

Vehicle Security

(GPS/AGPS/LBS+GSM/WCDMA)

User Manual

(Version 6.0)



This user manual has been specially designed to guide you through the functions and features of your Defender Defender.



1. Accessories:

- ▶ Device
- ▶ SIM card (inserted)
- ▶ Power cord
- ▶ 2x Wire connectors
- ▶ Relay
- ▶ Double sided tape

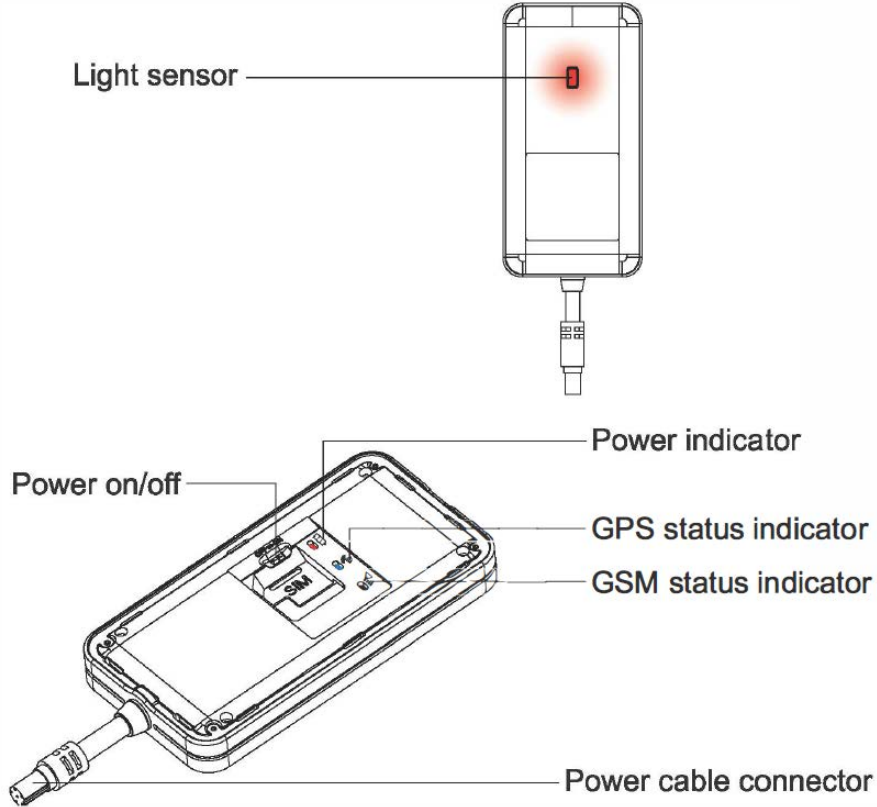
2. Specifications

GSM Specification	
Communication system	WCDMA/GSM
GSM frequency	850/900/1800/1900 MHz
GPRS	Class 12, TCP/IP
Memory	32+32Mb
Phase error	RMSPE<5,PPE<20
Max output	GSM850/GSM900:33±3dBm
	GSM1800/GSM1900:30±3Bm
Max frequency error	±0.1ppm

GPS Specification	
GPS chipset	BDS + AT6558
Frequency	L1,1575.42MHz C/A code
GPS channel	66
Location accuracy	<10 meters
Tracking sensitivity	-165dBm
Acquisition sensitivity	-148dBm
TTFF (open sky)	Avg. hot start≤1sec
	Avg. cold start≤35sec

Function & Package	
Standby current	5mA/12VDC
Battery	400mAh/3.7V
LED Indicator	GPS(blue), GSM(green), Power(red)
Working Voltage/current	9-36VDC/31mA(12VDC) 19mA(24VDC)
Operating Temperature	-20°C~ 70°C
Dimension	88(L) ×43.0 (W) ×13.0 (H) mm
Weight	60g

3. LED Indications



GPS LED Indicator - Blue	
Flashing (interval 0.1s)	Searching GPS signal
Solid blue	GPS fix
OFF	No GPS fix or initializing

GSM LED Indicator - Green	
Quick flashing (interval 0.1s)	GSM initializing
Slow flashing (flash 0.1s every 2s)	Receive GSM signal normally
Solid green	Connected to GSM network
OFF	No GSM signal

Power Status - Red	
Flashing (interval 0.1s)	Low battery
Slow flashing (interval 0.2s)	Full charge
Slow flashing (flash 0.1s every 2s)	Normal operating
Solid Red	Charging
OFF	Low battery/Power off

Ignition detection indication: three LED indicators take turns flashing.

4. Getting Started

Please follow below instructions for ensuring safe and correct use.

4.1 Install the SIM card

If not already inserted then please place the SIM card into the device with the gold-colored side facing down.

Note: Maintaining all SIM card functions is the responsibility of Defender Defender, your device can send an unlimited number of alerts with no extra charges

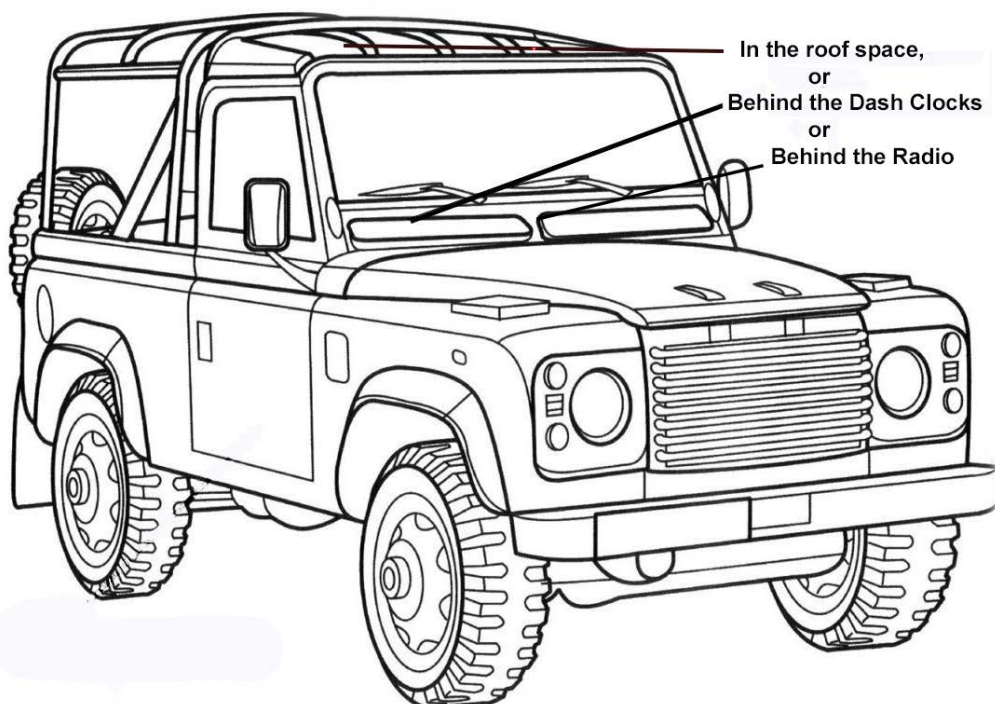
4.2 Install the device

Installation location is a personal decision, however we would suggest somewhere behind the dash/near the surface of the vehicle as this provides a stronger signal.

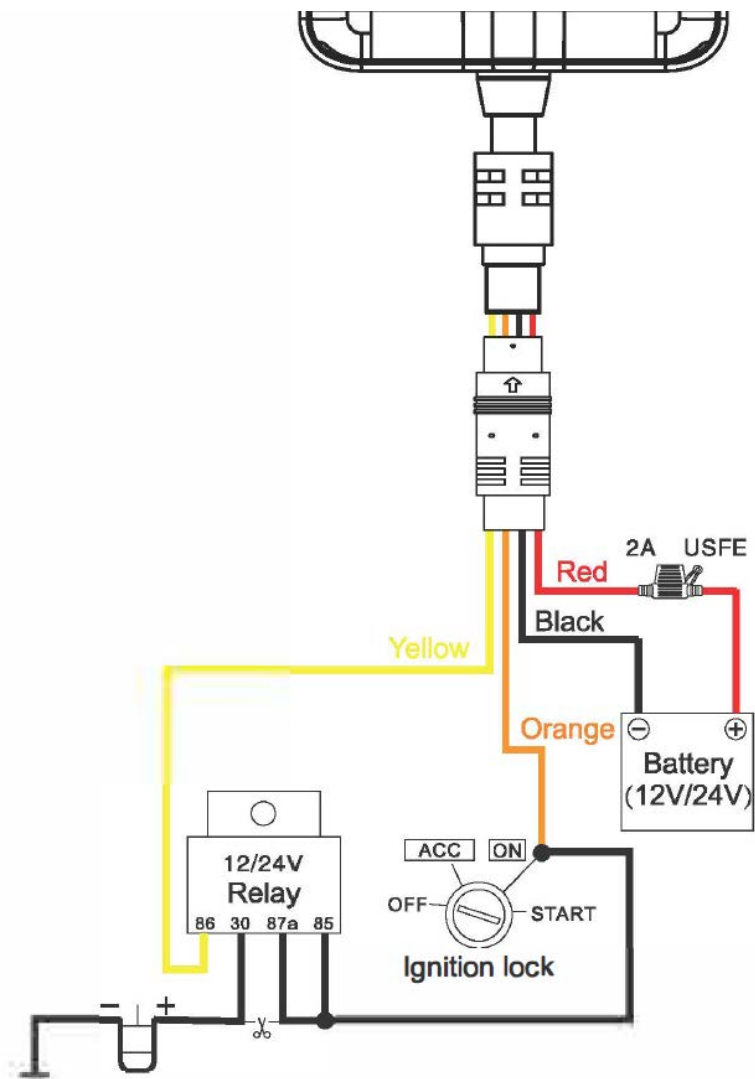
You need to choose somewhere that it won't be found, because the whole point of fitting covert GPS vehicle tracker is the secrecy element. However, you still would receive numerous alerts in the rare case of criminals breaking in and removing the unit.

NOTE:

1. Any high power devices such as reversing radar, anti-theft device or communication equipment would affect the signal of the device.
2. All metallic cases of the windshield will attenuate the signal on the tracking device. It's simply due to the shielding effects of the metal compound of the case.



4.3 Wiring configuration



1. Your device comes with a power cord and is designed to use only with the manufacturer-specified original device. The red line is positive while the black one is negative.

2. The ACC line (orange) connects to ACC switch of the vehicle. Please be sure to connect the ACC line; otherwise the device will enter ignition detection status and you will receive constant alerts during regular use of your vehicle.

3. With reference to the relay. The two power connectors are a white line (85) and a yellow line (86). The white line must be connected to vehicle positive power (+12V) and the yellow line is to be connected to the device relay control line (Yellow).

We recommend cutting/removing the ignition line off the back of the barrel and connect in series to the relay using the two green lines (30 & 87A).

Alternatively you can cut positive connection line to the pump (fuse box side) and then connect in series to the relay using the two green lines.



Warranty instructions and service

1. The warranty is valid only when the warranty card is properly completed, and upon presentation of the proof of purchase consisting of original invoice indicating the date of purchase, model and serial No.of the product. We reserve the right to refuse warranty if this information has been removed or changed after the original purchase of the product from the dealer.
2. Our obligations are limited to repair of the defect or replacement the defective part or at its discretion replacement of the product itself.
3. Warranty repairs must be carried out by our Authorized Service Centre. Warranty cover will be void, even if a repair has been attempted by any unauthorized service center.
4. Repair or replacement under the terms of this warranty does not provide right to extension or renewal of the warranty period.
5. The warranty is not applicable to cases other than defects in material, design and workmanship.

Maintenance Record

Date		Serviced by	
Product Model			
IMEI Number			
Fault Descriptions			
Comments			