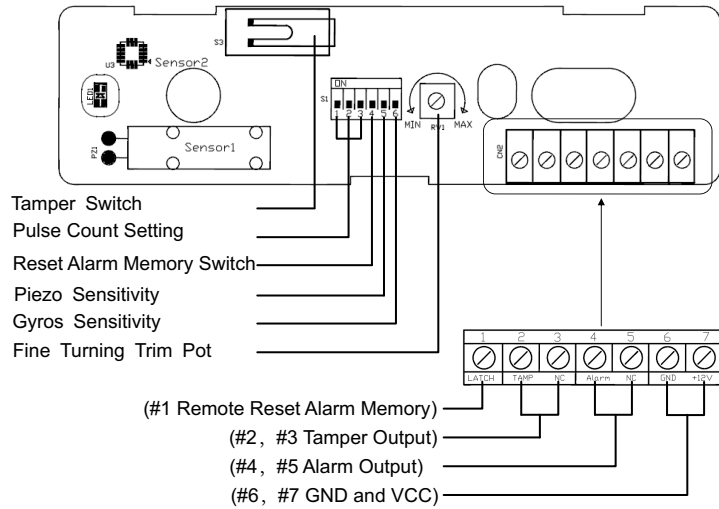**Alarm duration:**3 seconds

Approval:GB/T 10408.8-2008

Pulse count setting for SS-10:

Pulses	Dip SW1	Dip SW2	Dip SW3
1	OFF	OFF	OFF
3	ON	OFF	OFF
4	OFF	ON	OFF
6	OFF	OFF	ON

Pulse count setting for SS-10X:

Pulses	Dip SW1	Dip SW2
1	OFF	OFF
2	ON	OFF
4	OFF	ON
6	ON	ON

Wiring diagram for SS-10:

Tamper Switch
Pulse Count Setting
Reset Alarm Memory Switch
Piezo Sensitivity
Gyros Sensitivity
Fine Turning Trim Pot

(#1 Remote Reset Alarm Memory)
(#2, #3 Tamper Output)
(#4, #5 Alarm Output)
(#6, #7 GND and VCC)

Wiring diagram for SS-10X:

Tamper Switch
Pulse Count Setting
ATM Mode
Reset Alarm Memory Switch
Piezo Sensitivity

Fine Turning Trim Pot

(#1 Remote Reset Alarm Memory)
(#2, #3 Tamper Output)
(#4, #5 Alarm Output)
(#6, #7 GND and VCC)
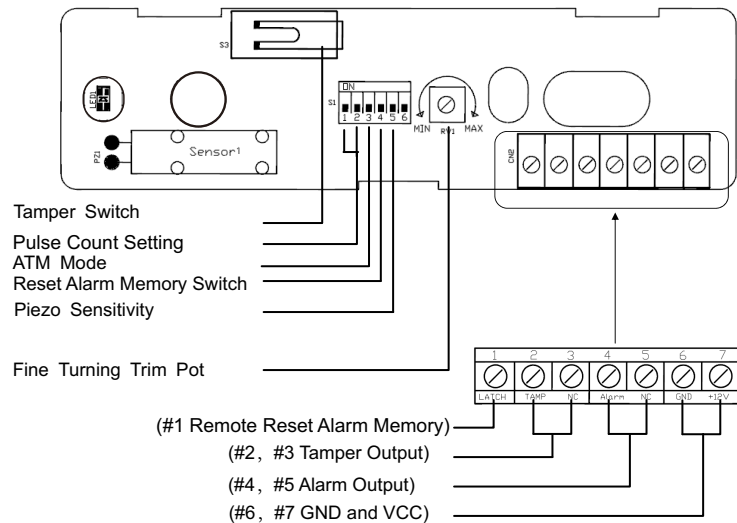
ATM mode setting (SS-10X only):For ATM application, set dip switch 3 to "ON".
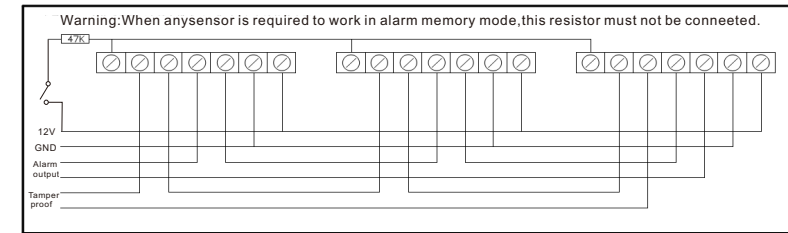
Wiring diagram for Alarm memory:
Terminal #1 is not connected when alarm memory is not needed.
Please refer Diagram 1 below for wiring when each device is to have the memory independently.

12V
GND
Alarm output
Tamper proof
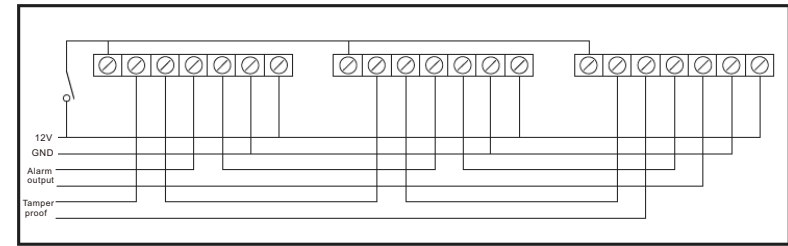
Drawing 1

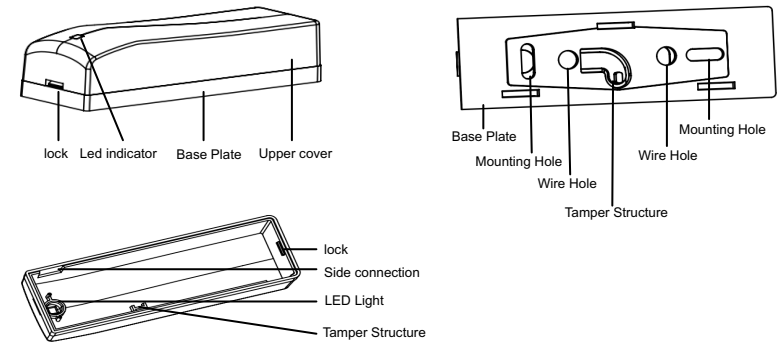## Wiring diagram for Alarm memory only on first to detect:
Only the first triggered device has alarm memory and flashes in Red and Blue, all other devices activated will lit in steady Red. In this mode, the remote reset switch should be in "close" position.

Warning:When anysensor is required to work in alarm memory mode,this resistor must not be conneeted.
47K
12V
GND
Alarm output
Tamper proof

Drawing 2

Note: To reset alarm memory of the first triggered device , Open the remote reset switch to reset the memory , then, Close the remote reset switch for the devices to return to Alarm memory mode.

Production:

lock   Led indicator   Base Plate   Upper cover

Base Plate
Mounting Hole
Wire Hole
Tamper Structure
Mounting Hole
Wire Hole

lock
Side connection
LED Light
Tamper Structure

Installation Procedure:
1. The mounting surface should be flat in order for the tamper switch to work properly.
2. Remove the PCBA from the device before mounting the base plate.
3. Place the PCBA back to the base plate after the installation.
4. Replace the top cover.