



# HI-605X GPS/GPRS TRACKER



Easy Manual

**HI-605X is a multi-functional and cost-efficient communication platform ideal for all AVL applications. It integrates most recent high sensitivity GPS chipset and quad-band (850/900/1800/1900) GSM communication module with powerful microcontroller into a compact/ lightweight size.**

**HI-605X is secured in a solid enclosure for simple installation without sweat and hassle. Nevertheless, not only it provides user with real time GPS location and accurate vehicle status all the time on server, but also it allows user to command vehicle remotely by one-click on computer. In a word, HI-605X accomplishes advanced implementation of convenient fleet management, enhanced vehicle safety, simultaneous emergency response, and merchandise/ package transportation, etc... Unlimited advantages are available with HI-605X extensive applications.**

**Quad band 850/900/1800/1900 MHz GSM system External SiRF Star III high performance GPS receiver External 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 reports on preferred interval and vehicle status monitoring.**

**Premium functions: Fast GPS Fixed/ Geo-Fencing/ Hands free Kit/**

**Anti-Theft/ Data Logger function - 250,000 records or more.**

**Low battery alarm and battery voltage status\*\***

**Optional SOS button.**

**Minimum GPRS sending interval 10 seconds and interval adjustable.**

**\*\* Only available with the version with build in battery**

## HI-605X Characteristics

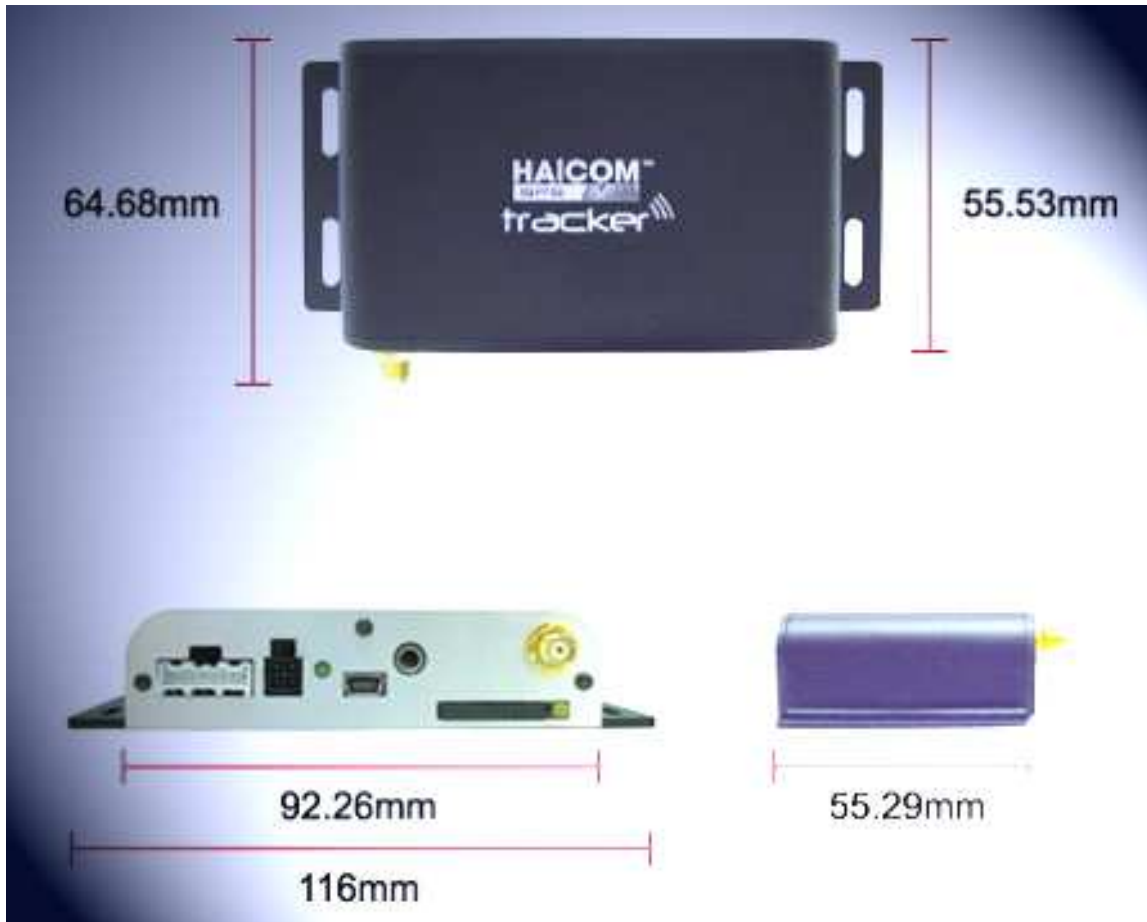
Items	Specifications
Power Supply	DC +9V – +28V
Backup Battery (Optional)	550mAh
Normal power consumption	85mA/h
Dimension	116mm x 55mm x 24mm
Operating temperature	-20°C to 55°C
Humidity	5% to 95% Non-condensing
Frequency	GSM 900/1800/1900Mhz
GPS Chipset	latest GPS SIRF-Star III chipset
GPS Sensitivity	-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

## MAIN UNIT OVERVIEW



- 1. I/O AND POWER IN**
- 2. TO GPS ANTENNA**
- 3. GSM NETWORK STATUS**
- 4. USB SETTING**
- 5. TO MICROPHONE**
- 6. TO GSM ANTENNA**
- 7. SIM CARD HOLDER**

## Dimensions



## LED INDICATOR



### ORANGE LIGHT

**NO LIGHT: NO POWER**

**STAY ON: POWERED, GSM NOT STARTED  
(OR IN SLEEPING MODE)**

**FAST BLINKING (EVERY ONE SECOND):**

**GSM ACTIVE BUT NOT IN NETWORK**

**SLOW BLINKING (EVERY 3 SECONDS):**

**GSM NETWORK CONNECTED**



### RED LIGHT

**STAY ON  
BLINKING**

**GPS NOT IN 3D FIXED  
GPS IN 3D FIXED**

### NOTED:

**THE TRACKER WILL ONLY START TO SEND THE VALID DATA WHEN THE GREEN LIGHT BLINKING (GSM CONNECTED) AND THE RED LIGHT BLINKING (GPS IN 3D FIXED)**



- PINOUT:**
- **GND**
  - **+12V ~ 24V**
  - **REMOTE RELAY**
  - **SOS SWITCH**
  - **GEOFENCING SWITCH**

# STANDARD PACKING:

1. HI-605X MAIN UNIT
2. VEHICLE CONTROL WIRES
3. MINIUSB SETTING CABLE
4. GPS RECEIVER
5. SIM CARD TRAY
6. TOOL CD



1



4



2



5



3



6



## Getting Started

**1. Push in the yellow part with a pen to release the SIM card holder.**



**2. Place the local SIM card on the holder.**

**(Make sure to disable the SIM card pin code requirement. Do this from your mobile phone.)**

**Close the tray. Note the tray does not quite sit flush with the unit when closed.**



**2. Connect the GSM antenna and GPS receiver to HI-605X**



## 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.

### 1. Connect the mini USB to the computer port.

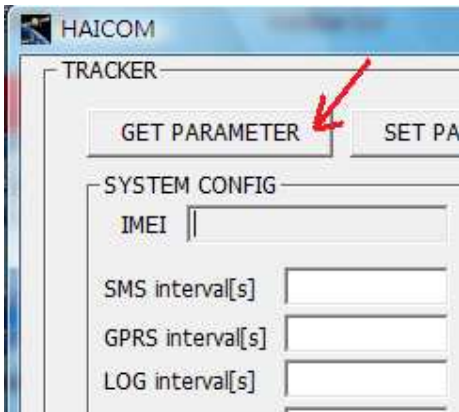
Connect the HI 605X to the USB cable. The HI-605X will initially show all lites illuminated.



### 2. Open the tracker set up program by double clicking on “tracker.exe”

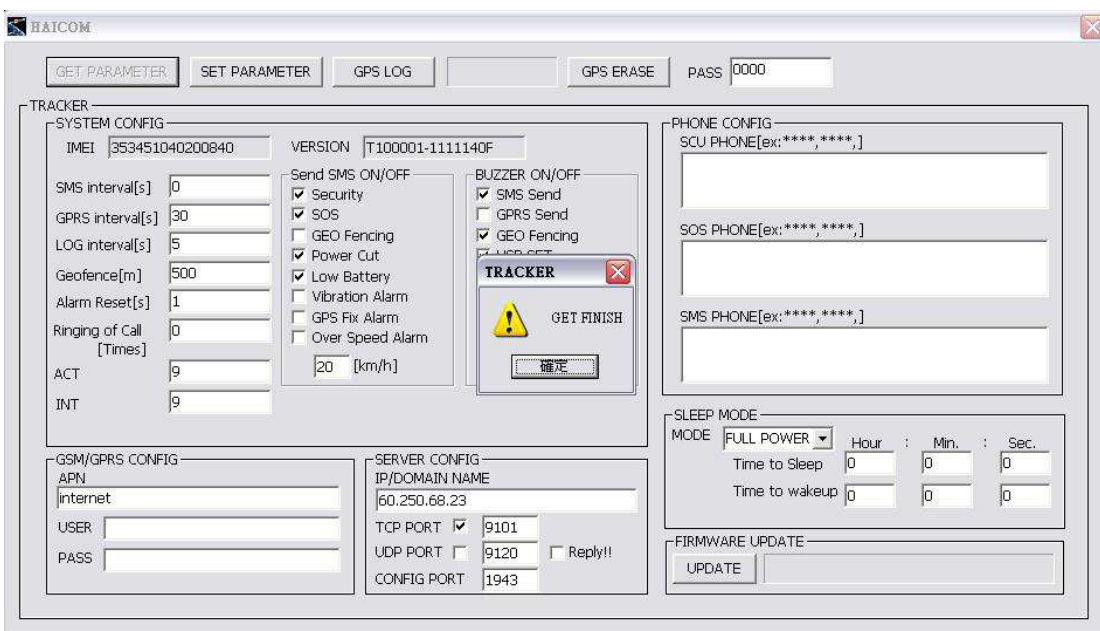


### 3. Click “Get Parameter”



4. A message will show “Get Finish” and all the trackers current set up will appear.

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:

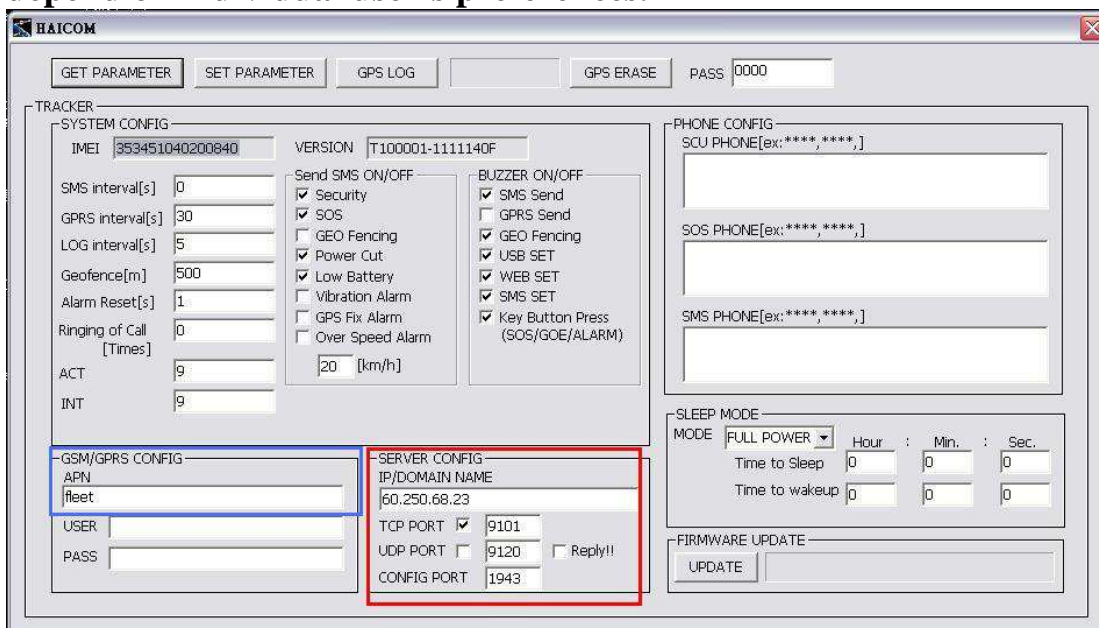
On factory defaults, the basic set up was done.

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.



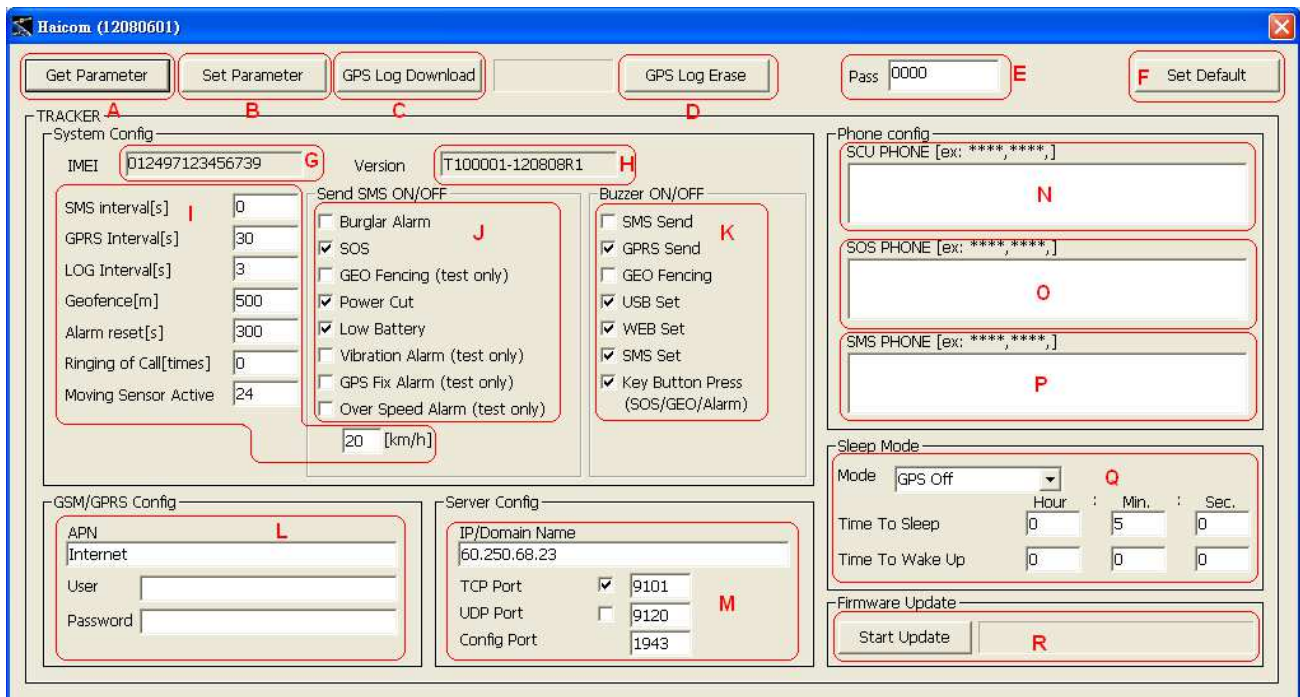
The screenshot shows the HAICOM software interface with the following configuration details:

- 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
  - Ringling of Call [Times]: 0
  - ACT: 9
  - INT: 9
  - 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)
- GSM/GPRS CONFIG (Blue box):**
  - APN: fleet
  - USER:
  - PASS:
- 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:\*\*\*\*,\*\*\*\*,]:
  - SOS PHONE[ex:\*\*\*\*,\*\*\*\*,]:
  - SMS PHONE[ex:\*\*\*\*,\*\*\*\*,]:
- 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:

## 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-theft 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 normal. The automatic sleep and wake up will be cycled continuously based on the settings. The mode is suitable for the condition that the user only needs to know the tracker's updated locations in some fixed time and let the tracker go to sleeping mode (switched off) to save power consumption. The 'Time To Sleep' set up is recommended to be 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.

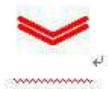
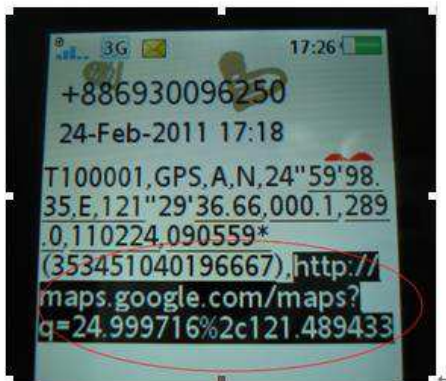
**R: Firmware update:** After the firmware is updated, delete the GPS log data in the tracker. It is recommended to make sure the tracker's internal memory is completely cleared.



## Terms Explanations

### System Config:

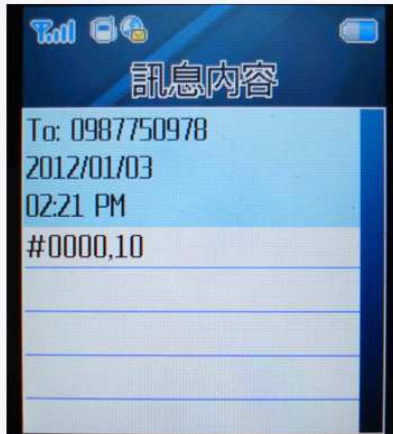
1. **IMEI: Tracker imei #**
2. **Version: Tracker firmware version**
3. **SMS intervals[s]: Interval of tracker send real time position with Google map hyperlink via SMS**



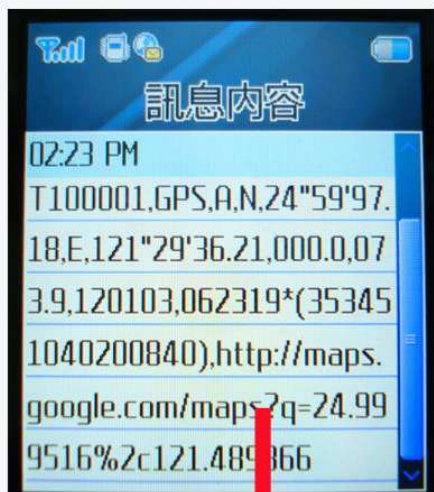
4. **GPRS interval[s]: Interval of tracker send real time position to the server via GPRS**
5. **LOG interval[s]: Interval of tracker data logging**
6. **Geofence [m]: Send warning when tracker out of the Geofencing range**
7. **Alarm Reset[s]: Time of all the security functions temporary disabled**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

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



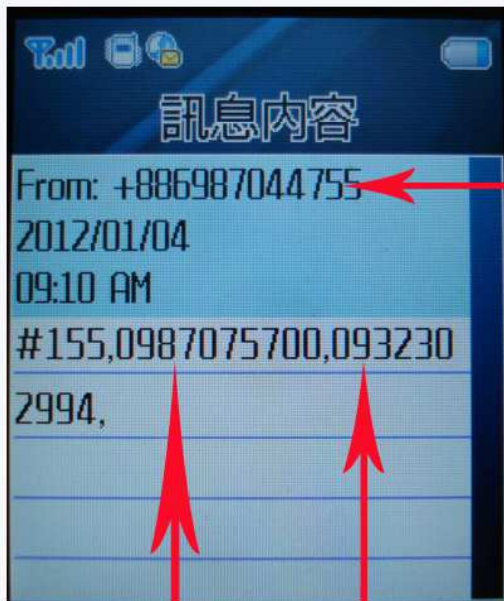
Longitude  
Latitude

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#
<a href="http://maps.google.com/maps?q=24.999518,121.489352">http://maps.google.com/maps?q=24.999518,121.489352</a>	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 sections: 'SYSTEM CONFIG' (IMEI, VERSION, SMS interval, GPRS interval, LOG interval, Geofence, Alarm Reset, Ringing of Call, ACT, INT), 'SERVER CONFIG' (APN, IP/DOMAIN NAME, TCP PORT, UDP PORT, CONFIG PORT), 'PHONE CONFIG' (SCU PHONE, SOS PHONE, SMS PHONE), 'SLEEP MODE' (MODE, Time to Sleep, Time to wakeup), and 'FIRMWARE UPDATE' (UPDATE button 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

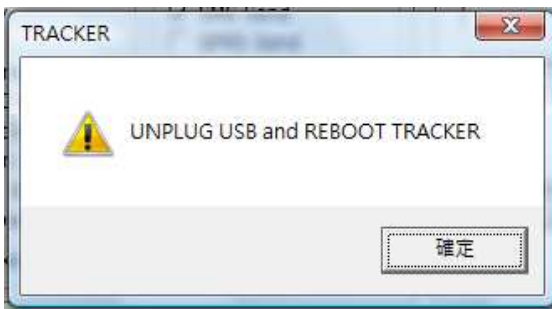
MODE: FULL POWER    Hour: 0    Min.: 0    Sec.: 0

Time to Sleep/Wake Up: 0 : 0 : 0

FIRMWARE UPDATE

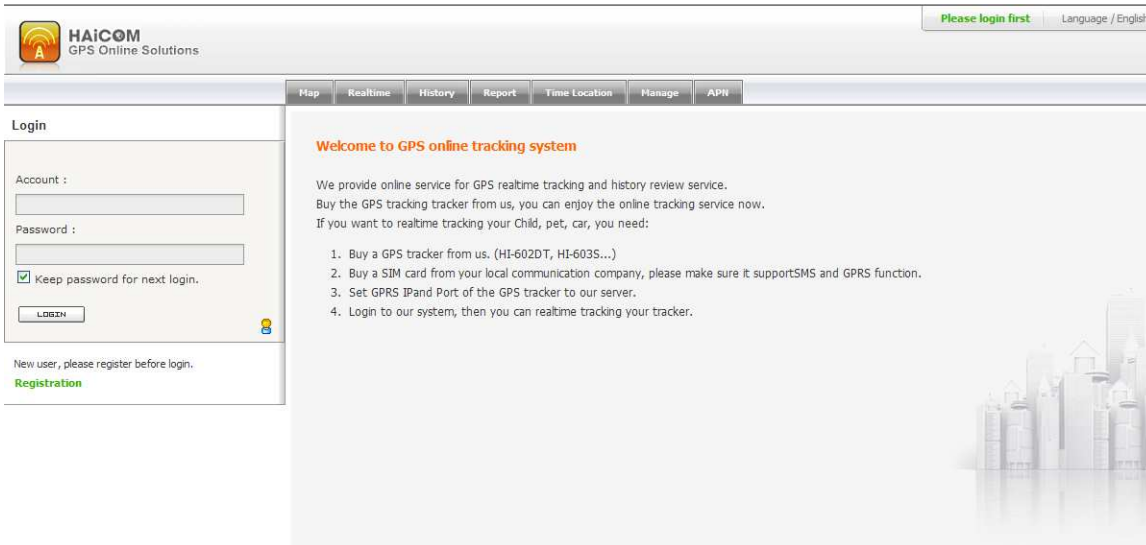
UPDATE    [Progress Bar]

## 9. The below message shown and press OK

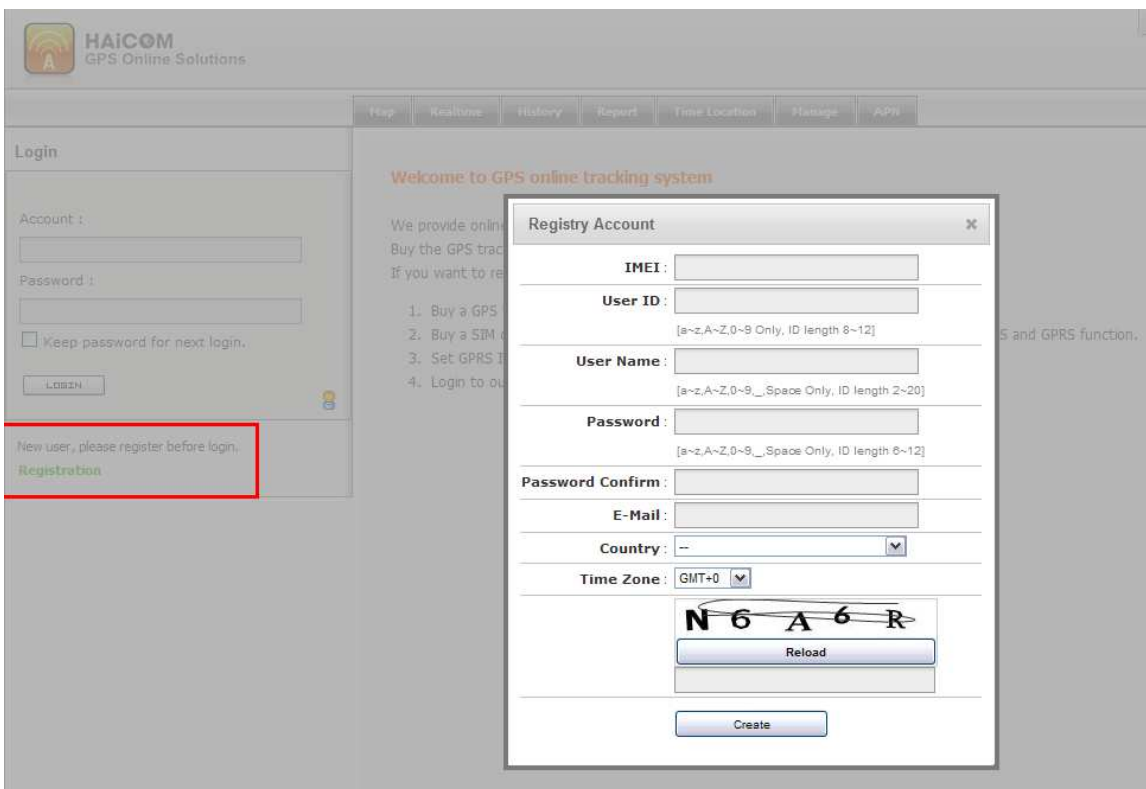


# 1. Initial registration from the GPRS web tracking platform:

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



## 2. New user; please register before login.



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



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

HAiCOM GPS Online Solutions

Map Realtime History Report Time Location Manage APN

Manage/TrackerConfig

Tracker config

Geo-Fence

Speed Alarm

Modify Password

User Account

Graphic Setting

Device Setting

Command Send

Add New Tracker Total devices permission : 100

User Name	IMEI ID	Tracker Model	
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.5			Ryan
M.5.1			ryan

Tracker Setting

User ID : ryan

User Name :

Model : HI-602

Tracker ID :

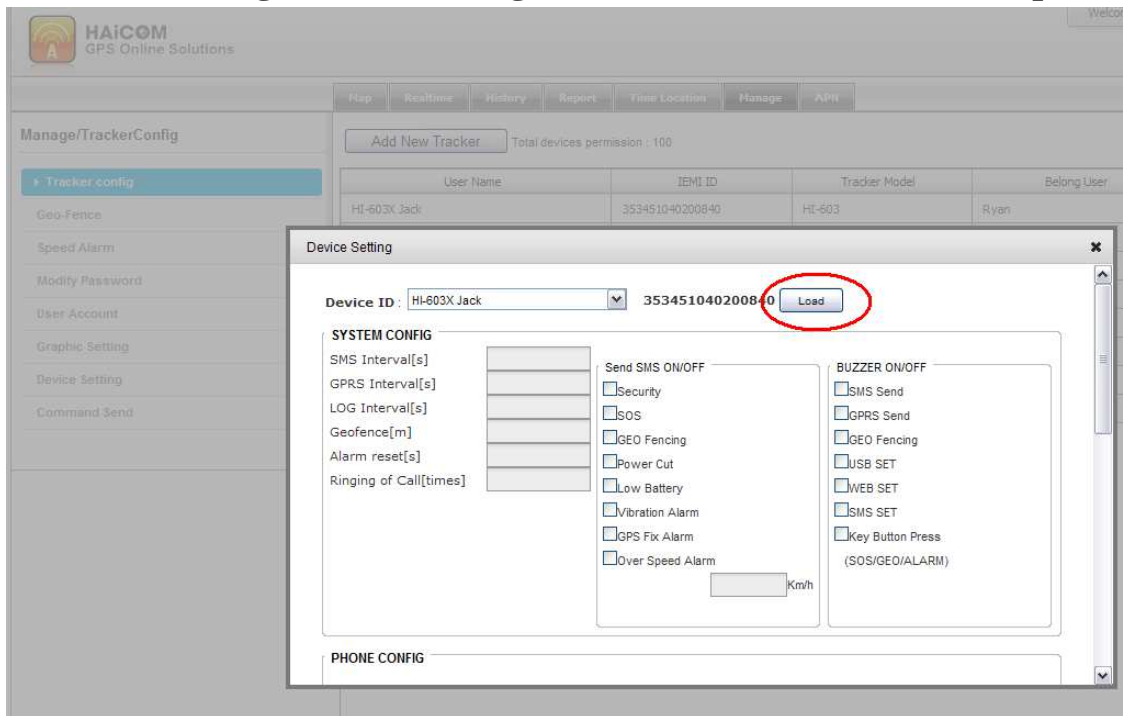
Please input digital number

Add

**\* 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. The 'Manage/TrackerConfig' section is active, showing a table of trackers. A 'Device Setting' dialog box is open, allowing configuration for a specific tracker. The dialog is divided into several sections: GSM/GPRS CONFIG, SERVER CONFIG, and SLEEP MODE. The 'Setup' button at the bottom right of the dialog is circled in red.

User Name	IMEI 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**

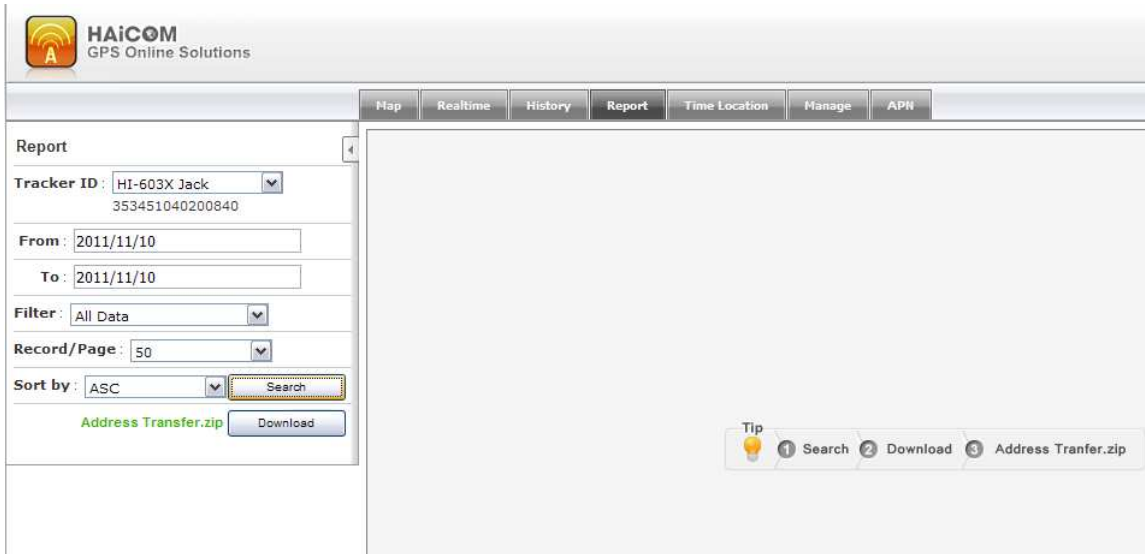
IP/Domain Name [ ]  
TCP PORT  [ ]  
UDP PORT  [ ]  Reply!  
CONFIG PORT [ ]

**SLEEP MODE**

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

Setup

## How to generate the detail report print out with address



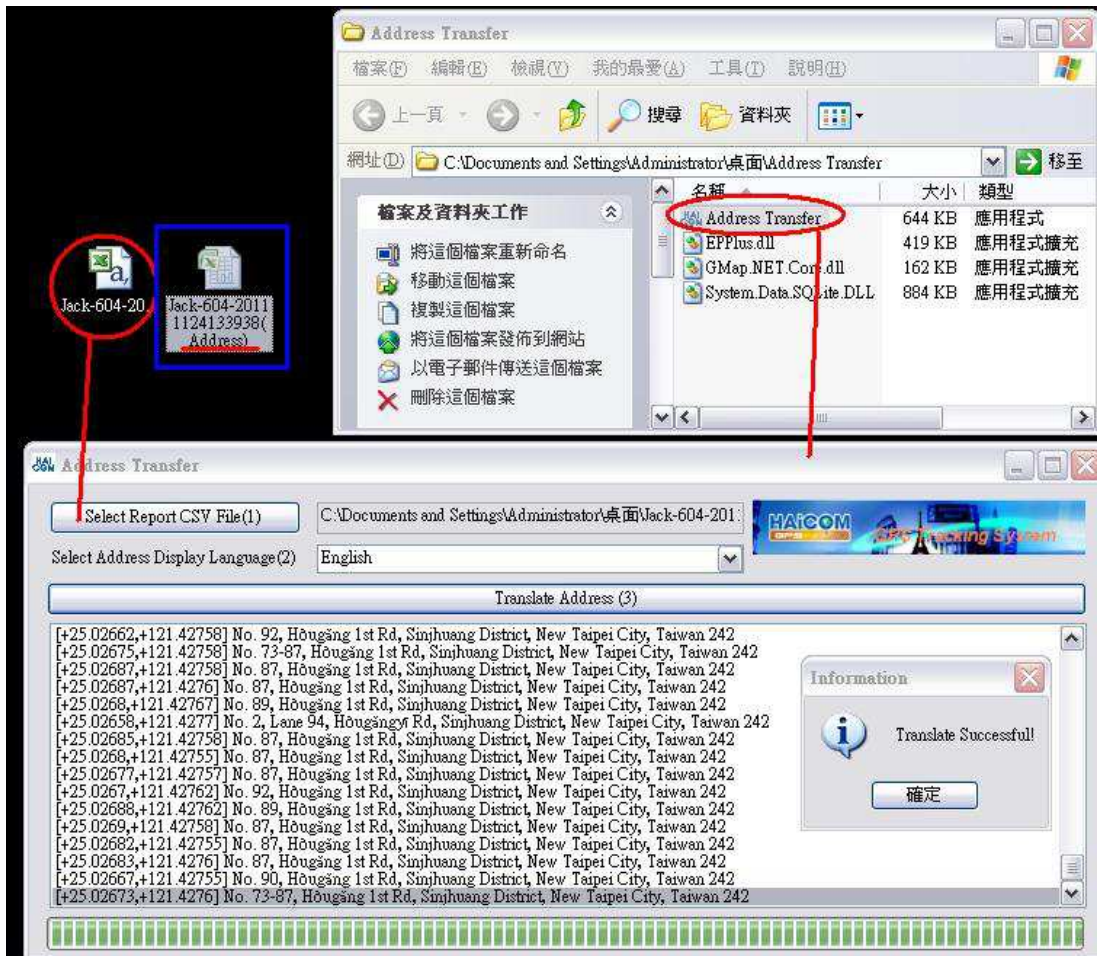
The screenshot shows the HAICOM GPS Online Solutions web interface. The top navigation bar includes tabs for Map, Realtime, History, Report, Time Location, Manage, and APN. The 'Report' tab is active. On the left, there is a 'Report' section with the following fields:

- Tracker ID: HI-603X Jack (353451040200840)
- From: 2011/11/10
- To: 2011/11/10
- Filter: All Data
- Record/Page: 50
- Sort by: ASC

Below these fields, there is a 'Search' button and a 'Download' button. A green link 'Address Transfer.zip' is visible. A 'Tip' box on the right contains the following steps: 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	2011/10/28	09:41:51	No. 35, Àiguó East Rd, Daan District, Taipei City, Taiwan	34.3 km/hr	0 km	OK	10.2	N 25.03173	E 121.5268	
3	2	2011/10/28	09:42:26	No. 27, Lane 31, Section 2, Jīnshān South Rd, Daan District, Taipei City, Taiwan	30.6 km/hr	0.205 km	OK	99.2	N 25.03277	E 121.52848	
4	3	2011/10/28	09:42:59	Lishuí St, Daan District, Taipei City, Taiwan 106	23.3 km/hr	0.302 km	OK	12	N 25.0334	E 121.52915	
5	4	2011/10/28	09:43:31	No. 200-226, Section 2, Xinyi Rd, Daan District, Taipei City, Taiwan	23.3 km/hr	0.545 km	OK	86	N 25.03353	E 121.53155	
6	5	2011/10/28	09:44:05	No. 200-226, Section 2, Xinyi Rd, Daan District, Taipei City, Taiwan	0.7 km/hr	0.547 km	OK	322	N 25.03352	E 121.53157	
7	6	2011/10/28	09:45:14	No. 250, Section 2, Xinyi Rd, Daan District, Taipei City, Taiwan	9.3 km/hr	0.599 km	OK	96.5	N 25.03357	E 121.53208	
8	7	2011/10/28	09:45:45	No. 5, Lane 2, Section 2, Xīnshēng South Rd, Daan District, Taipei City, Taiwan	35.2 km/hr	0.69 km	OK	165.4	N 25.03295	E 121.53267	
9	8	2011/10/28	09:46:15	No. 32, Section 2, Xīnshēng South Rd, Daan District, Taipei City, Taiwan	12.4 km/hr	0.9 km	OK	167.9	N 25.03115	E 121.53328	
10	9	2011/10/28	09:46:45	106 Taiwan Taipei City Daan District 金華國中	38.5 km/hr	1.088 km	OK	253.2	N 25.03013	E 121.5318	
11	10	2011/10/28	09:47:17	No. 217, Jīnhuá St, Daan District, Taipei City, Taiwan 106	14.5 km/hr	1.375 km	OK	285.4	N 25.02988	E 121.52897	
12	11	2011/10/28	09:47:50	No. 213, Jīnhuá St, Daan District, Taipei City, Taiwan 106	3.7 km/hr	1.402 km	OK	240.4	N 25.0299	E 121.5287	
13	12	2011/10/28	09:48:21	No. 211-223, Jīnhuá St, Daan District, Taipei City, Taiwan	0.7 km/hr	1.408 km	OK	233.2	N 25.02985	E 121.52873	
14	13	2011/10/28	09:48:54	No. 213, Jīnhuá St, Daan District, Taipei City, Taiwan 106	0.2 km/hr	1.411 km	OK	72.9	N 25.02987	E 121.52875	
15	14	2011/10/28	09:49:25	No. 213, Jīnhuá St, Daan District, Taipei City, Taiwan 106	0.9 km/hr	1.415 km	OK	94.1	N 25.0299	E 121.52877	
16	15	2011/10/28	09:49:57	No. 213, Jīnhuá St, Daan District, Taipei City, Taiwan 106	0.4 km/hr	1.424 km	OK	163.4	N 25.02998	E 121.5288	
17	16	2011/10/28	09:50:26	No. 213, Jīnhuá St, Daan District, Taipei City, Taiwan 106	0.4 km/hr	1.428 km	OK	41.7	N 25.03002	E 121.5288	
18	17	2011/10/28	09:50:56	No. 213, Jīnhuá St, Daan District, Taipei City, Taiwan 106	1.7 km/hr	1.433 km	OK	196	N 25.03005	E 121.52877	
19	18	2011/10/28	09:51:29	No. 213, Jīnhuá St, Daan District, Taipei City, Taiwan 106	0.6 km/hr	1.441 km	OK	213.2	N 25.02998	E 121.52877	
20	19	2011/10/28	09:52:02	No. 213, Jīnhuá St, Daan District, Taipei City, Taiwan 106	0.4 km/hr	1.448 km	OK	218.2	N 25.02992	E 121.52875	
21	20	2011/10/28	09:52:18	No. 211-223, Jīnhuá St, Daan District, Taipei City, Taiwan	0.2 km/hr	1.454 km	No	219.1	N 25.02987	E 121.52872	
22	21	2011/10/28	10:00:49	No. 179-181, Jīnhuá St, Daan District, Taipei City, Taiwan	14.5 km/hr	1.617 km	OK	282.4	N 25.0301	E 121.52712	
23	22	2011/10/28	10:01:27	No. 10, Lane 132, Section 2, Jīnshān South Rd, Daan District, Taipei City, Taiwan	34.6 km/hr	1.706 km	OK	199.8	N 25.02968	E 121.52637	
24	23	2011/10/28	10:02:02	No. 64, Cháozhōu St, Daan District, Taipei City, Taiwan 106	35.4 km/hr	1.96 km	OK	284.3	N 25.02923	E 121.5239	
25	24	2011/10/28	10:02:34	No. 22-24, Cháozhōu St, Daan District, Taipei City, Taiwan 106	6.7 km/hr	2.128 km	OK	293.3	N 25.02955	E 121.52227	
26	25	2011/10/28	10:03:09	100 Taiwan Taipei City Zhongheng District 台噪	33.3 km/hr	2.293 km	OK	149.7	N 25.02937	E 121.52065	
27	26	2011/10/28	10:03:39	No. 32-1, Section 2, Luósīfú Rd, Zhongheng District, Taipei City, Taiwan	1.1 km/hr	2.403 km	OK	80.2	N 25.02855	E 121.52125	
28	27	2011/10/28	10:04:11	No. 34, Section 2, Luósīfú Rd, Zhongheng District, Taipei City, Taiwan	1.7 km/hr	2.42 km	OK	38.3	N 25.0284	E 121.52125	
29	28	2011/10/28	10:04:43	No. 34, Section 2, Luósīfú Rd, Zhongheng District, Taipei City, Taiwan	0.2 km/hr	2.424 km	OK	34.3	N 25.02842	E 121.52128	
30	29	2011/10/28	10:05:13	No. 7, Section 2, Luósīfú Rd, Zhongheng District, Taipei City, Taiwan	34.5 km/hr	2.486 km	OK	331.2	N 25.02897	E 121.52122	

## HI-603X installation video guides

### How to connect and install Haicom Tracker

[http://www.youtube.com/watch?v=9ytNRmu6TMQ&feature=channel\\_video\\_title](http://www.youtube.com/watch?v=9ytNRmu6TMQ&feature=channel_video_title)

### How to connect and install HI-603X

[http://www.youtube.com/watch?v=yVAqvhHLzvU&feature=channel\\_video\\_title](http://www.youtube.com/watch?v=yVAqvhHLzvU&feature=channel_video_title)

## How to calculate the historical total travel distance:

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

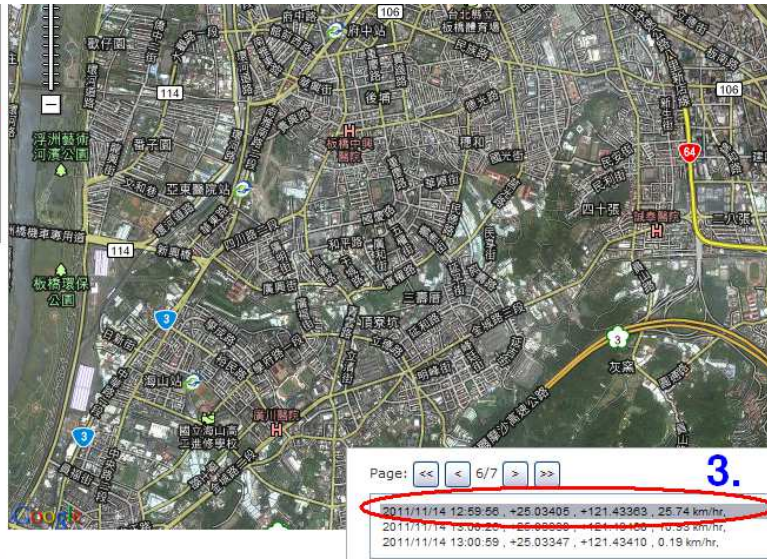
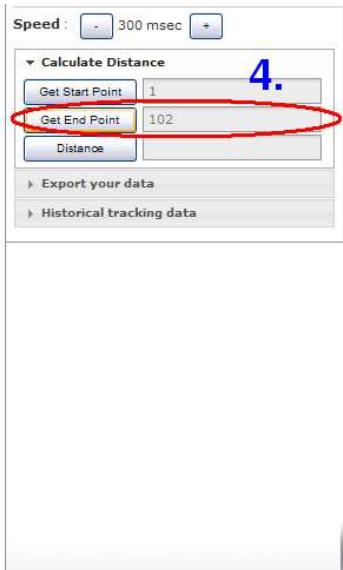
The screenshot displays the HAiCOM GPS software interface. On the left, the 'History' tab is active, showing the Tracker ID 'Jack-604' and the ID number '354779034842998'. The date range is set to 'From: 2011/11/14 H: 00 M: 00' to 'To: 2011/11/14 H: 23 M: 59'. The 'Sort by' is set to 'ASC'. The 'Speed' is set to '300 msec'. The 'Calculate Distance' section is highlighted with a red circle and a '2.' label, containing 'Get Start Point' (set to '1'), 'Get End Point', and 'Distance' buttons. Below this are 'Export your data' and 'Historical tracking data' options.

The main map area shows a city street grid. A red circle and a '1.' label highlight a specific location on the map. The bottom status bar shows a table of historical tracking data:

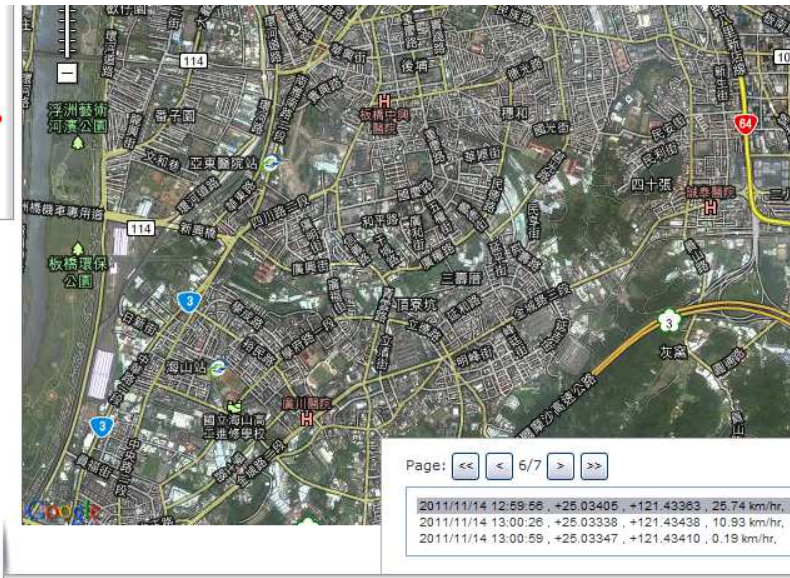
Date/Time	Latitude	Longitude	Speed (km/hr)
2011/11/14 09:50:11	+26.03788	+121.51717	0.19
2011/11/14 09:50:43	+26.03700	+121.51727	0.00
2011/11/14 09:51:16	+26.03763	+121.51722	0.37

3. Click the preferred end point

4. Click the end point icon

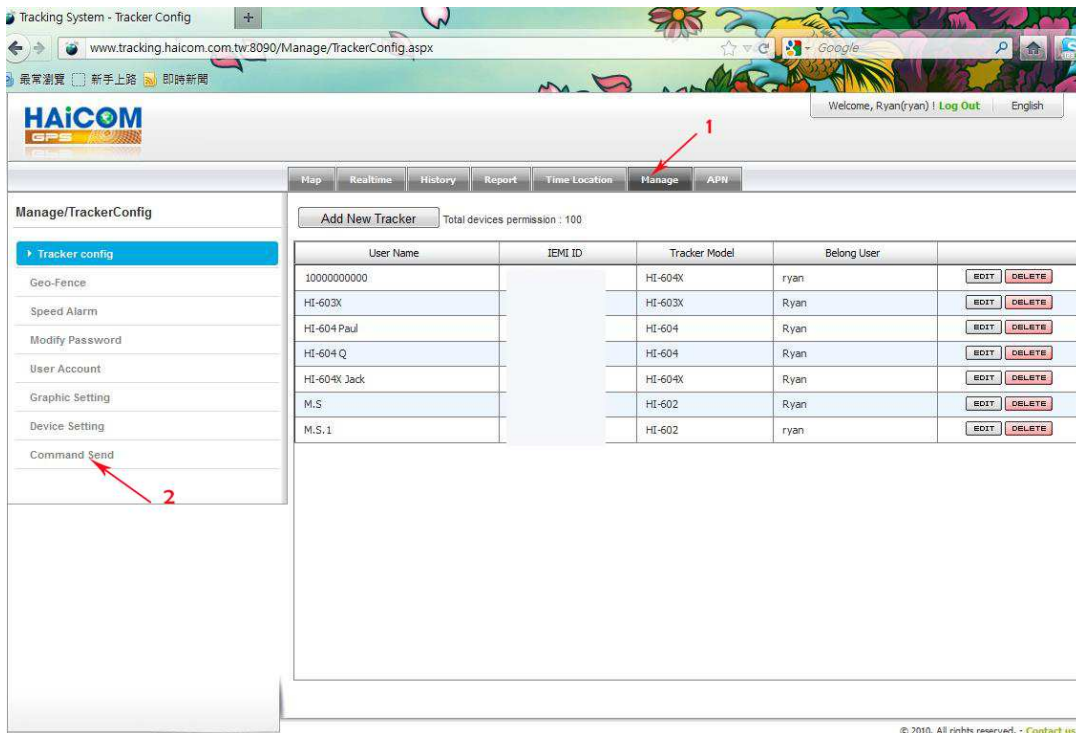


5. Click the Distance icon to get the total traveled distance



## How to send command from the GPRS tracking platform:

1. Click Manage -> Command Send:

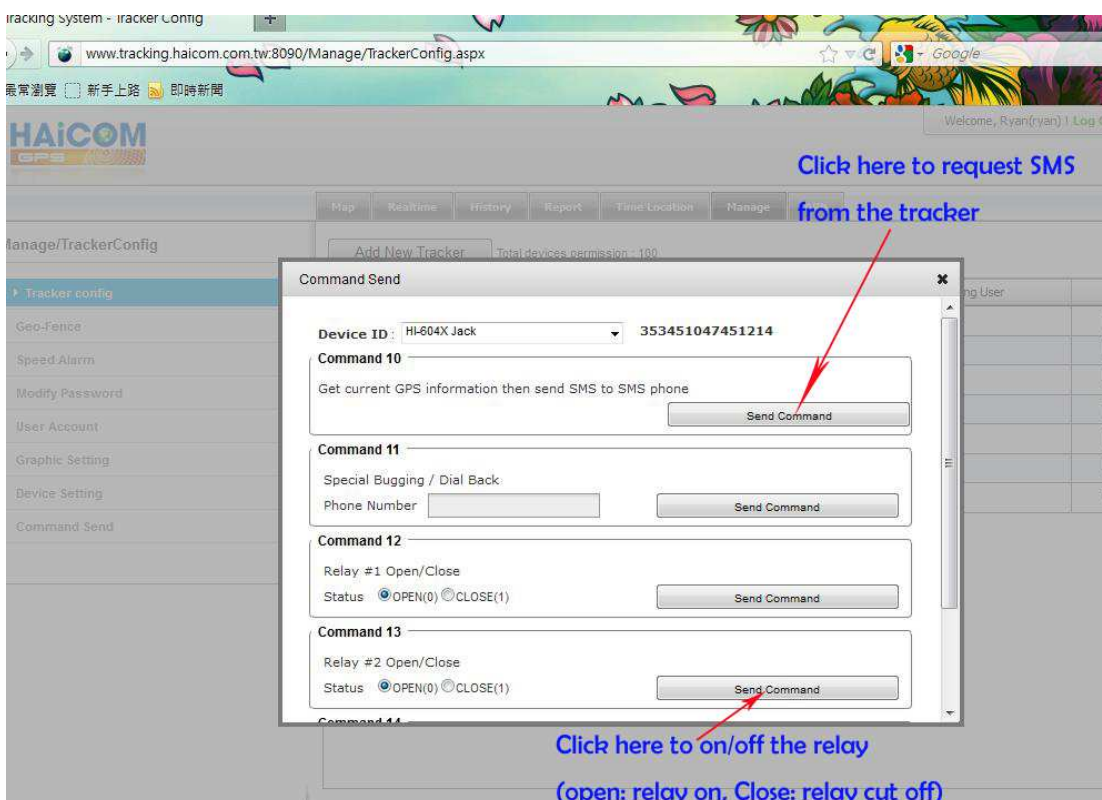


2. Click to send commands from the platform:

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:

Click here to see the commands sending status

YES: the sending successfully  
NO: the sending still pending

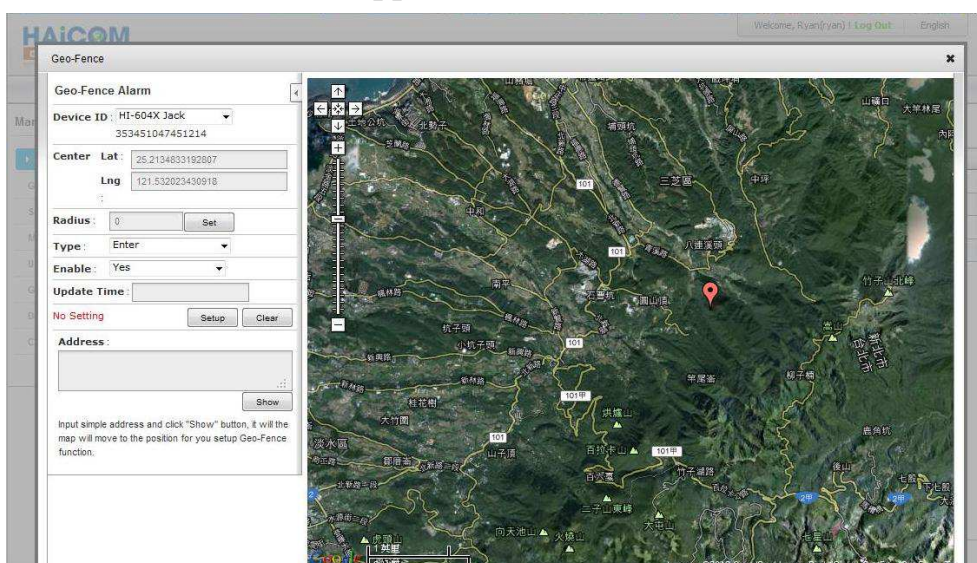
User	Date Time	TX ID	TX	Send Flag	Send Time
ryal	2012-01-17 15:39:18	TX200	\$GPRS353451040200840,TX201,#10,*	YES	2012-01-17 15:39:46
ryal	2012-01-17 10:01:38	TX200	\$GPRS353451040200840,TX201,#13,0,*	YES	2012-01-17 10:02:39
ryal	2012-01-17 10:01:37	TX200	\$GPRS353451040200840,TX201,#12,0,*	YES	2012-01-17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

## Set up GeoFencing function steps:

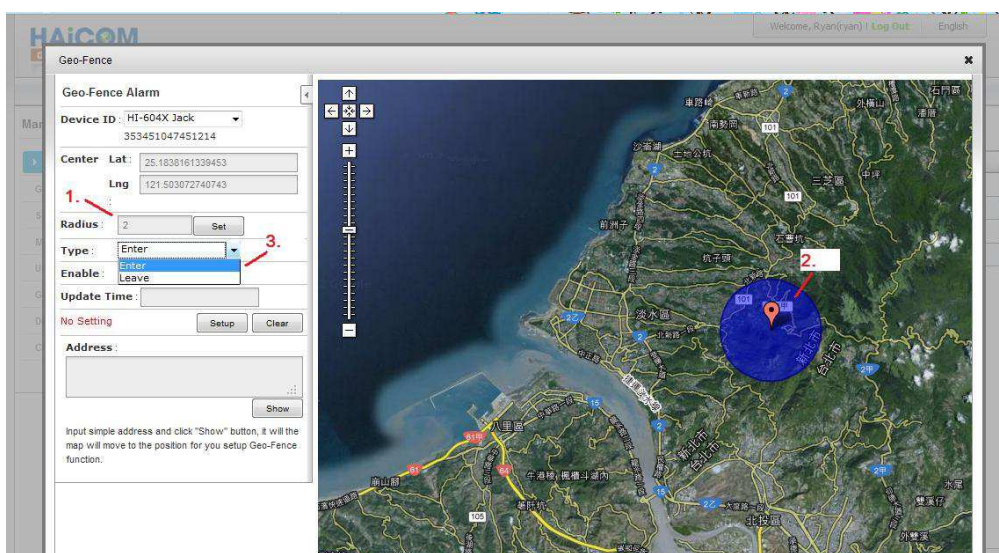
Basically, there are two ways to set up the geo fence function and both ways are independent to each other. For instance, if you set up the geo fence alarm on the map radius, the trigger will only report to the tracking site. If you set up the geo fence function from the Manage -> Device Setting, from 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:

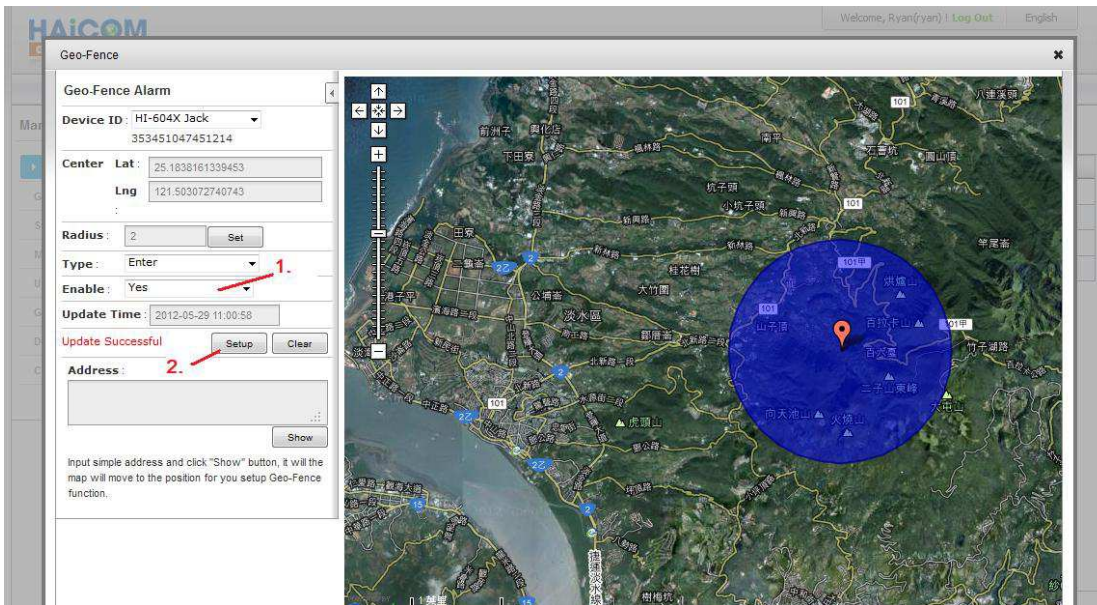


2. Key in the preferred geo fencing radius range (in km) and click Set.  
After the clicking, the blue circle will appeared on the map.  
User can select to get the geo fencing alarm when the tracker enter or leave the radius range.



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

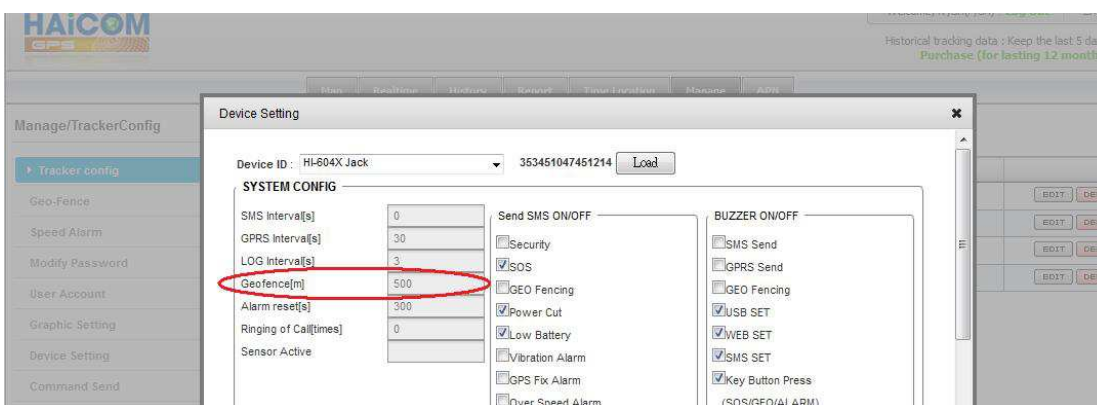
Then, click Setup to complete the procedures. In the mean time, the Update Time will show the time that you set up and show Update Successful on the side:



## 2. Set up geo fence from the Device Settings:

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

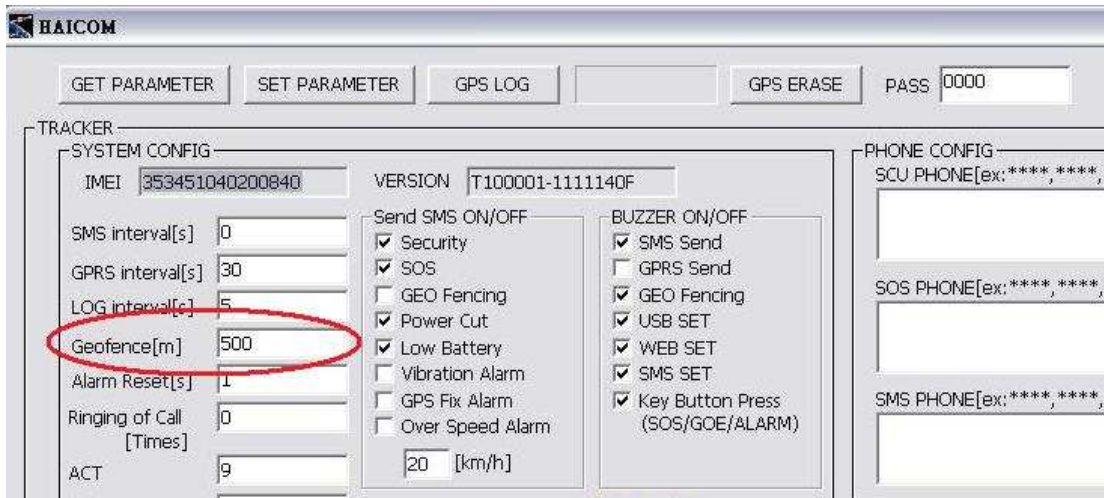
a. On the GPRS tracking site, go Manage and Device Setting and press “load”:



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