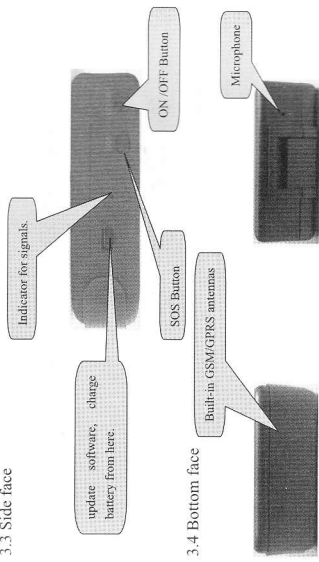


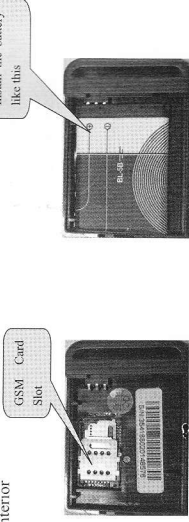
3.3 Side face



3.4 Bottom face



3.5 Interior



4 Specs.

| Content | Specs.             |
|---------|--------------------|
| Dim.    | 64mm x 46mm x 17mm |
| Weight  | 50g                |
| Network | GSM/GPRS           |

|                   |   |
|-------------------|---|
| Band              | 850/900/1800/1900MHz  |
| GPS chip          | UBLOX chip  |
| GPS sensitivity   | -159dBm   |
| GPS accuracy      | 5m  |
| Time To First Fix | Cold status 45s<br>Warm status 35s<br>Hot status 1s             |
| Car charger       | 12-24V input<br>5V output                                       |
| Wall charger      | 110-220V input  |
| Battery           | 5V output<br>Chargeable rechargeable 3.7V 850mAh Li-Ion battery |
| Standby           | 12 hours  |
| 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:

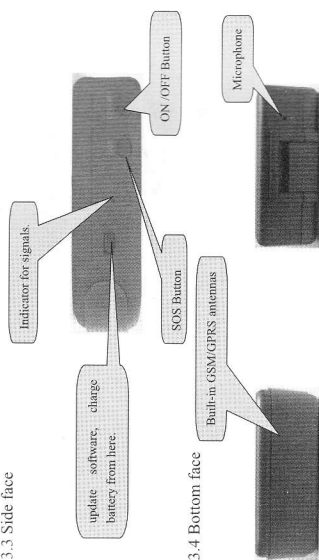
5.1.1 Open the rear cover, and pick out the battery.

5.1.2 Push the foil up according the arrow on the foil and load the micro TF card and

push back.



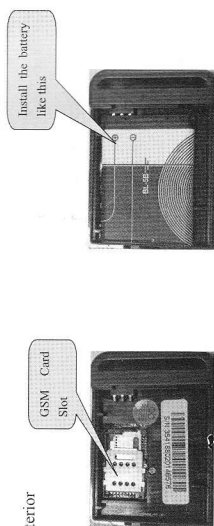
### 3.3 Side face



### 3.4 Bottom face



### 3.5 Interior



### 4 Specs.

| Content | Specs.             |
|---------|--------------------|
| Dim.    | 64mm x 46mm x 17mm |
| Weight  | 50g                |
| Network | GSM/GPRS           |

|                   |   |
|-------------------|---|
| Band              | 850/900/1800/1900MHz                                |
| GPS chip          | UBLOX chip  |
| GPS sensitivity   | -159dBm   |
| GPS accuracy      | 5m  |
| Time To First Fix | Cold status 45s<br>Warm status 35s<br>Hot status 1s |
| Car charger       | 12-24V input<br>5V output                           |
| Wall charger      | 110-220V input<br>5V output                         |
| Battery           | Chargeable rechargeable 3.7V 850mAh Li-Ion battery  |
| Standby           | 12 hours  |
| 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:

5.1.1 Open the rear cover, and pick out the battery.

5.1.2 Push the foil up according the arrow on the foil and load the micro TF card and

push back.



5.1.3 Put the SIM card into the holder as picture shows.



### 5.2 Battery and Charger

Do charge the battery to capacity in 8 -12 hours for first time. Please use the battery and charger provided by the manufacturer. This unit adopts built-in Li-ion battery, and full battery can standby 12 hours. After first use, the battery usually should be charged fully in 10 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 outdoor by pressing the "on/off" button for 4-5seconds until the indicator is flashing.
- For first use, please initialize the unit and restore it to default setting. (Please refer to 5.4 for instruction.)
- 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 3 seconds when the unit has received the signals.

- When this unit receives GPS signals normally, you can use it and do any setting as the instructions of this manual.

## 6. Device Parameter Settings

### 6.1 Initialization

Send SMS "#begin#" to the tracker, it will reply "begin ok" and initialize all the settings. (Default password: 123456). Remark: initialization is resetting all the parameters to factory defaults.

For example, send SMS "#begin#"; If succeeded, it will reply "begin ok".

### 6.2 Set password

6.2.1 Set Password: Send SMS: "#password#old password#new password#" to the unit to change the password.

For Example, send SMS: "#password#123456#666888#" to device, it will reply SMS: "password OK".

6.2.2 Make sure the new password is in 6 digits arabic numbers, or the device cannot recognize the password.

6.2.3 Resume original password: send SMS: "#resume#" to the device, it will reply SMS: "resume password, password is 123456".

### 6.3 Authorization

6.3.1 Set authorization: send SMS "#admin#password#cell phone number#" to set up authorized number, device will reply "admin ok".

6.3.3 Delete authorization send SMS "#noadmin#password#authorized number#" to delete the authorized number, device will reply "no admin ok".

### 6.4 Single Locating

6.4.1 If there is no authorized number, any number dials up the device number, it will report tracking message; If already set authorized number, then it will not respond when an unauthorized number calls it.

6.4.2 **Dialing tracking:** make a call to device number, it will hang up and reply a real-time tracking message as below.

6.4.3 **SMS tracking:** send SMS"#smslink#123456#", it will reply a real-time tracking message as below.



```
http://maps.google.com/
mapsq=N22.674878,E114.023439, Speed:0 km/h
Time:10:46:12, Date:13/12/12
IMEI:366866020133735
更新时间:11:38
```

\*Tracking location, when GPS signals is weak, you will receive the last location when GPS is available. If it is different with its exact current location, pay attention to check the time included in the SMS.

### 6.5 Get geographical location

6.5.1 Must set the SIM Card APN parameter firstly before using this function, if there is APN user name and password, Please refer to point 6.1.3 to set.

6.5.2 Send SMS: "DW" to device, it will reply current location info.

For example: ADD: Floor 5, Bldg C, LaoWei 2nd Industrial Park, DaLing South Rd, Longhua town, Shenzhen,China

Note: this function may not work in some certain area.

### 6.6 Auto continuous track

6.6.1 Limited times auto track: Send SMS "#at#30#sum#15#" to the device, it will reply the tracking message at 30s intervals for 15 times. (default "s";second).

6.6.2 Unlimited time auto track: Send SMS "#at#30#sum#0#" to the device. Remark:

device must be connected to tracking software.

6.6.3 Cancellation: Send SMS **"#noat#password#"** to the device.

#### 6.7 Voice Surveillance

6.7.1 The command to switch between Track and Monitor are "tracker" and "monitor

6.7.2. The default mode is "track" (Tracking status).

6.7.3. Send SMS **"#monitor#password#"** to the device, and it will reply "monitor ok!" and switch to "monitor" mode. Then use mobile phone to dial the device number, it will get though and enter voice listening function.

6.7.4. Send SMS **"#tracker#password#"** to the device, it will reply "tracker ok!" and restore to "track" mode.

#### 6.8 Storage

6.8.1 Auto Storage: When the tracker devices lost GSM signals or fall offline from GPRS, tracker will store the tracking position automatically in the flash, when GSM signals get back, all the storage data will be sent to monitoring platform (server).

6.8.2 Storage Volume: Built-in flash 1MB (store about 7,000 positioning data); external TF card support 16 GB at most.

6.8.3 The stored data will be sent to the tracking system [www.gps228.com](http://www.gps228.com) through the

GSM signal recover.

#### 6.9 Geo-fence

Set up geo-fence for the unit to restrict its movement within a district. The device will send message to the authorized number automatically when it exceed the district.

##### 6.9.1 Set up

When the unit stays immobile in a place, send SMS:

**"#stockade#password#semidiameter#"** to unit to set the restricted district. In case of breach, it will send SMS "stockade! + Geo-info" to the authorized number.

6.9.2 Cancel: Send SMS: **"#nostockade#password#"** to deactivate this function, it will reply "no stockade ok".

##### 6.10 Overspeed alarm

6.10.1 Set up: Send SMS: **"#speed#password#speed number in 3 digits#"** to the device (suppose the speed is 80km/h). Eg, send SMS **"#speed#123456#080#"**, and it will reply "speed ok". When the car moves exceeding 80 km/h, the unit will send SMS: alert "speed alarm" to the authorized number.

6.10.2 Cancel: send SMS: **"#nospeed#password#"** to deactivate the overspeed alarm. it will reply "cancel speed ok".

##### 6.11 SOS alarm

Press the SOS for 3 seconds, it will send "SOS alarm + Geo-info" to the authorized

number.

#### 6.12 Time Zone Setting

Remark: UTC+8 is default time zone.

6.12.1 Send SMS "**#timezone#password#direction#time zone value in hours#time zone in minutes#**". If set OK, it will reply "time zone ok". For example, if in UTC-6,

send SMS "**#timezone#123456#W#6#**". If in UTC+5,30, send SMS "**#timezone#123456#E#5#30#**".

#### 6.13 GPRS setting

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

##### 6.13.1 Setting APN

6.13.1.1 APN standards for Access Point Name and differs from country to country.

For more information about the local APN, inquiry from your local GPRS network operator.

6.13.1.2 Send SMS "**#apn#password#APN content#APN user name#APN password#**" via a cell phone and if succeeded, the tracker will return the message "set APN OK".

E.g. send SMS command "**#apn#123456#cmnet#**".

Notes: CMNET is the APN content of China Mobile (it has no APN user name and password). If there is no APN user name and password, then no need to write APN

user name and password.

#### 6.14 IP and Port setting

6.14.1 Send SMS "**#IP#password#ip address#port number#**". If succeeded, "set ip address and port ok" will be returned by SMS. **Note: "IP" in SMS must be capital letter.**

E.g. Send SMS command "**#IP# password ##58,64,200,27#6780#**" to the device (58,64,200,27 is IP, 6780 is port)

#### 6.15 Check device setting parameters

Send SMS "**TCP**" to device, if device will reply SMS "**IP+port+APN+GPRS setting (A: valid, V: invalid).**

#### 6.16 Web platform GPS tracking software

Web based platform [www.gps228.com](http://www.gps228.com), further details please contact manufacturer.

### 7 Cautions

Please comply with the instructions to extend the unit life:

7.1 Keep the unit dry. Any liquid, i.e. rain, moisture, may destroy or damage the inside circuitry.

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

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

7.4 Handle carefully. Don't vibrate or shake it violently.

- 7.5 Clear the unit with a piece of dry cloth. Don't clean in chemicals, detergent.
- 7.6 Don't paint the unit, this may cause some foreign materials left in between the parts.
- 7.7 Don't disassemble or re-fit the unit.
- 7.8 Please use the battery and charger provided by manufacturer. Using other batteries and chargers will cause unwanted situation.

**8 Faults & The solutions**

| Faults        | Solution  |
|---------------|---|
| Startup Fail  | Check the battery and see if it is fully charged or correctly installed.  |
| Hang up Fail  | In existence of an authorized number, an unauthorized number dials up the unit. Please initialize the unit and re-set up the authorized number. |
| No GSM Signal | Please make sure SIM Card is GSM Net and installed correctly; also call display should be on; but no call transfer and PIN code off.            |