

**SCORPION**®  
AUTOMOTIVE

## **Installation Guide**

# SIGS39

## Contents

<b>1.0 - ALARM POSITIONING</b>	<b>PAGE 3</b>
<b>2.0 - ACCESSORIES POSITIONING</b>	<b>PAGE 4</b>
<b>2.1 - Override key receptacle</b>	<b>PAGE 4</b>
<b>2.2 - Contact switch (Thatcham Requirement)</b>	<b>PAGE 4</b>
<b>2.3 - Infra-Red Sensor</b>	<b>PAGE 4</b>
<b>3.0 - ALARM UNIT SEALING</b>	<b>PAGE 5</b>
<b>4.0 – ALARM POSITIONG FOR MAXIMUM SENSITIVITY</b>	<b>PAGE 6</b>
<b>5.0 - ELECTRICAL CONNECTIONS</b>	<b>PAGE 8</b>
<b>6.0 - WIRING DIAGRAM AND PINOUT</b>	<b>PAGE 9</b>
<b>7.0 - PAIRING NEW DEVICES</b>	<b>PAGE 10</b>
<b>7.1- With GREEN/BROWN wire ground connection</b>	<b>PAGE 10</b>
<b>7.2 - Without GREEN/BROWN wire ground connection</b>	<b>PAGE 11</b>
<b>8.0 - PROGRAMMABLE FEATURES</b>	<b>PAGE 12</b>
<b>9.0 - PROGRAMMING EXAMPLE</b>	<b>PAGE 13</b>
<b>10.0 - REMOTE CONTROL</b>	<b>PAGE 14</b>
<b>11.0 - WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT</b>	<b>PAGE 15</b>
<b>12.0 - TECHNICAL SPECIFICATIONS</b>	<b>PAGE 15</b>

## 1.0 – Alarm Positioning

For maximum security the alarm should be mounted inside the caravan.

To ensure maximum sound volume in the event of an alarm trigger it is recommended that the alarm is mounted close to an external air vent, if this is not possible it may be necessary to install an air vent.

**Note:** should the alarm be mounted in an area rain may enter, please ensure that the alarm is mounted as in the image below.



Do not install the alarm unit in this position as water ingress over time may seep through the rubber sheath and permanently damage the electronic circuit making the alarm system unreliable. Eventual malfunctioning due to water infiltration is not covered by warranty.



- Install the alarm as shown in the picture opposite to prevent water from entering.
- Give the rubber sheath a 'goose neck' bending as shown and secure with a cable tie.
- Install the alarm away from moving mechanical parts, electric or electronic components that could generate high frequency electromagnetic disturbances and away from devices that could reach high temperatures when in use.

### **Warning**

If a jet wash is used to clean the vehicle, protect the alarm unit from water splashes and be careful not to expose it to high pressure jets.

The warranty will not cover damages to the system due to water infiltrations caused by improper installation, improper jet washing or the use of non-original accessories, not approved by the manufacturer.

## 2.0 - Accessories Positioning

### 2.1 – Override key receptacle

The receptacle may be mounted inside or outside the caravan it should be mounted where it can readily be seen and accessed by the user. Before drilling a 13mm hole for the receptacle, check the receptacle will not be covered and that the user can easily operate the touch key.

### 2.2 – Contact Switch

For maximum security it is recommended that contact switches are fitted onto the main habitation door plus any locker doors, be careful the switches do not foul the operation of the doors or fly screens. The switches may be of the wired or wireless type.

**NB:** If a wired switch is not fitted, the GREEN/BROWN wire should be insulated but remain free for other possible uses such as programming the alarm or learning new devices.

### 2.3 – Infra-Red Sensor

Additional interior security may be obtained by installing a PIR sensor, Scorpion offer a wireless PIR sensor (SIG909) should be mounted onto the ceiling of the caravan and has a detection range of approximately 8M (diameter) when mounted at a ceiling height between 2 - 2.5M.

To avoid false alarms do not install the sensor in direct sunlight or directly above heat/air vents and where pets have access and can trigger it.

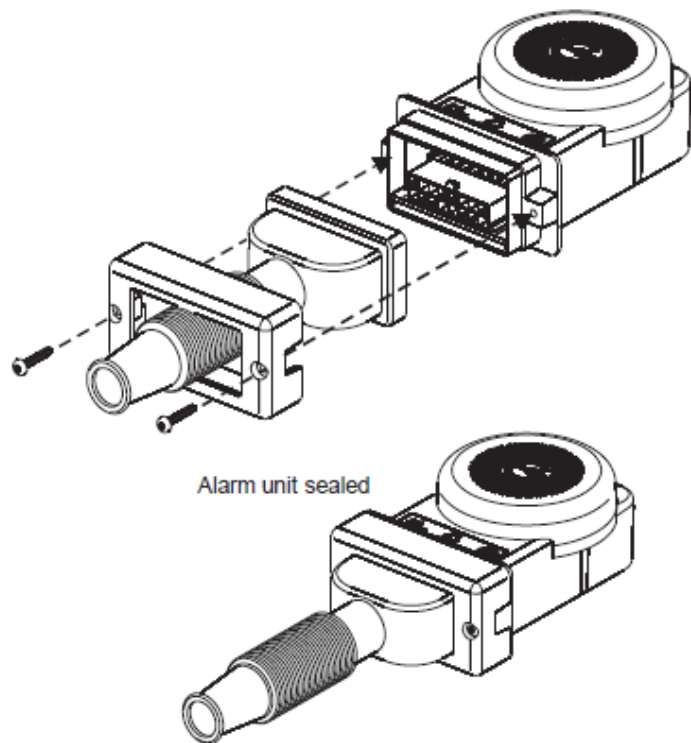
### 3.0 - Alarm Unit Sealing

The alarm unit will be supplied with the rubber seal and plastic rectangular flange already fixed in place, the following is for informational purposes should the unit need to be disassembled and reassembled.

To seal the alarm, position the rubber cap over the external edge of the alarm housing.

Pull the plastic rectangular flange over the rubber cap and secure with the supplied screws.

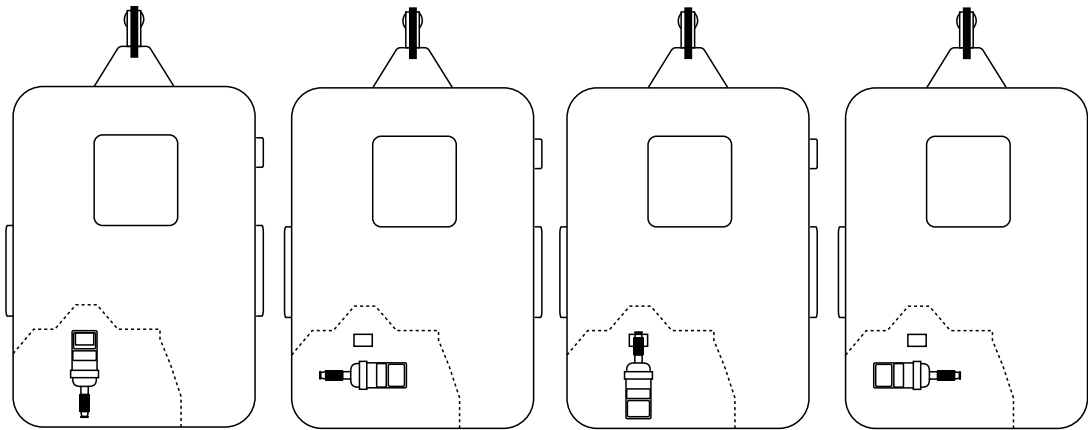
Do not over tighten.



## 4.0 - Alarm Positioning for Maximum Sensitivity

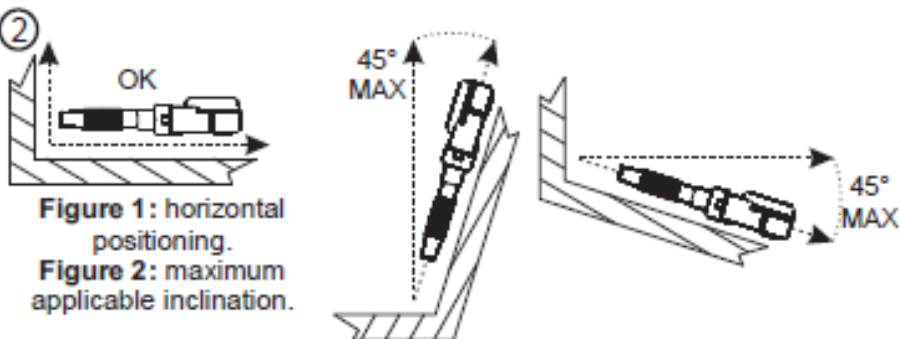
To ensure the correct operation of the built-in motion sensor install the alarm flat as illustrated below, this will allow coverage on all directions. The siren may be mounted with the siren cone facing upward or downward.

①



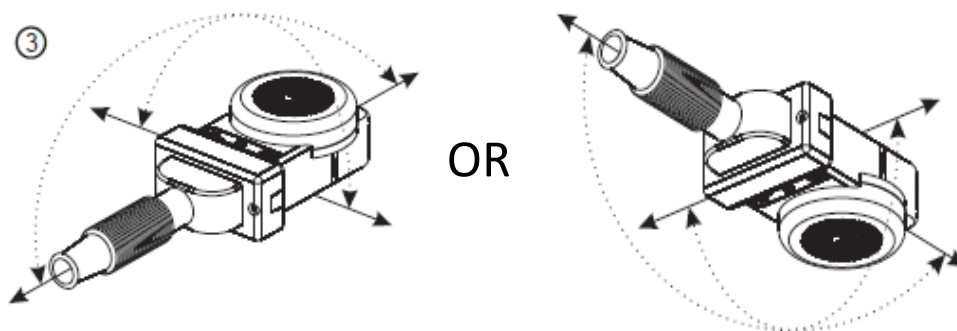
The alarm location in the image above is for illustration only, the alarm can be mounted at the front, side or centre of the caravan.

②



**Figure 1:** horizontal positioning.  
**Figure 2:** maximum applicable inclination.

③



OR

Figure 3: motion sensor operation with alarm fitted horizontally, siren facing up or down.

The sensor will detect any movement of the motorcycle in any direction.

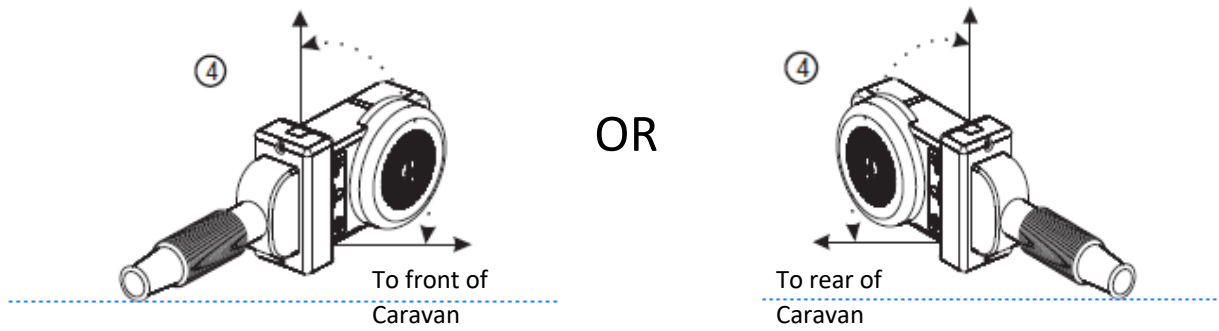


Figure 4: motion sensor operation with siren facing sideways.

The alarm will only detect in the direction as indicated by the arrow in the drawing above. In order for alarm to correctly detect a change of inclination the siren cone should either point towards the front of the vehicle or towards the rear of the vehicle.

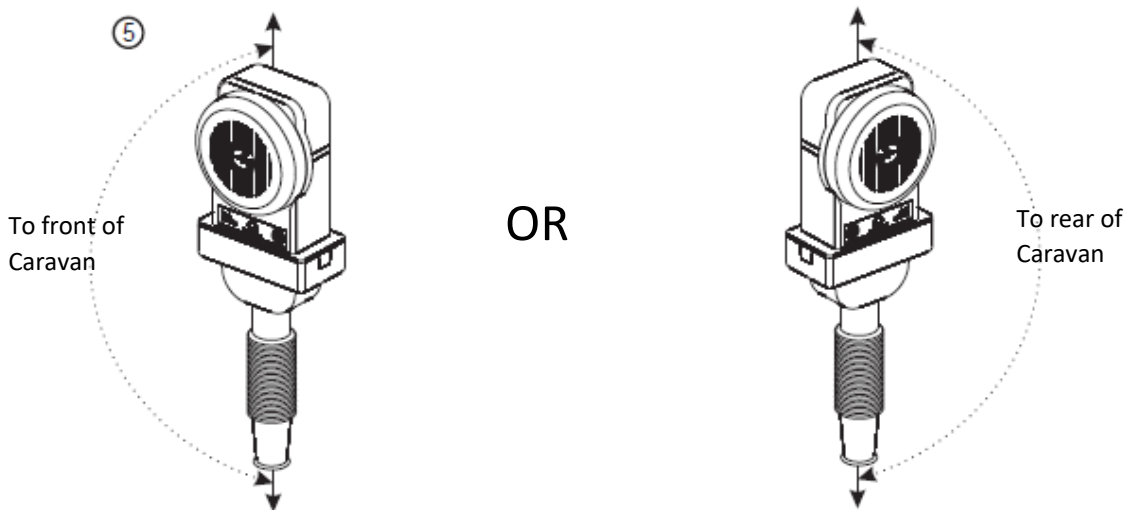


Figure 5: motion sensor operation with alarm fitted vertically.

If fitted in an area that the alarm may be subjected to water, the wire rubber sheath must be turned downwards to prevent water from entering the unit.

**NOTE:** Prior to fitting, test the operation of the sensor to confirm it will work in the intended position.

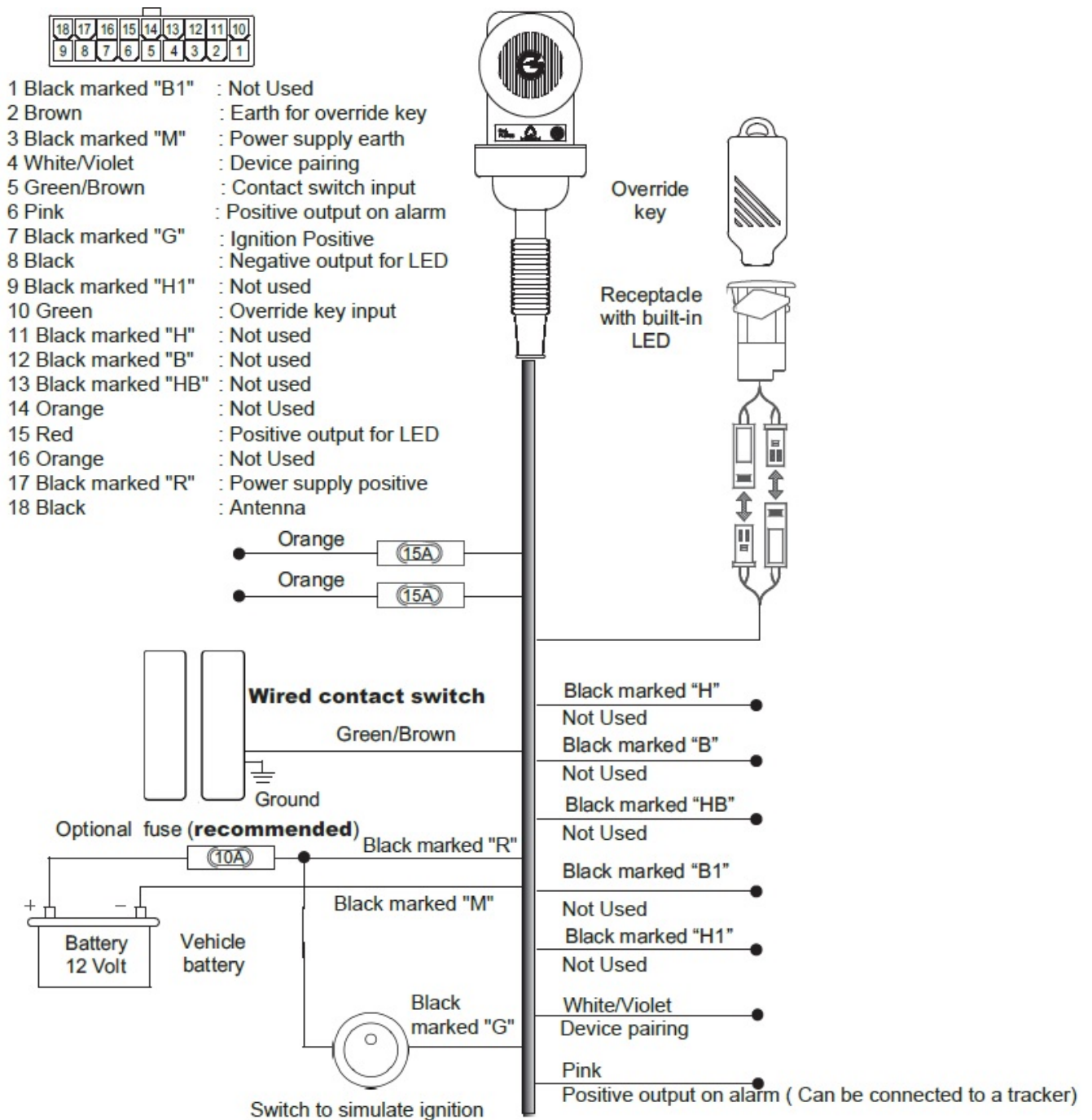
## 5.0 - ELECTRICAL CONNECTIONS

<b>WIRE COLOUR</b>	<b>CONNECTION</b>
Black marked "M"	Connect to negative
Black marked "R"	Connect to positive
Orange	Not Used
Orange	Not Used
Black marked "G"	+15 Ignition
Green/Brown	Connect to contact switch or insulate
Pink	Positive output on alarm trigger
White/Violet	Device pairing
Black with Red sleeve	Antenna

<b>WIRE COLOUR</b>	<b>CONNECTION</b>
Black marked "B"	Not Used
Black marked "H"	Not Used
Black marked "HB"	Not Used
Black marked "H1"	Not Used
Black marked "B1"	Not Used



## 6.0 - WIRING DIAGRAM AND PINOUT



## 7.0 - PAIRING NEW DEVICES

### 7.1 - With GREEN/BROWN wire ground connection

The alarm is supplied with 2 remote controls and 1 override key but other optional devices can be added.

**CAUTION**

**Alarm memory will only store 8 devices.  
Saving an extra device will automatically delete the first one.**

To pair a new device, proceed as follows:

- Arm and then disarm the alarm via remote control or override key.
- Within 20 seconds of disarming the alarm ground the GREEN/BROWN wire.
- Connect the WHITE-VIOLET wire to ground.
- Press the ignition simulation switch to ON.
- A Beep and a Bop will confirm the system is in learn mode.
- Remove the WHITE-VIOLET wire from ground.
- Depending on which device is to be paired either press one of the remote-control buttons OR touch the override key to its receptacle OR make the magnetic contact transmit (bring contact and magnet together and then move apart) OR press the button on the opening detector, make the infrared sensor or wireless hyper-frequency sensor transmit (refer to sensor instructions).
- A Beep will confirm the operation has been completed successfully.
- To pair another device, ground the WHITE-VIOLET wire for 1 sec.
- To exit learn mode, press the ignition simulation switch to OFF.
- A Bop will confirm the end of the procedure. Remove the GREEN/BROWN wire from ground.

## 7.2 - Without GREEN/BROWN wire ground connection


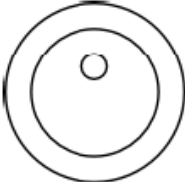


To pair a new device, proceed as follows:

- Arm and then disarm the alarm via remote control or override key.
- Press the ignition simulation switch to ON.
- The status LED will turn ON for 1 sec.
- While the LED is ON, simultaneously press both buttons on the remote control or touch the override key to its receptacle.
- A Beep and a Bop will confirm the system is in learn mode. Depending on which device is to be paired either press one of the remote-control buttons OR touch the override key to its receptacle OR make the magnetic contact transmit (bring contact and magnet together and then move apart) OR press the button on the opening detector, make the infrared sensor or wireless hyper-frequency sensor transmit (refer to sensor instructions).
- If another device needs to be paired, wait 2 sec. before doing so.
- To exit learn mode, press the ignition simulation switch to OFF.
- A Bop will confirm the end of the procedure.

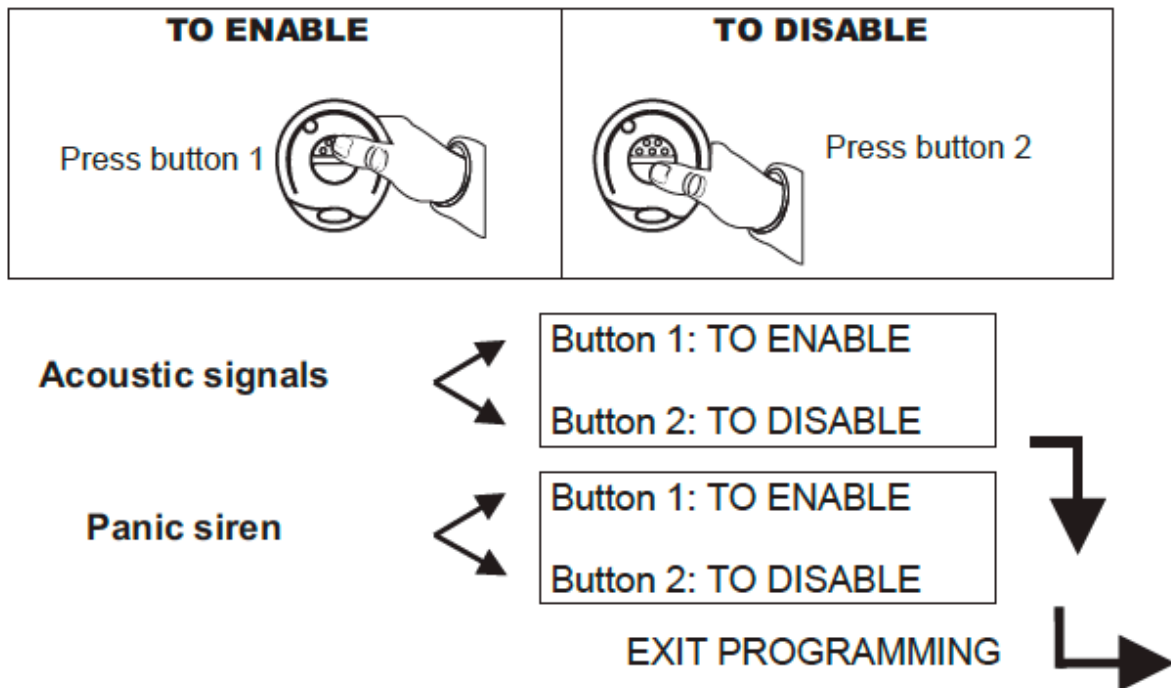
## 8.0 - PROGRAMMABLE FEATURES

To either enable or disable one of the programmable features proceed as indicated hereafter.

NB: Remember to ALWAYS arm and disarm the alarm before programming.

<p>1</p>	<p>With the alarm disarmed, ground the brown/green wire.</p> <p>Green/Brown Wire</p> 
<p>2</p>	 <p>Press the ignition simulation switch to ON..</p>
<p>3</p>	 <p>The LED will light up for approx. 1 sec.</p>
<p>4</p>	 <p><b><u>While the LED is ON</u></b> simultaneously press the 2 buttons on the remote control. A Beep and a Bop will confirm the system is in programming mode. The LED will light up steady.</p>

After pressing both buttons simultaneously (step 4), program the features according to your needs.



## 9.0 - PROGRAMMING EXAMPLE

To help you understand the programming procedure, here below is an example showing how to enable both features.

Keep in mind that, at every button press, the system automatically scrolls to the next feature.

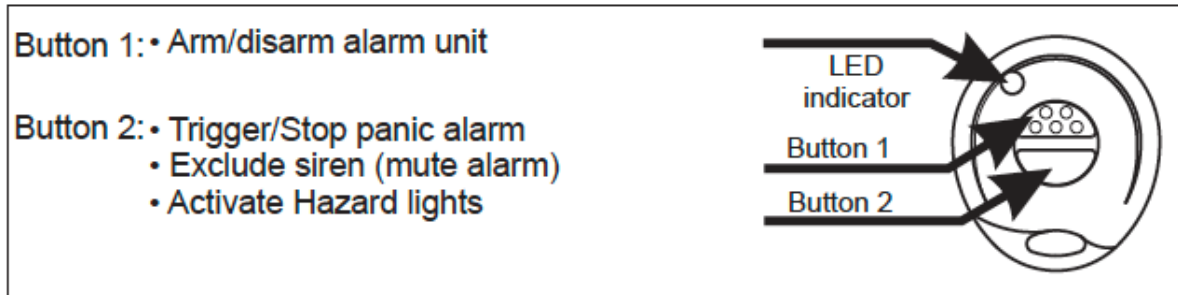
- With the alarm disarmed, ground the green/brown wire.
- Press the ignition simulation switch to ON.; the LED will light up for 1 second.
- While the LED is ON, simultaneously press the 2 buttons on the remote control. Two Beeps will confirm that the system is in programming mode. The LED will turn ON steady.
- Press remote control button 1, a Beep will confirm that acoustic signals have been enabled.
- Press button 1 again, a Beep will confirm that the panic siren has been enabled.
- When the last feature is programmed, the system automatically exits the programming mode. Three will confirm the end of the procedure. The status LED will also turn OFF.
- Press the ignition simulation switch to OFF, then remove the green/brown wire from ground.

NB: You can exit programming at any time by pressing the simulated ignition switch to OFF. Programmed features will automatically be saved whilst the others will remain unsaved.

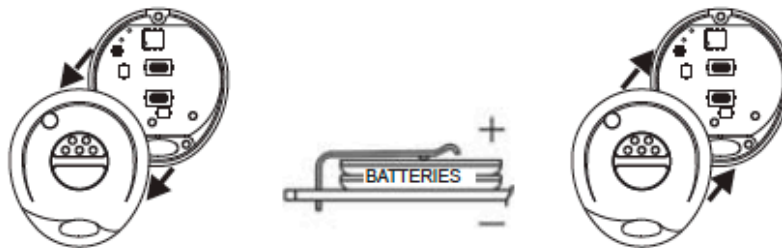
## 10.0 - REMOTE CONTROL

The remote control has 2 different function buttons each of which corresponds to a control signal that activates a selected action according to the operational condition and alarm configuration.

The textured button is for arming/disarming the alarm while the smooth button is used to exclude or trigger the siren.



The remote control has a low charge battery indicator that gives you early warning to avoid malfunctioning. When the batteries are fully charged, the LED will show a steady light at the press of a button. If the batteries are too weak for normal operation, the LED will start blinking at the press of a button. To replace the batteries proceed as follows:



Separate the shell halves taking care not to damage the internal circuit.

Remove the discharged batteries and insert the new ones taking care not to invert the polarity.

Close the plastic shells and make sure the remote works properly.

### **⚠ WARNING**

Use only CR1616 batteries.  
Different type batteries can seriously damage the remote control unit.  
Discard used batteries properly in special dedicated containers.

## 11.0 - WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT

The present device falls within the field of application of the current WEEE Directive. The crossed-out wheeled bin symbol on the equipment or on its packaging indicates that the product, at the end of its useful life, must be discarded separately from other waste to allow adequate treatment and recycling. The user must therefore take the equipment, at the end of its useful life, to an appropriate waste collection facility.



## 12.0 - TECHNICAL SPECIFICATIONS

Nominal supply voltage	12 Vdc
Load @ 12Vdc	< 1mA (alarm armed and LED flashing)
Load in sleep mode	< 1 $\mu$ A
Siren output level	118 dBA @ 1 meter
Relay capacity	8A