

## 1. Overview

### 1.1 Main Functions

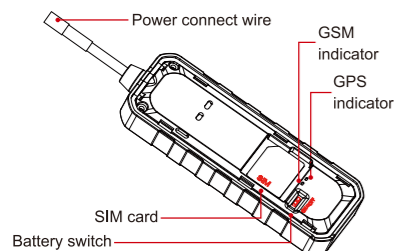
- GPS + LBS positioning
- Vibration / Displacement alarm
- Power failure / Overspeed alarm
- Compact and lightweight
- IPX5 waterproof
- Geo-fence
- Remote cut-off (petrol/power)
- Mileage

### 1.2 Specifications

Frequency	GSM 850/900/1800/1900MHz
GPRS	Class 12, TCP/IP
Location accuracy	<10 meters
TTFF (open sky)	Avg. hot start ≤1sec Avg. cold start ≤32sec
Battery	100mAh/3.7V industrial grade li-ion polymer battery
Working voltage/current	9-90VDC/32mA(12VDC), 18mA(24VDC)
Standby current	≤5mA
Operating temperature	-20℃ ~ +70℃
Dimension	73.8(L) x 25.9(W) x 12.2(H) mm
Weight	26.6g

## 2. Overview

### 2.1 Device



## 2.2 Device

- GPS tracker
- User Manual
- Power cable
- 12V/24V relay (optional)

### 2.3 LED Indicator

Blue LED

Status	Meaning
Flash quickly	Searching signal
Solid blue	Positioning succeed
Dark	Sleep/Dormant

Green LED

Status	Meaning
Quick flashing	Search network
Slow flashing	Normal network signal
Solid green	Calling/Online
Dark	Abnormal network/No SIM card

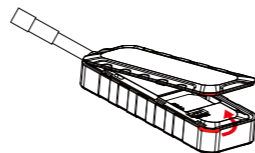
LED indicator will be OFF when device electrified for 5 minutes. LED can be controlled by platform and APP.

### 3. SIM card

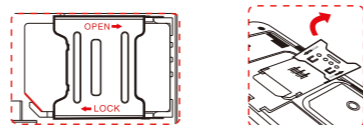
SIM card should have access to GPRS. Before SIM card installation, ensure external power is disconnected and battery switch is on OFF.



1. Find the notch and remove bottom cover

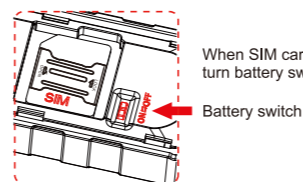


2. Insert the SIM card as shown below



### Power on

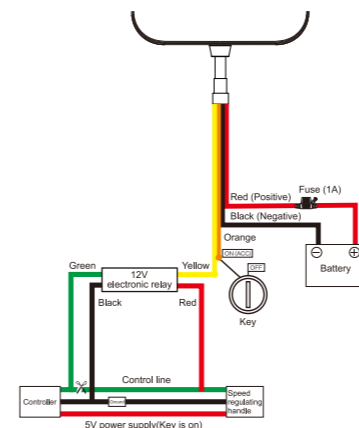
Open top cover and turn battery switch to ON. Terminal starts up by using backup battery. Connect the device to external power, then power indicator lights up and battery is charging.



### Power off

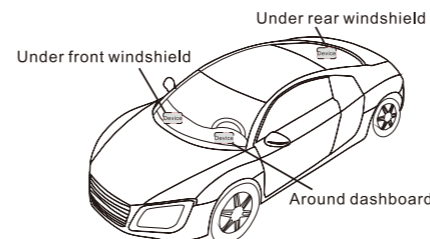
Disconnect external power and turn battery switch to OFF. Power LED is off and charging stop after device power off.

## 4. Wiring Instruction



## 5. Installation

Please install the device under the guidance of professional personnel.



Note:

The device should face up to the sky. Metal thermal barrier or heating layer of the windshield affects the signal. Please change installation places to receive better signal.

## 6. Platform & APP

### 6.1 Login service platform

Please login the designated service platform to set and operate the device.

### 6.2 Download APP

Please download and install the APP in designated website, APP store or Google Play store.

## 7. Main Functions

### 7.1 SOS

3 SOS phone numbers can be set. Alerts will be sent to pre-set SOS number.

(1) Add SOS number.  
Send SMS command to the terminal. Command format: **SOS,A,phone number 1,phone number 2,phone number 3#**  
"A" means to add new numbers, for example:  
SOS,A,18165542975,18165542976,18165542977#  
It will reply  
"OK! SOS1: 18165542975 SOS2: 18165542976 SOS3: 18165542977" after set successfully.

(2) Delete SOS number.

Command:  
Send SMS command: **SOS, D, phone number 1,phone number 2, phone number 3#**

(3) Check current SOS number.  
Command: **SOS#**

Respond example: **SOS1: 12352\*\*\*, SOS2: 132532\*\*\*, SOS3:135323\*\*\***

### 7.2 Multiple Alarms

#### Power cut-off alarm

When the electricity supply of device is cut off, alarm message will be sent to platform and SOS number.

#### Low battery alarm

When backup battery is low, alarm message will be sent to platform and SOS number.

#### Displacement alarm (Default OFF)

Device will send movement alarm when vehicle moves out the pre-set distance.

#### Overspeed alarm (Default OFF)

Speed limitation can be set in platform or by SMS. When vehicle's speed exceeds the pre-set value, overspeed alarm will be sent.

#### Vibration alarm (Default OFF)

Device is in defense status if vibration alarm turned on. When vehicle vibrates several times, the vibration alarm will be triggered.

### 7.3 Remote Restart

Restart the terminal in platform or send SMS command.  
SMS command: RESET#

## 8. Frequently Used Command List

1	Check device status	STATUS#
2	Get device GPS latitude/longitude	WHERE#

3	Check device location in Google Map link	1, URL# 2, POSITION
4	SOS number setting	<b>1. Add SOS number:</b> SOS,A,number 1,number 2,number 3# Example:SOS,A,12342***,134533***,135432***# <b>2. Delete the SOS number:</b> SOS,D,phone number# <b>3. Query SOS number:</b> SOS#
5	Vibration alarm (Default OFF)	1, SENALM,ON# 2, SENALM,OFF#
6	Displacement alarm (Default OFF)	<b>1. MOVING,ON,R, M#</b> R=100~1000; Movement radius, unit: meter M=0~3; 0: only GPRS; 1: SMS+GPRS; 2: GPRS+SMS+CALL; 3: GPRS +CALL; Default: 1 <b>2. MOVING,OFF#</b>
7	Power cut-off alarm	<b>1. POWERALM, [A],[M],[T1],[T2],[T3]#</b> A=ON/OFF, default: ON; M=0/1/2/3, way of alarming, 0: GPRS only, 1: SMS+GPRS, 2: GPRS+SMS+phone call, 3: GPRS+ call, default: 1; T1=2~60 (second), power off detect time, default: 10; T2=1~3600 (second), default: 300; T3=0~3600 (second), ACC ON to OFF status step alarm prohibition time default: 0; <b>2. POWERALM, OFF#</b> Turn off the power alarm. <b>3. POWERALM#</b> Check the parameters of the alarm.

8	Low battery alarm	<b>1. BATALM, [A], [ M]#</b> A=ON/OFF, default: ON; M=0/1, way of alarming, 0: GPRS only, 1: SMS+GPRS <b>2. BATALM,OFF#</b> <b>3. BATALM#</b> Check the parameters of the alarm.
9	Overspeed alarm	<b>1. SPEED,[A],[B],[C],[M]#</b> A=ON/OFF, turn on/off overspeed alarm, Default: OFF B=5~600 (second),time interval, default: 20 (second) C=1~255(km/h), speed limit, default: 100(km/h); M=0/1, alarm method, 0: GPRS only, 1: SMS+GPRS, default: 1 <b>2. SPEED#</b> Check the parameters of over speed.
10	Restart	<b>RESET#</b> Device restart 20 seconds after receiving this command

## Troubleshooting

If you are having trouble with your device, try these troubleshooting procedures before contacting a service professional.

Problems	Causes	Solutions
Poor signal	The signal waves are unable to transmit when use the GPS tracker in the places that have poor signal reception, such as: tall building around or basement.	Using the GPS tracker in the places that have good signal condition.
	Device covered by metal objects or face down	Device face up or installed in somewhere else

Unable to boot	Low battery	Connect to external power supply to charge
	Fusing	Contact supplier to replace fuse
Unable to connect to the network	SIM card inserted incorrectly	Insert SIM card again
	Dirty things exist above the SIM card	Clean SIM card
	Damaged or invalid SIM card	Replace SIM card
Charge failure	Not in GSM service area	Move to service area
	Poor signal	Move to area with strong signal
Fail to locate	Poor contact	Ensure device power wire connection
	SIM has no access to GPRS	Contact network supplier to get GPRS service
Parameters modification failure	SIM card charges owed	Charge
	Command format error	Edit and send the command again
	No reply after sending command	Check network and ensure SMS available

## Warranty instructions and service

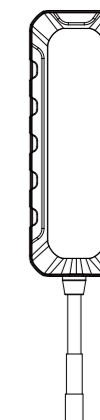
- The warranty is valid only when the warranty card is properly completed, and upon presentation of the proof of purchase consisting of original invoice indicating the date of purchase, model and serial No.of the product. We reserve the right to refuse warranty if this information has been removed or changed after the original purchase of the product from the dealer.
- Our obligations are limited to repair of the defect or replacement the defective part or at its discretion replacement of the product itself.

- 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 centre.
- Repair or replacement under the terms of this warranty does not provide right to extension or renewal of the warranty period.
- 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	

## Vehicle GPS Tracker User Guide (Version 2.2)



To ensure quickly and correctly use, please read this manual carefully before using. Any changes to the product appearance, color or accessories are without notice.

⚠ One side of the device is marked "THIS SIDE TOWARDS SKY", place the unit upside down will result in connection issues. Avoid placing the device somewhere that metal will be covering it up.