

# **GSM/GPRS/GPS TRACKER 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.

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## 1 Summary

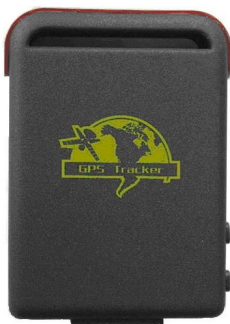
Working Based on existing GSM/GPRS network and GPS satellites, this product can locate and monitor any remote targets by SMS or internet.

## 2 Applications

- Vehicle rental / Fleet management etc
- Powerful magnet+water proof, adsorbing in the hidden place of car.
- Protect child / the old / the disabled / pet etc
- Provide peace-of-mind for businessmen
- Manage personnel
- Track criminals secretly

## 3 Hardware Description

### 3.1 Front face



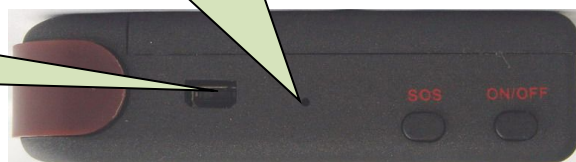
### 3.2 Rear face



### 3.3 Side face

You can update software, charge battery from here.

Indicator for signals.



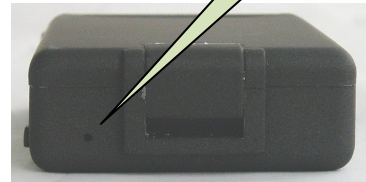
You can press the "SOS" buttons for 3s for emergent help.

Turn on / off the unit here.

GSM/GPRS antenna is inside

Microphone

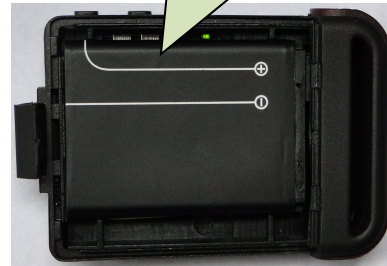
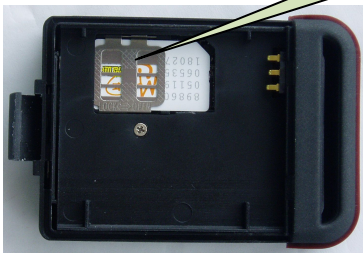
### 3.4 Bottom face



### 3.5 Interior

Put SIM card here.

Install the battery like this



## 4 Specs.

Content	Specs.
Dim.	64mm x 46mm x 17mm(1.8"*2.5"*0.65")
Weight	50g
Network	GSM/GPRS
Band	850/900/1800/1900Mhz
GPS chip	SIRF3 chip
GPS sensitivity	-159dBm
GPS accuracy	5m
Time To First Fix	Cold status 45s Warm status 35s Hot status 1s

Car charger	12—24V input 5V output
Wall charger	110—220V input 5V output
Battery	Chargeable changeable 3.7V 800mAh Li-ion battery
Standby	80hours
Storage Temp.	-40°C to +85°C
Operation Temp.	-20°C to +55°C
Humidity	5%--95% non-condensing

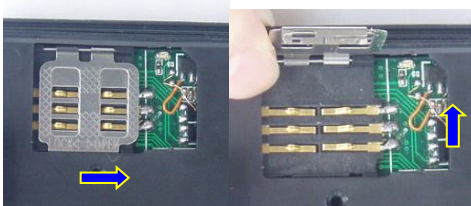
## 5 Usage

### 5.1 SIM card installation

Make sure that there is no call transfer and call display is on, and PIN code off. The SMS message must in Text format, can't be identified for PDU format.

#### Steps:

- 1 Open the rear cover, and pick out the battery.
- 2 Push the foil along and turn it left.



- 3 Put the SIM card into the holder, and turn the foil right and fasten it in place.



## 5.2 Battery and Charger

Do charge the battery to capacity in 8 -12 hours for first use. Please use the battery and charger provided by the manufacturer. This unit adopts built-in Li-ion battery, and full battery will support around 48 hours use on end. After first use, the battery can be charged fully in 3-5hours.

### **Cautions:**

- a:** For it's Li-ion battery, which contains harmful chemicals and may burst, please don't bump, puncture it violently and keep it off fire.
- b:** Please charge the battery in time to keep it working normally.

## 5.3 Startup

- Put the SIM card and battery in place.
- Turn on the unit outdoors by pressing the “on/off” button , in 5 seconds after the blue lights flashing until the indicator is on.
- For first use, please initialize the unit and restore it to default setting.
- In 10 or 40 seconds, the unit will begin to work and acquire the GSM signals as well as the GPS signals. The indicator will keep flashing every 8 seconds when the unit has received the signals, otherwise it will keep on.
- When this unit receives GPS signals normally, you can use it and do all the following settings.

## 5.4 Change the password

Send SMS: [#770#new password#User password##](#) to change the password.

Remark:

5.4.1 Be sure keep the new password in mind, if you forgot password, please send SMS: [#901##](#) to the tracker device [\(default password:0000\)](#)

5.4.2 Make sure the new password is in 4 digits, or else the tracker can not recognize the password.

## 5.5 Set the center number:

Send SMS [#710#phone number#new password#old pass word##](#)

For example: [#710#13588888888#1234#0000##](#)

When the command is sent, the center number will be: 13588888888 and it will reply “CONFIG OK” to you cell phone, when the password is error, it will reply “PASSWORD ER”.

The admin number is used for controlling the car power (on/off), setting Geo-fence and receiving the messages from the tracker.

## 5.6 Set the administrator number:

Send SMS: [#711#call1#call2#call3#User password##](#)

Admin number is used for the tracker owner to set up the next 3 controlling numbers.

Maximum is 3

For example:

[#711#13588888888###0000##](#) (Set a license number)

[#711#13588888888#13467510012###0000##](#) (Set up two authorization number)

#711#13588888888#13467510012#13675144233#0000##( Set three authorization number)

When the setting is successful, it will reply “CONFIG OK” when the pass word is wrong;  
it will reply “PASSWORD ER”

**\*Tracking location, the SMS information about the lat./long. Received is the place received the GPS signal when the GPS signal is weak. Please check the time received the SMS if there are some errors of the location.**

## 5.7 Regular Upload Interval Setup

Send SMS: [# 730# Sampling interval # Pieces of uploads # User password ##](#) to the tracker device, The defaulted factory upload interval of this device is 2 minutes for getting the point and 10 minutes for uploading one piece of positioning information. The user may change such parameter according to actual demand.

**For example: 730#20#4#0000##**

Note: The parameter “20” indicates getting one point every 20s; after getting points accumulatively for 4 times, upload one piece of positioning information with the upload interval as  $20 \times 4 = 80$ s. The user may change this parameter as the case may be.

## 5.8 Geo-fence

### 5.8.1 Alarm format

Send SMS :[#720#Warning way0-3#User password##](#)

1 .Warning way0: Don't call the police

2. Warning way1: Dial-up alarm



3. Warning way2: Message alarm

4. Warning way3: Dial-up alarm and Message alarm

Example: #720#3#0000## After the implementation of this order, Module is set to dial up the way with text messages. If module is warned about the information at the same time also to perform the first number went to the default function.

the terminal will return the message of CONFIG OK to the setting mobile phone, or the message of PASSWORD ER if the password is wrong.

Note: The factory default alarm way for 0.

### 5.8.2 GPS Fence Function

Send SMS: # 751 # fence radius # sampling interval # longitude # latitude # user password ##.

For example: #751#500#5#22.5442N#113.91E#0000##

After the setup is successful, the setting mobile phone will receive a piece of config ok command. Then, when the ward leaves this area, the terminal will send the alarming information of being out of the fence to the center number.

Note: Send 9860000 reply of longitude and latitude this standard

### 5.8.3 Fence Reading Function

Send SMS : # 752 # user password ##

after the command is set successfully, the terminal will read the data of the module fence working status and return message to the sending mobile phone, or PASSWORD ER if the password is wrong.

For example: #752#0000##

Return: #open:1#lat:11456.209400#lng:2233.470100#distance:500#time:5#status:2

Where, open: 1 indicates fence open; Open: 0 indicates fence closed;

lat:11456.209400, latitude;

lng: 2233.470100; longitude;

distance: 500; fence radius;

time: 5 sampling interval;

status: 2 , terminal has obtained valid satellite data, fence works normally;

status: 1; fence open, but there are no valid satellite data have been received;

status: 0, no electronic fence is set.

#### 5.8.4 Function of Canceling Fence

SendSMS: #760 # user password ##

Example: #760#0000##

After the terminal receiving this command, all fence settings will be cancelled.

Advice; Do not set GSM fence and GPS fence at the same time.

### 5.9 SOS button

If a ward number (the number in 3 above) is set, when the ward encounters emergency and presses the SOS button, then the terminal will send alarming information to the center number and dial three ward numbers in order.

## 5.10 Monitoring Function

The ward may send SMS **555 + password** to the terminal of the ward; in such case, the ward terminal of the ward will automatically call back the mobile phone of the guardian and the guardian may listen to the sound of the surroundings within 10m around the ward.

SendSMS: **5550000**

Remarks: 0000 is the initial default password and the actual use s subject to the actual password.

## 5.11 Low battery alert

It begins to alert when it is 3.7V and sends you SMS in 3m interval.

If the terminal of the ward has a very low power and needs to be powered off, the terminal of the ward will automatically upload one piece of low-voltage alarming command to the monitoring center number.

## 5.12 IMEI checking

Send SMS command **#901##**to the unit.,a IMEI number in 15 digits will be returned to your cell phone.

## 5.13 GPRS setting

User must send SMS via cell phone or software to set up IP, port and APN before starting GPRS.

Set APN Command

Send SMS: #802#APN letters or digits, 4-20 bits ### terminal password ##

and send it to the terminal; after executing this command, the terminal will automatically restart and connect to GPRS with APN set.

Command example 1: #802#cmnet###0000##

After this command is executed, APN will cmnet.

Note: The default APN of this product is CMNET.

## 5.14 Real-time polling

5.14.1 If there is no authorized number, when any number dials up the unit, it will report a Geo-info; If there is already an authorized number, then it will not respond when an unauthorized number calls it up.

5.14.2 Any call phone send [6660000](tel:6660000) to the tracker; you will get a reply SMS with link.

5.14.3 Any call phone send [9860000](tel:9860000) to the tracker; you will get a Google maps link

For Example:

356823033247432 2011/07/04 07:56:15

Lat+22.49232

Lon:+112.85710

Speed:0.00k

open

M/H <http://maps.google.com/maps?q=+2249232,+112.85710>

## 5.15 Tracking website

If you register on service platform <http://www.khdtrack.com/> you can log in to view real-time online tracking.

For example: open <http://www.khdtrack.com>



User name :test ( Behind the ID number 8 digits )

Password:test (Initial password )

## 6 .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.

## 7 Faults & The solutions

Faults	Solution
Startup Fail	Check the battery and see if it is fully charged or correctly installed.
Hangup Fail	In existence of an authorized number, an unauthorized number dials up the unit. Please initialize the unit and re-set up the authorized numbers.
Monitor Fail	Check if the authorized number is setup or in the coverage of signals.
Location report in digits of zeros.	Don't use it in the place beyond reach of signals. Place the unit outdoors, especially when starting it up.