# GPS Vehicle tracker (GPS+GSM+SMS/GPRS)

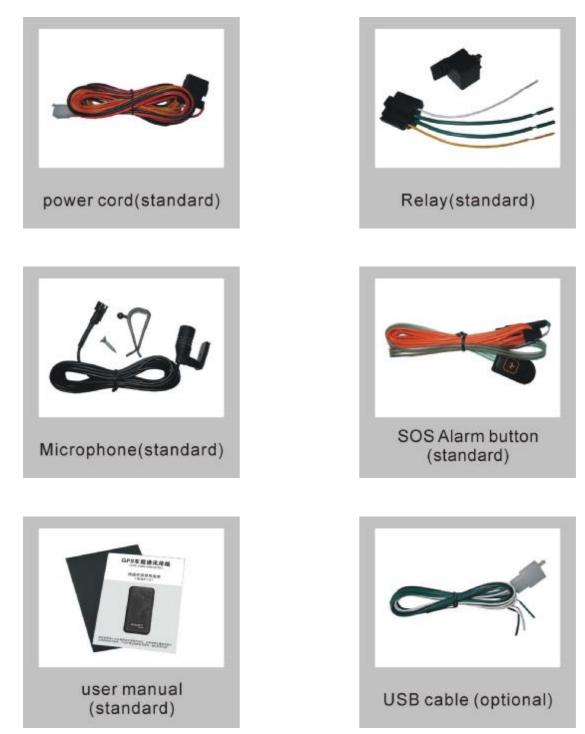
# **User Manual**

(Version 1.0)



Please read this manual carefully before attempting installation and online activation. Pictures are for indication and illustration purposes only.

# 1. Accessories:



Please check the accessories before using. Pictures are for indication and illustration purposes only.

# 2 Features:

- GSM 850/900/1800/1900 Quad band
- Wide for voltage input range:9-36vDC
- GPS continuous positioning, GPRS timing interval
- Check location via SMS
- Built-in vibration sensor, theftproof
- ACC ignition detection
- Tele-cutoff (petrol/ electricity) function
- SOS alarm and burglar alarm
- voice monitor function
- Alarm when the power supply is disconnected intentionally (with

backup battery)

• Compatible with external connection through (serial port)

### 2.1 Red LED (power/working status)

LED Status	Meaning	
Flashing (interval 0.1s)	Low battery indication	
Continuously in bright state	Charging	
Slow flashing(interval 0.2s)	Full charge	
Continuously in dark state	Low battery / power off	
Slow flashing(flash 0.1s after every 2s)	Working normally	

# 2.2 Green LED(GSM status indicator)

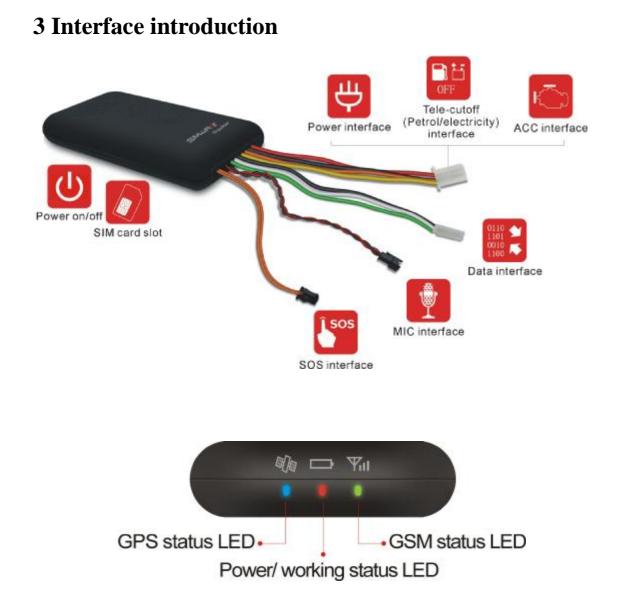
LED Status	Meaning	
Quick flashing (interval 0.1s)	GSM initialization	
Slow flashing(flash 0.1s after every 2s)	Receive GSM signal normally	
Continuously in bright state	GSM conversation/Start GPRS	
Continuously in dark state	No GSM signal	

# 2.3 Blue LED (GPS status indicator)

LED Status	Meaning	
Flashing (interval 0.1s)	Searching GPS signal	
Continuously in bright state	GPS located	
Continuously in dark state	GPS not located	

# 2.4 Ignition detection indication

Three (blue/red/green)LEDs are in cycling flashing



# 4 Method of installation

4.1. Preparation before installation

4.1.1 Open the packing box to check whether the type of device is correct and whether the accessories are included, or else please contact your distributor.

4.1.2 Choose SIM card: each device needs to insert a GSM SIM card.

Please refer to the distributor's suggestions to choose the SIM card.

4.1.3 Installing SIM card: The SIM card slot is on the right side of device. Open the SIM card silicon seal, then insert the SIM card to the slot (do not insert the SIM card backwards). When the SIM card is ready you will hear a click. Or else please insert again and then replace the silicon seal. Note:

Power off before installing or removing the SIM card.

The SIM card used should be enabled for GPRS.

The SIM card used should be enabled for called ID.

If there is a power on password, or pin, please cancel it;

Ensure the SIM card can send and receive SMS.

#### 4.2 Installation

The device installation is covert. Please refer installation to an auto electrical contractor.

NOTE:

4.2.1 To prevent theft of the device, it should be installed as covertly as possible. Covertly installation is suggested.

4.2.2 Avoid placing the device close to higher power electrical devices, such as reversing radar, anti-theft device or other vehicle communication equipment;

4.2.3 The device should be fixed into position with cable ties or wide

double-side tape.

4.2.4 The device has built-in GSM antenna and GPS antenna. During installation, please make sure the receiving side face is up, with no metal object above the device to interfere with GPS reception. The following places are suggested for installation:

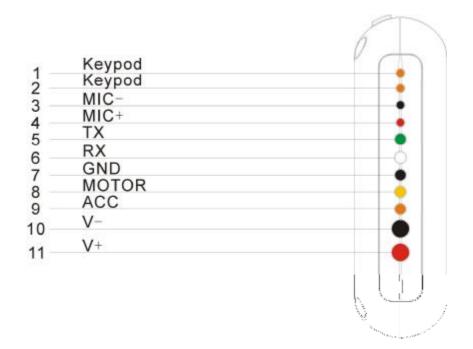
-shelter in the decorated board below the front windshield;

-shelter around the front instrument panel (non-metallic material face);

-in the decorated board below back windshield;

Notice: if the windshield is pasted with metal thermal-protective coating or heating coating, It may affect the receiving signal. In this case, please change the installation place.

## 4.3 Device outlet specification



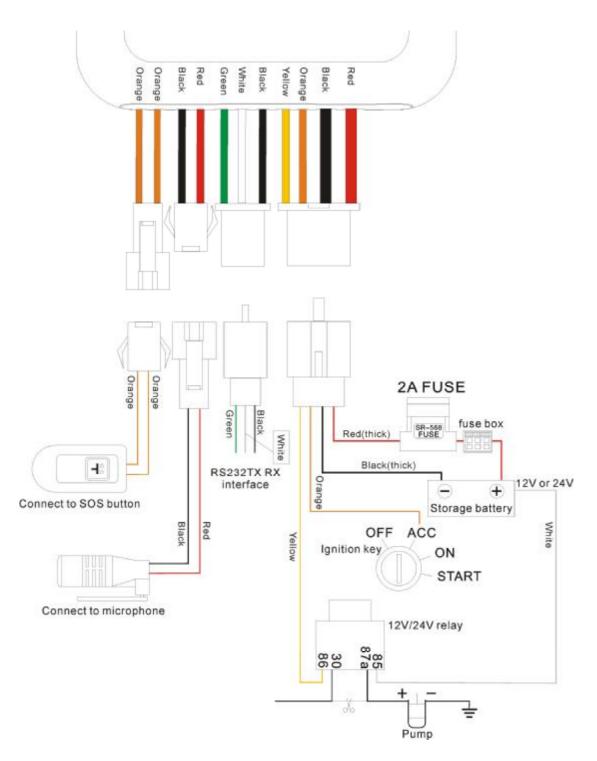
Line	Specification	Color	Instruction
No.			
1.2	Keypod	Orange/ orange	Connect to SOS button
3. 4	MIC-,MIC+	Black/ red	Connect to Microphone
5	ТХ	Green	Sending data (TX)/backup
6	RX	White	Receiving data (RX)/backup
7	GND	Black	Ground wire
8	MOTOR	Yellow	Connect to relay control line
9	ACC	Orange	Connect to ACC ignition
10	V-	Black(thick)	Vehicle 12V/24V negative storage battery
11	V+	Red(thick)	Vehicle 12V/24V positive storage battery

#### Notes of the relay wiring

The relay wiring of pump: oil connectors of both ends are a fine white line (85) and a fine yellow line (86). The fine white line (85) is connected to vehicle positive power (+12V). The fine yellow line is connected to the device relay control line.

Cut off the positive connection line of the pump; then connect in series to the relay N.C. contact (thick green line 87a) and the other end to relay COM contact ((thick green line 30).

#### 4.4 Device wiring diagram



#### 5. Cautions of device wiring

5.1 Power/ACC/ Tele-cutoff (petrol/ electricity) control line (4 pin)

5.1.1 The standard voltage is 9V-36VDC. Please use the power line which provided by the manufacturer. The red line is the positive. The black line is the negative. The negative should earth alone or link iron during

installing. Do not connect it to other ground wire.

5.1.2 ACC line (orange) is connected to the ACC switch of the vehicle. Please make sure to connect the ACC line. The tracker will decide whether to enter ignition detection according to ACC status. If do not connect to ACC line, the device will enter ignition detection status. If the vehicle vibrates when moving, it will activate the vibration alarm. If there is no need for the theftproof function, connect the ACC line to the positive in parallel and keep high level.

5.1.3 Tele-cutoff (petrol/ electricity) control line (yellow) is connected to pin 86 of the Tele-cutoff (petrol/ electricity) relay (equal to the yellow line of the relay socket).

5.2 USB cable (3 pin)

Firmware updating interface/expanded function to reserve space.

5.3 MIC line (2 pin)

Externally connect to microphone for voice monitor function

5.4 SOS line (2 pin)

Externally connect to SOS switch for SOS function.

#### 6. Parameter setting

The SMS command format should be in block letters and it is divided by comma. There is a reply SMS after sending the command. If set successfully, there is a "success" reply SMS; or else please set again. The device will reply the corresponding information after sending the SMS command.

#### 6.1 Set configuration of GT06

For example: When the device goes to Indonesia, and the customer put the sim card from the Indosat operator in it.

Send a message to the sim card which has been put into the device. The content of the SMS is as following:

#### GPRS,000000, indosatgprs, 0, www.gookey.net:8841#

\* indosatgprs is the APN of the Indonesian operator Indosat, please replace it by the local one. You might need to give a call to the local operator to ask them what their APN is.

If the APN needs login password

The SMS is as following:

GPRS,000000, APN, 0, www.gookey.net:8841, admin, password#

After sending the SMS, the situation could be:

1) If you receive "Success", go to web <u>www.gootrack.net</u> to track the device.

2) If you receive "Fail", it means that the device can not identify the content of the SMS. In this case, please check the content of SMS, especially the format of Minuscule/ Majuscule. Find the problems and resend the SMS, you would get "success".

CONTENT OF SMS:

GPRS-GPRS

000000—Default password;

indosatgprs—APN of the GSM operator (Here just an example);

0 or 1-GPRS Communication Protocol (0 stands for TCP, 1 stands for

UDP), (Recommended way is TCP)

www.gookey.net—Internet Domain name for the sever;

:8841—Server port;

#-ending symbol

#### 6.1 Modification of password

SMS "XGYHMM, old password (6 digits), new password (6 digits)#", The default password is "000000".

e.g.: XGYHMM,000000,123456#

#### 6.2 Add specific number

The specific number is for the alarms. Three groups of specific numbers are available. SMS command to the device to add specific numbers. In alarm status, the device will SMS the location to the specific numbers, and it will call the specific numbers continuously until it gets through.

Command format: ZJHM, user password, number#

#### e.g.: ZJHM,000000,136XXXXXXX#

Reply information for successful setting:

Add the first group of specific number: "OK! Total number=1" Add the second group of specific number: "OK! Total number=2" Add the third group of specific number: "OK! Total number=3" There are three group of specific number in maximum. If it receives "ERROR! ALREADY 3 NUMBERS", it means you can not set any more.

#### 6.3 Delete specific number

Before deleting specific number, please check its corresponding code. For the code, please SMS "CXSZ, users' passwords #" to the device.

Command format: SCHM, user password, code#

e.g.: SCHM,000000,1# ( it means deleting the specific number of code 1) Note:

After deleting the specific number, the remaining two numbers will be adjusted automatically with no skip code.

Reply information:

It will receive "Delete number 135XXXXXXX success! specific number total 2" for successful deleting of the specific number.

• • • • • •

After delete the last group of specific number, it will receive: "Delete number 135XXXXXXX success! specific number total 0"

When there is no specific number, it will receive: "Notice: Specific phone book empty!"

#### 6.4 Check the parameter setting

SMS parameter setting command to the device to check the device setting.

Command format: CXSZ, users' passwords #

e.g.: CXSZ,000000#

Reply information:

IMEI: 35341903XXXXXXX

GPRS time : 10

GPSOFF time: 20

SOS Number: 1. 135xxxxxxx

2. 136xxxxxxx

3. 137xxxxxxx

Center Number:

Sensor time interval: 10

Sensor alarm time: 10

Time Zone: E: 8

It contains IMEI number/GPRS time/GPSOFF time/SOS number/Center number/Sensor time interval/Sensor alarm time/Time Zone

### 6.5 GPRS time sending interval

The default GPRS time sending interval is 10s which means the device will upload positioning data to the platform server every 10s. Users can modify GPRS time sending interval by SMS "GPRSDS, password, time(second)#". The time ranges from 10-18000s

For example: GPRSDS,000000,10#. It means the device will upload

data to the server every 10s

#### 6.6 GPSOFF time

GPSOFF time is valid only in low-level ACC cable. When the vehicle power is off, dial the device to activate it, and then the device will upload data to the server during the GPSOFF time (default as 20mins). Users can modify GPSOFF time by SMS "GPSOFF, password, time(minute)#". The time ranges from 1-999mins

For example: GPSOFF,000000,20#. It means the device will work for 20mins after activated

In addition, when ACC cable is in low level, the device will be activated to upload data by trigger alarm

GPSOFF time is meaningless in high-level ACC cable. Once turn on the vehicle, GPS keeps continuously working.

#### 6.7 Sensor alarm time

When the vehicle power is off, the ACC cable is in low level. If the vehicle power keeps off for 10 minutes, the device will come to the state of sensor alarm preparation automatically. In that case, if several times of vibration happened, the device will trigger vibration alarm mechanism. After that, if the vehicle power is still off (low-level ACC cable) in the following 3mins, the device will alarm instantly.

The sensor alarm preparation time can be modified by SMS "SFDS,password,time(minitus)#" The time ranges from 1-180 mins. For example: SFDS,000000,15#. It means when ACC cable is in low level for 15mins, then the device comes to the state of sensor alarm preparation

### 6.8 Time zone

The time showed in the positioning data is defaulted as Beijing Time (Time zone is GMT+8). If the device is in the place where the time is different from Beijing Time, users can modify the time zone by SMS "SQSZ,password,director,code#"

For example: SQSZ,000000,W,11#. It means the time zone is GMT-11

E means East(GMT+), W means West(GMT-).

The code ranges from 0-12

For example: SQSZ,000000,W,11#(Which means Western 11 zone)

# 7 Operation of device

### 7.1 Power on/ Power off

Power on: Once insert a valid SIM card and connect all the wires, turn on the device, then Power LED will flash first, During signal searching process, GSM and GPS LED will flash. Once GPS LED keeps solid light, it means the device has been located and it starts to work.

Power off: Just turn off the power switch

The device will begin to upload positioning data to server once inserting a valid SIM card and power on. During the working time, it can upload data to server every 10 seconds.

#### 7.2 View location method

7.2.1 By SMS

SMS "WHERE,000000#", to the SIM number of GT06. The terminal will send a location message automatically.

This coordinate can be put into Google map directly and you can get the address.

Example: Normal mode! Lat: 23.008618, Lon: E114.393686, Course: 120, Speed: 53.02, Data Time: 10-04-12 14: 52: 36

7.2.2 By platform

Go to the platform website offered by dealers to check your vehicle location.

## 7.3 SOS alarm

In emergent case, press SOS for 3s to activate SOS alarm. Then the device will send SOS SMS to preset specific numbers and then dial the

numbers in circles until the call is through. At the meantime, the device will upload SOS alarm data to the server.

SMS example: SOS Alarm Model! Lat:N22d 34.5823m, Lon:E113d 55.0061m, Course:234.93, Speed:10.760, Data Time:10-04-12 07:50:08 SOS Alarm Model!- It indicates a SOS alarm happened.

Lat:N22d 34.5823m, Lon:E113d 55.0061m, Course:234.93, Speed:10.760, Data Time:10-04-12 07:50:08-It is the last positioning information

Note: The specific numbers should be preset, just refer to 7.2

#### 7.4 Wire cut-off alarm

When the electricity supply of device is cut off, it will activate cut-off alarm. In this case, the device will send related SMS to the specific numbers and dial the numbers in circles. If nobody answers, the call just keeps 3 loops at most. At the meantime, the device will upload SOS alarm data to the server.

Cut electricity alarm sms e.g.:

Charger off! Cut Power Mode! Lat: N22d 34.5823m, Lon:E113d 55.0061m, Course: 234.93, Speed:10.760, Data Time:10-04-12 07:48:38 Description: Charger off! Cut Power Mode! Means power has been cut. Lat: N22d 34.5823m, Lon:E113d 55.0061m, Course: 234.93, Speed:10.760, Data Time:10-04-12 07:48:38 is the last location

information of the device.

Note: SMS and call alarm function need setting special number beforehand.

#### 7.5 Low battery alarm

When the device is only working with battery, once the internal voltage of battery is less than 3.7V, device will send low battery alarm sms to specific number and alarm on platform.

Low battery alarm sms content example: "Warning!!! Battery is too low!" Which means the battery is to low, to inform user charging it in time.

Note: SMS and call alarm need specific numbers set beforehand.

#### 7.6 Vibration alarm

When vehicle power is off, ACC status is also low, and if the lead time of low ACC is more than 10 minutes (settable), device will activate security alarm. When the security alarm is on, once the vehicle vibrates for several times, the alarm will be activated, in the later 3 minutes, vehicle power is still off (ACC status is low, device will start alarm. At this time, it will send alarm sms to SOS specific number, and dial the SOS specific number in cycle until through, the tracking platform will also receive vibration alarm message.

e.g.: Sensor Alarm Mode! Lat: N22d 34.5823m, Lon:E113d 55.0061m,

Course: 234.93, Speed:10.760, Data Time:10-04-12 07:48:38

Description: Sensor Alarm Mode! Means sensor alarm is activated.

Lat: N22d 34.5823m, Lon:E113d 55.0061m, Course: 234.93, Speed:10.760, Data Time:10-04-12 07:48:38 means the last location information of device

Note: SMS and call alarm function need setting special number beforehand.

#### 7.7 Voice monitoring

When the special number cellphone dial device, ringing fifth, it will enter voice monitoring status. At this time, caller can monitoring the sound in vehicle.

Incoming call from non special number, will not activate voice monitoring function.

Note: to realize this function, please set special number beforehand.

#### 7.8 Oil cut-off

If vehicle is theft, you can send oil cut-off command to tracking platform. If the vehicle running safely, cut off the oil, the vehicle will be stopped. To make sure the security of vehicle, tracker can only indicate to cut off oil when GPS is in valid position status, and the speed is less than 20KM/H or in static. Note: SMS and call alarm function need setting special number beforehand.

## 7.9 Restoring Oil

When the alarm is off, sending recover oil command manually. Device will restore oil supplying, and vehicle will work normally again.

#### 8 Web based tracking online activation

The GPRS web based tracking platform allows real time tracking with the latest Google maps. There is also a playback feature that allows you to view where the vehicle has been for up to 30 days in the past making it ideal for fleet management.

### 9 Trouble shooting

9.1. After installing it in the first time, if device can not get connected with platform server, at this time it is "logged off" status in platform. Please check the installation of device:

- Check whether the connection of power-line is correct, please do not connect it with the car control line.
- Check whether SIM card is installed correctly, please refer to the installation manual;
- 3) Check whether the power switch is toggled to "ON", the switch is in

the left of the SIM card's slot.

- Whether ACC ignition cable is connected, please turn on the ACC with key after it is connected.
- Check the LEDs' status. In normal working status, the red LED is in solid bright or flashing; green LED and blue LED are both in solid bright.
- Check whether GPS is located, if not, please drive to the open areas for positioning.

9.2 If it is "offline" status in platform:

First of all, check the three LEDs' status. If it is not convenient to check that, please check the SIM card status :

- Call the SIM card number of the device to check whether you can get through;
- 2) Check whether the vehicle is in no GSM area, such as basement;
- Check the GSM/GPS disconnection area, whether it is all disconnected or few of them disconnected, to make sure whether it is the fault of operator's internet.
- 4) Check whether your SIM card charge is overdue;
- 5) Check whether the SIM card supports GPRS;
- 6) Check the parameter setup, whether the device IMEI number, GPRS sending interval is correct;

9.3 If the device' GPS function is normal, but can not locate for a long time, please check whether the installation setup of device is correct:

1) Please make sure the GPS antenna face is up;

2) Please make sure there is no electromagnetic wave- absorbent object (metal) above the device, especially the thermal-protective coating on the windshield, it may affect the GPS reception of the device;

9.4 If GPS can not receive the signals normally (there is high building around to interfere with GPS reception), please drive to the open areas for positioning. Generally, it needs 1-2 minutes to receive the first coordinates.

9.5 If GSM can not receive the signals normally, please check whether SIM card is installed correctly or there is no GSM signal at the location you are, such as basement parking, please drive to a place covered by GSM signal reception.

9.6 When cellphone with special number receives tele- cutoff alarm sms, please make sure whether it is illegal wire cutoff, or the FUSE on power line is blown. If the FUSE in it is blown, please contact your distributor to exchange with the same model FUSE, after the internal trouble is shoot, it can be power on to work again.