

# CarDefender

## The shock and tilt accelerometer device for vehicle security

Working in conjunction with existing Pyronix systems, the CarDefender is our three-axis accelerometer device recommended for vehicle security. With three configurable detection modes, it can be set to trigger for shock only, tilt only, or if either shock or tilt is detected.

The device comes with a specially designed, brightly-coloured silicone rubber mount, allowing users to strap it to a vehicle's steering wheel for reliability and visual deterrence. Alternatively, the device can be secured with the included 3M tape for a wide variety of use cases.

### Pioneering vehicle intrusion detection



for more information



# CarDefender

## Selectable Detection Modes

Once the device has been professionally installed on the system, users have the option to configure shock, tilt or either shock/tilt to their preference by pressing and holding the button on the front.

### • Tilt only

Tilt mode has one setting, on or off. The device requires a tilt angle of 4° to trigger the detector.

### • Shock only

Shock mode has three sensitivity settings; low, medium and high. At the highest setting, the detector will trigger with less force. The lowest setting requires more force to trigger.

### • Tilt or Shock

This mode will activate on either shock or tilt detection - an intruder hitting the vehicle or tilting the steering wheel will activate the alarm.

## Universal Mounting

The device comes with a specially designed, brightly-coloured silicone rubber mount, allowing users to strap it to a vehicle's steering wheel for reliability and visual deterrence. Alternatively, the device can be secured with the included 3M tape for a wide variety of use cases.

## Back to Home (B2H)

The CarDefender secures vehicles within home range of the control panel\*. Where the vehicle has left the home range and later returned, the device's supervision will reset after 5 minutes or the user can reset it manually by pressing the B2H button on the device, which is the recommended method. The device will indicate signal strength with a flashing LED; green indicates good signal strength and red suggests poor.

\*Obstructions may interrupt signal strength if the vehicle is parked on a public road or street outside the property.

## The 10 Minute Safety Feature

Once users have selected their chosen settings, these are locked-in after a period of 10 minutes. This feature stops users accidentally changing the settings and potentially invalidating the device. Once locked, the settings can only be changed by opening and closing the device to enable another window for set up.

## Conformally Coated PCB

The CarDefender's PCB is conformally coated, so it can be used in changeable environments\*, making it ideal for bikes, vans or trailers too.

\*As the device is not IP rated, it is not recommended for harsh, wet conditions or environments where it is exposed to the elements.

## Vehicle Protection

The CarDefender has been developed to combat vehicle theft, (particularly keyless) offering a new line of defence to deter intruders by raising the house alarm in the event of an attempted theft. Users are given early warning, allowing them to take action as soon as possible, where previously, the theft may have gone unnoticed for some time.

Partcode	CARDEFENDER-WE
Specifications	
Dimensions and weight (W x H x D)	Device - 30 x 95 x 10mm, 30g Holder - 122 x 163 x 12mm, 35g
Casing / Colour	Device - 2mm polycarbonate-ABS, anthracite Holder - Silicone strap, yellow   UV Additive RIASORB UV-329 holder, black
LED colours	Red, blue and green
Transmission frequency	868MHz FM transceiver narrow band
Transmission method	Fully encrypted rolling code
Detection methods	Shock   Tilt   Tilt or Shock
Tilt alarm threshold	~4°
Shock sensitivity	Low, medium and high
Battery	2 x lithium CR2450R, 3V, 500mAh with a 50mA pulse
Low battery threshold	2.2V +/-5% @ 25°C
Temperature	Storage: -20°C to 50°C Operating: -10°C to 40°C
Standards	EN50131-2-6-2008 EN50131-2-8-2016
RoHS Directive	EU 2015/853   UK RoHS regulation 2012
RE Directive	2014/53/EU   Radio Equipment Regulations 2017 (RED)
Emissions	EN 55032:2015+A11:2020 Class B
Immunity compliance	EN 50130-4:2011+A1:2014
Environmental class	II



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