



# GPS Tracker

(GPS+GSM+SMS/GPRS)

## User Manual

(Version 1.1)



Please read this manual carefully before attempting installation and online activation. Pictures are for indication and illustration purposes only.

### Accessories:

Charger line



## 1. Functions

- GSM 850/900/1800/1900MHz
- GPS location, GPRS data transmission
- Inquires the position by SMS or mobile phone or PC
- Built-in OLED screen, display time and battery level
- One power on/off key
- One SOS key
- Remote setup by SMS
- Remote monitoring voice
- Low battery reminding

## 2. Specification

GSM: 850/900/1800/1900MHz

GPRS: Class 12, TCP/IP

Battery: 420mAh

Current: working  $\approx$ 50mA

Standby  $\approx$ 3mA

GPS fixed time: Cold start 30sec(open sky)  
Warm start 29sec(open sky)

GPS fixed precision: 10m (2D RM)

Temperature: -20°C ~ +70°C

Humidity: 5% ~ 95% RH

Dimension:39.5(L)x39.5 (W) x15.9(H)mm

## 3. Prepare

- 3.1 SIM Card: Please use a GSM SIM card.
- 3.2 Before insert the SIM card, please make sure to turn off the device.
- 3.3 Please make sure the GPRS can be used, if not, please connect GPRS Service Provider.
- 3.4 Please make sure the Caller ID can be used.
- 3.5 Then insert the SIM card and press power key over 3s.
- 3.6 Maybe you need she APN first, get APN from GPRS Service Provider, then set APN refer **4.2.15**

## 4. Setting by SMS

4.1 If use service platform, please contact our dealer

4.2 All of the following commands must be lowercase letters, all of the send commands will be reply. If set successful it will reply "set success!" otherwise need to set again. Send the corresponding commands the device will reply the corresponding results.

### 4.2.1 Set the center number:

If you want to use SMS to set device's working parameter or control the device, you must set the center number first. Device only accept SMS commands of the center number, you can set your mobile phone number as the center number. In order to ensure the safety of users, you must use the password to set the center number. The initial password is "123456". Password can be modified.

The center number set command:

`pw,123456,center,000000000000#`

Example: pw,123456,center,13524258458#

If the service center number is set successful, the device will reply: Master command set successfully!

If the password is incorrect, the device will reply: "The password is wrong!"

Note: you can only set one service center number.

#### **4.2.2 Set slave center number**

Slave center number only can set parameters by SMS.

Command: pw,123456,slave,00000000000#

#### **4.2.3 Delete the service center number**

Command: pw,123456,center,d#

If the command is set successful, the device will reply "Center number has been deleted!"

#### **4.2.4 Modify password**

The default password is 123456

Command: pw: new password (6 digits)#

Example: pw,888888#

If the password is modified successful, the device will reply: "password success! Password for 888888".

If the setting is incorrect, then reply "Password format error!"

#### **4.2.5 Add SOS number**

Can set three SOS number, Command:

sos1,,1111111111#

sos2,2222222222#

sos3,3333333333#

Example: sos1,13412345678#

If the setting is successful, then reply "SOS set success!".

#### **4.2.6 Delete the SOS number**

Command:

sos1#

sos2#

sos3#

If the command is set successful, the device will reply "SOS delete success!"

#### **4.2.7 Inquire the parameter setting**

Command: test#

Example: test #

Reply Message:

ver:TQ-v0.1-2013/07/04-22:51;ID:7893267561;ip:000.000.000.000;port:0000;center:13812345678;slave:13812345678;upload:65535s;work mode:1;bat level:3;GPS:OK(7);GPRS:OK(100);LED:OFF;

ver: firmware version

ID: 7893267561– device ID Number

ip: 000.000.000.000, PORT:0000 -- Server IP and port

center: Center number

slave: Slave center number

upload: GPRS Data upload interval

workmode: working mode

bat level: battery power

GPS: GPS fixed or not, and the number of received GSP satellite

GPRS: connected server or not, and the GSM signal level

LED: soft switch of LED twinkle or off

#### **4.2.8 Language and time zone setting**

The device provide two kinds of language, Chinese and the English. The different areas use different time zone setting.

Command: lang,x,zone,n#

Language options x: 0 is English, 1 is Chinese, the default language x=1.

Time zone n: East eight area for 8, west three areas for -3, the default time zone n=+8.

#### **4.2.9 Working mode setting**

Command: m1, 20# or m2, 20# or m3,600# or m4#

The default working mode is mode 1,

m1, 20#: mode 1, GSM and GSP always working, every 20 seconds send GPS data to server. (Range: 10~65535S, default 60S)

m2, 600#: mode 2, power saving mode, every 600 seconds turn on GPS, and send GPS data to server once, then enter sleep. (Range: 300~65535S)

m3,20#: mode 3, GPS not work, every 20 seconds send GSM's cell ID to server, some commands can wakeup GPS once. (Range: 10~65535S)

m4#: mode 4, no server, always sleeps, only wakeup by SMS or call, can get google map link by SMS.

#### **4.2.10 Modify the interval time of GPRS data upload**

Command: upload, time (in seconds) #

Example: upload,15#

Reply Message:" Set success! Upload time is 15s"

#### **4.2.11 Language and time zone setting**

The device provide two kinds of language, Chinese and the English. The different areas use different time zone setting.

Command: lang,x,zone,n#

Language options x: 0 is English, 1 is Chinese, the default language x=1.

Time zone n: East eight area for 8, west three areas for -3, the default time zone n=+8.

#### **4.2.12 Restart device**

Command: reset#

Example: reset#

When the device received the command, it will restart device after 1 min.

#### **4.2.13 Restore factory settings**

Command: factory #

Example: factory #

When the device received the command, it will restore factory settings and auto restart.

#### **4.2.14 Monitoring voice number setting**

Command: monitor,00000000000#

Example: monitor,13612345678#

If the command is set successful, the device will reply "monitor set success!"

#### **4.2.15 Server IP setting**

Command: ip,\*\*\*.\*\*\*.\*\*\*.\*\*\*,port,\*\*\*\*#

Example: ip,000.000.000.000,port,0000#

If the command is set successful, the device will reply "Interval set successfully!"

#### 4.2.16 Server domain name setting

Command: surl,www.\*\*\*.com,port,\*\*\*\*#

Example: surl,www.xytracking.com,port,3381#

If the command is set successful, the device will reply "Surl set successfully!"

#### 4.2.17 APN setting for GPRS

Command: apn,APN\_name,plmn,PLMN\_number#

Example: apn,cmwap,plmn,46000#

If the command is set successful, the device will reply "APN set successfully!"

#### 4.2.18 Firmware upgrade









Command: upgrade,address#

address: Link URL of firmware

## 5、 Device user manual



### 5.1 LED and Screen Status Description

Screen Status Description	
Patterning	Description
	Means GPS model is working, and not fix ( If the position no display, means GPS not working )
	Means GPS model is working, and fixed ( If the position no display, means GPS not working )
	Means GSM signal level, five levels(0, 1、 2、 3、 4)
	Means no SIM card
	Means battery level
	Means device power on and charging
	Means device power off and charging
	Means device power off and battery charged full
SOS	Means sos calling
<b>LED Twinkle Description</b>	

Working State	Twinkle Description
GPS Off	GPS LED off
GPS working,not fix	GPS LED Twinkle every second
GPS working and fixed	GPS LED light on
GSM not register	GSM LED Twinkle every second
GSM registered	GSM LED Twinkle every 5 seconds
GPRS connected to server	GSM LED off
GPRS send data to server	GSM LED Twinkle every 0.05 seconds
Charging	GPS and GSM LED Twinkle alternately, it will restore when charged full
Device power off	GPS and GSM LED both light on and both off after a few seconds
Firmware remote upgrade	GPS and GSM LED both light on and both off after upgrade success

## 5.2 Power on/off

Power on: Before power on, please insert the effective SIM card. Then long press the power key for over 5 seconds, the device will power on, then you will see screen display.

Power off: When the device power on, long press key for over 5 seconds, the device will power off, then you will see screen off.

## 5.3 Location inquires

### 5.3.1 Get address by SMS from server

Command: where#

This function needs server support. If server not support, please ignore it.

If GPS fixed, the device replies address.

If GPS not fixed, the device replies: "unable to get the correct GPS data, please try again!"

### 5.3.2 Get location by Google map by SMS

Command: url#

If GPS fixed, the device reply: Google map's location link

If GPS not fixed, the device replies: "Not fixed, the last fixed location is Google map's location link"

If your mobile phone can connect to the Internet, you can open the Google map link to get the address of the device; also can get the address by the browser of computer for input the Google map link.

### 5.3.3 Tracker management by server

User can login in server's website to manage tracker. You can get the account and password form vendors.

## 5.4 Send SOS and alarm clear

Long press SOS key over 3 seconds, the device will call the 3 SOS number one by one. User can send command to clear alarm by server or SMS.

## 5.5 Low Battery reminding

When battery level is level 1, the device will send low battery message to center number by SMS.

## 5.6 Monitoring voice

If the phone's number of monitoring voice call the device, the device will auto answer it, then will hear voice nearby the device.