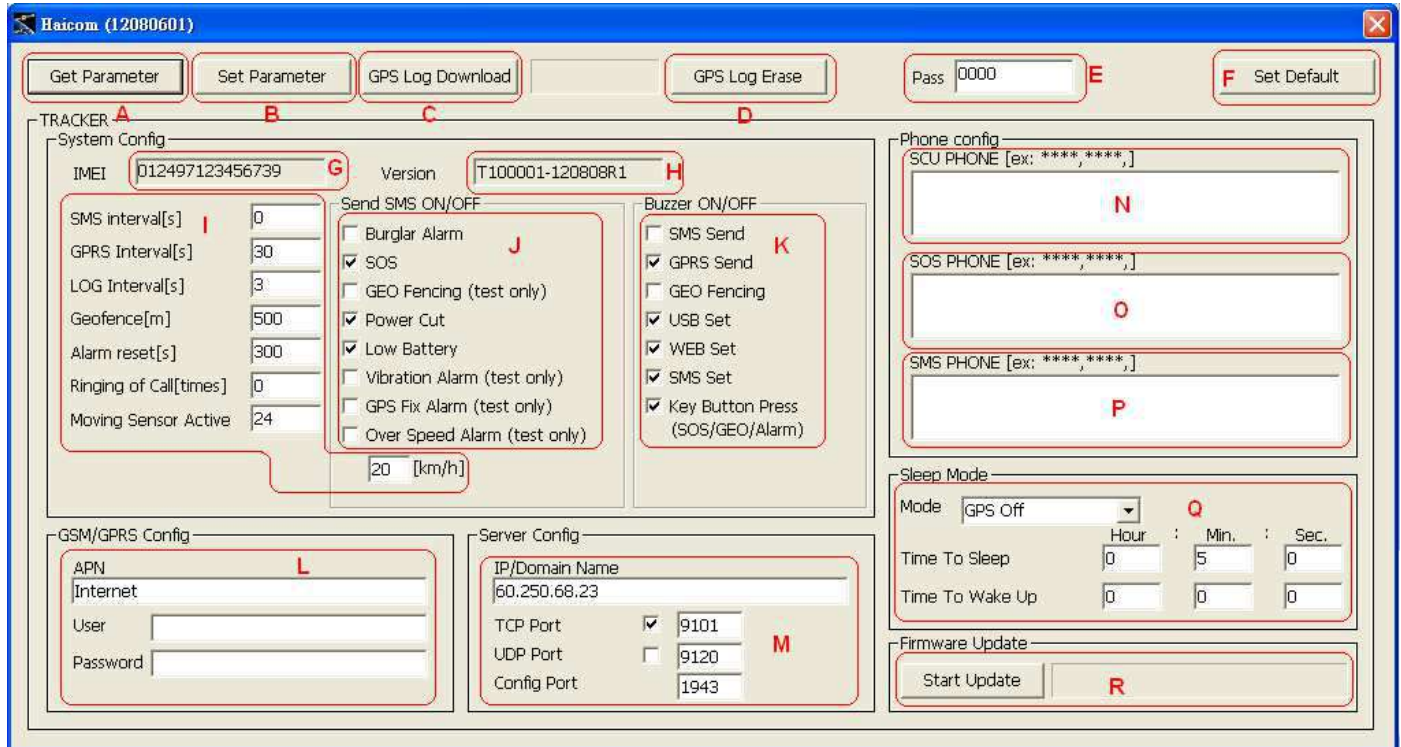


## X series trackers

### 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’ 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.

## SMS command guides:

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