



# DIY ALARM

## Installation and User Guide

The Scorpion compact self-fit alarm is suitable for any 12V motorcycle, ATV or Scooter and benefits from many features that you would only normally find on one of the top of the range systems.

### Features

High Powered Siren

Waterproof Design

Class Leading Ultra Low Current Draw

Compact Alarm Unit

Simple 'Add New Remote' Feature

Simple 2 wire installation & plug-in LED

### Installation Guide:

#### Electrical Connections:

**RED:** +12V Permanent Supply, Connect via 3A inline Fuse.

**BLACK:** Negative (Ground) Supply. Connect to chassis earth or negative battery pole.

**BLUE:** Universal Trigger (optional). Connect to Switch or loop to ground

**2-Way Connector:** LED, Plug into LED

#### NOTE:

Upon connection of supply the alarm will be armed and sound off – disarm by pressing the bigger button on the remote.

The inline fuse fitted to the red wire should be concealed but be readily reached to disable the alarm in the event of losing a remote or emergency override.

# Operation

## Arming

Press the large button on the remote control the alarm will arm, a double chirp will be heard (if arm/disarm tones are activated); the LED will light constant for 3 seconds and then flash once every second for a further 10 seconds, this is called the neutral time, and is used to initialize the tilt and trigger inputs. At the end of this time, 10 seconds, the alarm is fully armed; when fully armed the LED will flash depending upon the output of the battery monitor.

Battery monitor voltage levels, and LED output will be as follows:

1. Fully charged, greater than 11.5V, LED flashes once every 5 seconds
2. Partially discharged, between 11.5V and 10.5V, LED flashes every 10 Seconds
3. Low Battery, less than 10.5V, LED flashes every 20 seconds

### Note:

1. Voltages are approximate.
2. Alarm cannot be disarmed within 3 seconds of arming.
3. If armed in Transport the LED will flash in groups of 2 flashes, indicating the movement sensor is disabled.
4. If arm in Battery Charge mode the LED will flash in groups of 3 flashes, indicating ignition detect is disabled.

## Silent Arming

Press the small button and then immediately (within 3 seconds) press the large button; the alarm will arm/disarm as normal except the chirp will be off for that one operation.

## Arming in Transport Mode

This mode allows the movement sensor to be disabled whilst keeping a level of security on the motorcycle during transportation.

When disarmed, press the large button to arm the alarm. The siren will chirp twice (if arm/disarm tones are activated), to indicate the alarm has been armed. Then within 3 seconds press the small button, the siren will chirp one extra time, three times in total, to indicate the Tilt sensor has been disabled.

**Note:** If ignition detect has been disabled by pressing both buttons after arming, then the transport mode cannot be activated.

## Arming in Battery charge mode

Some battery chargers may cause false trigger of the alarm system via the ignition sensor. If this is the case then the alarm can be armed with ignition/hotwire detect disabled.

When disarmed, press the large button to arm the alarm. The siren will chirp twice (if arm/disarm tones are activated), to indicate the alarm has been armed. Then within 3 seconds press both the buttons simultaneously, the siren will chirp extra two times, four times in total, to indicate the ignition detect has been disabled.

Note: If tilt sensor has been disabled via programming or by pressing the small button after arming then battery charger mode cannot be activated.

## **Disarming**

Press the large button on the remote control the alarm will disarm, a single chirp will be heard (if arm/disarm tones are activated) and the LED will extinguish.

If the alarm system has triggered, upon disarming of the alarm system the siren will sound one long beep and then the LED will flash and the siren will chirp indicating the trigger circuit. If the engine is cycled on then off the sequence will repeat. Arming the alarm system will erase diagnostics; also if the engine is on for more than a minute then diagnostics will be erased.

Number of flashes/chirps:

- 1 Flash/chirp: Ignition/engine trigger
- 2 Flash/chirp: Change of state trigger/ Universal trigger.
- 3 Flash/chirp: Movement trigger
- 4 Flash/chirp: Panic trigger
- 5 Flash/chirp: Power removal

Note: alarm cannot be armed within 3 seconds of disarming.

## **Silent Disarm**

Press the small button then (within 3 seconds) press the large button; the alarm will arm/disarm as normal except the chirp will be off for that one period.

## **Auto re-arm**

Auto re-arm function is disabled as default. When enabled, if the alarm is disarmed and left for 30 sec without manual arming or turning the engine on then the alarm will automatically re-arm.

## **Triggering the alarm:**

The alarm can be triggered by the following actions: Tilt trigger, Engine Start, Change of state trigger input, Panic button, Power removed and re-applied.

When triggered, the siren will sound for 29 seconds. The alarm will re-arm. If the fault is still present then the alarm will trigger again. Ignition, tilt and change of state can only trigger for maximum of 10 times. Panic will sound continuously for 29 seconds, then off for 5 seconds and repeat. Power removed will sound for one 29 seconds cycle every time the power is reapplied.

## **Panic mode**

Holding down the large button for 3 seconds will sound the siren. Press the large button once to stop the siren. Feature will operate in armed state with ignition on or off, and disarmed state with ignition off.

## **Programming mode**

To enter programming mode turn the motorcycle ignition on, disarm the alarm on then hold down both buttons on the remote control for 3 seconds; the alarm will now start to chirp (one chirp, then 2 chirps, then 3 chirps and finally 4 chirps). Select the item to be programmed by releasing the buttons after the appropriate chirp count.

Programmable items:

- 1 chirp Movement setting
- 2 chirps Arm/disarm tones
- 3 chirps Auto re-arm
- 4 chirps Reset to default
- 5 chirps Adding/Removing remote control

Once an item has been selected:

1. LED flashes and buzzer beeps to show current setting
2. To change setting press large remote button to change up or small button to change down, setting will roll round in either direction
3. To exit and save turn ignition off, or no button presses for 30 seconds, Alarm will beep long when exiting programming mode.

### **Movement setting LED flashes**

The LED will flash in sets of 1 up to 4 indicating the current setting:

1. Off
2. Low sensitivity
3. Medium sensitivity (default)
4. High sensitivity

### **Arm/disarm tones**

The LED will flash and buzzer will beep in sets of 1 up to 3 indicating the current settings:

Arm/Disarm tones OFF(default)

Arm/Disarm tones quiet

Arm/Disarm tones loud

### **Auto re-arm**

The LED will flash in sets of two if the auto re-arm function is on and single flashes if the auto re-arm function is off. Default is off.

### **Reset to defaults LED flashes**

To reset to defaults set the LED to flash twice. To exit without resetting to defaults set the LED to flash once.

### **Adding/ removing remote controls**

The LED flash count and the buzzer beep count will show the number of remotes programmed to work with the alarm.

Pressing the large button on the remote existing or new will add this to the system and delete all previously entered remote control. Press the large button on each remote control required, the buzzer will beep as each valid remote is added. If maximum number of remotes has been reached then the LED flash/ buzzer beep count will not increase indicating the last remote pressed has not been saved.

Maximum of 6 Remotes can be programmed at a time

**Important: If all working remote controls are lost or damaged it is not possible to reprogram the alarm. Always ensure you have at least one spare remote programmed to operate the alarm.**