



HI-604X



Easy Manual

HI-604X GPS Tracking Device with 3-years Standby Battery/IP56 waterproof

INTRODUCTIONS:

This is a multi-function state-of-the-art GPS tracking solution offering you all in one solution GPS/GSM/GPRS/SMS all in real time - the most flexible tracking device in the world - a great marriage of the latest technology and affordability.

With HI-604X multi function tracker, one can track, remote control, tapping any object globally in real time on the map. User can check the real time location from the GPRS tracking web site or using the Haicom Tracking software installed on the PC and check the real time position on the map via the regular dial tone transmission.

HI-604X tracking Device is the best tracking solution for use in the widest range of applications, from motor homes to mobile home, from cars to caravans, from agricultural machinery to construction equipment, from containers to golf carts – all the assets that you feel could be at risk, especially if they do not have their own source of power.

Just place the tracker where there is no metal material on above, user can see his valuable anytime, anywhere from any computer. The waterproof case allows the tracker still functioning even though under tough and harsh environment. The build in big battery provide the independent power supply even if there is no external power supply. The moving sensor will let the tracker totally switch off (only the microchip standby: 2 mAh) and the tracker can operate very long, could be years, if there is not much movements. With the moving sensor, the tracker will not drain the car battery when the tracker connected to external battery power.

Features

Haicom Asset Tracking Solution offers you a lot of advantages

Quad band 850/900/1800/1900 MHz GSM system

External SiRF Star III high performance GPS receiver

Internal GSM active antennas

Advanced communication via SMS/TCP/UDP/HTTP

Program and control the tracker from the OTA (Over the Air) web tracking platform and also USB configurations

Build in motion sensor for power saving

Support emergency/ over speed/ motion/ power lost alarm

Real time location report on preferred interval and vehicle status monitoring

Premium functions: Fast GPS Fixed/ A-GPS/ Geo-Fencing/ Hands free Kit/ Anti-Theft/ Data Logger function with 8MB memory size with 100,000 records or more

Low battery alarm and battery voltage status

- **Our GPRS tracking software Platform and server is free; if you have your own server we can program our tracker with your server protocol**
- **Worldwide coverage with NO additional programs to buy or install - no additional or hidden costs!**
 - **Built-in moving sensor with deep sleeping mode (2mA)**
 - **Built in 5,500 mAh battery for independent power**
 - **Stand-by deep sleeping time up to 180Days (depending on tracking frequency)**
 - **Very high sensitivity GPS fixed**
 - **Multi-ways tracking software plate form available**
 - **Waterproof case for harsh condition environment**
 - **Customizations for different tracking applications**
 - **Comes with strong Magnetic mounting for easy attachment**
 - **Stand alone (Internal Antenna - Self Contained Unit)**
 - **Worldwide coverage using GSM/GPRS/SMS**
 - **allow you to monitor both on demand or at regular intervals**
 - **Ultra low power GPS.**

- **All-in-one design.**
- **Provides you 24/7 access to the location of all your assets.**
- **LIVE real-time tracking, configurable from every 20 second to 72hour GPRS updates!**

- **Give complete supervision into your operations by seeing how long assets are sitting around in one place, when they start moving / stop moving etc.**
- **Establish how long the assets are being used (actual operations time).**
- **Warns when unauthorized/unwanted movement happens.**
- **Provides security and accountability.**
- **Enable the recovery of any stolen assets.**
- **View asset's history online from any computer**

Applications

- **Police Force and law enforcement Sector**
- **Private Investigations Sector**
- **GPS Asset Tracking**
- **GPS Cargo Tracking**
- **Surveillance Work**
- **Anti theft – both domestic and commercial**
- **Asset recovery**

HI-604X Characteristics

| Items | Specifications |
|--------------------------|---------------------------------------|
| Power Supply | DC 5V |
| Backup Battery | 5500mAh |
| Normal power consumption | |
| Dimension | 90.8mm x 52.3mm x 38.9mm |
| Operating temperature | -20°C to 55°C |
| Humidity | 5% to 95% Non-condensing |
| Frequency | GSM 850/900/1800/1900Mhz |
| GPS Chipset | latest GPS SIRF-Star III chipset |
| GPS Sensitivity | -159Db |
| GPS Frequency | L1,1575.42 MHz |
| C/A Code | 1.023MHz chip rate |
| Channels | 20 channel all-in-view tracking |
| Position Accuracy | 10 meters, 2D RMS |
| Velocity Accuracy | 0.1 m/s |
| Time Accuracy | 1 us synchronized to GPS time |
| Default datum | WGS-84 |
| Reacquisition | 0.1 sec. , average |
| Hot start | 1 sec. , average |
| Warm start | 38sec. , average |
| Cold start | 42 sec. , average |
| Altitude Limit | 18,000 meters (60,000 feet) max. |
| Velocity Limit | 515 meters / second (1000 knots) max |
| Interface | One input and one output |

How The HI-604X GPS Tracker Works:

Once fully charged, the HI-604 battery can last up to 180 Days, depending on usage frequency, it has a built-in movement sensor that can be configured directly to alert you on your mobile phone and our server automatically when the object is moved or touched. The owner can locate the asset at any time using our free of charge GPRS web tracking platform or from your smart phone or real time SMS address hyperlink solutions. The HI-604X can also be programmed to automatically report its position at regular pre-set time intervals, which could be from every 30 seconds to every 72 hours. Also, set up to weak up and send location back during the long sleep mode.

Getting Started:

1. Take out the waterproof side rubber seal and connect the 18 pin cable to HI-604 and plug another end to the USB port from computer or to the AC power outlet with the AC adaptor for power charging.



2. Place the SIM card on the SIM card tray and slid in the SIM card tray in. When the SIM card tray inserted in place, the HI-604X power will switch on.



3. To switch off HI-604X power, simply push in the yellow dot with any pen.



Dimensions:



LED Indicator:



| LED Color | LED | Status |
|-----------|--------------------------------------|---|
| Amber | On Off | Charging Charge Completed |
| Green | flashing Stay on Off | GPS in 3D fixed GPS not 3D fixed yet GPS in sleeping mode |
| Red | On | Battery low |
| White | 64 ms ON/3S OFF 64 ms ON/0.8S OFF | GSM stand-by Searching GSM network or no SIM |

Standard Packing:

1. HI-604X main unit
2. SIM card tray
3. 18 pin to USB set up cable
4. AC power adaptor
5. DC cigarette lighter
6. mini CD with user manual



The in-build self contained battery:

As mentioned, we can not tell you how long the HI-604X battery can last because it is really depend on how frequent the tracker used and the sleeping mode time.

Anyway, here are the figures:

POWER ON (GPS ON, GSM OFF) mA

GSM connected (GPS on) 90 mA

GPS OFF, GSM ON 25 mA

GPS OFF, GSM OFF 2 mA

Connect HI-604X to vehicle battery:

With the optional car battery cable, user can also connect HI-604X to the vehicle battery for permanent power supply.

Car battery cable:



The car battery cable can be connected directly to the vehicle battery (12V or 24V) and transfer into 5V for the HI-604X. Very important: don't connect HI-604X pintail cable directly to the vehicle battery because the pintail cable takes only 5V.



GPRS Tracking:

Set up the APN, IP and Port:

1. Connect HI-604X to computer USB port with the set up cable

Setting up

For the initial set up from the retail box, you will need to use the set up program from the inclusive small CD and perform the set up from your computer. **Please make sure the SIM card tray is pull off from the holder (User can only program the HI-604X while the HI-604X on power off status)**

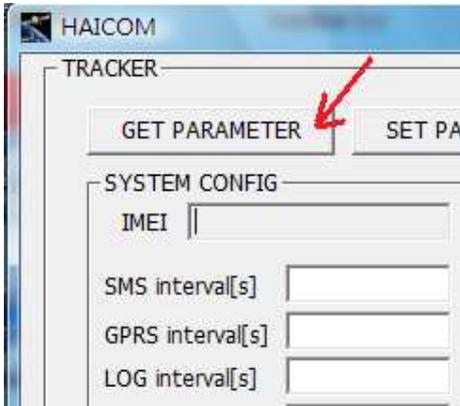
1. Connect the 18 pins to USB set up cable from the tracker to your computer USB port:



2. Open the tracker set up program:

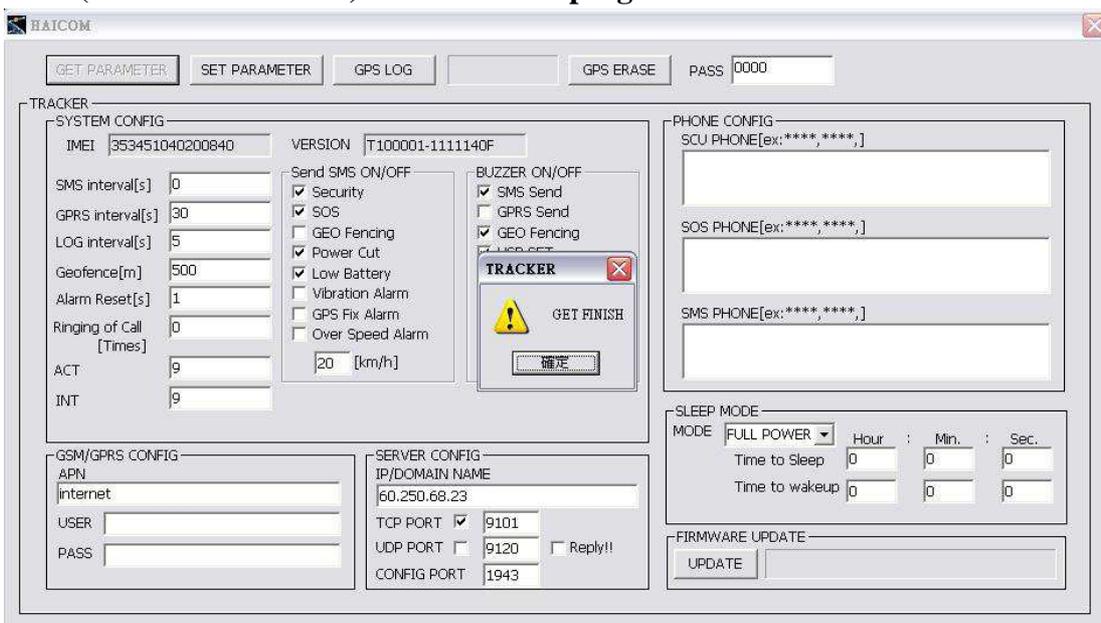


3. Click the “Get Parameter “



4. Message will shown: “GET FINISH “ and all the tracker current set up will appeared:

Please double check with your local telecomm service provider to make sure the SIM card APN (Access Point Name) and fill in and program to the tracker.



Initial computer set up reminder:

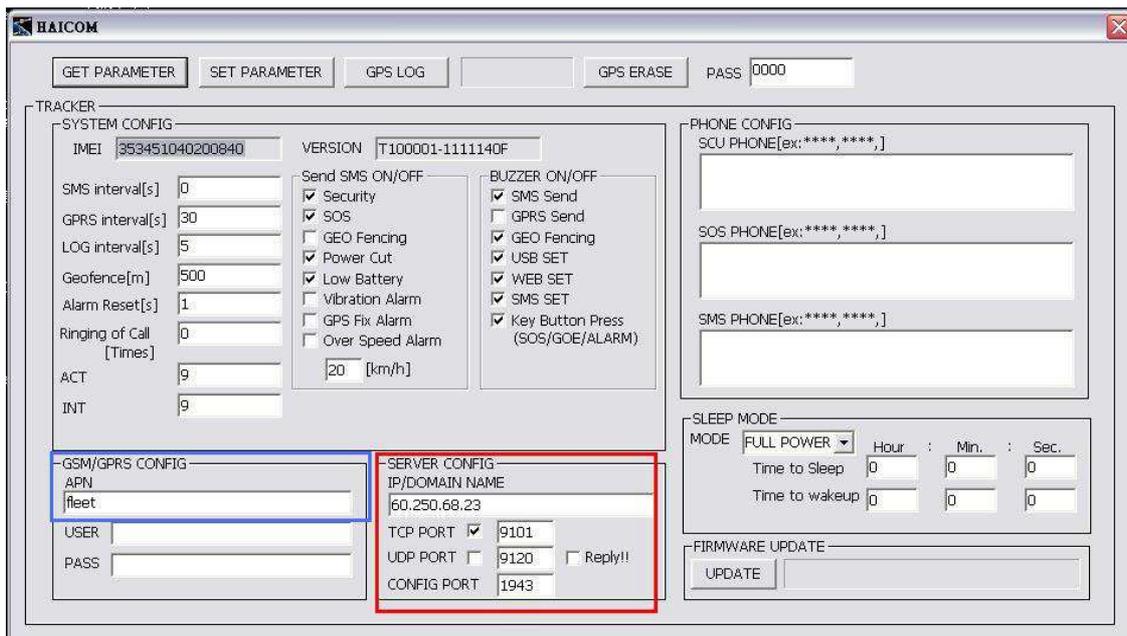
On factory defaults, the basic set up was done.

As soon as you plug in the computer and get parameter, the computer will automatically get and show the tracker imei# on the program.

You will double check with your SIM card telecomm service provider for the correspondent APN (Access Point Name) and key in to the APN section (like the below blue block). The APN could be for instances, “ internet “, “ web.Vodafone “ or any name.

Also, please double check if the IP and port settings (the below red block) was correctly set up. (for use with Haicom GPRS web tracking: <http://www.tracking.haicom.com.tw:8090/Default.aspx>)

The above settings are the must to make the tracker to start sending data back to our server and show on the platform. The rest of selections will be set up depend on individual user’s preferences.



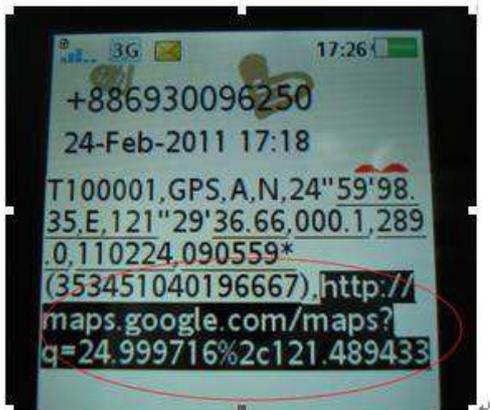
The screenshot shows the HAICOM software interface with the following configuration details:

- TRACKER SYSTEM CONFIG:**
 - IMEI: 353451040200840
 - VERSION: T100001-1111140F
 - SMS interval[s]: 0
 - GPRS interval[s]: 30
 - LOG interval[s]: 5
 - Geofence[m]: 500
 - Alarm Reset[s]: 1
 - Ringing of Call [Times]: 0
 - ACT: 9
 - INT: 9
- GSM/GPRS CONFIG (Blue box):**
 - APN: fleet
 - USER: [Empty]
 - PASS: [Empty]
- SERVER CONFIG (Red box):**
 - IP/DOMAIN NAME: 60.250.68.23
 - TCP PORT: 9101
 - UDP PORT: 9120 Reply!!
 - CONFIG PORT: 1943
- PHONE CONFIG:**
 - SCU PHONE[ex:****,****,]: [Empty]
 - SOS PHONE[ex:****,****,]: [Empty]
 - SMS PHONE[ex:****,****,]: [Empty]
- SLEEP MODE:**
 - MODE: FULL POWER
 - Time to Sleep: Hour: 0, Min.: 0, Sec.: 0
 - Time to wakeup: Hour: 0, Min.: 0, Sec.: 0
- FIRMWARE UPDATE:**
 - UPDATE: [Button]

Terms Explanations

System Config:

1. **IMEI: Tracker** (International Mobile Equipment Identity number , IMEI#)
2. **Version: Tracker** firmware version
3. **SMS intervals[s]:** Interval of tracker send real time position with Google map hyperlink via SMS

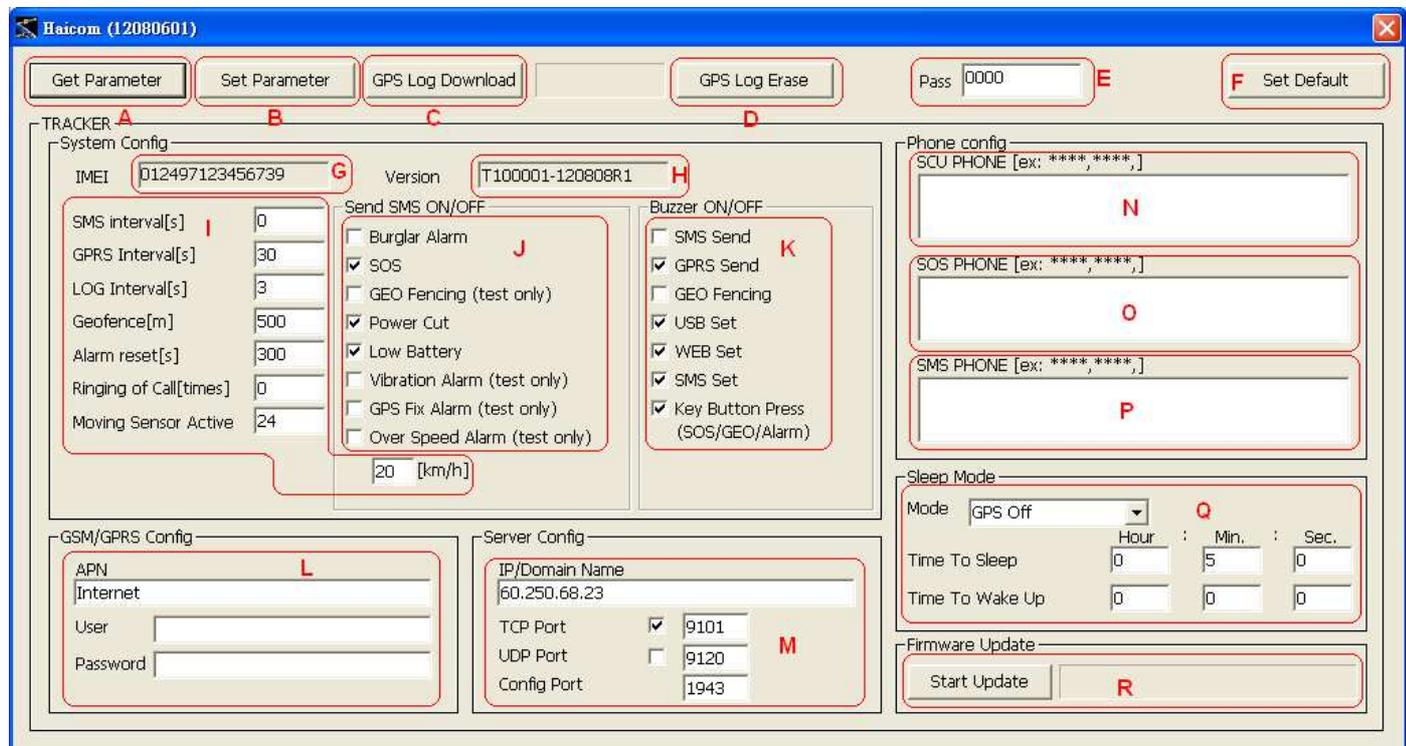


4. **GPRS interval[s]:** Interval of tracker send real time position to the server via GPRS
5. **LOG interval[s]:** Interval of tracker data logging
6. **Geofence [m]:** Send warning when tracker out of the Geofencing range
7. **Alarm Reset[s]:** Time of all the security functions temporary disabled
8. **Ringing of Call[Times]:** Tracker ringing time when user call

X series trackers

User guides for USB settings and SMS features

1. USB Settings :



A. Press to get the tracker current settings

B. Press to save the settings changed

C. Press to download the GPS data logger records

D. Press to delete and clean out the GPS logger records. To avoid the records capacity too full (the full capacity is about 257,000 points) and slow down the download time, the records deleting is recommended after download the GPS data logger.

E. The Password is for the security purposes and the SMS commands can be used after the password verification.

F. Press to re-flash all settings back to defaults

G. The tracker's imei#

H. The current firmware version. The file name is based on the data of the generating.

I: The parameter settings for different functions:

1. The continue SMS sending time interval to certain preset phones. The setting is recommended to set more than 10 (s), 10 seconds, and set “ 0 “ means switch off this function.
2. The continue GPRS GPS coordinates sending time interval to the server. The setting is recommended to set more than 15 (s), 15 seconds, and set “ 0 “ means switch off this function.
3. The GPS data logger recording time interval. The setting is recommended to set more than 3 (s), 3 seconds, and set “ 0 “ means switch off this function.
4. The geo-fencing setting range (in diameter) The setting is recommended to set more than 500 (m), 500 meters.
5. To temporary disable all the alert functions. The setting is recommended to set less than 300 (s), 300 seconds. During the time, all the alert features will be disabled.
6. The ringing times after the voice tapping function activated.
7. The motion sensor sensitivity. The setting is recommended to set between 21 to 24, The less the number, the higher the sensibility.
8. The speed limit alert function. The alert will shown after the tracker speed higher than the speed (in kilometer per hour)

J: The on/off settings for the alert functions:

1. Turn on or off for the vehicle anti-thief alarm function
2. Turn on or off for the SOS button alarm function
3. Turn on or off for the geo fencing alarm function. The function here is only for testing and the function will be switched off once the geo fencing function activated (only one time)
4. Turn on or off the alarm when the tracker external power cut off.
5. Turn on or off the alarm when the tracker battery voltage power lower than 3.6V (battery low)
6. Turn on or off for the motion sensor alarm function. The function here is only for testing and the function will be switched off once the motion sensor function activated (only one time)
7. Turn on or off for the GPS in 3D fixed inform function. The function here is only for testing and the function will be switched off once the GPS 3D fixed function reported (only one time)
8. Turn on or off for the over speed alarm function. The function here is only for testing and the function will be switched off once the over speed function activated (only one time)

K: The settings for the tracker buzzer sound or silent:

1. Buzzer sound or silent every time when the SMS coordinates sending
2. Buzzer sound or silent every time when the GPRS coordinates sending
3. Buzzer sound or silent when the geo fencing alarm sent
4. Buzzer sound or silent when the USB set up completed
5. Buzzer sound or silent after receiving the settings from the web tracking site
6. Buzzer sound or silent after receiving the settings from the phone SMS command

7. Buzzer sound or silent when press the buttons (only available for the HI-602X and the optional car kit box)

L: Set up the APN (Access Point Name) from the SIM card telecomm service provider

M: Set up the IP/Domain address of the tracking server for the GPRS data to send to

1. Can set up either the IP or the domain name
2. Set up the server receiving data protocol and port (Set TCP if the server protocol is TCP)
3. Set up the server receiving data protocol and port (Set UDP if the server protocol is UDP)
4. Set up the two-way configuration port between the server and the tracker. User can also set as “ 0 “ to disable the GPRS function (under this mode, the SMS and the data logger functions still keep on working) User can also set as “ 1 “ to switch off both the server alarm control function and the two-way configuration function (under this mode, the GPRS coordinates sending functions still keep on working)

N: Set up the telephone numbers which will receive SMS from all the alarm functions activated and the tapping voice (except for the SOS)

O: Set up the telephone numbers which will receive SMS when the SOS alarm functions activated and the tapping voice

P: Set up the telephone numbers which will receive SMS with the continue coordinates and the tapping voice

Q: Set up the sleeping mode and the times:

1. Full power: Keep on sending coordinates none stop. Highest power consumption and no need to set up the times.
2. GPS Off: The tracker GPS function will be switched off (based on the ‘Time To Sleep’ colume time) after the tracker no moved. Under this mode, the tracker still stand by to take the commands from the phone SMS or from the web tracking set up) As soon as the tracker moved again, the GPS function will start to work again. Under this mode, the tracker power consumption will be less.
3. All Off: The tracker all functions, GPS, GSM, etc. will be switched off (based on the ‘Time To Sleep’ colume time) after the tracker no moved. Under this mode, the tracker will not be able to take any commands from the phone SMS or from the web tracking set up) As soon as the tracker moved again, all the functions will start to work again. Under this mode, the tracker power consumption will be lowest.
4. Weak Up: The tracker all functions, GPS, GSM, etc. will be switched off (based on the ‘Time To Sleep’ colume time) regardless of the tracker motion sensor moved or not. Under this mode, the tracker will not be able to take any commands from the phone SMS or from the web tracking set up) After the finish the sleep time (based on the ‘Time To Weak UP’

column time) the tracker will be switched on again to work normally. The automatic sleep and wake-up will be cycled continuously based on the settings. This mode is suitable for the condition that the user only needs to know the tracker's updated locations at some fixed time and let the tracker go to sleeping mode (switched off) to save power consumption. The 'Time To Sleep' setting is recommended to be set to no less than 3 minutes so that the tracker's GPS has enough time to get a 3D fix. In this way, the tracker can send the updated real-time location (GPS 3D fixed location) back to the server.

R: Firmware update: After the firmware is updated, deleting the GPS log data in the tracker is recommended to ensure the tracker's internal memory is completely free.

The example to send SMS command to the tracker:

Send: #0000,10



You will receive this message:



Click the hyperlink to get the real time position



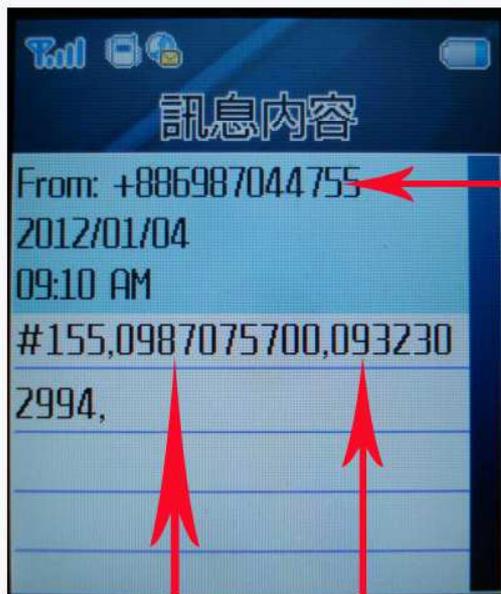
Longitude
Latitude

The example to send SMS command to the tracker:

Send: #0000,155



You will receive this message:



Tracker Telephone#

2nd. set send back telephone #

1st. set send back telephone #

SMS Command for X seris



| Code | Format | Function |
|------|---|-------------------------------------|
| 100 | #0000,100 | Request all setting values back |
| 151 | #0000,151,0000000000,0000000000,0000000000 | Set Security Phone Number.(10 Max.) |
| 152 | #0000,152,0000000000,0000000000,0000000000 | Set SOS Phone Number (10Max.) |
| 153 | #0000,153,0000000000,0000000000,0000000000 | Set SMS Phone Number (10 Max.) |
| 154 | #0000,154 | Get Security Phone Setting |
| 155 | #0000,155 | Get SOS Phone Setting |
| 156 | #0000,156 | Get SMS Phone Setting |
| 200 | #0000,200,APN,USER,PASS | Set APN |
| 201 | #0000,201 | Get APN Setting |
| 210 | #0000,210,IP,TCP port,UDP port,config port,protocol select #0000,210,60.250.68.23,9101,9120,1943,0 | Set IP and Port |
| 211 | #0000,211 | Get IP and Port Value |
| 250 | #0000,250,SMS,GPRS,LOG,Geo,Alarm,Ring,Speed,Sensor #0000,250,0,30,0,500,60,0,20,10 | Set Interval and Parameter |
| 251 | #0000,251 | Get Interval Setting |
| 300 | #0000,300,Buglar,SOS,PWCUT,LBAT #0000,300,0,1,1,1 | Set Event |
| 301 | #0000,301 | Get Event Setting |
| 350 | #0000,350,SMS_Send,GPRS,GEO,USB,WEB,SMS_Set,KEY #0000,350,0,0,0,1,1,1,1 | Set Buzzer |
| 351 | #0000,351 | Get Buzzer Setting |
| 400 | #0000,400,Mode,Hour1,Minute1,Second1,Hour2,Minute2,Second2 #0000,400,1,0,5,0,0,0,0 | Set Power Saving Mode |
| 401 | #0000,401 | Get Power Saving Mode Setting |
| 01 | #0000,01,Pass,Pass #0000,01,0000,0000 | Set Password |
| 10 | #0000,10 | Get GPS Data |
| 11 | #0000,11,Phone Number | Talking Permitted |
| 12 | #0000,12,1 | Relay #1 On/Off |
| 13 | #0000,13,1 | Relay #2 On/Off |
| 14 | #0000,14 | Tracker Reset |
| 15 | #0000,15 | Inform Tracker send TX000 to Server |
| 16 | #0000,16,1 | Set GEO Fencing Activate |
| 17 | #0000,17,1 | Set GPS Fixed Alarm Activate |
| 18 | #0000,18,1 | Set Moving Alarm Activate |
| 19 | #0000,19,1 | Set Over Speed Alarm Activate |

EXAMPLE : #0000,210,60.250.68.23,9101,9120,1943,0

SMS initial code

0000 password (default is 0000)

210 Initial command code

60.250.68.23,9101,9120,1943,0 Varies parameters

Fill in “ * “ between the comma when the above parameters unchanged.

Fill in nothing between the comma to empty the data (originally there are some parameters in between, such as the APN, USER and the PASS)

Different parameters will divided by comma: “ , “

Explanations to the initial command code:

151 (Set Security Phone Number)

Fill in maximum 10 phone numbers

152 (Set SOS Phone Number)

Fill in maximum 10 phone numbers

153 (Set SMS Phone Number)

Fill in maximum 10 phone numbers

200 (Set APN)

APN : GPRS Access Point Name of the SIM card (check with your telecomm service provider for the exact APN)

USER : APN user name

PASS : APN password

210 (Set IP and Port)

IP : The server IP address which the tracker will send to (Domain name also OK)

TCP port : The destinate server TCP port

UDP port : The destinate server UDP port

Config port : Set up the two-way configuration port between the server and the tracker. User can also set as “ 0 “ to disable the two way configuration function.

Protocol select : Select the communication protocol between the tracker and server

0→ TCP 、 1→UDP

250 (Set Interval and Parameter)

SMS: The continue SMS sending time interval to certain preset phones. The setting is recommended to set more than 10 (s), 10 seconds.

GPRS: The continue GPRS GPS coordinates sending time interval to the server. The setting is recommended to set more than 15 (s), 15 seconds.

LOG: The GPS data logger recording time interval. The setting is recommended to set more than 3 (s), 3 seconds.

Geo: The geo-fencing setting range (in diameter) The setting is recommended to set more than 500 (m), 500 meters.

Alarm: To temporary disable all the alert functions. The setting is recommended to set less than 300 (s), 300 seconds. During the time, all the alert features will be disabled.

Ring: The ringing times after the voice tapping function activated.

Speed: The speed limit alert function. The alert will shown after the tracker speed higher than the speed (in Km/h kilometer per hour)

Sensor: The motion sensor sensitivity. The setting is recommended to set between 21 to 24, the less the number, the higher the sensibility.

300 (Set Event)

Buglar: Enable or disable (1 → enable, 0 → disable) to send SMS when the vehicle anti-thief alarm function activated

SOS: Enable or disable (1 → enable, 0 → disable) to send SMS when the SOS button pressed

PWCUT: Enable or disable (1 → enable, 0 → disable) to send SMS when the tracker external power source was cut.

LBAT: Enable or disable (1 → enable, 0 → disable) to send SMS when the tracker internal battery low (less than 3.6V)

350 (Set Buzzer)

SMS Send: Buzzer sound or silent (1 → enable, 0 → disable) every time when the SMS coordinates sending

GPRS: Buzzer sound or silent (1 → enable, 0 → disable) every time when the GPRS coordinates sending

GEO: Buzzer sound or silent (1 → enable, 0 → disable) when the geo fencing alarm sent

USB: Buzzer sound or silent (1 → enable, 0 → disable) when the USB set up completed

WEB: Buzzer sound or silent (1 → enable, 0 → disable) after receiving the settings from the web tracking site

SMS Set: Buzzer sound or silent (1 → enable, 0 → disable) after receiving the settings from the phone SMS command

KEY: Buzzer sound or silent (1 → enable, 0 → disable) when press the buttons (only available for the HI-602X and HI-603)

400 (Set Power Saving Mode)

Mode : Set up the sleeping mode: 0 → Full power · 1 → GPS off · 2 → all off · 3 → fixed on/off time

Hour1 : Time setting, hours

Minute1 : Time setting, minutes

Second1 : Time setting, second (please consult the above USB setting guides “Time To Sleep” Q)

Hour2 : Time setting, hours

Minute2 : Time setting, minutes

Second2 : Time setting, second (please consult the above USB setting guides “Time To Weak Up” Q)

01 (Set Password)

Pass : Set up the new password (needed to be 4 digits)

Pass : Key in once again the new password (the set up can only success when this 4 digits are identical to the above 4 digits)

10 (Get GPS Data)

Request the current GPS coordinates from the tracker

11 (Talking Permitted)

Allow some specific phone to do the phone tapping and the request will only available one time and user will set another command when once again need such function. For instances, the telephone number, 0937777777, was not fill in the list of the preset telephone numbers (like, the SCU, SOS, SMS from the USB column)

When need to do the tapping, send SMS command #0000,11, 0937777777 to the tracker and the user can use the phone 0937777777 to do the tapping once.

12 (Relay #1 On/Off)

1 → cut off relay · 0 → recover the relay to normal

13 (Relay #2 On/Off)

1 → cut off relay · 0 → recover the relay to normal

14 (System Reset)

Request the tracker re-flesh all settings

15 (Inform Tracker send TX000 to Server)

Request the tracker and the server to perform the two ways synchronize communications (In order to let the tracker and the server to do the two way settings and information exchanges, they must stay in connection status. But, under some circumstances, the tracker is not connected to the server, such as under GPS off mode (sleeping mode) although the GSM is active but the tracker do not stay connect with the server. With this command, the tracker will immediately take the server command and react. If not, the tracker will also proactively connect to the server within 3 minutes)

16 (Set GEO Fencing Activate)

Activate GeoFencing alarm send back , 1 → enable , 0 → disable The function only available for one time and will set up once again when need it.

17 (Set GPS Fix Alarm Activate)

Activate GPS in 3D fixed message send back , 1 → enable , 0 → disable The function only available for one time and will set up once again when need it.

18 (Set Moving Alarm Activate)

Activate motion sensor alarm send back , 1 → enable , 0 → disable The function only available for one time and will set up once again when need it.

19 (Set Over Speed Alarm Activate)

Activate over speed alarm send back , 1 → enable , 0 → disable The function only available for one time and will set up once again when need it.

The tracker will automatically send SMS message notice that the above settings and control executed successfully.

SMS GPS coordinates send back guides:

EXAMPLE:

\$T120808R1,GPS,A,N,24°59'58.26,E,121°29'21.65,000030.0,182.57,120808,074222*(012497123456789),<http://maps.google.com/maps?q=24.999518,121.489352>

Explanations:

| | | |
|---|---|--|
| \$ | SMS initial code | |
| T120808R1 | Firmware version | |
| GPS | SMS message type (please consult the below SMS message type list) | |
| A | GPS fixed status (A in 3D fixed ,V not fixed yet) | |
| N,24°59'58.26,E,121°29'21.65 | Coordinates (Format: degree" minute' second) | |
| 000030.0 | Speed (Sea mile) | |
| 182.57 | Direction angle (degree) | |
| 120808 | GPS time (UTC) | |
| 074222 | GPS time (UTC) | |
| 012497000242432 | Tracker imei# | |
| http://maps.google.com/maps?q=24.999518,121.489352 | The hyperlink URL to the map Click the link to see the map | |

SMS message type:

| | |
|--------|---|
| GPS | Upon request with command 10, the tracker will keep on sending (SMS interval) |
| the | GPS coordinates back via SMS |
| BUR | Burglar Alarm activated |
| BATLOW | Battery power low (less then 3.6V) alarm |
| POWCUT | Tracker external power cut off alarm |
| SOS | The SOS button press |
| GPS_OK | GPS 3Dfixed report |
| GEO | Geo Fencing activated |
| VIA | Vibration Alarm activated |
| OSA | Over Speed Alarm activated |

* Update new firmware

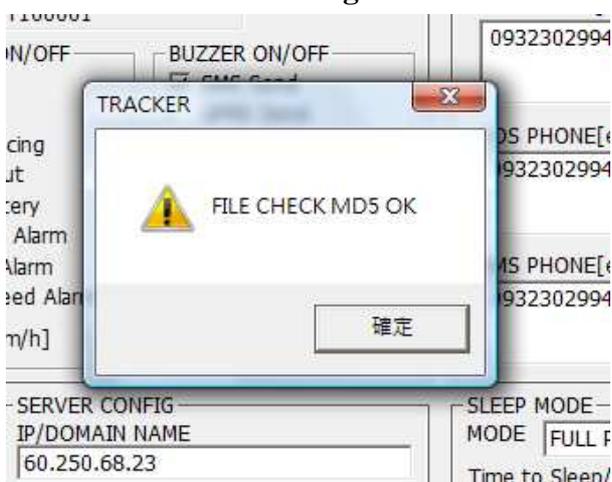
1. Decompress the files.
2. Run the TRACKER program

| 名稱 | 大小 | 類型 |
|--------------|----------|--------|
| Smpl_HID | 75 KB | BIN 檔案 |
| Smpl_HID.md5 | 1 KB | MD5 檔案 |
| TRACKER | 1,880 KB | 應用程式 |

3. Plug the tracker to the computer USB port
4. Press the GET PARAMETER and see the current settings
5. Press the UPDATE
6. Open the firmware (2 files)

The screenshot shows the HAICOM TRACKER software interface. At the top, there are buttons for 'GET PARAMETER', 'SET PARAMETER', 'GPS LOG', 'GPS ERASE', and a 'PASS' field with '0000'. The main area is divided into several configuration sections: 'SYSTEM CONFIG' (IMEI, VERSION, SMS/GPRS intervals, Geofence, Alarm, ACT, INT), 'PHONE CONFIG' (SCU, SOS, SMS phone numbers), 'GSM/GPRS CONFIG' (APN, USER, PASS), 'SERVER CONFIG' (IP/DOMAIN NAME, TCP/UDP/CONFIG PORTS), and 'SLEEP MODE' (MODE, Time to Sleep, Time to wakeup). The 'FIRMWARE UPDATE' section at the bottom right contains an 'UPDATE' button, which is circled in red.

7. Show the below message and click OK



8. The firmware start loading

TRACKER

GET PARAMETER SET PARAMETER GPS LOG PASS

SYSTEM CONFIG

IMEI: 353451040013565 VERSION: T100001

SMS interval[s]: 3600 GPRS interval[s]: 30 LOG interval[s]: 0 Geofence[m]: 2000 Alarm Reset[s]: 5 Ringing of Call [Times]: 5

Send SMS ON/OFF: Security, SOS, GEO Fencing, Power Cut, Low Battery, Vibration Alarm, GPS Fix Alarm, Over Speed Alarm

BUZZER ON/OFF: SMS Send, GPRS Send, GEO Fencing, USB SET, WEB SET, SMS SET, Key Button Press (SOS/GOE/ALARM)

PHONE CONFIG

SCU PHONE[ex:****,****,]: 0932302994,

SOS PHONE[ex:****,****,]: 0932302994,

SMS PHONE[ex:****,****,]: 0932302994,

GSM/GPRS CONFIG

APN: fleet USER: PASS:

SERVER CONFIG

IP/DOMAIN NAME: 60.250.68.23 TCP PORT 9101 UDP PORT 9120 Reply!! CONFIG PORT: 1943

SLEEP MODE

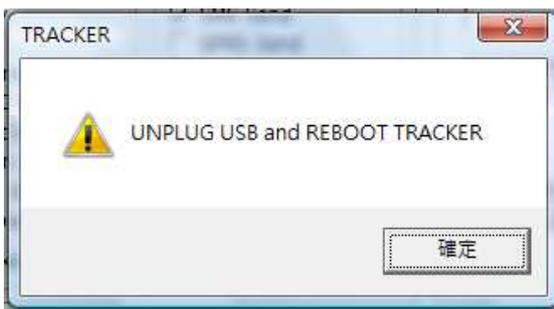
MODE: FULL POWER Hour: 0 Min.: 0 Sec.: 0

Time to Sleep/Wake Up

FIRMWARE UPDATE

UPDATE [Progress Bar]

9. The below message shown and press OK



1. Initial registration from the GPRS web tracking platform:

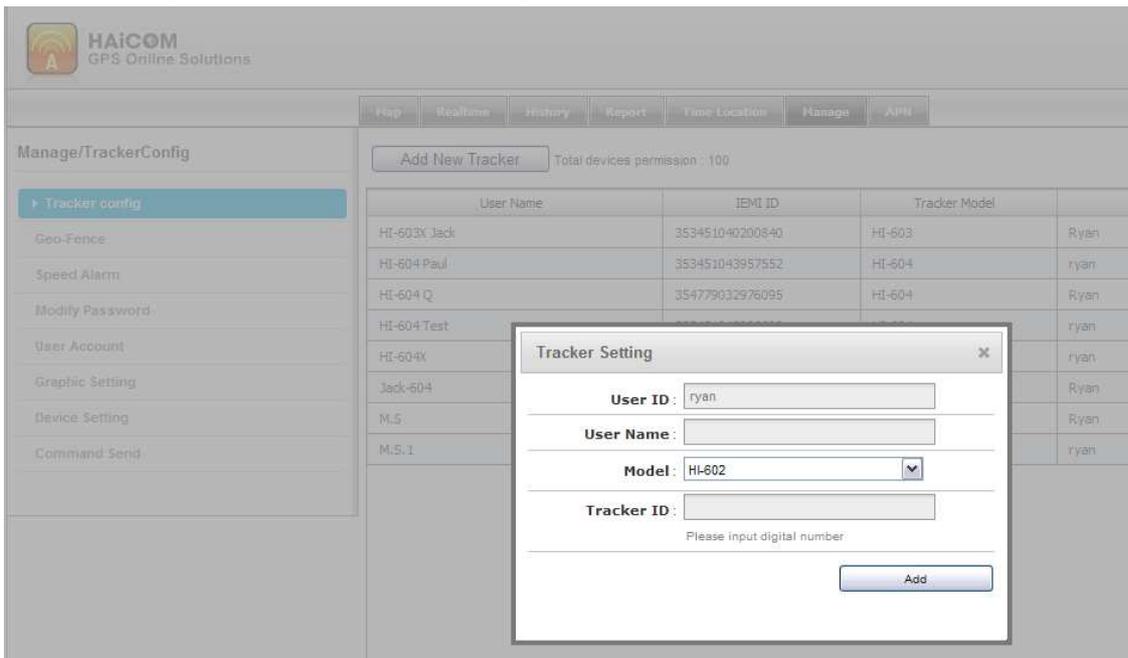
<http://www.tracking.haicom.com.tw:8090/>

2. New user; please register before login.

3. The tracker idea # is shown on the bottom of the sticker:



4. After login, select the “ Manage “ for Add New Tracker

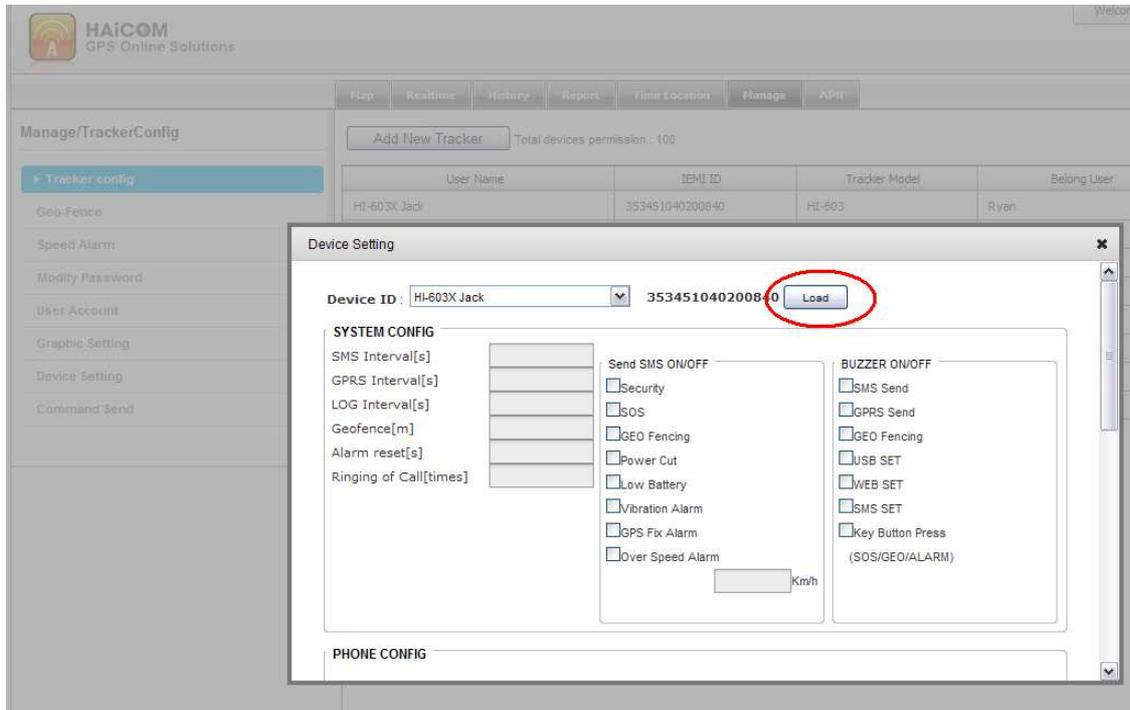


The screenshot shows the HAiCOM GPS Online Solutions web interface. The 'Manage' tab is selected, and the 'Add New Tracker' button is visible. A table lists existing trackers with columns for User Name, IMEI ID, Tracker Model, and User. A 'Tracker Setting' dialog box is open, showing fields for User ID (ryan), User Name, Model (HI-602), and Tracker ID. An 'Add' button is at the bottom of the dialog.

| User Name | IMEI ID | Tracker Model | User |
|--------------|-----------------|---------------|------|
| HI-603X Jack | 353451040200840 | HI-603 | Ryan |
| HI-604 Paul | 353451043957552 | HI-604 | ryan |
| HI-604 Q | 354779032976095 | HI-604 | Ryan |
| HI-604 Test | | | ryan |
| HI-604X | | | ryan |
| Jack-604 | | | Ryan |
| M.S | | | Ryan |
| M.S.1 | | | ryan |

*** Program tracker from Haicom GPRS web tracking web site**

- 1. Make sure the tracker connected to the GSM network and start sending back the data**
- 2. On the Manage/Device Settings section, select the tracker and press Load**



- 3. Change the prefer settings**

4. Press Setup and will show: Device information update successfully

The screenshot displays the HAICOM GPS Online Solutions web interface. The main menu includes options like Flag, Realtime, History, Report, Time Location, Manage, and APN. A table lists trackers with columns for User Name, IEMI ID, Tracker Model, and Belong User. A 'Device Setting' dialog box is open, containing sections for GSM/GPRS CONFIG, SERVER CONFIG, and SLEEP MODE. The 'Setup' button at the bottom right of the dialog is circled in red.

| User Name | IEMI ID | Tracker Model | Belong User |
|--------------|-----------------|---------------|-------------|
| HI-603K Jack | 353451040200840 | HI-603 | Ryan |

Device Setting

10 [] 10 [] 10 []

GSM/GPRS CONFIG

APN []

USER []

PASS []

SERVER CONFIG

IP/Domain Name []

TCP PORT []

UDP PORT [] Reply!

CONFIG PORT []

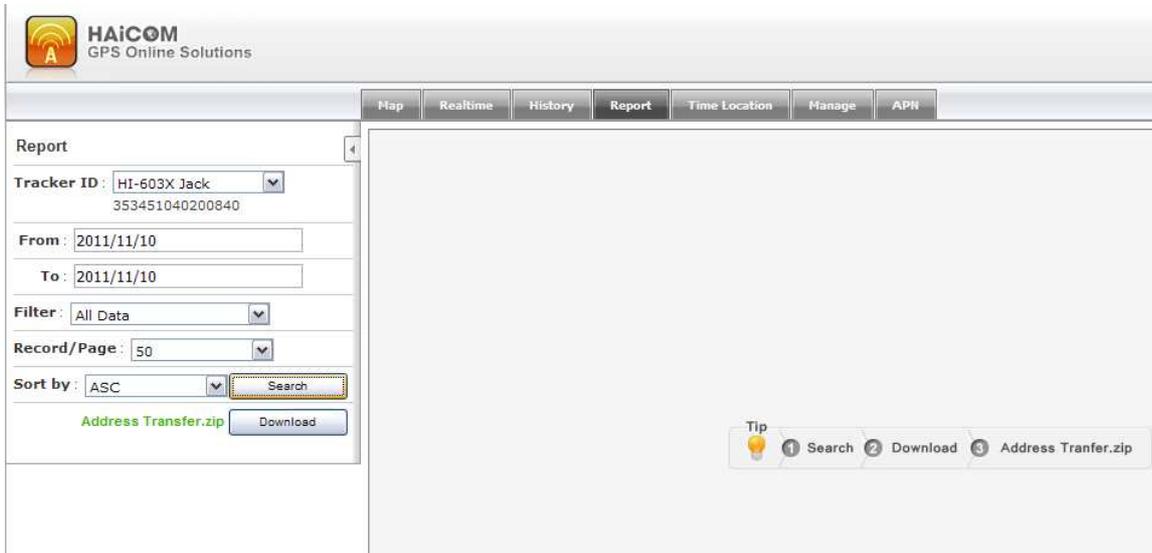
SLEEP MODE

MODE FULL POWER [v]

Time to Sleep/Wake Up [] (hh): [] (mm): [] (ss)

Setup

How to generate the detail report print out with address

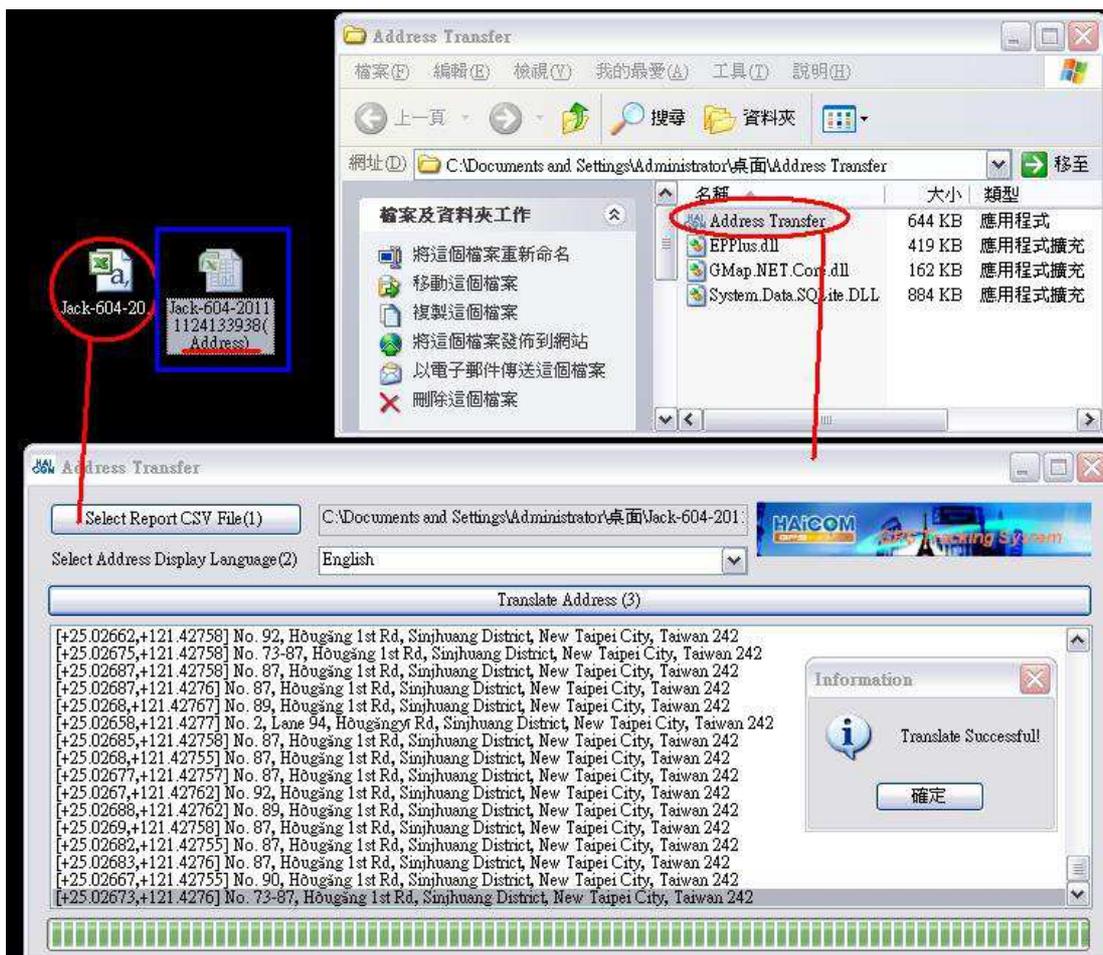


The screenshot shows the HAiCOM GPS Online Solutions web interface. The top navigation bar includes tabs for Map, Realtime, History, Report, Time Location, Manage, and APN. The 'Report' tab is active. On the left side, there is a 'Report' section with the following fields:

- Tracker ID: HI-603X Jack (dropdown menu) with the ID 353451040200840 below it.
- From: 2011/11/10 (text input)
- To: 2011/11/10 (text input)
- Filter: All Data (dropdown menu)
- Record/Page: 50 (dropdown menu)
- Sort by: ASC (dropdown menu) with a 'Search' button next to it.

Below these fields, there is a green link 'Address Transfer.zip' and a 'Download' button. On the right side of the interface, there is a 'Tip' box with a lightbulb icon and a numbered list: 1 Search, 2 Download, 3 Address Tranfer.zip.

1. Select the preferred from and to date and click “Search “
2. Click “Download “ and the csv file will be saved as Excel file
3. Click “Address Transfer.zip “ for the transfer program



1. Click “Address Transfer program icon to run the program “
2. Select the csv Excel file
3. Click “Transfer Address (3) “
4. After the translate program running, the “Translate successful ! “ message will appeared. In the mean time, there will extra Excel file with (Address) saved on your desktop. Open the file, you will see the retail reports, with Date/time/long./lat./detail address data like below example shown.

The example of the detail report printout:

| | A | B | C | D | E | F | G | H | I | J | K |
|----|-------|------------|----------|--|-----------|----------|---------|--------|------------|-------------|---------|
| 1 | Index | DATE | TIME | ADDRESS | SPEED | DISTANCE | GPS FIX | ORIENT | LATITUD | LONGITUD | COMMENT |
| 2 | 1 | 2011/10/27 | 00:00:21 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0.2 km/hr | 0 km | OK | 96.4 | N 24.99952 | E 121.48935 | |
| 3 | 2 | 2011/10/27 | 00:00:51 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0 km | OK | 40.2 | N 24.99952 | E 121.48935 | |
| 4 | 3 | 2011/10/27 | 00:01:21 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0 km | OK | 90.9 | N 24.99952 | E 121.48935 | |
| 5 | 4 | 2011/10/27 | 00:01:51 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0 km | OK | 171 | N 24.99952 | E 121.48935 | |
| 6 | 5 | 2011/10/27 | 00:02:21 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0 km | OK | 44.8 | N 24.99952 | E 121.48935 | |
| 7 | 6 | 2011/10/27 | 00:02:51 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0 km | OK | 60.8 | N 24.99952 | E 121.48935 | |
| 8 | 7 | 2011/10/27 | 00:03:21 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0 km | OK | 177.7 | N 24.99952 | E 121.48935 | |
| 9 | 8 | 2011/10/27 | 00:03:51 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0 km | OK | 31.2 | N 24.99952 | E 121.48935 | |
| 10 | 9 | 2011/10/27 | 00:04:21 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0 km | OK | 339 | N 24.99952 | E 121.48935 | |
| 11 | 10 | 2011/10/27 | 00:04:51 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0 km | OK | 46.3 | N 24.99952 | E 121.48935 | |
| 12 | 11 | 2011/10/27 | 00:05:21 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0 km | OK | 342.5 | N 24.99952 | E 121.48935 | |
| 13 | 12 | 2011/10/27 | 00:05:51 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0.2 km/hr | 0 km | OK | 44.8 | N 24.99952 | E 121.48935 | |
| 14 | 13 | 2011/10/27 | 00:06:21 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0 km | OK | 214.5 | N 24.99952 | E 121.48935 | |
| 15 | 14 | 2011/10/27 | 00:06:51 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0 km | OK | 95.9 | N 24.99952 | E 121.48935 | |
| 16 | 15 | 2011/10/27 | 00:07:21 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0 km | OK | 36.3 | N 24.99952 | E 121.48935 | |
| 17 | 16 | 2011/10/27 | 00:07:51 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0 km | OK | 71.1 | N 24.99952 | E 121.48935 | |
| 18 | 17 | 2011/10/27 | 00:08:21 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0.2 km/hr | 0 km | OK | 67.4 | N 24.99952 | E 121.48935 | |
| 19 | 18 | 2011/10/27 | 00:08:51 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0 km | OK | 166.3 | N 24.99952 | E 121.48935 | |
| 20 | 19 | 2011/10/27 | 00:09:21 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0.2 km/hr | 0.002 km | OK | 83.7 | N 24.99952 | E 121.48937 | |
| 21 | 20 | 2011/10/27 | 00:09:51 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0.002 km | OK | 7.7 | N 24.99952 | E 121.48937 | |
| 22 | 21 | 2011/10/27 | 00:10:21 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0.002 km | OK | 100.6 | N 24.99952 | E 121.48937 | |
| 23 | 22 | 2011/10/27 | 00:10:51 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0.002 km | OK | 59.2 | N 24.99952 | E 121.48937 | |
| 24 | 23 | 2011/10/27 | 00:11:21 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0.004 km | OK | 102.6 | N 24.99952 | E 121.48935 | |
| 25 | 24 | 2011/10/27 | 00:11:51 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0.006 km | OK | 66.5 | N 24.99952 | E 121.48937 | |
| 26 | 25 | 2011/10/27 | 00:12:21 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0.006 km | OK | 127.5 | N 24.99952 | E 121.48937 | |
| 27 | 26 | 2011/10/27 | 00:12:51 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0.008 km | OK | 42.4 | N 24.99952 | E 121.48935 | |
| 28 | 27 | 2011/10/27 | 00:13:21 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0.008 km | OK | 95.9 | N 24.99952 | E 121.48935 | |
| 29 | 28 | 2011/10/27 | 00:13:51 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0.01 km | OK | 49.3 | N 24.99952 | E 121.48937 | |
| 30 | 29 | 2011/10/27 | 00:14:21 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0 km/hr | 0.01 km | OK | 42.9 | N 24.99952 | E 121.48937 | |
| 31 | 30 | 2011/10/27 | 00:14:51 | No. 3, Lane 125, Jiànbā Rd, Zhonghe District | 0.2 km/hr | 0.01 km | OK | 63.6 | N 24.99952 | E 121.48937 | |

How to calculate the historical total travel distance:

1. Click the preferred start point
2. Click the start point icon

History

Tracker ID: Jack-604
354779034842998

From: 2011/11/14 H: 00 M: 00
To: 2011/11/14 H: 23 M: 59

Sort by: ASC Search Play Stop

Speed: 300 msec

Calculate Distance

Get Start Point 1

Get End Point

Distance

Export your data

Historical tracking data

Page: << 1/7 >>

| | | | |
|---------------------|-----------|------------|------------|
| 2011/11/14 09:50:11 | +26.03788 | +121.51717 | 0.19 km/hr |
| 2011/11/14 09:50:43 | +26.03761 | +121.51721 | 0 km/hr |
| 2011/11/14 09:51:16 | +26.03763 | +121.51722 | 0.37 km/hr |

3. Click the preferred end point

4. Click the end point icon

Speed: - 300 msec +

▼ Calculate Distance

Get Start Point 1

Get End Point 102

Distance

Export your data

Historical tracking data

Page: << < 6/7 > >>

2011/11/14 12:59:56 , +25.03405 , +121.43263 , 25.74 km/hr,
 2011/11/14 13:00:26 , ~~25.03338~~ , ~~+121.43438~~ , 10.93 km/hr,
 2011/11/14 13:00:59 , +25.03347 , +121.43410 , 0.19 km/hr,

5. Click the Distance icon to get the total traveled distance

▼ Calculate Distance

Get Start Point 1

Get End Point 102

Distance 12.893 Km

Export your data

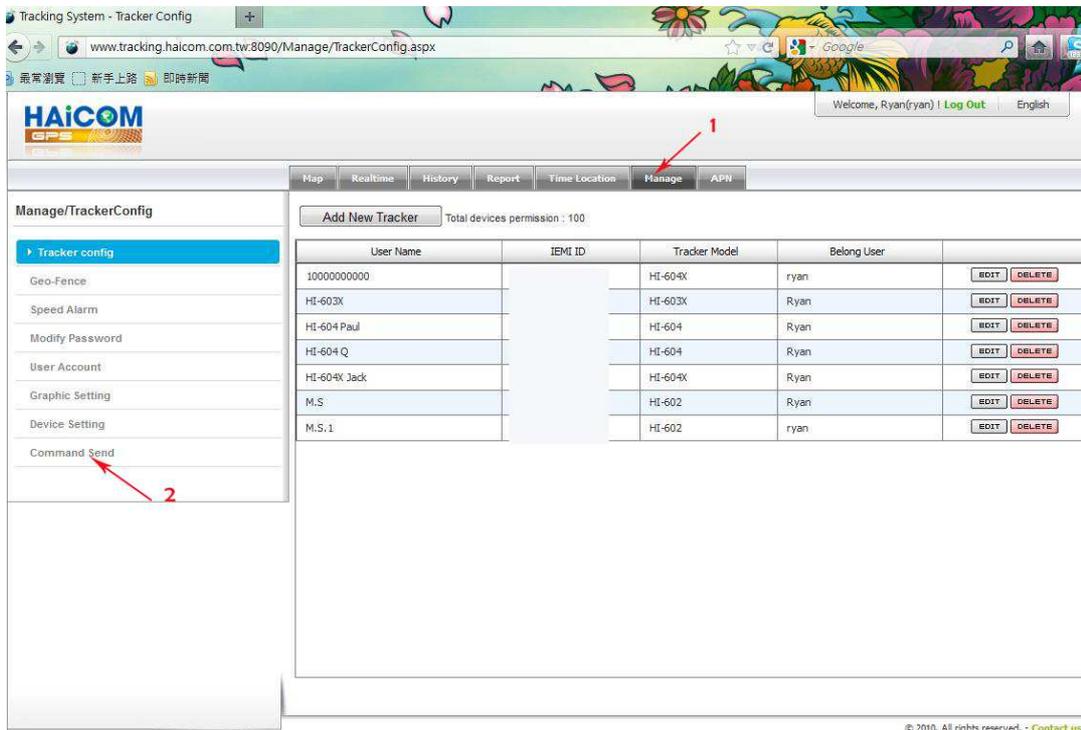
Historical tracking data

Page: << < 6/7 > >>

2011/11/14 12:59:56 , +25.03405 , +121.43363 , 25.74 km/hr,
 2011/11/14 13:00:26 , +25.03338 , +121.43438 , 10.93 km/hr,
 2011/11/14 13:00:59 , +25.03347 , +121.43410 , 0.19 km/hr,

How to send command from the GPRS tracking platform:

1. Click Manage -> Command Send:

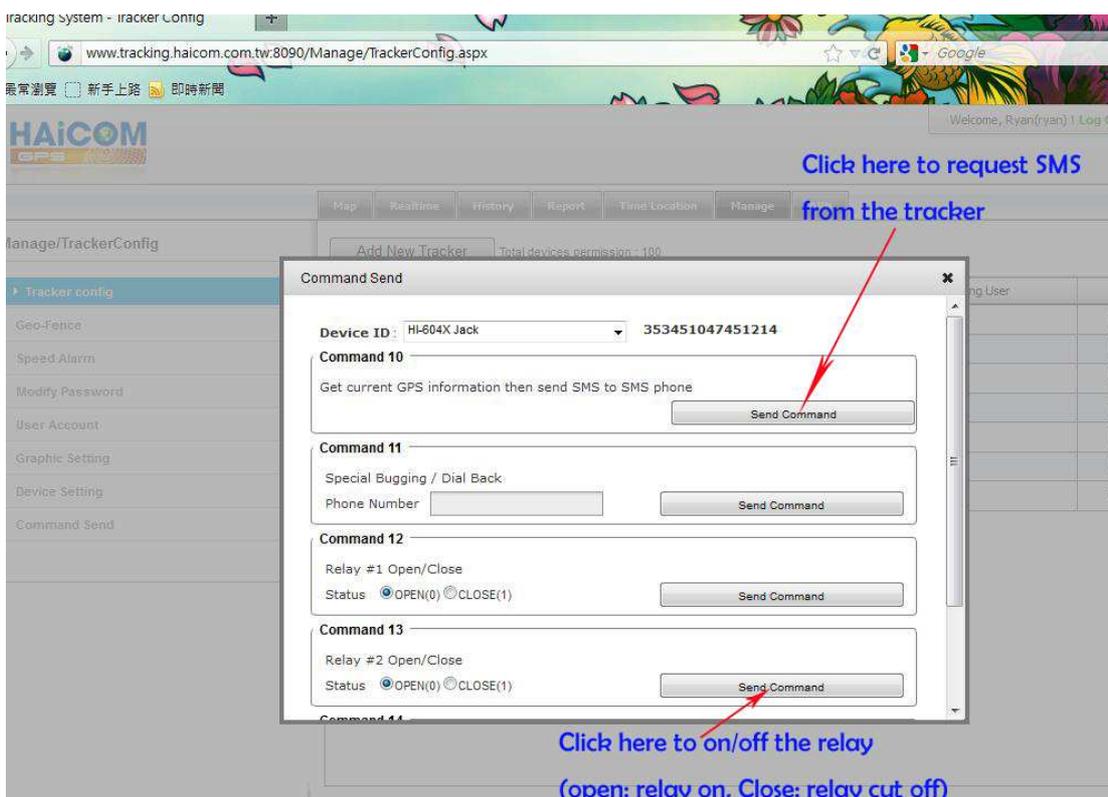


2. Click to send commands from the platform:

Status

Open (0) means the relay is stay connection.

To cut the relay (cut off the ignition, oil pump, power, etc.), select Close (1)



3. Click the Select to see the command sending status:

Command Send

Status OPEN(0) CLOSE(1)

Command setup successful

Command 13

Relay #2 Open/Close

Status OPEN(0) CLOSE(1)

Command setup successful

Command 14

Tracker Reset

Tracker Reset

Command Queue List ALL Command

| User | Date Time | TX ID | TX | Send Flag | Send Time |
|------|---------------------|-------|-------------------------------------|-----------|---------------------|
| ryal | 2012-01-17 15:39:18 | TX200 | \$GPRS353451040200840,TX201,#10,* | YES | 2012-01-17 15:39:46 |
| ryal | 2012-01-17 10:01:38 | TX200 | \$GPRS353451040200840,TX201,#13,0,* | YES | 2012-01-17 10:02:39 |
| ryal | 2012-01-17 10:01:37 | TX200 | \$GPRS353451040200840,TX201,#12,0,* | YES | 2012-01-17 10:02:18 |
| | 2012-01-17 | | | | 2012-01-17 |

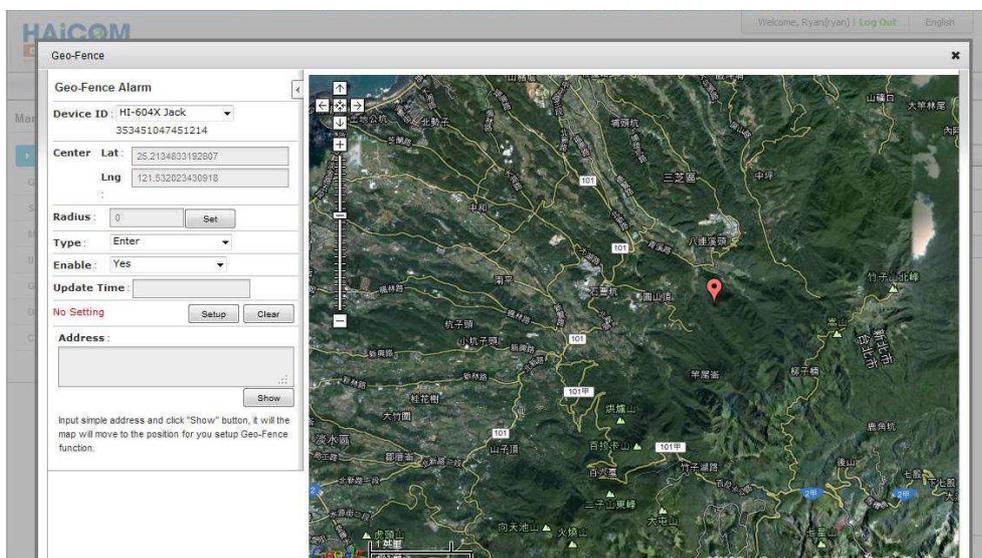
YES: the sending successfully
NO: the sending still pending

Set up GeoFencing function steps:

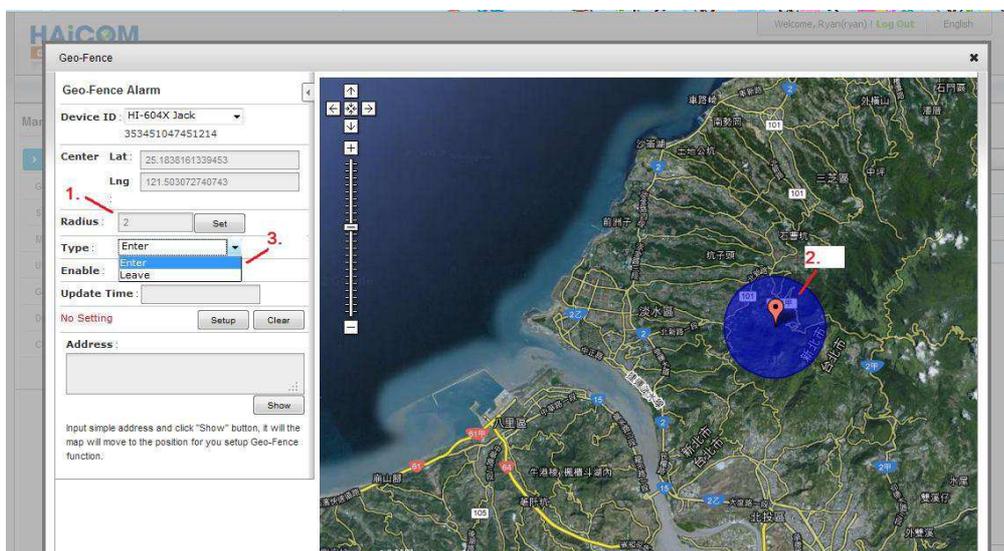
Basically, there are two ways to set up the geo fence function and both ways are independent to each other. For instance, if you set up the geo fence alarm on the map radius, the trigger will only report to the tracking site. If you set up the geo fence function from the Manage -> Device Setting, from the SMS or from the computer set up program, it will only report the alarm to the phone (and not to the tracking site)

1. Set up geo fence radius on the tracking site:

1. Move the mouse cursor to the preferred geo fencing point and double click it.
The red bubble will appeared:

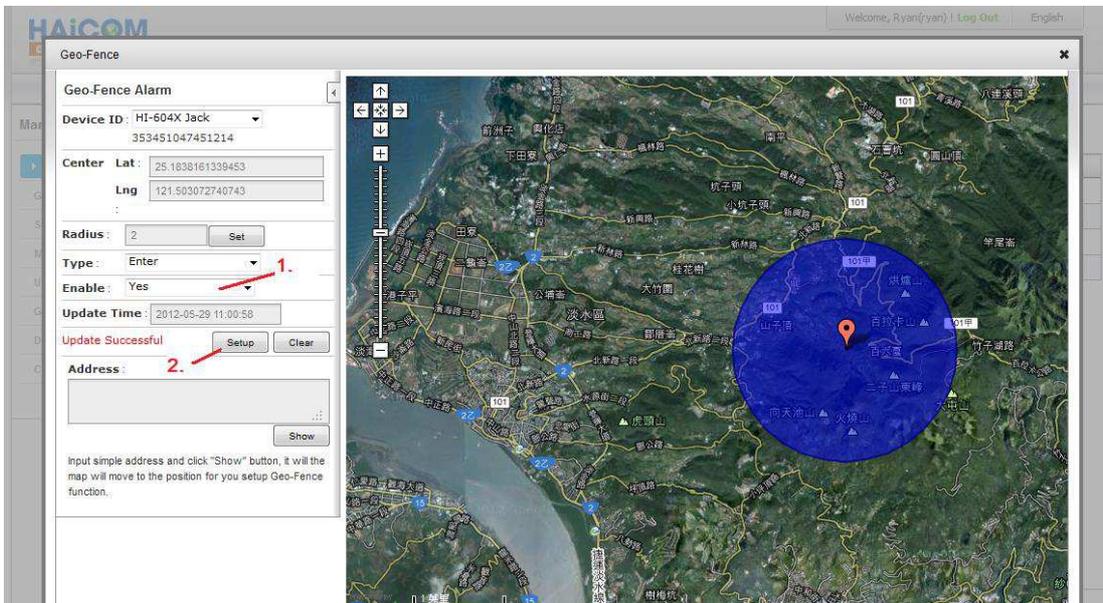


2. Key in the preferred geo fencing radius range (in km) and click Set.
After the clicking, the blue circle will appeared on the map.
User can select to get the geo fencing alarm when the tracker enter or leave the radius range.



3. Make sure click “ Yes “ on the Enable section so that the geo fencing function will work.

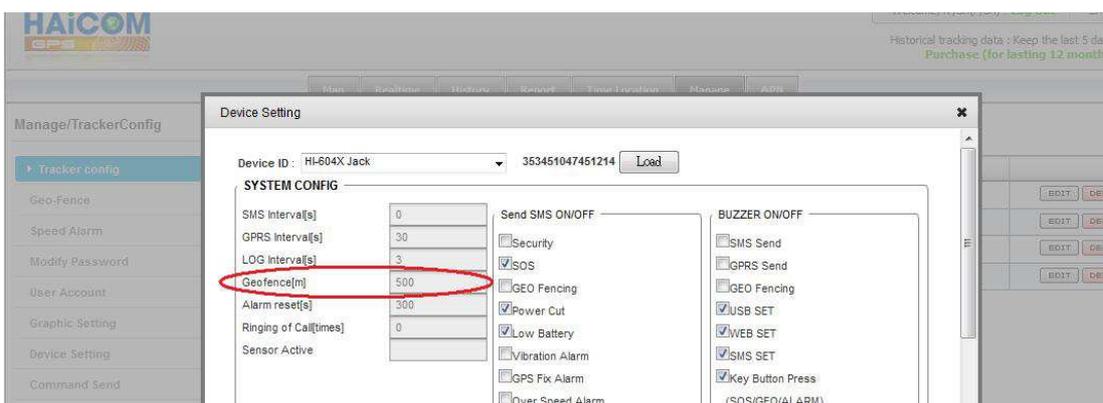
Then, click Setup to complete the procedures. In the mean time, the Update Time will show the time that you set up and show Update Successful on the side:



2. Set up geo fence from the Device Settings:

User can use different ways to set up the geo fence functions:

a. On the GPRS tracking site, go Manage and Device Setting and press “load”:



Set up the geo fence range, say 500 meters radius, the tracker will report to the preset phones while the feature triggered.

b. Connect the tracker to your computer and set up geo fence from the set up program:



c. The geo fence will triggered only once and user will set up again from the SMS command to activate the alarm once again:

| | | | |
|----|------------|------------------------------------|------------------------------------|
| 14 | #0000,14 | | System Reset |
| 15 | #0000,15 | | Inform Tracker call back to server |
| 16 | #0000,16,1 | (1 is activated, 0 is deactivated) | <u>Set GEO Fencing activate</u> |
| 17 | #0000,17,1 | (1 is activated, 0 is deactivated) | Set GPS FIX alarm activate |
| 18 | #0000,18,1 | (1 is activated, 0 is deactivated) | Set Sensor (Moving) Alarm |