

# **GTR-388A12/GTR-388E12**

## **Motorcycle/ Vehicle Tracker**

### **Quick Start Guide**



**V1.1**

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## **1. Introduction**

### **1.1 Introduction**

GTR-388A12/GTR-388E12 is designed as a durable and multi-functional 3G GPS tracker. It integrates highly sensitive GPS module and 3G communication module with a powerful microcontroller that fits into a compact enclosure. The device is capable of being waterproof and ideal for use in a motorcycle, golf carts and vehicles. It provides real-time GPS positions anytime and anywhere with an open view to the sky, and offers precise positioning, and reports vehicle status to the server with necessary information shown on the map. Benefits such as enhanced fleet management, improved vehicle safety, emergency response, are all accomplished through the implementation of the GTR-388A12/GTR-388E12 system. The built-in 3G and GPS antennas are for easy installation without hassle.

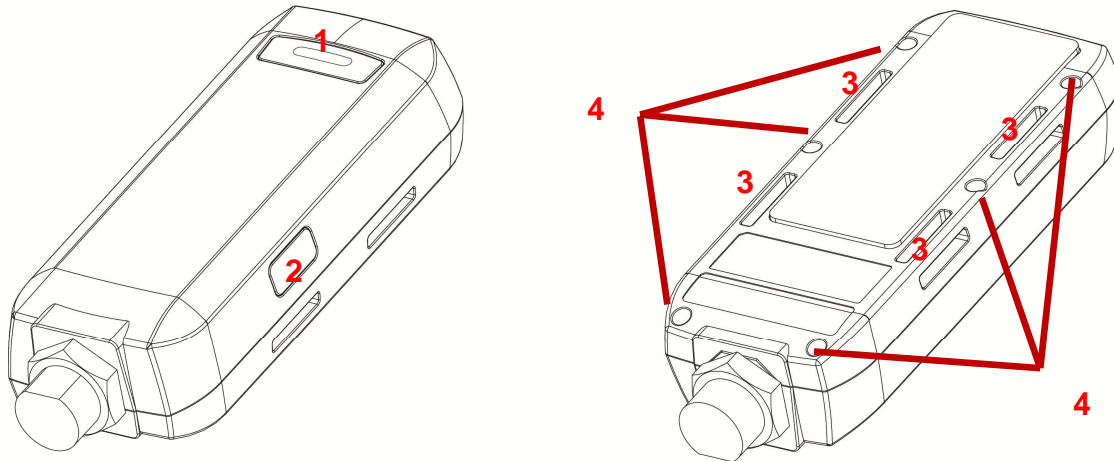
### **1.2 Features**

- AGPS support
- Support communication protocols- SMS/TCP/UDP.
- Multiple I/Os support: 1 Digital Input for custom function, 1 Digital input for optional Emergency button, 1 Analog Input for fuel sensor, 1 Digital Output for Relay, 1 Digital Input for ACC detection.
- Firmware update via Over-The-Air
- Alert functions including Power low/ Over speed/ Movement alarms
- Tracking by preferred interval, scheduling and Geo-fence
- Multiple power solution

### 1.3 Hardware specification

Item	Description	
Model	GTR-388A12	GTR-388E12
Back-up Battery	Li-Polymer 820mAh	
Temperature	Operation	-30°C ~ + 60°C (0°C ~ + 45°C for charging)
	Storage	-40°C ~ + 60°C
Dimension	107.5 mm X 38.7 mm X 23.5 mm	
GPS receiver	high performance GPS chipset	
Communication	GSM/GPRS/EDGE: 850/1900MHz UMTS/HSPA+:850/1900MHz	GSM/GPRS/EDGE:900/1800MHz UMTS/HSPA+:900/2100MHz
GPS Antenna	Built-in patch ceramics antenna	
GSM Antenna	Built-in Pi-Fa antenna	
Protocol	SMS/GPRS (TCP/UDP)	
Power	9V~36V	
Built-in Memory	32 Mb	
Emergency Input	Negative trigger x 1	
Ignition (ACC) Input	Positive trigger x 1	
Digital Input Port	Negative trigger x 1	
Digital Output Port	Negative trigger x 1 (300 mA)	
Fuel sensor Input Port	Analog Input x 1( 0~28V), 12 bits resolution	
Sensor	Motion sensor	
Humidity	5% to 95% Non-Condensing	
Weight	66.5g	

## 1.4 Appearance



<b>1</b>	<b>LED</b>
<b>2</b>	<b>Reset button</b>
<b>3</b>	<b>For fixing device with Velcro tape</b>
<b>4</b>	<b>Screws of back cover</b>

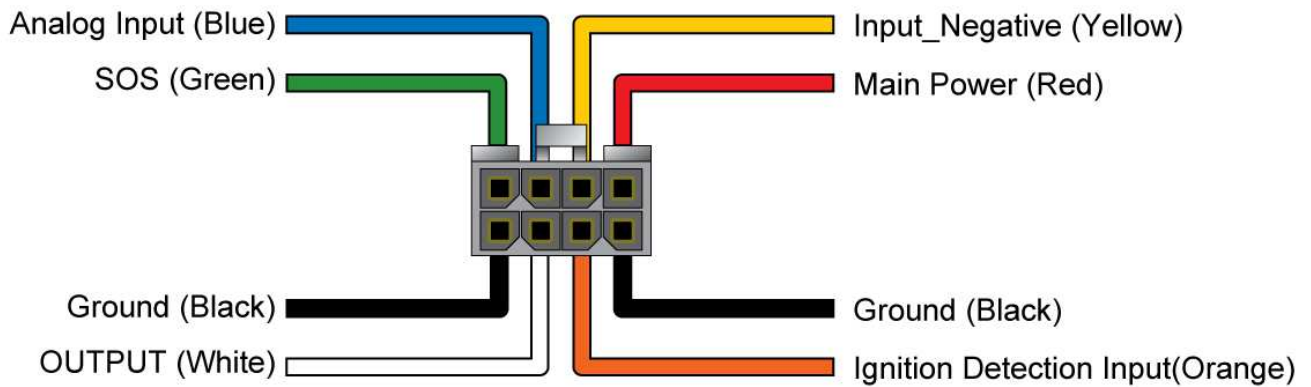
## 1.5 LED indicator

**Normal mode:**

<b>LED status</b>	<b>Description</b>
<b>Red blinking</b>	Device is being boot but SIM card isn't ready
<b>Red solid</b>	SIM card is ready, but not register to network
<b>Yellow solid</b>	Registered to network, but not connected to server
<b>Green solid</b>	Registered to network, and connected to server

**Hiding mode:** Device would blink red light while it is booting up. After completing the boot, the LED would go off.

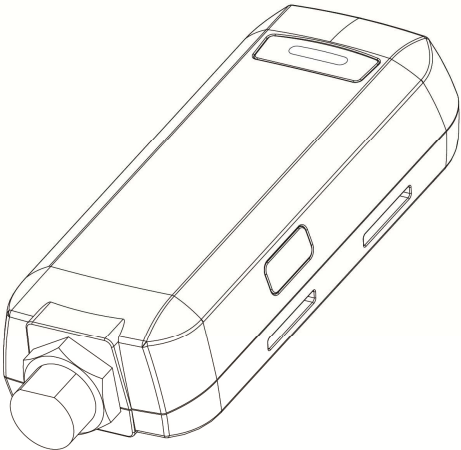
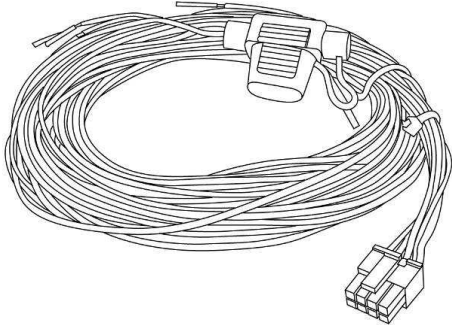
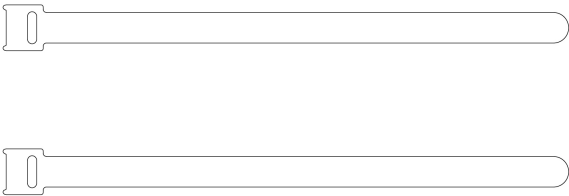
## 1.6 Cable description



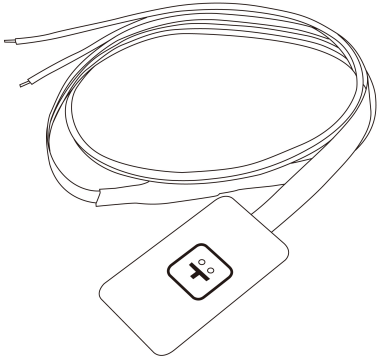
Wire Color	Description
Green	<b>SOS</b> (Negative Trigger)
Blue	<b>Fuel sensor input</b> (Analog Input, 0~28 V, 12 bits resolution)
Yellow	<b>Digital Input</b> (Negative Trigger)
Red	<b>Main Power, 9~36 V</b>
Black	<b>Ground</b>
White	<b>Digital Output</b> (Negative Trigger), 300 mA
Orange	<b>Ignition Detection Input</b> (Positive Trigger)
Black	<b>Ground</b>

**1.7 Accessories**

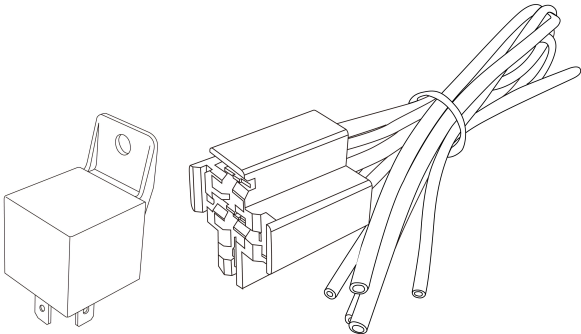
**1.7.1 Standard Items**

 <p><b>Main Unit</b></p>	 <p><b>Hardwire cable</b></p>
 <p><b>Velcro Tape X2</b></p>	

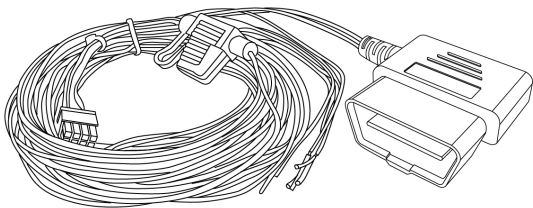
**1.7.2 Optional Items**



**External Emergency Button**



**12V/24V Relay**



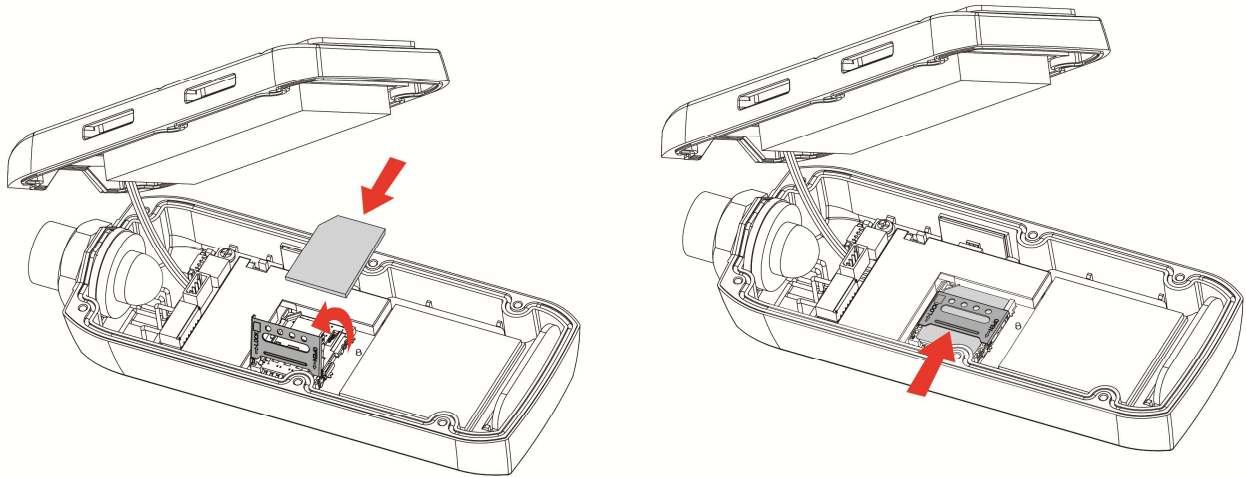
**OBDII Power Cable**



## 2 Operation

For first time users, please follow the steps below to complete the pre-installation.

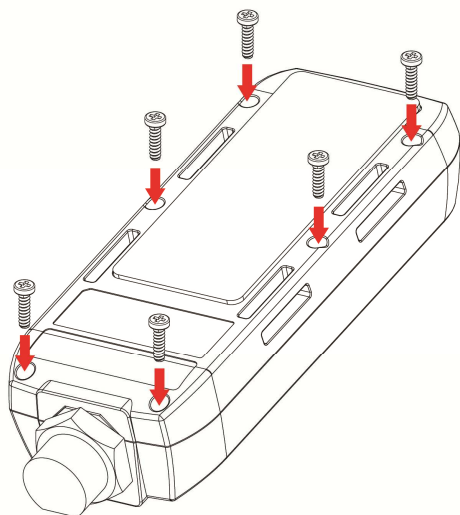
### 2.1 Install the SIM card



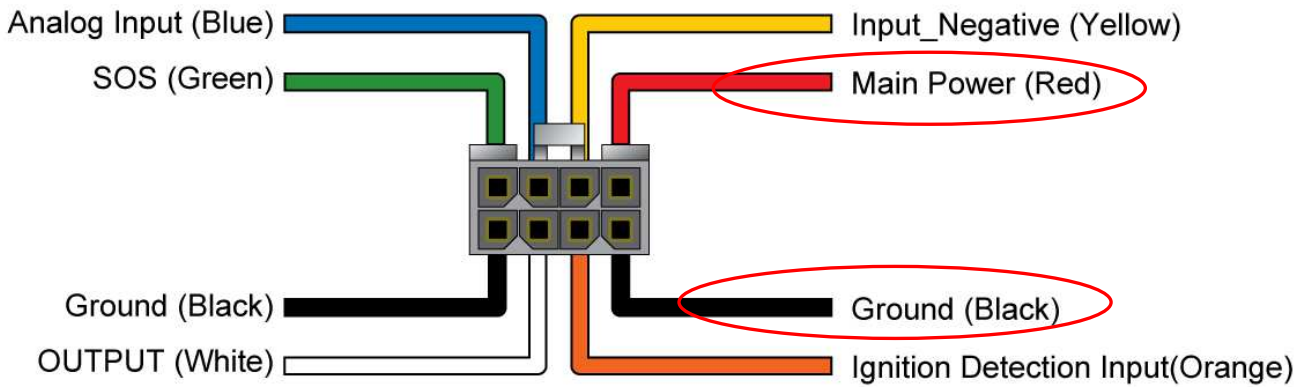
Unscrew the cover of device. Open the SIM holder, place SIM card with the copper contacts face-down and the notch on the SIM card at the left side of the SIM holder. Push the SIM holder's lid according to the direction of the arrow.

**Note:** Make sure to disable the SIM PIN entry function on the SIM card before inserting your SIM card

After installing the SIM card, please screw the back cover..

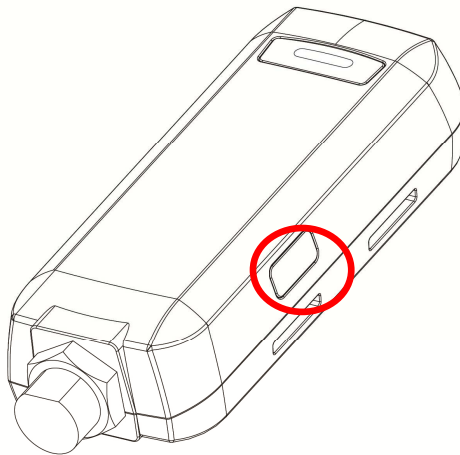


## 2.2 Connect the Main Power



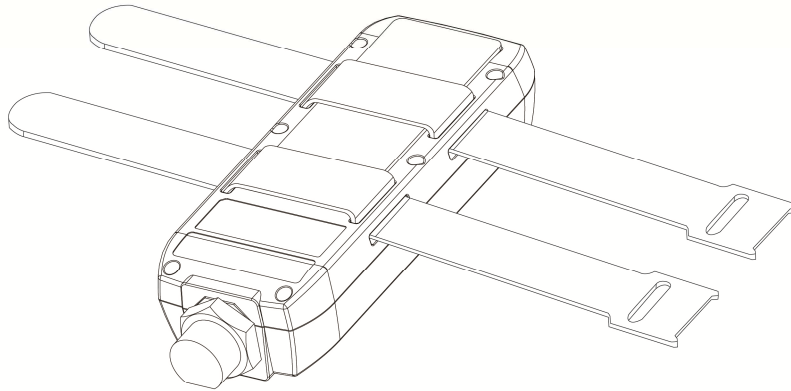
Connect the red wire from the cable to a power source of 9V~36 V. Connect the black wire to ground.

## 2.3 Switch on/off Tracker

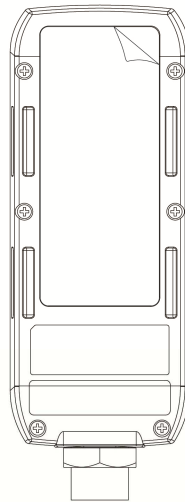


After connecting the power, please press the reset button to turn on GTR-388A12/GTR-388E12.

## 2.4 Fix the device



You could fix the GTR-388A12/GTR-388E12 with the Velcro tape as the picture above.



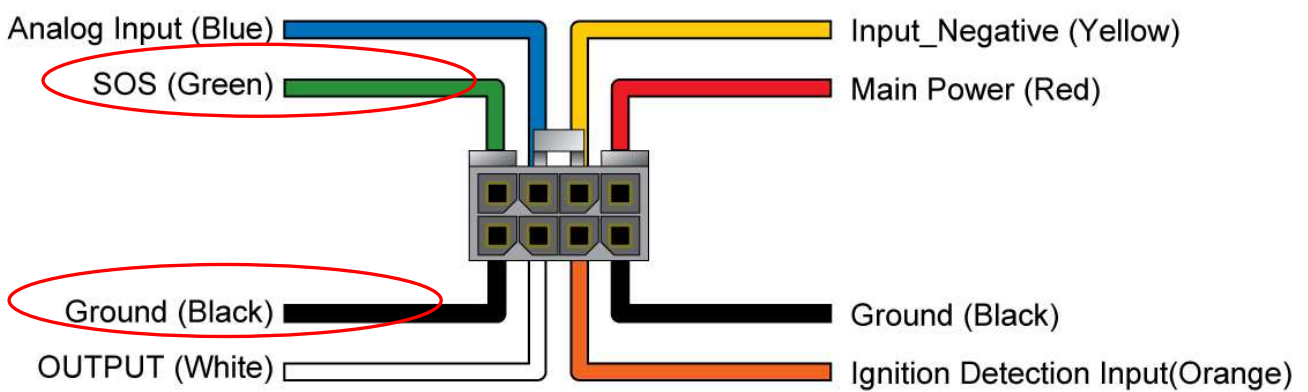
You could tear down the cover of double side tape and stick GTR-388A12/GTR-388E12 to the installation position.

There is a magnet behind the double side tape. You could install the GTR-388A12/GTR-388E12 to a metal surface. The magnet on the device would attract the metal surface.

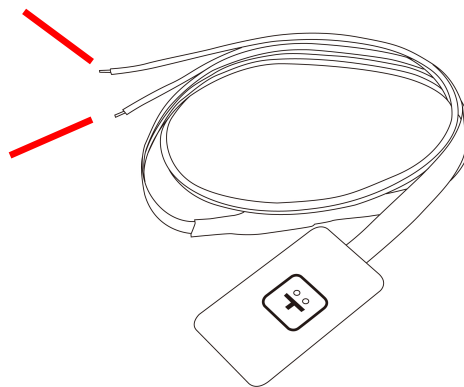
### 3 Installation

#### 3.1 Installing the Emergency button

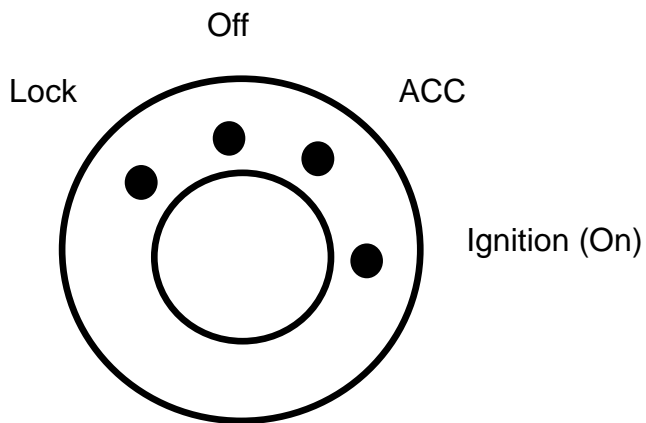
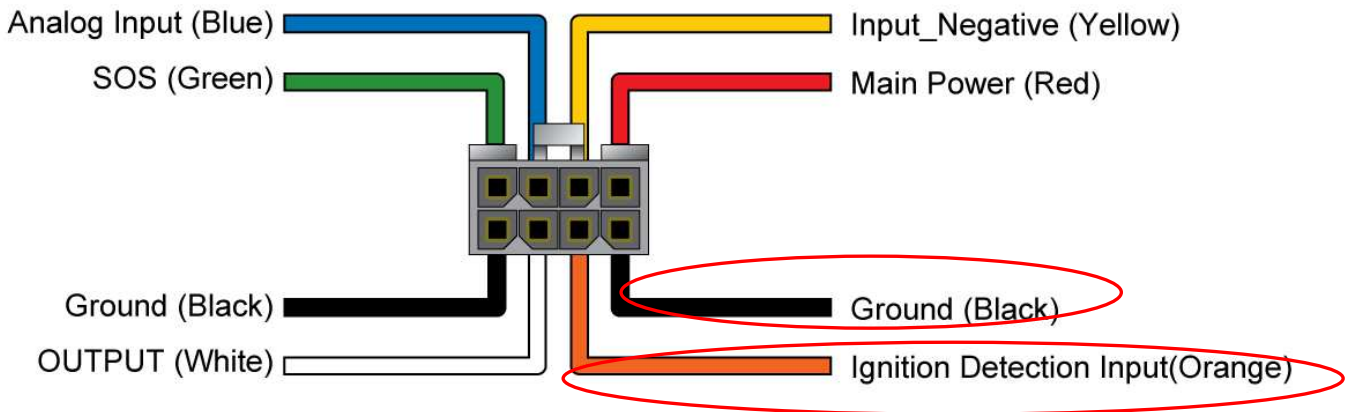
There is a line of cable for connecting a push button for emergency help.



One end of the button must be connected to the SOS line and the other end must be connected to the ground line.

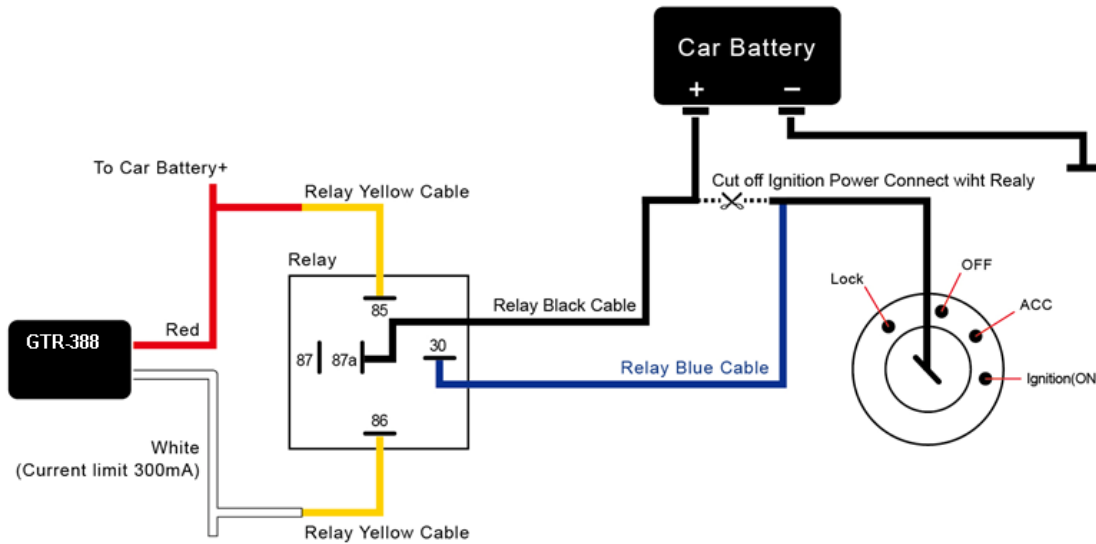


### 3.2 Connecting ignition detection line on car



Connect the orange wire from the cable to ACC position of vehicle. Connect the black wire to ground.

### 3.3 Connecting Relay



Connect the white wire from GTR-388A12/GTR-388E12's cable to the yellow wire of relay. For the other connections, please refer to the diagram above.

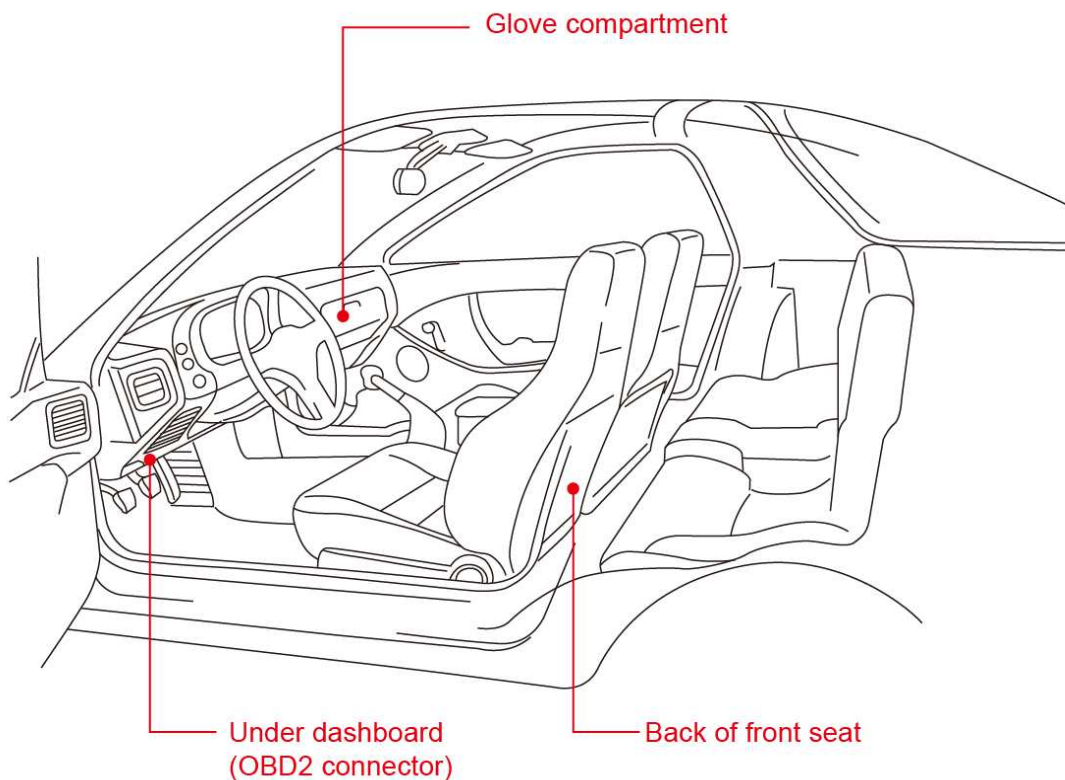
### 3.4 Installation reminder

**WARNING:**

In a confined space of the car, there is a big different temperature between inside and outside of the car. In addition, it is also considerable temperature difference between tracker's interior and exterior. Therefore, if you put a tracker in the car, please make sure to place it with good ventilation.

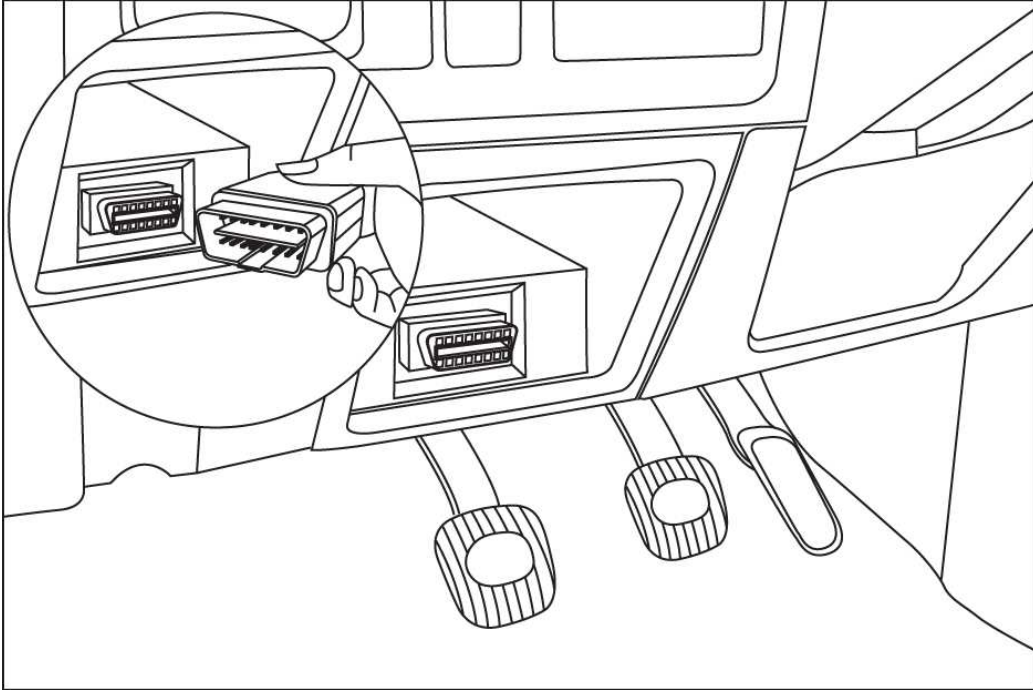
**For Vehicle:**

GTR-388A12/GTR-388E12 could be placed or installed on the marked position as the pictures below.



If you'd like to install GTR-388A12/GTR-388E12 at the OBDII connector of vehicles, please connect GTR-388A12/GTR-388E12 with the OBDII power cable firstly, then you could connect the OBDII power cable to the OBDII connector of vehicle as the picture below.





#### For Motorcycle

- For motorcycle rider, GTR-388A12/GTR-388E12 could be installed at the marked position as the picture as below.

