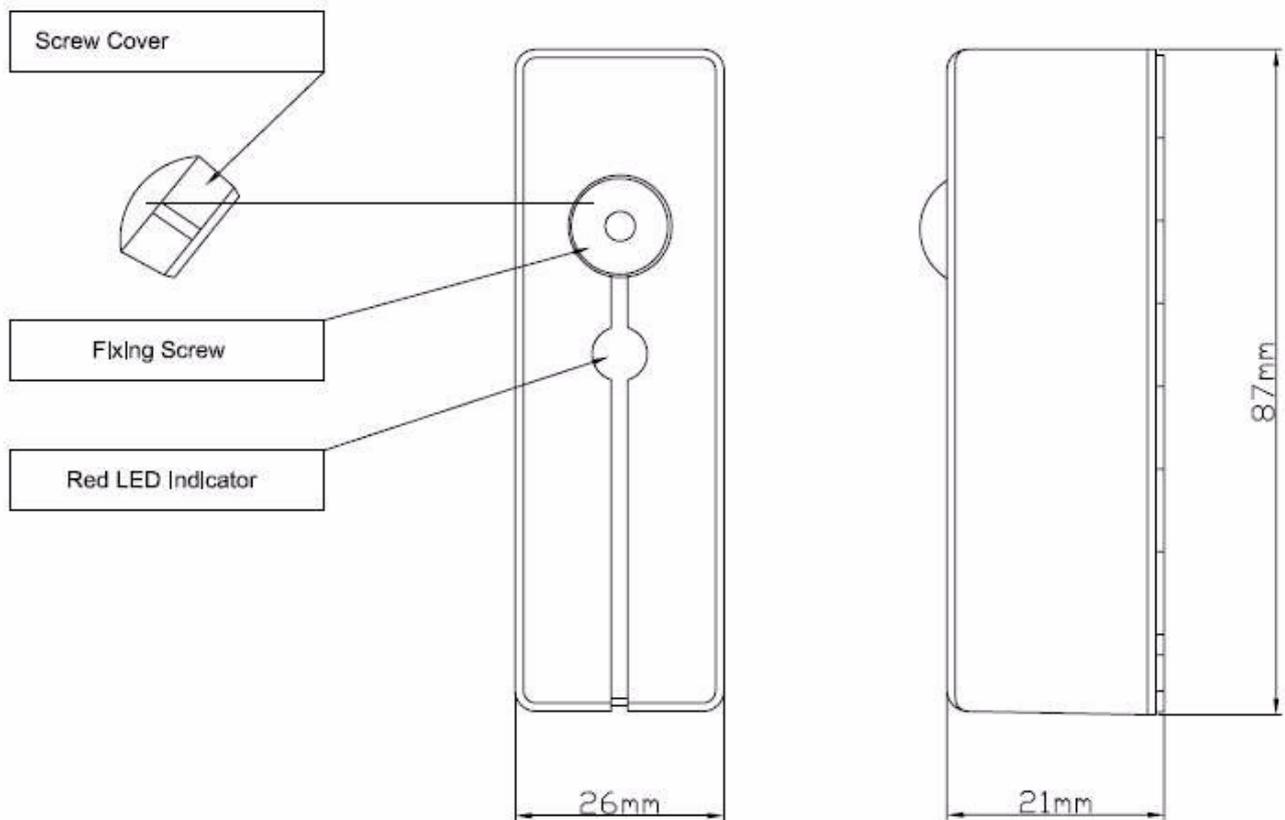


## IMPACTOR

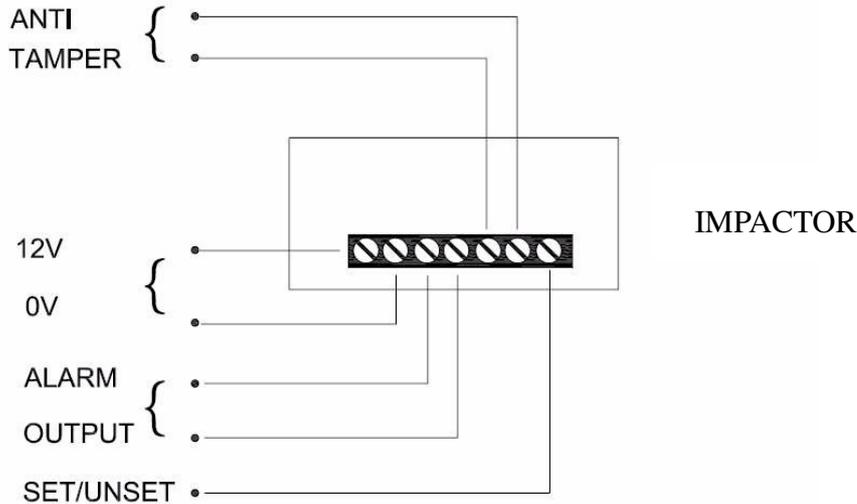
## AA11 - A SMART SHOCK SENSOR

### Features of IMPACTOR™ A smart Shock Sensor

- Normal latching and non-latching setting.
- Wide dynamic range of sensitivity with High/Low sensitivity settings.
- Pulse count options, one or two pulses.
- Power on reset.
- Six or seven wire connection.  
Six wires: 2 power, 2 anti-tamper, 2 alarm condition.  
Optional Res : Set/Unset - used for latching.
- Fast and easy installation.
- Dimensions: 21 x 26 x 87 mm.
- Indication via LED



## Connection Diagram :

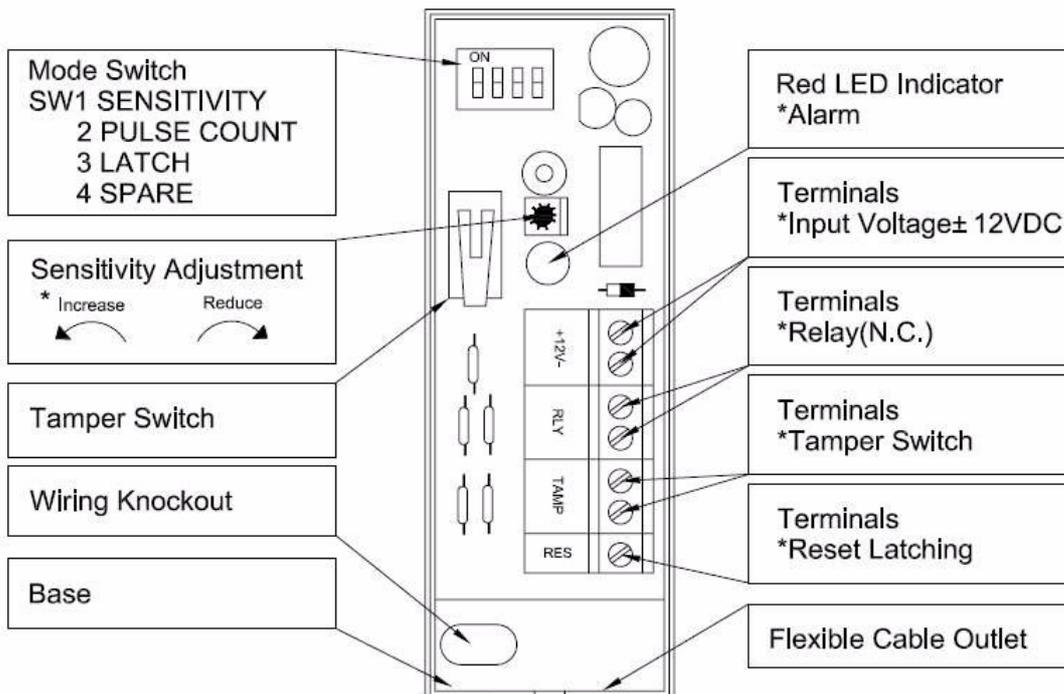


## CONNECTION DETAILS

### Terminals

- + -** 12V Power Connection, reverse polarity protected.
- RLY** N.C. opens when alarm occurs.
- RES** Latching connection. Connect it to + Ve SET (12V) terminal of the alarm system.
- TAMP** N.C. anti-tamper switch, opens when cover is removed.

\*Note that connecting RES is optional.



**CALIBRATION MODE**

1. Install IMPACTOR™ according to Installation instructions.
2. Power on IMPACTOR™
3. Choose sensitivity level before calibrating.
4. Make sure switches 2 and 3 are ON.
5. Tap the coverage area and watch the LED. If detection occurred the LED will light
6. To reduce sensitivity so that detection will appear only on a stronger impact, turn Adjustment clockwise.
7. To increase sensitivity so that detection will appear on a lighter impact, turn Adjustment anti-clockwise.
8. Set switches according to the mode of operation that you choose.

**MODES OF OPERATION**

Switch 1	Sensitivity Switch
OFF	Low Sensitivity
ON	High Sensitivity

Switch 2	Pulse Count
OFF	Dual Pulse Count
ON	Single Pulse Count

Switch 3	Latching Switch
OFF	Latch Mode
ON	Normal Mode

Switch 4	Spare Switch
OFF	Spare
ON	Spare

- Use low sensitivity in a noisy environment - near roads, airports, factories, etc.
- Use high sensitivity in a quiet environment when you need a large coverage area.

Do not calibrate unit and then change sensitivity.

To change sensitivity you must recalibrate the unit.

All LED alarm indications will clear upon setting the alarm.

**INSTALLATION INSTRUCTIONS**

1. Select the intended position for installation, ensuring the surface is clean and clear of any irregularities.
2. Remove the cover of the sensor by removing the screw cap, unscrewing the single fixing screw then lift off the front cover.
3. Carefully lift the printed circuit board from the base.
4. Move the base plate to the mounting position and mark the desired fixing holes.
5. If rear cable entry is required, cables should be threaded through the rear of the base.
6. Fix the base in position using screws, (some hard surfaces may require pilot drilling).  
Ensure the base is in complete contact with the mounting surface.
7. Carefully push the printed circuit board onto the base.
8. Terminate the connections to sensor.
9. If side cable entry is being used, remove the appropriate knockout from the cover.
10. Go to the calibration section and apply power to the sensor.
11. After the unit is calibrated to your satisfaction, replace the cover of the sensor, tighten the fixit screw and check its response to the desired impact.

<b>Technical data</b>	
<b>Supply Voltage</b>	<b>9V - 16V DC</b>
<b>Current – normal mode</b>	<b>15mA @ 12V dc</b>
<b>- alarm</b>	<b>18mA @ 12V dc</b>
<b>Temperature limit</b>	<b>-10°C to +55°C</b>
<b>Relative humidity at 30°C</b>	<b>0 - 90%</b>
<b>Dimensions (mm)</b>	<b>21 x 26 x 87 mm</b>
<b>Indicator</b>	<b>Red LED</b>
<b>Sensitivity settings</b>	<b>High /Low sensitivity options</b>
<b>Latching modes</b>	<b>Non latch/latch modes</b>
<b>Pulse count</b>	<b>Selectable one or two pulses</b>
<b>Relay contact resistance</b>	<b>150mA 24V Resistive: 10 <math>\Omega</math> 1/10 Watt</b>
<b>Relay open time</b>	<b>At least one second</b>
<b>Coverage</b>	
<b>Surface</b>	<b>Radius</b>
<b>Brick Wall</b>	<b>2.5m</b>
<b>Steel</b>	<b>3.0m</b>
<b>Wood</b>	<b>3.5m</b>
<b>Concrete</b>	<b>1.5m</b>
<b>Plywood</b>	<b>4.0m</b>
<b>Glass</b>	<b>3.5m</b>

**Due to our policy of continuous improvement we reserve the right to change specification without prior notice.**

**Errors and omissions accepted. These instructions have been carefully checked prior to publication. However, no responsibility can be accepted by Challenger Security Products for any misinterpretation of these instructions.**

CHALLENGER SECURITY PRODUCTS

10 Sandersons Way

Marlon

Blackpool

FY4 4NB

Tel No: 0044 1253 791 888

Tech No: 0044 1253 792 898

Website: [www.challenger.co.uk](http://www.challenger.co.uk)

Email: [enquiries.challenger@adivision.co.uk](mailto:enquiries.challenger@adivision.co.uk)

