GPS Vehicle Tracker

USER MANUAL

VT-108

VT-108 is a GPS/GSM/GPRS tracking device which is specially developed and designed for vehicle Real-time tracking and security. With superior GPS and GPRS modules, VT-108 has good sensitivity and stable performance. It can get accurate GPS fix even in remote places.

Function

Tracking via SMS or GPRS (TCP/UDP)

Single location report

Tracking by time interval

SOS emergency alarms

Geo-fencing control

Low battery alert

Speeding alert

Two ways communication

Monitoring surveillance

Illegally startup or cutting off alert

Specification:

content	specification
Dim.	91*64*25mm
Weight	750g
Network	GSM/GPRS
Band	850/ 900/1800/1900Mhz
GPS chip	SIRF3 chip
GSM/GPRS	Simcom300d or Simcom340d
GPS sensitivity	-154dBm
GPS accuracy	5m
Time to first fix	Cold status 60s Warm status 40s Hot status 1s
Battery	Chargeable changeable 3.7V 1050mAh Li-ion battery
Storage Temp.	-40°C to +85°C
Operation Temp.	-20°C to +55°C
Humidity	5%--95% non-condensing
Standby Time	60 hours

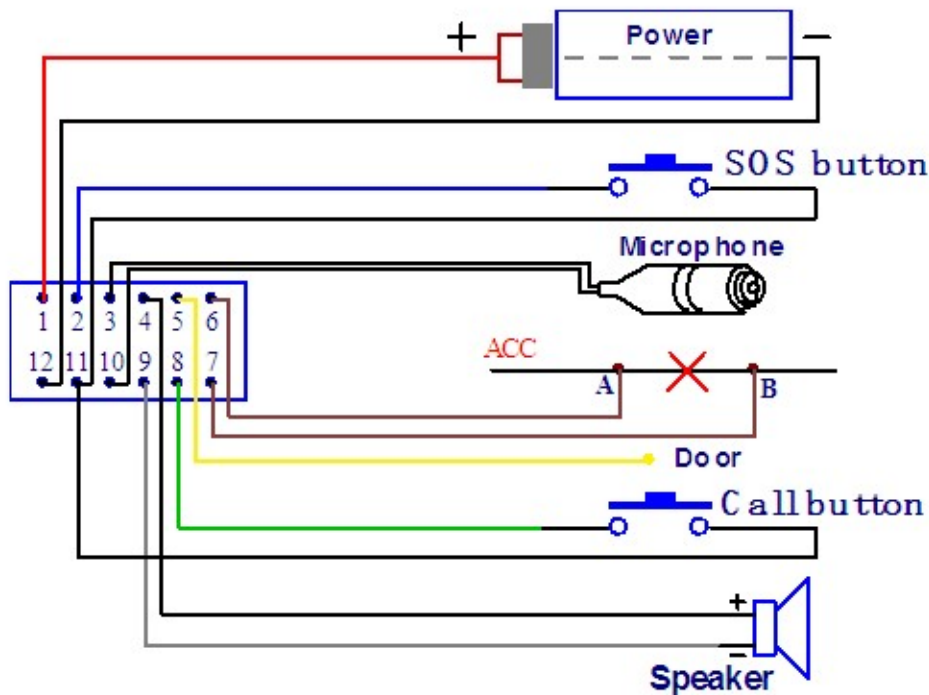# Hardware description:

GSM Antenna:

GPS Antenna:

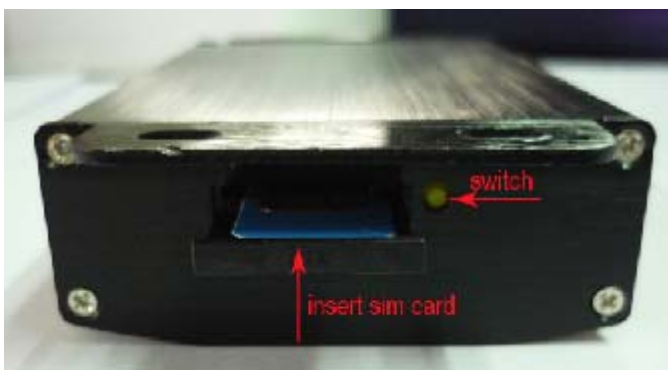**SOS button**

Wiring of installation

SIM card installation

Please make sure that the SIM card is able to execute the function of incoming calls display, no calls can be diverted and the PIN code is turned off.

The SMS format must be TXT format, and can't recognize the PDU format.

Before inserting SIM card, cut off the power for the unit.

Install SIM Card

a. Press the switch button with cuspidate target

b. Insert SIM card, let the metal surface upward

c. After the startup, LED of GPS and GSM will light at the same time, the tracker can initialize in one minute. The red LED means GSM signal will flash every 3 seconds. The green LED means GPS signal will also flash every 3 seconds when the device gets the signal.

1. **Set the authorized number.**

There are 5 numbers can be authorized.

Send SMS"password+A1, +country code + mobile number" to set the first authorized number.

Send SMS"password+A2, +country code + mobile number" to set the second authorized number.

Send SMS"password+A3, +country code + mobile number" to set the third authorized number.

Send SMS"password+A4, +country code + mobile number" to set the fourth authorized number.

Send SMS"password+A5, +country code + mobile number" to set the five authorized number.

E.g. send "123456A1,+8613812345678" to tracker to set +8613812345678 as the first authorized number. Send "123456A2, +8613898765432" to tracker to set +8613898765432 as the second authorized number. （default password: 123456. +86 is the country code of China. A must be capital. No space in the command）

2. **Check the authorized numbers and other setting.**

Send SMS: "password +G" to the tracker it will reply all the authorized numbers and other setting.

E.g. send "123456G" to the unit. It will reply all the authorized numbers and other setting.

3. Single location

3.1 Any number call the tracker, it will reply a SMS about the position of latitude .and longitude.. if not set up the authorized number.

In existence of an authorized number, an unauthorized number dials up the tracker, it won't reply a SMS about the position.

3.2 Dialing the tracker device through the authorized number, hang it up before the call is put through, it will reply a position message.

3.3 Send SMS "password +F" to the tracker, it will reply its position by SMS. Only the authorized number can get the reply.

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

4. Monitor and two ways communication

The default mode is two ways communication; this can change to monitor surveillance by SMS command

SMS command: Send SMS Password+U1 to the unit, it will change to monitor function

Send SMS Password+U0 to the unit, it will change to two ways communication

E.g. Send 123456U1, it will be monitor mode, send 123456U0, it will be two way communication

4.1 Monitor (Please change to the monitor mode)

Any cell phone number calls the tracker, after the unit automatic answering, and then you can monitor the voice around the unit.

4.2 Two ways communication

    4.2.1 Dial the unit (Change to the two way communication mode first)

Any cell phone number calls the tracker, after the unit automatic answering, and then you can talk with the holder

    4.2.2. The unit calls the cell phone number

      a. SOS function;

      b. Calling button; Press the calling button for 3 seconds, the unit will call the forth authorized number. If nobody answer the call or any other reason fail to answer this call, the unit will continue call the number for 3 times.

      Press the SOS button can end this communication.

5. Continuous tracking function

In this continuous tracking mode, the tracker will send one position message at a preset time interval.

Message content: "password +M (0/1), xxx (S/M/H)"

Note: M0 means turn off, M1 means turn on

xxx means time interval and must be three digitals,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 authorized number. Send"123456M0,030S" to the tracker means turn off   the continuous tracking function.

6. Speeding alarm

Sent SMS "password +J(0/1) + speed" to set the Speeding alarm function.

Note: J0 means turn off the over speed alarm function; J1 means turn on the speeding alarm function. speed should be<250 and must three digitals, e.g. 080= km/h. .

For example, send "123456J1, 080" to tracker. When the object moves exceeds 80 km/h, the unit will send SMS as "Over speed! +GPS INFO" to the authorized number. Send "123456J0, 080" to tracker means turn off the speeding alarm function.

7. Cut off the engine function

Message content: password+T(1/0)

Attention: 0 means turn off, 1 means turn on

For example: 123456T0 means cancel the cut off engine function,

        123456T1 means cut off the engine.

8. SOS button

Press the SOS for 3 second

1. It will send "help me +GPS info" to the authorized numbers.
2. The SOS message can send to the server under the GPRS mode.
3. The unit also calls the authorized number at the same time

9. Set the local time

Send SMS "password + L + time zone" to set the local time
Note: + in the time zone means east,- in the time zone means west. Time zone must be 2 digitals. So Beijing time zone should be like this: +08
E.g. send "123456L+08" to set the time to the Beijing time.

10. Change the password.

Send SMS "old password + H + new password" to change the password.
Note: H must be English in capital, send it to tracker to modify the password. (Default password: 123456)
E.g. send "123456H456789" means change the password123456 to 456789
The pre-set password won't be erased by changing SIM card.
Be sure keep the password in mind, otherwise you have to update the software to restore the original setting in case of losing the password.
The password must be 6 digits, If not the tracker can not recognize the password.

11. Low battery alarm

Send SMS "password + N (0/1), + xx" to set the low-battery alarm.
Note: N0 means turn off the low-battery alarm function; N1 means turn on the low-battery alarm function. xx should be <45 and must be tow digitals.
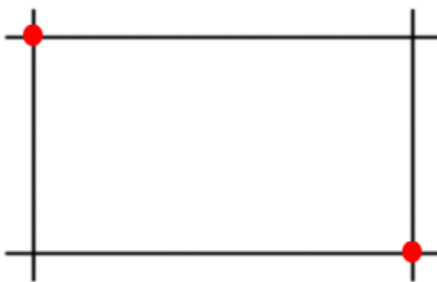E.g. send"123456N1,30" to the tracker means when the battery is lower then 30%,it will send a alarm to the authorized number. Send"123456N0,30" to the tracker means turn off the low battery alarm function.

12. **Set up GEO-FENCE.**
We can set 5 GEO-FENCE for the tracker. Set up the geo-fence for the device to restrict its movement within a district. The device will send the message to the authorized numbers as "Stockade +geo info" when it breaches the district.

LAT:aa°bb' cc.dd"
LONG:fff°gg' hh.ii"

LAT:kk°ll' mm.nn"
LONG:ppp°qq' rr.ss"

Message content: "password + I + x , + y , + z ,+ aabbccddefffgghhiijkkllmmnnopppqqrrsst"
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

13. 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 "password + C + APN" to set the APN,IP and port.

Note: Make sure that the IP should be the public IP. If your pc is in Internet, you must know your public IP.

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

If the GPRS function need username and password, you should have to send another command.

Password+O+uername,password

E.g send 123456Oorange,orange to set the user name and password. The first orange is the username and the second orange is password, if the SIM card you buy from the orange in France.

If the provider doesn't need username and password for the GPRS, you do not need to send this command.

Send SMS "password + D" to turn on GPRS

E.g. send SMS "123456D"

Send SMS "password + E" to turn off GPRS

E.g. send SMS "123456E"

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

E.g. send SMS "123456B" to get the IMEI of the tracker.

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.