

G509 Relay GPS Tracker

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.

◆ Quick using

- 1) Open device case, proper insert GSM card, connect external power supply.
- 2) Put device outside, around 30s three lights will keep lighting on stands for device can work normally.
- 3) Dialing device number, it will hang up and reply tracking message with valid Longitude and latitude.
- 4) If need track online system, send 2 SMS connects to platform as below:

SMS1: #IP#123456#220.231.203.248#7700#

SMS2: #apn#123456#APN of operator#APN user name#APN password#

- 5) Login platform to track in real time(please contact supplier).

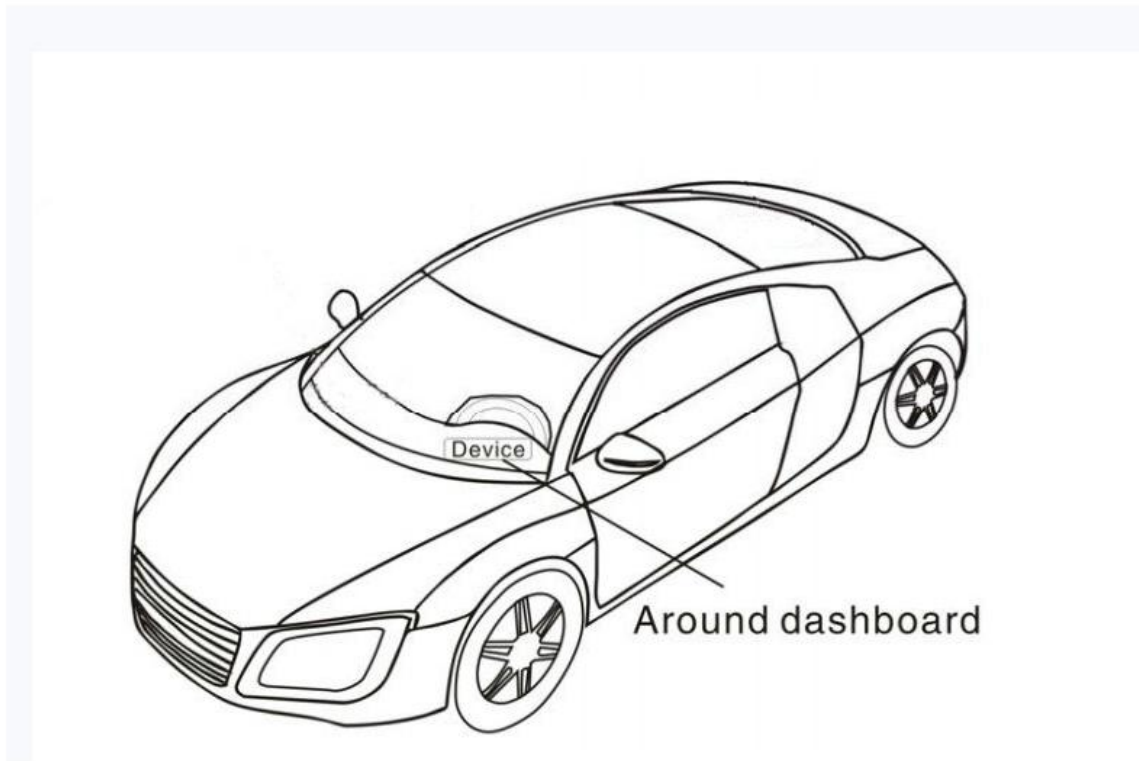
1. Specifications

| Content | Specs. |
|-------------------|---|
| Dim. | 33 *31*31 mm |
| Weight | 35g |
| Network | GSM/GPRS |
| Band | 850/900/1800/1900 Mhz |
| GPS chip | MTK |
| GSM module | MTK2503 |
| GPS sensitivity | -159dBm |
| GPS accuracy | 5m |
| Time To First Fix | Cold status 45s Warm status 35s Hot status 1s |
| Work voltage | 9V-80V |
| Storage Temp. | -40°C to +85°C |
| Operation Temp. | -20°C to +55°C |
| Humidity | 5%--95% |

◆ **Installation attentions**

NOTE: device front side towards the sky.

When install in car, if the windscreen glued by metal thermal insulation layer or heating layer, it will reduce the GPS receive signal and lead to GPS work disorder.



Device light description

| Light | Represents |
|--------|-------------------|
| yellow | GSM signal normal |
| blue | GPS signal normal |
| Red | Power |

1.Installation instructions

1.1 Preparation

1.1.1 Open the package to check the device model number is correct, be with full accessories, or else please contact your supplier.

Choose SIM card, need insert a GSM SIM card into the device, please refer to the suggestion of your supplier for SIM card choice.

Notice:

Please insert SIM card before turning the device power switch to on;

The SIM card need open the GPRS function;

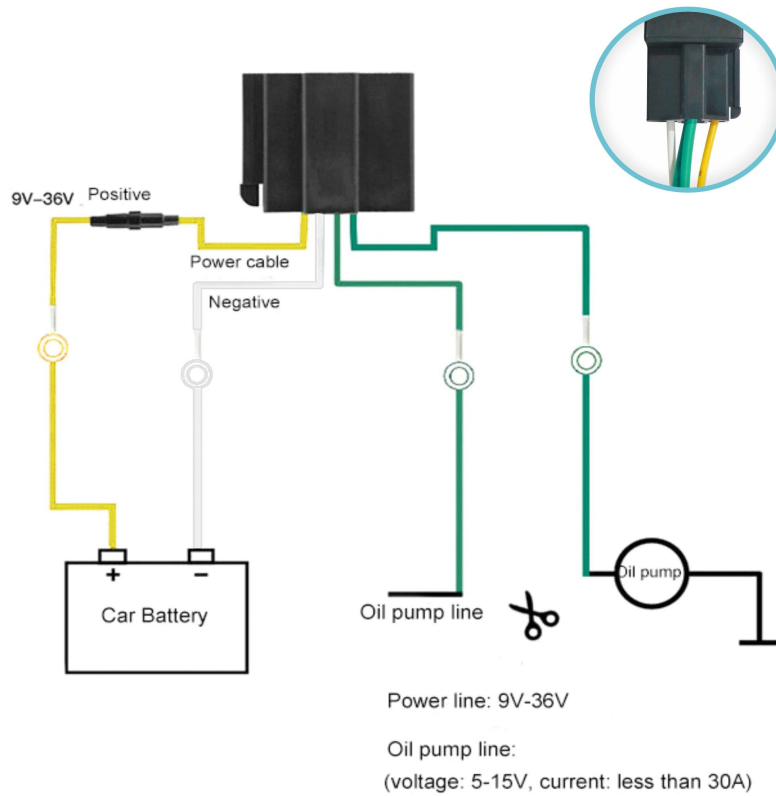
Please make sure SIM card with full balance.

2. Device wiring requirements

Open the upper cover and insert the sim card (support NANO card), the notch is towards the lower left corner

Close the cover and insert it with the broken oil line (the wiring method is as shown in the picture on the right, be careful not to insert the wrong line)

INSTALLATION WIRING



◆ Attentions

◆ Device light

1) No yellow light: failed to read SIM card, need reinstall SIM card. 2) Blue light flash: no GPS signal, make sure device started outside. 3) Three lights off: lights entered sleep mode, make a call or move device can wake up.

◆ Device failed located

1) Failed located: message replied with all 0, make sure device started outside not in room.

2) Can't reach the call: make sure SIM card has balance and installed Properly and opened the switch.

◆ Device can't track on platform

1) Check three lights are stable on.

2) Make sure device can work and reply valid tracking long&Lat in SMS.

3) Send SMS #check#123456# , it will reply you device setting status to check IP,Port,APN etc.

3. User Settings

| 1.Initialization (initialize the settings) | | |
|---|-----------|---------|
| Text command | Parameter | Example |
| Command | #super# | #super# |
| Command Feedback | super ok | |

| 2.Single Locating : Two ways | | |
|-------------------------------------|---|------------------|
| 1.Dialing tracking | make a call to device number, it will hang up and reply a real-time tracking message. | |
| 2.SMS tracking | Send SMS command,it will reply your location. | |
| Text command | Parameter | Example |
| Command | #smslink#password# | #smslink#123456# |
| Command Feedback | Google link + Speed + Time + Date + IMEI | |

| 3.Authorized number (All alarm messages will be sent to authorized number only) | | |
|--|---|------------------------------|
| Text command | Parameter | Example |
| Add Authorized number | #admin#123456#phone number# | #admin#123456#18575518750# |
| Command Feedback | admin ok | |
| Del Authorized number | #noadmin#123456#phone number# | #noadmin#123456#13409877890# |
| Command Feedback | noadmin ok (If notified not admin number,send #super# please) | |

| 4.Set password | | |
|-----------------------|--------------------------------------|--------------------------|
| Text command | Parameter | Example |
| Command | #password#old password#new password# | #password#123456#666888# |
| Command Feedback | Password ok | |

| 5.Set data to upload interval | | |
|--------------------------------------|--|----------------|
| Text command | Parameter | Example |
| Command | #at#123456#10~600# | #at#123456#10# |
| Command Feedback | at ok | |
| Command description | The data upload interval can be set as you need, 10~600 represents seconds of data uploading interval, default as 10 seconds for real time tracking. | |

| 6.Device reboot | | |
|------------------------|---|-----------------|
| Text command | Parameter | Example |
| Command | #reboot#password# | #reboot#123456# |
| Command Feedback | reboot ok | |
| Command description | The device will restart within 30 seconds | |

| 7.Set all alarm mode | | |
|-----------------------------|---------------|-----------------------------------|
| Text command | Parameter | Description |
| Command | #KC#123456#0# | To close alarm function |
| Command | #KC#123456#1# | Alarm will reply only SMS |
| Command | #KC#123456#2# | Alarm will reply only call back |
| Command | #KC#123456#3# | Alarm will reply via SMS and call |

| 8.Timezone Setting | | |
|---------------------------|---|--|
| Text command | Parameter | Example |
| Command | #timezone#password#direction#time zone value in hours#time zone in minutes# | In UTC-6 example: #timezone#123456#W#6#00# In UTC+5.30 #timezone#123456#E#5#30# |
| Command Feedback | timezone ok | |

| 9.Check vehicle state | | |
|------------------------------|--|----------------|
| Text command | Parameter | Example |
| Command | #check#password# | #check#123456# |
| Command Feedback | IMEI + Authorized number + Alarm mode + IP + GPS status + Data upload interval status + APN + Time zone + ACC status | |

| 10.Geo-fence | | |
|---------------------|--|-----------------------|
| Text command | Parameter | Example |
| Command | #stockade#password#meter# | #stockade#123456#300# |
| Command Feedback | stockade ok | |
| Command description | send SMS: “#stockade#123456#300#”, “300” represents 300 meters. In case of breach, it will send SMS “stockade alarm + IMEI + Coordinates” to | |

| | |
|--|------------------------|
| | the authorized number. |
|--|------------------------|

| 11.Overspeed alarm | | |
|---------------------------|---|--------------------|
| Text command | Parameter | Example |
| Command | #speed#password#speed number in 3 digits# | #speed#123456#060# |
| Command Feedback | speed ok | |
| Command description | Sample means When the car moves exceeding 60 km/h, the unit will send SMS alert “speed alarm +imei+ Coordinates ” to the authorized number. | |

| 12.Vibration alarm | | |
|---------------------------|--|--------------------------------|
| Text command | Parameter | Description |
| Command | #vibrate#123456#1# | 1 means Slight vibration level |
| Command | #vibrate#123456#2# | 2 means medium vibration level |
| Command | #vibrate#123456#3# | 3 means high sensitive level |
| Command description | When the tracker detect the vibration,it will send “vibrate alarm + IMEI +Google map link” to authorized phone number. | |

| 13.Cut oil or electricity (Optional with relay) | | |
|--|--------------------|--------------------|
| Text command | Parameter | Example |
| Command | #stopoil#password# | #stopoil#123456# |
| Command Feedback | stop oil ok | |
| Command | #supplyoil#123456# | #supplyoil#123456# |
| Command Feedback | supply oil ok | |

| | |
|-------------------------------|---|
| 14.Power failure alarm | |
| Description | If device was removed from car battery, device will send SMS “cut power alert! +IMEI number+Long&Lat” to the authorized number. |

Web based platform www.gpstky.net further details please contact manufacturer.

1.Setting APN

1.1 APN standards for Access Point Name and differs from country to country. For more information about the local APN, inquiry from your local GPRS network operator.

1.2 Send SMS “**#apn#password#APN content#APN user name#APN password#**” via a cell phone and if succeeded, the tracker will return the message “set APN OK”.

E.g. send SMS command “**#apn#123456#cmnet#**”.

Notes: CMNET is the APN content of China Mobile (it has no APN user name and password).

2.IP and Port setting

Send SMS “**#IP#password#ip address#port number#**”. If succeeded, “set ip address and port ok” will be returned by SMS.

E.g, Send SMS command “**#IP# password #220.231.203.248#7700#**” to the device (220.231.203.248 is IP,7700 is port, IP is in capital)

4.Cautions

Please comply with the instructions to extend the unit life:

1. Keep the unit dry. Any liquid, i.e. rain, moisture, may destroy or damage the inside circuitry.
2. Don't use & store the unit in dusty places.
3. Don't put the unit in overheated or overcooled places.
4. Handle carefully. Don't vibrate or shake it violently.
5. Clear the unit with a piece of dry cloth. Don't clean in chemicals, detergent.
6. Don't paint the unit, this may cause some foreign materials left in between the parts.
7. Don't disassemble or refit the unit.
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.

5.Troubleshooting

Q: Why can't I boot up?

A: Please check whether the device line is connected correctly.

Q: The device cannot obtain location information?

A: Please place the device in an open outdoor place for testing.

Q: How to choose a sim card?

A: The card needs to support GSM&GPRS, and ensure that there are sufficient charges and data in the card.

Q: Can overseas customers use it?

A: Overseas customers need to set up APN to use it normally. Request to send SMS "#apn#123456#APcontent#APNUsername#APN Password#" and send it to the sim card in the device, cmnet is the mainland operator APN, other operators please replace the corresponding APN, please consult your area APN SIM card Details of the operator.