# **GPS Vehicle Tracker**

# (GPS+GSM+SMS/GPRS)

## **User Manual**

(V1.0)

Please read the installation guide before use, in order to get the correct installation and quick operation. Please note that specification and information are subject to changes without prior notice in this manual. Any change will be integrated in latest release. The manufacturer assumes no responsibility for any errors or omissions in this document.



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### 2. Product Functions

- 2.1 GSM850/900/1800/1900 MHZ
- 2.2 Super wide working voltage input range: 8-80V
- 2.3 GPS/LBS positioning, support computer and mobile phone
- 2.4 Support SMS query location information
- 2.5 The ACC ignition signal detection, vehicle status indicators
- 2.6 Built-in vibration sensor, Intelligent anti-theft
- 2.7 Set up specific number for anti-theft alarm
- 2.8 Built-in battery, cutting line alarm (optional)
- 2.9 Platform support area fence, in and out of the area alarm
- 2.10 Platform support overspeed alarm
- 2.11 Platform support report output
- 2.12 Support WEB distributed protection and removal (need platform support)

### 3. Installation Instructions

- 3.1 The preparing work before installation:
- 3.1.1 Open the box, and check device model is correct, accessories is complete, if find something wrong, please contact your supplier.
  - 3.1.2 SIM card choice, device need to insert one GSM SIM card
- 3.1.3 Install the SIM card, open the device, lift the SIM card slot metal cover, put the SIM card into the card slot, and then cover card slot.

### Note:

- (1)Before install or remove the SIM card, please toggle the power supply switch to power off position;
  - (2) SIM card need to open the GPRS function
- (3) SIM card need to open the call identification. (according to customer needs to choose to open or not open).
  - (4) Make sure the SIM card has no password
  - (5) Make sure the SIM card has money.

# 3.2 Installation

Please find the professional and technical personnel for installation. Pay attention to the following items:

- 3.2.1 In order to avoid thieves damage, please select a hidden place to install.
- 3.2.2 Not place with other emission source, such as reverse sensor, car alarm, and other vehicle communication device.
  - 3.2.3 Use cable tie to fixed or use a wide strong double-sided tape to stick;
- 3.2.4 Device with built-in GSM antenna and GPS antenna, so make sure the front of device face to the air, and without metal cover above the device.

Recommended installation location:

- 3.2.4.1 The decorating plate below the front windshield of the car
- 3.2.4.2 Around the car dashboard (skin for non-metallic material)

- 3.2.4.3 The decorating plate below the back windshield of the car
- 3.2.4.4 In the car door or in the column.
- 3.2.4.5 In the dashboard of motorcycle or electric bike, or below the back seat

### Note:

If there is metal insulation layer or heat layer paste with the windshield, it will cause GPS signal weak and make device work abnormal. So please replace the device installation location.

### 3.3 Device wire

- 1. The red wire to connect power positive.
- 2. The black wire to connect power negative.
- 3. The orange wire to connect the ACC.
- 4. The yellow wire to connect the oil or electricity control.

Please choose original factory power wire, red wire for power positive, black wire for power negative. When installation, please select a single grounding, do not connect with other ground. If need the ACC automatic anti-theft function, make sure connect the ACC line. Devices will decide whether to enter the security status according to the ACC. If we do not connect the ACC wire, it will make the device to prevention state. And in prevention state, if car occur vibration, it will trigger vibration alarm.

- 3.4 The correct use of steps: Install -> Start Up->Set Up ->Registered (1) Installation: Make sure GPS antenna face to air, and there are no heat-insulating-explosion membrane and metal layer above the device.
  - (2) Start Up: Insert SIM card, connect the wire, and then toggle the switch on.
- (3) Set Up: Sending the SMS with the owner phone to set the admin phone and special phone.

(4)Register: Registration method based on the using platform

### 3.5 Indicator light

### 3.5.1 Yellow light - GSM light

state	meaning
Flash 1 time every 2 seconds	GSM initialization
Always on	GPRS communicate normal /on line
Not light	GSM sleep

### 3.5.2 Blue light-GPS light

state	meaning
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Flash 1 time every 2 seconds	Search GPS signal
Always on	GPS position
Not light	GPS sleep

# 4. Application method

Note: The device can be set parameters by SMS, the owner phone number send SMS to SIM number in the device, and the SMS content is separated by a comma. The comma of SMS is in English input format.

### 4.1 change password:

Owner number can be set only one, the owner number of setting last is effective.

The default password is: 123456

Set owner number SMS: admin123456 13712345678 Reply: admin ok

Inquire administrator SMS: C10#

Delete administrator SMS: D101#

D102# D103#

Change password SMS: password123456 666888 (666888 is new password)

Reply: password ok

4.12 Set APN:

Set APN: apn123456 cmnet Reply: apn ok

Set Username: apnuser123456 user Reply: apnuser ok

Set Password: apnpasswd123456 password Reply: apnpasswd ok

4.13 Set IP and port:

SMS: IP+space+IP address+space+port

Sample: IP 123.142.106.193 8800 Reply: set IP OK

4.2 Set power off alarm

4.2.1 open power off SMS alarm SMS: pwrsms123456,1 (default)

Reply: pwr sms alarm set ok

4.2.2 close power off SMS alarm SMS: pwrsms123456,0

Reply: pwr sms alarm set ok

4.2.3 open power off call alarm SMS: pwrcall123456,1

Reply: pwr call alarm set ok

4.2.4 close power off call alarm SMS: pwrcall123456,0 (default)

Reply: pwr call alarm set ok

- 4.3 Set ACC alarm (need to connect the ACC)
- 4.3.1 In ACC on, if in auto-arm state, the ACC can remove auto-arm; if SMS to set auto-arm, ACC can not be remove auto-arm.
  - 4.3.2 In ACC close, after the setting time, the device will enter auto-arm.
  - 4.3.3 Set ACC auto-arm on SMS: ACCLOCK, 123456,1 Reply: OK
  - 4.3.4 Set ACC auto-arm close SMS: ACCLOCK, 123456,0 (default) Reply: OK
  - 4.3.5 Set auto-arm time SMS: ACCLT,123456,3 (3 is auto-arm time, unit is minute)
- 4.4 Vibration alarm setting
  - 4.4.1 Open the vibration alarm SMS: 125# (default) Reply: OK
  - 4.4.2 Close the vibration alarm SMS: 126# Reply: OK
  - 4.4.3 Open the vibration alarm calling: 122# Reply: OK
  - 4.4.4 Close the vibration alarm calling: 121#(default) Reply: OK
  - 4.4.6 Set vibration alarm time command, 1-15 second

SMS: vibtime123456,n Reply: vibtime set ok

 $n(0\sim15)$ , 0 cancel vibrate alarm, default is 3 second

The ACC auto-arm description: In main power on and ACC close state, after 3 minutes, the device enter auto-arm state. If car vibration, sending alarm SMS to owner phone.

If not connect ACC, can set auto-arm or not by SMS.

- 4.5 Query location information
- 4.9.1 The owner phone call SIM number in device, and the device hung up, then reply position SMS.
  - 4.9.2 Google link SMS: g1234
- 4.6 Setting over speed alarm

Setting Over Speed: speed123456 080 unit is km/h

4.10.1 Close overspeed alarm SMS: speed123456 000 (default) Reply: speed ok

4.7 Setting move alarm

SMS: move123456 300 (default) unit is meter Reply: move ok

4.8 cut oil or electricity (option)

When the car is stolen, you can send the cutting oil or electricity command by platform.

Note: In order to make sure the car safety, the device will cut-off the oil or electricity when GPS is located and speed is lower than 20km/h.

After cancel alarm, you can send the recovery oil or electricity command by platform. Device will continue to drive.

Cut oil or electricity: DY

Open oil or electricity: KY

4.9 Restore the factory Settings: SMS: FORMAT

4.10 Reset Device: SMS: CQ

4.11 Check device information SMS: CXZT

### 5. Troubleshooting

- 5.1 After the first installation, if it is not online on the platform, please check the device installation:
  - 5.1.1 Check the main power wire
  - 5.1.2 Check the SIM card
  - 5.1.3 Check the power switch, switch is on the edge of the back cover.
  - 5.1.4 Check the state of LED lights
  - 5.1.5 Check the GPS location, if not, please go outside to locate for the first time.
- 5.2 It is off-line on the platform

First check the indicator light, and if no condition to check LED, please check the SIM card state, as follow:

- 5.2.1 Dial the SIM number in the device, check the dial tone.
- 5.2.2 Check the car is in the basement without gsm signal
- 5.2.3 Check the dropped area, confirm individual drops or all drop, so can determine whether network for operators
  - 5.2.4 Check the SIM card arrearage
  - 5.2.5 GPRS service is cancelled (at the end of the last day of offline)
  - 5.2.6 Check the parameters settings, is the interval of upload correct?
- 5.3 If the GPS function is activated, but can not locate for a long time, please check the device

installation location.

5.5 If specific number phone receive the SMS about power off alarm, determine whether illegal cutting line, otherwise please check whether the fuse on the power wire.

# Relay wiring diagram oil wire or circuit wire 87a 30 relay 86 86 power positive oil or circuit control output wire motorcycle device

# **Commands:**

No.	Function	SMS	Reply
1	Set ip and port	IP123.142.106.193 8800	Set ip ok
2	Add Number	Admin123456 13612345678	Admin ok
3	Delete Number	D101# D102# D103#	Ok
4	Change password	Password123456 138138	Change password ok
5	Set APN	Apn123456 cmnet	APN set ok
6	Set APN user name	Apnuser123456 user	Set apn user ok
7	Set power off sms alarm	Pwrsms123456,1	Pwr sms alarm set ok
8	Close power off sms alarm	Pwrsms123456,0	Pwr sms alarm set ok
9	Set power off call administrator	Pwrcall123456,1	Pwr call alarm ok
10	Close power off call administrator	Pwrcall123456,0	Pwr call alarm ok
11	Set acc auto-arm open	Acclock123456,1	OK
12	Set acc auto-arm close	Acclock123456,0	OK
13	Set auto-arm time	ACCLT123456,3	Set ok . (3 is minutes)
14	Open the vibration sms alarm	125#	OK
15	Close the vibration sms alarm sms	126#	OK
16	Open the vibration alarm calling	122#	OK
17	Close the vibration alarm calling	121#	OK
18	Set vibration alarm time	Vibitime123456,n	Vibitime set ok (range is 1s to 15seconds)

19	Google link	G1234	Reply link
20	Set over speed	Speed123456 080	Set speed ok . (unit is km/h)
21	Close over speed alarm	Speed123456 000	Set speed ok
22	Set move alarm	Move123456 300	Set move ok . Unit is meter,range is morn than 300
23	Cut oil or electricity	DY	Set ok
24	Open oil or electricity	KY	Set ok
25	Restore the factory	Format	Set ok
26	Reset device	CQ	Set ok
27	Check device information	CXZT	Reply some info.

# 6. Specification

6.1 Size: 68.2 (L) x 36.7(W) x 6.0 (H) mm

6.2 Weight: 0.2kg

6.3 Communication system: GSM

6.4 GSM: MTK6260D

6.5 GSM frequency: Quad Band 850/900/1800/1900 MHz

6.6 GSM antenna: built in Quad Band antenna

6.7 GPRS: Class 126.8 GPS: UBLOX7

6.9 Channel number: 56 channels6.10 Tracking sensitivity: -159dBm6.11 Capture sensitivity: -144dBm

6.12 Start positioning time: hot start< 1sec (sky open); cold start <29sec (sky open)

6.13 GPS antenna: built in high gain ceramic Patch antenna

6.14 Built in battery: 3.7V DC

6.15 Listening range: 5M (optional)

6.16 Working voltage/current: 8-80V DC

6.17 Working current: 10-20mA

6.18 LED indicator: 3 LED status indicator: GPS- blue GSM- yellow Power- red

6.19 Working environment: working temperature: -25 °C to +60 °C

6.20 Working humidity: 5% to 95% is not solidified