

Preface

Thank you for purchasing the tracker. This manual shows how to operate the device smoothly and correctly. Make sure that it is read 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. This version is based on an original at version v 1.0.0- 103AB

Contents

1.	Function Introduction	3
2.	Applications	3
3.	Hardware Description	3
4.	Accessories	4
5.	Specifications	5
6.	Operating instructions	5
6.1	Terminal Installation	5
6.2	SIM CARD Installation	6
6.3	Turn on the Tracker Device	7
6.4	GSM/GPS LED Indicator	7
6.5	Initialization	7
6.6	Change Password	7
6.7	Authorization	7
6.8	Single Locating	8
6.9	Auto track continuously	8
6.9.1	Track with limited times upon time interval	9
6.9.2	Track with unlimited times upon time interval	9
6.9.3	Smart track upon time and distance interval	9
6.10	Turning points update automatically	9
6.11	GPS drift suppression	9
6.12	Exact street address	9
6.13	Location based service (LBS) / Cell-ID Locating	10
6.14	Monitor	10
6.15	Data logging	10
6.16	Data Load	11
6.17	Forward the third parties' message	11
6.18	SIM card Balance enquiry	11
6.19	ACC working alarm	11
6.20	Cut off the Fuel and power System	12
6.21	Calibration of fuel sensor	12
6.22	Function of Remote Controller (Option, for model B Only)	13
6.23	Arm	13
6.24	Disarm	13
6.25	Silent Mode	14
6.26	Decide how many times of alarm message	14

6.27	Alarms	
6.27.1	Low battery alarm	14
6.27.2	Power off alarm	14
6.27.3	GPS blind Spot alert	14
6.27.4	SOS	14
6.27.5	Geo-fence	15
6.27.6	Multi-area management	15
6.27.7	Movement alarm	27
6.27.8	Over speed alarm	27
6.27.9	Fuel alarm	16
6.28	Alarms under Arm State	16
6.28.1	Door open alarm	16
6.28.2	ACC Alarm	16
6.28.3	External Shock Sensor alarm(Optional)	17
6.28.4	Built in Acceleration Sensor Alarm	17
6.28.5	Built in Shock sensor sensitivity configuration	17
6.28.6	Alarm without GSM network service	17
6.29	Sleep Mode	17
6.30	Check the Vehicle State	18
6.31	Check IMEI	18
6.32	Terminal (local) Time Setting	18
6.33	Reset Hardware	18
6.34	Configure parameters by USB	18
6.35	GPRS Setting	18
6.36	Less GPRS traffic	19
6.37	Activate "Fuel" value in GPRS data	20
6.38	Instructions for web platform and mobile APP	20
7.	Cautions	23
8.	Faults & the Solutions	23
9.	<i>Disclaimer</i>	23

1. Function Introduction

1.1. This tracker is a new product based on the GSM / GPRS network and GPS satellite positioning system. Multiple functions of security, positioning, monitoring, surveillance, emergency alarms and tracking can be configured. It can track and monitor a remote target by SMS or internet.

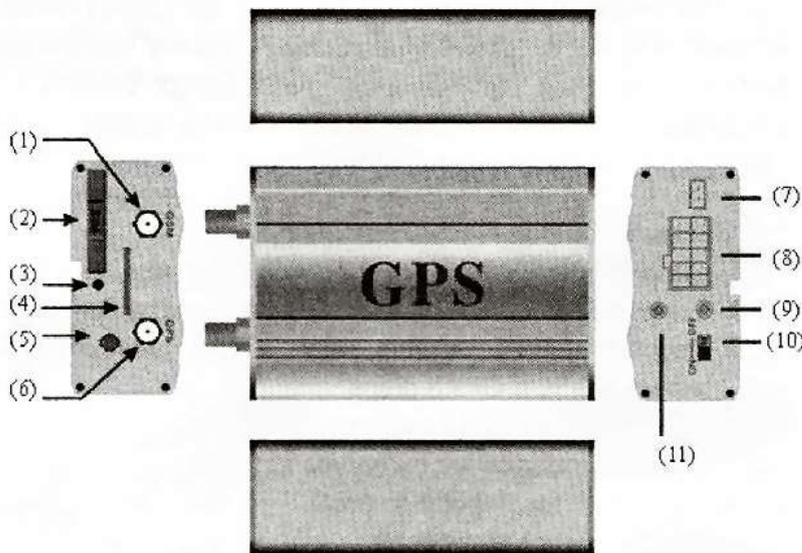
1.2 Features

- 1.2.1 Support both GPS & LBS (Location based service).
- 1.2.2 Support SMS/GPRS/internet Network data transmission.
- 1.2.3 Support GPRS on-line and GPRS re-connected automatically GPRS drops
- 1.2.4 Support SMS / GPRS dual-mode switching
- 1.2.5 Support configuration by remote terminal.
- 1.2.6 Support for point to-point, point to group, group to-group monitoring.
- 1.2.7 Set multiple functions of security, positioning, monitoring surveillance, emergency alarms and tracking.

2. Applications

Used wildly for vehicle and other moving objects tracking.

3. Hardware Description



(1)	GSM Antenna connector	(2)	SIM Card Slot
(3)	SIM card pop-up button	(4)	Micro SD card slot
(5)	Monitor microphone jack	(6)	GPS Antenna connector
(7)	Shock sensor connector	(8)	Wiring harness connector
(9)	GSM/GPS LED	(10)	Backup battery switch
(11)	Remote controller antenna (Optional for Model B only)		

4. Accessories

No.	PHOTOES	NAME	NOTE
1		GPS Antenna	2 meters
2		GSM Antenna	2 meters
3		Microphone	1.5 meters
4		Harness	10PIN
5		Relay	12V/40A to 24V/40A according to vehicles
6		Shock sensor	Option for both model A and B
7		Siren	Option for both model A and B
8		Remote controller	Option for model B ONLY
9		Fuel Sensor	Option for both model A and B

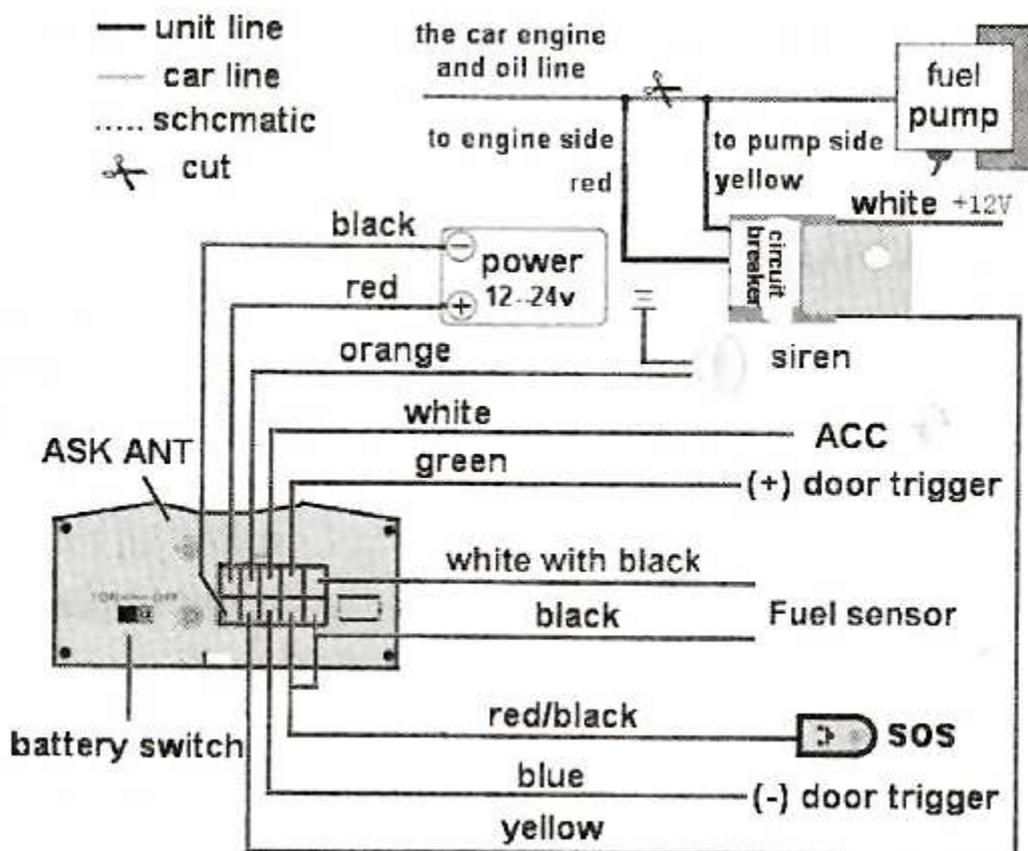
5. Specifications

Content	specifications
DIM.	83*54*26mm
Weight	120g
Network	GSM/GPRS
Band	850/900/1800/1900Mhz
GPS Sensitivity	-159dBm
GPS Accuracy	5m
GPS Start time	Cold status 45s Warm status 35s Hot status 1s
Voltage	12 V -24V
Backup battery	Chargeable 3.7V500mAh Polymer Li-Battery
Storage Temp.	-40°C to +85°C
Operation Temp.	-20°C to +65°C
Humidity	5%--95% non-condensing

6. Operating Instructions

6.1 Terminal installation

- 6.1.1 Please ask a qualified engineer to install the device.
- 6.1.2 Do not install it in an environment which is over GSM performance index, and please pay attention to fixing location of the antennas which should be in an appropriate position with good signals.
- 6.1.3 Pay attention to the installation location to prevent water and dust ingress.
- 6.1.4 Locate the 10 PIN harness and insert it into the corresponding socket of the tracker. Connect the wires with the original vehicle circuits as shown below:



Note: The orange wire can be connected to the original car horn circuit; it can also be connected to the siren you buy with the tracker. (Siren is Option)

- 6.1.5 Depending on the polarity of the door trigger, connect the green wire if it is positive or connect the blue wire if it is negative.
- 6.1.6 Please place SOS button at the place driver can touch.
- 6.1.7 Insert the shock sensor plug into the sensor jack. (Shock sensor is Option)
- 6.1.8 Insert the external monitor Microphone into the monitor jack.
- 6.1.9 Connect the GPS and GSM antenna to the correct connectors, and find an appropriate place to fix the antennas ensuring a location for good reception.

6.2 SIM CARD Installations

- 6.2.1 Use a tweezers or a sharp object to press the SIM CARD popup switch, the SIM CARD slot will pop up, take out the SIM card holder and insert SIM card into it. Replace the SIM card holder back into its original position after confirm the SIM card in the right place.
- 6.2.2 Please ensure that 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 (red) and negative (black) wire to the 12V or 24V car power system, wait for 1 minute after connecting power whilst the tracker boots up, and then turn on the backup battery switch.

6.4 GSM/GPS LED Indicator

LED Indicator Type	Behaviour	Meaning
Red LED	ON	No GSM signal
	Flash quickly, 1 time per second	GSM mode with good reception
	Flash slowly, 1 time per 3 seconds	GPRS mode
Green LED	ON	Fix to satellites
	OFF	Lost fix to satellites

6.5 Initialization

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

For example: send SMS "begin123456", it will reply "begin ok " . (No quotation marks " " when sending all the SMS)

6.6 Change Password

6.6.1 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 successful, the tracker will text a reply "password ok".

6.6.2 Be sure to remember your the new password, you have to upload the software to restore the original setting in case of losing the new password.

6.6.3 Attention: Ensure the new password is in 6 digits Arabic numerals, or else the tracker cannot recognize the new password.

6.6.4 When reading this user manual, you will notice that we have used "+" and "space" between some words;"+" between two words means they should be written together as one word and "space" between two words means you should leave one character space between two words.

6.7 Authorization

6.7.1 You must setup the authorized phone number before using SOS, geo-fence alarm, etc. Up to 5 numbers can be authorized.

6.1.2 Call the tracker for 10 times continuously and get its position, then it will save the cell phone number as the authorized number automatically then reply "add master ok". Or set as per 6.7.3.

6.7.3 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 authorised, the unit will reply "admin OK" by SMS.

6.7.4 Delete authorization:

Send SMS "nadmin+password+space+aauthorized number" to delete the authorized number.

6.7.5 If you wish to track the target when it enters into another country, you must add the country code before the cell phone number. You should authorize your number in international format as follows: "adminl23456 008613322221111" to tracker to set 13322221111 as an authorized number.

Be wary as entering the international number when used in the UK the tracker will not respond as the Calling Line Identity (CLI) does not include the international code.

6.8 Single Locating

6.8.1 If there is no authorised numbers set-up, the tracker will reply to all numbers with a location report; if there are authorized numbers set-up, then it will not respond when an unauthorized number calls it.

6.8.2 If you call it from authorized phone number, it will hang up and report a real-time location as below:

lat: 45.827220

lon: 0.687850

speed:0.00

T:15/07/21 10:05

<http://maps.google.com/maps?f=q&q=45.827220,0.687850 &z=16>

Pwr: ON

Door: OFF

ACC: OFF

6.8.3 If satellite fix is lost the tracker will track by LBS / CELL-ID and the SMS will include two locations:

- GPS coordinates of the last known position by satellite tracking.
- LAC code. Open web platform and find "manual track", put code received from tracker in LAC and Cell-ID fields to locate by LBS technology.

6.9 Auto track continuously

6.9.1 Track with limited times upon time interval. Send SMS command "fix030s005n+password" to the tracker device will report the Latitude & Longitude at intervals of 30 seconds for 5 times. (s=second, m=minute, h=hour). This command set must be in 3 digits Arabic numerals and the maximum value is 255.

e.g. fix030s005n123456

6.9.2 Track with unlimited times upon time interval

Send SMS "fix030s030m***n+password" to the tracker. Tracker will report a real-time location every 30 seconds when ACC is ON, and report every 30 minutes when ACC is OFF.

Note: The interval must not less than 10s.

6.9.3 Smart track upon time and distance interval

6.9.3.1 Please set "track with unlimited times upon time interval" before this function, and 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 numerals.

6.9.3.2 Set this function on web platform: Set time interval first and then distance interval, tracker will locate upon the time and distance.

6.9.3.3 Cancel: Send SMS "nofix+password" to the tracker device to cancel the "auto track".

e.g. nofix123456

6.10 Turning points update automatically

6.10.1 The tracker will update the positions automatically to web platform once the vehicle changing driving direction over pre set angle value to form a smooth trajectory consistent with the actual road, this function is only effective in GPRS mode.

6.10.2 Send "anglc+password+space+angle" to tracker, it will reply "angle ok". e.g. anglel23456 040

6.10.3 The angle must be 3 digits Arabic numerals, default angle value is 30 degrees.

6.11 GPS drift suppression

6.11.1 This function is deactivated by default, to activate this function, send SMS "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 remain the same and GPS data updates automatically when the vehicle is moving.

6.11.2 Cancel: send "nosuppress+password" to tracker which will reply "nosuppress ok".

6.12 Exact street address

6.12.1 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 6.35.1 & 6.35.2 section of this manual to configure the APN, user name and password for GPRS login.

6.12.2 After configure the APN, send "address+password" to the device which will reply SMS including real street/address name.

For example: No.113, Guankou 2nd Rd, Nantou, Nanshan district, Shenzhen, Guangdong, China.

6.13 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 positions as well as a LAC code. Entering the LAC code to the "Manual Track" menu of web tracking platform www.gpstrackerxy.com will enable you to see the tracker's current location. You can also send command "address+password" to the tracker to request exact address, track will automatically switch to tracking by LBS in GPRS mode. Accuracy of LBS depends on the distance to the nearest GSM Network Cell Tower or Base Station.

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

6.14 Monitor

6.14.1 The command to switch between Track mode and Monitor mode are "tracker" and "monitor". The default mode is "track" (Track mode).

6.14.2 Send SMS "monitor+password" to the unit, and it will reply "monitor ok!" and switch to "monitor" mode.

6.14.3 Send SMS "tracker+password" to the unit, and it will reply "track ok!" and switch to "track" mode.

6.15 Data logging

6.15.1 Auto logging: When the tracker device loses GSM signals or falls offline from GPRS, tracker will log the tracking position and alerts automatically in the SD card on the basis of the pre-set condition, when GSM signals returns, all the event alerts will be auto-sent to the authorized numbers or web platform (server), but the logged tracking data should be loaded to the web platform via SMS command.

6.15.2 Logging upon times: Send SMS: "saveO30s005n+password" to the tracker unit, it will reply "save ok", and will log the Latitude and longitude locations every 30 seconds for 5 times.
(S=second, m= minute, h=hour).

6.15.3 Multi-logging: Send SMS:"save030s***n+password" to tracker device, it will reply "save ok".

6.15.4 Cancel logging: Send SMS "nosave+password"
e.g. nosave123456

6.15.5 Logging Clearance: send SMS: "clear+password" to tracker device, it will reply "clear ok".

6.15.6 Logging Volume: Dependant on the capacity of the SD card inserted in the tracker device.

6.15.7 The logged data in SD card can be copied to computers through a card reader, and then the data route can be checked by importing data in the menu "Data Import" of web platform www.gpstrackerxy.com

6.16 Data Load

6.16.1 Current date Load: Send SMS: "load+ password" to the tracker device, it will reply: "load ok" if the device is working correctly in GPRS mode; if not, it will reply "load fail! Please check GPRS" that means device does not work under GPRS mode.

6.16.2 Specified date Load: Send SMS: "load+password+space+year month date" to tracker device, it will reply: "load ok" and load the tracking data to the web platform upon the valid time you choose.

For Example: send SMS: "load123456 20110425" to the tracker device, means to load the tracking data of 25th April 2011 to web platform.

6.17 Forward the third parties' message

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

For example, set the phone number of the service provider of the SIM card in the tracker, when charge remind message comes in, tracker will forward it to authorized phone number.

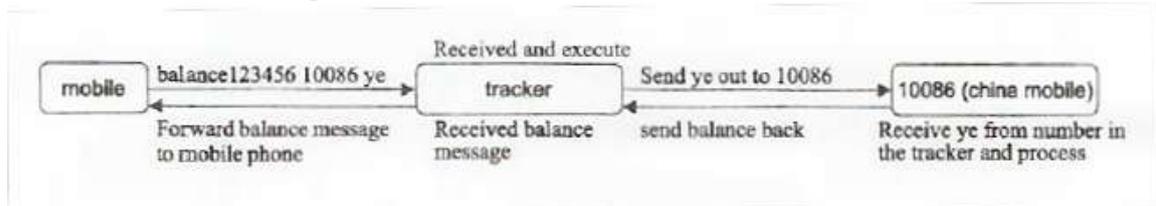
6.17 .2 Cancel: Send SMS command "noforward+password".

6.18 SIM card Balance Inquiry

6.18.1 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.

6.18.2 How it works: After accept balance command, tracker will remember the "mobile phone number", carrier's phone number and the code:

6.18.3 Then send the code to carrier's phone number and forward the message from carrier to mobile phone number Take China mobile for example, mobile users can send "ye" to China mobile number 10086, and 10086 will send user's balance message to tracker, and then tracker forward the balance message to mobile phone number , following is an illustration how this function works.



6.19 ACC working alarm

6.19.1 This function is deactivated by default. To active 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 on, that means the vehicle has been started; and tracker will send "ACC off+latitude & longitude" to authorized numbers when ignition off and ACC is off, that means vehicles has been stopped.

- 6.19.2 Send "noAcc+password" to deactivate this function, tracker will reply "noACC ok".
- 6.19.3 This configuration can only activate and deactivate the alarm to authorized numbers; it will send to web platform automatically in GPRS mode and can't be deactivated.

6.20 Cut off the Fuel and Power System

Note that references to fuel (oil) and power only relate to the circuit that has been interrupted by the operation of the relay supplied with the tracker (or other type as connected to the yellow wire from the tracker)

- 6.20.1 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.
- 6.20.2 Stop mode
 - Execute immediately:
Send command "quickstop+password" to tracker, it will reply "quickstop OK". Then tracker will stop the car immediately after "stop" command.
 - Execute depending 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 is less than 20KM/H", and stop the car when the speed is less than 20KM/H.
- 6.20.3 Resume the Fuel and Power System
 - Send "resume+password" to tracker. it will reply "Resume engine succeed", it means the fuel supply is resumed.

6.21 Calibration of fuel sensor

- 6.21.1 Due to the difference of fuel tank height and resistive fuel level sensor specifications, tracker needs to set an appropriate zero value and full range value to detect the precise fuel percentage.
- 6.21.2 Zero calibration: Send "oilzero+password" to tracker when the fuel tank is empty, tracker will adjust zero and reply "oilzero ok!". The fuel check is 0%.
- 6.21.3 Full calibration: Send "oilfull+password" to tracker when the fuel tank is full, then tracker will adjust the full range and reply "oilfull ok!". The fuel check is 100%.
- 6.2 1.4 Tracker can connect to car original resistive fuel level sensor ranging from 0 - 500 OHM. You can also connect add-on resistive fuel level sensor.

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

Button	Function	Descriptions
Locked  Padlock	ARM	Press for 0.5 second, the siren will beep one time.
Open  Padlock	DISARM	Press for 0.5 second, the siren will beep two times.
Bell  Symbol	ARM & Silent mode	Press for 0.5 second when it is in disarm state, the siren will beep one times. No voice from siren when alarm triggered and quit from silent mode automatically when disarm.
Zig-Zag  Symbol	SOS	Press for 3 seconds, Tracker will send SOS alert to authorized phone numbers without voice.
Locked  Padlock	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 SMS command "nrm+password" to the tracker device in the vehicle. It will reply "Tracker is activated" in both armed and disarmed state and the SMS command will make the tracker device enter into armed state if the unit currently disarmed. The user must stop the engine, (that is ACC is lower voltage). Sending SMS "am+password" when close the door and left. You will set up arm status fail if the engine is turned on (the ACC is high voltage), it will reply "set up fail! pls turn off ACC"

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

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

6.24 Disarm

6.24.1 Disarm by SMS

Send SMS command "disarm + password" to the tracker device in the vehicle, It will reply "Tracker is deactivated" in both armed and disarmed state and the SMS command will make the tracker device enter into disarmed state if the unit currently armed. It won't alarm if the door is open, sensor is vibrated or the engine is started when arm function is deactivated.

6.24.2 Disarm by remote controller (Option, for model B ONLY)

Press 'Open Padlock button' on the remote controller, the car enters into disarm state, and the siren will beep two times, no SMS sent.

6.25 Silent Mode

6.25.1 Set up silent mode by SMS

Send SMS "silent+password" to tracker device, it will reply "silent ok!". It means tracker device enters into silent mode, siren won't be sound after alarm is triggered, but tracker will send alarm SMS to authorized number.

Send disarm command "disarm+password" to quit silent mode..

6.25.2 Set up silent mode by remote controller (Option, for model B ONLY)

Press 'Bell Symbol' in disarm state for 0.5 second, the siren will beep one time, tracker device enters into silent mode, siren won't sound after alarm is triggered, but tracker will send alarm SMS to authorized numbers.

Press 'Open padlock symbol' to quit silent mode.

6.26 Set how many times alarm SMS message is sent

You can decide how many times of the alarm message is to be sent. For those alarm message sent in cycle, you can limit the times the alarm message to be sent, send SMS "xtime+password+005" to tracker, alarm message will be sent 5 times once alarms are triggered. Alarm SMS will be sent 5 times by default.

6.27 Alarms

6.27.1 Low battery alarm

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

6.27.1.2 This function activates by default, send SMS "lowbattery+password+space+off ' to deactivate.

6.27.2 Power off alarm

6.27.2.1 Send "extpower+password+space+on" to activate, it will send SMS "power alarm+latitude/longitude" to authorized numbers every 3 minutes when external power is cut off.

6.27.2.2 This function activates by default.

To cancel: Send SMS " extpower+password+space+off' to deactivate it.

6.27.3 GPS blind Spot alert

6.27.3.1 This function deactivates by default, send SMS "gpssignal+password+space+on", it will send alert SMS "no gps+last valid latitude/longitude before lost signal"

6.27.3.2 Send SMS "gpssignal+password+space+off' to deactivate.

6.27.4 SOS

Long Press the SOS button for 3 seconds (For model B, press 'ZigZag button' on remote controller for 3 seconds) , the tracker device will send SMS "help me!+lat./long." to all the authorized numbers at intervals of 3 minutes.

The tracker will stop sending such a SMS when any authorized number reply SMS "help me!" to the tracker.

6.27.5 Geo-fence

6.27.5.1 Set up a geo-fence for the tracker device to restrict its movements within a district. The unit will send SMS to the authorised numbers when it goes out of this district.

6.21.5.2 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 the unit to set the restricted district. In case of breach, it will send SMS "stockade!+ latitude & longitude" to the authorized numbers.

Remark: 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. The tracker will send alarm SMS at interval of 3 minutes once beyond the restricted district.

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

6.27.6 Multi-area management

6.27.6.1 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 "areal23456 22.353648,113.543678 school,800M".

Note: Maximum of 5 areas can be setup and the distance between two points can't be less than the total distance in the 2 commands. and different areas can't overlap each other.

6.27.6.2 Delete Area

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

6.27.6.3 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 overlap 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.

6.27.6.4 Activate multi-area management

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

6.27.6.5 Deactivate Multi-area management

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

6.27.7 Movement alarm

6.27.7.1 Set up: when the unit stays immobile in a place for 3-10 minutes with GPS signal reception, the user 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 authorised numbers at interval of 3 minutes.

6.27.7.2 Cancel: Send SMS "nomove+password" to deactivate the movement alarm.

6.27.8 Over speed alarm

6.27.8.1 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, it will only send one SMS in 3 minutes in SMS mode when over speed; the siren will beep 1 time when over speed.

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

Remark: The recommended speed should be not less than 30km/h. For below that rate, it will be effected the accuracy by GPS signals drift etc.

6.27.9 Fuel alarm

6.27.9.1 When the fuel consumption exceeds the normal standards during driving, or fuel theft/leakage when the vehicle is stopped, the tracker will send "oil: xx% + Geo-info" to the authorised number at interval of 3 minutes. The horn beeps 20s.

6.27.9.2 Cancel: Send SMS command " nooil+password" to tracker.

6.28 Alarms under Arm State

6.28.1 Door open alarm

The unit will send SMS "Door alarm+lat/long" to the authorized number at interval of 3 minutes when the door of the car opens in arm status. Siren will be sound for 20 seconds, and repeat sound at interval of 20 seconds ?? minutes if the door is always open. Disarm to stop this alarm.

6.28.2 ACC Alarm

The unit will send SMS "ACC alarm+lat/long" to the authorised number in 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 20 seconds, and repeat again at interval of 20 seconds if the ACC remains ON. Disarm to stop this alarm.

6.28.3 External Shock Sensor alarm(Optional)

The unit will send only one alarm SMS "Sensor alarm+lat/long" to the authorized number in 3 minutes when the sensor is triggered in arm status. Within 3 minutes, the alarm siren sound for 5 seconds when the vibration is detected in for first time. The alarm siren sound for 10 seconds when vibration is detected for a second time. If you disarm the tracker the times will reset. Disarm to stop this alarm.

6.28.4 Built in Acceleration (Shock) Sensor Alarm

The tracker has a built in three axis acceleration sensor, the tracker can detect it in arm state when the vehicle moves, tilts or shakes. The alarm method is same as the external shock sensor alarm. Disarm to stop this alarm.

6.28.5 Built in Shock sensor sensitivity configuration

The sensitivity of the built-in shock sensor has three different levels:
 First level: Alarm will be triggered after detecting a slight vibration, Send SMS command "sensitivity+password+space+1".
 Second level: Alarm will be triggered after detecting 8 vibrations in 2 seconds, send SMS command" sensitivity+password+space+2".
 Third level: Alarm will be triggered after detecting 25 vibrations in 5 seconds, send SMS command" sensitivity+password+space+3"

6.28.6 Alarm without GSM network service

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

6.29 Sleep Mode

	SMS Mode	GPRS Mode	Set Less GPRS Traffic in GPRS Mode
No Sleep	Work	Online	ACC Off No Calling, SMS and any triggered alarm. GPRS disconnect and switch to SMS mode, go to sleep. ACC on or Calling, SMS and any triggered alarm can awake it and GPRS connect
Sleep	ACC off. No Calling, SMS and any triggered alarm, go to sleep, GPS module shut off. GSM module work in low power consumption. ACC On or Calling, SMS and any triggered alarm can awake it.	Online	ACC Off No Calling, SMS and any triggered alarm, GPRS disconnect and switch to SMS mode, go to sleep. ACC on or Calling, SMS and any triggered alarm can awake it and GPRS connect.

6.29.1 This function is deactivated by default, send

"sleep+password+space+on", tracker will reply "sleep on ok".
 When vehicle is not driving (ACC is OFF), GSM module falls asleep; GPS module shut off; and tracker works in low power consumption. Calling, SMS command and any triggered alarm can awake it.

6.29.2 Cancel Send "sleep+password+space+off ", tracker will reply "sleep off ok", tracker won't sleep, GSM and GPS works all the time.

6.30 Check the Vehicle State

Send SMS command "check+password" to the tracker in the vehicle, It will reply SMS as follows:

Power: ON/OFF
Battery: 100%
Oil:100%
GPRS: ON/OFF
GPS: OK/NO GPS
ACC: OFF/ON
Door: OFF/ON
GSM Signal: I-32 Note: The higher digit it shows the better.
APN:cmnet
IP: I 04.250.1 38.146
PORT:9000

6.31 Check IMEI

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

6.32 Terminal (local) Time Setting

6.32.1 Send SMS command "time+spacc+zone+password+space+time" to the device, If successful, it will reply "time OK"

6.32.2 For example: Send SMS "time zonel23456 8", 8 is Chinese time zone, If your country time zone is minus, send SMS "time zonel23456 -8".

Note UK = 0

6.33 Reset Hardware

Send SMS "reset+password" to tracker device to reset the GSM module and GPS module of the tracker device which will reply "reset ok".

6.34 Configure parameters by USB

Connect tracker to computer with the optional USB cable. *{Beware, special cable.}* Open the memory of the tracker, find and open the initial configuration file (.ini file) with notepad, operate according the instructions. *(Instructions, What instructions?)*

Note: Correct password is needed every time you configure the tracker.

6.35 GPRS Setting

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

6.35.1 Configure APN

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

Send a SMS command to tracker "APN+password+Space+your local APN" via a cell phone and if successful, the tracker will reply "APN OK".

For example: Send SMS command "APN123456 CMNET". If successful, the tracker will reply "APN OK".

Notes: 123456 refers to password of the tracker and CMNET is the APN of one of china GPRS Network Operator (China mobile).

6.35.2 GPRS User Name and password Setup

6.35.2.1 In most countries, the user name and password involving GPRS login are not compulsorily necessary therefore, the entry can be skipped. As for those countries that require user name and password, please configure as following:

6.35.2.2 Send SMS "up+password+space+user+space+password" If successful, the tracker will reply "user, password ok!"

6.35.2.3 For instance, send SMS "up123456 web webgprs" to the tracker, and if successful, tracker will reply "user, password OK"

Note: 123456 is password for the tracker, web is the user name for GPRS login, webgprs is the password for GPRS login.

6.35.3 IP and Port Setup

6.35.3.1 Send SMS as below via a cell phone: adminip+password+Space+IP Address+Spac+Port Number. If successful, tracker will reply "adminip OK".

6.35.3.2 For example: Send SMS command "adminip123456 202.104.150.75 9000" to the tracker, If succeeded, it will reply "adminip OK". (123456 is default password, 202.104.150.15 is IP, 9000 is port).

6.35.4 Switch to GPRS mode

6.35.4.1 The default mode is "SMS".

SendsMS "GPRS+password" to the tracker, and it will reply "GPRS ok!" it means the tracker has switched to "GPRS" mode.

6.35.4.2 TCP and UDP switch

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

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

6.35.4.3 Send SMS "SMS+password" to the tracker. and it will reply "SMS ok!" and restore to "SMS" mode.

6.36 Less GPRS traffic

6.36.1 Tracker will change to less GPRS traffic mode after parking 5 minutes (ACC is OFF), GPRS disconnect and connect again when alarm being triggered or vehicle starts driving.

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

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

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

6.37 Activate "Fuel" value in GPRS data

The default format of GPRS data doesn't include "Fuel" value, if you need "Fuel" value, please send "protocol+password 18" to tracker, if succeed, it will reply "protocol 18 ok"; send "protocol+password 12" to change back to default mode, if successful, it will reply "protocol 12 ok".

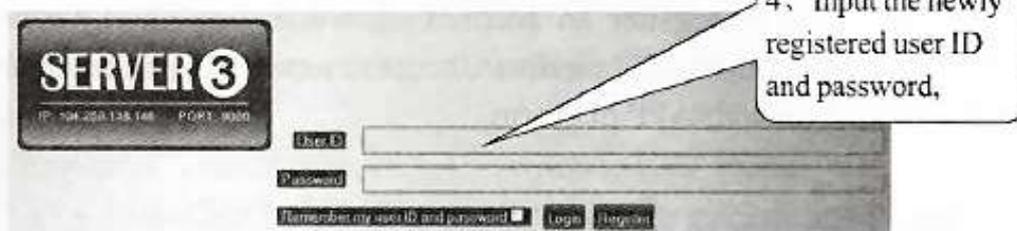
6.38 Instructions for web platform and mobile APP

Users need to register an account on www.gpstrackerxy.com before they can use web or APP platform, account name and password is the same on web/APP platform

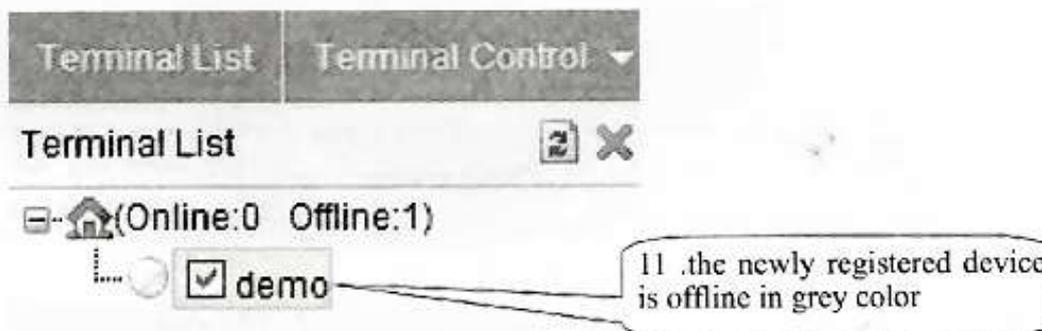
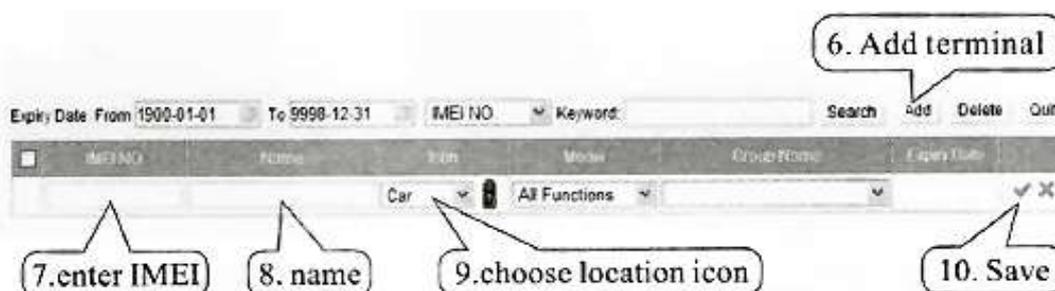
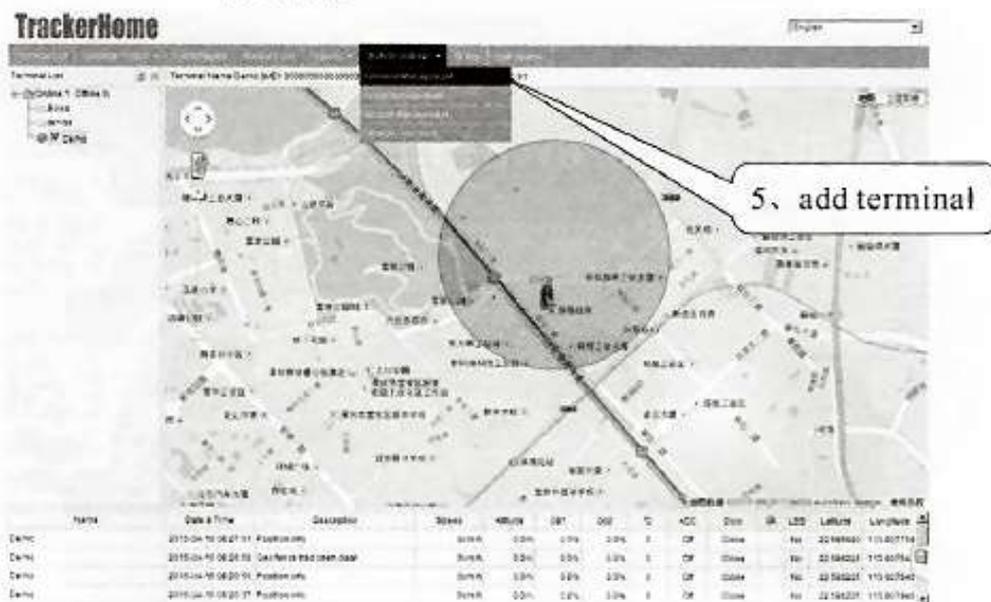
6.38.1 Register an account



6.38.2 Login

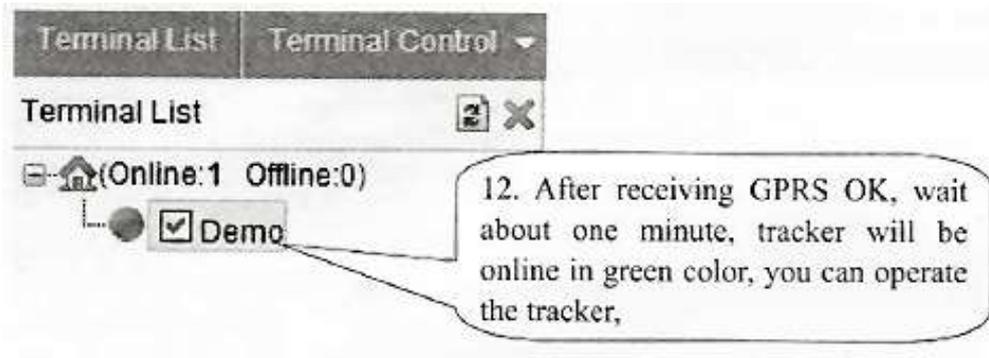


6.38.3 Add a terminal



6.38.4 Configure your hacker to web platform to track it online

- Step 1 : set APN, refer to 6.35.1
- Step 2 : set GPRS user name and password, refer to 6.35.2
- Step 3 : set IP and port, please use the corresponding IP and port of the server you choose, 6.35.3
- Step 4: switch to GPRS mode, refer to 6.35.4



6.38.5 If the tracker is always offline (grey colour), make sure the SIM card subscribes the GPRS service and has credit to surf the Internet, you can use phone to test the sim card can surf the Internet or not please check the APN, user name, password, IP, port settings arc correct, refer to 6.30.

6.38.6 IOS & Android mobile APP

6.38.6.1 Download and install the mobile APP software According to your phone type, download and install mobile app below the home page on web tracking platform



6.38.6.2 login in and use the mobile APP



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 Check vehicle voltage is correct for your unit. Incorrect supply voltage may destroy the tracker.

8. Faults & the Solutions

FAULT	SOLUTION
Fails to turn on.	Check if built-in battery is charged, and power wires connected correctly.
No GSM Signal.	Check if SIM card installed correctly. <ul style="list-style-type: none"> • Please check if SIM card is GSM network. • Don't turn on the PIN code. • no calls can be diverted. • Check supply voltage is correct.
No GPS.	Please check if GPS antenna connected firmly, it is recommended that the GPS antenna be installed near a window glass. No metal parts should shield it from the outside for a better GPS signal reception.
No reply to SMS commands	Password wrong or the format is wrong.
No reply when tracker is called.	Authorised / admin phone number is incorrect.
No alarm messages received.	Authorised / admin phone number has not setup.

9. Disclaimer

This document has been rewritten hopefully into a more understandable manner for English speaking users. No guarantee is made of the accuracy in this text, users do so at their own risk.

If any user has more to add or suggests changes to improve the document please contact:-

Rod Sleigh

rod@vwbooks.co.uk