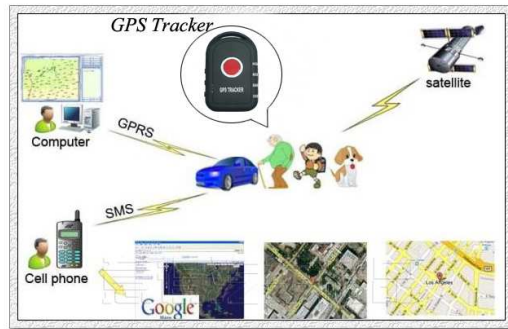


# PERSONAL GPS TRACKING SOLUTION

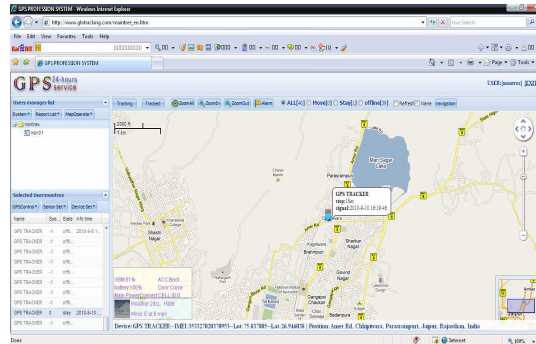


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## 1. Introduction

This tracker is a personal remote location device with small size, build-in long standby time battery and easy to use. This tracker can be used as an emergency cellular phone and allows speed dialing 5 numbers for 2-way voice communication. This tracker sends alert and call the preset numbers for immediate assistance. The alerts include Date, Time, Coordinate, Speed and Map URL link. It will send the coordinate to the designated server by GPRS and then displaying the location by tracking software.



USB Charger, User manual, USB cable, Lanyard,  
Tracker, Key



Charger



User manual



Tracker

USB Cable



Lanyard

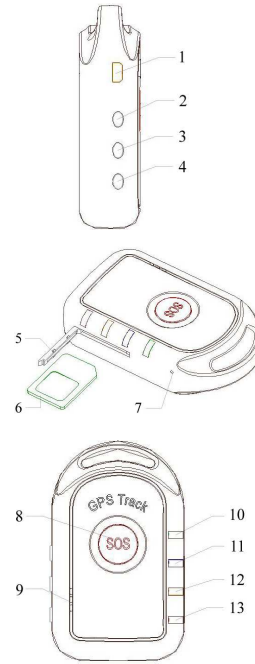


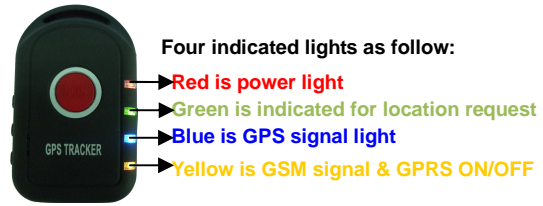
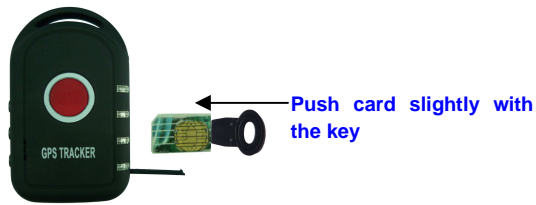
Key

## Parts

## 2. Hardware Description

- 1.USB;
- 2.Switch button;
- 3.Call2 button;
- 4.Call1 button;
- 5.SIM card cover;
- 6.SIM card;
- 7.Microphone;
- 8.SOS button;
- 9.Speaker;
- 10.Power led (Red);
- 11.GSM signal led (Orange);
- 12.GPS signal led (blue);
- 13.Transmit led (green)





### 3. What's new?

- 3.1 Smaller size: As small as a car remote controller so that it can be linked to the key chain.
- 3.2 Longer battery life (standby time is 200hours)
- 3.3 Accurate position will combine the GPS info and GSM base station info.
- 3.4 By pressing CALL1 (Blue LED will flash) to turn up the

volume and pressing CALL2 (Yellow LED will flash) to turn down the volume.

3.5 Get position by 3 ways: Search the coordinate in Google map, click the URL and see the position in cell phone directly and view the position and history in tracking software.

#### **4. Main Features**

- ◆ Locating and tracking via SMS or GPRS
- ◆ Support voice call
- ◆ Listen in function
- ◆ SOS alert
- ◆ Geo-fence alert
- ◆ Speeding alert
- ◆ Low battery alert
- ◆ Combine the GPS info and GSM base station info(customer should offer the base station data)
- ◆ Position transmit

#### **5. Applications**

- ◆ Protect the child/elderly/disabled/pet etc.
- ◆ Personnel management
- ◆ Track the vehicle/ equipment etc.

- ◆ Provide peace-of-mind for businessmen
- ◆ Tracking system for Express/Carriers/Logistics

## 6. Specification

Content	Specs
Dimension	67mm x 40mm x 18mm
Weight	56.4g
Network	GSM/GPRS
Band	850/900/1800/1900Mhz
GPS chip	SIRF3 chip
GPS sensitivity	-159dBm
GPS accuracy	5m
Cold start	42 sec.
Warm start	38 sec.
Hot start	1 sec.
Battery	Chargeable 3.7V 1700mA/h
Operation temperature	-20°C to +55°C
Humidity	5%--95% non-condensing



## 7. Start up

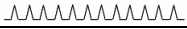
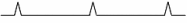
**TRACKER:** Do charge the battery for 8 -12 hours after first use. Then, the battery can be charged fully in 4-5 hours. In order to protect the device please use the battery and charger which come with the tracker.




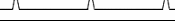

**SIM CARD:** Please be sure that there is call display but no call transfer, and PIN code is off.

**Switch on:** Please take the unit outdoors or near the window. Press the power button till four lights blinking together.

**Switch off:** Please press the power button till four lights blinking one by one. It will take around five seconds.

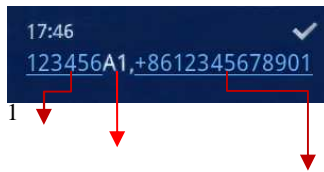
10 to 30 seconds after switching on, the unit will begin working and each LED will blink as the following:

Four LED	Bright at the same time	The device gets started
Four lights	Blink like 	Switch on
Yellow LED(GSM)	Blink like 	Work in GSM mode

Yellow (GSM)	LED	Blink like 	Connect GPRS now
Yellow (GSM)	LED	Blink like 	Connected to GPRS
Red (power)	LED	Blink like 	Power on and it blinks all the time
Blue (GPS)	LED	Blink like 	Got GPS signal
Green (Once)	LED	Blink like 	Send once position

### 8. Set the authorized number

Send SMS "123456A1,phone number" to set the first SOS number. At least, you have to set 1 authorized number  
A1/2/3 is SOS number  
A4 is Call 1 number and A5 is Call 2 number



**Command SMS**

**Note:**

'A' must be capital

**Password**

A1/2/3/4/5

**Authorized number**

```
17:46
1TEL OK!+8612345678901;DATE:
11/06/21,TIME:09/41/17,LAT:
22.7649200N,LOT:114.3980750E,Speed:
000.0,66-27,000
```

Reply SMS

**Note:** All the letters in any commands must be English in capital and make sure there is no space in the command. Phone number must include the country code. For example: +86 is the country code of China. Please do not use 00 instead of +.

123456 is the default password of the tracker.

**9. Delete authorized number**

```
10:06
123456A1,D
```

**Command SMS**

123456A1 (2/3/4/5), D

'A, D' must be capital

```
10:06
1TEL OK!+8612345678901;DATE:
11/12/05,TIME:01/58/20,LAT:
22.7639750N,LOT:114.3976750E,Speed:
000.0,88-28,000,46000-2634-FF99
```

Reply SMS

**E.g.** send "123456A1,D" to delete the A1(SOS) number.

## **10. Get instant position via THREE ways**

### **10.1 Get instant position by calling the tracker**

You can use the authorized numbers to call the tracker SIM number for at least 2 seconds, and then hang up the call before the tracker hangs up or receives it. The tracker will reply a Google position URL SMS. You can click on this URL to see the position. The tracker will not reply the SMS if you did not hang up the call before the tracker hangs up or receives it.

**Note:** The tracker will reply to any incoming call number if you have not set the authorized numbers yet. Once you have set the authorized number, the tracker will reply SMS to the authorized numbers only.

### **10.2 Get instant position by pressing ON/OFF button**

You can get a Google position URL SMS by pressing the

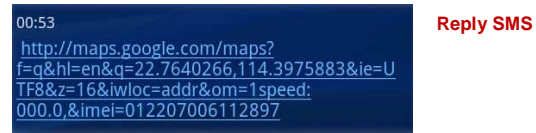
1

power button (around one second) till the **Green LED** blinking fast.

**Note:** This link SMS will just be sent to the A1, A2 and A3 authorized numbers.

### 10.3 Get instant position by sending SMS command

Send "123456F" to the unit. It will reply its position.



### 11. Auto-track function

Send SMS "123456M0/M1, xxxS/M/H" to the unit, the

tracker will reply the location URL messages to **A5** according to the time interval. If the device has been connected to the server, the reply data will be sent to the server only, which means the server has the priority.

01:47 ✓  
123456M1,003M

**Command SMS**

**Note:** M must be capital.  
M1 means turn on  
M0 means turn off

01:47  
AUTO TRACK OKIDATE:11/06/24,TIME:  
17/46/46,LAT:22.7613783N,LOT:  
114.3969616E,Speed:000.0,67-16,000

**Reply SMS**

01:54  
AUTO-DATE: 11/06/24,TIME:17/53/18,LAT:  
22.7611383N,LOT:114.3967816E,Speed:  
000.0,67-16,000

**Reply SMS**

Tracking  
data

01:57  
AUTO-DATE:11/06/24,TIME:17/56/25,LAT:  
22.7615833N,LOT:114.3968800E,Speed:  
000.0,67-16,000

xxx is interval time and must be three digits,030S means 30S.

S—second, M—minute, H—hour

H should be ≤90, S,M should be <255

**E.g.** send“**123456M1,030S**” to the tracker means every 30 seconds send back a position coordinate to the A5 number. Send“**123456M0,030S**” to the tracker means stop the continuous tracking.

### 12. Dial preset number A4 or A5 via Call1 or Call2

Press CALL1 button for 3 seconds till **Blue LED** blinking fast, the tracker will dial the A4 number. Press CALL2 button for 3 seconds till **Yellow LED** blinking fast, the tracker will dial the A5 number.

**Note:** By pressing the SOS button once to end the call.

### 13. SOS function

16:03

HELP ME !Before!DATE:11/12/07,TIME:  
07/50/01,Speed:000.0,64-21, [http://  
www.glotracking.com/sms/?  
22.7644366/114.3977016](http://www.glotracking.com/sms/?22.7644366/114.3977016)

Reply

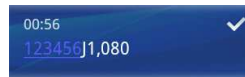
Tracker will send above SMS to SOS number (A1, A2, A3) after the user presses SOS button till the **RED LED** blinking fast. A few seconds later, it will dial the 3 numbers one by one (A1→A2→A3→A1.....) for 10 times till getting through. So SMS first then calling follow.

The first preset number will take priority over the second one and the third one. If the tracker fails to connect to the first number, it will switch to the second one, In case the second number fails to be connected neither, the system will connect to the third number, This will go on and on until one of the 3 telephones picks up, then two-way communication starts.

## 14. Alerts

### 14.1 Speeding alert

Send SMS "**123456J0/J1,speed**" to set the Speeding alert function.



#### Command SMS

J0 means turn off the function  
J1 means turn on the function



#### Reply SMS



When the speed exceeds 80 km/h, the unit will send SMS as "Over speed! +GPS info" to the A1, A2, A3 number.

**Note:** J must be capital, speed should be <250 and must be 3 digits, e.g. 080= 80 km/h.

**E.g.** Send "123456J0,080" to turn off this function.

#### 14.2 Low-battery alert

Send SMS "123456N0/N1,battery" to set the Low-battery alert function.

00:57  
123456N1,25 ✓

#### Command SMS

J0 means turn off the function  
J1 means turn on the function

00:57  
OPEN LOW BAT OK!Before!DATE:  
09/01/01,TIME:00/00/01,LAT:  
22.7640266N,LOT:114.3975883E,Speed:  
000.0,18-16,000,46000-2634-FF98

#### Reply SMS

04:33  
BAT:Low!23!Before!DATE:11/06/24,TIME:  
00/30/38,LAT:22.7614083N,LOT:  
114.3966300E,Speed:  
000.0,23-17,000,46000-2634-FF7B

#### Alarm SMS

When the battery level is below 30%, the unit will send Alarm SMS to the A1, A2, A3 number.

**Note:** N must be capital, battery is the Low-battery percentage, It should be <45 and 2 digits, e.g. 30= 30%.

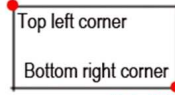
**E.g.** Send "123456N0,30" to turn off this function.

#### 14.3 GEO-FENCE alert

"123456lxyz,aabbccddeffgghhijkkllmmnneppp qqrssj"

send above message to set up the geo-fence for the device to restrict its movement area. The device will send the message to the A1, A2, A3 numbers as "Stockade +geo info" if the tracker enters/exits the preset zone. 5 groups GEO-FENCE areas can be set for the tracker.

Lat. aa°bb'cc.dd"N  
Lot. fff°gg'hh.ii"E



Lat. kk°ll'mm.nn"N  
Lot. ppp°qq'rr.ss"E

**Note:** l must be capital.

x=NO. of the GENFENCE(1-5)

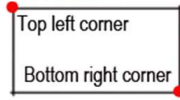
y=1 means ON, y=0 means OFF

z=0 means go into, z=1 means go out

e=N means north latitude, e=S means south latitude  
j=E means east longitude, j=W means west longitude  
aa,bb,cc,dd,gg,hh,ii,kk,ll,mm,nn,qq,rr,ss must be 2 digits.03 means 3. fff,ppp must be 3 numbers.011 means 11.

**E.g.** The first Lat.22°45'55.49"N, Long.114°23'46.86"E  
The second Lat.22°45'47.40"N, Long.:114°23'54.99"E

Lat. 22°45'55.49"N  
Lot. 114°23'46.86"E



Lat. 22°45'47.40"N  
Lot. 114°23'54.99"E

17:07  
123456I1,1,0,22455549N|14234686E|224547  
40N|14235499E

**Command SMS**

17:07  
SET GEO OK|DATE:11/06/27,TIME:  
09/03/33,LAT:22.7646216N,LOT:  
114.3976250E,Speed:000.0,0-0-1-1-54-27,000

**Reply SMS**

17:14  
Stockade1-IN|DATE:11/06/27,TIME:  
09/13/38,LAT:22.7646216N,LOT:  
114.3976250E,Speed:000.0,0-0-1-1-54-25,000

**GEO-Fence  
Alarm SMS**

## 15. Set the local time

Send SMS "**123456Ltime zone**" to set the local time

**Note:** L must be capital, + in the time zone means east, - in the time zone means west. Time zone must be 2 numbers. So Beijing time zone should be like this: +08

**E.g.** send "123456L+08" to set the time to the Beijing time  
send "123456L-08" to set the time to Los Angeles time

**Note:** Please send "**123456L+05:30**" to set the India time.

## 16. GPRS setting

Send SMS "**123456B**" to get the IMEI number of the unit.

**Note:** B must be capital.

**E.g.** send SMS "**123456B**"

**Note:** Before you execute the following GPRS connection, please submit the IMEI # to the manufacturer to register the IMEI #.

In order to use GPRS function, the user needs to set IP, Port and APN (Access Point Name) by sending SMS commands. Make sure that the SIM card in the tracker has the GPRS function

activated.

Send SMS "**123456C\$\$\$**,IP:Port" to set the APN, IP and port.

**Note:** C must be capital. Please get APN from your local GSM operators and the APN is case sensitive. Users do not need to input the server's IP & Port if you use the manufacturer's server.

**E.g.** send SMS "**123456CCMNET**".CMNET is the APN of China Mobile, and it will connect the manufacturer's server as a default mode.

**Note:** The APN should be in wap mode.

Send SMS "**123456O&&&&**, @ @ @ @" to set the username and password for APN.

**Note:** &&&& is the username and @@@@ is the password. O must be capital. If the GSM provider doesn't create a username and password for the APN, you can ignore this command.

**E.g.** send SMS "**123456Owap, wap**".

**Note:** The username and password should be in wap mode.

Send SMS "**123456D**" to turn on GPRS connection

**Note:** D must be capital.

**E.g.** send SMS "**123456D**"

Send SMS "**123456E**" to turn off GPRS connection

**Note:** E must be capital.

**E.g.** send SMS "**123456E**"

## 17. Check tracker's parameters

Send command 123456G to check the parameters

The respond SMS is as follow:



20:08  
Telephones:A;B;C;D;E I  
+8613510220020;F;G;H;CMNET;Speed:  
80;0;0;0;0;0;1;BAT:56,30% II III  
IV V

**I** Telephones:A; B; C; D; E ( the phone number of A1; A2; A3; A4; A5)

**II** CMNET is China mobile's APN

**III** Speed: 80 is over speed value

**IV** 0;0;0;0;0;0;1 :Over speed alarm; auto-track; auto-arm; Move alarm: Rrm; Low battery alarm(0 is OFF, 1 is ON)

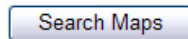
**V** BAT: 56, 30%: 56 is the power value, 30% is low power alarm value

### 18. Displaying location on Google map

Go to <http://maps.google.com> and type in the latitude and longitude like this: **22.7640801N,114.3975566E**



Click search button, then you can see the position.



Download Google earth software from <http://earth.google.com/>  
Start the Google Earth software and type the latitude and longitude into the software like this: **22.7640801N,114.3975566E**. Click search. Then you can see the position.



### 18. Displaying location on your cell phone



It will reply a location URL SMS like:

<http://maps.google.com/maps?f=q&hl=en&q=22.7647333,114.3978316&ie=UTF8&z=16&iwloc=addr&om=1speed:000.0,&imei=012207009017010>

Click on the URL, then you can see the location

## 20. Real time tracking on website or PC software

The device can be tracked on our tracking platform, please contact us for more information.



Tracking website



PC software

**Note:** alternative from tracking website and PC software



## **21. 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 use the battery and charger provided by manufacturer. Using other batteries and chargers will cause unwanted situation.
9. Don't dismount the antenna randomly, or use other antennas. This may interfere the transmission, and increase the radiation as well.




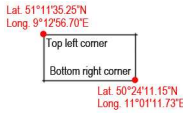
**SMS commands list**

**Appendix\***

➤ name	➤ Sentence content	➤ Description
➤ Set authorized numbers	➤ <b>123456A1,phone number</b> ➤ <b>123456A2,phone number</b> ➤ <b>123456A3,phone number</b> ➤ <b>123456A4,phone number</b> ➤ <b>123456A5,phone number</b>	➤ A1,A2,A3 is for setting the 3 SOS numbers. ➤ A4,A5 is for the call center number Phone number must include the country code like +8613812345678. +86 is the country code of China. Please do not use '00' instead of '+'
➤ Sample of setting authorized numbers	➤ <b>123456A1,+8613812345678</b> ('A' and the comma must be English )	➤ Set +8613812345678 as the first SOS number (A1).
➤ Delete authorized numbers	➤ <b>123456A1,D</b> ➤ <b>123456A2,D</b> ➤ <b>123456A3,D</b> ➤ <b>123456A4,D</b> ➤ <b>123456A5,D</b>	➤ A1,A2,A3 is for deleting the 3 SOS numbers. ➤ A4,A5 is for deleting the call center number
➤ Switch to the Talking mode	➤ <b>123456U0</b> <b>Calling in 2-way voice mode</b>	➤ The tracker will pick up the incoming call then the call center can talk to the driver.

➤ Switch to the Listen-in mode	➤ <b>123456U1</b> <b>(Default Mode)</b> <b>Calling in listen-in mode</b>	➤ The tracker will pick up the incoming call then the call center can hear the sound around the tracker.
➤ Switch to the Listen-in mode	➤ <b>123456U2</b> <b>SOS Call in listen-in mode</b>	➤ When you make the SOS call, just the call receiver can hear the sound around the tracker
➤ Switch to the Talking mode	➤ <b>123456U3</b> <b>(Default Mode)</b> <b>SOS Call in 2-way voice mode</b>	➤ The mode is 2-way voice communication after hitting the SOS
➤ Calling out automatically	➤ <b>123456V31,phone number</b> <b>Calling phone number in listen-in mode</b>	➤ Tracker will call this number automatically in listen-in mode.
➤ Calling out automatically	➤ <b>123456V30,phone number</b> <b>Calling phone number in 2-way voice mode</b>	➤ Tracker will call this number automatically in two-way voice mode
➤ Get position by SMS	➤ <b>123456F</b>	➤ It will reply the latitude and longitude as well as a link to the cell phone

➤ Set continuous tracking	➤ <b>123456Mx,yyyz</b>	<ul style="list-style-type: none"> <li>➤ x=1 means on, x=0 means off</li> <li>➤ yyy means time interval. If z=S/M it should be &lt;=255. If z=H, it should be &lt;=090. It must be three numbers, 030S means 30S</li> <li>➤ Z means time unit, z=S means second, z=M means minute, z=H means hour</li> </ul>
➤ Sample of Setting continuous tracking	➤ <b>123456M1,030S</b>	The tracker will reply the position according to the time interval you set (30 seconds). If the tracker has connected to server it will send to the server by GPRS or it will be sent to the cell phone by SMS
➤ Set the speeding alarm	➤ <b>123456Jx,yyy</b>	<ul style="list-style-type: none"> <li>➤ x=1 means on, x=0 means off</li> <li>➤ yyy means the alarm speed, it should be &lt;250 and must be three digitals, e.g. 080=80km/h.</li> </ul>
➤ Sample of setting speeding alarm	➤ <b>123456J1,080</b>	➤ The tracker will send a speeding alarm to server if it is over the 80km/h

<p>➤ Set GEO fence</p>	<p><b>1234561x,y,z, aabbccddeffggghhij kkllmmnnppppqrrs sj</b></p>  <p>Lat. aa°bb'cc.dd" Long. fff°gg'ff.ai"</p> <p>Top left corner</p> <p>Bottom right corner</p> <p>Lat. kk°ll'mm.nn" Long. ppp°qq'rr.ss"</p>	<p>➤ x=NO. of the GEO-fence(1-5),5 GEO fence can be set</p> <p>➤ y=1 means on, y=0 means off</p> <p>➤ z=0 means go in, z=1 means go out</p> <p>➤ e=N means the north latitude, e=S means the south latitude</p> <p>➤ j=E means the east longitude, j=W means the west longitude</p> <p>➤ aa,bb,cc,dd,kk,ll,mm,nn,qq,rr,ss must be 2 numbers.03 means 3.</p> <p>➤ fff,ppp must be 3 numbers.011 means 11</p>
<p>➤ Example of setting GEO fence</p>	<p><b>12345611,1,1,511135 25N009125670E 50241115N011011173 E</b></p>  <p>Lat. 51°11'35.25"N Long. 9°12'56.70"E</p> <p>Top left corner</p> <p>Bottom right corner</p> <p>Lat. 50°24'11.15"N Long. 11°01'11.73"E</p>	<p>➤ The tracker will send an alarm data if it is in/out the district you set.</p>

➤ Set the time zone	➤ 123456Lxyy	➤ x=+ means east x=- means west ➤ yy means the time zone, must be 2 numbers
➤ Sample of setting the time zone	➤ 123456L+08	➤ Set the east 8 zone
➤ Set the low battery alarm	➤ 123456Nx,yy	➤ x=1 means on,x=0 means off yy is the alarm battery percentage. It must be<45 and 2 numbers.
➤ Sample of setting the low battery alarm	➤ 123456N1,40	➤ The tracker will send a low battery alarm if the battery is lower than 40%
➤ Modify the password	➤ 123456H456789	➤ 456789 is the new password, new password must be 6 numbers
➤ Set the APN,IP and port	➤ 123456C\$\$\$\$,IP:Port	➤ \$\$\$\$ is the APN, you can get the APN from your local GSM provider.
➤ Sample of setting the APN	➤ 123456CCMNET,119.122.101.91:9289	➤ CMNET is the APN of China mobile.

➤ Set the username and password for APN	➤ <b>123456O&amp;&amp;&amp;&amp;, @ @ @ @</b>	➤ &&&& is the username and @ @ @ @ is the password. ➤ If the SIM card doesn't need username and password for the APN, pls ignore this command
➤ Sample	➤ <b>123456Ointernet,internet123</b>	➤ The user name is internet and the password is internet123.
➤ Open ➤ GPRS	➤ <b>123456D</b>	➤ The tracker will send a confirmation SMS back after successful connection.
➤ Close ➤ GPRS	➤ <b>123456E</b>	➤ The tracker will close the connection with the server.
➤ Get the IMEI number	➤ <b>123456B</b>	➤ It will reply the IMEI number of the tracker.
➤ Check the setting	➤ <b>123456G</b>	➤ Check all parameters set in tracker
➤ Reset the device	➤ <b>RESET!1</b>	➤ Tracker will be reset and keep all the configurations
➤ Refresh the device	➤ <b>RESET!</b>	➤ Tracker will be reset and erase all the configurations