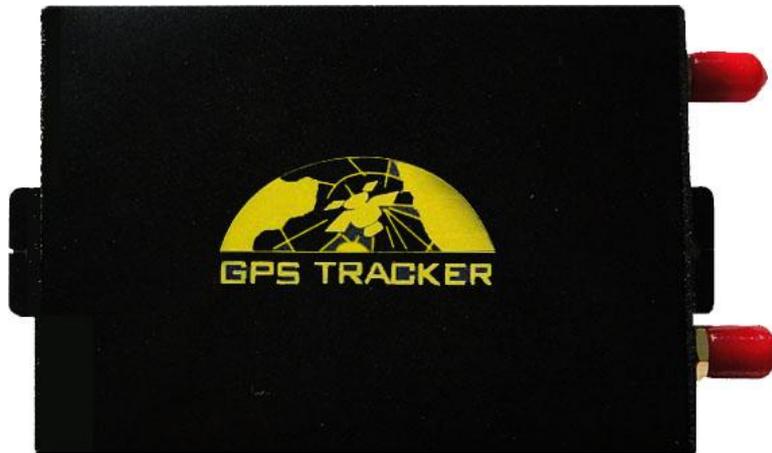


# **GSM/GPRS/GPS Vehicle Tracker GPS105 User Manual**



## **Preface**

Thank you for purchasing the tracker. This manual shows how to operate the device smoothly and correctly. Make sure to read this manual carefully before using this product. Please note that specification and information are subject to changes without prior notice in this manual.

Any change will be integrated in the latest release. The manufacturer assumes no responsibility for any errors or omissions in this document.

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# 1. Function Introduction

1.1. This tracker is a new product based on the GSM / GPRS network and GPS satellite positioning system, which set multiple functions of security, positioning, monitoring surveillance, emergency alarms and tracking in its entirety. It can track and monitor remote target by SMS or internet.

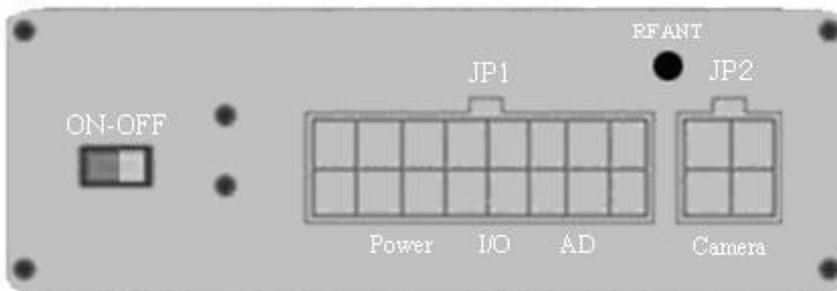
1.2. Features

- GPS/LBS (location based service) double way tracking solution.
- SMS/GPRS/Internet Network data transmission.
- Configure by remote terminal, remote control vehicle.
- Snapshot photo automatically when alarm triggered
- RFID.
- Fuel level measurement, Oil leakage or theft alarm.
- Vehicle Speed Detection.
- Kilometrage report.
- Tracking and monitoring by SMS, web server and mobile app.

# 2. Applications

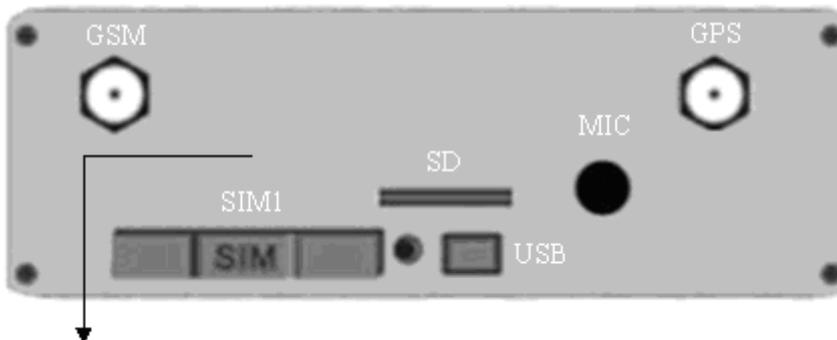
Used widely for vehicle and other moving objects tracking and management.

# 3. Hardware Description



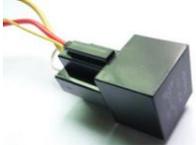
(JP1) 16PIN harness port

(JP2) Camera port / RFID Port



Built SIM II

# 4. Accessories

NO.	PHOTOES	NAME	NOTE
1		GPS Antenna	2 meters
2		GSM Antenna	2meters
3		Microphone	1.5 meters
4		Harness	16PIN
5		Relay	12V/40A
6		Shock sensor	Option
7		Siren	Option
8		Remote controller	Option for model B ONLY
9		Camera	Choose one only from these 2 accessories for each tracker
10		RFID	
11		Central lock relay	Option

12		Fuel sensor	Option
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## 5. Specifications

Content	specifications
<b>DIM.</b>	<b>92*71*26mm</b>
<b>Weight</b>	<b>120g</b>
<b>Network</b>	<b>GSM/GPRS</b>
<b>Band</b>	<b>850/900/1800/1900Mhz</b>
<b>GPS Sensitivity</b>	<b>-159dBm</b>
<b>GPS Accuracy</b>	<b>5m</b>
<b>GPS Start time</b>	<b>Cold status 45s</b> <b>Warm status 35s</b> <b>Hot status 1s</b>
<b>Voltage of car power system</b>	<b>12 V -24V</b>
<b>Backup battery</b>	<b>Chargeable 3.7V500mAh Polymer Li-Battery</b>
<b>Storage Temp.</b>	<b>-40 °C to +85 °C</b>
<b>Operation Temp.</b>	<b>-20 °C to +65 °C</b>
<b>Humidity</b>	<b>5%--95% non-condensing</b>

## 6. Installation

### 6.1. Terminal Installation

6.1.1 Please ask the qualified engineers to install.

6.1.2 Do not install it in an environment which is over GSM &GPS performance and fix the antennas in a position with good signals.

6.1.3 Pay attention to make installation location preventing water and dust.

6.1.4 Knowing about the type of the door trigger is positive or negative. Please connect the green wire to the door control circuit if it is positive, and connect blue wire if it is negative.

6.1.5 Electric lock is set default central lock. If vehicle central lock is vapor lock, refer to the following instruction to Switch between Electric and Vapor lock.

6.1.6 Please put SOS button at the place driver can touch.

6.1.7 Connect the GPS and GSM antenna to the right connector, and find an appropriate place to fix the antennas to make sure good reception.

6.1.8 Find the accompanied harness and insert it into the corresponding holes of the products, and connect the wires with the original car circuit showing below.

6.1.9 Fuel sensor diagram instructions: Refer to the fuel sensor installation instructions.

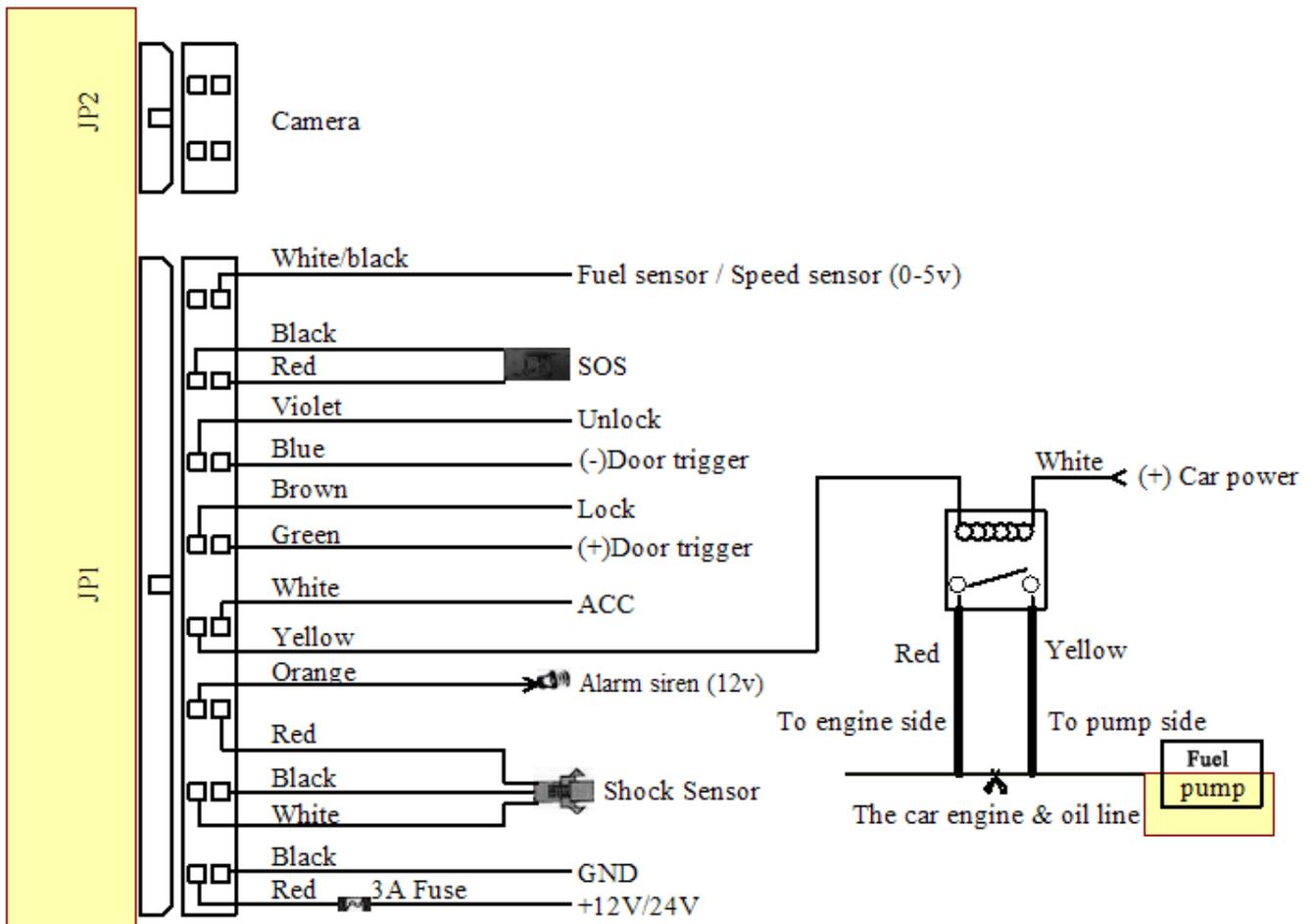
## 6.2. Installation wiring diagram

### 6.2.1. Unit installation wiring diagram

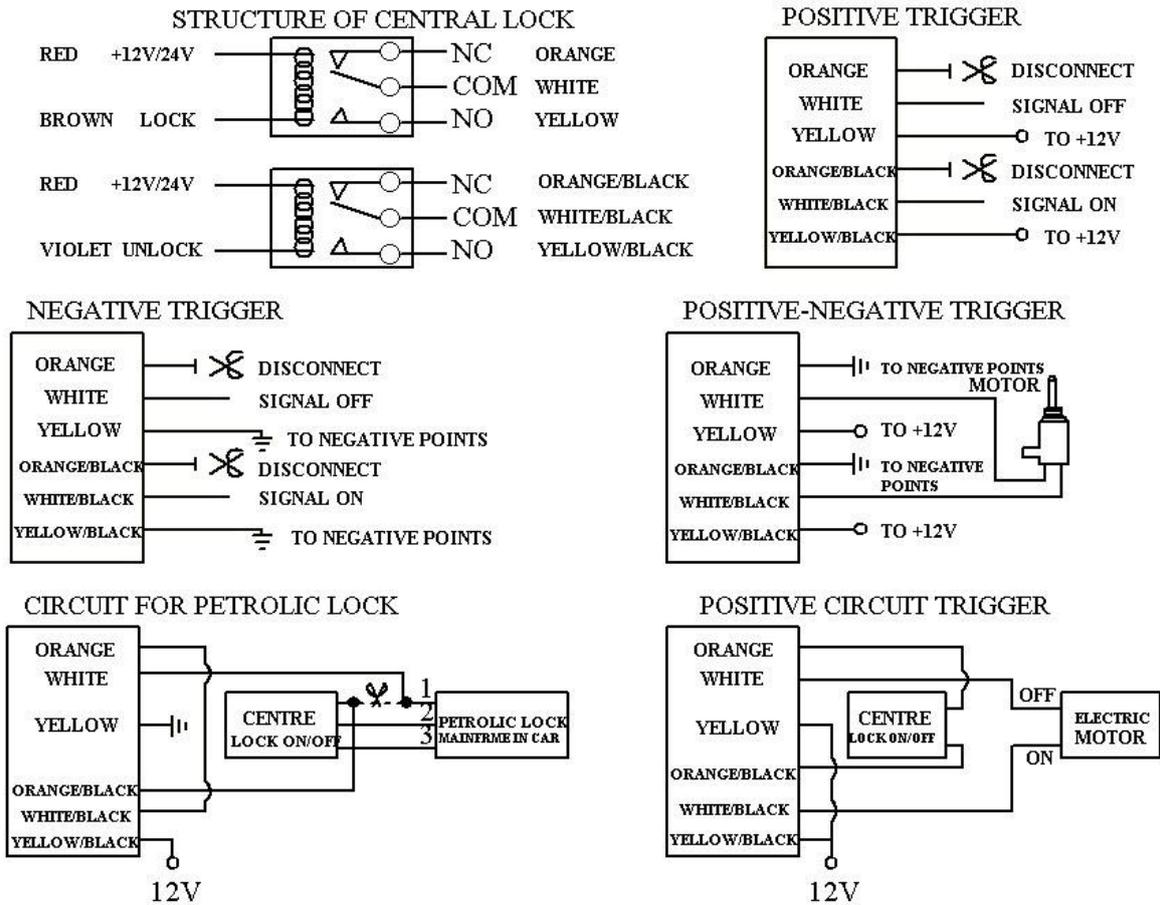
6.2.1.1. choose only one from vehicle Speed detection and fuel measurement.

6.2.1.2. For vehicle Speed detection, white with black wire directly connect to speed sensor signal wire of car gearbox.

6.2.1.3. For fuel measurement, white with black wire connect to fuel sensor signal wire.



## 6.2.2. Central locking system wiring diagram:



## 6.3. SIM Card Installation

6.3.1 Use a tweezers or a sharp thing to touch the SIM CARD popup switch, the SIM CARD slot will pop up, take out the SIM card slot to load the SIM card, and then put the SIM card slot back to its original position after confirm the SIM card in the right place.

6.3.2 Please make sure that the SIM card is GSM network and able to execute the function of incoming calls display, no calls can be diverted and the PIN code is locked. The SMS format must be TXT format, and can't recognize the PDU format.

6.3.3 If need to save historical positions or positions when GSM not available, please insert SD card to its slot.

6.3.4 User need open the case to install the second internal SIM card

## 7. Function and Operation

### 7.1. Turn on device

7.1.1 Connect the positive (red) and negative (black) wire to 12V or 24V car power, wait for 1 minute after connecting power to wait tracker works normal, and then turn on the backup battery switch

## 7.2. GSM/GPS LED Indicator

LED color	Behavior	Descriptions
Red	on	No GSM signal
Red	one time per second (fast)	GSM signal normal and work under GSM mode
Red	one time per 3 seconds (slow)	GPRS mode
Green	Quick flash	GPS signal normal
Green	OFF	No GPS signal
Red & Green	Flash three times alternately	Detect microSD card

## 7.3. Initialization

Send SMS “begin+password” to the unit, it will reply “begin OK” and initialize all the settings to default factory settings. (default password: 123456)

For example: Send SMS “begin123456”, it will reply “begin ok”. (No quotation marks “”when sending all the SMS)

## 7.4. Change Password

7.4.1. Send SMS “ password+old password+space+new password” to the unit to change the password.

For example: send SMS “password123456 888888” to the unit. If succeeded, “Password ok” will reply to your cell phone.

7.4.2. Keep the new password in mind, the machine will not work properly if lost the password.

7.4.3. Note: The new password must be 6 digits of the Arabic numerals, or the device will not recognize.

7.4.4. When reading this user manual, you will notice that we have used "+" and "space" between some words;

"+" between two words means they should be written together as one word and "space" between two words means you should leave one character space between two words.

## 7.5. Authorization

7.5.1 You have to save your phone number as authorized user to be able to use certain functions as movement alerts, sos alerts and reports. You can authorize up to 5 numbers. Authorization can be done in two different ways

7.5.2. Call and track the tracker device for 10 times from your cell phone in success and it will register your mobile phone number as the authorized number automatically. And reply “add master ok”

7.5.3. Send SMS “admin+password+space+cell phone number” to set up an authorized number. All the other authorized numbers must be set by the first authorized number. “admin OK” will be returned after command was executed.

7.5.4. Delete authorization: Send SMS“ noadmin+password+space+authorized number” to delete the authorized number.

7.5.5. If you want to track the target when it enters into another country, you must add the country code before the cell phone number. You should authorize your number in international format as follows: “admin123456 008613322221111” to tracker to set 13322221111 as an authorized number.

## 7.6. Dual SIM Card

7.6.1. Device supports dual SIM card, but only one of them work with tracker, and switch to the other one automatically when it is broken or no GSM reception.

7.6.2. Device default external SIM card as card ONE which have the priority to work with the tracker,. when 2 cards are valid, can be set by text message to specify priority to one of the 2 SIM cards. But when one of the 2 SIM card is damaged, or no GSM network. It will automatically switch to another different SIM card.

SMS Command: Send “ SIM ONE+password”, priority to use external SIM Card

SMS Command: Send “ SIM TWO+password”, priority to use internal SIM Card

## 7.7. Modes switch “track”, “monitor”

7.7.1 The default mode is “track” (Track mode).

7.7.2 Send SMS command "monitor+password" to tracker device, it will reply " monitor ok!" and switch to monitor mode, and then call the number in device to monitor the voice.。

7.7.3 Send SMS command "tracker+password" to tracker device, It will reply "tracker ok" and restore to track mode.

## 7.8. Single Locating

7.8.1 If there aren't any authorized numbers set-up, Tracker will reply to all calls with a location report. If there are authorized numbers set-up, only authorized numbers will be able to receive location report from the tracker.

7.8.2. Dialing the tracker device from the authorized number, it will hang up your calling and respond to a real-time latitude and longitude information as following:



Tracking location, when no GPS signal, the SMS includes the last valid latitude & longitude as well as the LAC code of current position, the LAC code can be input in the column of “manual track” menu of web platform to check location.

## 7.9. Auto track continuously

### 7.9.1 Track with limited times upon time interval:

Send SMS command "fix030s005n +password" to the tracker device, it will report the latitude & longitude at 30s intervals of 5 times. (s:second, m:minute, h:hour). This command set must be in 3 digits and the maximum value is 255.

### 7.9.2 Track with unlimited times upon time interval:

Send SMS "fix030s\*\*\*n+password" to the tracker device, it will reply the latitude & longitude continuously at interval of 30 seconds.

Note: the interval must not less than 20s.

### 7.9.3. Smart track upon time and distance interval:

Please set "track with unlimited times upon time interval" before this function, and send "distance+password+space+distance", tracker will reply "Distance ok", and then tracker will locate upon both the pre-set time and distance.

E.G: Send "distance123456 0050", it means distance is 50 meters; the number must be 4 digits Arabic numbers. Set this function on web server: Set time interval first and then distance interval, tracker will locate upon the time and distance.

### 7.9.4 Cancel: Send SMS "nofix+password" to the tracker device

## 7.10. Automatic update positions of vehicle turns

7.10.1 The tracker will update the positions automatically to web server once the vehicle changing driving direction over pre set angle value to form a smooth trajectory consistent with the actual road, this function works only in GPRS mode.

7.10.2 Send "angle+password+space+angle" to tracker, it will reply "angle ok".

7.10.3 The angle must be 3 digits Arabic numbers, default angle value is 30 degree.

## 7.11. GPS drift suppression

7.11.1 This function is deactivated as default, send "suppress+password" to tracker, it will reply "suppress drift ok". The GPS data stop updating if vehicle is not driving (ACC is OFF) and latitude and longitude always keep same, and GPS data updates automatically when vehicle is moving (ACC is ON)

7.11.2 Cancel: send "nosuppress+password" to tracker, it will reply "nosuppress ok".

## 7.12. Exact street address by SMS

7.12.1 You must set up the APN of your local GSM network for the SIM card in tracker first before using this function, if there is user name and password for GPRS login, Please refer to APN configure in this manual.

7.12.2 After configure the APN, send "address+password" to device, it will reply SMS including exact street address. For example: No.8, Guankou 2nd Rd, Nantou, Nanshan district, Shenzhen, Guangdong, china.

## **7.13. Location based service (LBS) / Cell-ID Locating.**

If the tracker cannot establish a solid GPS Fix, it will calculate its location using Cell-ID GSM locating, Location reports will include the GPS coordinates of the last known positions as well as a LAC code, Entering the LAC code to the “Manual Track” menu of web tracking platform will enable you to see the tracker’s current location. You can also send command “address+password” to the tracker to request exact address, track will automatically switch to tracking by LBS in GPRS mode. Accuracy of LBS depends on the distance to the nearest GSM Network Cell Tower or Base Station.

## **7.14. View photo on cell phone (option)**

7.14.1 You must set up the APN of your local GSM network for the SIM card in tracker first before using this function, if there is user name and password for GPRS login, Please refer to APN configure in this manual.

7.14.2 After APN configuration, send “photo+password” to device, it will take photos and send a SMS including http link to cell phone. Click the link to get the photo from internet.

## **7.15. Speed detecting (option)**

### **7.15.1. Speed calibration**

7.15.1.1 Due to the different signal of speed sensor and size of tire, so calibration is needed before using this function.

7.15.1.2 Send command “setspeed+password xxx”, tracker will records the speed and always calculate speed accordingly.

### **7.15.2. Speed recording**

7.15.2.1 Tracker will record speed every 5 seconds;

7.15.2.2 Tracker will always record the latest 48 hours data in memory (memory card) including the speed of speed sensor and GPS.

### **7.15.3. Kilometrage Report.**

7.15.3.1 Set travelled kilometrage: Send command “ODO+password+space+100000”, tracker will reply “Set ODO ok!”, the unit is kilometer, the accumulating kilometrage will add the travelled kilometrage automatically.

7.15.3.2 Tracker will calculate the kilometrage smartly according to the speed sensor and GPS.

### **7.15.4. Governor mode**

7.15.4.1 Send command “ governor+password” to tracker, it will reply “ governor ok” and switch to governor mode.

7.15.4.2 Set governor: send command “max+password 080”. E.g max123456 080, 123456 is the password, 080 is the speed.

7.15.4.3 When speed approach max speed, siren beeps 5 times to warn the driver; when speed reaches or exceed the max speed, relay will be activated to limit the speed.

7.15.4.4 Cut off oil and power system doesn't work in governor mode.

7.15.4.5 Cancel: send command “nogovernor+password” to tracker, it will reply “nogovernor ok”.

## **7.16. Vehicle maintenance notification**

Send SMS "service123456 365d 10000", tracker replies "service ok!" after succeed, when the travelled mileage over 10,000 kilometers, or when the device accumulated 350 days of work, it will give send maintenance notice to the authorized numbers 15 days in advance.

If in GPRS mode, Device will report to GPRS central.

If in GPRS mode, Device will report to server center every time when vehicle starts, and only one notification in SMS mode.

## **7.17. RFID (option)**

RFID module is supported. RFID data can be uploaded to service center (web platform) via GPRS, and saved and displayed on the web platform.

## **7.18. Data logging**

Logging volume depends on the capacity of the SD card inserted in the tracker device, and can be copied to computer by card reader.

### **7.18.1 Auto logging**

When the tracker device lost GSM signals or fall offline from GPRS, tracker will log the tracking position and alerts automatically in the SD card on the basis of the pre-set condition, when GSM signals get back, all the event alerts will be auto-sent to the authorized numbers or monitoring platform (server), but the logged tracking data should be loaded to the monitoring platform via SMS command.

### **7.18.2 Logging upon times**

Send SMS: “save030s005n+password” to the tracker unit, it will reply “save ok”, and will log the lat, long locations every 30 seconds for 5 times. (S: second, m: minute; h: hour).

### **7.18.3 Multi-logging:**

Send SMS:”save030s\*\*\*n+password” to tracker device, it will reply “save ok”.

### **7.18.4 Logging Clearance**

Send SMS: “clear+password” to tracker device, it will reply “clear ok”.

## **7.19. Data load**

### **7.19.1 Current date Load**

Send SMS: “load+ password” to tracker device, it will reply: “load ok” if the device is working well under GPRS mode; if not, it will reply “load fail! Please check gprs” that means device does not work under GPRS mode, and the data can be only uploaded to web platform by gprs.

### **7.19.2 Specified date Load:**

Send SMS: “load+ password+ space+ year month date” to tracker device, it will reply: “load ok” and load the tracking data to the monitoring platform upon the valid time you choose. For Example: send SMS: “load123456 20110425” to the tracker device, means to load the tracking data of 25th April 2011 to monitoring platform.

## 7.20. Forward the third parties' message

7.20.1 Send SMS "forward+password+space+third parties phone number" from authorized phone number, tracker will reply "forward ok", and supports 1 third parties phone numbers at most.

For example, set the phone number of the service provider of the SIM card in the tracker, when charge remind message coming in, tracker will forward it to authorized phone number.

7.20.2 Cancel: Send SMS command "noforward+password".

## 7.21. Charges Inquiry

Send SMS command "balance+password+space+carrier's phone number+space+code" to tracker, it will forward the code to carrier's phone number and return the balance message received from carrier's phone number.

## 7.22. ACC working alarm

7.22.1 This function is deactivated by default. To activate this function, send "ACC+password" to tracker, it will reply "ACC ok". And tracker will send "ACC on+latitude & longitude" to authorized numbers when detect ignition action, that means the vehicle has been started; and tracker will send "ACC off+latitude & longitude" to authorized numbers, that means ACC off.

7.22.2 Send "noACC+password" to deactivate this function, tracker will reply "noACC ok".

7.22.3 This configuration can only activate and deactivate the alarm to authorized numbers; it will send to web server automatically in GPRS mode and can't be deactivated.

## 7.23. Function of Remote Controller (option)

Button	Function	Descriptions
	ARM / Lock	Press for 0.5 second, the siren will beep 1 time.
	DISARM /unlock	Press for 0.5 second, the siren will beep 2 times.
	ARM & Silent mode	Press for 0.5 second when it is in disarm state, the siren will beep 1 time. No voice from siren when alarm triggered and quit from siren mode automatically when disarm.
	SOS	Press for 3 seconds, Tracker will send SOS alert to authorized phone numbers without voice.
	Deterrence/car search	Press for 0.5 second when it is in arm state, siren will beep 10 seconds, press disarm button  to quit.

## 7.24. Remote controller programming

7.24.1 Supply power to tracker to turn it on and then short press the SOS buttons for 7 times, programming mode is ready after siren beeps 2 times.

7.24.2 Short press  on the first remote controller, programming for the first remote controller is successful after siren beeps 1 time.

7.24.3 Short press  button on the second remote controller, programming for the second remote controller is successful after siren beeps 1 time.

## 7.25. Electric lock and Vapor lock switch

7.25.1 Send command "locktype+password+space+1", tracker will reply "locktype ok", switch to vapor lock in 5 seconds.

7.25.2 Send command "locktype+password+space+0", tracker will reply "locktype ok", switch to electric lock in 0.5 seconds, electric lock is the default one.

## 7.26. Arm/lock (All lock/unlock functions need the optional central lock relay )

### 7.26.1. arm/lock door by SMS

Send SMS command "arm+password" to the tracker, the terminal of vehicles will change to arm state, Meanwhile, car door is locked, and it will reply SMS "Tracker is activated".

If the vehicle are in ignition state (ACC is ON), car door will be locked, but ARM will fail, Meanwhile , it will reply SMS "set up fail! pls turn off ACC".

If engine turn off, but door is open, then the car can't enter ARM state and reply "setup fail, pls close the door."

### 7.26.2. Arm / lock door by remote controller

In disarm mode, short-press remote control button ,the door of the vehicle will lock, and tracker changes to arm states, siren beep 1 time, no SMS message.

If the vehicles are in ignition state (ACC is ON), fail to change to arm state, but door will be locked, siren will not beep.

If car door is not closed, siren will beep for 3 times.

## 7.27. Disarm

### 7.27.1. Disarm / unlock door by SMS

Send SMS command "disarm+password" to the tracker device in the vehicle, It will reply "Tracker is deactivated" in both armed and disarmed state, and the SMS command will make the tracker device enter into disarmed state if the unit currently armed.

It won't alarm if the door is open and sensor is vibrated and the engine is started when deactivated this arm function.

### 7.27.2. Disarm / unlock door by remote controller

Short press  button in ARM state to enter DISARM state, siren beeps 2 times.

## 7.28. Silent arm

### 7.28.1. Silent arm / lock door by SMS

Send SMS “silent+password” to tracker, it will reply “silent ok!”. It means tracker enters into silent mode and door will be locked as well; siren won't be sound after alarm is triggered, but tracker will send SMS to authorized numbers.

And send “disarm+password” to quit silent mode.

### 7.28.2. Silent arm / lock door by remote controller (option)

Press  in disarm state for 0.5 second, the siren will beep one time, the car will enter ARM & Silent mode and lock door at the same time. Siren won't be sound after alarm is triggered, but tracker will send alarm SMS to authorized numbers.

Press  to quit.

## 7.29. Alarms

### 7.29.1. SOS Emergency Alarm

#### 7.29.1.1 SOS via remote controller

Press  button for 3 seconds; siren will not beep, the tracker device will send SMS “help me+lat./long.” to all the authorized numbers at interval of 3 minutes. It will stop sending such a SMS when any authorized number reply SMS “help me!” to the tracker.

#### 7.29.1.2 SOS via SOS Button

Long-press SOS button on the cables for 2 seconds, the device will send sms: “help me + lat/long” to every authorized number at interval of 3 minutes. No beeps from siren. Alerts will be stopped after received “help me!” from any authorized phone number.

### 7.29.2. Geo-fence

Set up a geo-fence for the tracker device to restrict its movements within a district. The unit will send SMS to the authorized numbers when it goes out of this district.

Set up: When the tracker stays immobile in a place for 3-10 minutes, the user can send SMS “stockade+password+space+latitude,longitude;latitude,longitude” to tracker to set the restricted district. In case of breach, it will send SMS “stockade!+latitude/longitude.” to the authorized numbers.

Note: The first latitude & longitude is coordinate of the top left corner of the Geo-fence, while the second latitude & longitude is the coordinate of the bottom right corner, it will alarm SMS at 3 minutes interval once goes out of

the fence.

Cancel: Send SMS “nostockade+password” to deactivate this function.

### **7.29.3. Multi-area management**

#### **7.29.3.1 Set Area**

Send SMS command "area+password+space+latitude,longitude+space+areaname,distanceM" to tracker(distance unit: M for meter, K for kilometer), it will reply "area01 ok".

Example: Send "area123456 22.353648,113.543678 school,800M".

Note: 5 areas at most and the distance between two points can't be less than the total distance in the 2 commands, and different areas can't cover each other.

#### **7.29.3.2 Delete areas**

Send SMS command:"noarea+password+space+area name", tracker will reply:"noarea ok".

#### **7.29.3.3 Rename and set distance**

Send SMS command "rename+password+space+old name;new name,distanceM" to tracker, if name is not repeated and area doesn't cover others, it will reply "rename ok!" for successful configuration.

Example: Send"rename123456 area01;school,800M", it means the new area name is "school", and covers area of a radius of 800 meters.

#### **7.29.3.4 Activate multi-area management**

Send SMS command "area+password+space+on" to tracker, it will reply "Area on ok!", when tracker enter the pre set area, it will send SMS "area name+latitude & longitude" to all the authorized phone number, and send same SMS when goes out of the area.

#### **7.29.3.5 Deactivate Multi-area management**

Send SMS command "area+password+space+off" to tracker, it will reply"area off ok!"

### **7.29.4. Movement Alarm**

Set up: when the unit stays immobile in a place for 3-10 minutes with GPS signal reception, the user can send SMS“move+password+space+0200” to the tracker (Suppose area of a radius of 200 meters, it supports 4 digits at most. Unit: Meter). It will reply “move OK”. In case of such a movement (the default distance is 200m), it will send SMS “Move+ latitude & longitude” to the authorized numbers.

Cancel: Send SMS “nomove+password” to deactivate the movement alarm.

### **7.29.5. Over Speed Alarm**

7.29.5.1.Set up: Send SMS “speed+password+space+080” to the unit (suppose the speed is 80km/h), and it will reply “speed OK!”. When the target moves exceeding 80km/h, the unit will send SMS “speed+080!+ latitude & longitude” to the authorized numbers.

7.29.5.2.Cancel: Send SMS “nospeed+password” to deactivate the over speed alarm.

Remark: The recommended speed should be not less than 30km/h. For below that rate, it will be effected the accuracy by GPS signals drift etc.

### **7.29.6. Fuel Checking Alerts (Optional)**

7.29.6.1 During driving process, when the Tracker Device detects the fuel decrease by 20% in 3 minutes, then it will send

oil leak or theft alert “oil:XX%+Lat, Long” to authorized number in 3 minutes interval. Siren beeps 30 seconds continuously.

7.29.6.2. When Acc off and Car stop, the tracker device detects the fuel decrease 2% comparing with previous fuel when car stop, It will send oil leak or theft alert “oil: XX%+ Lat, Long” to authorized number in 3 minutes interval. Siren beeps 30 seconds continuously.

7.29.6.3. Cancel fuel alarm: Send SMS command “nooil+password” to tracker.

### **7.29.7. Low battery alarm**

7.29.7.1. Send SMS “lowbattery+password+space+on”, it will send SMS “low battery+latitude/longitude” to authorized numbers 2 times in total at 15 minutes interval when voltage of battery is going to be about 3.55V.

7.29.7.2 This function activates as default, send SMS “lowbattery+password+space+off” to deactivate.

### **7.29.8. Power off alarm**

7.29.8.1 Send “ extpower+password+space+on” to activate, it will send SMS “power alarm+latitude/longitude” to authorized numbers every 3 minutes when external power is cut off.

7.29.8.2. This function activates as default.

Cancel: Send SMS “ extpower+password+space+off” to deactivate it.

### **7.29.9. GPS Blind Spot Alert**

7.29.9.1 This function deactivates as default, send SMS “gpssignal+password+space+on” to activate, it will send alert SMS “no gps+last valid latitude/longitude before lost GPS signal”

7.29.9.2 Send SMS “gpssignal+password+space+off” to deactivate.

### **7.29.10. Accident Alarm (Optional)**

7.29.10.1. When tracker detects accident occurred (severe impact) during normal driving, it will send “Accident! + latitude & longitude ” to all authorized phone numbers.

7.29.10.2 This function is active as default. To disable this functions, send "Accident+password+space+off" to tracker.

7.29.10.3. Send "Accident+password+space+on" to tracker, when need to active this function.

## **7.30. Alarms under Arm State**

### **7.30.1. Door Open Alarm**

When the door open during arm mode, the device will send sms "door alarm +lat/long" to Authorized no. in 3 minutes interval; Siren beeps 30 seconds continuously.

Disarm the device to stop.

### **7.30.2. Acc Alarm**

The tracker will send SMS "ACC alarm+lat/long" to the authorized numbers in 3 minutes interval when the engine of the car is turned on, that is the key is rotated to ACC.ON position to start the car in arm state; send disarm command "disarm+password" to stop it.

### **7.30.3. Shock Sensor Alarm (Option)**

The tracker will send SMS "Sensor alarm+lat/long" to the authorized numbers in 3 minutes interval when the sensor is triggered in arm status; the siren beeps 5 seconds if shock sensor alarm is triggered one time in 15 seconds and beeps 30 seconds if it is triggered two times in 15 seconds, send disarm command "disarm+password" to stop it.

## **7.31. Auto Photograph (Option)**

When the tracker terminal device detects DOOR/ ACC / SOS / alarm, the tracker device will be automatically ready for photo during sending the alarm and then shoot camera to upload the photo to the monitoring platform (web server).Meanwhile, the device will send SMS including http link to all authorized cell phone numbers, photo can be also requested from web server by sending command. All photos will be automatically saved in the SD card, and viewed after copied to computers through card reader,

## **7.32. Alerts Resend**

When vehicle enters GSM blind areas, the siren beep in Non-quiet mode if DOOR/SHOCK SENSOR/ACC, OIL alarms are triggered, and all these alarms will be stored and send to authorized numbers or web server after GSM signal recover.

### 7.33. No GSM Alarm

When Vehicle enters GSM Blind area, the siren beeps in Non-quiet mode without sms sending if DOOR, SHOCK SENSOR/ACC alarms are triggered.

### 7.34. Cut off oil and power system

7.34.1 Send SMS command “stop+password” to the GPS, it will reply “Stop engine Succeed” and remain the immobile state until receiving the next SMS command to resuming the oil and power.

7.34.2 Stop Mode

7.34.3 Execute immediately: Send command “quickstop+password” to GPS, it will reply “quickstop OK”. Then it will stop the car immediately after “stop” command.

7.34.4 Execute depends on speed(Default mode): Send command “noquickstop+password” to tracker, It will reply “noquickstop OK”, Then the tracker won't stop the car immediately after “stop” command, instead, it will reply “it will be executed after speed less than 20KM/H”, and stop the car when the speed is less than 20KM/H.

### 7.35. Resume the Oil and Power System

Send “resume+password” to tracker, it will reply "Resume engine succeed", that means vehicle has resume the oil supply.

### 7.36. Check the Vehicle State

Send SMS command “check+password” to the tracker device in the vehicle, It will reply the status of external power, battery, GPS reception, ACC, door, GSM reception, GPRS and oil consumption to the authorized numbers.

For example: Send SMS “check123456” to the tracker device in the vehicle, it will reply following SMS after **executed** the command.

Power: ON/OFF Battery: 100%

**Door:OFF ACC:ON**

**GPS:OK**

**GPRS:OFF line**

GSM Signal:21 (1-32 the higher digit it shows; the stronger of GSM reception it receives.)

Oil: 65.5%

### 7.37. Reset Hardware

Send SMS “reset+password” to tracker device to reset the GSM module and GPS module of the tracker device, it will reply “reset ok”

## 7.38. Sleep Mode

7.38.1 This function is deactivated as default, send “sleep+password+space+on”, tracker will reply “sleep on ok”.  
When vehicle is not driving (ACC is OFF), GSM module fall asleep; GPS module shut off; and tracker works in low power consumption. Calling, SMS command and any triggered alarm can awake it.

7.38.2 Cancel: Send “sleep+password+space+off”, tracker will reply “sleep off ok”, then tracker won't sleep, GSM and GPS works all the time.

## 7.39. Check IMEI

Send SMS command "imei+password" to the unit. E.g. Send SMS command "imei123456" to the tracker device, an IMEI number in 15 digits will reply to your cell phone.

## 7.40. Terminal (local) Time Setting

Send SMS command “time+space+zone+password+space+time” to the tracker unit, If succeed, It will reply “time OK”

For example: Send SMS “time zone123456 8”, 8 is Chinese time zone, If your country time zone is minus, send SMS “time zone123456 -8”.

## 7.41. TCP/UDP switch

7.41.1 Command: "gprs+password,0,0" switch back to TCP mode, this is the default mode.

7.41.2 Command: "gprs+password,1,1" switch to UDP mode.

## 7.42. Configure parameters by USB

Connect tracker to computer with the optional USB cable, open the memory of the tracker, find and open the initial configuration file with notepad  user\_config.ini , operate according the instructions.

Note: Correct password is needed every time you configure the tracker.

## 7.43. GPRS Setting

User must send SMS via cell phone to set up APN, IP and port before starting tracking by GPRS.

### 7.43.1. Configure APN

7.43.1.1 APN standards for Access Point Name and differs from country to country. For more information about your local APN, please inquire with your local GPRS network operator.

7.43.1.2 APN settings of the first SIM card: (External SIM card is the first SIM card)

Send SMS “APNONE+password+Space+your local APN” via a cell phone and if succeeded, the tracker will return the message “APN OK”.

7.43.1.3 APN settings of the second SIM card: (Internal SIM card is the second SIM card)

Send SMS “APNTWO+password+Space+your local APN” via a cell phone and if succeeded, the tracker will

reply "APN OK"

E.g. Send SMS command "APNONE123456 CMNET". If succeeded, tracker will reply "APN OK"

Notes: 123456 refer to password of tracker and CMNET is the APN of the china mobile.

### **7.43.2. Configure GPRS User Name and password**

7.43.2.1 In most countries, the user name and password involving GPRS login are not compulsorily necessary, therefore, the entry can be skipped. For those countries requiring user name and password, please configure as following:

7.43.2.2 User name and password settings of the first SIM card

Send SMS "upone+password+space+user+space+password" If succeeded, tracker will reply "user,password ok!"

7.43.2.3 User name and password settings of the second SIM card

Send SMS "uptwo+password+space+user+space+password" If succeeded, tracker will reply "user,password ok!"

For instance, send SMS "upone123456 jonnes 666666" to the tracker, and if succeeded, tracker will reply "user, password OK"

Note: 123456 is tracker device password, jonnes is the user name for GPRS login, 666666 is the password for GPRS login.

### **7.43.3. Configure IP and Port**

7.43.3.1 Send SMS as below via a cell phone: "adminip+password+Space+IPAddress+Space+Port Number". If succeeded, "adminip OK" is returned by the device in SMS.

7.43.3.2 E.g. Send SMS command "adminip123456 202.104.150.75 9000" to the tracker device, If succeeded, "adminip OK" is returned by the device in SMS. ( 123456 is default password, 202.104.150.75 is IP, 9000 is port).

7.43.4 Modes Switch between "SMS" and "GPRS"

7.43.4.1 The default mode is "SMS"

7.43.4.2 Send SMS "GPRS+password" to the unit, and it will reply "GPRS ok!" it means tracker device has switched to "GPRS" mode.

7.43.4.3 Send SMS "SMS+password" to the unit, it will reply "SMS ok!" and restore to "SMS" mode.

## **7.44. Less GPRS traffic**

Tracker will change to less GPRS traffic mode after parking 5 minutes (ACC is OFF), GPRS disconnect and connect again when alarm being triggered or vehicle starts driving.

Activate this function: Send "less gprs123456 on", tracker will reply "less gprs on ok".

Deactivate this function: Send "less gprs123456 off", tracker will reply "less gprs off ok".

## **7.45. Set up monitor center number**

Setup: send command "centernum+password+space+number" to tracker, it will reply "centernum ok". After setup monitor center number, the messages of auto track by sms will be set to this center number, if all alarms need to be sent to this number too, then this center number must be setup as authorized number.

Cancel: Send "nocenternum+password" to tracker, it will reply "no center num ok".

## 7.46. Web platform and app for mobile phones

7.46.1 Web based platform [www.gpstrackerxy.com](http://www.gpstrackerxy.com). Configuration IP: 202.104.150.75 Port: 9000. Or configure corresponding IP according the server you choose.

7.46.2 Please check chapter 7.42 GPRS settings for more details.

7.46.3 Please check platform [www.gpstrackerxy.com](http://www.gpstrackerxy.com) for more details about the app .

## 7.47. PC tracking software

7.47.1 Please download on the web platform or find it in the CD.

## 8. Cautions

Please comply with the instructions to extend the unit life:

8.1. Keep the unit dry. Any liquid, i.e. rain, moisture, may destroy or damage the inside circuitry.

8.2. Don't use & store the unit in dusty places.

8.3. Don't put the unit in overheated or overcooled places.

8.4. Handle carefully. Don't vibrate or shake it violently.

8.5. Clear the unit with a piece of dry cloth. Don't clean in chemicals, detergent.

8.6. Don't paint the unit, and may cause malfunction for the circuit.

8.7. Don't disassemble or refit the unit.

8.8. Please read the user manual carefully before installation and operation, learn something more about the voltage range. Otherwise, it won't work properly or destroy the product.

8.9. Web platform and PC installation tracking software user manual pls refer to the CD included in the Standard Package.

## 9. Faults & the Solutions

Faults	Solution
Startup Fail	Please check out the power wiring in correct place.
No GSM Signal	Check GSM Antenna be correct connected and correct place to put, Check whether the SIM card in place. Make sure the SIM Card should be GSM , PIN code off and no call transfer.
No GPS Signal	Check GPS Antenna correct connected or not and GPS antennas should put to the place near the windows of vehicle, no covered by metal parts.
SMS reply fail	Password incorrect or wrong sms commands format
Hang up Fail or alarms fail to get	Authorized no. setting fail or no authorized no set, Please initialize the unit and re-set up the authorized numbers.
Engine Stop Fail	Check the relay wire connection for engine cutting.
Central lock fail	Check if the external cable is connected well according to Wiring diagram

Remote Controller	Pls restart and reprogram after external power disconnect .
Siren Fail	Siren's voltage is DC12V/24V/1A. Siren can't be triggered if connect to negative trigger.