1

# GSM/GPRS/GPS Tracker User 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.

# **Contents**

1. Summary	4
2. Applications	4
3. Hardware Description	4
4. Accessories:	6
5. Specs	7
6. Operating Instructions	7
6.1Terminal Installation	7
6.2 SIM CARD Installations	8
6.3 Turn on the Tracker Device	8
6.4 Initialization	8
6.5 Change Password	8
6.6 .Authorization	9
6.7. Single Locating	9
6.8. Auto track continuously	
6.9. Automatic update positions of vehicle turns	10
6.10. GPS drift suppression	
6.11 Exact street address by SMS	11
6.12 Location based service (LBS) / Cell-ID locating	
6.13. Monitor	
6.14 Data logging	12
6.15 Data Load	12
6.16. Forward the third parties' message	12
6.17. Charges Inquiry	12
6.18. Alarms	13
6.18.1 Low battery alarm	13
6.18.2 External Power off alarm	13
6.18.3 GPS blind Spot alert	13
6.18.4. SOS Alert	13
6.18.5. Geo-fence	13
6.18.6 Multi-area management	14
6.18.7 Movement alarm	14
6.18.8 Over speed alarm	15
6.18.9 ACC working alarm	15
6.19 Cut off the Oil and Power System	15
6.20 Inductive Key	15
6.21 Indicator mode	16
6.22 Function of Remote Controller (Option, for model B ONLY)	17
6.23 Arm	17
6.24 Silent Mode	17
6.25 DISARM	18

6.26 Alarms under Arm State	18
6.26.1 ACC alarm	18
6.26.2 Shock Sensor alarm	18
6.27 Alarm without GSM network service	18
6.28 Check the Vehicle State	19
6.27 Reset Hardware	19
6.30 Sleep Mode	19
6.30.1 Sleep by time	19
6.30.2 Sleep by shock sensor	20
6.30.3 Deep Sleep by shock sensor	20
6.30.4 No sleep mode	20
6.31 Awake at specific time	20
6.32 Check IMEI	20
6.33 Set up Terminal (local) Time	21
6.34 TCP / UDP Switch	21
6.35 Configure parameters by USB	21
6.36 GPRS setting	21
6.36.1 Setting up APN	21
6.36.2 GPRS User ID and password Setup	22
6.36.3 IP and port setup	22
6.37 Less GPRS traffic	22
6.38 Modes Switch between "SMS" and "GPRS"	22
6.39 Set up monitor center number	23
6.40 Web platform and PC installation tracking software user manual	23
7. Cautions	23
8. Faults & the Solutions	24

## 1. Summary

- 1.1 Working Based on existing GSM/GPRS network and GPS satellites, Set multiple functions of security, tracking, monitoring surveillance, emergency alarms and management, this product can locate and monitor any remote targets by SMS or internet.
- 1.2Features
- 1.2.1 Taillights shape, easy to hide, waterproof design, and outdoor installation.
- 1.2.2 Built-in GSM, GPS antenna.
- 1.2.2 Support GPS and LBS (location based service) double tracking solution
- 1.2.3 Support SMS / GPRS / Internet Network data transmission (GPRS/Internet instructions includes in CD in package)
- 1.2.4 Support configures the settings remotely
- 1.2.5 Set multiple functions of security, tracking, monitoring surveillance, emergency alarms and management in its entirety.

# 2. Applications

Used widely for motorcycle and other moving objects tracking.

## 3. Hardware Description







# 4. Accessories:

This device is divided into the following two types according the accessories and its function:

Type A: 8 PIN hardness, tracking, monitoring, ACC, cut off oil and power.

Type B: Add remote controller to ARM & DISARM on the basis of type A.

No.	Photo	Name	Specs	Applicable model
1		Harness	8PIN	Standard
2		Relay	12V/40A or 24V/40A	Standard
3		Inductive key		Standard

4	Alarm Siren	DC12V	Optional, Type A/B
5	Remote controller		Optional, type B

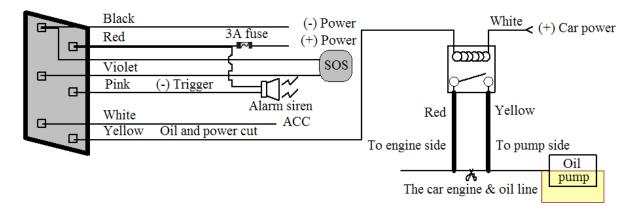
# 5. Specs

Content	Specs
Dim.	7.5×5.0×2.4cm
Weight	75g
Network	GSM/GPRS
Band	850/900/1800/1900Mhz
GPS sensitivity	-159dBm
GPS accuracy	5m
	Cold status 45s
Time To First Fix	Warm status 35s
	Hot status 1s
Car charger	12V~24V
battery	Chargeable 3.7V 1000mAh Li-ion battery
Storage Temp.	-40 ℃ to +85 ℃
Operation Temp.	-20 ℃ to +70 ℃
Humidity	5%95% non-condensing

# 6. Operating Instructions

## 6.1Terminal Installation

- 6.1.1 Please ask the qualified engineers to install it.
- 6.1.2 Do not install it in an environment which is over GSM performance index.
- 6.1.3 Pay attention to make installation location preventing water and dust.
- 6.1.4 Find the 8 PIN harness and insert it into the corresponding holes of the products, and connect the wires with the original car circuit showing below:



## **Wiring Diagram**

- 6.1.5 Note: The pink wire can be connected to the car original siren; or connected to the siren buying with the tracker. (Siren is an option)
- 6.1.6 Please install the SOS button on the place driver can touch.

#### **6.2 SIM CARD Installations**

- 6.2.1 Use the screwdriver accompanied with the device to open sealed buckle and insert the SIM card, the SIM card is placed correctly if heard the sound of lock, the SIM will automatically pop up if press it gently. Then, put sealed buckle back
- 6.2.2 Please make sure the SIM card is for GSM network and able to execute the function of incoming calls display, no calls can be diverted and the PIN code is locked. The SMS format must be TXT format, and can't recognize the PDU format.

#### 6.3 Turn on the Tracker Device.

Connect the positive & negative wire, red / black ones, with 12V or 24V car power system, wait for 1 minute after connecting power to wait tracker works normal, and then turn on the backup battery switch.

#### 6.4 Initialization

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

For example, send SMS "begin123456" to the tracker via a cell phone, if succeeded, if will reply "begin ok".

### 6.5 Change Password

6.5.1 Send SMS "password+old password+space+new password" to the unit to change the password.

For example: send SMS "password123456 888888" to the unit. If succeeded, "password ok" will reply to your cell phone from the device tracker.

- 6.5.2 Be sure to keep the new password in mind, you have to upload the software to restore the original setting in case of losing the new password.
- 6.5.3 Attention: Make sure the new password is in 6 digits Arabic numbers, or else the tracker cannot recognize the password.
- 6.5.4 The "+" in the command, please don't type "+", space means press the space keyboard on your cell phone

#### 6.6 .Authorization

There are 5 numbers to be allowed to authorize in the tracker at most.

- 6.6.1 Call and track the tracker device for 10 times from cell phone in success, it will make the cell phone number as the authorized number automatically, and reply "add master ok".
- 6.6.2 Authorization: Send SMS "admin+password+space+cell phone number" to set up an 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" by SMS.
- 6.6.3 Delete authorization: Send SMS "noadmin+password+space+authorized number" to delete the authorized number.
- 6.6.4 If you would like to track the target tracker device while aboard, please add your country code in front of your number, e.g. admin123456 008613322221111

## 6.7. Single Locating

- **6.7.1** If there aren't any authorized numbers set-up, it will reply to all calls with a location report. If there are authorized numbers set-up, it won't reply when the unauthorized number dials up it.
- **6.7.2** Dialing the tracker device from the authorized number, it will hang up your calling and respond to a real-time latitude and longitude report as following:



Tracking location, when no GPS signal, the SMS includes the last valid latitude & longitude as well as the LAC code of current position, the LAC code can be input in the column of "manual track" menu of web platform to check location.

## 6.8. Auto track continuously

Tracker can send automatic location reports at set intervals. If SMS mode is active, reports will be sent as SMS text messages; if GPRS tracking mode is active, update intervals to the server will be adjusted.

#### **6.8.1** Track with limited times upon time interval:

Send SMS command "fix030s005n +password" to the tracker device, it will report the latitude & longitude at 30s intervals for 5 times. (s:second, m:minute, h:hour). This command setting must be in 3 digits and the maximum value is 255.

#### 6.8.2 Track with unlimited times upon time interval:

Send SMS "fix030s\*\*\*n+password" to the tracker device, it will reply the latitude & longitude continuously at interval of 30 seconds.

Note: the interval must not less than 20s.

#### 6.8.3 Smart track upon time and distance interval:

- 6.10.3.1 Please set "track with unlimited times upon time interval" before this function,
- and then send "distance+password+space+distance", tracker will reply "Distance ok", and then tracker will locate upon both the pre-set time and distance.
- E.G: Send "distance123456 0050", it means distance is 50 meters; the number must be 4 digits Arabic numbers.
- 6.10.3.2 Set this function on web server: Set time interval first and then distance interval, tracker will locate upon the time and distance.
- 6.10.4 Cancel: Send SMS "nofix+password" to the tracker device to cancel the "auto track".

## 6.9. Automatic update positions of vehicle turns

- 6.9.1 The tracker will update the positions automatically to web server once the vehicle changing driving direction over pre set angle value to form a smooth trajectory consistent with the actual road, this function works only in GPRS mode.
- 6.9.2 Send "angle+password+space+angle" to tracker, it will reply angle ok".
- 6.9.3 The angle must be 3 digits Arabic numbers, default angle value is 30 degree.

## 6.10. GPS drift suppression

- 6.10.1 This function is deactivated as default, send "suppress+password" to tracker, it will reply" suppress drift ok". The GPS data stop updating if vehicle is not driving (ACC is OFF) and latitude and longitude always keep same, and GPS data updates automatically when vehicle is moving.
- 6.10.2 Cancel: send "nosuppress+password" to tracker, it will reply" nosuppress ok ".

## 6.11 Exact street address by SMS

- 6.11.1 You must set up the APN of your local GSM network for the SIM card in tracker first before using this function, if there is user name and password for GPRS login, Please refer to 6.36 to configure the APN, user name and password for GPRS login.
- 6.11.2 After configure the APN, send "address+password" to device, it will reply SMS including exact address. For example: No.113, Guankou 2nd Rd, Nantou, Nanshan district, Shenzhen, Guangdong, china.

# 6.12 Location based service (LBS) / Cell-ID locating

If the tracker cannot establish a solid GPS Fix, it will calculate its location using Cell-id GSM locating, location reports will include the GPS coordinates of the last known position as well as a LAC code, Entering the LAC code to the "Manual Track" menu of web tracking platform will enable you see the tracker's current location, you can also send command "address+password" to the tracker to request exact address. Tracker will automatically switch to tracking by LBS in GPRS mode. Accuracy of LBS also known as Cell-id Tracking depends on the GSM signal reception.

Note: This feature can be used normally in most areas according to the signal of GSM network. It may not be available in some areas.

## 6.13. Monitor

- 6.13.1 The command to switch between Track and Monitor are "tracker" and "monitor".
- **6.13.2** The default mode is "track" (Track mode).
- **6.13.3** Send SMS "monitor+password" to the unit, and it will reply "monitor ok!" and switch to "monitor" mode.
- **6.13.** 4 Send SMS "tracker+password" to the unit, it will reply "tracker ok!" and restore to "track" mode.

## 6.14 Data logging

- 6.14.1 Auto logging: If the tracker device lost GSM signals or fall offline from GPRS, it can store the tracking position and alerts automatically on the flash drive onup the pre-set condition, when GSM signals is re-established, all the event alerts will be auto-sent to the authorized numbers or monitoring platform (server), but the stored tracking data should be loaded to the monitoring platform via SMS command.
- 6.14.2 Logging at preset times: Send SMS: "save030s005n+password" to the tracker, it will reply "save ok", and will store the lat, long locations every 30 seconds for 5 times. (S: second, m: minute; h: hour).
- 6.14.3 Continuous logging: Send SMS:"save030s\*\*\*n+password" to tracker, it will reply "save ok".
- 6.14.4 Logging Clearance: send SMS: "clear+password" to tracker device, it will reply "clear ok".
- 6.14.5 Logging Volume: Built-in flash drive can save 16,000 positions.
- 6.14.6 The stored data in flash drive can be download to computers through USB connection and then click menu "Data Import" on web platform www.gpstrackerxy.com to import the data to repeat its route.

#### 6.15 Data Load

- 6.15.1Current date Load: Send SMS: "load+ password" to tracker, it will reply: "load ok" if the device is working well under GPRS mode; if not, it will reply "load fail! Please check gprs" that means device does not work under GPRS mode. Data only can be loaded to monitor platform by GPRS
- 6.15.2 Specified date Load: Send SMS: "load+ password+ space+ year month date" to tracker device, it will reply: "load ok". For Example: send SMS: "load123456 20110425" to the tracker device, means to load the tracking data of 25th April 2011 to monitoring platform.

# 6.16. Forward the third parties' message

- 6.16.1 Send SMS "forward+password+space+third parties phone number" from authorized phone number, tracker will reply"forward ok", and supports 1 third parties phone number at most.

  For example, set the phone number of the service provider of the simcard in the tracker, when charge remind message coming in, tracker will forward it to authorized phone number.
  - 6.16.2 Cancel: Send SMS command "noforward+password".

# 6.17. Charges Inquiry

Send SMS command "balance+password+space+carrier's phone number+space+code" to tracker, it will forward the code to carrier's phone number and return the balance message received from carrier's phone number.

#### **6.18. Alarms**

## 6.18.1 Low battery alarm

6.18.1.1 Send SMS "lowbattery+password+space+on", it will send SMS "low battery+latitude/longitude" to authorized numbers 2 times in total at 15 minutes interval when voltage of battery is going to be about 3.55V.

6.18.1.2 This function is activated by default, send SMS "lowbattery+password+space+off" to deactivate.

#### 6.18.2 External Power off alarm

6.18.2.1 Send "extpower+password+space+on" to activate, it will send SMS "power alarm+latitude/longtitude" to authorized numbers every 3 minutes when external power is cut off. 6.18.2.2 This function is activated by default.

Cancel: Send SMS "extpower+password+space+off" to deactivate it.

# 6.18.3 GPS blind Spot alert

6.18.3.1This function is deactivated by default, send SMS "gpssignal+password+space+on", it will send alert SMS "no gps+last valid latitude/longitude before lost signal" when lost GPS signal. 6.18.3.2 Send SMS "gpssignal+password+space+off" to deactivate

#### **6.18.4. SOS Alert**

Long Press the SOS button for 3 seconds (For model B, press button on remote controller for 3 seconds), the tracker will send SMS "help me!+lat./long." to all the authorized numbers at interval of 3 minutes. It will stop sending such a SMS when any authorized number reply SMS "help me!" to the tracker.

#### **6.18.5.** Geo-fence

Set up a geo-fence for the tracker to create a safety zone. The tracker will send SMS to the authorized numbers when it leaves this zone.

Set up: When the unit stays immobile in a place for 3-10 minutes, you can send SMS"stockade+password+space+latitude,longitude;latitude,longitude" to unit to set the restricted district. In case of breach, it will send SMS "stockade!+ location" to the authorized numbers

Note: The first latitude & longitude is coordinate of the top left corner of the Geo-fence, while the second latitude & longitude is the coordinate of the bottom right corner, it will alarm at interval of 3 minutes once leave this restricted zone.

Cancel: Send SMS "nostockade+password" to deactivate this function.

# 6.18.6 Multi-area management

#### 6.18.6.1 Set Area

Send SMS command "area+password+space+latitude,longitude+space+areaname,distanceM" to tracker(distance unit: M for meter, K for kilometer), it will reply "area01 ok".

Example: Send "area123456 22.353648,113.543678 school,800M".

Note: 5 areas at most and the distance between two points can't be less than the total distance in the 2 commands, and different areas can't cover each other.

#### 6.18.6.2 Delete areas

Send SMS command: "noarea+password+space+area name", tracker will reply: "noarea ok".

#### 6.18.6.3 Rename and set distance

Send SMS command "rename+password+space+old name;new name,distanceM" to tracker, if name is not repeated and area doesn't cover others, it will reply "rename ok!" for successful configuration. Example: Send" rename123456 Area01;school,800M ", it means the new area name is "school", and covers area of a radius of 800 meters.

#### 6.18.6.4 Activate multi-area management

Send SMS command "area+password+space+on" to tracker, it will reply "Area on ok!", when tracker enter or leaves the pre set area, it will send SMS "area name+latitude & longitude" to all the authorized phone number.

#### 6.18.6.5 Deactivate Multi-area management

Send SMS command "area+password+space+off" to tracker, it will reply "area off ok!"

#### **6.18.7** Movement alarm

6.18.7.1. Set up: when the unit stays immobile in a place for 3-10 minutes with GPS signal reception, you can send SMS"move+password+space+0200" to the tracker (Suppose area of a radius of 200 meters, it supports 4 digits at most. Unit: Meter). It will reply "move OK". In case of such a movement (the default distance is 200m), it will send SMS "Move+ latitude & longitude" to the authorized numbers at interval of 3 minutes.

6.18.7.2 Cancel: Send SMS "nomove+password" to device.

## 6.18.80ver speed alarm

Set up: Send SMS "speed+password+space+080" to the unit (suppose the speed is 80km/h), and it will reply "speed OK!". When the target moves exceeding 80km/h, the unit will send SMS "speed+080!+ latitude & longitude" to the authorized numbers at interval of 3 minutes.

Cancel: Send SMS "nospeed+password" to deactivate the alarm.

Note: The recommended speed should be not less than 30km/h. It may cause accuracy problem because GPS signals drift if below that.

## 6.18.9ACC working alarm

6.18.9.1This function is deactivated by default. To activate this function, send "ACC+password" to tracker, it will reply "ACC ok". And tracker will send "ACC on+latitude & longitude" to authorized numbers when detect ignition action, that means the vehicle has been started; and tracker will send "ACC off+latitude & longitude" to authorized numbers, that means ACC off.

6.18.9.2 Send "noACC+password" to deactivate this function, tracker will reply "noACC ok".

6.18.9.3 This configuration can only activate and deactivate the alarm to authorized numbers; it will send to web server automatically in GPRS mode and can't be deactivated.

## 6.19 Cut off the Oil and Power System

6.19.1 Send command "stop+password" to tracker, tracker will execute it and reply "Stop engine Succeed". And it will remain immobile state until next command to resume.

6.19.2 Stop mode

6.19.2.1Execute immediately: Send command "quickstop+password" to tracker, it will reply "quickstop OK". Then tracker will stop the car immediately after "stop" command.

6.19.2.2Execute depends on speed(Default mode): Send command "noquickstop+password" to tracker, It will reply "noquickstop OK", Then the tracker won't stop the car immediately after "stop" command, instead, it will reply "it will be executed after speed less than 20KM/H", and stop the car when the speed is less than 20KM/H.

6.19.3 Resume the Oil and Power System

send "resume+password" to tracker, it will reply "Resume engine succeed", that means vehicle has resume the oil supply.

# **6.20** Inductive Key

Put the inductive key on the top of the tracker as the picture showing:



## 6.20.1 ARM by inductive key

Put the inductive key on the top of the tracker, LED blink 1 time, siren beeps 1 time, that means tracker enters ARM mode.

## 6.20.2 DISARM by inductive key

Put the inductive key on the top of the tracker, LED blink 2 times, siren beeps 2 times, that means tracker enters DISARM mode.

# 6.20.3 Activate / deactivate ARM by inductive key

ARM by inductive key is activated by default.

Send "keyarm+password+space+on" to tracker to activate this function, and use the inductive key to ARM / DISARM after received "keyarm on ok".

Send "keyarm+password+space+off" to tracker to deactivate this function, tracker will reply "keyarm off ok".

## 6.21 Indicator mode

Using the inductive key to switch the mode of indicator, the mode switchs in circle as following table shows:

Mode	Description		
Driving	Blink 1 time	Quick blink when driving	ng and stop blink when
Dilving	means succeed	parking.	
Quick	Blink 2 times	Voon blinking	
blink	means succeed	Keep blinking	
		Blink each second	GSM reception normal
	Blink 3 times	Blink each 3 seconds	GPRS mode
Working	means	Double blink each	GPS fixed
succeed		time	GF3 fixed
		On	No GSM reception
Off	Blink 4 times	Indicator is off and never blinks	
OII	means succeed		

## 6.22 Function of Remote Controller (Option, for model B ONLY)

Button	Function	Descriptions
<u>(A)</u>	ARM	Press for 0.5 second, the siren will beep one time.
<b>(S)</b>	DISARM	Press for 0.5 second, the siren will beep two times.
	ARM & Silent mode	Press for 0.5 second when it is in disarm state, the siren will beep one time. No voice from siren when alarm triggered and quit from siren mode automatically when disarm.
Ø	SOS	Press for 3 seconds, Tracker will send SOS alert to authorized phone numbers without voice.
	Deterrence/ car search	Press for 0.5 second when it is in arm state, siren will beep 10 seconds, press disarm button to quit.

#### 6.23 Arm

### 6.23.1 Set up arm by SMS

Send "arm+password" to tracker, it will make the car enter ARM states and and reply "Tracker is activated".

If the car is in ignition (ACC is at "ON" position), then the car can't enter ARM state, reply "set up fail! pls turn off ACC".

## 6.23.2 Set up arm by remote controller (Option, for model B ONLY)

Press button on the remote controller for 0.5 seconds, the car enters armed state and the siren will beep one time, no SMS reply.

If the car is in ignition (ACC is at "ON" position), then the car can't enter ARM state, and siren keep silent.

## 6.24 Silent Mode

#### 6.24.1 Set up silent mode by SMS

Send silent+password to tracker, it will reply silent ok! that means tracker enters ARM & silent mode, siren won't be sound after alarm is triggered, but SMS alarm will be sent to authorized numbers.

Send disarm+password to quit ARM & silent mode.

## 6.24.2 Set up silent mode by remote controller (Option for model B)

Press in disarm state for 0.5 second, the siren will beep one time, the car will enter ARM & Silent mode. Siren won't be sound after alarm is triggered, but SMS alarm will be sent to authorized

Press **a** to quit.

numbers.

#### 6.25 DISARM

#### 6.25.1 DISARM BY SMS

Send command "disarm+password" to tracker, tracker will be disarmed and reply "Tracker is deactivated", then it will turn off the alarm of shock sensor and ACC, and no alarms if shock sensor and ignition triggered.

6.25.2 DISARM BY Remote controller (Option for model B)

Press on remote controller for 0.5 seconds, the car will enter DISARM state and, siren beeps two times and tracker doesn't send message.

#### 6.26 Alarms under Arm State

#### **6.26.1 ACC alarm**

The unit will send SMS "ACC alarm+lat/long" to the authorized numbers at interval of 3 minutes when the engine of the car is turned on, that is the key is rotated to ACC.ON position to start the car in arm state; Siren will be sound for 30 seconds, send "disarm+password" to stop it.

#### 6.26.2 Shock Sensor alarm

6.26.2.1 The unit will send SMS "Sensor alarm+lat/long" to the authorized numbers when the sensor is triggered in arm status; send "disarm+password" to stop it.

6.26.2.2 Shock sensor sensitivity configuration:

The sensitivity of the built-in shock sensor has three different level:

First level: Alarm will be triggered after detect slight vibration, send command" sensitivity+password+space+1" .

Second level: Alarm will be triggered after detect 8 times vibration in 2 seconds, send command" sensitivity+password+space+2".

Third level: Alarm will be triggered after detect 25 times vibration in 5 seconds, send command" sensitivity+password+space+3".

## 6.27 Alarm without GSM network service

When the car is in the place without GSM network service, siren will be sound under non-silent mode if alarm is triggered (shock sensor, ACC), but no SMS alarm will send to authorized

- 1

numbers.

#### 6.28 Check the Vehicle State

Send SMS command "check+password" to the tracker, It will reply the status of the power,

battery, GPS, ACC, GSM signal, GPRS status and oil to the authorized numbers.

For example: Send SMS "check123456" to the tracker, It will reply following SMS.

Power: ON/OFF

Battery: 100%

GPRS: ON/OFF

GPS: OK/NO GPS

ACC: OFF/ON

GSM Signal: 1-32 The higher digit it shows; the stronger of GSM signals it receives.

#### 6.27 Reset Hardware

Send SMS "reset+password" to tracker, it will reply "reset ok". And the GSM module and GPS module in the tracker will be reset.

# 6.30 Sleep Mode

## 6.30.1 Sleep by time

Send SMS command "sleep+password+space+time" to tracker device, tracker will reply "sleep time ok" if none of the alarms has been set and no operations, tracker will fall asleep in 5 minutes, GPS module shuts down, LED will be off ,calling or SMS can awake the tracker. If these alarms have been set, tracker will sleep by detecting shock sensor. (This mode only works under SMS mode)

e.g. sleep123456 time

## 6.30.2 Sleep by shock sensor

Send SMS command "sleep+password+space+shock" to tracker, it will reply "sleep shock ok", and will enter sleep mode if no vibration is detected, GPS module shuts down, LED will be off. Shake or any operation can awake the tracker. (This mode only works under SMS mode)

## 6.30.3 Deep Sleep by shock sensor

Send SMS command "sleep+password+space+deepshock" to tracker to activate deep sleep by shock sensor, it will reply "sleep deepshock ok", and will enter deep sleep mode if no vibration is detected, GPS and GSM module shuts down, it will run in supper lowest power consumption mode. Vibration or any operation can't awake the tracker. Alarms can be triggered normally, after alarm cancelled, tracker come back to deep sleep mode again.

## 6.30.4 No sleep mode

Send SMS command "sleep+password+space+off" to tracker, it will reply "sleep off ok". Tracker won't sleep, and GSM, GPS module keep working. This mode is the default mode.

## 6.31 Awake at specific time

Send "schedule+password+space+1h" to awake the tracker each hour, and location will be automatically sent after wake up.(m: minute, h: hour, d:day). The maximum time interval is 3 digits, and can't exceed 30 days. GSM and GPS shut down, tracker runs in supper lowest power consumption, calling or sms can't awake the tracker. Alarms can be triggered normally, after alarm cancelled, tracker come back to deep sleep mode again  $\circ$ 

Cancel: after wake up, send "noschedule+password" to deactivate this function.

## 6.32 Check IMEI

Send SMS command "imei+password" to the unit. E.g. Send SMS command "imei123456" to the tracker device, an IMEI number in 15 digits will reply to your cell phone.

## 6.33 Set up Terminal (local) Time

Send SMS command "time+space+zone+password+space+time" to the tracker unit, If succeed, It will reply "time OK"

For example: Send SMS "time zone123456 8", 8 is Chinese time zone, If your country time zone is minus, send SMS "time zone123456 -8".

## 6.34 TCP / UDP Switch

Send command: "gprs+password,0,0" switch back to TCP mode, this is the default mode.

Send command: "gprs+password,1,1" switch to UDP mode.

# 6.35 Configure parameters by USB

Connect the gps tracker to computer with the optional USB cable, open gps tracker's flash drive and then open user\_config.ini with notepad to operates according the tips.

Note: Correct password is necessary every time to succeed in configuring the settings.

# 6.36 GPRS setting

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

## 6.36.1 Setting up APN

6.36.1.1 APN standards for Access Point Name and differs from country to country. For more information about the local APN, inquire with your local GPRS network operator.

6.36.1.2 Text the tracker a SMS "APN+password + Space + your local APN" via a cell phone and if setup successfully, the tracker will return the message "APN OK".

6.36.1.3 e.g. send SMS command "APN123456 CMNET". If succeeded, SMS "APN OK" returns from the tracker.

Notes: 123456 is tracker's password and CMNET is the APN of China Mobile (One of GSM Operator in China).

# 6.36.2 GPRS User ID and password Setup

6.36.2.1 In most countries, the user name and password involving GPRS login are not compulsorily necessary, therefore, the entry can be skipped. For those countries requiring user name and password, please configure as following:

6.36.2.2 Send SMS "up+password+space+user+space+password" If succeeded,

"user,password ok" is returned by the tracker in SMS.

6.36.2.3 For instance, send SMS "up123456 jonnes 666666" to the tracker, and if succeeded, the tracker returns "user, password OK"

Note: 123456 is tracker device password, jonnes is the user name for GPRS login, 666666 is the password for GPRS login.

## 6.36.3 IP and port setup

6.33.6.1. Send SMS via a cell phone: adminip +password + Space + IP Address + Space + Port Number. If succeeded, SMS "adminip OK" returns from the device.

6.33.6.2 e.g, Send SMS command "adminip123456 202.104.150.75 9000" to the tracker device, If succeeded, "adminip OK" is returned by the device in SMS.( 123456 is default password, 202.104.150.75 is IP, 9000 is port).

#### 6.37 Less GPRS traffic

6.37.1 Tracker will change to less GPRS traffic mode after parking 5 minutes, GPRS disconnect and connect again when alarm being triggered or vehicle starts driving.

6.37.2 Activate this function: Send "less gprs123456 on", tracker will reply "less gprs on ok".

6.37.3 Deactivate this function: Send "less gprs123456 off", tracker will reply "less gprs off ok".

Note: 123456 is the password of tracker, and replace it with the new if you have changed.

## 6.38 Modes Switch between "SMS" and "GPRS"

6.38.1 The default mode is "SMS"

- 6.38.2 Send SMS "GPRS+password" to the unit, and it will reply "GPRS ok!" It means tracker device has switched to "GPRS" mode.
- 6.38.3 Send SMS "SMS+password" to the unit, it will reply "SMS ok!" and restore to "SMS" mode.

# 6.39 Set up monitor center number

- 6.39.1 Setup: send command "centernum+password+space+number" to tracker, it will reply "centernum ok". After setup monitor center number, the sms messages of auto track will be sent to this center number, if events alarm need be sent to this number too, then this center number must be setup as authorized number.
- 6.39.2 Cancel: Send "nocenternum+password" to tracker, it will reply "no center num ok".

# 6.40 Web platform and PC installation tracking software user manual

- 6.40.1 Web based platform www.gpstrackerxy.com. Configuration IP: 202.104.150.75 Port: 9000. Please check "software platform user manual" included in the CD for detailed operation information.
- 6.40.2 PC based installation tracking software user manual included in the CD in package.

## 7. 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.

# 8. Faults & the Solutions

Faults	Solution
Fail to turn on	Please check out the power wiring connects well
No GSM Signal	Please make sure SIM Card is GSM Network and installed correctly; also call
No GSM Signal	display should be on; but no call transfer and PIN code off.
No CDS Signal	A more open view of the sky is recommended to make sure the device can receive
No GPS Signal	the GPS signal normally.
SMS reply fail	Password incorrect or sms commands in wrong format
Call without SMS	Authorized number is wrong or without setting any authorized number
Stop engine fail	Check the relay for engine cut is right connected.
Remote Controller	Turn off and turn on the device and program again
Siren fail	Siren's voltage is DC12V/24V/1A. Siren can't be activated if it is negative triggered.