## **Preface**

Thank you f or pu rehasing the tracker. T his m anual s hows how to operate the d evice s moothly and correctly. Make s ure t o read this manual c arefully b efore us ing t his pr oduct. Please not e t hat specification a nd i nformation a re s ubject t o c hanges without pr ior notice i n this m anual. Any c hange w ill be i ntegrated i n t he l atest release.

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# 1 Summary

Working Based on existing GSM/GPRS n etwork and GPS s atellites, this product c an l ocate a nd m onitor a ny remote t argets b y S MS 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**







## 4 Specs.

Content	Specs.
Dim.	64mm x 46mm x 17mm(1.8"*2.5"*0.65")
Weight	50g
Network	GSM/GPRS
Band	900/1800/1900Mhz
CPU	STCMCU
GPS chip	SIRF3 chip
GSM module	SIMCOM SIM300/SIM900B
GPS sensitivity	-159dBm
GPS accuracy	5m
Time To First Fix	Cold status 45s Hot status 1s
Wall charger	110–220V input 5V output
Battery	3.7V 850mAh Li-ion battery
Standby	48hours
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 installat

#### **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.

#### **5.2 Battery and Charger**

Do charge the battery to capacity in 24 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 3-5 hours. **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 until the indicator is on.
- ➢ In 10 or 40s econds, the unit will begin to work and a cquire the GSM signals as well as the GPS signals. The indicator will keep flashing every 3 seconds when the unit has received the signals,
- When this unit receives GPS signals normally, you can use it and do all the following settings.

#### **5.4 Initialization**

Send "begin+ password" in SMS to the unit, it will reply "begin ok" and initialize all the settings. (default password: 123456)

#### 5.5 Change the password

Send SMS password+ old password+ space+ new password to change the password.

5.5.1please keep the new password in mind, contact with local dealers once lost .

5.5.2 Make sure the new password is in 6 digits, or else the tracker can not recognize the password.

### 5.6 Authorization

There are only 5 numbers able to be authorized.

5.6.1 Call the tracker for 10 times, it will make the cell phone number as the authorized number automatically.

5.6.2 Send SMS admin+ password+ space+ cell phone number to set up a authorized number. The other authorized numbers should be set by the first authorized number. If the number is successfully authorized, the unit will reply "admin ok!" in SMS.

5.6.3 For roaming purpose, you have to add your country code ahead of the c ell ph one num ber, f or exa mple, pl ease s end admin123456 008613322221111 to tracker

#### 5.7 Real-time polling

**5.7.1** If there is no authorized number, when any number dials up t he 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.

**5.7.2** When an authorized number dials up the unit, it will hang up and report a real-time Geo-info as below:



#### Data format (default)

Google link format

send smslink123456 to switch the format to Google map link format, visit the link to see the map

Cancel Google map Send: Begin123456

**5.8 Auto Track** (To implement 5.20)

Report a G eo-info a t 30s i ntervals t o t he a uthorized num bers f or 5 times:

5.8.1 Set up: send S MS " t030s005n pa ssword" t o t he d evice, i t w ill send latitude a nd l ongitude i nformation every 30 s econds, totally 5 times. (s: s econds, m : poi nts, h: ho urs). S etting t he s hortest t ime interval 030s

the longest time 255h (interval 255 hours), the frequency 999n must set maximum with three numbers.

5.8.2 S end S MS t 030s\*\*\*n+password t o t he un it, i t w ill reply S MS heaps of times

5.8.3 Cancel: Send tmno+ password to delete the " auto track "

Remark: the interval must not be less than 30s.

### 5.9 Voice Surveillance

In this mode, the user can dial up the unit to monitor the voice (please refer to 5.10 for instruction).

### 5.10 Modes switch between "track" and "monitor"

5.10.1. The default mode is "track".

**5.10.2.** Send SMS monitor+password to t he unit, a nd it will r eply "monitor ok!" and switch to "monitor"mode.

**5.10.3.** Send SMS tracker+password to the unit, it will reply "tracker ok!" and restore to "track" mode.



**5.11 Geo-fence** (To implement 5.20/5.82)

Set a ge o-fence to restrict car within a district. The unit will send the message to the authorized numbers when it breaches the district.

5.11.1 Set up: When the unit stays immobile in a place for 3-10 minutes, the user can Send SMS stockade+ password+ space+ latitude, longitude; latitude, longitude to unit to set the restricted district. when breach, it will send SMS "stockade!+geo-info" to authorized numbers.

Remark : T he first l atitude&longitude is coordinate of the top left corner of t he Geo-fence, the s econd latitude&longitude i s the coordinate of t he bo ttom r ight c orner. It will a larm one t ime in each setting.

5.11.2 C ancel: Send S MS nostockade+ password to deactivate this function.

This f unction will b e o ut o f e ffect a fter the uni t m oves outside t he district.

#### **5.14 Movement alert** (To implement 5.20/5.82)

5.14.1 Set up: When the unit stays immobile in a place for 3-10 minutes, the user can send SMS move+ password to the unit, then the unit will reply "move ok!". In case of such a movement (the unit default distance is 200M), it will send SMS "Move" along with a Geo-infot ot he authorized numbers. It will alarm one time in each setting.

5.14.2 Cancel: Send S MS n omove+ password to d eactivate the movement alert.

Remark: This function will be out of effect after the unit moves outside the district.

#### **5.15 Over speed alert** (To implement 5.20/5.8.2)

5.15.1 Set up : S end SMS speed+password+space+080 to t he uni t (suppose the speed is 80km/h), and it will reply "speed ok!". When the target m oves exceeding 80 km/h, t he uni t w ill s end SMS speed+080!+Geo-info to the authorized numbers. It will alarm one time in each setting.

5.15.2 C ancel: S end SMS nospeed+ password to de activate t he overspeed alert

Remark: It is recommended that the speed alarm is set at not less than 50km/h. F or be low that r ate, it may cause the excursion of the GPS signal influenced by clounds etc.

#### 5.17 SOS button

Press the SOS for 3 second, it will send "help me !+ Geo-info" to all the authorized numbers every 3 m inutes. It will stop sending such a SMS when any authorized number reply SMS "help me!" to the tracker.

#### 5.18 Low battery alert

It begins to alert when it is 3.7V and sends you SMS in 30m interval. SMS format: low battery+Geo-info.

#### 5.19 Change time

5.19.1 Send S MS " time+space+zone123456+space+time z one t o change time".

For example, Send SMS" time+space+zone123456+ space+ 8 " (time zone of China ).

#### 5.20 GPRS setting

Platform m onitor: User m ust s end S MS to set up I P, port a nd A PN before starting GPRS.

5.20.1 Setting up APN

5.20.1.1 APN standards for A ccess P oint N ame and different country maybe with different APN. For more information about the local APN, inquire with your local GPRS network operator.

5.20.1.2 Send SMS "APN123456 + Space + your local APN" to unit tracker will reply "APN OK".

5.20.1.3 eg. Send SMS "APN123456 C MNET" tracker will r eply "APN OK".

Notes: 123456 is the password and CMNET is APN of China. 5.20.14: IP and port:

Send sms: adminip+ passwd+ space+ IP+ space+ port to tracker, tracker will reply adminip ok . Cancel : send sms: adminip+ passwd to cancel this step.

Ater finished above steps pls send sms: t030s\*\*\*n123456 to tracker.

Pls note that: ask the user name and passwd to login the platform from dealer before real time tracking on platform.

# **6** Cautions

- 1. Keep the unit dry.
- 2. Don't put the unit in overheated or overcooled places.
- 3. Handle carefully. Don't vibrate or shake it violently.
- 4. Don't disassemble or refit the unit.
- 5. Please use the battery and charger provided by manufacturer. Using other batteries and chargers will cause unwanted situation.
- 6. 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.	
Not hang up when	When call tracker will not hang up and led light is	
calling	on all the time : wrong sim card installation.	
No reply	1: no money with sim card; 2: not the authorized	
	number, 3: S end w rong c ommand, 4: w hen	
	GRPS is working also will not reply.	
Location data is	Make s ure t he t racker i s o utside a nd no m etal	
zeros.	cover.	
	1:Check the A PN, IP port, p ls c heck the manual	
No da ta at the	5.8 about this.	
platform	2:After several days tracker can't get the position	
	data: take out the battery, restart it.	
Work time	Work t ime us ual : 6-8 ho urs, s tandby t ime:	
	48hours.	

## 7 Faults & The solutions