Rectangle GPS TRACKER USER MANUAL

Contents

1. Introduction

Working Based on existing GSM /GPRS network and GPS satellites, this tracker is a small and powerful tracking device that is developed for personal, vehicle and pet etc. Not only transmitting the longitude and latitude coordinate to your cell phone by SMS, but also transmitting the longitude and latitude coordinate to the designated server by GPRS and then displaying the location by tracking software.

2. What's new?

Mini size: as small as a car remote controller can be link to the key chain.

Excellent design: Designed by famous designer, it not only a tracker but an artwork also. Especially design for personal using.

Long battery life: its standby time will be 8days.

Get position by 3 ways: It will reply a position SMS that consist of coordinate and an URL .You can put the coordinate into Google map and search for the position or click the URL and see the position in cell phone directly. It can send the position to server and view the position and history in tracking software.

3. Main Features

Tracker	Software
Long battery life	Based on Google map
Real-time locating	Support multi-users
Once locating	Real-time tracking
Continuous locating	History replay
Geo-fence alarm	Report download
Over speeding alarm	Set time zone
Low power alarm	Speeding alarm
Storage data in memory	Geo-fence alarm
Set time zone	Storage data for one month
Customizations are welcome	Customizations are welcome

4. Applications

Protect the child/elderly/disabled/pet etc.

Personnel management

Track the vehicle/ equipment etc.

5. Specification

Content	Specs.
Dimension	90mm*54mm*10mm
Weight	80g
Network	GSM/GPRS
Band	900/1800Mhz 900/1800/1900Mhz 850/900/1800/1900Mhz
GPS chip	SIRF3 chip
GPS sensitivity	-159dBm
GPS accuracy	5-20m

Cold start	38 sec.
Warm starts	36 sec.
Hot start	1 sec.
Battery	Chargeable 3.7V 1800mAh battery
Operation temperature	-20 ℃ to +55 ℃
Humidity	5%--95% non-condensing

6. Start up
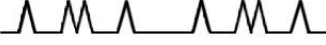
Do charge the battery to capacity in 8 -12 hours for first use. After the first use, the battery can be charged fully in 3-5hours. In order to protect the device please use the battery and charger provided by the manufacturer.
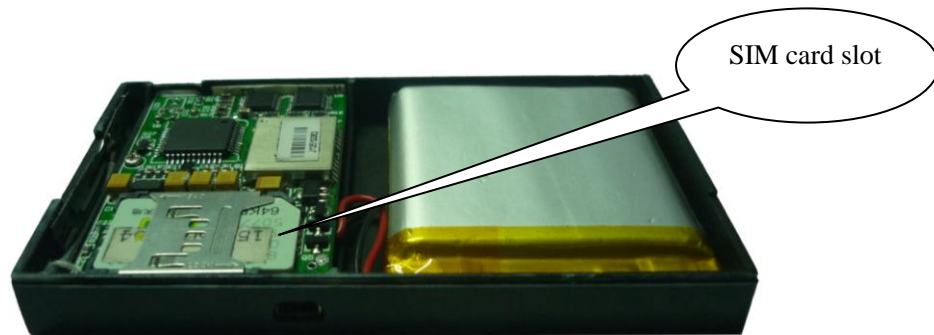
Insert the SIM card into the tracker like this.

Switch on the unit outdoors. The LED will be flash. In 10 to 30seconds, the unit will begin to work and indicators will blink as the following:

Condition	Flashing frequency	Working mode
Starting	Blink like	The device is starting
Has GSM, No GPS	Blink like	Work on GSM mode, no GPS
Has GPRS, No GPS	Blink like	Work on GPRS mode, no GPS
Has GSM and GPS	Blink like	Work on GSM mode
Has GPRS and GPS	Blink like	Work on GPRS mode
No GSM and GPS	Blink like	Don't work, just running
No GSM, Has GPS	Blink like	Storage position INFO only

Power	GPS	GSM

7. Set and delete the authorized number.

7.1 Set the authorized number

Send SMS"**123456A1, phone number**" to set the first SOS number.

Send SMS"**123456A2, phone number**" to set the second SOS number.

Send SMS"**123456A3, phone number**" to set the third SOS number.

Note: 123456 is the default password. A must be English in capital and make sure there is no space in the command. Phone number must include the country code

E.g. send SMS "**123456A1,+8613812345678**" to set +8613812345678 as the first SOS number. +86 is the country code of China. Please do not use 00 instead of +.

Send "123456A4,+8613899998888" to set +8613899998888 as the CALL1 number.

It doesn't means that all of the five authorized numbers should be set, but at least set one authorized number. The device will only accept the all of the SMS commands from the authorized numbers only.

7.2 Delete authorized number.

Send SMS"**123456A1,D**" to delete the first SOS number.

Send SMS"**123456A2,D**" to delete the second SOS number.

Send SMS"**123456A3,D**" to delete the third SOS number.

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

8. Get position

8.1 Get position by SMS

Send SMS "**123456F**" to the device and it will reply its position by SMS. Only the authorized number can get the reply.

Note: F must be English in capital.

E.g. send "**123456F**" to the unit. It will reply its position.

8.2 Get position by calling

Call the tracker via A4,A5, and hang up when you hear 3 rings, the tracker will reply you its position.

8.3 Continuous tracking function

Send SMS "**123456M0/M1,xxxS/M/H**" to the unit, the tracker will reply the position message according to the time interval. If the device did not connect to the server, the message will reply to A1 number or it will reply to server.

Note: M must be English In capital.

M0 means turn off, M1 means turn on

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

S means second, M means minute, H means 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 A1 number. Send"123456M0,030S" to the tracker means stop the continuous tracking.

9. GEO-FENCE

Send SMS "**123456Ixyz,aabbccddefffgghhiijkkllmmnnepppqqrrssj**" to set up the geo-fence for the device to restrict its movement within a district. The device will send the message to the A1,

A2, A3 numbers as "Stockade +geo info" when it breaches the district.

5 GEO-FENCES can be set for the tracker.

LAT:aa°bb' cc.dd"
LONG:fff°gg' hh.ii"

LAT:kk°ll' mm.nn"
LONG:ppp°qq' rr.ss"
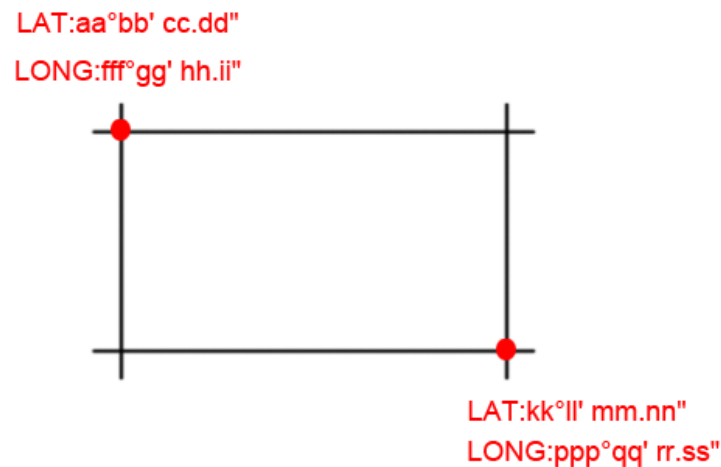
Note: I must be English in capital.

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

y=1 means turn on, y=0 means turn 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
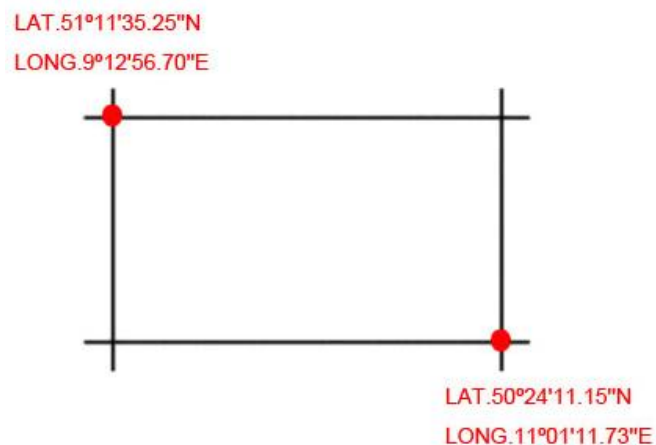
aa,bb,cc,dd,kk,ll,mm,nn,qq,rr,ss must be 2 numbers.03 means 3.

fff,ppp must be 3 numbers.011 means 11.

E.g. The first Lat.51°11'35.25"N, Long.9°12'56.70"E

    The second Lat.50°24'11.15"N, Long.:11°01'11.73"E

LAT.51°11'35.25"N
LONG.9°12'56.70"E

LAT.50°24'11.15"N
LONG.11°01'11.73"E

So the SMS command should be

"123456I1,1,1,51113525N009125670E50241115N011011173E"

10. GPRS setting

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 your SIM card in the tracker supports the GPRS function.

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

Note: C must be English in Capital. Please get APN from your local GSM operators and pay attention to the lower case or upper case of those letters.

E.g. send SMS "123456CCMNET, 119.122.101.91:7289".CMNET is the APN in China, please set the APN in your country.

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

Note:&&&& is the username and @@@@ is the password. O must be English in capital. This setting depends on different providers. If the provider doesn't need username and password for the GPRS, you do not need to send this command.

E.g. send SMS "123456Owap, wap". The username will be wap and the password will be wap.

Send SMS "123456D" to turn on GPRS

Note: D must be English in capital.

E.g. send SMS "123456D"

Send SMS "123456E" to turn off GPRS

Note: E must be English in capital.

E.g. send SMS "123456E"

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

Note: B must be English in capital.

E.g. send SMS "123456B"

11. Displaying location

11.1 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/ and install it in to your computer.

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.

11.2 Displaying location on your cell phone

It will reply a URL within the location SMS like:

http://grpsgprs.vip.dns12580.com/?227640783/114.3976533

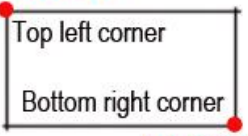Click the RUL then you can see the location

11.3 Tracking in the tracker software

The device can be tracked in the computer by your own tracking software, please see the GPRS

protocol document for more information.

12. Command list

Name	Sentence content	Description
➢ Set authorized numbers	➢ **123456A1,phone number** ➢ **123456A2,phone number** ➢ **123456A3,phone number** ➢ **123456A4,phone number** ➢ **123456A5,phone number**	➢ A1,A2,A3 is for setting the 3 SOS numbers. ➢ A4 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 authorized numbers	➢ 123456A1,+8613812345678	➢ Set +8613812345678 as the first SOS number.
➢ Delete authorized numbers	➢ **123456A1,D** ➢ **123456A2,D** ➢ **123456A3,D** ➢ **123456A4,D** ➢ **123456A5,D**	➢ A1,A2,A3 is for setting the 3 SOS numbers. ➢ A4 ,A5 is for getting position
➢ Get position by SMS	➢ **123456F**	➢ It will reply the latitude and longitude to the cell phone, then you can go to the Google to search the position
➢ Set continuous Tracking	➢ **123456Mx,yyyz**	➢ x=1 means on, x=0 means off ➢ yyy means time interval. If z=S/M it should be <=255.if z=H, it should be<=090. It must be three numbers,030Smeans 30S ➢ Z means time unit，z=S means second, z=M means minute, z=H

		means hour
➤ Sample of continuous tracking	➤ 123456M1,030S	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	➤ **123456Jx,yyy**	➤ x=1 means on, x=0 means off ➤ yyy means the alarm speed, it should be<250 and must three digital, e.g. 080=80km/h.
➤ Sample of speeding alarm	➤ 123456J1,080	➤ The tracker will send a speeding alarm to server if it is over the 80km/h
➤ Set GEO fence	**123456Ix,y,z, aabbccddefffgghhiijkkllmmnne pppqqrrssj** Lat. aa°bb'cc.dd" Long. fff°gg'ff.ii" Top left corner Bottom right corner Lat. kk°ll'mm.nn" Long. ppp°qq'rr.ss"	➤ x=NO. of the GEO-fence(1-5),5 GEO fence can be set ➤ y=1 means on, y=0 means off ➤ z=0 means go in, z=1 means go out ➤ e=N means the north latitude, e=S means the south latitude ➤ j=E means the east longitude, j=W means the west longitude ➤ aa,bb,cc,dd,kk,ll,mm,nn,qq,rr,ss must be 2 numbers.03 means 3. ➤ fff,ppp must be 3 numbers.011 means 11

➤ Example of GEO fence	123456I1,1,1,511135 25N009125670E 50241115N011011173E Lat. 51°11'35.25"N Long. 9°12'56.70"E Top left corner Bottom right corner Lat. 50°24'11.15"N Long. 11°01'11.73"E	➤ The tracker will send an alarm data if it is in/out the district.
➤ Set the time zone	➤ **123456Lxyy**	➤ x=+ means east x=- means west ➤ yy means the time zone，must be 2 numbers
➤ Sample of the time zone	➤ 123456L+08	➤ Set the +08 time zone
➤ Set the low battery alarm	➤ **123456Nx,yy**	➤ x=1 means on,x=0 means off yy means battery lower then yy% then send the alarm. It must be<45.it must be 2 numbers.
➤ Sample of 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 it from your local GSM provider. IP&Port depend on server
➤ Sample of the APN	➤ 123456CCMNET, 119.122.101.91:7289	➤ CMNET is the APN of China mobile.

➢ Set the username and password for APN	➢ **123456O&&&&, @@@@**	➢ &&&& is the username and @@@@ is the password. ➢ If the SIM card doesn't need username and password for the APN, you do not need to set it.
➢ Sample of the username and password for APN	➢ 123456Ointernet,internet123	➢ The user name is internet and the password is internet123.
➢ Open ➢ GPRS	➢ **123456D**	➢ The tracker will start to connect the server by GPRS.it will send back an SMS to confirm after it have connected the server successfully.
➢ Close GPRS	➢ **123456E**	➢ The tracker will close the connection with the server.
➢ Get the IMEI number	➢ **123456B**	➢ It will reply the IMEI number of the tracker.
➢ Check setting	➢ **123456G**	➢ It will reply its parameter
➢ Reset	➢ **RESET!**	➢ The device will reset.

18. Cautions

Please comply with the instructions to extend the unit life:

1. Keep the unit dry. Any liquid, i.e. rain, moisture, may affect its working.

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

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

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

5. Don't disassemble or refit the unit.

6. Please use and charger provided by manufacturer. Using other chargers will cause unwanted situation.