# **GPS Tracker**

(GPS+SMS+GPRS+GSM)

## **User Manual**

(Version 1.0)

## 1. Appearance Design



# 2. Specification

- GSM 850/900/1800/1900 Quad band for global world
- GPRS: CLASS12,TCP/IP
- Voltage input range: 9-45V
- Sleeping Current: 1.0mA@12V
- GPS positioning time: Cold start -38S (OPEN SKY)

Hot start -2S (OPEN SKY)

- GPS positioning precision: 10m (2DRMS)
- Temperature :  $-20^{\circ}$ C ~ +70 $^{\circ}$ C
- Humidity: 20% 80% RH
- Dimension: 70(L)mm\*39(W)mm\*12(H)mm
- Weight: 37g

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

## 3.Function

- ♦ GPS satellite & LBS base station dual model positioning
- ♦ Vibration alarm (sensitivity is adjustable from 1 to 5 grade)
- ♦ GEO-fence
- ♦ Low current consumption sleep mode
- ♦ ACC detection(Digit input1: 9-50V)
- ♦ AC detection(Digit input2: 9-50V)
- ♦ ADC detection(Analog input: 0-26V): support fuel oil sensor, temperature sensor
- ♦ +5V output for sensor power supply
- ♦ Remote control cut-off/on engine (petrol / electricity)
- ♦ Power cut off alarm
- ♦ SOS Alarm
- ♦ Voice monitoring
- ♦ 128M data storage while no gsm

## 4. Indicating Led Light



(PIC.2)

NOTE: For covert protective, the LED status will be invisible after installing the back cover. (1).Red Led -Power status indicator

Led status	Meaning	
Quick flashing	Working normally (working by backup car battery ).	
Slow plashing	Working normally (working by battery of device) the device will change to work by own battery while backup battery had been cut down and it will alarm.	
Continuously in bright status	Device error	

#### (2).Blue LED-GSM status indicator

LED Status	Meaning			
Quick flashing	Working normally ,uploading GPRS data to platform server			
Slow flashing	Working normally ,receive GSM signal normally			
Continuously in bright status	No GSM signal			

#### (3). Green LED- GPS status indicator

LED Status	Meaning	
Quick flashing	Working normally , GPS Located	
Continuously in bright status	Searching GPS signal	

### 5. Installation:

#### 5.1 preparation before installation:

- 5.1.1 Open the packing box to check whether the type of device is correct and whether the accessories are included ,or else please contact with your distributor.
- 5.1.2 To test SIM card, please install it into a normal GSM mobile and ensure it can send and receive SMS, and enables for GPRS.
- 5.1.3 SIM installation, refer to below pictures.

Note: Power off before installing or removing the SIM card.

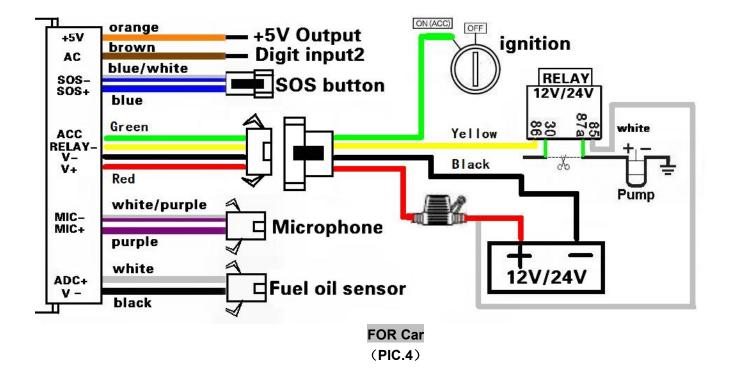


#### 5.2 Notice of Installation:

To prevent theft of the Device, the device should be installed as covertly as possible. Notice as following:

- 5.2.1 Avoid placing the Device close to higher power electrical devices ,such as reversing radar,anti-theft device or other vehicle communication equipment.
- 5.2.2 The Device should be fixed into position with cable ties or wide double-side tape.
- 5.2.3 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.
- 5.2.4 For safety, do NOT remove the fuse of device cable.

#### 5.3 Device wiring diagram



### 5.4 Steps of installation

- 5.4.1 Open the back cover ,insert a SIM card to SIM card slot .
- 5.4.2 Switch power button up(power on).
- 5.4.3 Connect the power code with the interface of device. Now three LED lights will lighting .Make sure the receiving side face up, without any metal object shelter. The LED lights will flashing after 1 to 5mins. It shows working normally.
- 5.4.4 Close the back cover.
- 5.4.5 Please ask professional technical to connect wires and install to the vehicle. After correct installation, the RED led will flashing, 1 min. Later the BLUE led will flashing too. That shows installing completely.

## 6. Cautions of device wiring:

### **6.1** Power code wiring:

The standard voltage is 9V-45V. 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. And please make sure the device is powered on status. (Power button on down position)

Red Led light will flashing while device installed correctly, GSM blue led light and GPS Green led light will flashing around 1 minutes later after getting signal.

## 7. Message commands:

User can set different kinds of function commands via sending message, including check position, cut

engine, etc., Below commands and punctuation marks must be putted under English status. All commands will get auto replies according to the message sent.

Note device with initial password 6666

NO	Features	Commands	Replies from device	Remarks	
	Add administrator	#6666#AAD#1#Cell		For example:	
1	No 1	No#	ADD admin account 1 ok!	#6666#AAD#1#1598888888#	
				Means administrator1 number is :	
	Add administrator	#6666#AAD#2#Cell		15988888888, can add 2 administrator	
2	No 2	No#	ADD admin account 2 ok!	total	
	Delete			For example: #6666#DAD#1# for	
3	Administrator No 1	#6666#DAD#1#	Delete admin account 1 OK!	delet the administrator	
	Delete			1 ;#6666#DAD#2# for delet the	
4	Administrator No 2	#6666#DAD#2#	Delete admin account 2 OK!	administrator 2	
			Fuel cut has already been	For example: #6666#CF# , only apply	
5	Cut engine	#6666#CF#	completed,OK!	for administrator	
			Open fuel has already	For example: #6666#OF# , Start engine	
6	Restore engine	#6666#OF#	been completed,OK!	only apply for administrator.	
	Setting time			#6666#SMT#30# For example:	
	distance in moving	#6666#SMT#sendcon	Set movement upload	#6666#SMT#10#,Here the unit is	
7	status	ds#	time,OK!	senconds 10 to 200s	
	Setting time			For example: #6666#SST#3#, Here the	
	distance in steady			unit is minutes	
8	status	#6666#SST#minutes#	#6666#sst#3#ok!		
				For example: #6666#SLEEP#10# this	
				mean setting sleep mode and every 10	
				minutes device will exit sleep mode and	
	Setting sleep mode			send a data to server , time	
9	time	#6666#SLEEP#TIME#		rang:1-99999, 0=disable sleep mode	
				For example: #6666#SSA#1#, Here	
	Active vibration			Levels, 1: most fexible 2: standard level	
10	alarm	#6666#SSA#levels#	Set alarm level, OK!	3. lowest level	
	Cancel vibration			For example: #6666#CSA#, cancel	
11	alarm	#6666#CSA#	Close vibration Alarm, OK!	vibration alarm	
				1= allow sms alarm 0=Disable sms	
12	SMS Alarm	#6666#SMSA#1#		alarm, For example: #6666#SMSA#1#	
	<u> </u>			1= allow call alarm 0=Disable call	
13	Call Alarm	#6666#CALLA#1#		alarm	
				For example: #6666#RESET#, The	
				device will restart after 8~18 mins.	
				Device will not reply message to	
14	Re-start device	#6666#Reset#	Start Reset System, OK!	administrator again .	
			<u> </u>	For example:	
				#6666#sapn#CMNET##### if user	
				name and password are blank, Or	
				#6666#sapn#CMNET#AA#123456###	
15	Set APN	#6666#sapn#apn name#user#password###		,# can not be missed	
16	Check APN	#6666#capn#	Current APN:CMNET		
	2.1001.71.11				

**Simply Commands:** In order to make the steps easy, below you can find our simply commands, the function is same as per above detailed commands. Remarks: SMS must be text under English status.

Features	Simple commands	Remarks:	Authority
Getting Location		Reply with google	
of longitude and		links of longitude and	
latitude	1234	latitude	Anybody
	DY		Only
Engine engine	RELAY,1#	Cut off the engine	administrator
	KY		Only
Restore engine	RELAY,0#	Restore the engine	administrator
	CS		
	PARAM#	Checking IMEI,IP,	
View information	STATUS#	Etc,	Anybody
Re-start	CQ	Re-start the device	Anybody

#### Vibration alarm Function:

If you need vibration alarm, please follow below instructions:

- 1) Add admin number: please use your mobile phone to send a SMS to the device according to the 1st command as above commands list(make sure to text the SMS under English status). After add your number as administrator, device will reply you a SMS with OK or failed.
- 2) Setting vibrate alert level: text a SMS to active vibration alarm and send to the device(make sure to text the SMS under English status), and set the vibration alert level, detailed please refer the 10th command as above commands list.
- 3) After finished above 2 steps, vibration alarm had been actived. As long as the car stopped for more than 1minute, if somebody gets in touch with the car and didnt turn on the ACC in 10seconds(ACC=0), the device will send SMS and call the administrator. If the ACC was turned on in 10seconds, the device will judge it as the car owner himself and will not alert the car owner. This is for not sending wrong vibration alert, active and close the vibration alarm smartly.

#### **Sleeping Mode with power saving Function:**

The sleeping mode had been activated and defaulted inside the device in the factory: After the car has switched off more than 5 minutes, the device will shut off all the led lights, turn off GPS module and goes to sleeping mode to save the power of the vehicle's battery. There are 2 methods to exit the sleeping mode:

- 1), Switch on the ACC, at this time, the green ACC cable is high level up, this will lead device exit sleeping mode. If ACC is always on high level up, (means ACC is always on) the device will not goes to sleeping mode.
- 2), Shake the device to make it exit from sleeping mode.

During the first time testing, it is better to connect the ACC wire to high level up to locate the GPS signal fast in the opening area as well as to avoid the device goes to sleeping mode and could not locate the GPS after 5 minutes. (note: please do not test in room as no GPS signal inside room). If client need to turn off the sleeping mode, please send SMS to the device #6666#SLEEP#0# to close this function.

#### ACC alarm Function:

Send following sms to set the ACC alarm. And the tracker will send the alarm via sms and call to admin while acc alarm occurred.

#6666#ACCAM#0#

(0=disable ACC alarm; 1= ACC ON alarm; 2= ACC OFF alarm; 3= ACC ON and OFF alarm)

### Digit input2 alarm Function:

Send following sms to set the input2 alarm. And the tracker will send the alarm via sms and call to admin while acc alarm occurred.

#6666#input2AM#0#

(0=disable input2 alarm; 1= input2 ON alarm; 2= input2 OFF alarm; 3= input2 ON and OFF alarm)

### Analog input Function: (Calibration of fuel sensor)

Tracker has ADC detection(Analog input) function, the input voltage range is from 0.0V to 100.0V, you can connect car original voltage type fuel sensor or add-on voltage type fuel sensor to this port. Due to the different height of fuel tank and fuel sensor specifications, tracker needs to be set appropriate zero rang value and full range value to detect the precise fuel percentage.

Zero calibration: Send "#6666#oilzero#" to tracker when the fuel tank is empty ,then tracker will adjust zero range automatically and reply "Getting oilzero ok! value=?.?V". you can also send sms command #6666#oilzero#0.1# to define the different voltage value when fuel tank is empty and it will reply"Setting oilzero ok! value=?.?V"

Full calibration: Send "#6666#oilfull#" to tracker when the fuel tank is full ,then tracker will adjust full range automatically and reply "Getting oilfull ok! value=?.?V". you can also send sms command #6666#oilfull#5.1# to define the different voltage value when fuel tank is full and it will reply"Setting oilfull ok! value=?.?V"

#6666#checkoil# is the command for checking percentage, current voltage, oilzero, oilfull values.

If full calibration is set as 0.0V, then tracker does not give percentage value but ADC voltage value in gprs package.

#### **SOS Alarm Function:**

Press the sos button, device will send sos alarm via sms and call to the admin number.

### Voice monitoring Function:

To active the voice monitoring function, please follow the steps as below:

- 1) send sms #6666#OM#
- 2) set the admin number
- 3) use admin number to call the tracker and the phone will be got through automatically for monitoring. You can also send sms #6666#CallAdmin# to the tracker to get the call from the tracker.

## 8. Logging on platform to track devices via Internet globally

Platform Web domain:

If you are registered user arleady, you can logging in platform directly, or please contact with your distributor to open an account for you.

Please contact your distributor and get the platform user manual.

Please enter your user name and password to logging in.

## 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:

- 1) Check whether the connection of power-line is correct, please do not connect it with the car control line.
  - 2) 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.
  - 4) Whether ACC ignition cable is connected, please turn on the ACC with key after it is connected.
  - 5) 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.
  - 6) 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 LED's status. If it is not convenient to check that, please check the SIM card status:

- 1) 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;
- 3) 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.