

# HI-603X



# Easy Manual



HI-603X 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-603X 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-603X accomplishes advanced implementation of convenient fleet management, enhanced vehicle safety, simultaneous emergency response, and merchandise/ package transportation, etc... Unlimited advantages are available with HI-603X extensive applications.

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 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 - 30,000 records or more.

Low battery alarm and battery voltage status.

Optional SOS button. Minimum GPRS sending interval 5~10 seconds and interval adjustable.



## **HI-603X Characteristics**

ltems	Specifications
Power Supply	DC +9V - +28V
Backup Battery	550mAh
Normal power consumption	85mA/h
Dimension	116mm x 55mm x 24mm
Operating temperature	–20℃ to 55℃
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. GSM antenna plug
- 2. SIM card holder
- 3. Transmission status
- 4. GSM signal status
- **5.** Power status
- 6. GPS receiver plug



- 1. 12V~24V cigarette lighter power in
- 2. Connected to tapping microphone
- 3. Mini USB connector for set up
- 4. Connected to vehicle control wirings
- 5. Connected to the HI-403BT Bluetooth box



## Dimensions





## **LED indicator**



transmission status	transmission: Stay on		
GSM signal status	GSM stand by: Off 3 seconds / On 75 micro seconds Searching network or no SIM card: On 600 micro seconds / Off 600 micro seconds GSM network connected: Stay On		
Power status	Powered: Stay on Power off: Off		



## Hardware and Accessories

## Standard packing



- 1. HI-603X main unit
- 2. SIM card tray
- 3. GPS receiver
- 4. GSM antenna
- 5. CD
- 6. Vehicle control wires
- 7. Mini USB to USB set up cable
- 8. Tapping microphone
- 9. Relay



## **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 quiet sit flush with the unit when closed.



3. Connect the GSM antenna and GPS receiver to HI-603X





## **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 603X to the USB cable. The HI-603X will initially show all lites illuminated. See p5



2. Open the tracker set up program by double clicking on "tracker.exe"



GET PARAMETER	SET PARAMETER GPS LOG	PASS	
SYSTEM CONFIG	VERSION		PHONE CONFIG SCU PHONE[ex:****;****;]
SMS interval[s] GPRS interval[s] LOG interval[s] Geofence[m] Alarm Reset[s] Ringing of Cal [Times]	Send SMS ON/OFF Security SoS GEO Fencing Power Cut Cuw Battery Vibration Alarm GPS Fix Alarm GPS Fix Alarm [km/h]	BUZZER ON/OFF SMS Send GRS Send GEO Fencing USB SET WEB SET SMS SET Key Button Press (SOS/GOE/ALARM)	SOS PHONE[ex:****;*****;] SMS PHONE[ex:*****;*****;]
GSM/GPRS CONFIG	SERVER CO IP/DOMAIN TCP PORT UDP PORT CONFIG PO	NFIG	SLEEP MODE MODE Hour Min. Sec. Time to Sleep/Wake Up : Sec. FIRMWARE UPDATE UPDATE



### 3. Click "Get Parameter"

TRACKER	•
GET PARAMETER	SET PA
SYSTEM CONFIG	
SMS interval[s]	
GPRS interval[s]	
LOG interval[s]	

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.

SYSTEM CONFIG			1,1111140E	PHONE CONFIG
IMEL 1333431 SMS interval[s] .OG interval[s] Geofence[m] Alarm Reset[s] (Inging of Call [Times]	0 30 5 500 1 0	Send SMS ON (F10000     Send SMS ON/OFF     Send SMS ON/OFF     Sos     GEO Fencing     F Power Cut     Cut     Cow Battery     Vibration Alarm     GPS Fix Alarm     Over Speed Alar	m	SOS PHONE[ex:****,****,]
ACT INT	9	[20[km/h]		
SSM/GPRS CONF APN internet USER	IG	SERVE IP/DO 60.25 TCP P UDP P	R CONFIG MAIN NAME 0.68.23 DRT V 9101 DRT V 9101 R P120	MODE  FULL POWER Hour Min. Sec. Time to Sleep 0 0 0 Time to wakeup 0 0 0 FIRMWARE UPDATE



### **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.

YSTEM CONFIG		2			
IMEI 3534510	040200840	VERSION	T100001-11	11140F	SCO PHONE[ex:****,****,]
iMS interval[s]	0	- Send SMS	ON/OFF	BUZZER ON/OFF	
SDRS interval[c]	30	SOS	y	GPRS Send	
OG interval[s]	5	- 🖵 GEO Fe	encing	GEO Fencing	SOS PHONE[ex:****,****,]
Cod in too valeoj	500	Power	Cut	USB SET	
	1000	- IV LOW Ba	rttery In Alarm		
uarin Reset(s)	14	- I GPS Fix	Alarm	🔽 Key Button Press	SMS PHONE[ex:****,****,]
Inging of Call [Times]	μ	C Over S	peed Alarm	(SOS/GOE/ALARM)	
ст	9	- 20 [	km/h]		
NT	9	-		2 <u>1</u>	
	10.				
SM/GPRS CONF	IG		-SERVER CC	NEIG	Time to Sleen
APN		IP/DOMAIN NAME			
fleet	et 60.250.68.		23		
JSER	TCP PORT		9101		
PASS		UDP PORT	□ 9120 □ Reply!!		



#### X series trackers

User guides for USB settings and SMS features

#### 1. USB Settings :

Kaicom (12080601)	
Get Parameter       Set Parameter       GPS Log Download       GPS Log Erase         TRACKER       B       C       D         System Config       IMEI       D12497123456739       G       Version       T100001-120808R1       H         SMS interval[s]       Imediate       Imediate       Send SMS ON/OFF       Buzzer ON/OFF       Buzzer ON/OFF         GPRS Interval[s]       Imediate       Imediate       Imediate       Imediate       Imediate         LOG Interval[s]       Imediate       Imediate       Imediate       Imediate       Imediate       Imediate         Geofence[m]       500       Imediate       Imediate       Imediate       Imediate       Imediate       Imediate         Imediate       Imediat	Pass 0000 E F Set Default  Phone config  SCU PHONE [ex: ****, ****,]  N  SOS PHONE [ex: ****, ****,]  O
Alarm reset[s] 300 Ringing of Call[times] 0 Moving Sensor Active 24 GSM/GPRS Config GSM/GPRS Config APN Internet Alarm (test only) Cover Speed Alarm (test only) Server Config IP/Domain Name 60.250.68.23	SMS PHONE [ex: ****, ****,] P Sleep Mode Mode GPS Off ▼ Q Hour : Min. : Sec. Time To Sleep 0 5 0 Time To Wake Un 0 0
User VSer	Firmware Update

- 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 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'

colume time) the tracker will switched on again to work normal. The automatic sleep and weak up will be cycled continuesly base on the settings. The mode is suitable for the condition that the user only need to know the tracker updated locations in some fix time and let the tracker go sleeping mode (switched off) to save power consumption. The 'Time To Sleep' set up is recommended to set no less than 3 minutes so that the tracker GPS have enough time to let the GPS get 3D fixed. 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 updated, delete the GPS log data in the tracker is recommended to make sure the tracker internal memory stay in complete.



### **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:





## The example to send SMS command to the tracker: Send: #0000,155



You will receive this message:



## SMS Command for X seris



Code	Format	Function
100	#0000,100	Request all setting values back
151	#0000,151,000000000,0000000000,000000000	Set Security Phone Number.(10 Max.)
152	#0000,152,000000000,0000000000,000000000	Set SOS Phone Number (10Max.)
153	#0000,153,000000000,0000000000,000000000	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	Set IP and Port
	#0000,210,60.250.68.23,9101,9120,1943,0	
211	#0000,211	Get IP and Port Value
250	#0000,250,SMS,GPRS,LOG,Geo,Alarm,Ring,Speed,Sensor	Set Interval and Parameter
	#0000,250,0,30,0,500,60,0,20,10	
251	#0000,251	Get Interval Setting
300	#0000,300,Buglar,SOS,GEO,PWCUT,LBAT,Vir,GPS,OPA	Set Event
	#0000,300,0,1,0,1,1,0,0,0	
301	#0000,301	Get Event Setting
350	#0000,350,SMS_Send,GPRS,GEO,USB,WEB,SMS_Set,KEY	Set Buzzer
	#0000,350,0,0,0,1,1,1,1	
351	#0000,351	Get Buzzer Setting
400	#0000,400,Mode,Hour1,Minute1,Second1,Hour2,Minute2,Second2	Set Power Saving Mode
	#0000,400,1,0,5,0,0,0,0	
401	#0000,401	Get Power Saving Mode Setting
01	#0000,01,Pass,Pass	Set Password
	#0000,01,0000,0000	
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  $0 \rightarrow \text{TCP} \cdot 1 \rightarrow \text{UDP}$ 

#### 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 ( $1 \rightarrow$  enable,  $0 \rightarrow$  disable ) to send SMS when the vehicle anti-thief alarm function activated

**SOS**: Enable or disable (  $1 \rightarrow$  enable,  $0 \rightarrow$  disable ) to send SMS when the SOS button pressed

**GEO**: Enable or disable ( $1 \rightarrow$  enable,  $0 \rightarrow$  disable) to send SMS when the geofence triggered (for test only)

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

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

Vir: Enable or disable ( $1 \rightarrow$  enable,  $0 \rightarrow$  disable ) to send SMS when the tracker moved (for test only)

**GPS:** Enable or disable ( $1 \rightarrow$  enable,  $0 \rightarrow$  disable ) to send SMS when the GPS fixed (for test only)

**OPA:** Enable or disable ( $1 \rightarrow$  enable,  $0 \rightarrow$  disable ) to send SMS when the car speed over setting (for test only)

#### **350** (Set Buzzer)

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

**GPRS**: Buzzer sound or silent ( $1 \rightarrow$  enable,  $0 \rightarrow$  disable ) every time when the GPRS coordinates sending

**GEO**: Buzzer sound or silent ( $1 \rightarrow$  enable,  $0 \rightarrow$  disable) when the geo fencing alarm sent **USB**: Buzzer sound or silent ( $1 \rightarrow$  enable,  $0 \rightarrow$  disable) when the USB set up completed **WEB**: Buzzer sound or silent ( $1 \rightarrow$  enable,  $0 \rightarrow$  disable) after receiving the settings from

the web tracking site

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

**KEY**: Buzzer sound or silent ( $1 \rightarrow$  enable,  $0 \rightarrow$  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:  $0 \rightarrow$  Full power  $1 \rightarrow$  GPS off  $2 \rightarrow$  all off  $3 \rightarrow$  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)

 $1 \rightarrow$  cut off relay  $\cdot 0 \rightarrow$  recover the relay to normal

#### **13** (Relay #2 On/Off)

 $1 \rightarrow$  cut off relay  $\circ 0 \rightarrow$  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  $, 1 \rightarrow$  enable  $, 0 \rightarrow$  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  $\cdot$  1  $\rightarrow$  enable , 0  $\rightarrow$  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  $, 1 \rightarrow$  enable  $, 0 \rightarrow$  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  $, 1 \rightarrow$  enable  $, 0 \rightarrow$  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\*(0124971 23456789),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)
А	GPS fixed status (A in 3D fixed, V not fixed yet)
N,24"59'58.26	G,E,121"29'21.65Coordinates (Format: degree" minute' second)
000030.0	Speed (Sea mile)
182.57	Direction angle ( degree)
120808	GPS time (UTC)
074222	GPS time (UTC)
012497000242	.432Tracker imei#
http://maps.goo	bgle.com/maps?q=24.999518,121.489352 The hyperlink URL to the map Click
the link to see	e 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)

SYSTEM CONFIG- IMEI 353451040200840	VERSION T100001-111	1140F	PHONE CONFIG SCU PHONE[ex:****,****,]
SMS interval[s]         0           SPRS interval[s]         30           LOG interval[s]         5           Seofence[m]         500           Alarm Reset[s]         1	Send SMS ON/OFF	BUZZER ON/OFF SMS Send GRRS Send GEO Fencing WUSB SET WEB SET SMS SET Key Button Press	SOS PHONE[ex:****,****,]
Initian and a second se	Over Speed Alarm     20 [km/h]	(SOS/GOE/ALARM)	
GSM/GPRS CONFIG APN internet	SERVER CO IP/DOMAIN 60.250.68.	NFIG	MOULE     FULL POWER ▼     Hour     :     Min.     :     Sec.       Time to Sleep     0     0     0     0       Time to wakeup     0     0     0

7. Show the below message and click OK





## 8. The firmware start loading

SYSTEM CONFIG	GPS LOG	PASS		
IMEL 059451040013565	VERSION T100001		SCU PHONE[ex:****,****,]	
SMS interval[s] 3600 GPRS interval[s] 30 LOG interval[s] 0 Geofence[m] 2000 Alarm Reset[s] 5 Ringing of Call 5 [Times]	Send SMS ON/OFF Security SOS GEO Fencing Vower Cut Cut Low Battery Vibration Alarm GPS Fix Alarm VOver Speed Alarm	BUZZER ON/OFF GRS Send GPS Send GEO Fencing WUSB SET WEB SET Key Button Press (SOS/GOE/ALARM)	0932302994, SOS PHONE[ex:****,****,] 0932302994, SMS PHONE[ex:****,****,] 0932302994,	
GSM/GPRS CONFIG APN fileet USER PASS	SERVER COI IP/DOMAIN 60.250.68. TCP PORT UDP PORT	VFIG NAME 23 ↓ 9101 ↓ 9120 ↓ Reply!!	SLEEP MODE MODE FULL POWER I How Min. Time to Sleep/Wake Up 0 : 0 : FIRMWARE UPDATE	

9. The below message shown and press OK





## 1. Initial registration from the GPRS web tracking platform: http://www.tracking.haicom.com.tw:8090/

	Map Realtime History Report Time Location Manage APN	
Login Account : Password : Keep password for next login. Coox New user, please register before login. Registration	Wekcome to GPS online tracking system         We provide online service for GPS realtime tracking and history review service.         Buy the GPS tracking tracker from us, you can enjoy the online tracking service now.         If you want to realtime tracking your Child, pet, car, you need:         1. Buy a GPS tracker from us. (HI-602DT, HI-6035)         2. Buy a SIM card from your local communication company, please make sure it supportSMS and GPRS function.         3. Set GPRS IPand Port of the GPS tracker to our server.         4. Login to our system, then you can realtime tracking your tracker.	

2. New user; please register before login.

Login						
Account :		We provide online	Registry Account	Yaxan	×	1
Password :		Buy the GPS trac If you want to re	IMEI	:		
		1. Buy a GPS 2. Buy a SIM c	User ID	: [a~z,A~Z,0~9 Only, ID length 8~12]		S and GPRS function
		<ol> <li>Set GPRS I</li> <li>Login to ou</li> </ol>	User Name	: [a~z,A~Z,0~9,_;Space Only, ID length 2~20]		
New user, please register before login,	e		Password	Ia~z.A~Z.0~9. Soace Only, ID length 6~121		
Registration			Password Confirm			
			E-Mail			
			Country	: 💌		
			Time Zone	: GMT+0 💌		
				NGA6R		
				Reload		



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



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

Manage/TrackerConfig	Add New Trac	ker Total devices permis			
	Us	er Name	IEMI ID Trac		
	HE-603X Jack		353451040200840	HE-603	Rya
	HI-604 Paul		353451043957552	HI-604	
	HL-604 Q			HI-604	Ryar
	HI-604 Test				ryan
	HI-604X	Tracker Setting		ж	ryan
	Jack-60-4	User ID	. ryan	1	Ryar
		Uses Name			Ryar
		User Name			ryan
		Model	: HI-602		
		Tracker ID	:		
			Please input digital num	ber	
				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



lanage/TrackerConfig	Add New Tracker	Total devices permission : 100		
	User Name		Tracker Model	Belong Us
	HI-603X Jack	353451040200849	HI-603	Ryan
	Device Setting			*
	10	10	10	
	GSM/GPRS CONFIG			
	USER			
	PASS			
	SERVER CONFIG			
	IP/Domain Name			
		L_Reply!		
	CONFIG PORT			
	SLEEP MODE			
	PARTIES CONTRACTOR			

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



	Мар	Realtime	History	Report	Time Locatio	m Manag	e APN		
Report	4								
racker ID : HI-603X Jack 💌 353451040200840									
rom : 2011/11/10									
To: 2011/11/10									
Iter : All Data	_								
ecord/Page: 50									
ort by : ASC Search									
Address Transfer.zip Download	51				- Ti				
						Search	n 🙆 Download	Add	Iress Tranfer.zip

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

- 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



	Address Transfer		
	檔案(E) 編輯(E) 核視(Y) 我的最愛(A) 工具(E)	說明曲	<b>N</b>
	🕝 上一頁 🔹 🚫 🔹 🎓 搜尋 🔂 資料杯	ē 🛄 •	
	網址D 🗁 C:\Documents and Settings\Administrator\桌面\Ad	ldress Transfer	▶ 🛃 移至
Jack-604-201 1124133938( Address)	<ul> <li>         を立ていた。         <ul> <li>                  を注意した。                  をおいうには、またいでは、またいいでは、またいでは、またいいでは、またいいでは、またいいでは、またいいでは、またいいでは、またいいでは、またいいいでは、またいいいでは、またいいでは、またいいいでは、またいいいいいいは、またいいいいは、またいいいいいいいは、またいいいいいいいいいは、またいいいいいいいいいい</li></ul></li></ul>	大小 msfer 644 KB 419 KB .Con-dll 162 KB a.SQ.dite.DLL 884 KB	類型 應用程式 應用程式擴充 應用程式擴充 應用程式擴充
			Þ
🖏 Address Transfer		1	
Select Report CSV File(1)	C.\Documents and Settings\Administrator\4 arVack-604-201		
Select Address Display Language(2)	English	AVE	in <mark>g Silvern</mark>
	Translate Address (3)		
[+25.02662.+121.42758] No. 92. Ho	ugšng 1st Rd. Sinihuang District. New Taipei City. Taiwan 242		<b>E</b>
<sup>1</sup> 25 02675, +121 42758] No. 73-87, 125 02687, +121 42758] No. 87, Ho 125 02687, +121 4276] No. 89, Hou 125 0268, +121 42776] No. 89, Hou 125 0268, +121 42775] No. 2, Lane 125 0268, +121 427758] No. 87, Hou 125 0268, +121 42757] No. 87, Hou 125 02677, +121 42757] No. 87, Hou 125 02677, +121 42752] No. 89, Hoi 125 02688, +121 42762] No. 89, Hoi 125 02688, +121 42762] No. 89, Hoi 125 02688, +121 42755] No. 87, Hou 125 02683, +121 42755] No. 87, Hou 125 02683, +121 42755] No. 90, Hoi 125 02673, +121 42756] No. 90, Ho	Hôugăng 1st Rd, Sinjhuang District, New Taipei City, Taiwan 242 ugăng 1st Rd, Sinjhuang District, New Taipei City, Taiwan 242 găng 1st Rd, Sinjhuang District, New Taipei City, Taiwan 242 găng 1st Rd, Sinjhuang District, New Taipei City, Taiwan 242 94, Hôugăngyr Rd, Sinjhuang District, New Taipei City, Taiwan 242 ugăng 1st Rd, Sinjhuang District, New Taipei City, Taiwan 242 Ugăng 1st Rd, Sinjhuang District, New Taipei City, Taiwan 242 Ugăng 1st Rd, Sinjhuang District, New Taipei City, Taiwan 242 Ugăng 1st Rd, Sinjhuang District, New Taipei City, Taiwan 242 Ugăng 1st Rd, Sinjhuang Di	Information ① Translate S 確定	

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

	А	В	С	D	E	F	G	н	I	J	К
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	ок	10.2	N 25.03173	E 121.5268	
3	2	2011/10/28	09:42:26	No. 27, Lane 31, Section 2, Jinshān South Rd, Daan Distri	30.6 km/hr	0.205 km	ок	99.2	N 25.03277	E 121.52848	
4	3	2011/10/28	09:42:59	Lìshuĭ St, Daan District, Taipei City, Taiwan 106	23.3 km/hr	0.302 km	ОК	12	N 25.0334	E 121.52915	
5	4	2011/10/28	09:43:31	No. 200-226, Section 2, Xìnyì Rd, Daan District, Taipei Cit	23.3 km/hr	0.545 km	ОК	86	N 25.03353	E 121.53155	
6	5	2011/10/28	09:44:05	No. 200-226, Section 2, Xìnyì Rd, Daan District, Taipei Cit	0.7 km/hr	0.547 km	ОК	322	N 25.03352	E 121.53157	
7	6	2011/10/28	09:45:14	No. 250, Section 2, Xìnyì Rd, Daan District, Taipei City, Ta	9.3 km/hr	0.599 km	ОК	96.5	N 25.03357	E 121.53208	
8	7	2011/10/28	09:45:45	No. 5, Lane 2, Section 2, Xinsheng South Rd, Daan Distric	35.2 km/hr	0.69 km	ОК	165.4	N 25.03295	E 121.53267	
9	8	2011/10/28	09:46:15	No. 32, Section 2, Xinsheng South Rd, Daan District, Taip	12.4 km/hr	0.9 km	ОК	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	ОК	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	ОК	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	ОК	240.4	N 25.0299	E 121.5287	
13	12	2011/10/28	09:48:21	No. 211-223, Jinhuá St, Daan District, Taipei City, Taiwan	0.7 km/hr	1.408 km	ОК	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	ОК	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	ОК	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	ОК	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	ОК	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	ОК	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	ОК	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	ОК	218.2	N 25.02992	E 121.52875	
21	20	2011/10/28	09:52:18	No. 211-223, Jinhuá 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, Jinhuá St, Daan District, Taipei City, Taiwan	14.5 km/hr	1.617 km	ОК	282.4	N 25.0301	E 121.52712	
23	22	2011/10/28	10:01:27	No. 10, Lane 132, Section 2, Jinshān South Rd, Daan Distr	34.6 km/hr	1.706 km	ОК	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 1	35.4 km/hr	1.96 km	ОК	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, Taiwa	6.7 km/hr	2.128 km	ОК	293.3	N 25.02955	E 121.52227	
26	25	2011/10/28	10:03:09	100 Taiwan Taipei City Jhongjheng District台9線	33.3 km/hr	2.293 km	ок	149.7	N 25.02937	E 121.52065	
27	26	2011/10/28	10:03:39	No. 32-1, Section 2, Luósīfú Rd, Jhongjheng District, Taip	1.1 km/hr	2.403 km	ок	80.2	N 25.02855	E 121.52125	
28	27	2011/10/28	10:04:11	No. 34, Section 2, Luósīfú Rd, Jhongjheng District, Taipei	1.7 km/hr	2.42 km	ок	38.3	N 25.0284	E 121.52125	
29	28	2011/10/28	10:04:43	No. 34, Section 2, Luósīfú Rd, Jhongjheng District, Taipei	0.2 km/hr	2.424 km	ок	34.3	N 25.02842	E 121.52128	
30	29	2011/10/28	10:05:13	No. 7, Section 2, Luósīfú Rd, Jhongjheng District, Taipei (	34.5 km/hr	2.486 km	ок	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

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

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





# Click the preferred end point 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:

				and the second s	
• ) • Www.tracking.haicom.com.tw	:8090/Manage/TrackerConfig.aspx			C Google	P a
最常瀏覽 🗋 新手上路 <u>動</u> 即時新聞		m_t	a mana		M. S. S. S. S.
HAICOM		1	1	Welcome, Ryan(ryar	n) ! Log Out English
Nanage/TrackerConfig	Map Realtime History Add New Tracker Total dev	Report Time Location	Manage APN		
Itracker config	User Name	IEMI ID	Tracker Model	Belong User	
Geo-Fence	1000000000		HI-604X	ryan	
Speed Alarm	HI-603X		HI-603X	Ryan	
Modify Deservord	HI-604 Paul		HI-604	Ryan	
would rassword	HI-604 Q		HI-604	Ryan	
User Account	HI-604X Jack		HI-604X	Ryan	
Graphic Setting	M.S		HI-602	Ryan	
Device Setting	M.S.1		HI-602	ryan	
Command Send			1		
2					

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)

iracking system - iracker config	t v	70 ~	Multime and
🔶 🧉 www.tracking.haicom.c	om.tw:8090/Manage/TrackerConfig.aspx	☆ ▼ C	Google
最常瀏覽 门 新手上路 <mark>ळ</mark> 即時新聞	4	M-S	
HAICOM			Welcome, Ryan(ryan) 1 Log O
GPS		Click h	ere to request SMS
		Time Location Manage from th	ne tracker
lanage/TrackerConfig	Add New Tracker Total devices permis	sion : 100	
▶ Tracker config	Command Send		X ng User
Geo-Fence	Device ID : HL-604X Jack	- 353451047451214	
Speed Alarm	Command 10		
Modify Password	Get current GPS information then send SMS t	to SMS phone	
User Account		Send Command	
Graphic Setting	Command 11		
Device Setting	Special Bugging / Dial Back		
Command Send	Phone Number	Send Command	
	Command 12		
	Relay #1 Open/Close	C	
	Status OPEN(0) CLOSE(1)	Send Command	
	Command 13		
	Relay #2 Open/Close		
	Status OPEN(0) CLOSE(1)	Send Command	
	Command 44		-
	Click	here to on/off the relay	
	(ope	en: relay on, Close: relay c	ut off)



HAICOM	Welcome, Ryan(ryan)	1 Log Out
Manage/TrackerConfig	Map         Realtime         History         Report         Time Loustion         Manage         APN           Add New Tracker         Total devices correction : 100         100	
	Command Send * ng User	
	Command setup successful!	EDIT ]
	Command 13	(EDIT)
	Relay #2 Open/Close	EDIT
	Status OoPEN(0) @CLOSE(1) Send Click here to see the comm	
	sending status	EDIT
	Command 14	EDIT
	Tracker Reset	1
	Command Queue List ALL Command - Select	
	UserDate Time TX ID TX Send Time	
	yan 2012-01-17 15:39:18 TX200 \$GPRS353451040200840,TX201,#10,* YES 2012-01-17 15:39:46	
	yan 2012-01-17 10:01:38 TX200 \$GPRS353451040200840,TX201,#13,0,* YES 2012-01-17 10:02:39	
	yan 2012-01-17 10:01:37 TX200 gGPRS353451040200840,TX201,#12,0,* PS 2012-01-17 10:02:18	
	YES: the sending successfully NO: the sending still pending	

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



## 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:



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":

HAICOM					Historical backing data : Purchase (for la	Keep the last 5 da esting 12 month
lanage/TrackerConfig	Device Setting	Réaltime 3	Hatine Report Tine Existing	Manana Al7H	*	
	Device ID : HI-604X Jack	¢	➡ 353451047451214 Load	ł		
	SYSTEM CONFIG	0	Sand SMS ON/OFF			EDIT D
	GPRS Interval[s]	30				EDIT
	LOG Interval[s]	3	I Security IIISOS	GPRS Send	F	EDIT
	Geofence[m]	500	GEO Fencing	GEO Fencing		ED17
	Alarm reset[s]	300	Power Cut	USB SET		
	Ringing of Call[times]	0	Low Battery	WWEB SET		
	Sensor Active		Vibration Alarm	SMS SET		
			GPS Fix Alarm	Key Button Press		

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:

A HAICOM			
GET PARAMETER SET PARA		GPS ERAS	E PASS 0000
- TRACKER	VERSION T100001-111	11140F	PHONE CONFIG
SMS interval[s]     0       GPRS interval[s]     30       LOG interval[s]     5       Geofence[m]     500       Alarm Reset[s]     1       Ringing of Call     0       [Times]     9	Send SMS ON/OFF Security SOS GEO Fencing Power Cut Vibration Alarm GPS Fix Alarm Over Speed Alarm 20 [km/h]	BUZZER ON/OFF	SOS PHONE[ex;****,****

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)	Set GEO Fencing activate
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