

TR-151A / TR-151E

Vehicle/Asset Tracker

User Manual

Version 2.2



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1. Introduction and Features

1.1 Introduction

TR-151 is a durable and water resistant GPS/GSM/GPRS tracker. You can install TR-151 on vehicles or assets for tracking. It can send out SMS with its location (longitude and latitude) to user's cell phone by GSM network or to personal computer by internet network. Then you can track the location of their vehicles or assets. TR-151 is designed to equip with high capacity of Li-ion battery for long operation time. There is one SOS button on the TR-151 for emergency help. It is very easy to install or hide TR-151 in the car to perform tracking. TR-151 is ideal application for vehicle tracking and equipment/assets monitoring.

1.2 Features

- Highly sensitive GPS chipset
- Combination of GPS ,GSM/GPRS wireless network
- Durable and water resistant GPS tracker
- Easy to install or hide in the car to perform tracking. No external wires needed.
- Ideal application for vehicle tracking and equipment/assets monitoring
- Optional external antenna for GPS reception
- Rechargeable 2100mA high capacity Li-ion battery for long operation time
- External DC power supply
- Configuration can be done via SMS commands or by application software via USB interface.
- SOS (emergency) button.
- Voice monitor function to monitor the sound/conversation live.
- Geo-fence function
- Data buffer storage function

NOTE: Voice Monitoring function allows user to send a SMS or network command with voice monitoring command by to TR-151. TR-151 will call the assigned phone number. And then user can listen to the sound or voice around TR-151. While you listen to the sounds or voice around TR-151, people who around TR-151 won't know they are under voice monitoring.

NOTE: Geo-fence feature allows user to set up to 10 permissible or restricted areas whose shape is either circular or rectangular for tracking the vehicles or monitoring the equipment/assets. You can choose to receive alarm message if TR-151 enters the restricted areas or to receive alarm message if TR-151 gets out the permissible areas.

NOTE: Data Buffer Storage function will save up to 200 tracking points in the TR-151 when TR-151 is not making connection to server. And then TR-151 will send the data to server when it connects to server.

1.3 Hardware

GSM module:	TR-151A: Siemens GSM 850/1800/1900 TR-151E: Siemens GSM 900/1800/1900
Operating temperature:	-20° to 55° C
Antenna Type:	GPS patch antenna
Dimension:	86.7*48.9*32.5 mm
Battery:	2100mA rechargeable Li-ion battery
LED indicator:	For Charging, GPS, GSM and Status.
Interface:	Mini USB port for connecting to PC
Casing:	Water resistant (IPX4)
GPS external antenna port:	MMCX port

2. Start-up

2.1 Accessories



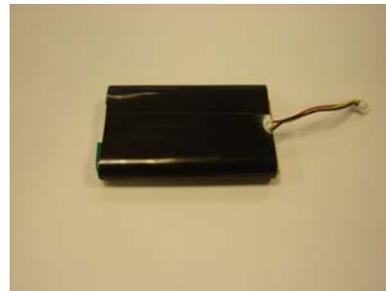
TR-151



AC charger



USB Cable



Battery



Mounting bracket with magnet (optional)

2.2 Install SIM card and Battery



- Use a coin or screwdriver to loosen the screw on back cover.



- Lift up the back cover and remove it as the direction shown.



- Push forward the cover of SIM card slot to the position marked with “OPEN”. Then lift up the cover.
- Insert the SIM card with its metal contacts facing down and the cut corner at the top left.



- Plug the battery connector into socket. Be aware that the **red wire** must be plugged on the top side.



- Please put the connector wire under the battery, and then put the battery into battery compartment.

NOTE: After installing the battery, the status LED will emit red light. After the LED go out, please wait for 5 seconds before turning on the power.

NOTE: Please take out the battery if you do not use TR-151 for a long time.

2.3 Charging the battery



Before using TR-151 for the first time, please fully charge it by connecting to AC power adapter under the power-off condition. (The attached battery is specially designed for TR-151. Please do not use other type of battery; otherwise it will damage the device. If you need to change the battery of TR-151, please contact your local dealer.) You can also charge the TR-151 by connect it to PC or Notebook via USB cable. (The power of PC or of notebook should be turned on.)

2.4 TR-151 with magnetic holder



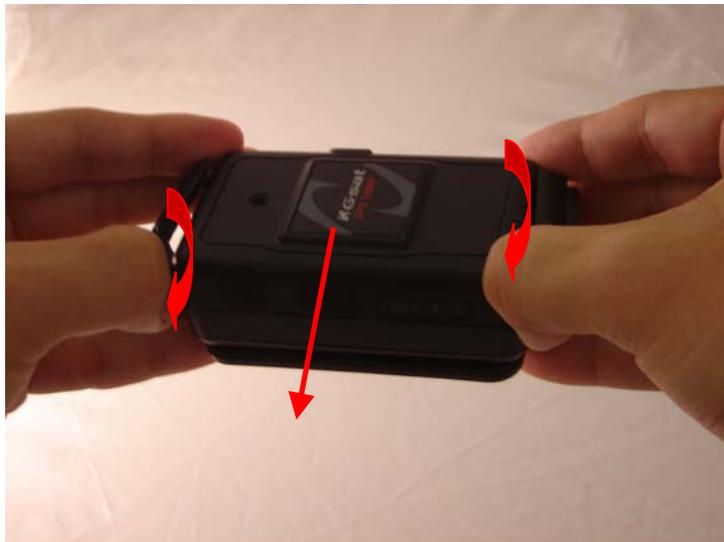
- Insert the TR-151 with the Power button side facing out.



- Push TR-151 into the holder until it clicks in position.



- There are 4 circular magnets on back of the magnetic holder for attaching TR-151 onto the metal material of vehicle or machine.



- To remove TR-151, slightly push outward the two sides of holder, and slide out the TR-151.

2.5 Turn on/off the device

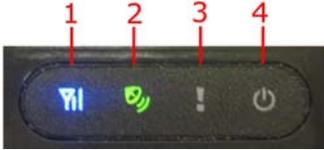
- **Turn on:** After installing the battery, the status LED will emit red light. After the LED goes out, please wait for 5 seconds before turning on the power. Press the power button for 3~4 seconds. When the device is turned on, GPS will do cold start to get fixed its position for the first time with the green GPS LED on. If location is fixed, the LED will blink. It is suggested that you stay at outdoor places or near the window where TR-151 can receive the better GPS signal when you turn on the device.

NOTICE: If it does not successfully get the location fixed after turning the power on, TR-151 may be located in the weak signal area or on the move.

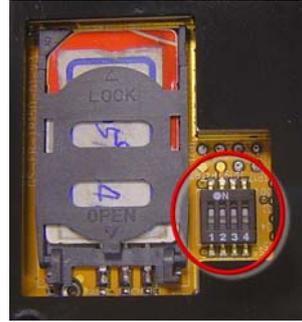
- **Turn off:** Press the Power button for 3~4 seconds. When the power is turned off, LED will go out.

2.6 Button Description



Power button	<ol style="list-style-type: none"> 1. Power On: Press and hold the power button for 3-4 seconds. The status LED will flash 2 times 2. Power Off: Press and hold the power button for 3-4 seconds. The status LED will flash 1 time.
SOS button	<p>Press the SOS Button, the status LED will flash 3 times to indicate the button is activated. TR-151 will immediately send out emergency messages along with its GPS report to 3 preset phone numbers.</p>
Indicator	 <ol style="list-style-type: none"> 1. GSM LED: <ul style="list-style-type: none"> • Voice monitoring: LED keeps on. • When no SIM card is inserted, network searches in progress, ongoing user authentication, or network login in progress: LED blinks quickly (about once per second). • In standby mode: LED blinks slowly (once for 3 seconds) 2. GPS LED: The LED keeps on when it is fixing the location. The LED blinks when TR-151's location has been fixed. When GPS function is disabled, GPS LED will be off. 3. Status LED: <ul style="list-style-type: none"> • When battery low: LED keeps on. • When enter setup mode: LED keeps on. • Press power button to turn on: LED flashes quickly 2 times. • Press power button to turn off: LED flashes quickly 1 time. • When SOS button is pressed: LED flashes slowly 3 times. • When error occurs: LED flashes quickly 5 times. • Sleeping mode: LED will flash slowly 60 times and then it enters sleeping mode. 4. Power LED: <ul style="list-style-type: none"> • The LED emits orange light when charger is plugged for charging the battery. • The LED goes off after the battery has been fully charged.
USB connector	<p>There are two functions of the USB connector:</p> <ol style="list-style-type: none"> 1. Connect TR-151 to PC by a Mini USB cable and setup all its features and functions from application software through PC. 2. Charge the battery by connecting a USB cable.
Microphone	<p>For voice monitoring use.</p>
External antenna connector	<p>For you to connect a MMCX external GPS antenna.</p>

2.7 DIP switch



	On	Off
Switch 1	Enable TR-151 to automatically power on when it is connected to external power.	You have to press the power button to power on TR-151 whether external power is connected or not.
Switch 2	All LED works as user mode.	Make all LED except status LED go off for secret tracking. Status LED works as user mode.
Switch 3	Setting Mode (Status LED keeps emitting red light)	User Mode
Switch 4	Sleeping Mode	User Mode

Note: You can set the switch by a little tweezers or pen point or toothpick.

3. TR-151 Management Setting

3.1 Install the USB driver

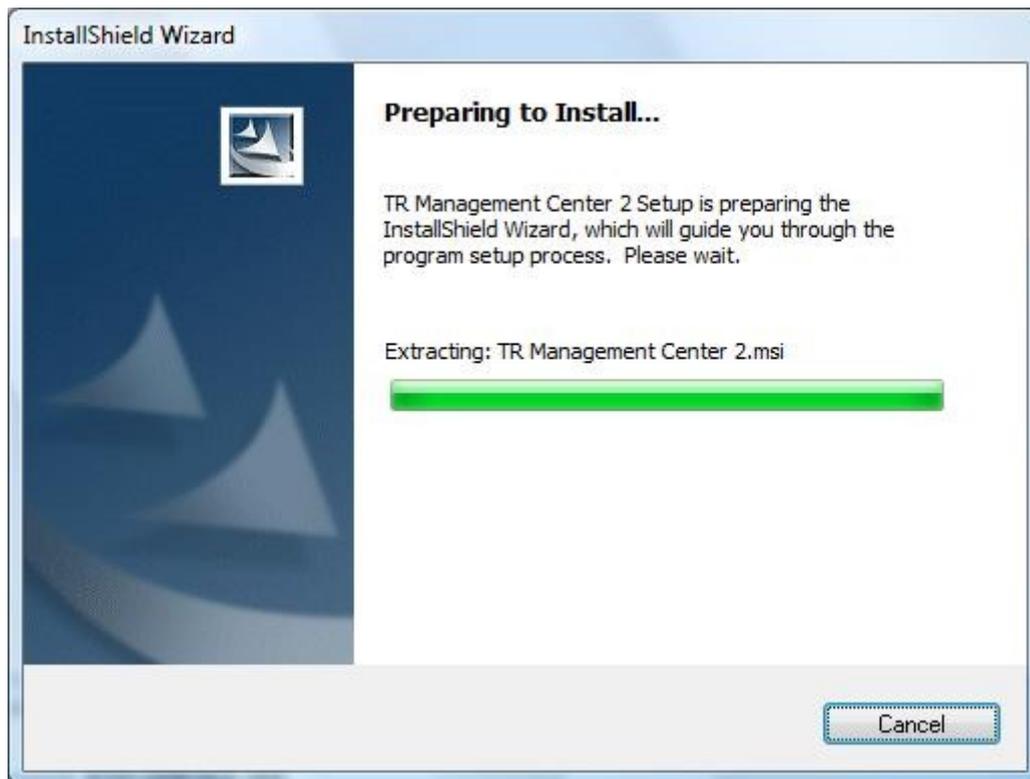


- 1.) Insert the Driver CD into your CD-ROM driver.
- 2.) AutoRun installation window will appear.
- 3.) Click "**Install USB Driver**" button to install the USB driver.
- 4.) You will see two folders. If your Windows is Vista version, please double click to open "**PL2303_USB_Driver_for_Windows_Vista**" folder and double click on "**PL-2303 Vista Driver Installer.exe**" to begin installation. Follow the instruction to complete the installation process.
- 5.) If your Windows is XP or 2000 version, please double click to open "**PL2303_USB_Driver_for_Windows_2000_XP**" folder and double click on "**PL-2303 Driver Installer.exe**" to begin installation. Follow the instruction to complete the installation process.

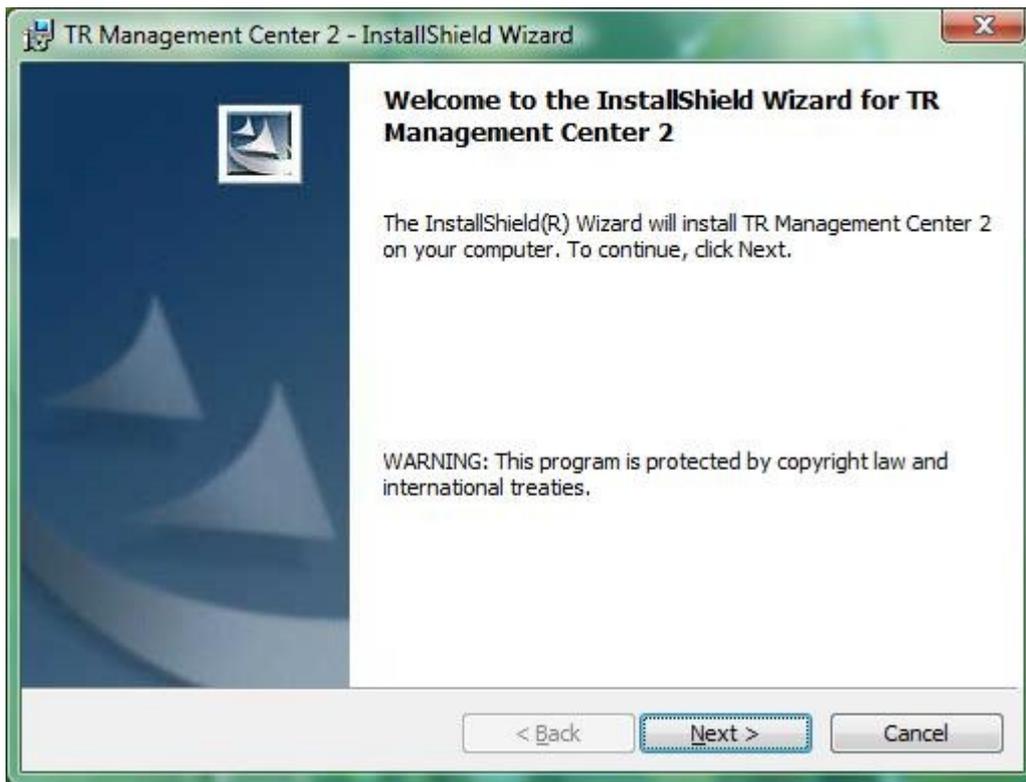
3.2 Install, Update, Uninstall the TR Management Center program

3.2.1 Install TR Management Center

Step 1: Click “**English PC Software**” button to install the TR Management Center program.



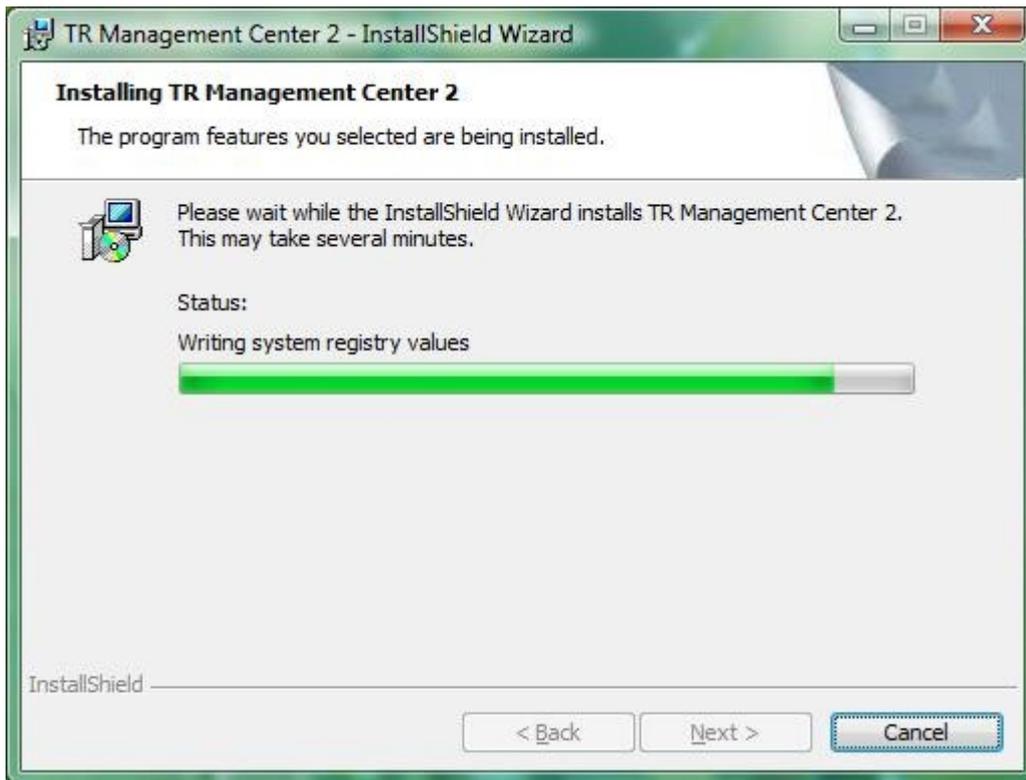
Step 2: Click "Next"



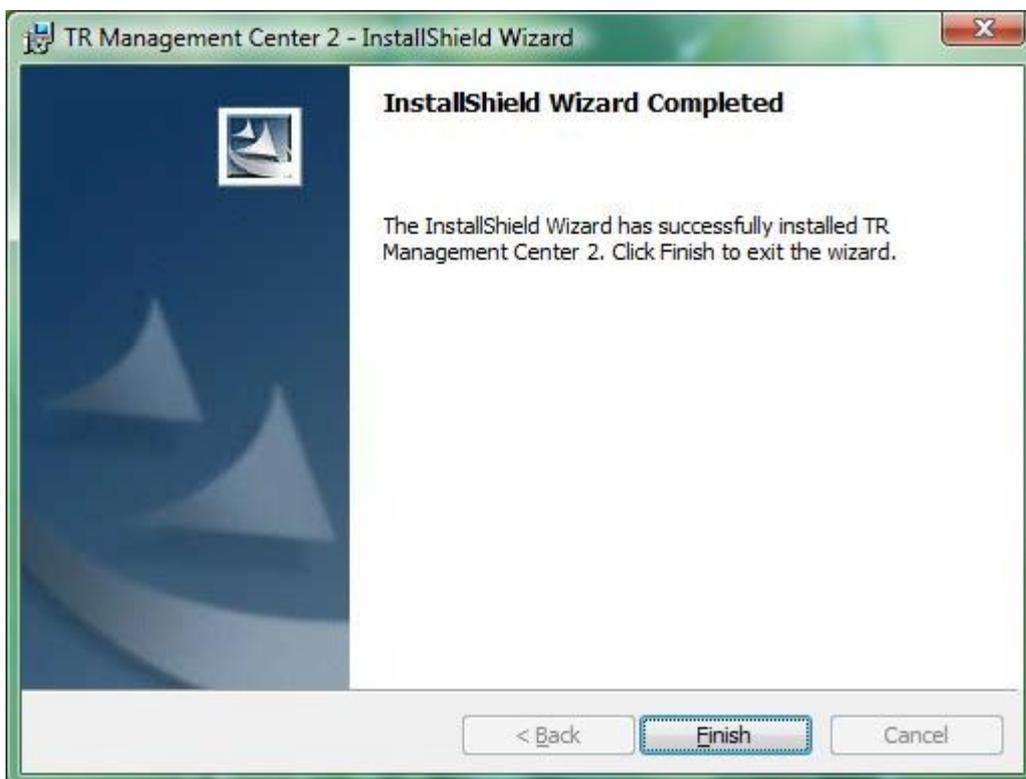
Step 3: Click "Install"



Step 4: Wait for the program to install



Step 5: Click "Finish" when installation is finished

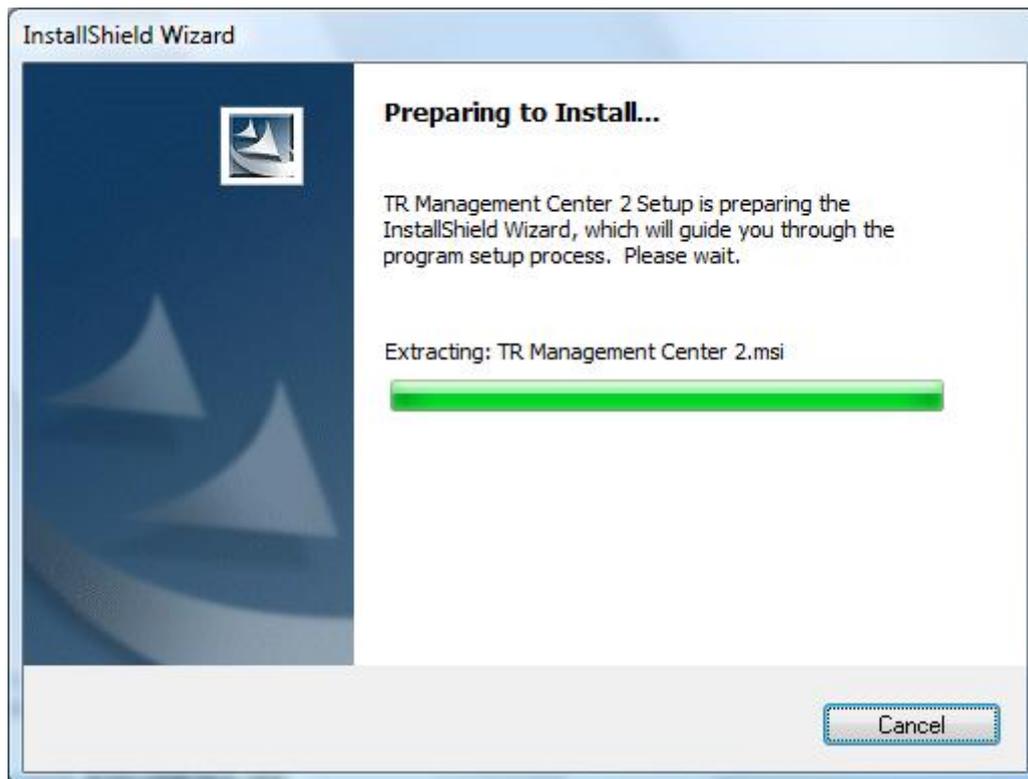


3.2.2 Update TR Management Center

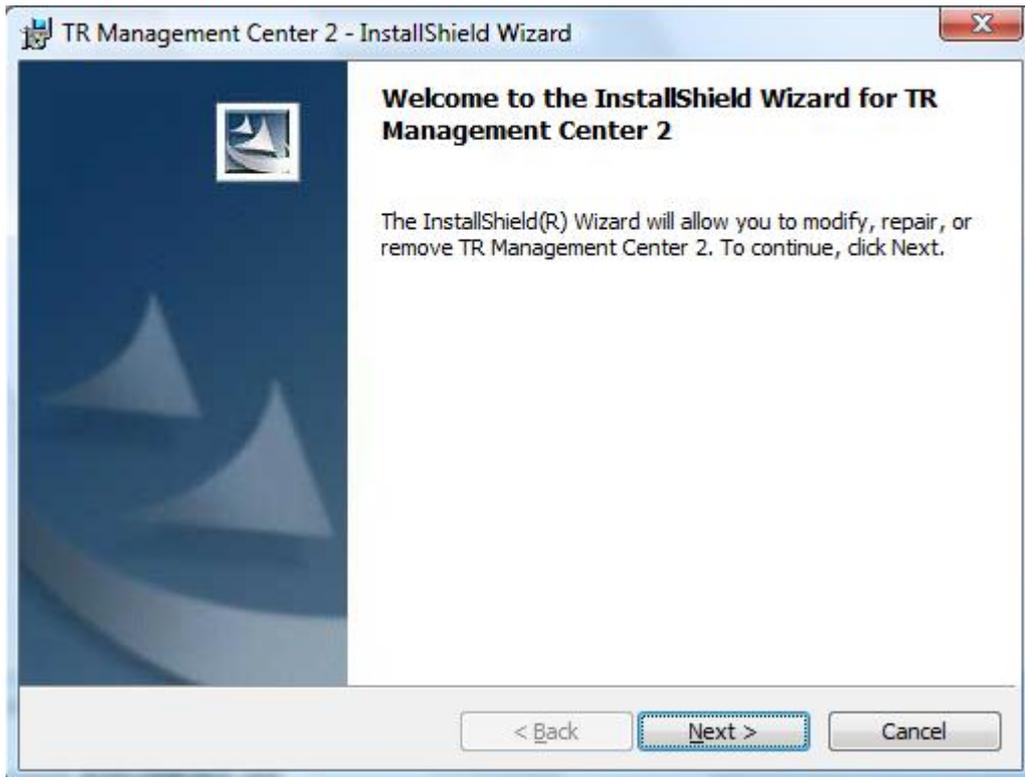
If you download a new version of the TR Management Center software from the Globalsat website, you could install the downloaded software to upgrade the TR Management center without un-installing the previous version of TR Management center.

The update process is as follows:

Step 1: Preparing to install program



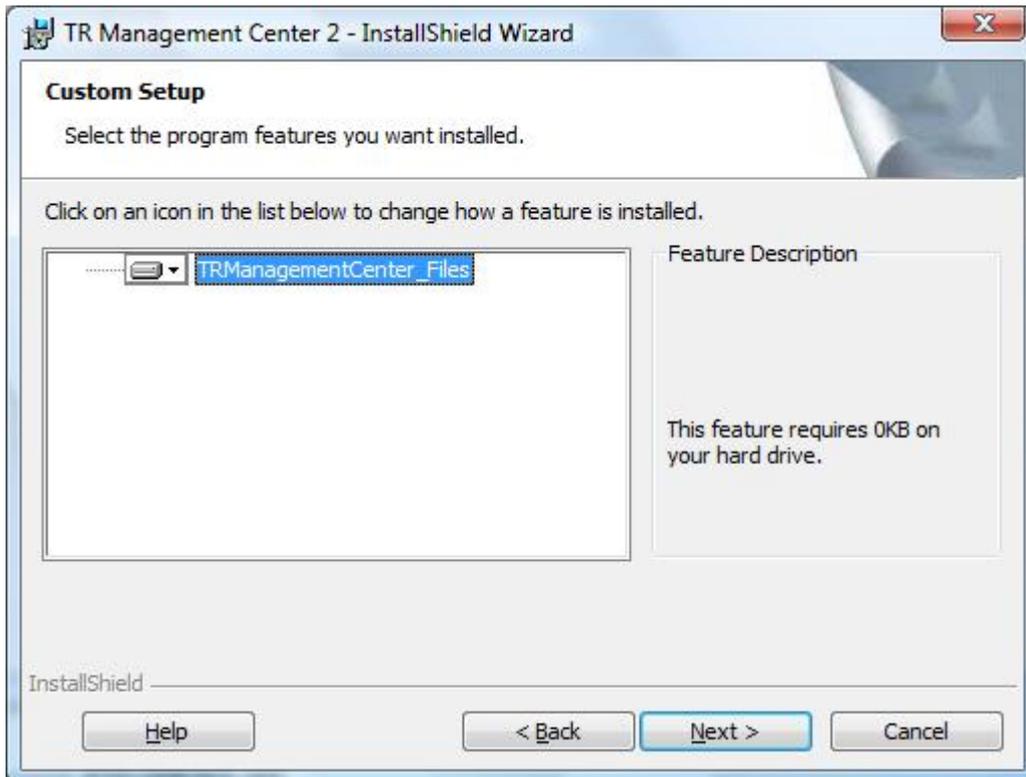
Step 2: Click "Next"



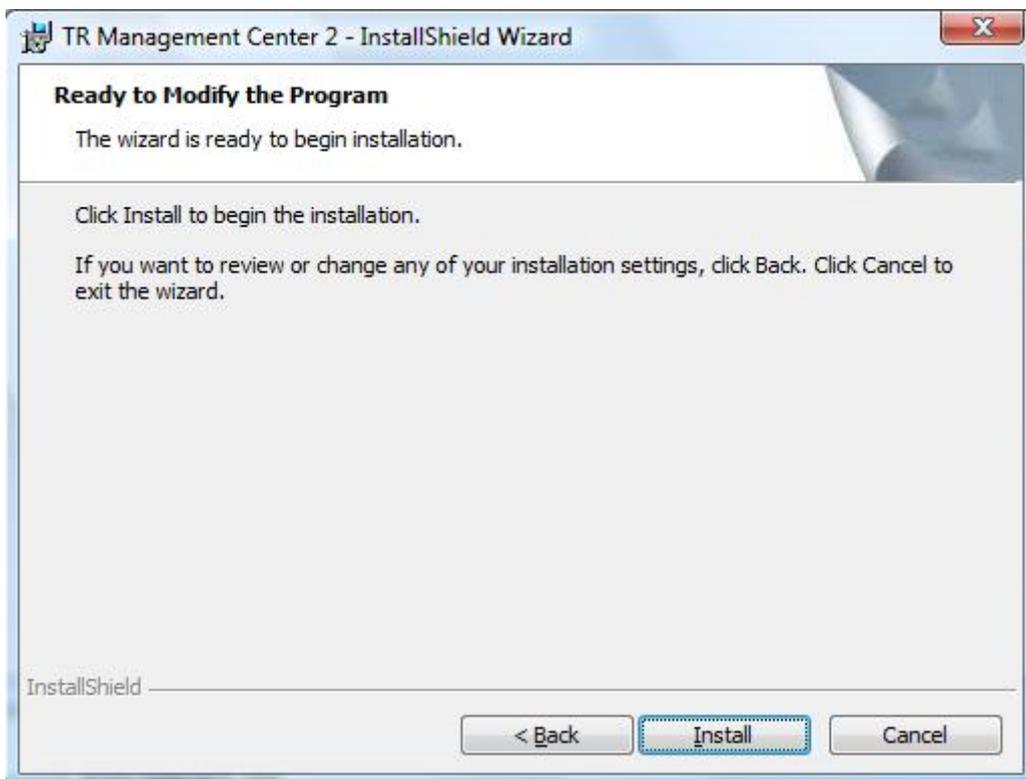
Step 3: Select "Modify" and click "Next"



Step 4: Click "Next"



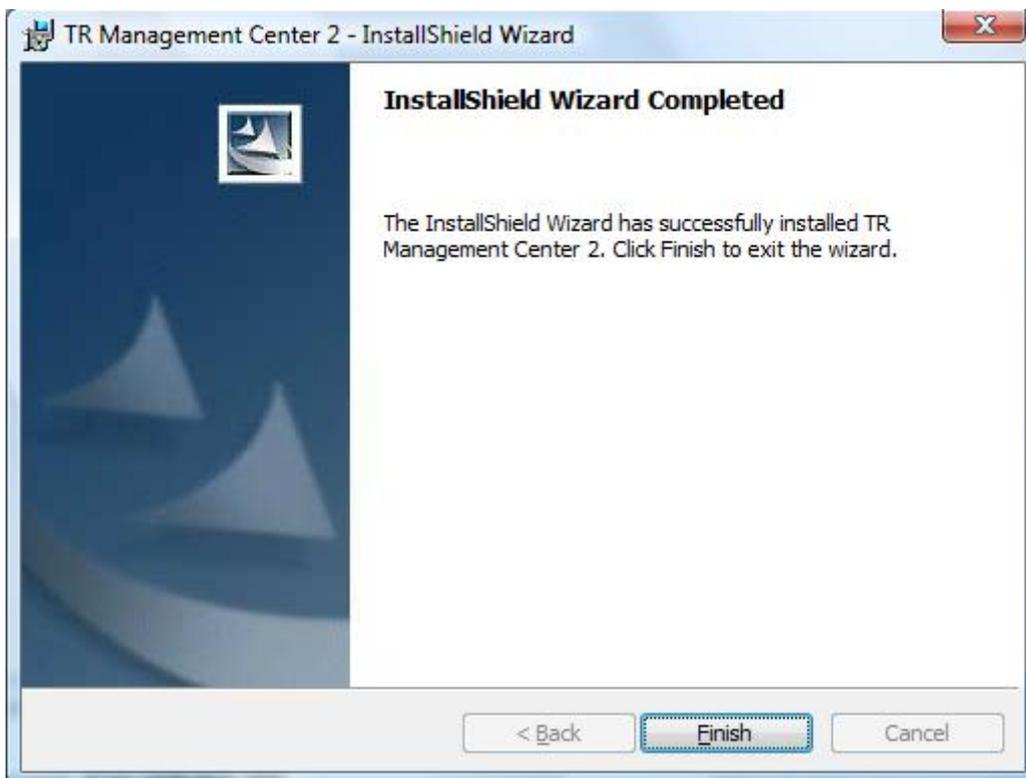
Step 5: Click "Install"



Step 6: Wait for upgrading the TR Management Center 2

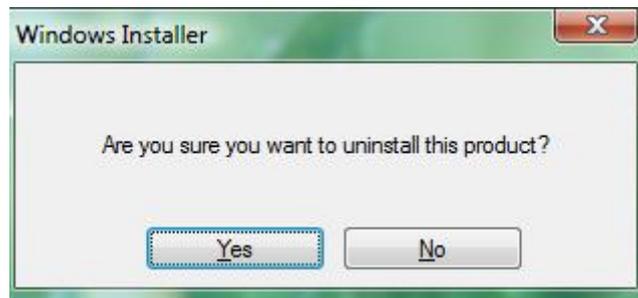


Step 7: Click "Finish"

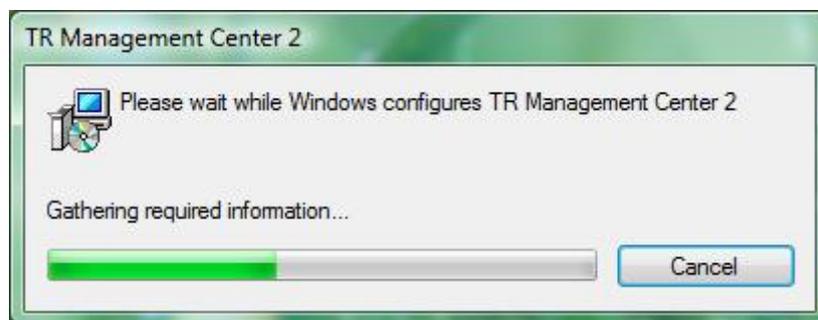


3.2.3 Uninstall TR Management Center

Step 1: Run "Start" -> "Globalsat" -> "TR Management Center" -> "Uninstall TR Management Center" Press "Yes"



Step 2: Uninstall in progress. Close window when finished



3.3 TR Management Center Screen Introduction

The screenshot shows the TR Management Center software interface. The main window is titled "TR Management Center" and contains several panels:

- Main Tool:** Located on the left, it includes a "Trackers List" with entries for "yvonne(TR-151)" and "jessica(TR-151)". Below the list are sections for "SMS Command Status" (showing "Delivery Successful"), "Network Service" (with "Start" and "End" buttons), and "Lastest Data" for the selected tracker "jessica".
- Google Map:** The central area displays a Google Map with a blue location pin. Callout boxes point to the "Menu" (top left) and "Google Map" (top center) areas.
- Data Output Area:** At the bottom center, a table displays tracking data for "jessica".

Name	Source_Tel	Local_Date	Local_Time	Gps_lat	Gps_lon	Gps_date	Gps_time
jessica	0919562737	2008/09/26	11:19:54	24.99677	121.48765	2008/09/26	11:19:32
- Query Tool:** On the right side, it provides search filters including "Tracker" (set to "yvonne"), "Type" (set to "Tracker Time"), "Start time" (9/26/2008, 11:11:25 AM), and "End time" (9/26/2008, 11:11:25 AM). It includes "Find", "Export", and "Delete" buttons, as well as "Find result" statistics and a "Coordinate locate" section.

Callout boxes at the bottom identify the "Main Tool", "Data Output Area", and "Query Tool" sections.

TR Management Center Main Screen

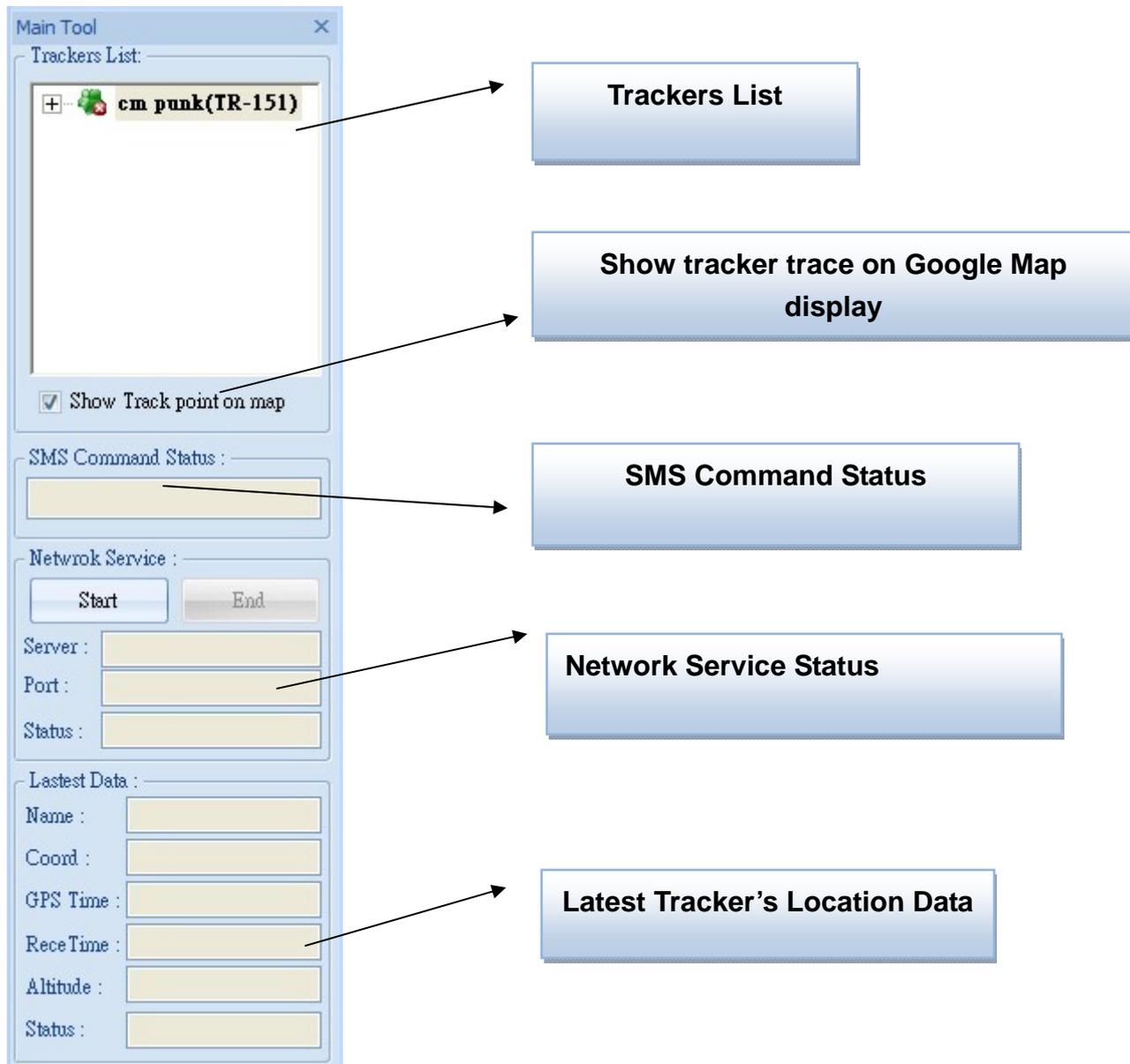
There are five parts of TR Management Center Screen as below.

- **Menu:** The basic menu options
- **Main Tools:** Shows the trackers' connection status, Network service status and the tracker's latest location
- **Query Tool:** Used for searching history data and finding coordinates
- **Data Output Area:** Shows the tracker login status, received network data and query results
- **Google Map:** Shows the Google Map

The detailed description of each part is as following.

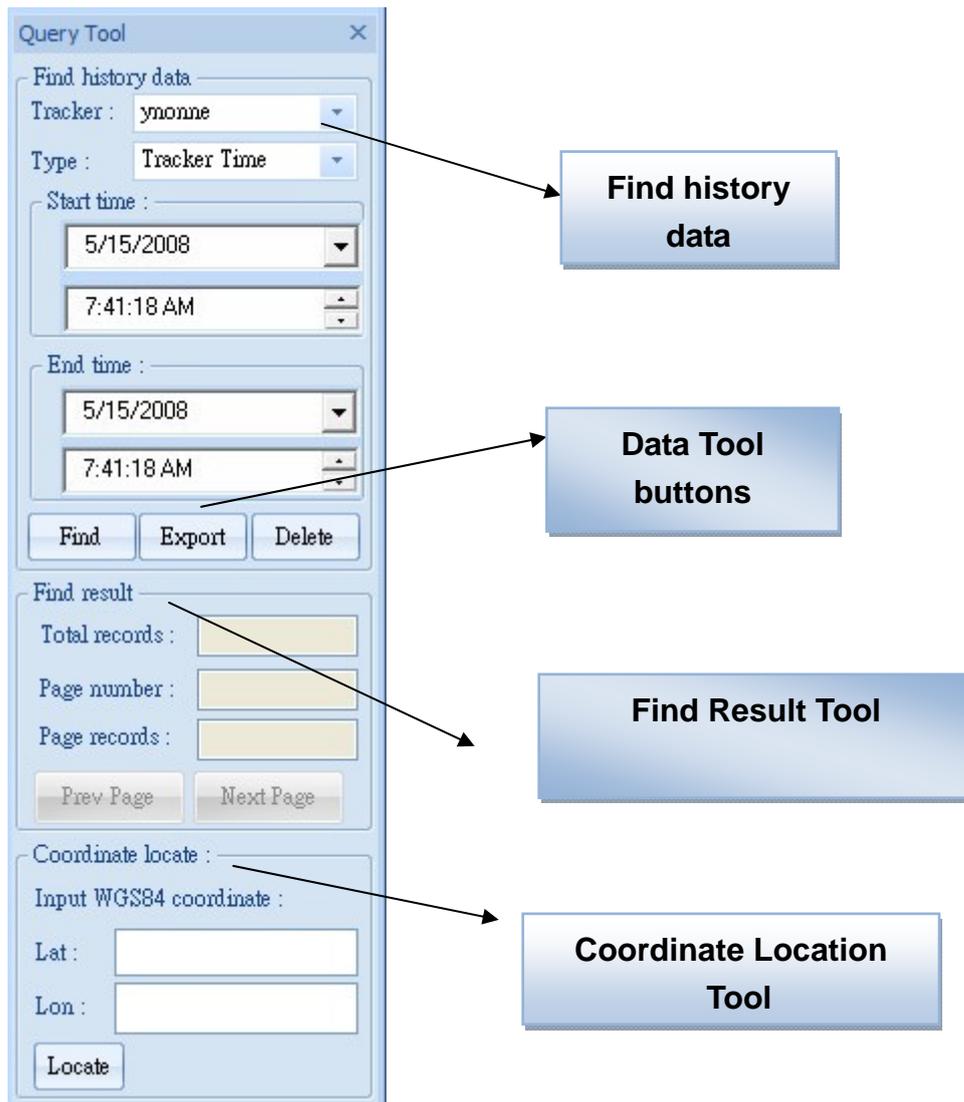
3.3.1 Tracker and Main Tool Bar

Main tool is for managing trackers and showing the server status



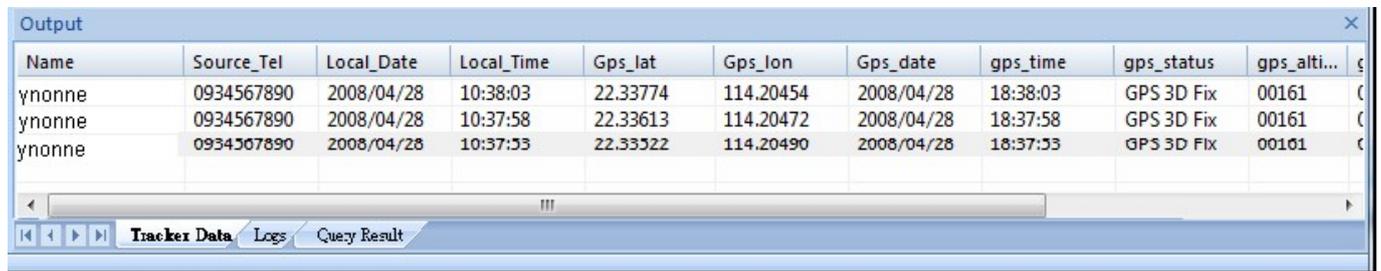
3.3.2 Query Tool

Query tool is for looking up for the history data and coordinate.



3.3.3 Data Output Area

Data output area is for displaying the Tracker data, log, and query result.



Name	Source_Tel	Local_Date	Local_Time	Gps_lat	Gps_lon	Gps_date	gps_time	gps_status	gps_alti...
ynonne	0934567890	2008/04/28	10:38:03	22.33774	114.20454	2008/04/28	18:38:03	GPS 3D Fix	00161
ynonne	0934567890	2008/04/28	10:37:58	22.33613	114.20472	2008/04/28	18:37:58	GPS 3D Fix	00161
ynonne	0934567890	2008/04/28	10:37:53	22.33522	114.20490	2008/04/28	18:37:53	GPS 3D Fix	00161

The Output area is divided into GPRS Data, GPRS Log and Query Result

Tracker Data: Shows the data sent from connected trackers. Only the last 100 entries from each tracker are shown.

Log: Shows the record of all tracker connections and disconnections including the raw transmitted data.

Query Result: Shows all matching results from the trackers' history data.

3.4 Skype Setup

In stead of sending SMS to trackers by mobile phones, TR Management Center sends SMS to trackers by Skype. You can not only send SMS to trackers for asking report by Skype, but send SMS to set the parameters of TR-151's function.

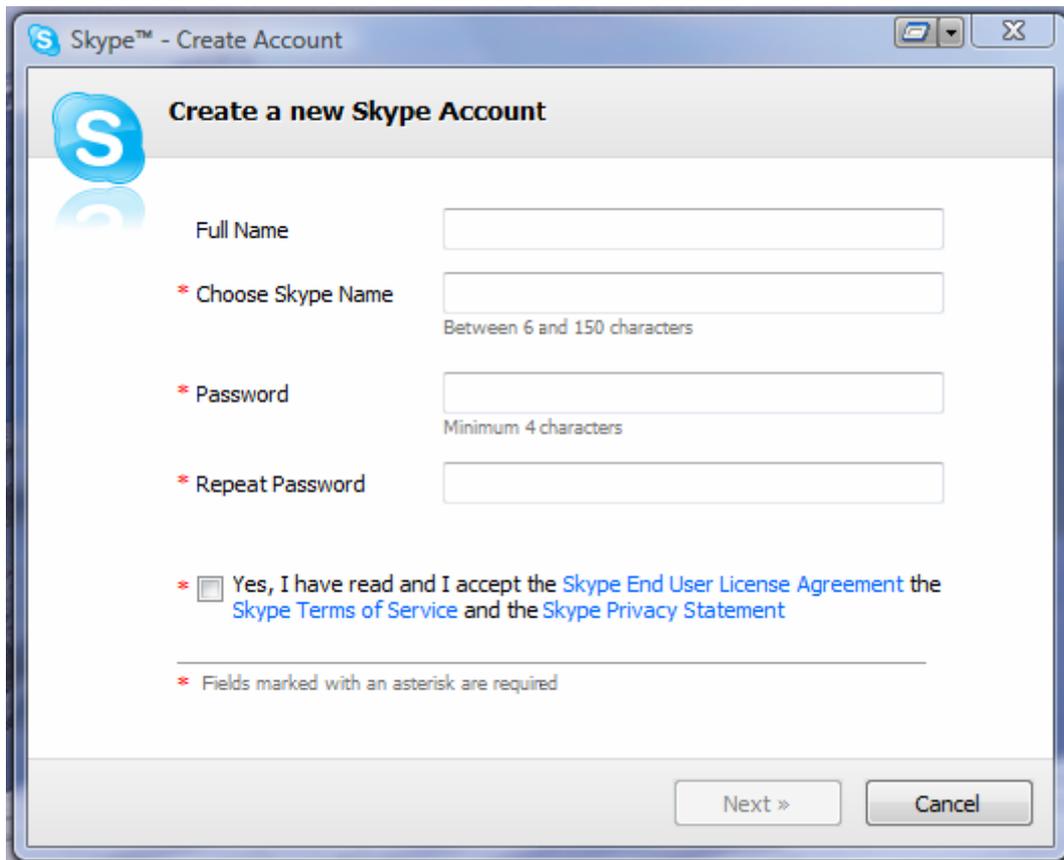
In order to send SMS by Skype, please complete the following steps to activate the SMS function of Skype.

Step 1: Install Skype Software

You can download Skype from www.skype.com or the website of the local Skype distributor. Please refer to the instruction of Skype to install the software.

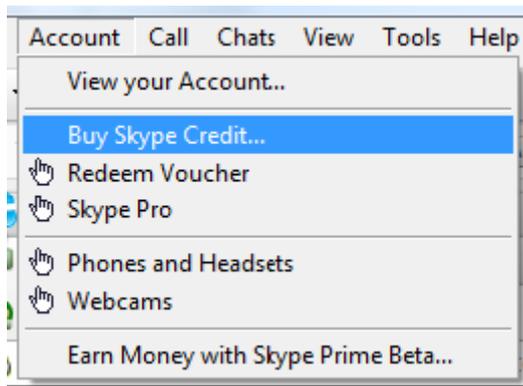
Note: The pictures and instructions provided in this manual are based on Skype version 3.6.1.xxx. If they do not match the version of Skype you are currently using, please download and upgrade to the latest version from the Skype website.

Step 2: Please create a user account.



Once you have created an account, you can login and use Skype's basic functions.

Step 3: Buy Skype credit

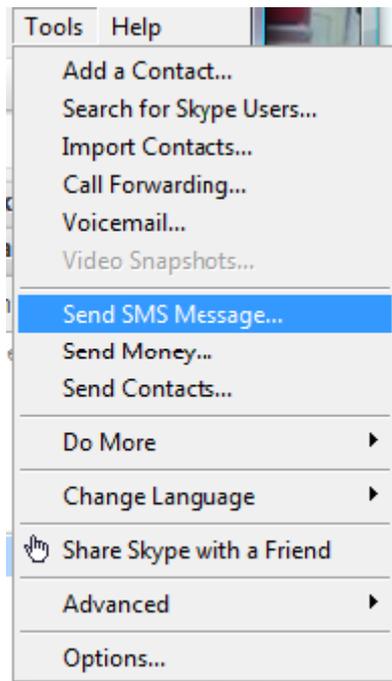


Step 4: Test the Skype SMS function

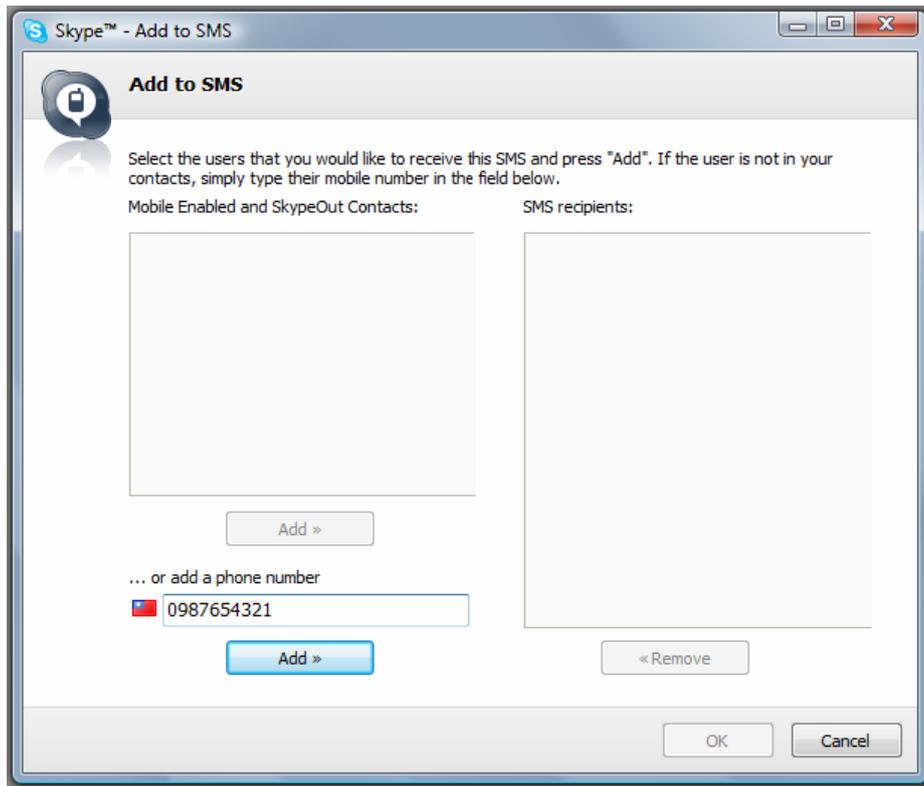
After completing the above process, please check if Skype's SMS functions can work by sending a test message to mobile phone. Follow the SMS messaging procedure below to send a SMS message and check that your Skype is working normally.

➤ Sending a test SMS

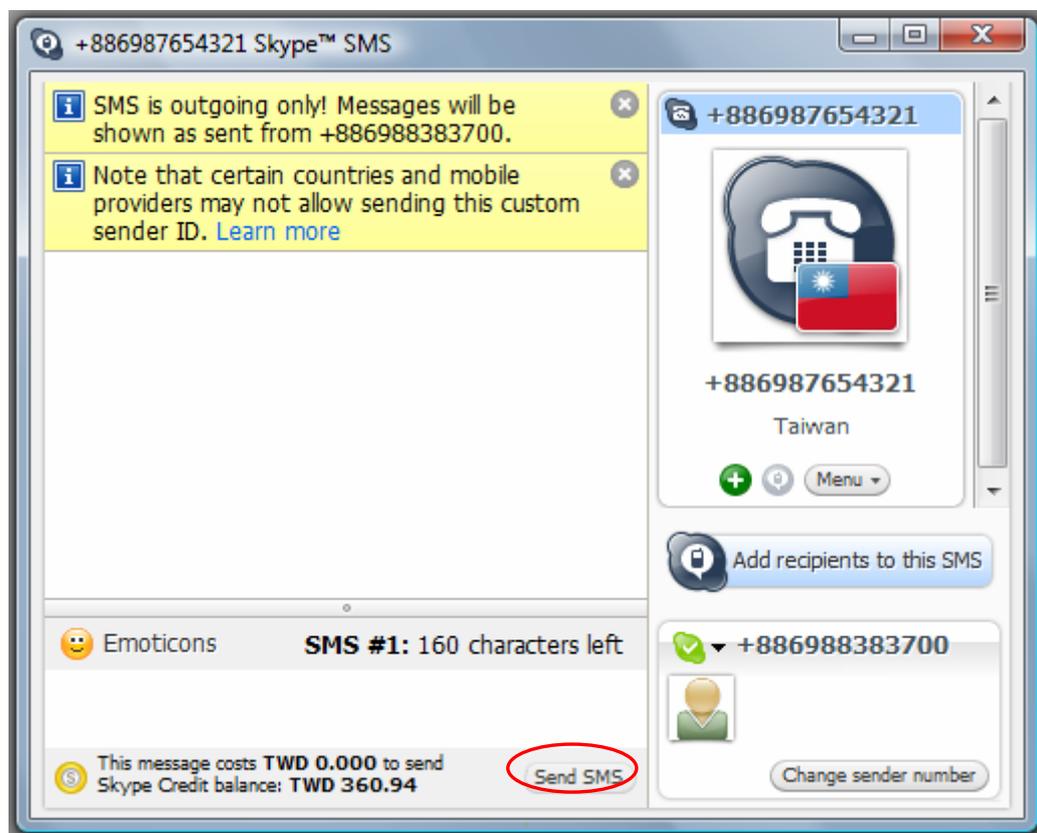
From the Skype menu, select "Tools" -> "Send SMS Message" then follow the steps shown below



Choose **Send SMS Message** from the menu

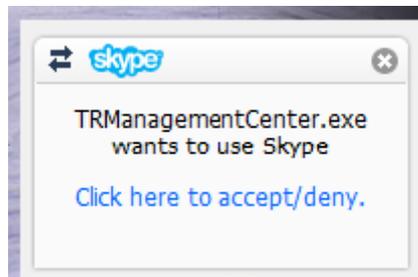


At the Send SMS interface, add the recipient's mobile phone number

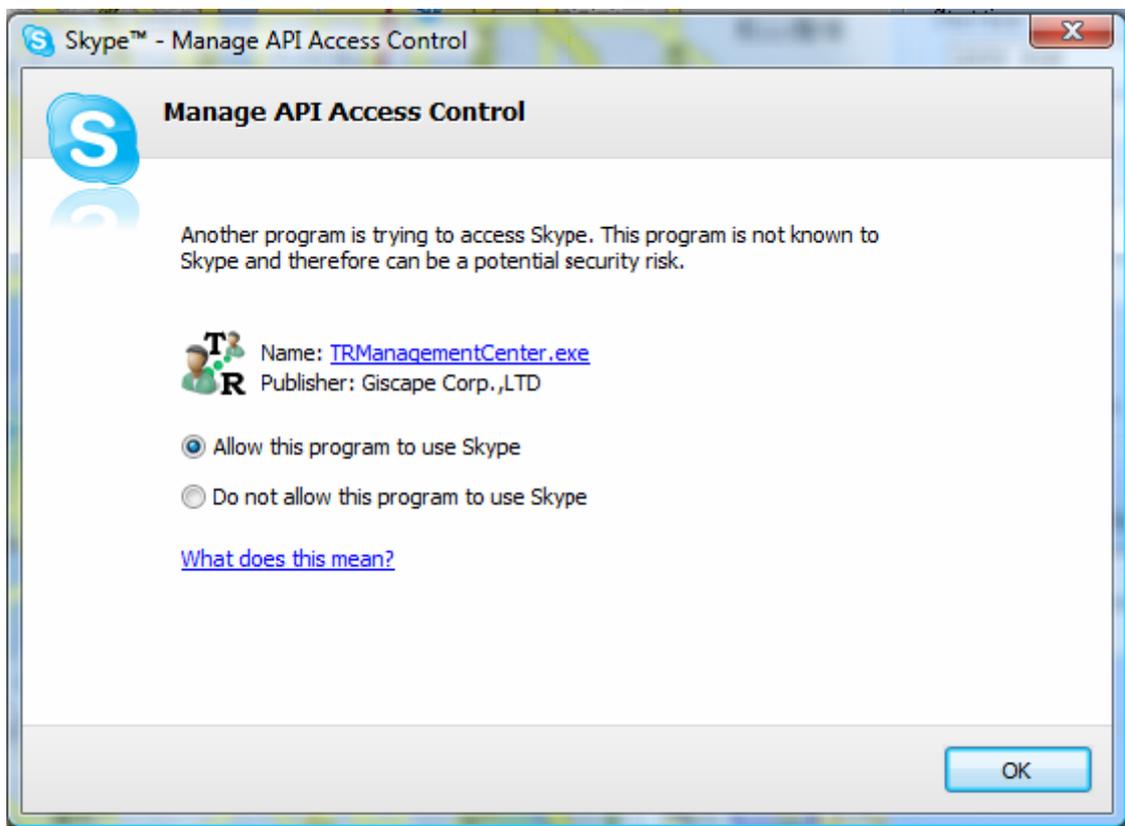


Write the content of SMS and click **Send SMS** button

Step 5: When you launch the TR Management Center program, the following security verification pop-up window will appear in the lower right corner of the screen asking you to allow the TR Management Center to use Skype functions.



Click the blue text to request Skype access.

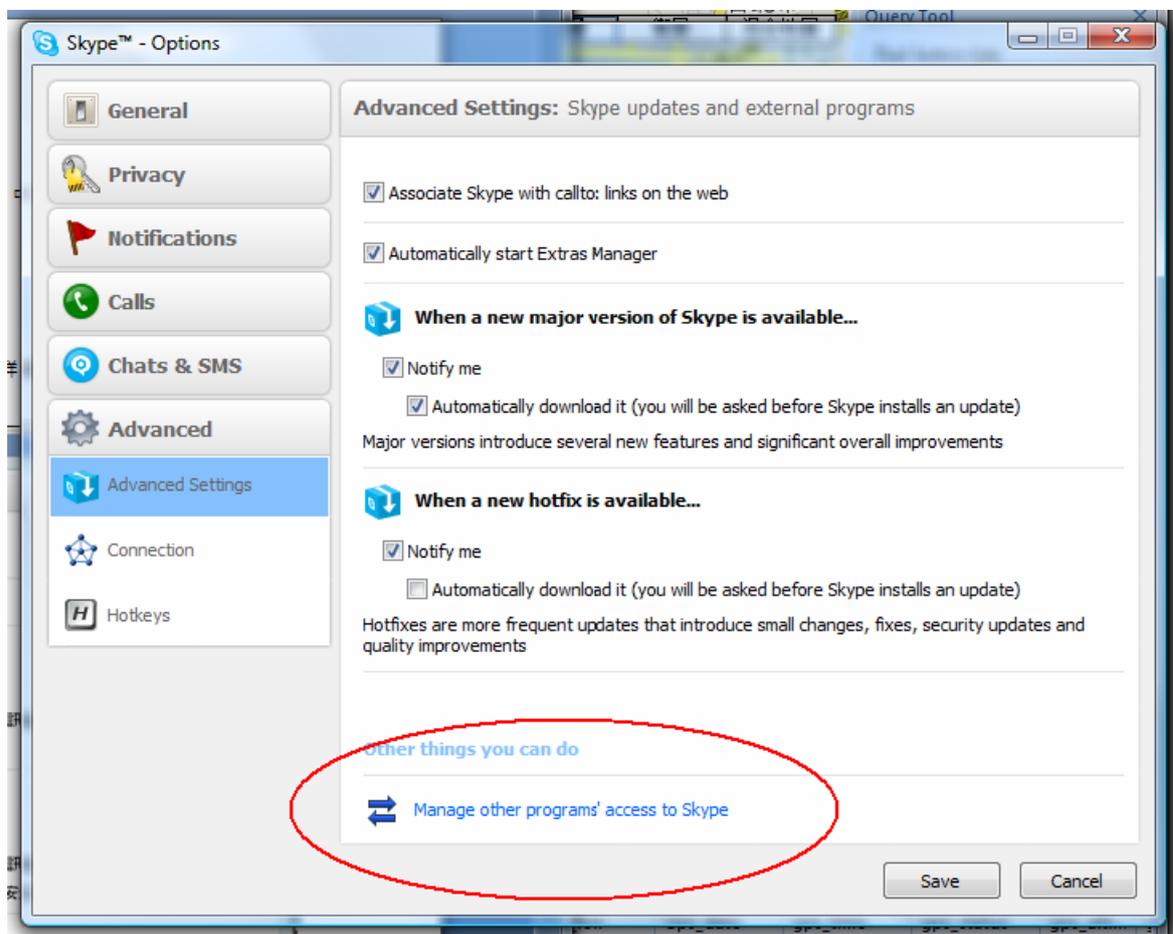


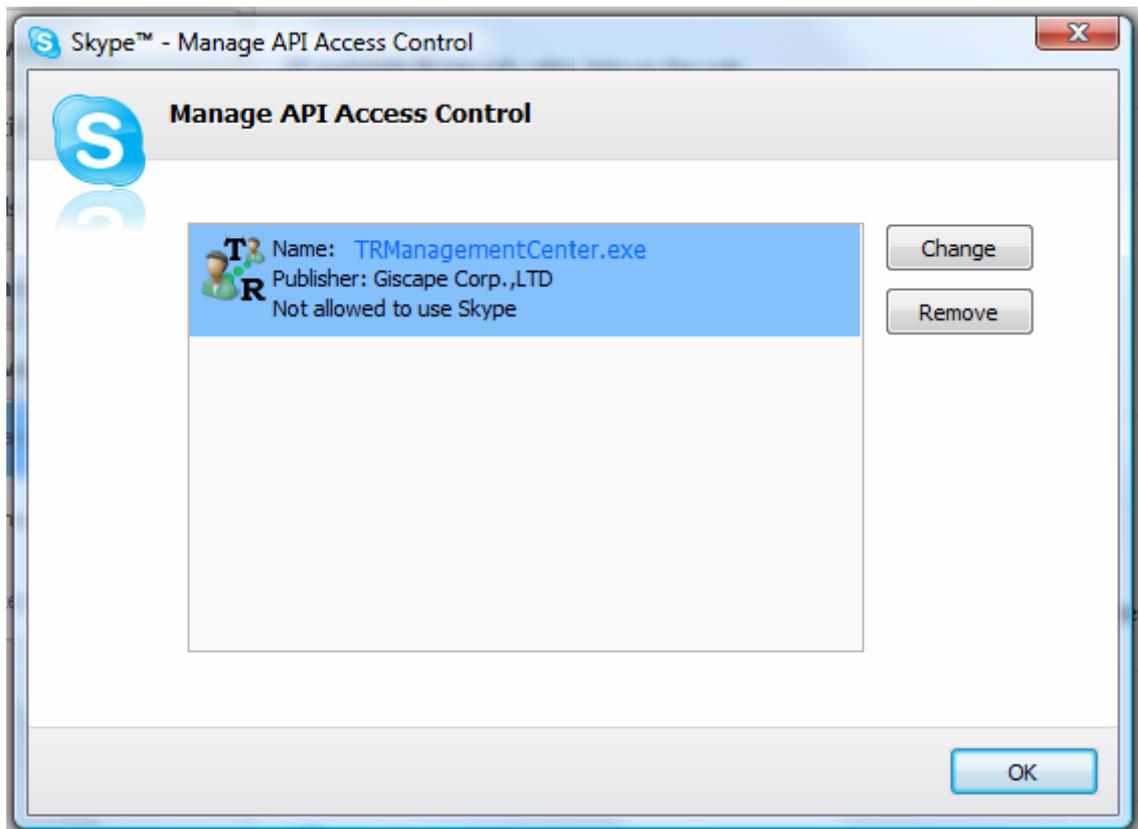
Select "**Allow this program to use Skype**"

If you accidentally select "Do not allow this program to use Skype", please change this from within the Skype program at "Options -> "Advanced"

Note:

The exact procedure may vary from the version of Skype. Please refer to the Skype manual for more information.





If the TR Management Center is not allowed to use Skype, please click on the "**Change**" button and select "**Allow this program to use Skype**".

3.5 Firewall Setting

The TR Management Center sends data via network, so the firewall must be configured to allow external access. When you launch the network service, a Windows Security Alert window will appear. Click on the "Unblock" button to let the TR Management Center to use the network.



3.6 TR Management Center System Requirement

The computer system requirements of the TR Management Center program:

1. The computer must be equipped with at least an Intel Pentium 4 or equivalent AMD CPU, 256MB of RAM and a network card.
2. Supports the following operating systems: Windows XP, Windows 2000, Windows 2003 or Windows Vista. **(It does not support 64 bits OS)**. If you will run TR Management Center on Windows 2000, please download the MDAC component on this [link](#) before installing TR Management Center.
3. The graphics card must support at least 256 colors and a resolution of 800x600 or higher.
4. Skype must be version 3.6 or higher. The latest version can be downloaded from www.Skype.com.
5. A fixed IP address is required. If a dial-up network connection is used, the program must be provided with this computer's external IP address. TR-151 trackers must be configured with this IP.

3.7 Copyrights and Example Information

The copyright on all software and hardware mentioned in this manual belong to their respective owners.

1. The copyright of Windows XP, Windows 2000, Windows 2003 and Windows Vista belong to the Microsoft Corporation.
2. The copyright of the Skype program belongs to Skype Technologies S.A.
3. The copyright of Google Map belongs to **Google Inc.**
4. The copyright of Intel Pentium belongs to the Intel Corporation.
5. The copyright of AMD belongs to Advanced Micro Devices, Inc.

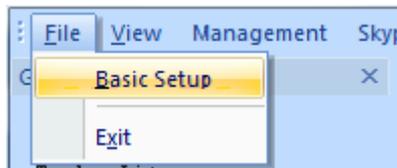
All text and telephone numbers mentioned in this manual are used as an example only. We apologize in advance for any coincidences.

Any copyrights not mentioned in this manual belong to their respective owners.

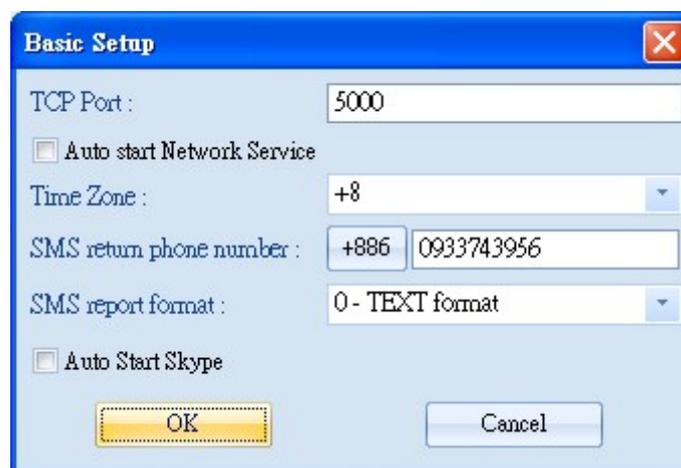
4. TR-151 Management Operation

4.1 TR Management Center Basic Setup

Before operating the TR Management Center, please set the operation parameters of the TR Management Center in the **Basic Setup**. It will make the afterward operation work properly.



Basic Setup



Basic Setup Interface

Item	Function	Description
TCP Port	Set the communication port for connecting network	The default is 5000. You can set form 1024~5000.
Auto start Network service	Choose to automatically start network service or not	
Time Zone	Set the time zone	
SMS Return phone number	Set the phone number for receiving the SMS report	
SMS report format	Set the SMS format	
Auto Start Skype	Choose to automatically start Skype	

Note: Please do the Basic Setup for the first time of using TR Management Center.

4.2 Tracker Management

TR Management Center can track and manage up to 5 trackers. You have to set the parameters of TR-151 while adding a set of TR-151 in the TR Management Center. If you have already set 5 trackers in the TR Management Center and want to set one more tracker, please delete one of the existing trackers in the TR management center.

The tracker's information and parameters must be properly configured before using other functions of TR Management Center. Then your tracker can correctly send report back to the TR Management Center and that the program can correctly display the tracker's current location on the map.

4.2.1 Adding and setting a TR-151 tracker

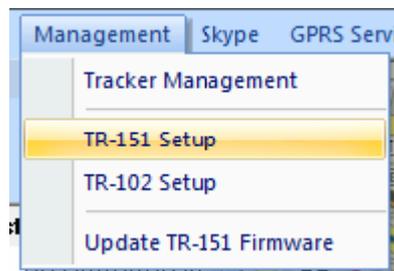
You can add a new tracker by making TR-151 Setup, please follow the steps below.

Step 1: Connect the TR-151 to the computer's USB port by the USB cable.

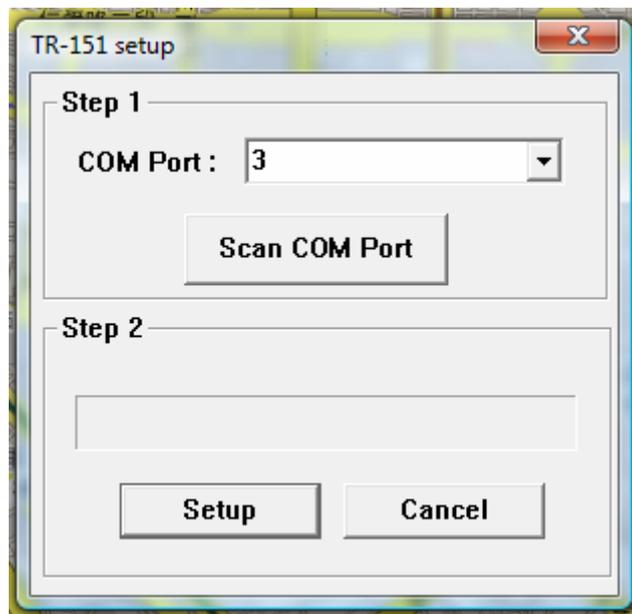
Step 2: Open the battery cover and adjust DIP Switch 3 to "On".

Step 3: Turn on the TR-151. When the status LED turns red, the tracker is under setup mode. (Please hold down the power button for 2 seconds or more until the red light comes on.) (Note: After turning on the power, please wait around 10 seconds before continuing with the TR-151 setup process)

Step 4: From the "Management" menu, select "TR-151 Setup" and enter the setup interface.

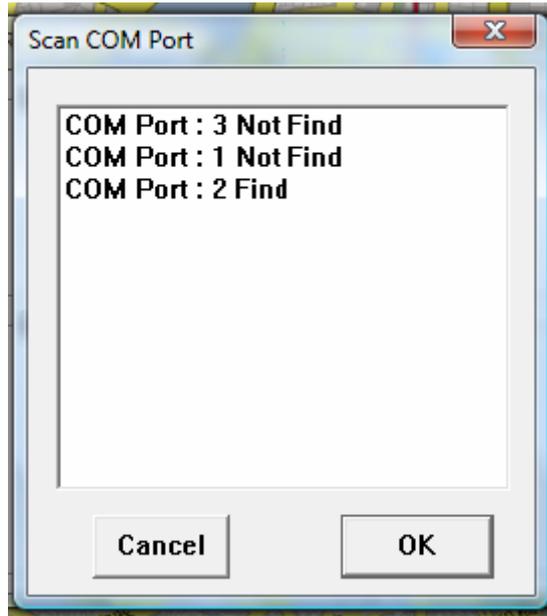


Step 5: After selecting "TR-151 Setup", please select the COM Port. If you are not sure which COM port you are using, click "**Scan COM Port**". Then please click "**Setup**" button to open the Setup window.



TR-151 Setup Interface

Click on Scan COM Port to find the port the TR-151 is connected to



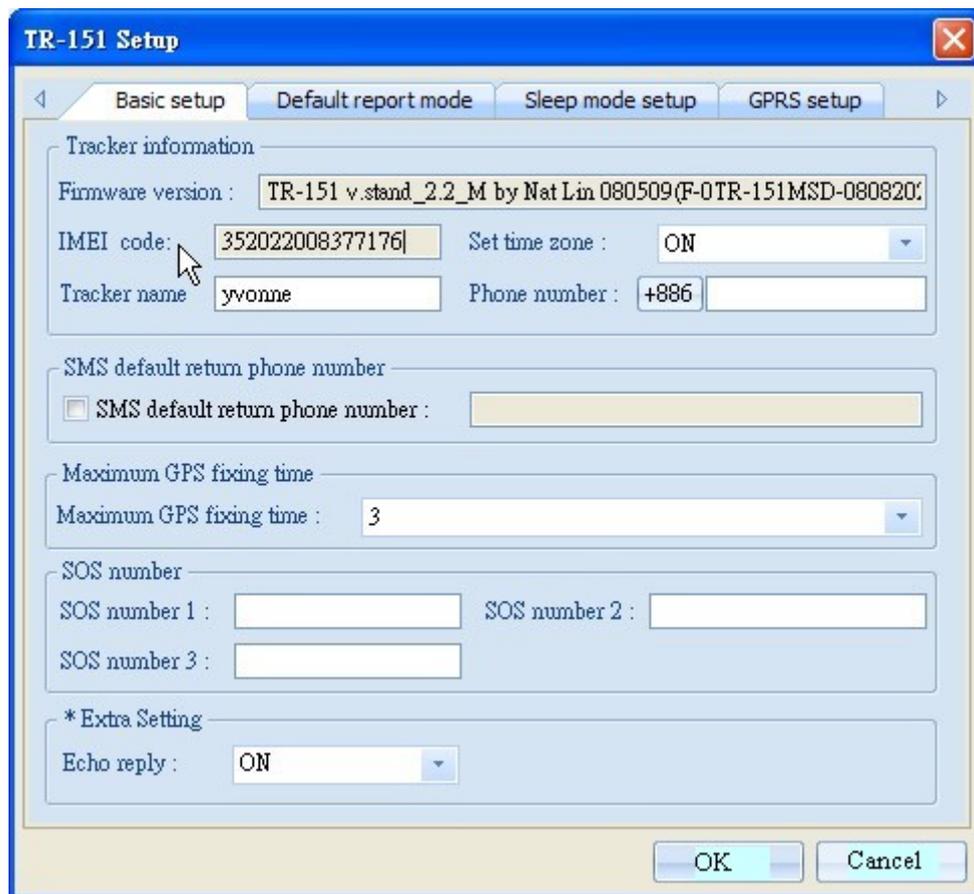
Note: If the scan fails to locate TR-151, please try again with the other USB port.

Note: If your SIM card asks for SIM PIN entry, a window will appear prompting you for the PIN password. (Please make sure you enter the correct code as the SIM card will be locked after three failed attempts. If you do not know the PIN code or the SIM card is locked, please contact your GSM network service provider for assistance.)



SIM PIN Code Interface

4.2.1.1 TR-151 Basic setup



TR-151 Basic setup

Tracker Information: TR-151's Basic Information:

Item	Description
Firmware Version	Version of TR-151 firmware.
IMEI Code	International Mobile Equipment Identity
Set Time Zone	On: SMS sent from TR-151 will be converted to local time. Off: SMS sent from TR-151 will include the Coordinated Universal Time (UTC).
Tracker name	Enter the name of the tracker.
Phone number	Enter the phone number for this TR-151 and select the country/area code.

SMS default return phone number:

Item	Description
SMS default return phone number	TR-151 will send location report or confirmed message back to the return phone number that is in the last field of all SMS tracking commands. If user leaves “ Return Phone Number ” blank in the tracking commands, TR-151 will send SMS back to “ SMS Default Return Phone Number ”.

	If “Return Phone Number” and “SMS Default Return Phone Number” are both blank, TR-151 will send report back to caller ID.
--	---

Maximum GPS fixing time:

Item	Description
Maximum GPS fixing time	The maximum time allowed for a GPS fix. If TR-151 cannot get fixed of the location within the specified time, TR-151 will turn off GPS and send back its last known position. The unit is minute.

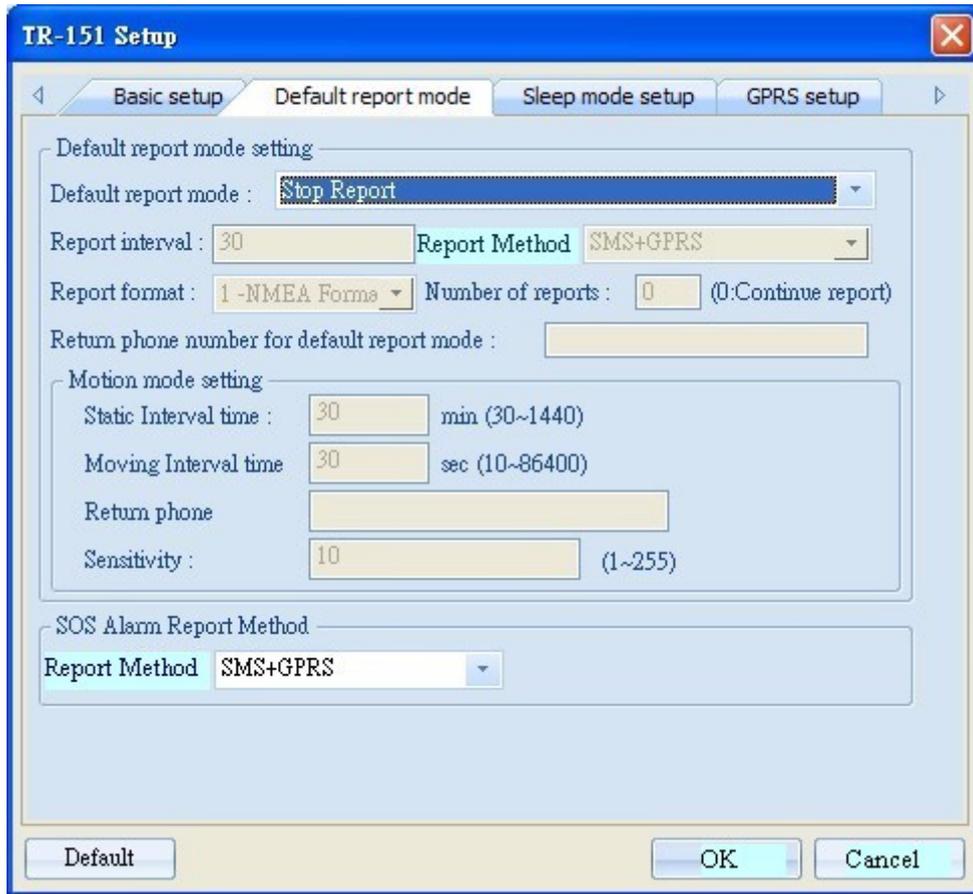
SOS number:

Item	Description
SOS number	After SOS button is pressed, TR-151 will send position report to 3 phone numbers or TR Management Center. You can set the 3 phone numbers in the field of SOS number. If only one phone number is setup, TR-151 will only send one SMS. You can set the report method of position report in 4.2.1.2 Default report mode

Extra Setting

Item	Description
Echo mode	On: Enable TR-151 to send return SMS or command to the phone number or server to confirm it has received the command Off: Disable TR-151 to send return SMS or command to the phone number or server to confirm it has received the command

4.2.1.2 Default report mode



Default report mode setting:

Item	Description
Default report mode	TR-151 will automatically go into the "Default report mode" when it is powered on. There are 7 report modes: SMS Immediate Report, SMS Period Report, Stop Report (Standby), GPRS Immediate Report, GPRS disconnect and period Motion report SMS/GPRS Immediate report After selecting a report mode, the unnecessary parameters for that mode will be disabled.
Report interval	The interval of sending location report in "SMS Period Report" and "GPRS Period Report" mode. The unit is second.
Report format	Set the TR-151's report format as 0, "TEXT Format" or as 1, "NMEA Format".

	<p>0 – TEXT Format</p> <p>TR-151</p> <p>2008/3/6 18:50:6</p> <p>N24.5981,E121.2924</p> <p>GPS fixed"</p> <p>1 – NMEA Format</p> <p>?0,352023006488395,0,3,130308,061740,E12129.3241,N2459.8051,134.0,0.04,0.00,4,4.45!</p>
Number of reports	Set the number of reports to transmit in "Period Report" mode.
Report Method	The method of the position report be sent by SMS or GPRS or SMS+GPRS
Return phone number for default phone number	The phone number for receiving the SMS of " Default report mode "

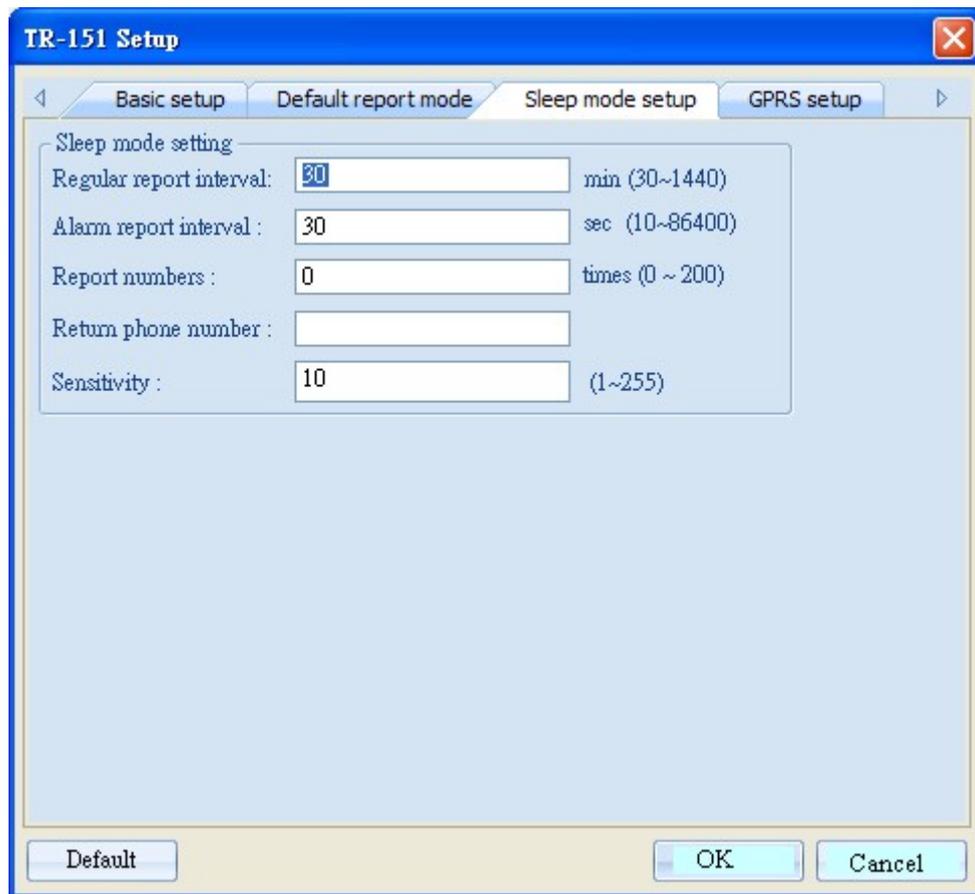
Motion Mode Setting

Item	Description
Static Interval time	The regular report interval under motion mode
Moving Interval time	The report interval when TR-151 senses vibration under motion mode
Return phone number	The phone number for receiving report when the Report Method is SMS or SMS/GPRS
Sensitivity	The number of vibration which activates TR-151 to send motion report. The value range is 1~255. The larger the number is, the less sensitive the device is.

SOS Alarm Report Method

Item	Description
Report Method	The method of the SOS alarm report be sent by SMS or GPRS or SMS+GPRS

4.2.1.3 Sleep mode setup



Item	Description	Default	Remarks
Regular report interval	The interval of sending position report under sleeping mode. During the interval, TR-151 will temporarily exit from sleeping mode	30 minutes	Unit is minute
Alarm report interval	The interval of sending position report when TR-151 senses vibration under sleeping mode	30 seconds	Can be set from 10~86,400 seconds
Report numbers	Set how many position report will be sent when TR-151 senses vibration under sleeping mode	0	0 indicates report continuously
Return phone number	The phone number for receiving position report under sleeping mode		
Sensitivity	The number of vibration which activates TR-151 to send alarm report. The value range is 1~255. The larger the number is, the less sensitive the device is.	10	Can be set from 1~255

4.2.1.4 TR-151 GPRS setting

The screenshot shows the 'TR-151 Setup' dialog box with the 'GPRS setup' tab selected. The fields are as follows:

- Server IP address or Domain name: 220.128.207.76
- Port: 4000
- APN: internet
- User name: (empty)
- User password: (empty)
- DSN1: (empty)
- DNS2: (empty)

Buttons at the bottom: Default, OK, Cancel.

Item	Description	Remarks
Server IP address or Domain name	server host IP	The fixed IP or Domain Name for the computer running the TR Management Center
Port	The communication port for connecting to GPRS network	Default is 5000 Can be set from 1024~5000
APN	The name of your network service provider's access point	The APN depends on the SIM card for the telecommunication service provider used by your TR-151 (The list below is for service providers in Taiwan. Please refer to the Appendix for your APN.)
user name	user name	Contact your GSM/GPRS network service provider
user password	user password	
DNS1		
DNS2		

APN Settings in Taiwan's provided

Service Provider	APN
Far East one	fetnet01
Trans Asia Telecommunications	hank
Chunghwa Telecom	emome or internet
MOBITAI Communications	gprs1
Taiwan Mobile	Internet
KG Telecom	internet

Once you have entered all of the settings, click on "OK" to set up the TR-151 or click on "Cancel" to cancel the setup.

Note 1: After setting up TR-151, if this tracker does not exist in the TR Management Center it will be added to the database. If it already exists then the database will be updated.

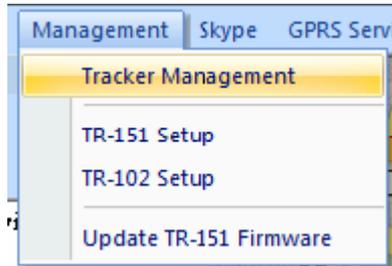
Note 2: Once setup is complete, turn off the TR-151, set the DIP Switch to OFF and restart before use.

Note 3: If your device has not been used for a long time or the data has been lost for some reason, click on the "Default" button to reset the device to its default settings.

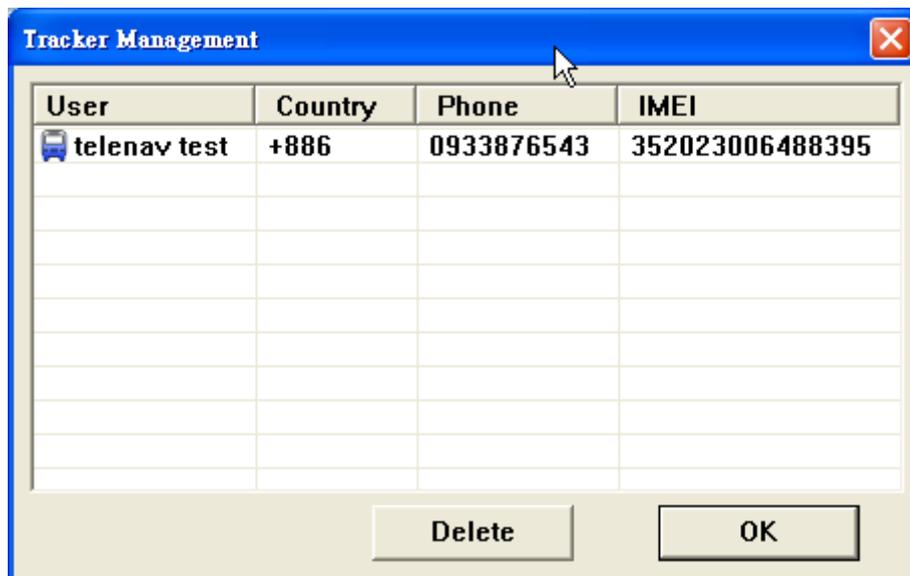
4.2.2 Tracker Management

Tracker Management is used to manage registered or previously configured trackers. In Tracker Management, you can edit or delete trackers.

You can find Tracker Management from the Menu "Management" -> "Tracker Management".



The Tracker Management option under Management in Menu



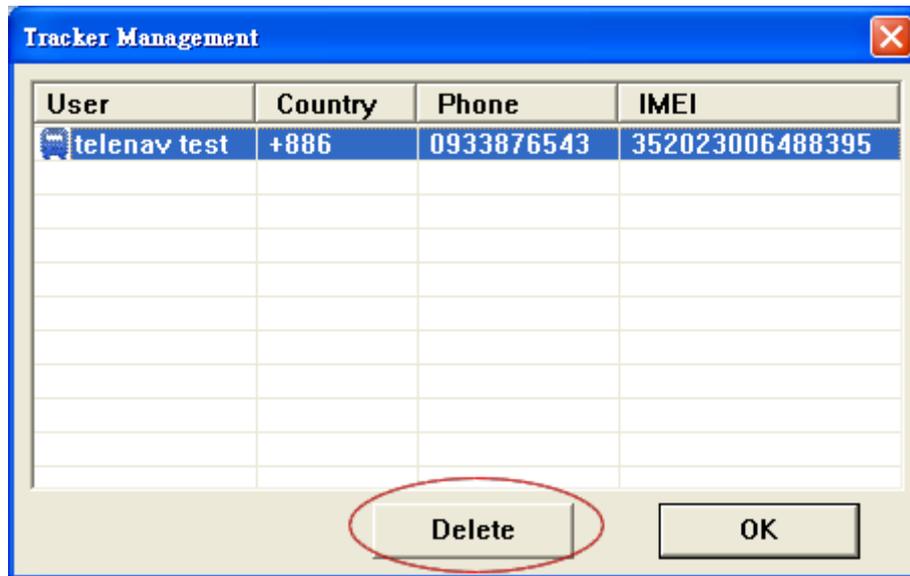
Tracker Management interface

4.2.3 Deleting a TR-151 tracker

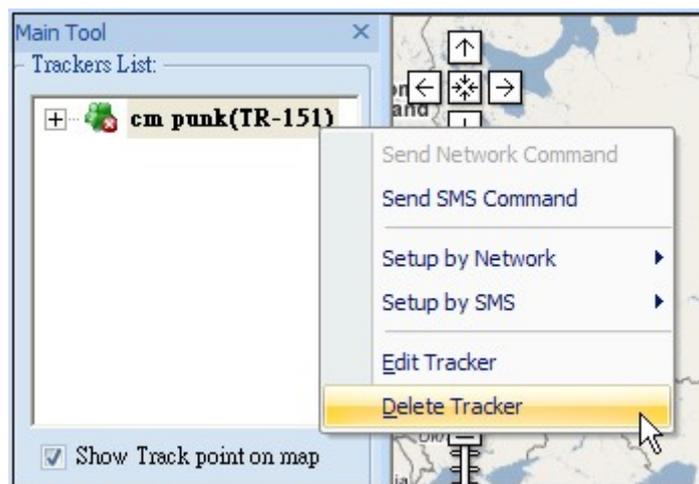
There are two ways for deleting TR-151 trackers in the TR Management Center

1. Select "Management" → "Tracker Management" from menu bar.

Choose the TR-151 you want to delete, and then click on the **"Delete"** button.



2. The other way of deleting TR-151 tracker is selecting a tracker from the Trackers List and right clicking the mouse button to bring the tracker menu. Now click on **Delete Tracker** to delete the selected tracker.



Method 2 for deleting a tracker



A confirmation window will appear when deleting a tracker

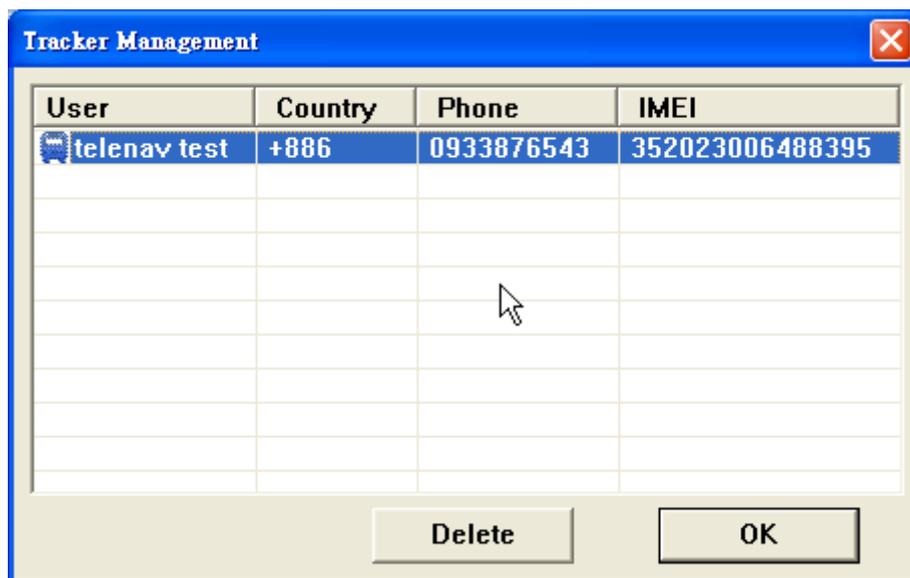
Note: Deleting a tracker does not actually delete its history data from the database. To delete all history data, please use the editing features in Microsoft Access.

4.2.4 Editing a TR-151 tracker

If you want to change the information of TR-151 tracker, you can edit the information by "Edit tracker"

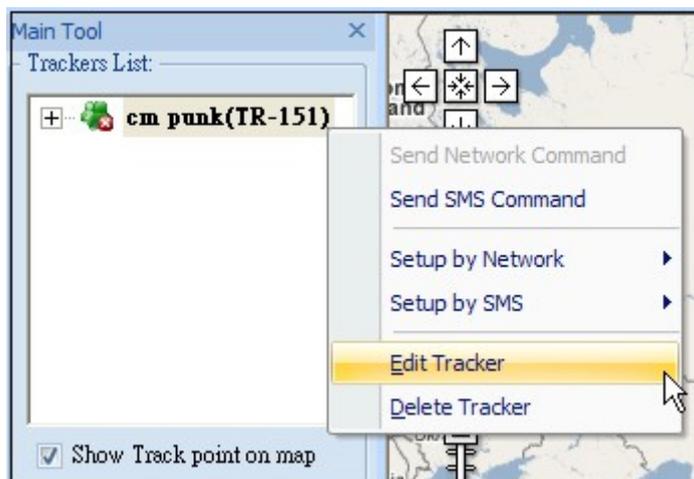
There are two ways of bring up "Edit tracker"

1. Click "Management" → "Tracker Management" from menu.



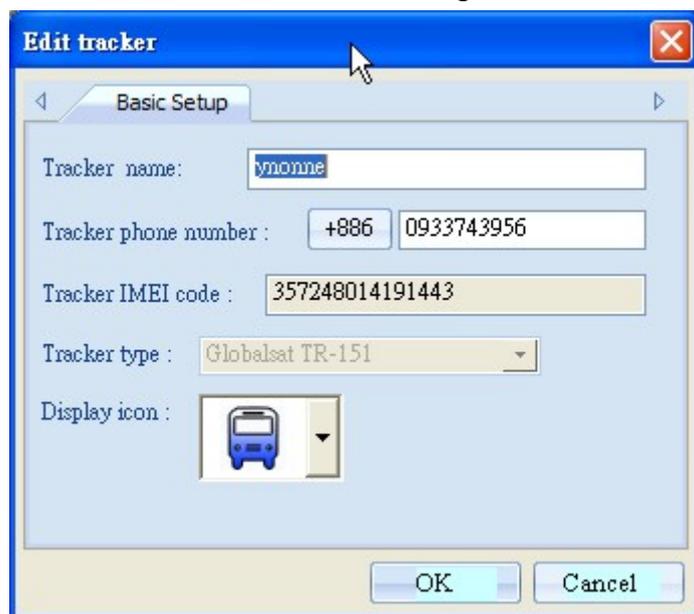
Double click a tracker, and then the window of "Edit tracker" will be brought up.

The other way of bringing “**Edit tracker**” is selecting a tracker from the Trackers List and right clicking the mouse button to bring the tracker menu. Click on **Edit Tracker**



Edit Tracker window

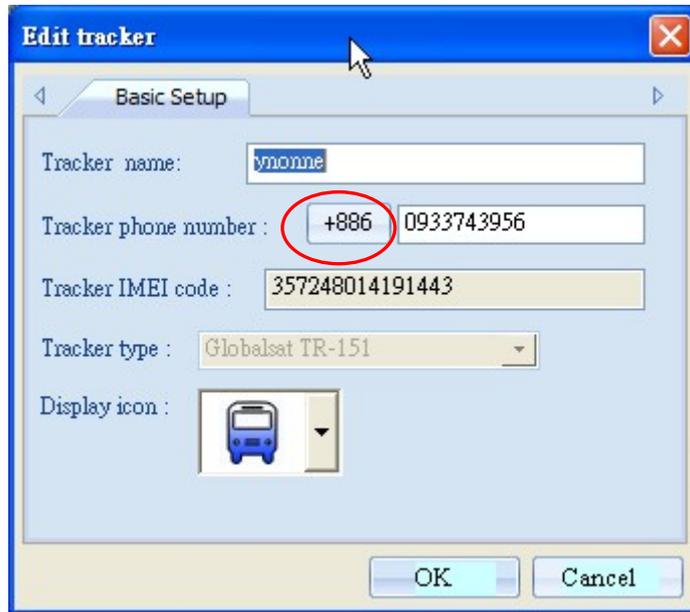
After editing the information, click **OK** to save the setting.



4.2.5 Selecting Country/ Area code

It requires adding country code/Area code prior to the phone number while sending SMS by Skype to TR151 or sending SMS to TR-151 by mobile phone when you and TR-151 are in the different country or area.

Please click the button beside the phone number in the window of **“Edit tracker”** The window for selecting country code/ area code will be brought up.



You can press the first letter of the country name by the keyboard to go to the countries with the same first letter. After selecting the country code, please click OK.

4.3 Instruction of using TR Management Center

4.3.1 Instruction for Beginners

If it is the first time for you to use TR-151, please refer [4.2.1 Adding and setting TR-151 trackers](#) to set TR-151. It will ensure TR-151 can send the report to TR Management center via network and display the location on the map.

Precautions before use:

1. The SIM card installed in TR-151 should support GPRS connection. This is usually what GSM/GPRS network operators refer to as a 2G or 3G SIM card. Please check if the SIM card supports GPRS connection with your GSM/ GPRS network service provider.
2. Please make sure the computer where you install TR Management center has a fixed IP. If the PC uses a dial-up network, please check the float IP address should be the same IP with TR-151's setting. You can send a SMS to update TR-151's IP address.
3. Please check that the firewall on your computer or router does not block the receiving TCP Port. If this port is not unblocked in the firewall, TR-151 will not be able to send its data to TR Management center through this port.
4. Please consult with your GSM/GPRS network service provider about the GPRS setting, GPRS will not connect properly if the settings are incorrect.
5. In order to send SMS by Skype, please install the Skype software, create a user account and buy Skype credits. The Skype SMS messaging function must be set up correctly as well. Skype only can send SMS. It is unable to receive SMS from TR-151

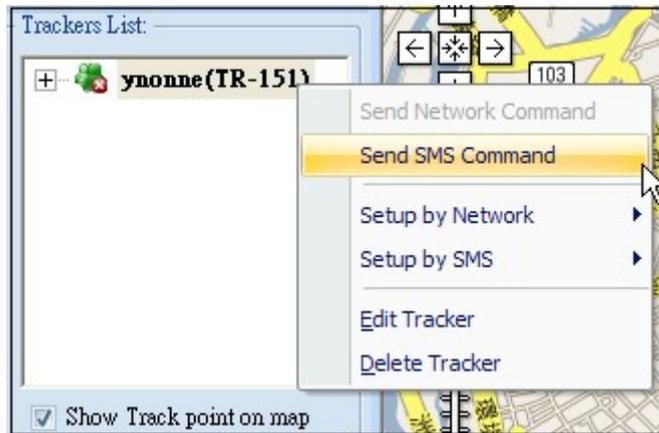
4.3.2 Asking TR-151 to make immediate report

You can send command via SMS or via network to make TR-151 make immediate report. You could send command via network only when TR-151 is under GPRS period and disconnect mode, motion mode, park mode, Geo-fence mode and the report method must be GPRS or GPRS + SMS.

Step1:

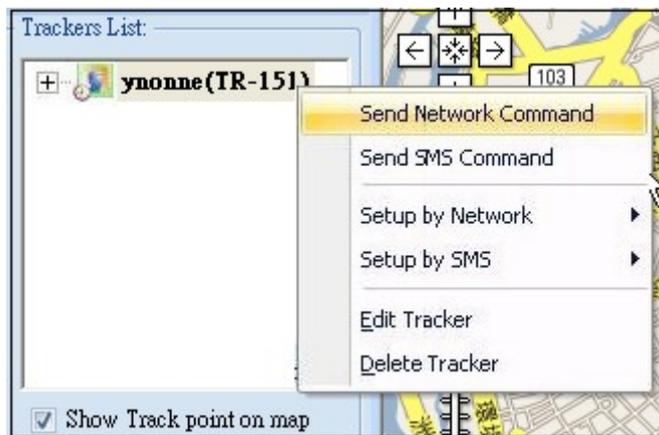
Send command via SMS:

Select the TR-151, right click the mouse to bring up the option menu, and select “**Send SMS Command**”

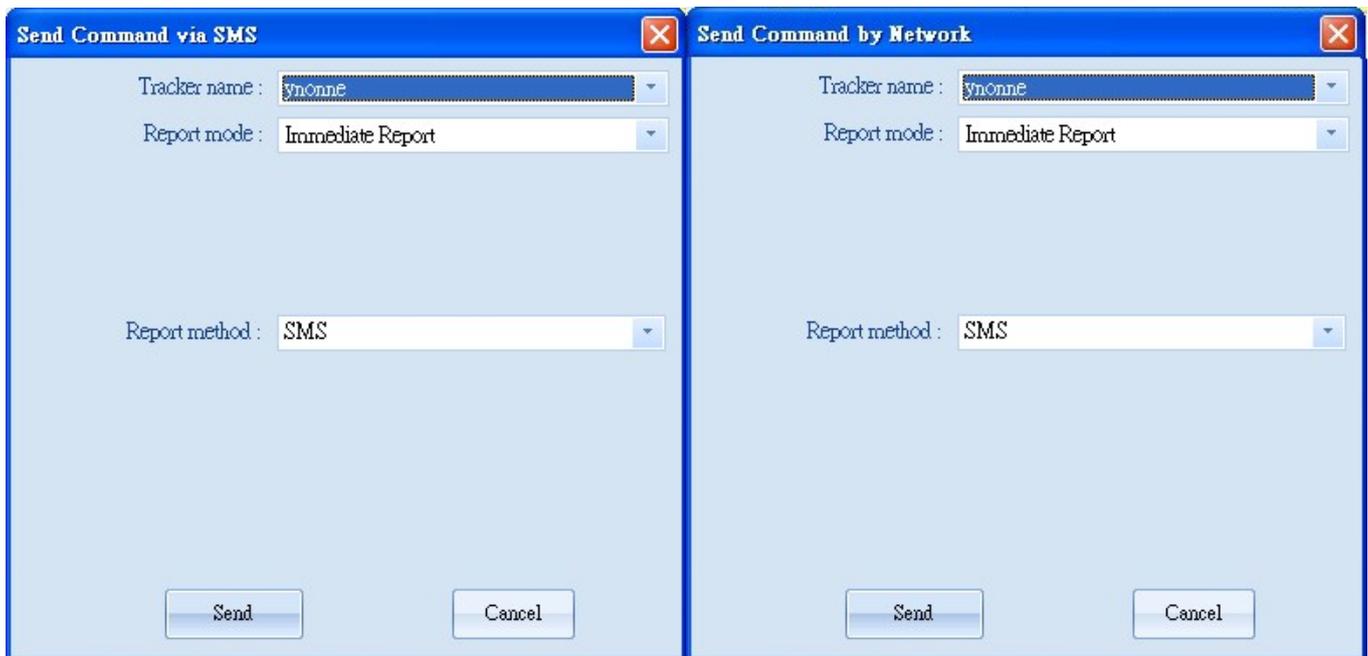


Send command via network:

Select a connected TR-151, right click the mouse to bring up the option menu, and select “**Send Network Command**”



Step2: Select “**Immediate Report**” in the field of **Report mode**.



Step3: Select “**SMS**” or “**GPRS**” or “**SMS+GPRS**” in the field of **Report method**, and then click “**Send**”.

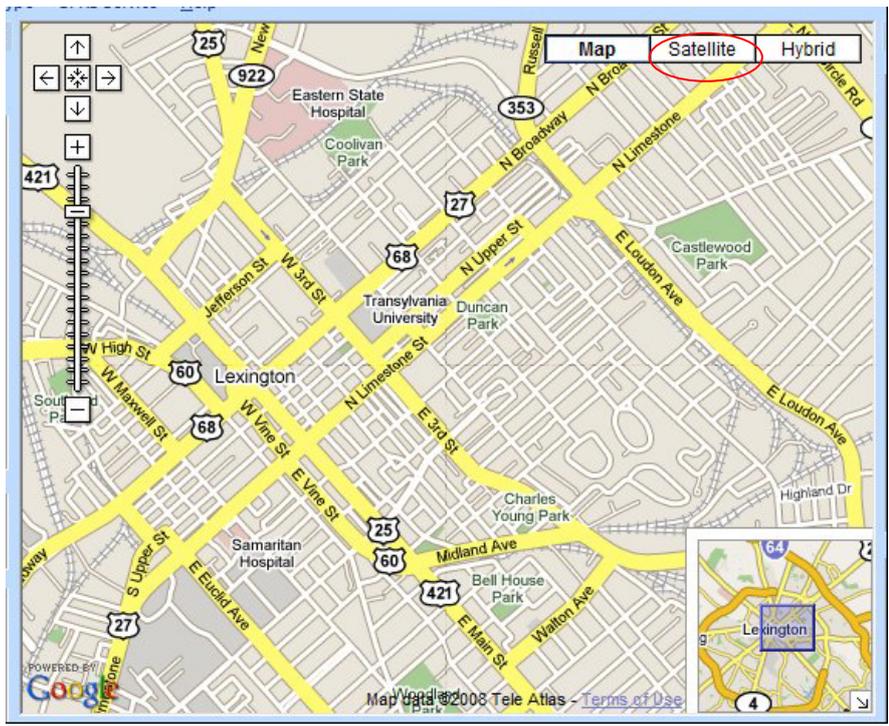
Select “**SMS**” as Report method: TR-151 will send position report to the phone number you set in Basic setup. (Refer to [4.1 TR Management Center Basic Setup](#).)

Select “**GPRS**” as Report method: TR-151 will send position report to TR Management center shown as the picture below.

Name	Source_Tel	Local_Date	Local_Time	Gps_lat	Gps_lon	Gps_date	gps_time	gps_status	gps_alti...	g
ynonne	0934567890	2008/04/28	10:38:03	22.33774	114.20454	2008/04/28	18:38:03	GPS 3D Fix	00161	0
ynonne	0934567890	2008/04/28	10:37:58	22.33613	114.20472	2008/04/28	18:37:58	GPS 3D Fix	00161	0
ynonne	0934567890	2008/04/28	10:37:53	22.33522	114.20490	2008/04/28	18:37:53	GPS 3D Fix	00161	0

Select “**SMS+GPRS**” as Report method: TR-151 will send position report to the phone number you set in Basic setup and to TR Management Center

When you receive position report in the TR Management Center, you can make the location of that position report to show on Google map by clicking that report.



You can also click Satellite to see the location on satellite map.



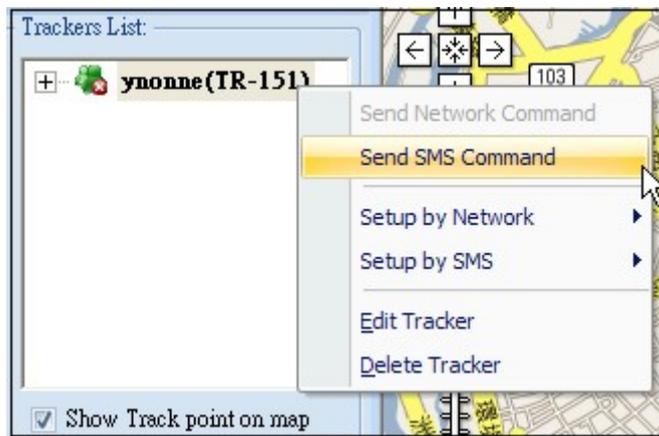
4.3.3 Asking TR-151 to make periodic report

You can send command via SMS or send command via network to make TR-151 make periodic report. You could send command via network only when TR-151 is under GPRS period and disconnect mode, motion mode, park mode, Geo-fence mode and the report method must be GPRS or GPRS + SMS.

Step1:

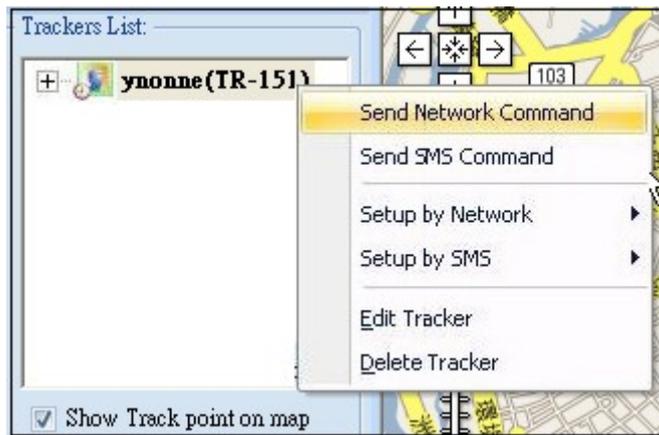
Send command via SMS:

Select the TR-151, right click the mouse to bring up the option menu, and select “**Send SMS Command**”

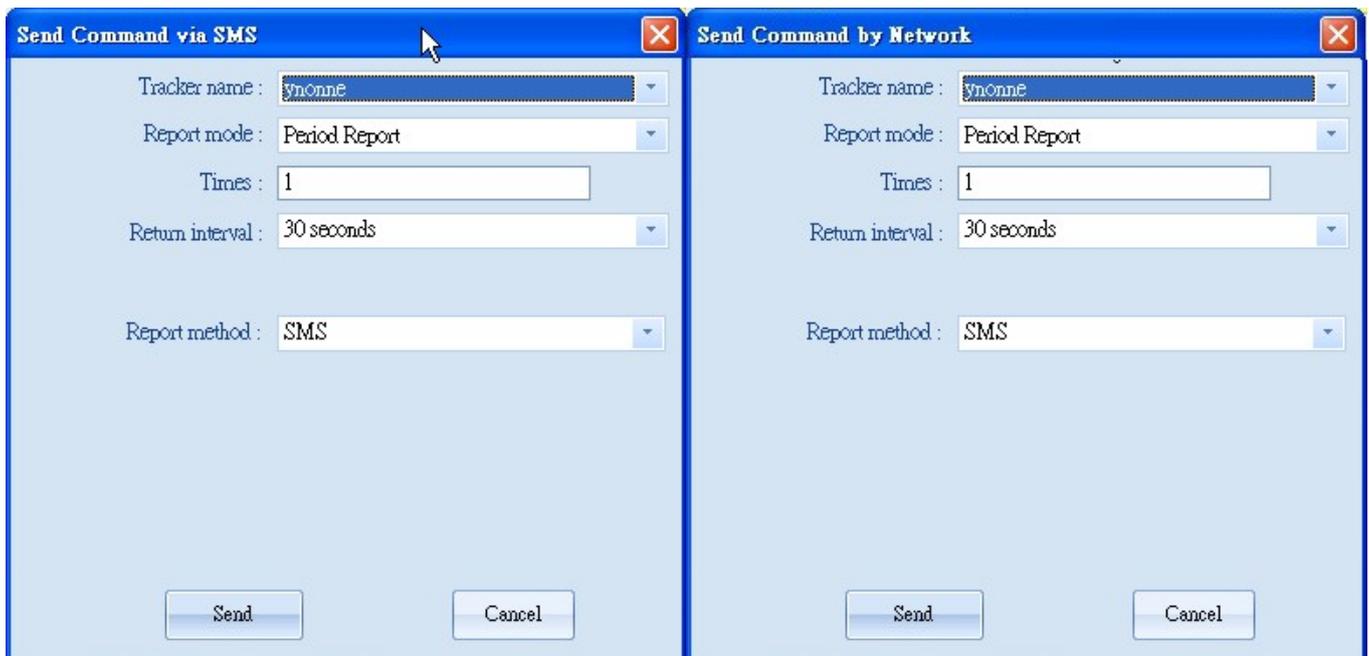


Send command via Network:

Select the TR-151, right click the mouse to bring up the option menu, and select “**Send Network Command**”



Step2: Select “**Period Report**” in the field of **Return mode**.



Step 3: Select how many periodic reports TR-151 will send in the field of “**Times**”, select the report interval in the field of “**Return interval**” and then click **Send**

Under period report, you could only select SMS as the Report method.

If you would like TR-151 to send periodic report to TR management center, please select “Period and disconnect” as the Report mode.

TR-151 will send position report to the phone number you set in Basic setup. (Refer to [4.1 TR Management Center Basic Setup](#).)

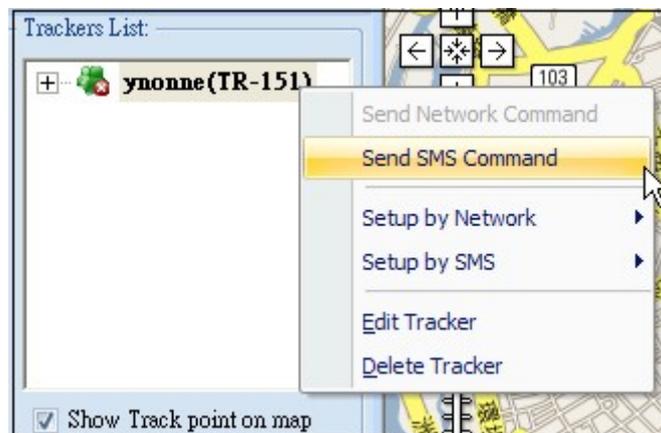
4.3.4 Asking TR-151 to make GPRS periodic report and then disconnect from TR Management Center

You can send command via SMS or via network to make TR-151 make GPRS periodic report and then disconnect from server. You could send command via network only when TR-151 is under GPRS period and disconnect mode, motion mode, park mode, Geo-fence mode and the report method must be GPRS or GPRS + SMS.

Step1:

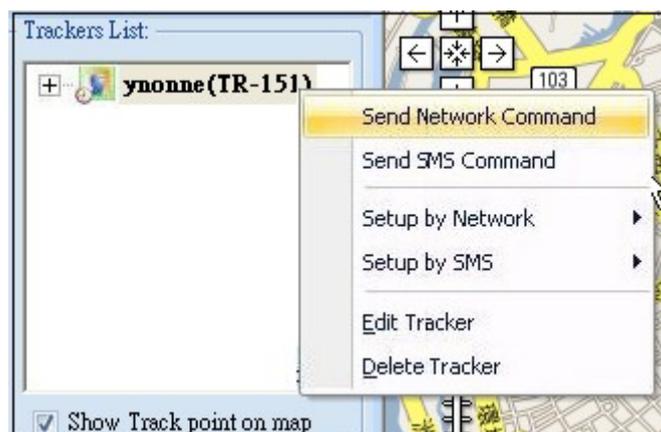
Send command via SMS:

Select the TR-151, right click the mouse to bring up the option menu, and select “**Send SMS Command**”

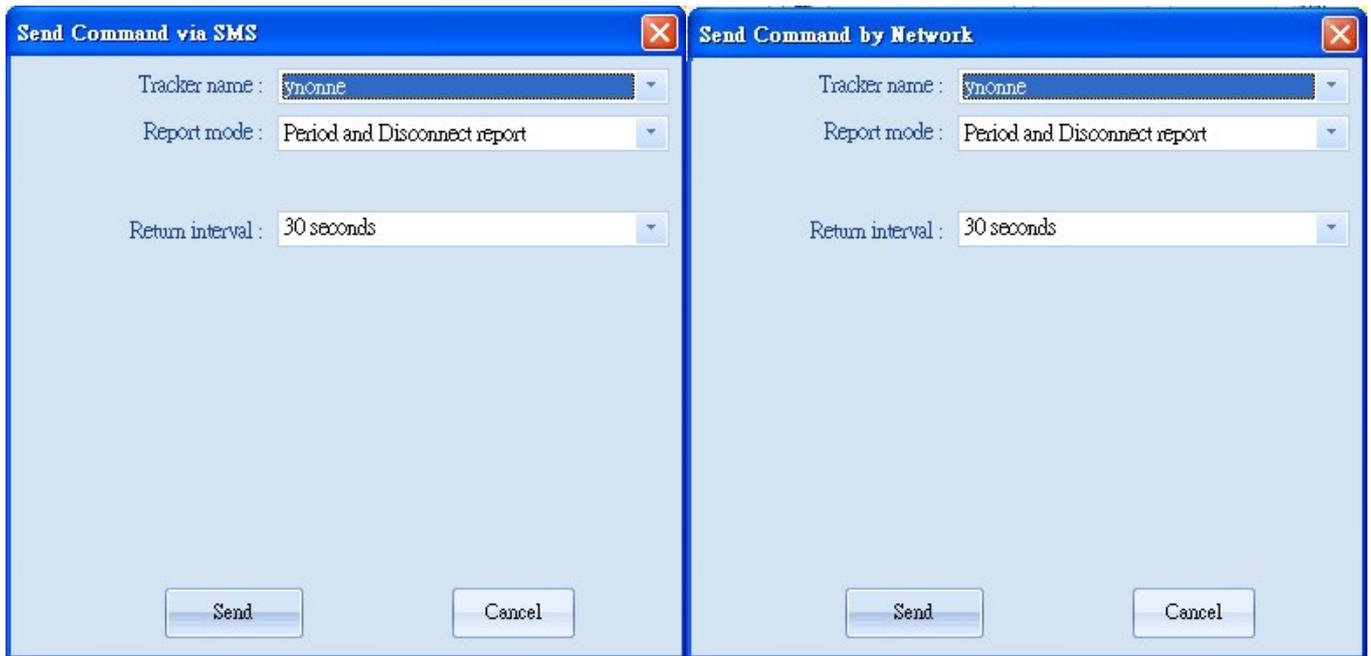


Send command via network:

Select a connected TR-151, right click the mouse to bring up the option menu, and select “**Send Network Command**”



Step2: Select “**Period and Disconnect Report**” in the field of **Report mode**.



Step3: Select the “Return interval” and then click “Send”

TR-151 will send position report to TR Management center shown as the picture below.

Name	Source_Tel	Local_Date	Local_Time	Gps_lat	Gps_lon	Gps_date	gps_time	gps_status	gps_alti...
ynonne	0934567890	2008/04/28	10:38:03	22.33774	114.20454	2008/04/28	18:38:03	GPS 3D Fix	00161
ynonne	0934567890	2008/04/28	10:37:58	22.33613	114.20472	2008/04/28	18:37:58	GPS 3D Fix	00161
ynonne	0934507890	2008/04/28	10:37:53	22.33522	114.20490	2008/04/28	18:37:53	GPS 3D Fix	00161

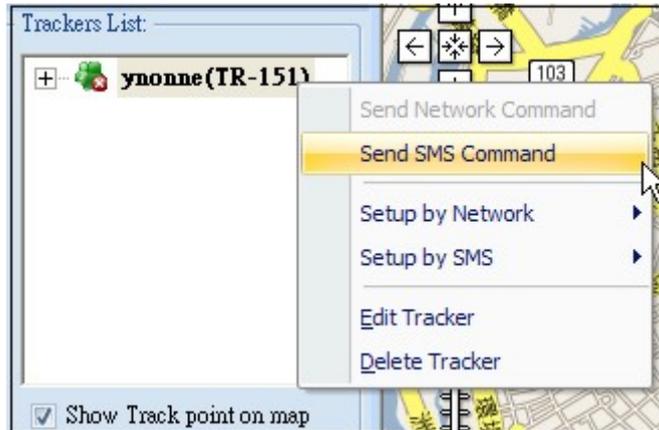
4.3.5 Asking TR-151 to Do Voice Monitor

You can send command via SMS or via network to make TR-151 start Voice Monitor.

Step1:

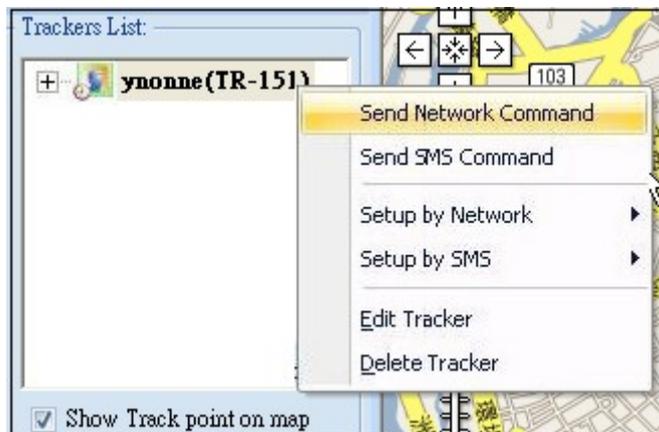
Send command via SMS:

Select the TR-151, right click the mouse to bring up the option menu, and select “**Send SMS Command**”

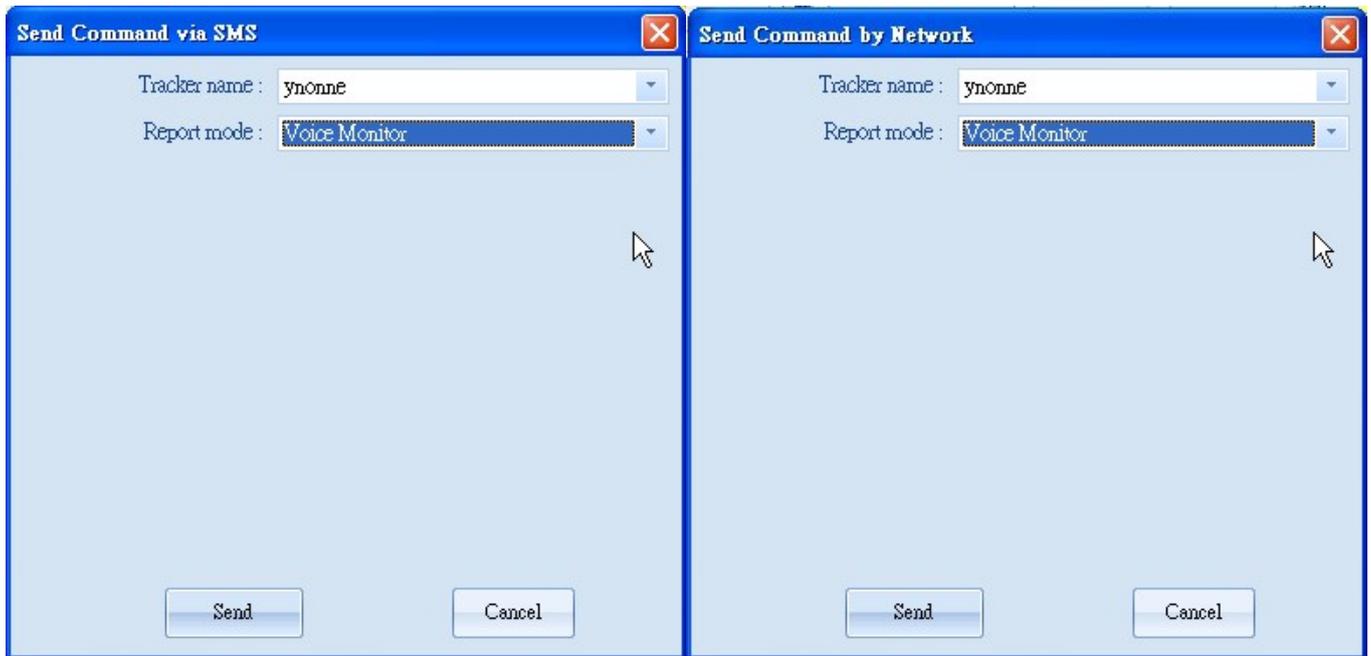


Send command via network:

Select a connected TR-151, right click the mouse to bring up the option menu, and select “**Send Network Command**”



Step 2: Select **Voice Monitor** in the field of **Report mode**.



Step 3: Click **Send**.

TR-151 will call the phone number you set in Basic setup. (Refer to [4.1 TR Management Center Basic Setup](#).)

4.3.6 Asking TR-151 to enter motion mode

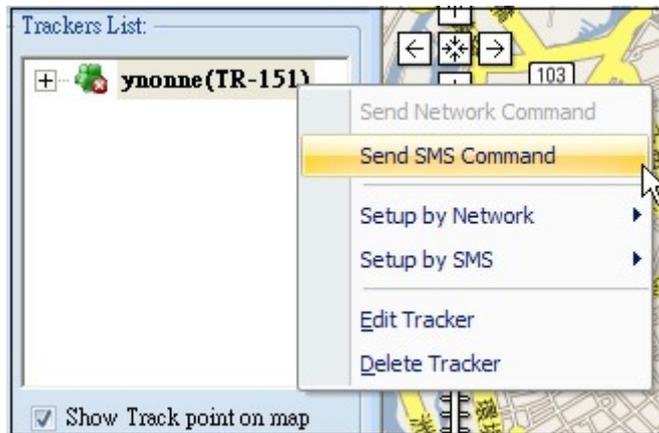
Motion mode is for user to get the continual location report when the vehicle installed with TR-151 is moving. In addition to the continual location report, TR-151 will also send regular location report when the vehicle installed with TR-151 is not moving. You could send a SMS or network command to ask TR-151 to enter motion mode.

You can send command via SMS or send command via network to make TR-151 enter motion mode. You could send command via network only when TR-151 is under GPRS period and disconnect mode, motion mode, park mode, Geo-fence mode and the report method must be GPRS or GPRS + SMS.

Step1:

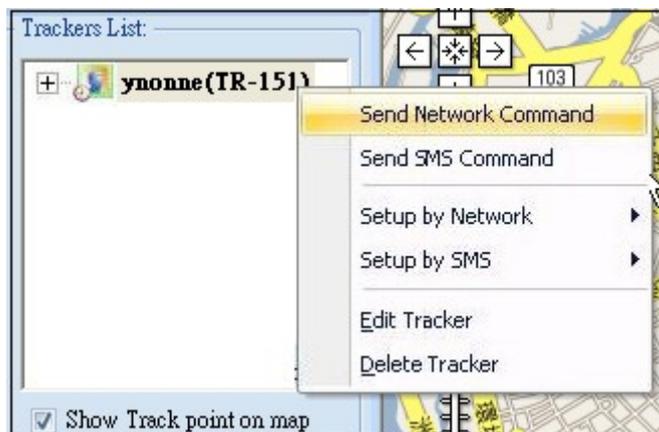
Send command via SMS:

Select the TR-151, right click the mouse to bring up the option menu, and select “**Send Command (Skype)**”

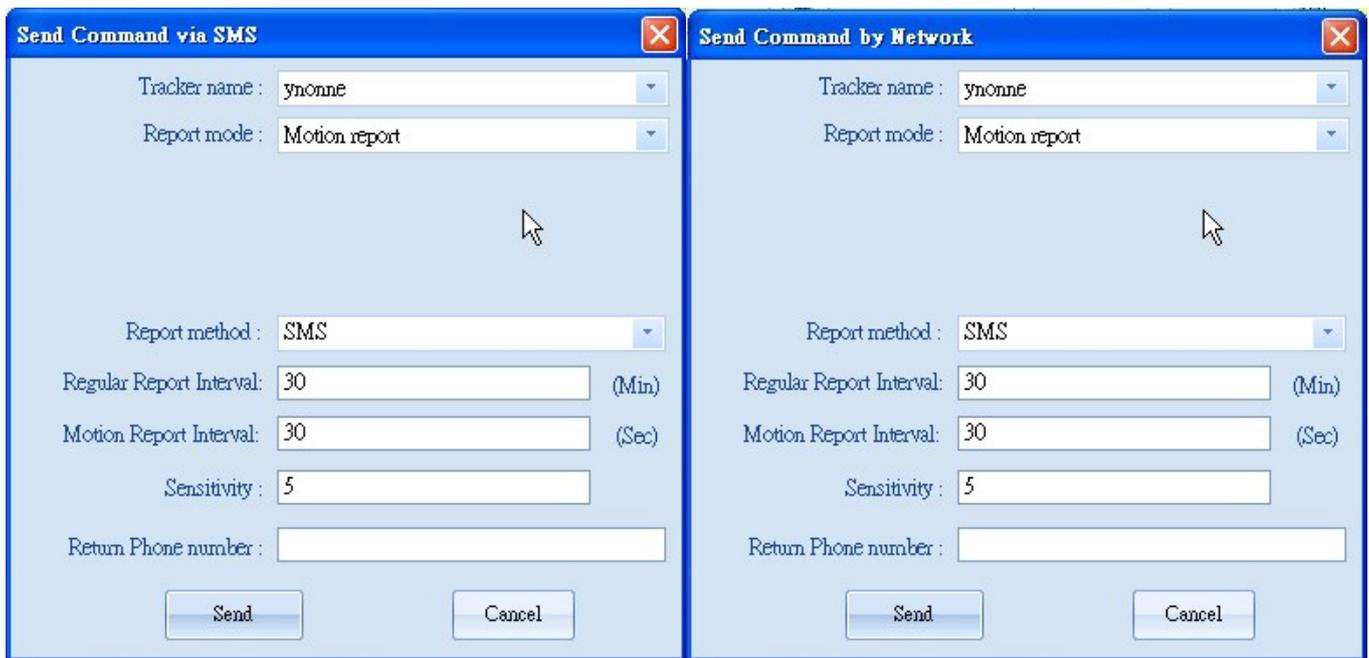


Send command via network:

Select a connected TR-151, right click the mouse to bring up the option menu, and select “**Send Network Command**”



Step 2: Select **Motion Mode** in the field of **Report mode**.



Step3: Select **“SMS”** or **“GPRS”** or **“SMS+GPRS”** in the field of **Report method**, and then click **“Send”**.

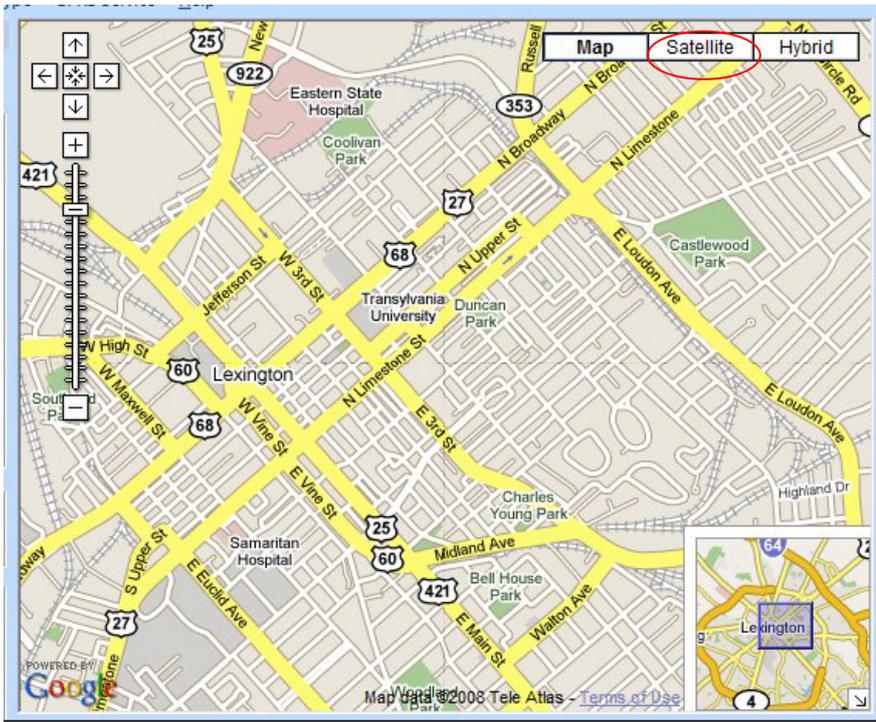
Select **“SMS”** as Report method: TR-151 will send position report to the phone number you set in Basic setup. (Refer to [4.1 TR Management Center Basic Setup.](#))

Select **“GPRS”** as Report method: TR-151 will send position report to TR Management center shown as the picture below.

Name	Source_Tel	Local_Date	Local_Time	Gps_lat	Gps_lon	Gps_date	gps_time	gps_status	gps_alti...
ynonne	0934567890	2008/04/28	10:38:03	22.33774	114.20454	2008/04/28	18:38:03	GPS 3D Fix	00161
ynonne	0934567890	2008/04/28	10:37:58	22.33613	114.20472	2008/04/28	18:37:58	GPS 3D Fix	00161
ynonne	0934567890	2008/04/28	10:37:53	22.33522	114.20490	2008/04/28	18:37:53	GPS 3D Fix	00161

Select **“SMS+GPRS”** as Report method: TR-151 will send position report to the phone number you set in Basic setup and to TR Management Center

When you receive position report in the TR Management Center, you can make the location of that position report to show on Google map by clicking that report.



You can also click Satellite to see the location on satellite map.

Step 4: Set “Regular Report Interval”, “Motion Report Interval”, “Sensitivity” and Phone Number”.

Item	Description	Default	Remarks
Regular Report Interval	The interval for TR-151 to send position report when it does not sense vibration	30 minutes	
Motion Report Interval	The interval for TR-151 to send position report when is senses vibration	30 seconds	5~86,400 seconds
Sensitivity	Set how many vibrations TR-151 senses over this sensitivity under sleep mode, it will send out the position report	5	
Phone Number	The phone number for receiving position report when the report method is SMS or SMS+GPRS		

Step 5: Click “**Send**”.

4.3.7 Asking TR-151 to enter park mode

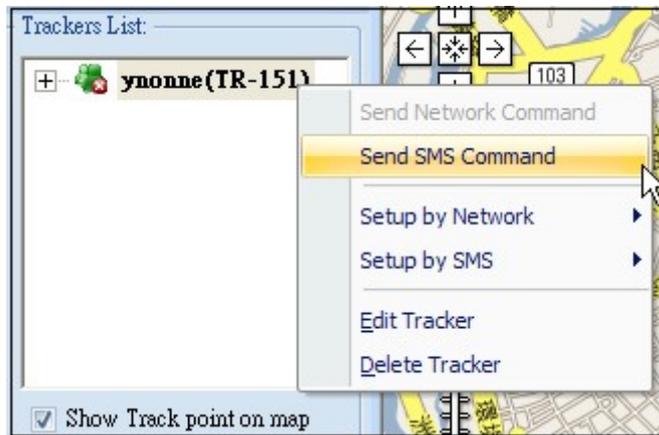
Park mode is for user to make TR-151 send alarm location report when the vehicle installed with TR-151 is moved. In addition to the alarm location report, TR-151 will also send regular location report when the vehicle installed with TR-151 is parked. You could send a SMS or network command to ask TR-151 to enter park mode.

You could send command via network only when TR-151 is under GPRS period and disconnect mode, motion mode, park mode, Geo-fence mode and the report method must be GPRS or GPRS + SMS.

Step1:

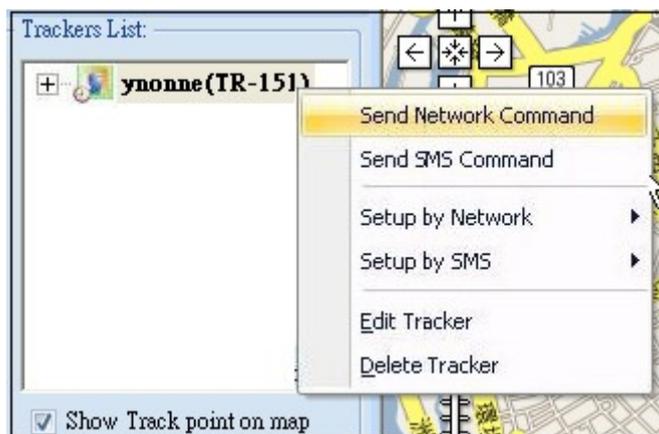
Send command via SMS:

Select the TR-151, right click the mouse to bring up the option menu, and select “**Send Command (Skype)**”

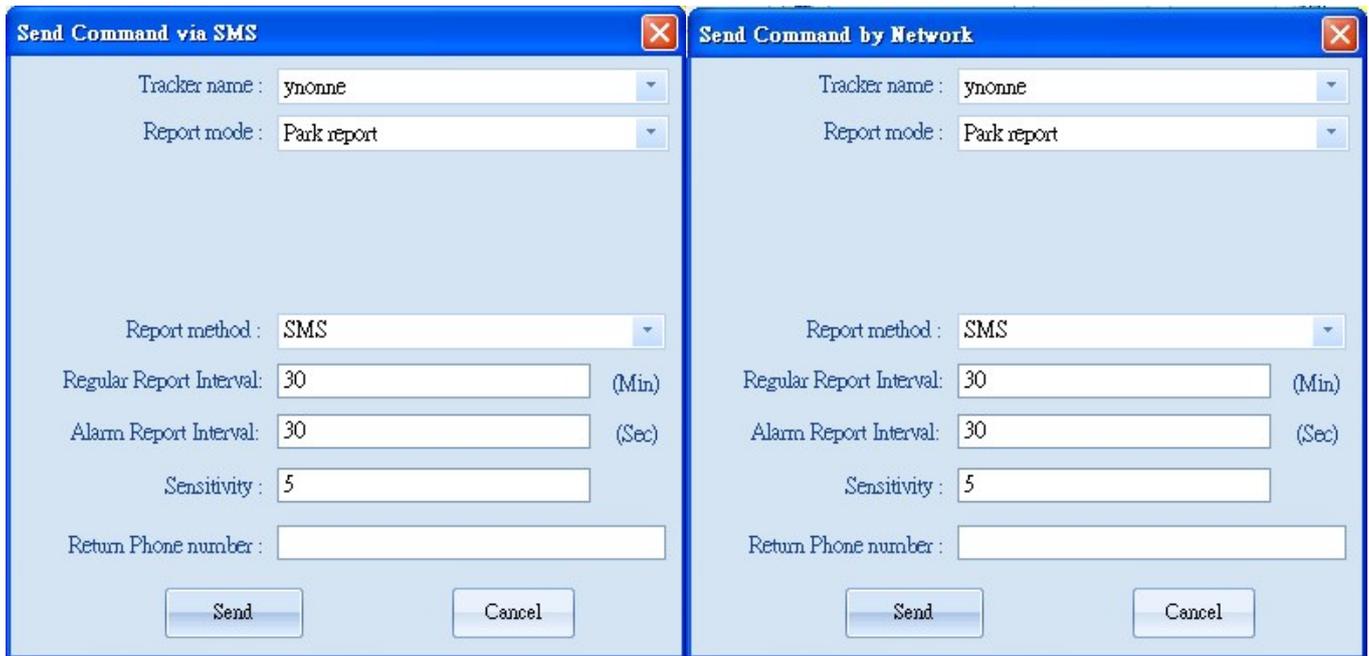


Send command via network:

Select a connected TR-151, right click the mouse to bring up the option menu, and select “**Send Network Command**”



Step 2: Select **Park Mode** in the field of **Report mode**.



Step3: Select “**SMS**” or “**GPRS**” or “**SMS+GPRS**” in the field of **Report method**, and then click “**Send**”.

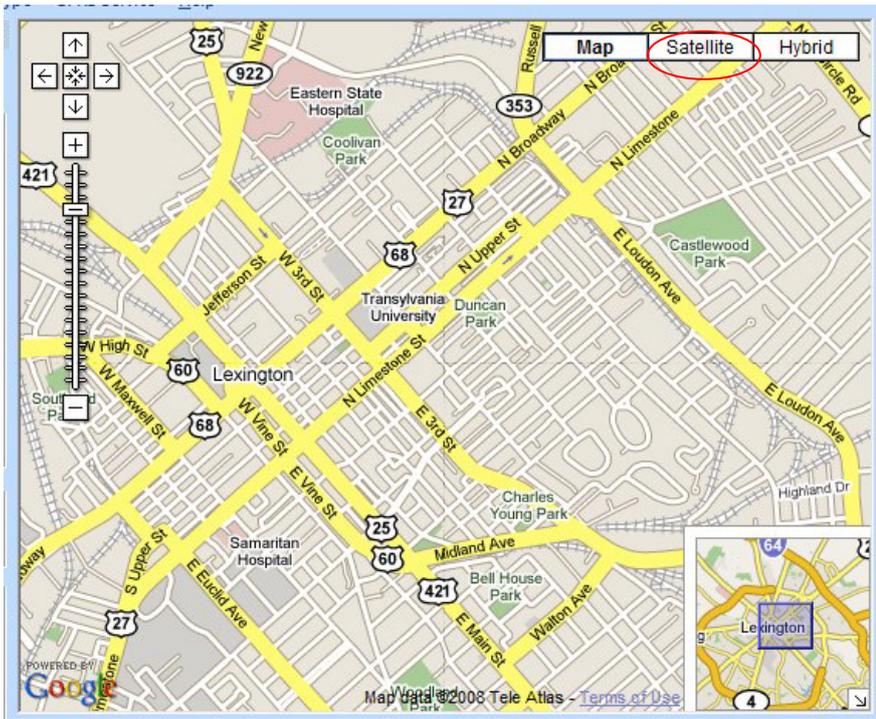
Select “SMS” as Report method: TR-151 will send position report to the phone number you set in Basic setup. (Refer to [4.1 TR Management Center Basic Setup.](#))

Select “GPRS” as Report method: TR-151 will send position report to TR Management center shown as the picture below.

Name	Source_Tel	Local_Date	Local_Time	Gps_lat	Gps_lon	Gps_date	gps_time	gps_status	gps_alti...
ynonne	0934567890	2008/04/28	10:38:03	22.33774	114.20454	2008/04/28	18:38:03	GPS 3D Fix	00161
ynonne	0934567890	2008/04/28	10:37:58	22.33613	114.20472	2008/04/28	18:37:58	GPS 3D Fix	00161
ynonne	0934567890	2008/04/28	10:37:53	22.33522	114.20490	2008/04/28	18:37:53	GPS 3D Fix	00161

Select “SMS+GPRS” as Report method: TR-151 will send position report to the phone number you set in Basic setup and to TR Management Center

When you receive position report in the TR Management Center, you can make the location of that position report to show on Google map by clicking that report.



You can also click Satellite to see the location on satellite map.

Step 4: Set “Regular Report Interval”, “Motion Report Interval”, “Sensitivity” and Phone Number”.

Item	Description	Default	Remarks
Regular Report Interval	The interval for TR-151 to send position report when it does not sense vibration	30 minutes	
Motion Report Interval	The interval for TR-151 to send position report when it senses vibration	30 seconds	5~86,400 seconds
Sensitivity	Set how many vibrations TR-151 senses over this sensitivity under sleep mode, it will send out the position report	5	
Phone Number	The phone number for receiving position report when the report method is SMS or SMS+GPRS		

Step 5: Click “**Send**”.

4.3.8 Comparison between parking mode, motion mode, sleeping mode, and normal mode

Comparison between parking mode, motion mode, sleeping mode, and normal mode

Function/Mode	Normal mode	Motion mode	Parking mode	Sleeping mode
GPS		Off	Off	Off
GSM	On	On	On	Off
Motion sensor	Off	On	On	On

4.4 TR Management Center Data Query

All the data sent from TR-151 will be stored in the database of TR Management center. You can make this data show on Google map or export them into KML format.

4.4.1 Look up for history data

You can look up for the history data that TR-151 sent to TR Management center by Query Tool.

"Query Tool"

Item	Description
Tracker	Select the tracker whose history data you'd like to look up for
Type	To look up for the data according to the time of Tracker's timer (Tracker Time) or the receiving time of the PC (Local Time)
Start time	The start time of the period of looking up the history data
End Time	The end time of the period of looking up the history data

Find	Start to look up for the data
Export	Export the data into KML format
Delete	Delete query results
Total records	Display the quantity of the history data between the Start time and End time
Page number	Display the page of the history data (Each page has 200 records)
Prev Page	Go to the previous page
Next Page	Go to the next page

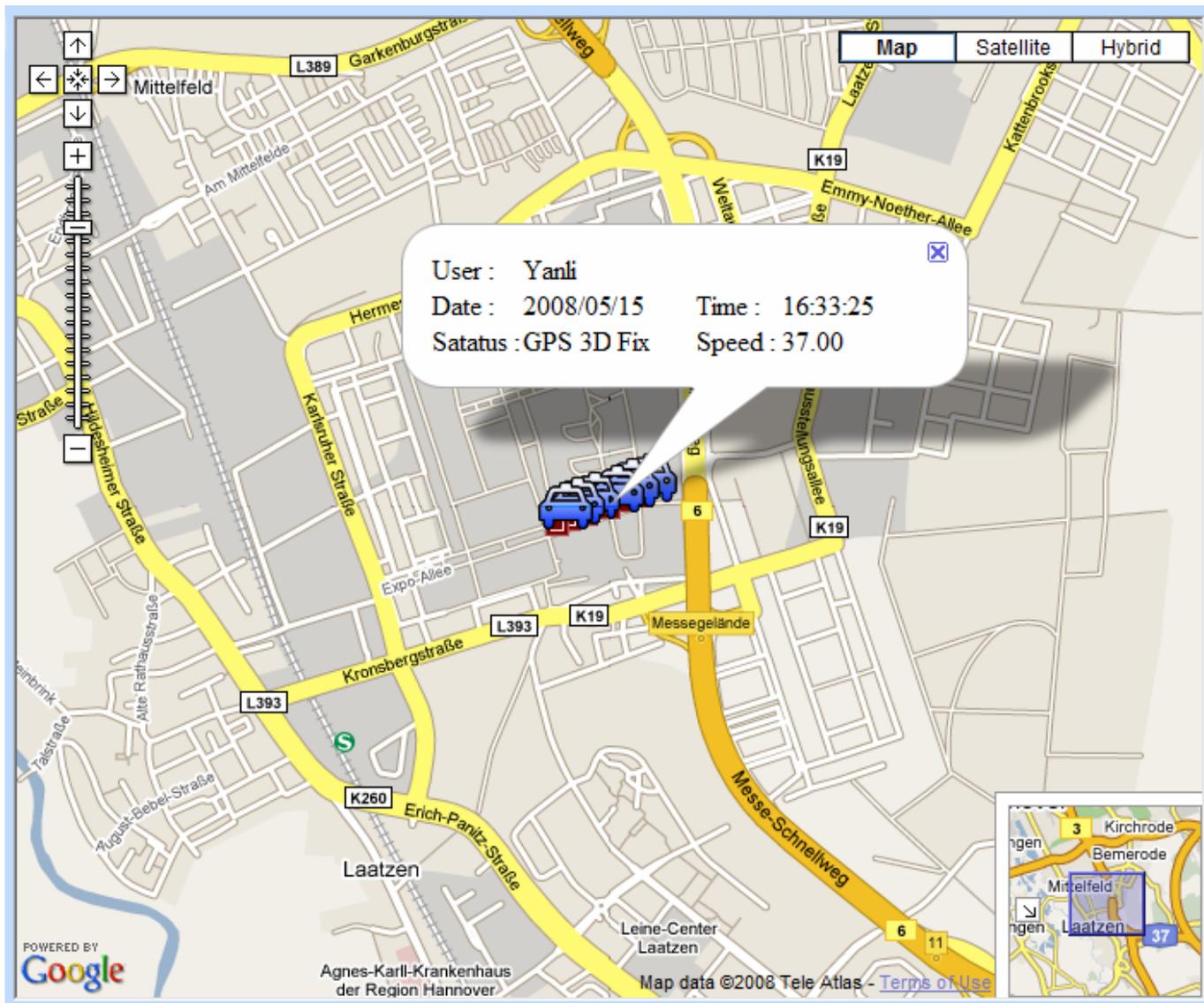
After specifying all the queried conditions, click the **Find** button and the query results will be shown on the Data Output Area..

Name	Source_Tel	Local_Date	Local_Time	Gps_lat	Gps_lon	Gps_date	gps_time	gps_status	gps_alti...
ynonne	0934567890	2008/04/28	10:38:03	22.33774	114.20454	2008/04/28	18:38:03	GPS 3D Fix	00161
ynonne	0934567890	2008/04/28	10:37:58	22.33613	114.20472	2008/04/28	18:37:58	GPS 3D Fix	00161
ynonne	0934567890	2008/04/28	10:37:33	22.33522	114.20490	2008/04/28	18:37:33	GPS 3D Fix	00161

Query Result list

The results will also be shown on the Google Map.

If you select a piece of result under the Data Output Area, its location and corresponding details will be shown on the Google Map.



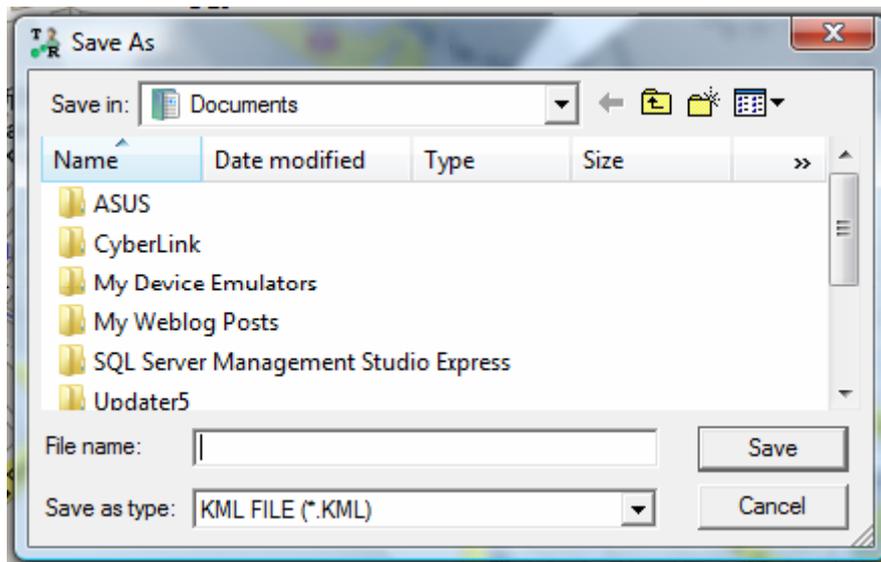
If you click on one of the tracker icon on the Google map, the selected tracker's data under Data Output Area will be highlighted.

4.4.2 Export the data into KML format

You can export the queried data into KML format for others to show the data on the Google map or Google earth.

Step 1: Please refer to 4.4.1 to look up for the history data.

Step 2: Please click the **Export** button on the Query Tool. And then enter a name for the exported data in the field of File name.

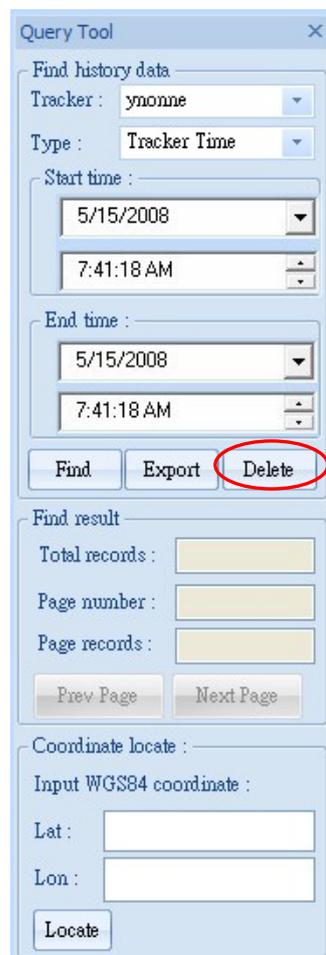


Enter a name for the exported KML file

4.4.3 Delete the history data in the database

You can delete the history data in the database.

Step 1: Select the name of the tracker and time interval whose data you'd like to delete.



Step 2: Click the **Delete** button.

4.5 Send SMS to set TR-151

In [4.2.1 Adding and setting a TR-151](#), you can connect TR-151 with TR Management center by the USB cable to set its parameters. You can also set its parameters by SMS via the Skype software in the TR Management center.

For the requirement of sending SMS by Skype, please refer to [3.4 Skype setup](#).

4.5.1 Asking TR-151 to enter Geo-fence mode

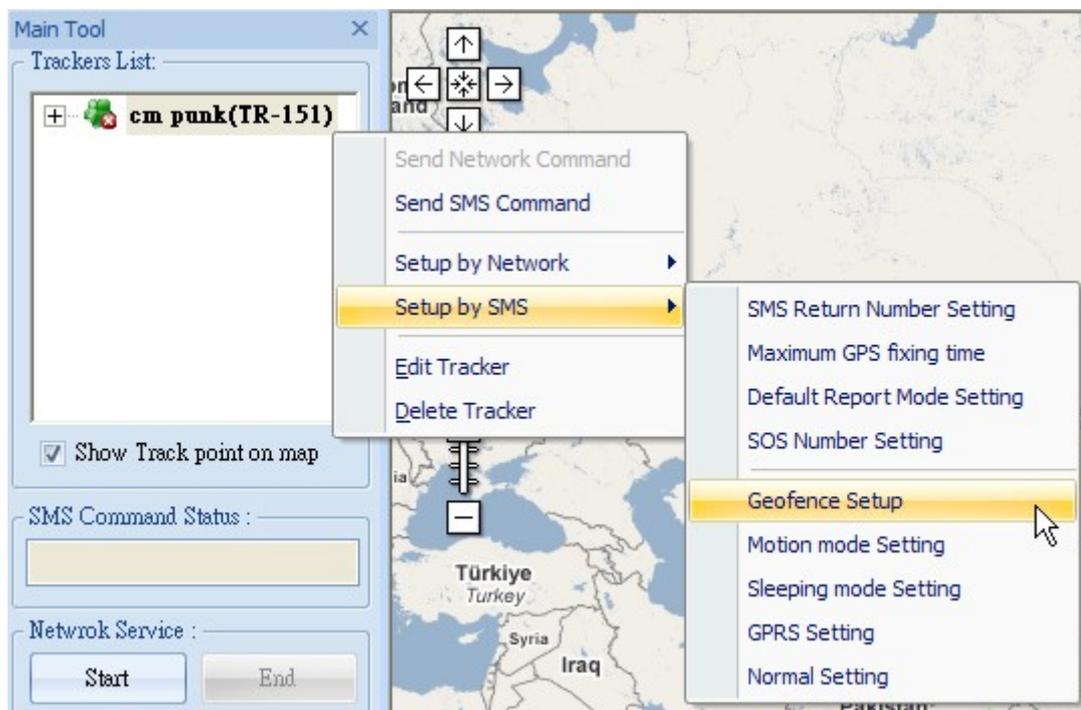
Geo-fence is that setting a rectangular or circular area as permissible area or restricted area. When TR-151 gets out the permissible area or goes in to the restricted area, TR-151 will send its location to the preset mobile phone number via SMS or to TR Management center via network.

You can send command via SMS to make TR-151 enter Geo-fence mode. The commands include choosing the rectangular or circular areas (**Rectangle** or **Circle**), getting in the restricted areas or getting out the permissible areas to send alarm (**In Geo-fence** or **Out Geo-fence**), time intervals of alarm report (**Report interval**), **Number of reports**, and **Report format**.

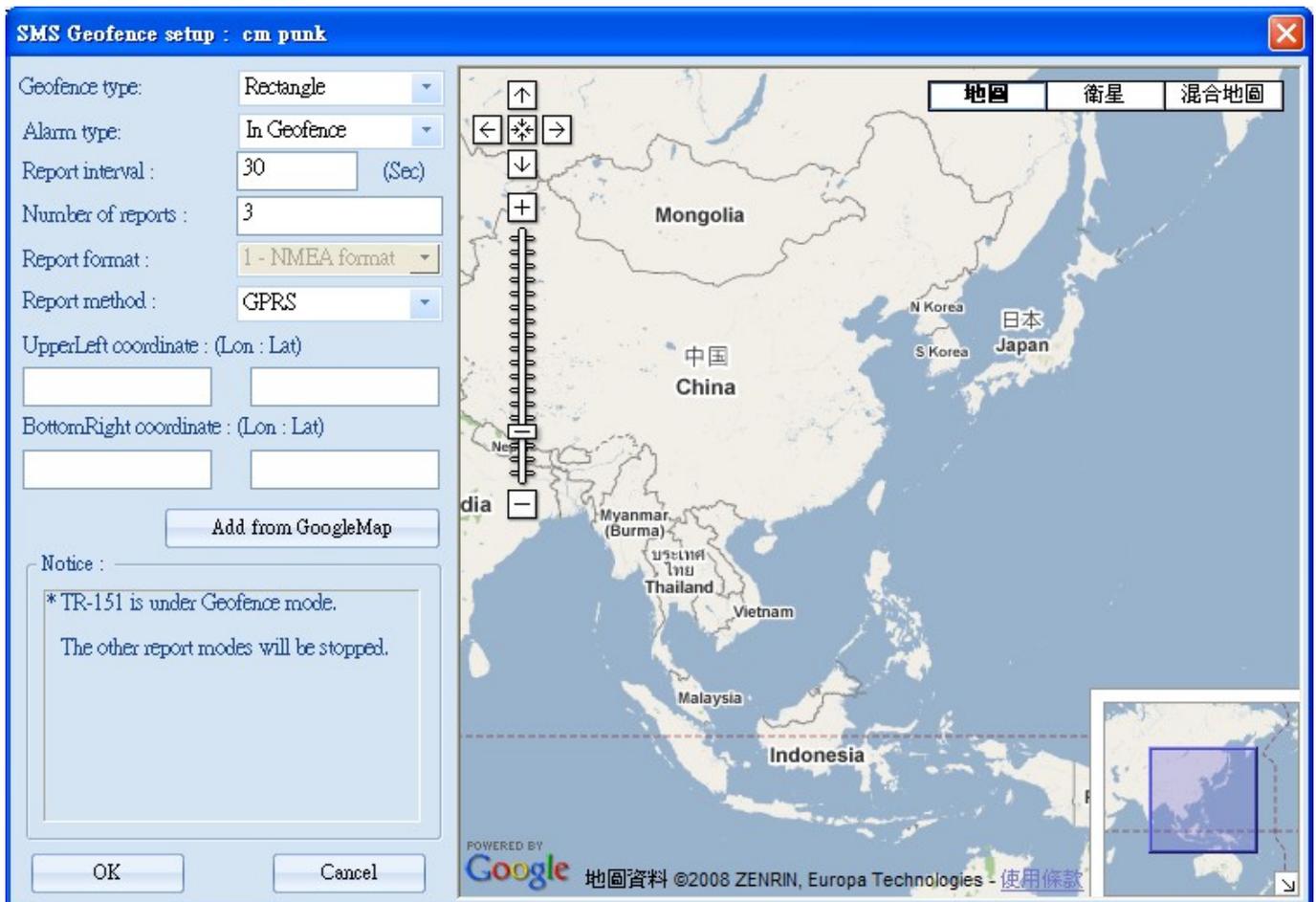
TR-151 will start to get fixed of the location as soon as it enters Geo-fence mode. TR-151 will keep fixing the location. Once TR-151 detect it enters restricted area or gets out the permissible area, it will send its location to the preset mobile phone number via SMS or to TR Management center via network.

- User can set up to 10 rectangular or circular boundaries.

Step1: Select the TR-151 and right click to select Setup by SMS → Geo-fence Setup.



Step 2: Enter and select the parameters.



You can refer to the table below for the meaning of the Geo-fence parameters.

Item	Description
Geofence Type	Choose to set a rectangular (Rectangle) or a circular (Circle) area
Alarm Type	Choose to send location report when TR-151 gets in (In Geofence) or get out (Out Geofence) the area
Report interval	The interval of sending location report when TR-151 disobey Geo-fence rule
Number of reports	How many reports TR-151 will send when TR-151 disobey Geo-fence rule
Report format	Choose the report format as NEMA format or text format (Only available for SMS or SMS+GPRS report method)
Report Method	Choose to send position report by SMS or GPRS or SMS+GPRS
Upper Left coordinate	The coordinates of the Geo-fence's upper left corner (Rectangle)
Bottom Right coordinate	The coordinates of the Geo-fence's lower right corner (Rectangle)
Center point	The coordinates for the center of the Geofence (Circle)

Radius	Geo-fence radius (Circle)
--------	---------------------------

TR-151 and Google map/ earth use different units to express longitudes and latitudes. The unit used in TR-151's longitude and latitude is degree and minute with a 4-digit decimal fraction while the unit in Google Map/Earth is degree, minute, and second. So please convert the unit to degree and minute with a 4-digit decimal fraction before setting Geo-fence.

TR-151's longitude and latitude is like E12129.3167 and N2459.8479

The number 121 represents longitude's degree and 29.3167 represents the longitude's minute. The number 24 represents the unit of latitude's degree, and 59.8479 represents the unit of latitude's minute.

The degree of TR-151's longitude must be 3 digits. The degree of TR-151's latitude must be 2 digits. If you are in the areas where the longitude's degree is not 3 digits or latitude's degree is not 2 digits, please enter 0 for the first and second digits.

Example1:

The longitude and latitude from Google earth is E121°29'15.72" & N24°59'47.40"

The number 121 represents longitude's degree, 29 represent the minute, and 15.72 represents second.

The number 24 represents latitude's degree, 59 represent the minute, and 47.40 represents second.

You can convert E121°29'15.72" & N24°59'47.40" into the unit of TR-151's longitudes and latitude as the method below.

$$15.72 \text{ (second)} \div 60 = 0.262 \text{ (minute)}$$

$$47.40 \text{ (second)} \div 60 = 0.79 \text{ (minute)}$$

The expression of TR-151's longitude and latitude is E12129. 2620 & N2459.7900

Example 2:

The longitude and latitude from Google earth is W1°12'55.05" & N5°55'17.93"

You can convert W1°12'55.05" & N5°55'17.93" into the unit of TR-151's longitudes and latitude as the method below.

$$55.05 \text{ (second)} \div 60 = 0.9175 \text{ (minute)}$$

$$17.93 \text{ (second)} \div 60 = 0.2988 \text{ (minute)}$$

The expression of TR-151's longitude and latitude is W00112.9175 & N0555.2988

Example 3

If you get a set of longitude and latitude, E21.4877° & S4.9965°, you can convert it into TR-151's longitudes and latitude as the method below.

$$0.4877 \text{ (degree)} \times 60 = 29.262 \text{ (minute)}$$

$$0.9965 \text{ (degree)} \times 60 = 59.79 \text{ (minute)}$$

The expression of TR-151's longitude and latitude is E02129.2620 & S0459.7900

Step 4: Click **OK** to send out the setting of Geo-fence to the TR-151 by Skype's SMS.

A dialog window for informing that Skype has sent out the SMS will appear. You can operate the other functions during the process of sending SMS.

NOTE: In addition to enter the coordinates to set the Geo-fence, you can also draw a rectangular or circular area on the Google map to set the Geo-fence.

Draw a rectangular area on the Google map to set Geo-fence:

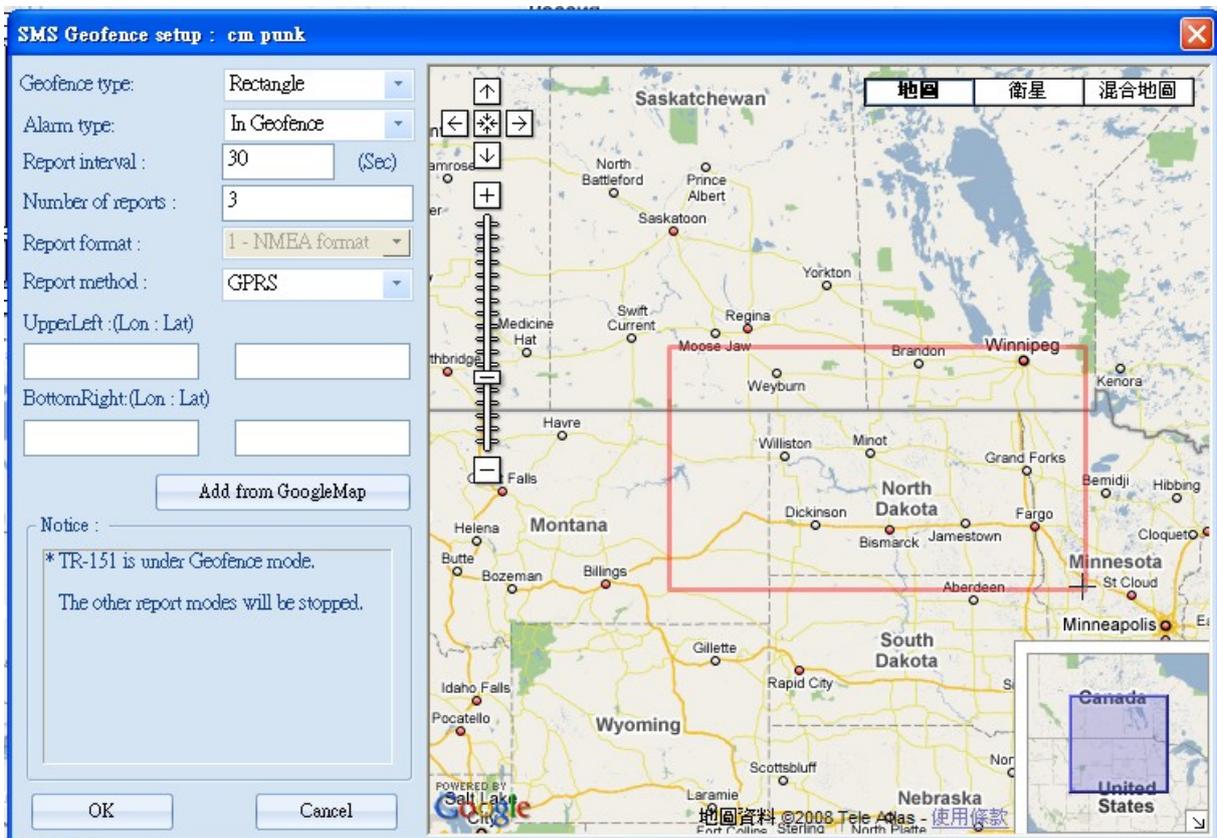
Step 1: Select **Rectangle** in the field of Geo-fence type.



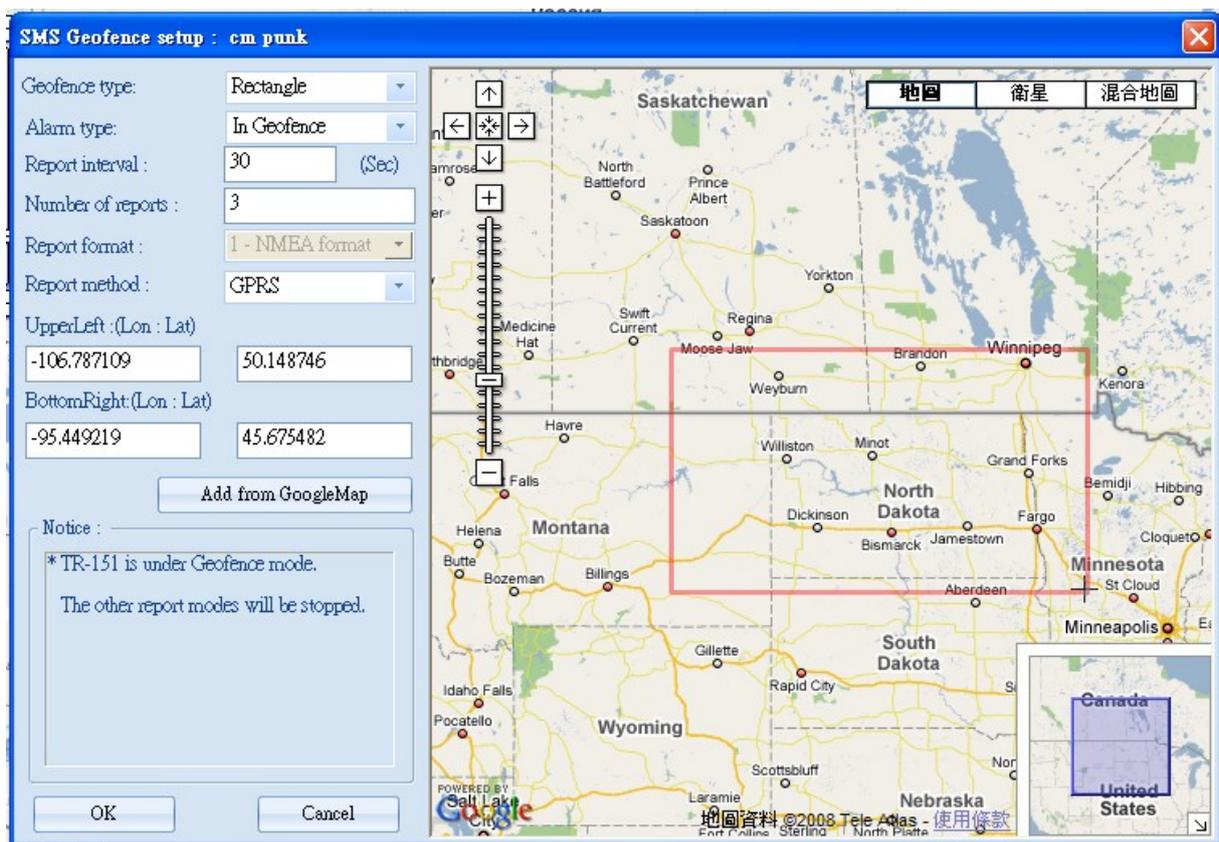
Step 2: Click the **Add from Google Map** button



Step3: Click and drag the mouse to draw a rectangle as the Geo-fence range on the Google map. The coordinates of the upper left corner and bottom right corner will be automatically loaded to the field of coordinate.



Drawing the rectangular area with the mouse



Loads the coordinates into the coordinate fields

Draw a circular area on the Google map to set Geo-fence:

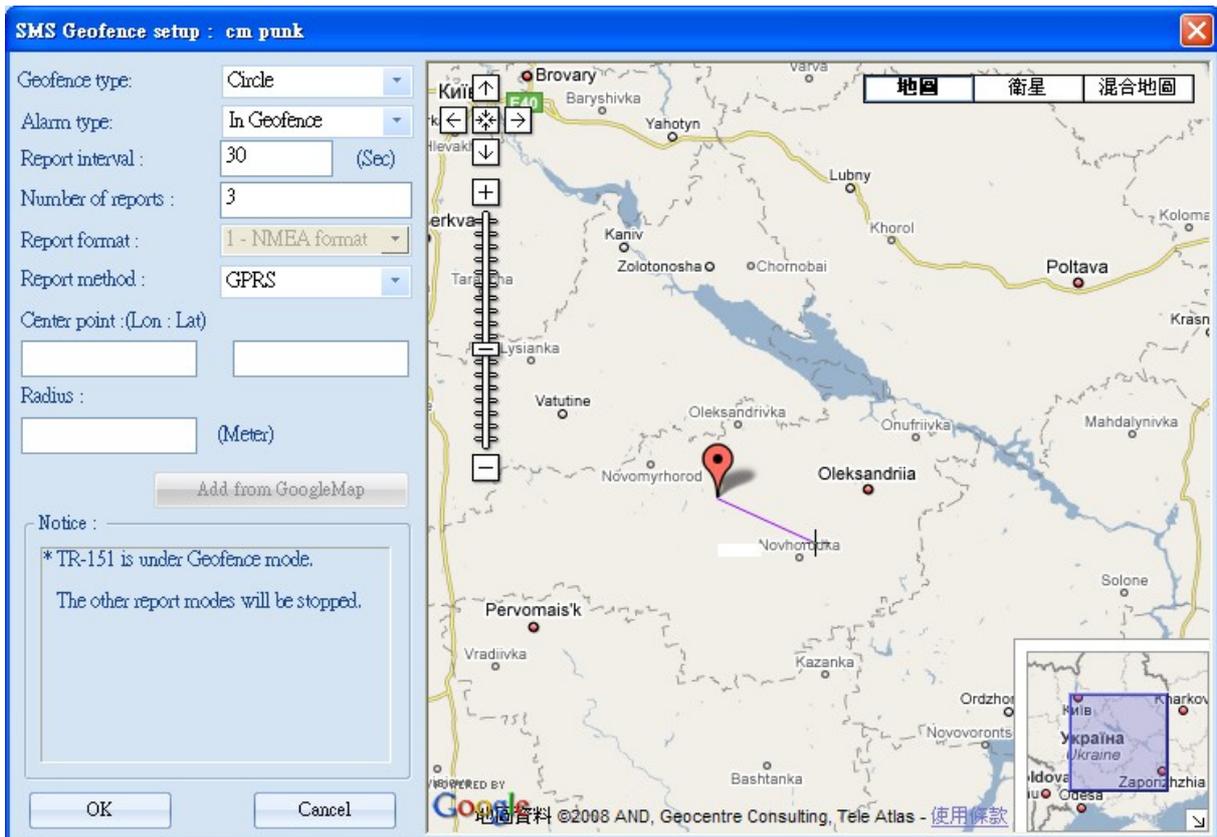
Step 1: Select **Circle** in the field of Geo-fence type.



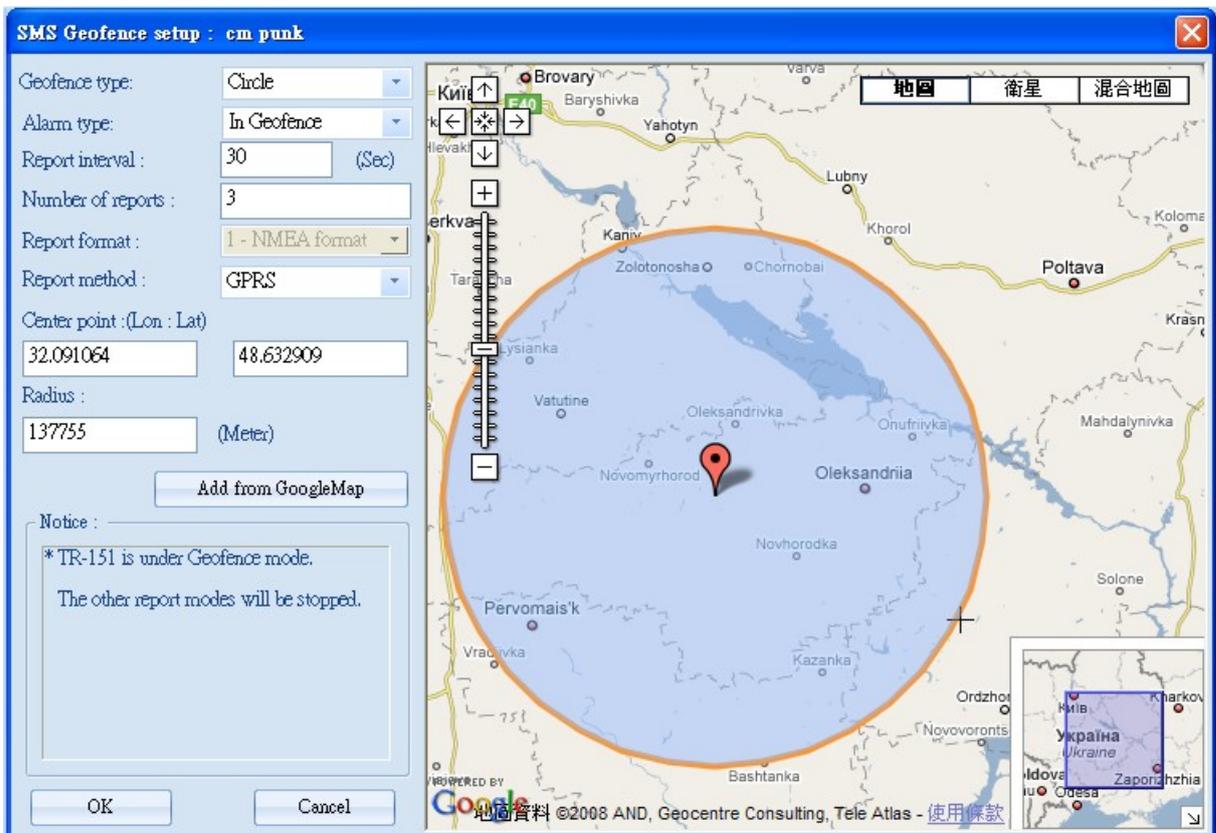
Step 2: Click the **Add from Google Map** button



Step 3: Left click on one point of the Google map as the central point of the circle. A balloon icon will appear. Drag the mouse to the position of the other side of the radius, and then left click the mouse. The circle will be shown on the Google map. And the coordinate of the central point and the radius will be automatically loaded into the fields.



Clicking on the center and moving the cursor will make a line appear

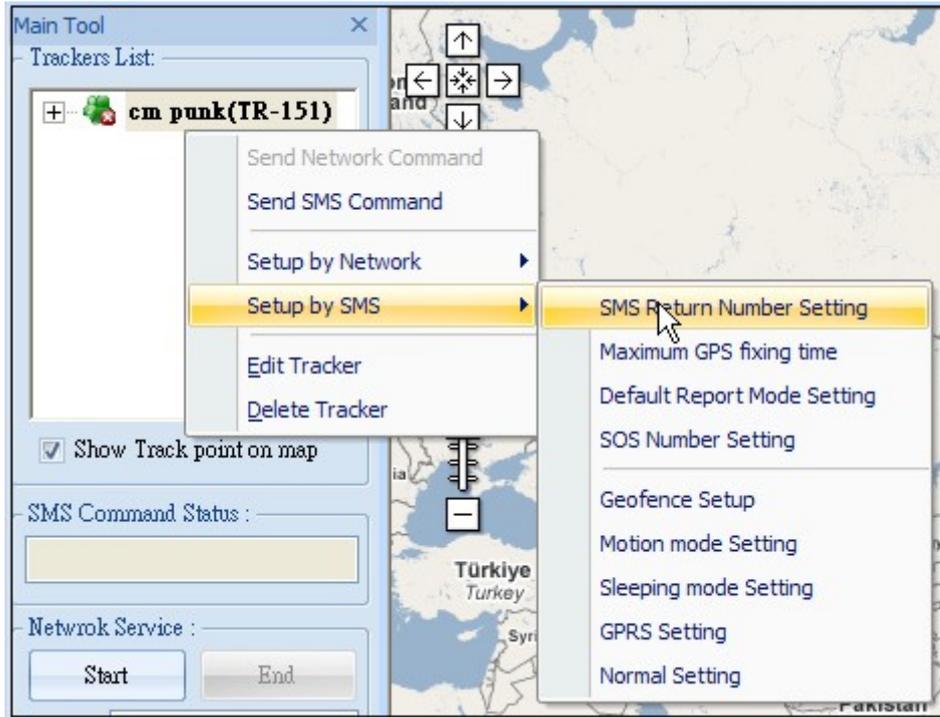


The system loads the center coordinates and radius into the coordinate fields

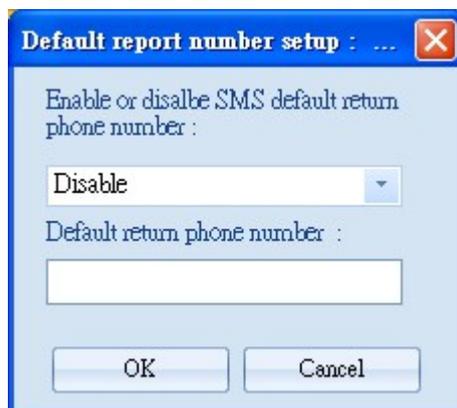
4.5.2 Set the SMS default return phone number

You can enable or disable the SMS default return phone number and assign the phone number as the default for receiving return SMS.

Step 1: Select the TR-151 and right click to select Setup by SMS → SMS Return Number Setting.



Step 2: Choose to Enable or Disable the SMS default return phone number. If you select to enable the SMS default return phone number, please enter the phone number.

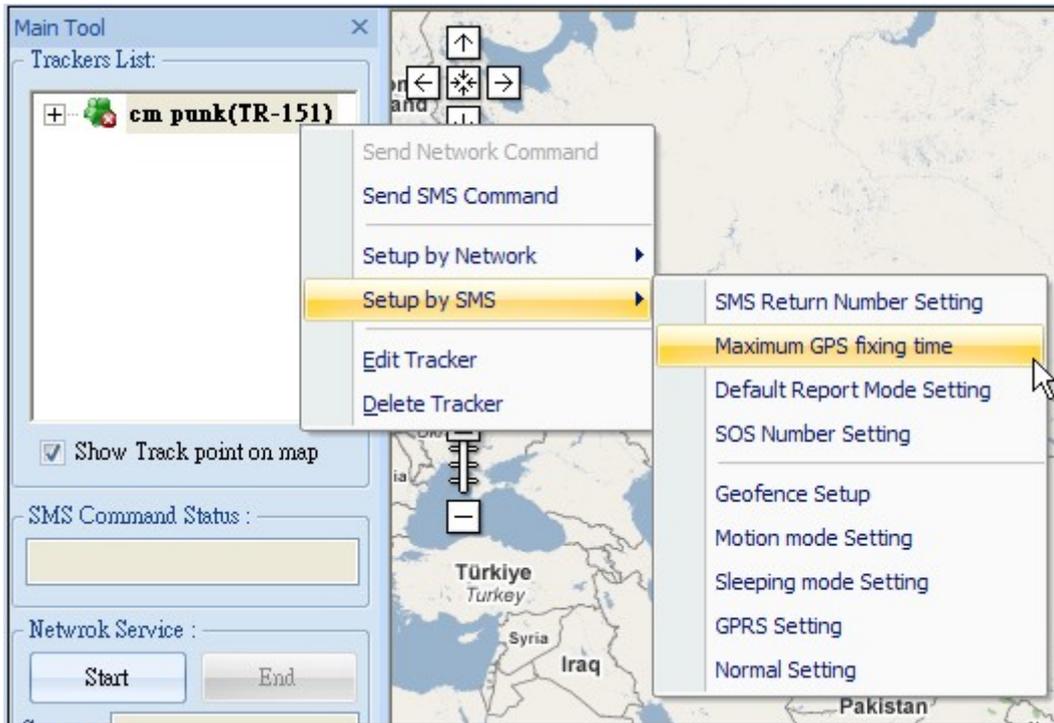


Step 3: Click **OK** button to send out the setting by Skype's SMS.

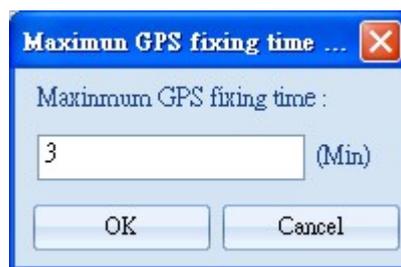
4.5.3 Set the Maximum GPS Fixing Time

You can set a period of time for TR-151 to get fixed of the location. When TR-151 cannot get fixed of the location within the period, TR-151 will send out the last location report.

Step 1: Select the TR-151 and right click to select Setup by SMS → Maximum GPS fixing time



Step 2: Enter the value for Maximum GPS fixing time.

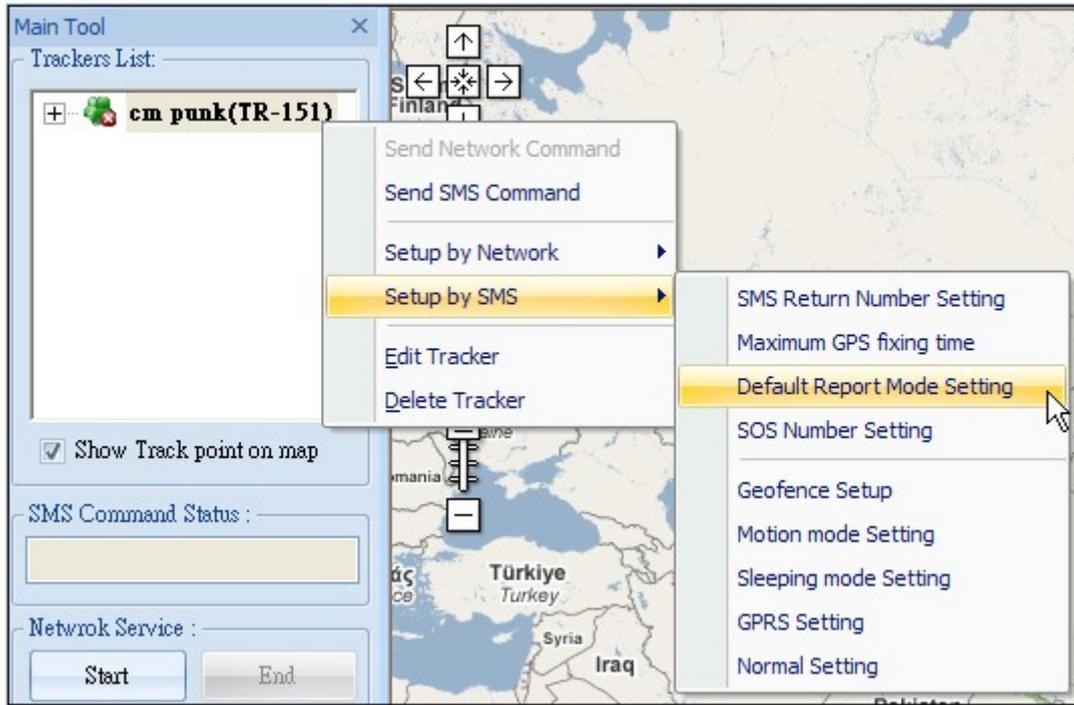


Step 3: Click **OK** button to send out the setting by Skype's SMS.

4.5.4 Set default report mode

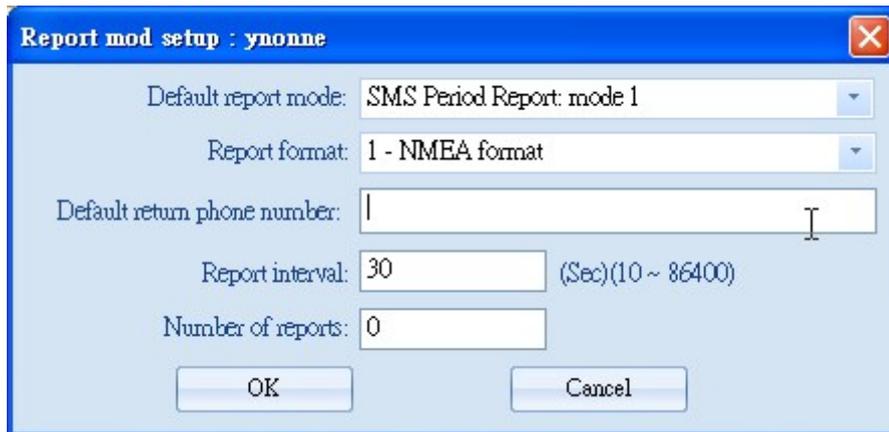
You can set the default report mode for TR-151. When TR-151 is powered on, it will enter the default report mode.

Step 1: Select the TR-151 and right click to select Setup by SMS → Default Report Mode Setting



Default report mode menu

Step 2: Select the default report mode, report format, and enter the concerning parameters.



You can refer tot the table below to enter the parameters.

Item	Description
Default report mode	Select the report mode after TR-151 is powered on
Report format	Select NEMA format or text format
Default return phone number	Enter the phone number for receiving SMS of default report mode
Report interval	Enter the interval between 2 reports

Number of reports	Enter how many reports will be sent out in the default report mode
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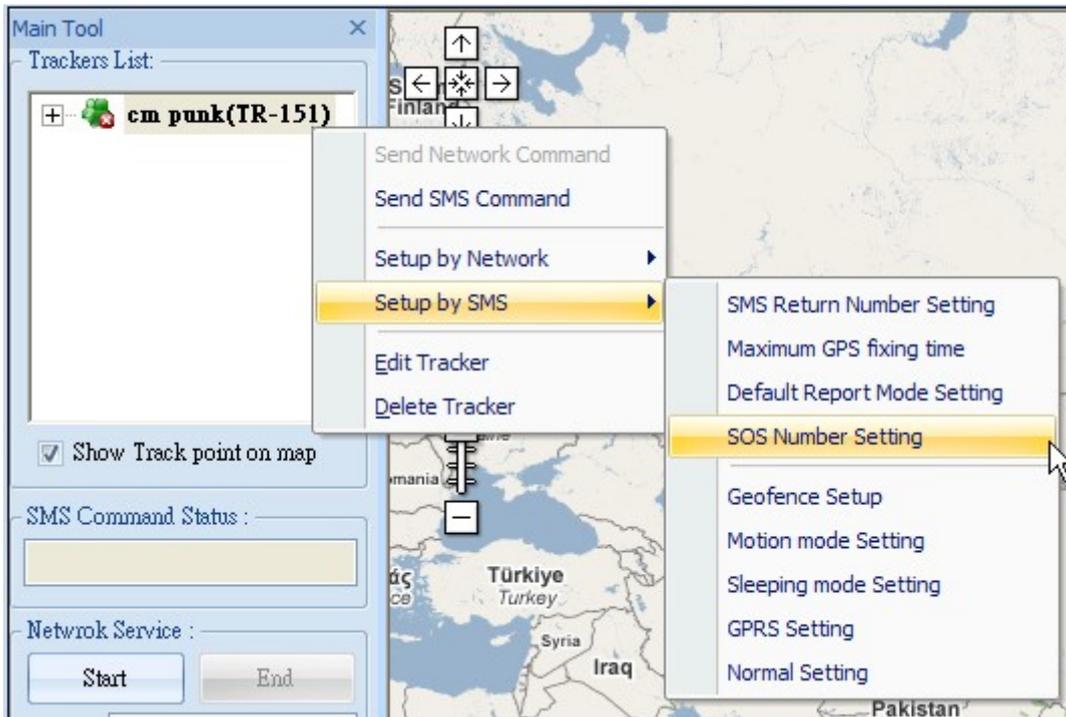
Step 3: Click **OK** button to send out the setting by Skype's SMS.

4.5.5 Set SOS phone number

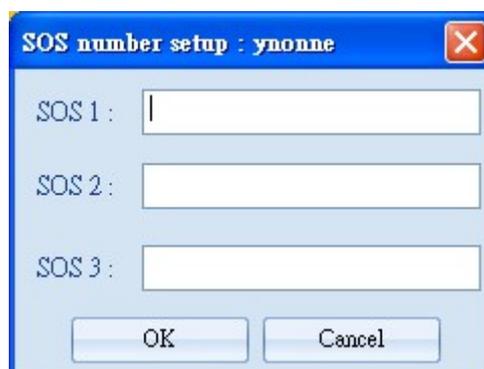
You can set the phone number for receiving emergency report after SOS button is pressed.

Note: If the report method of SOS you set in [4.2.1.2 Default report mode](#) is GPRS, the SOS alarm report will be sent to TR Management center, not the phone number

Step 1: the TR-151 and right click to select Setup by SMS → SOS Number Setting



Step 2: Enter the phone number for receiving emergency report after SOS button is pressed.

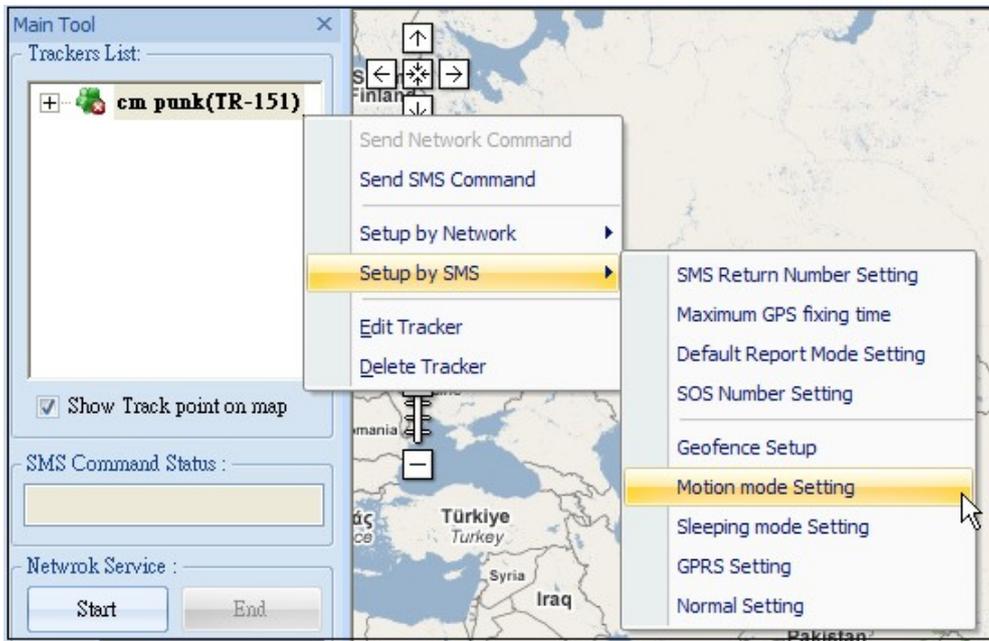


Step 3: Click **OK** button to send out the setting by Skype's SMS.

4.5.6 Set the Motion Mode's parameters

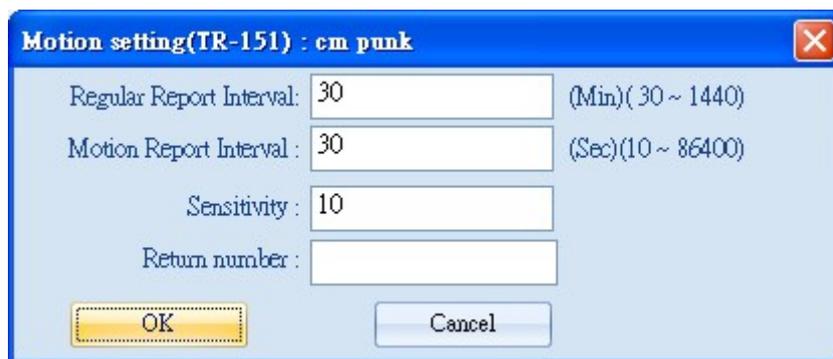
You can set the parameters of Motion mode by Skype's SMS.

Step 1: the TR-151 and right click to select Setup by SMS → Motion Mode Setting



Step 2: Enter the parameters on the window of motion mode setting.

You can refer to [4.5.6 Set the Motion Mode's parameters](#) to enter the parameters



Step 3: Click **OK** button to send out the setting by Skype's SMS

NOTE:

1. If you enter 0 in the field of **Number of reports**, TR-151 will not stop sending the report until TR-151 does not sense the vibration.
2. The Sensitivity is that while TR-151 senses the vibration over the sensitivity, it will send out the position report.

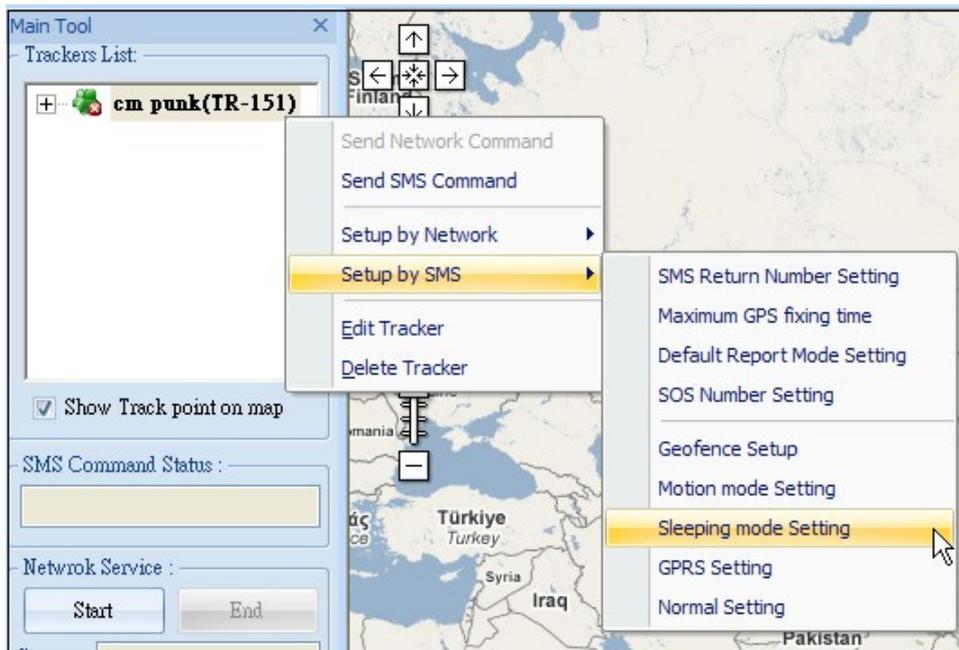
4.5.7 Set the Sleeping Mode's parameters

When TR-151 is under sleeping mode, its GSM module and GPS module will be turned off, the motion sensor will be turned on. Just like being under parking mode, it will send out SMS while it senses vibration. But TR-151 will not receive SMS under sleeping mode.

Making TR-151 to enter sleeping mode, you have to adjust DIP switch 4 to ON when TR-151 is powered off.

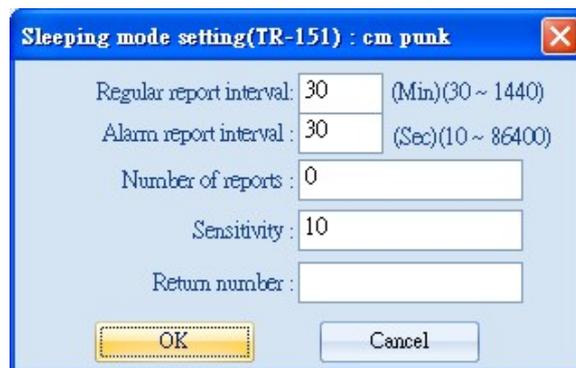
You can set the parameters of sleeping mode by Skype's SMS.

Step 1: Select the TR-151 and right click to select Setup by SMS → Sleeping Mode Setting



Step 2: Enter the parameters on the window of sleeping mode setting.

You can refer to [4.2.1.3 Sleep mode setup](#) to enter the parameters



Step 3: Click **OK** button to send out the setting by Skype's SMS

NOTE:

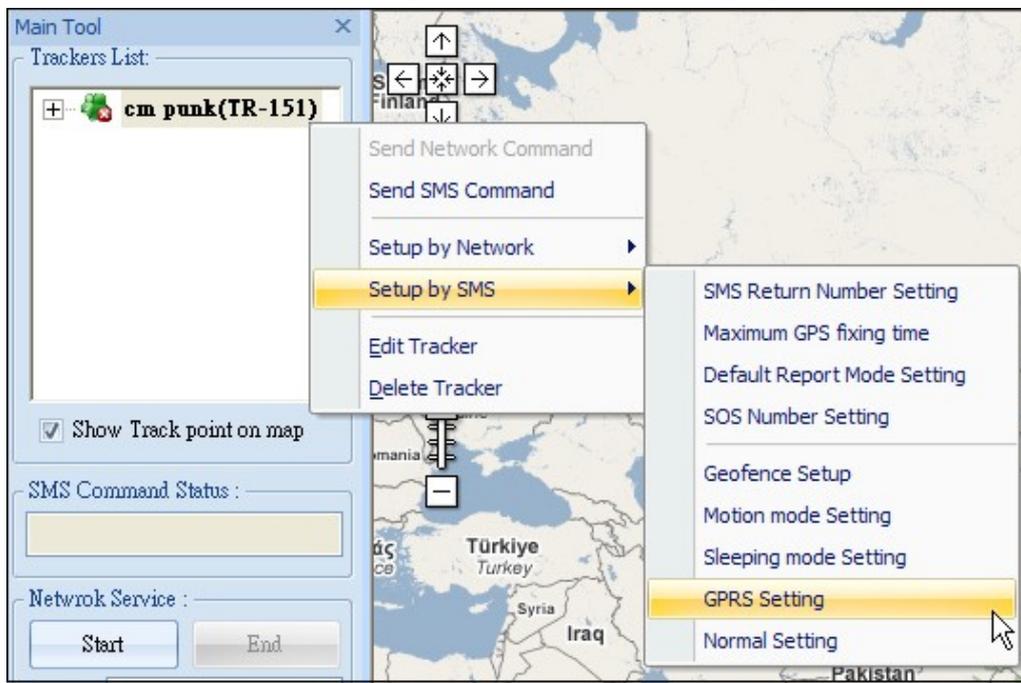
1. If you enter 0 in the field of **Number of reports**, TR-151 will not stop sending the report until TR-151 does not sense the vibration.
2. The Sensitivity is that while TR-151 senses the vibration over the sensitivity, it will send out

the position report.

4.5.8 Set the GPRS parameters

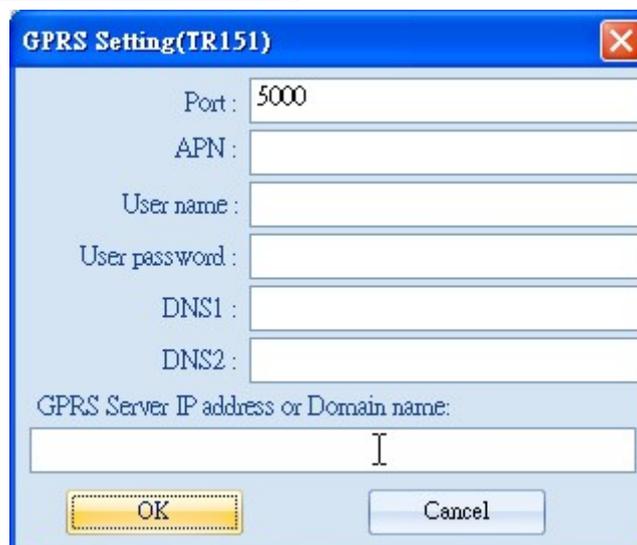
You can set the GPRS parameters by Skype's SMS.

Step 1: Step 1: Select the TR-151 and right click to select Setup by SMS → GPRS Setting



Step 2: Enter the parameters on the window of GPRS setting.

You can refer to [4.2.1.4 TR-151 GPRS setting](#) to enter the parameters

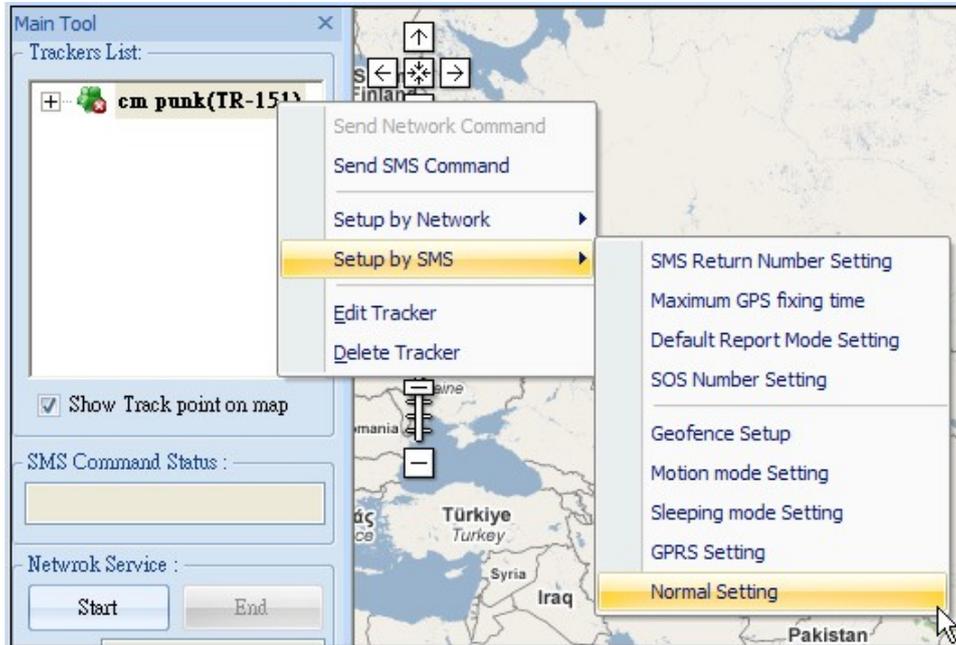


Step 3: Click **OK** button to send out the setting by Skype's SMS

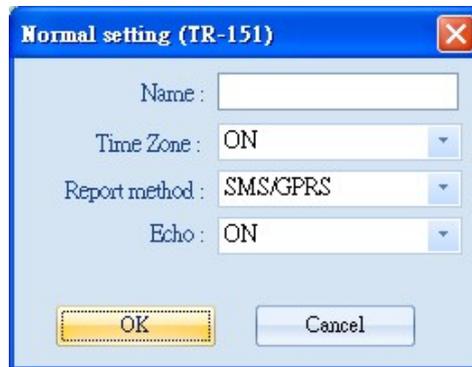
4.5.9 Set the Normal Setting

You can set the Normal setting parameters by Skype's SMS.

Step 1: Step 1: Select the TR-151 and right click to select Setup by SMS → GPRS Setting



Step 2: Enter the parameters on the window of Normal setting.



Item	Description
Name	Enter a name for changing the present name of TR-151
Time Zone	On: SMS sent from TR-151 will be converted to local time. Off: SMS sent from TR-151 will include the Coordinated Universal Time (UTC).
Report Method	Select TR-151 to send position report by SMS or GPRS or SMS+GPRS
Echo	On: Enable TR-151 to send return SMS or command to the phone number or server to confirm it has received the command Off: Disable TR-151 to send return SMS or command to the phone

	number or server to confirm it has received the command
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Step 3: Click **OK** button to send out the setting by Skype's SMS

4.6 Send command via network to set TR-151

In [4.2.1 Adding and setting a TR-151](#), you can connect TR-151 with TR Management center by the USB cable to set its parameters. In [4.5 Send SMS to set TR-151](#) you can also set its parameters by SMS via the Skype software in the TR Management center. You can also set the parameters of TR-151 by network's command.

You could set the parameters of TR-151 via network only when TR-151 is under GPRS period and disconnect mode, motion mode, park mode, Geo-fence mode and the report method must be GPRS or GPRS + SMS.

4.6.1 Asking TR-151 to enter Geo-fence mode

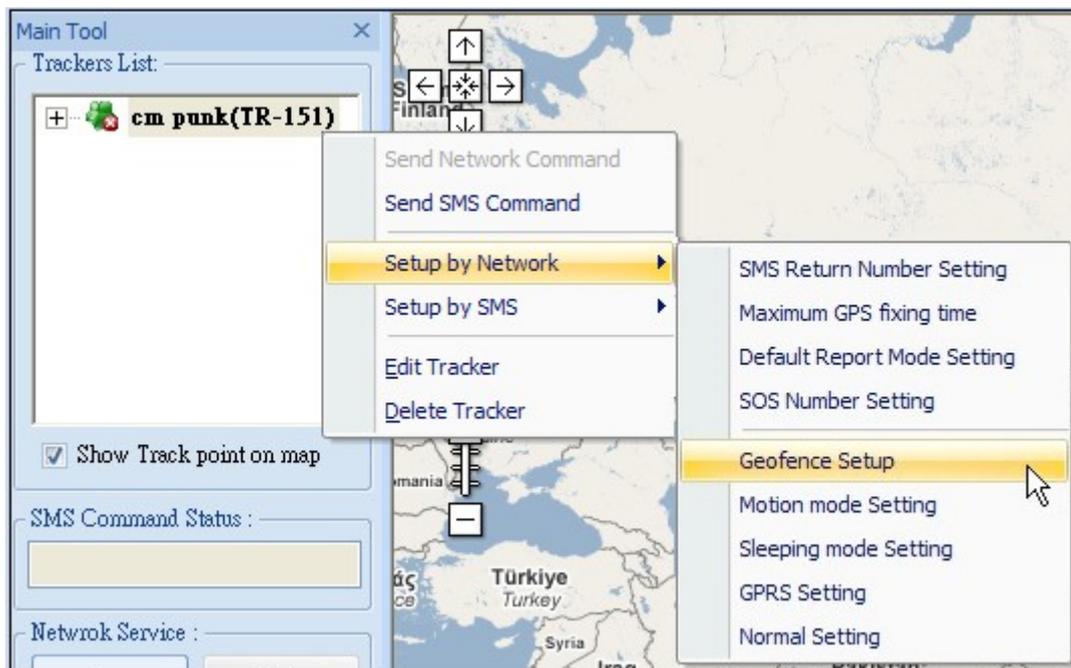
Geo-fence is that setting a rectangular or circular area as permissible area or restricted area. When TR-151 gets out the permissible area or goes in to the restricted area, TR-151 will send its location to the preset mobile phone number via SMS or to TR Management center via network.

You can send command via network to make TR-151 enter Geo-fence mode. The commands include choosing the rectangular or circular areas (**Rectangle** or **Circle**), getting in the restricted areas or getting out the permissible areas to send alarm (**In Geo-fence** or **Out Geo-fence**), time intervals of alarm report (**Report interval**), **Number of reports**, and **Report format**.

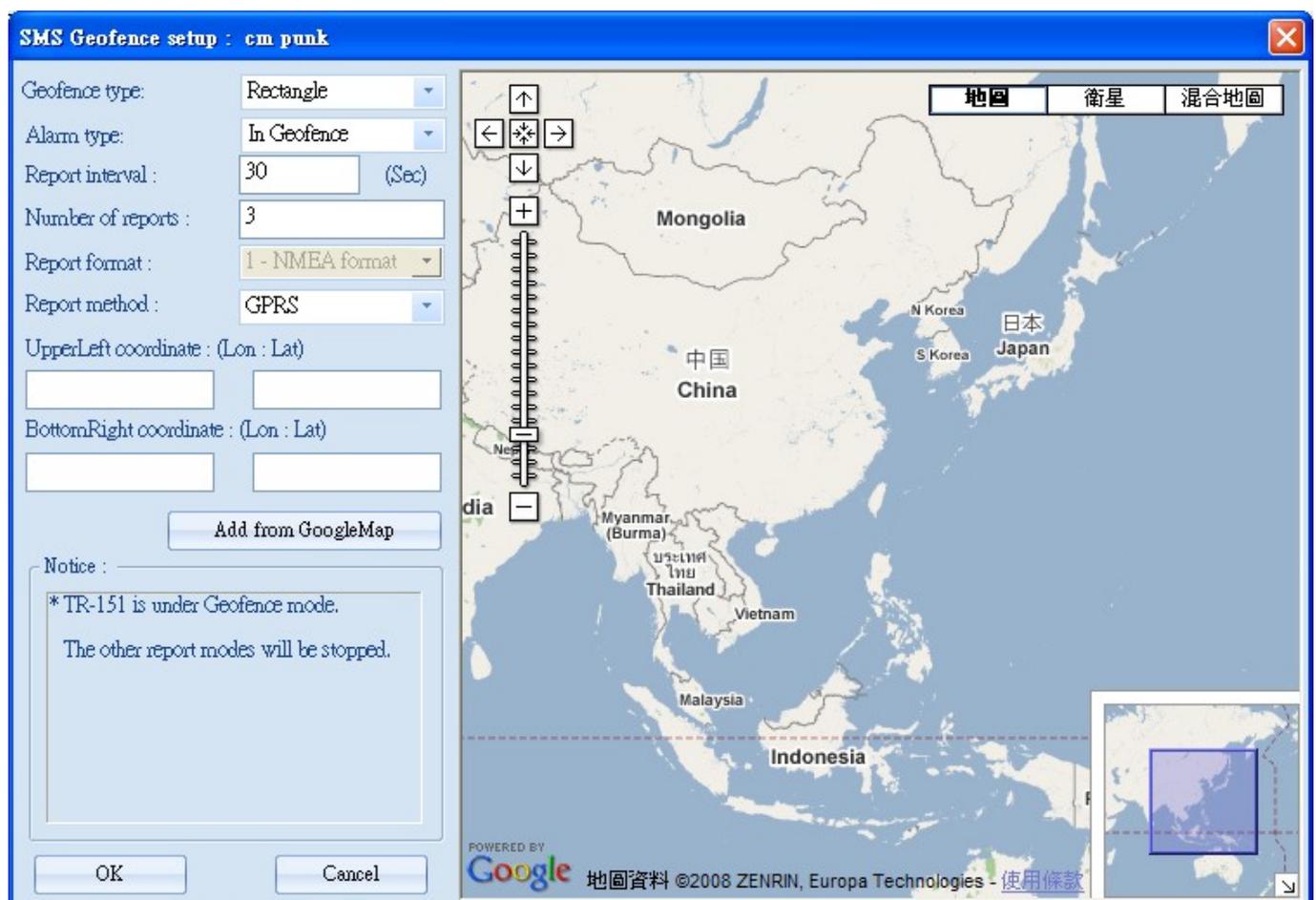
TR-151 will start to get fixed of the location as soon as it enters Geo-fence mode. TR-151 will keep fixing the location. Once TR-151 detect it enters restricted area or gets out the permissible area, it will send its location to the preset mobile phone number via SMS or to TR Management center via network.

Note: TR-151 will exit from geo-fence mode after it sends out the geo-fence alarm.

Step1: Select the TR-151 and right click to select Setup by Network → Geo-fence Setup.



Step 2: Enter and select the parameters.



You can refer to the table below for the meaning of the Geo-fence parameters.

Item	Description
Geofence Type	Choose to set a rectangular (Rectangle) or a circular (Circle) area
Alarm Type	Choose to send location report when TR-151 gets in (In Geofence) or get out (Out Geofence) the area
Report interval	The interval of sending location report when TR-151 disobey Geo-fence rule
Number of reports	How many reports TR-151 will send when TR-151 disobey Geo-fence rule
Report format	Choose the report format as NEMA format or text format (Only available for SMS or SMS+GPRS report method)
Report Method	Choose to send position report by SMS or GPRS or SMS+GPRS
Upper Left coordinate	The coordinates of the Geo-fence's upper left corner (Rectangle)
Bottom Right coordinate	The coordinates of the Geo-fence's lower right corner (Rectangle)
Center point	The coordinates for the center of the Geo-fence (Circle)
Radius	Geo-fence radius (Circle)

TR-151 and Google map/ earth use different units to express longitudes and latitudes. The unit used in TR-151's longitude and latitude is degree and minute with a 4-digit decimal fraction while the unit in Google Map/Earth is degree, minute, and second. So please convert the unit to degree and minute with a 4-digit decimal fraction before setting Geo-fence.

TR-151's longitude and latitude is like E12129.3167 and N2459.8479

The number 121 represents longitude's degree and 29.3167 represents the longitude's minute. The number 24 represents the unit of latitude's degree, and 59.8479 represents the unit of latitude's minute.

The degree of TR-151's longitude must be 3 digits. The degree of TR-151's latitude must be 2 digits. If you are in the areas where the longitude's degree is not 3 digits or latitude's degree is not 2 digits, please enter 0 for the first and second digits.

Example1:

The longitude and latitude from Google earth is E121°29'15.72" & N24°59'47.40"

The number 121 represents longitude's degree, 29 represent the minute, and 15.72 represents second.

The number 24 represents latitude's degree, 59 represent the minute, and 47.40 represents second.

You can convert E121°29'15.72" & N24°59'47.40" into the unit of TR-151's longitudes and latitude as the method below.

15.72 (second) ÷60=0.262 (minute)

47.40 (second) ÷60=0.79 (minute)

The expression of TR-151's longitude and latitude is E12129.2620 & N2459.7900

Example 2:

The longitude and latitude from Google earth is W1°12'55.05" & N5°55'17.93"

You can convert W1°12'55.05" & N5°55'17.93" into the unit of TR-151's longitudes and latitude as the method below.

55.05 (second) ÷60= 0.9175 (minute)

17.93 (second) ÷60= 0.2988 (minute)

The expression of TR-151's longitude and latitude is W00112.9175 & N0555.2988

Example 3

If you get a set of longitude and latitude, E21.4877° & S4.9965°, you can convert it into TR-151's longitudes and latitude as the method below.

0.4877 (degree) x 60= 29.262 (minute)

0.9965 (degree) x60=59.79 (minute)

The expression of TR-151's longitude and latitude is E02129.2620 & S0459.7900

Step 4: Click **OK** to send out the setting of Geo-fence to the TR-151 by Skype's SMS.

A dialog window for informing that Skype has sent out the SMS will appear. You can operate the other functions during the process of sending SMS.

NOTE: In addition to enter the coordinates to set the Geo-fence, you can also draw a rectangular or circular area on the Google map to set the Geo-fence.

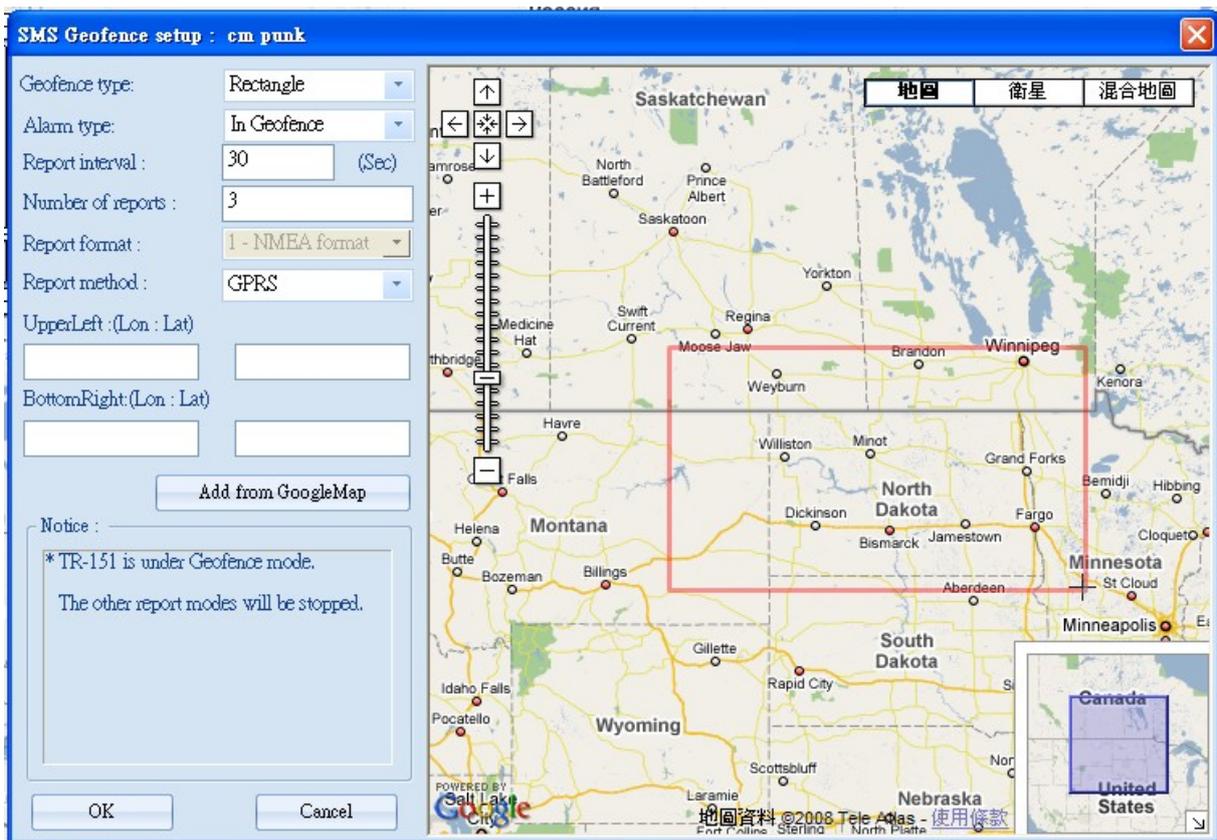
Draw a rectangular area on the Google map to set Geo-fence:

Step 1: Select **Rectangle** in the field of Geo-fence type.

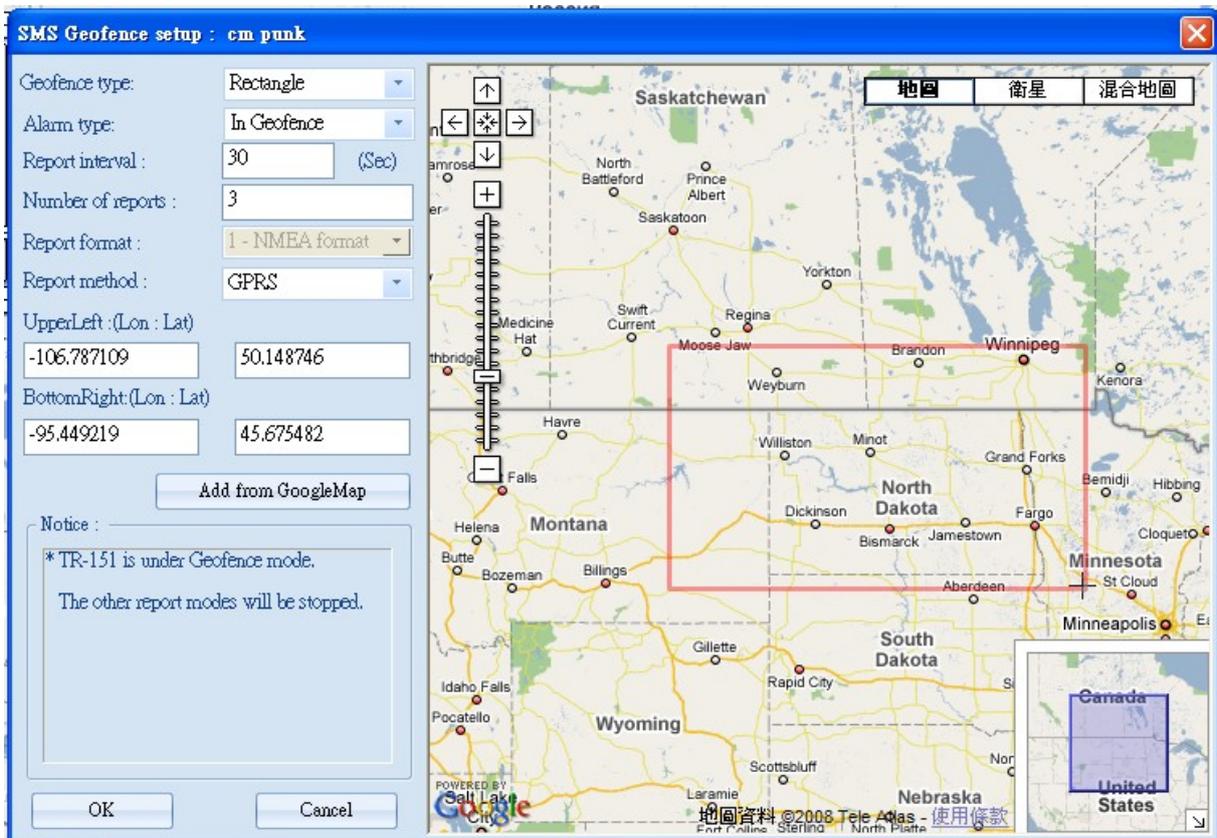
Geofence type:

Step 2: Click the **Add from Google Map** button

Step3: Click and drag the mouse to draw a rectangle as the Geo-fence range on the Google map. The coordinates of the upper left corner and bottom right corner will be automatically loaded to the field of coordinate.



Drawing the rectangular area with the mouse



Loads the coordinates into the coordinate fields

Draw a circular area on the Google map to set Geo-fence:

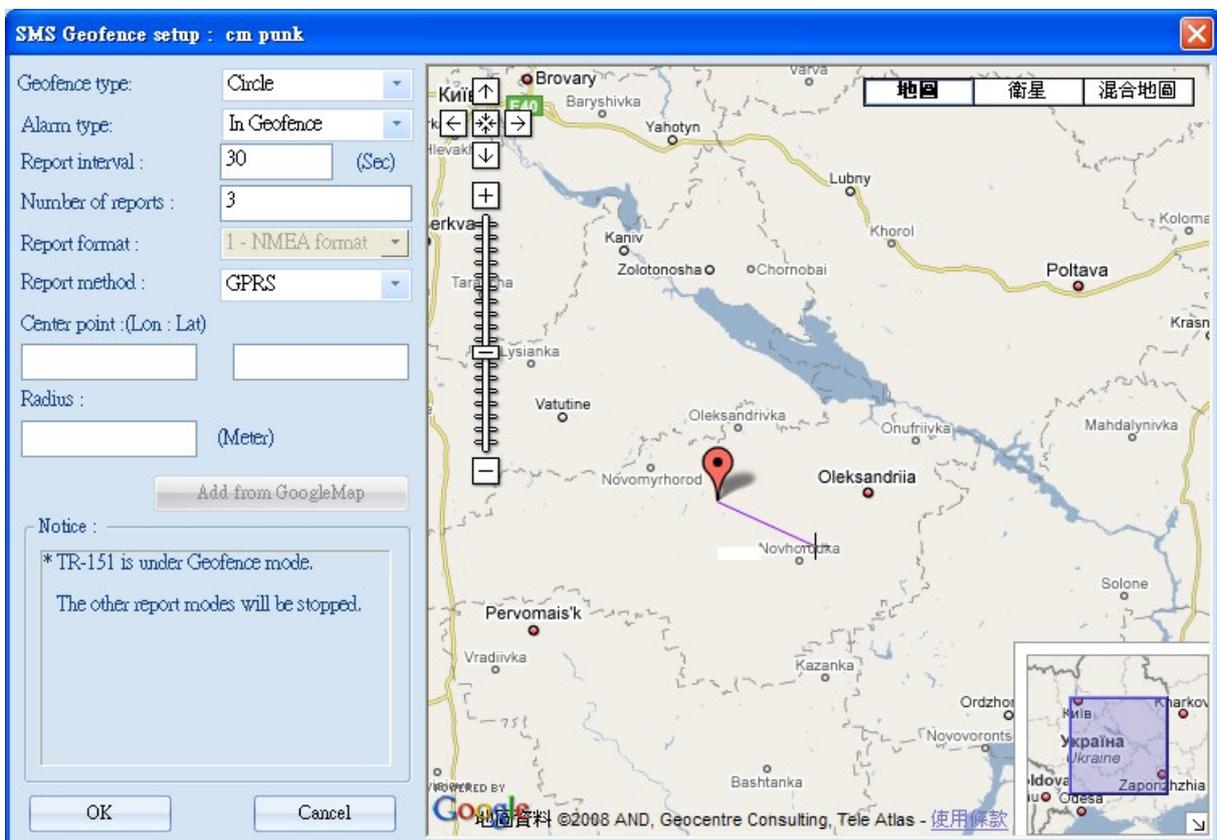
Step 1: Select **Circle** in the field of Geo-fence type.



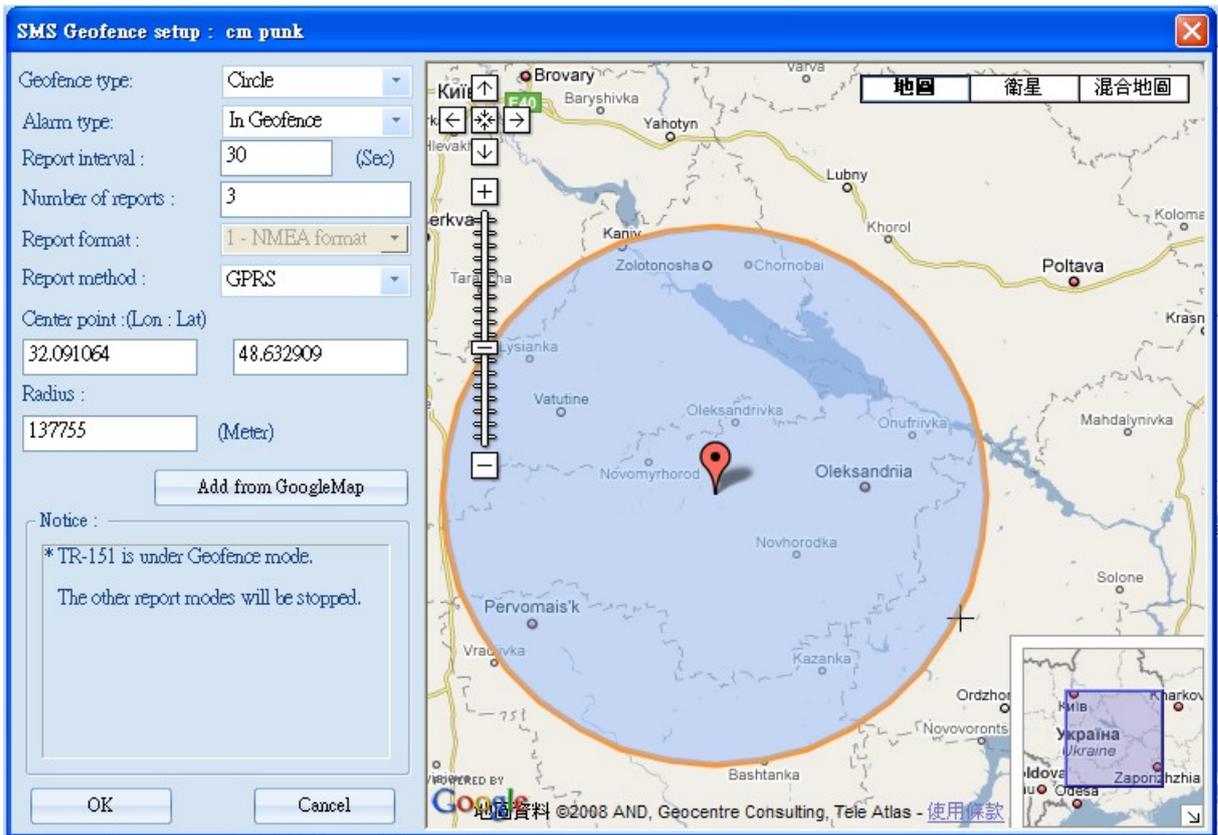
Step 2: Click the **Add from Google Map** button



Step 3: Left click on one point of the Google map as the central point of the circle. A balloon icon will appear. Drag the mouse to the position of the other side of the radius, and then left click the mouse. The circle will be shown on the Google map. And the coordinate of the central point and the radius will be automatically loaded into the fields.



Clicking on the center and moving the cursor will make a line appear

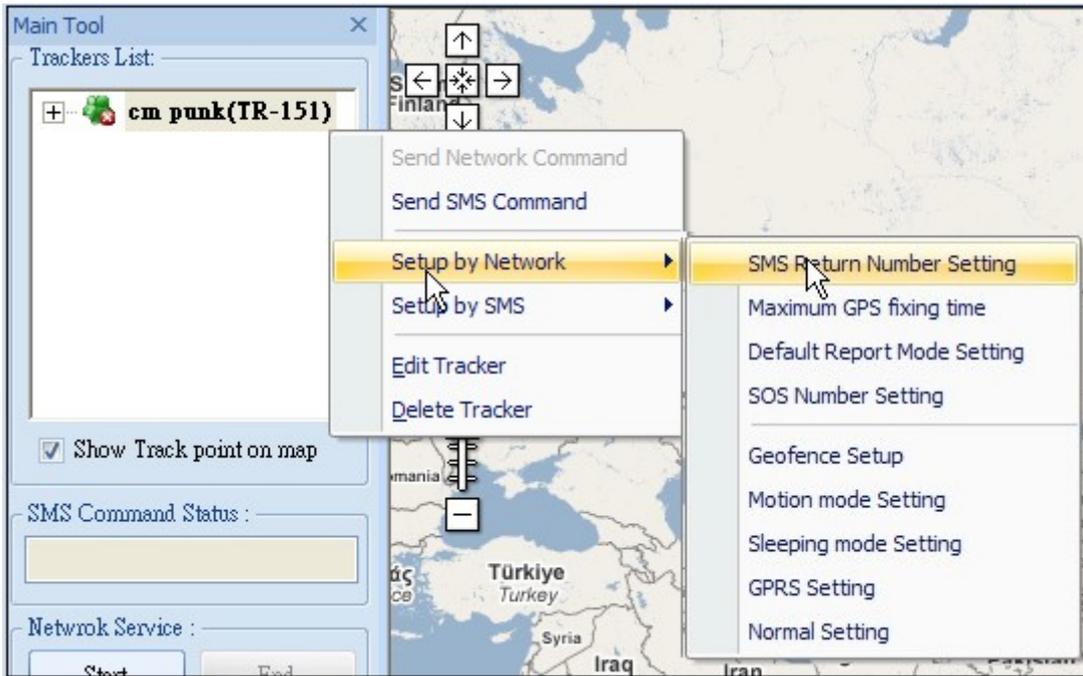


The system loads the center coordinates and radius into the coordinate fields

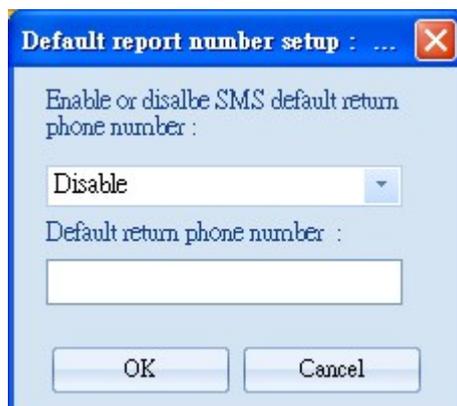
4.6.2 Set the SMS default return phone number

You can enable or disable the SMS default return phone number and assign the phone number as the default for receiving return SMS.

Step 1: Select the TR-151 and right click to select Setup by Network → SMS Return Number Setting.



Step 2: Choose to Enable or Disable the SMS default return phone number. If you select to enable the SMS default return phone number, please enter the phone number.

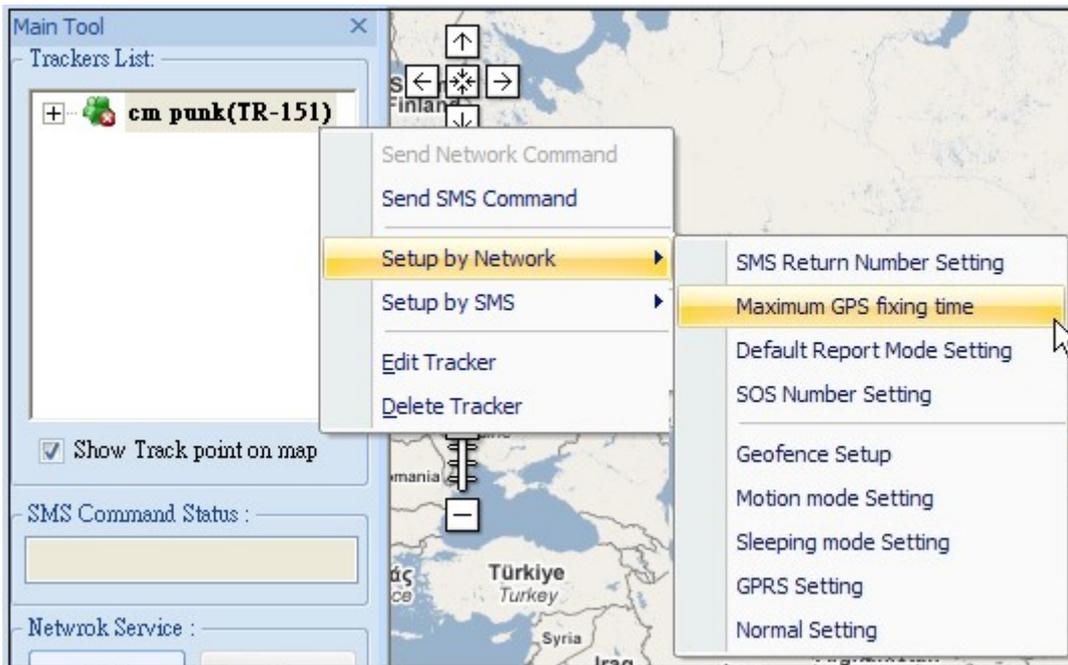


Step 3: Click **OK** button to send out the setting by network.

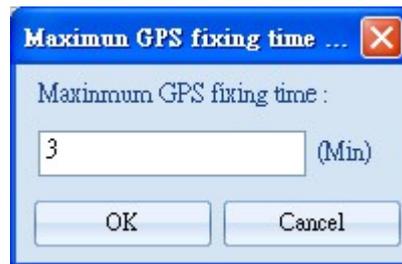
4.6.3 Set the Maximum GPS Fixing Time

You can set a period of time for TR-151 to get fixed of the location. When TR-151 cannot get fixed of the location within the period, TR-151 will send out the last location report.

Step 1: Select the TR-151 and right click to select Setup by Network → Maximum GPS fixing time



Step 2: Enter the value for Maximum GPS fixing time.

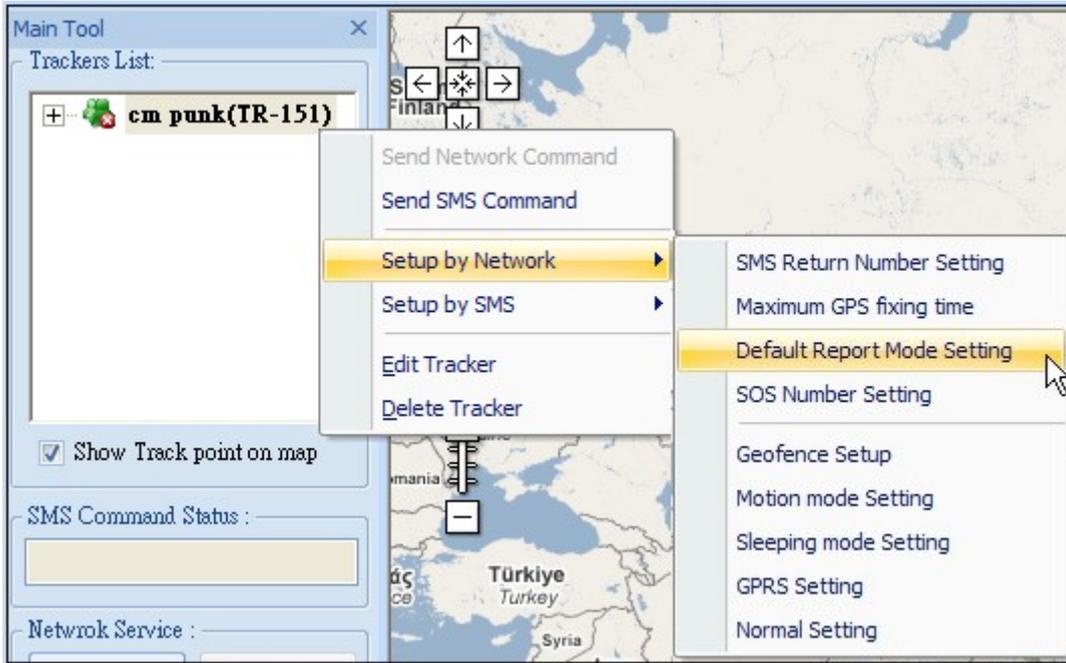


Step 3: Click **OK** button to send out the setting by Skype's SMS.

4.6.4 Set default report mode

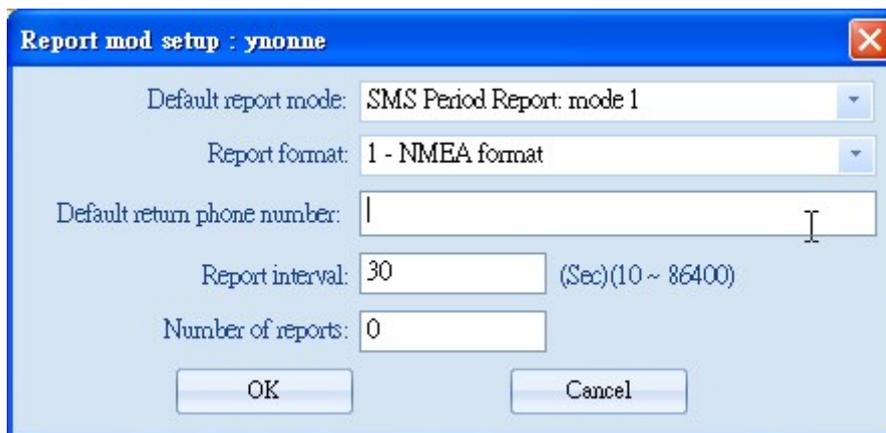
You can set the default report mode for TR-151. When TR-151 is powered on, it will enter the default report mode.

Step 1: Select the TR-151 and right click to select Setup by Network → Default Report Mode Setting



Default report mode menu

Step 2: Select the default report mode, report format, and enter the concerning parameters.



You can refer to the table below to enter the parameters.

Item	Description
Default report mode	Select the report mode after TR-151 is powered on
Report format	Select NEMA format or text format
Default return phone number	Enter the phone number for receiving SMS of default report mode
Report interval	Enter the interval between 2 reports

Number of reports	Enter how many reports will be sent out in the default report mode
-------------------	--

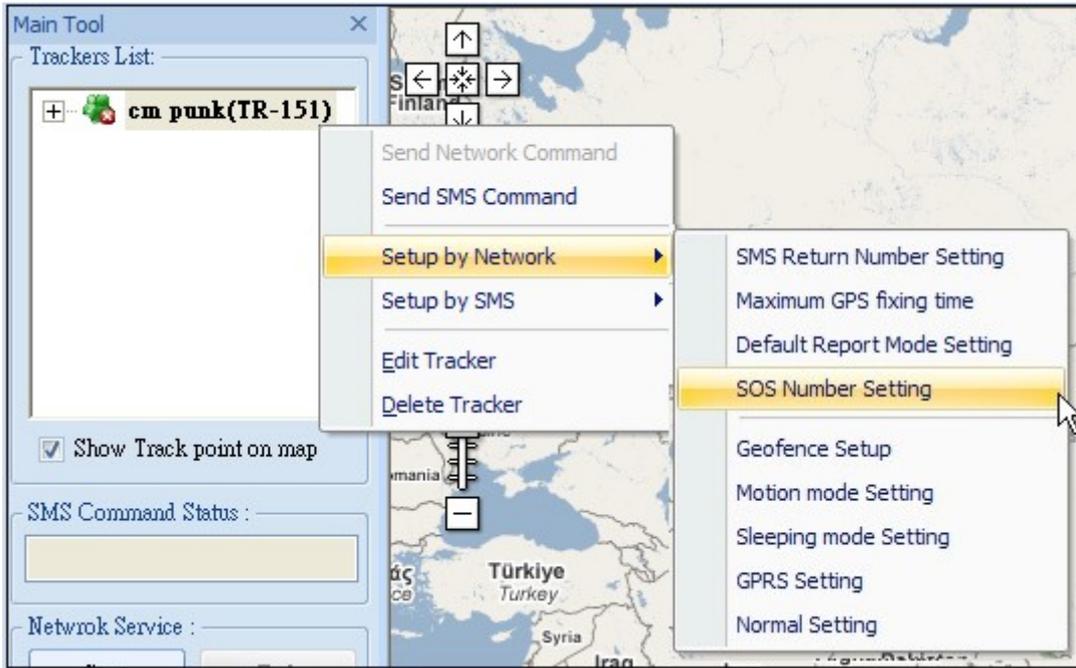
Step 3: Click **OK** button to send out the setting by Skype's SMS.

4.6.5 Set SOS phone number

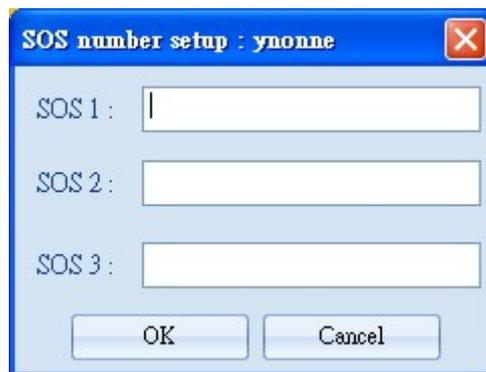
You can set the phone number for receiving emergency report after SOS button is pressed.

Note: If the report method of SOS you set in [4.2.1.2 Default report mode](#) is GPRS, the SOS alarm report will be sent to TR Management center, not the phone number

Step 1: the TR-151 and right click to select Setup by Network → SOS Number Setting



Step 2: Enter the phone number for receiving emergency report after SOS button is pressed.

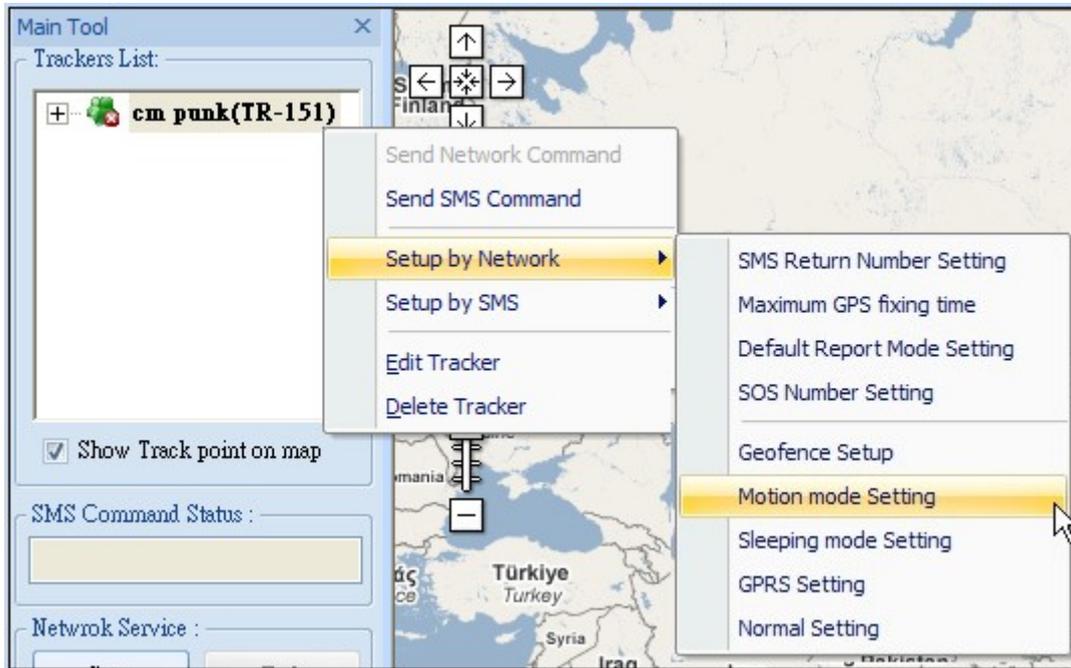


Step 3: Click **OK** button to send out the setting by Skype's SMS.

4.6.6 Set the Motion Mode's parameters

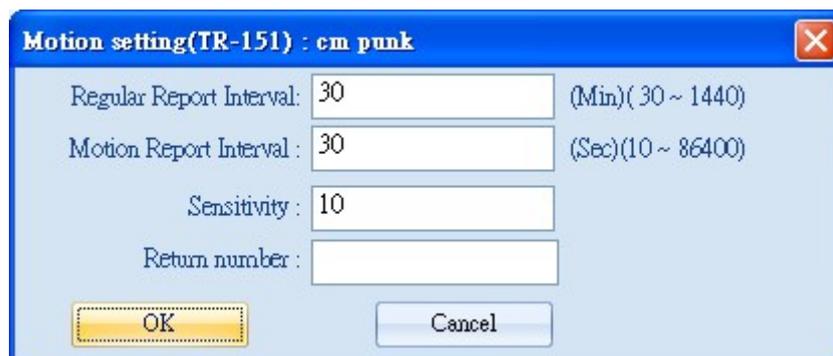
You can set the parameters of Motion mode by network command.

Step 1: the TR-151 and right click to select Setup by Network → Motion Mode Setting



Step 2: Enter the parameters on the window of motion mode setting.

You can refer to [4.5.6 Set the Motion Mode's parameters](#) to enter the parameters



Step 3: Click **OK** button to send out the setting by Skype's SMS

NOTE:

1. If you enter 0 in the field of **Number of reports**, TR-151 will not stop sending the report until TR-151 does not sense the vibration.
2. The Sensitivity is that while TR-151 senses the vibration over the sensitivity, it will send out the position report.

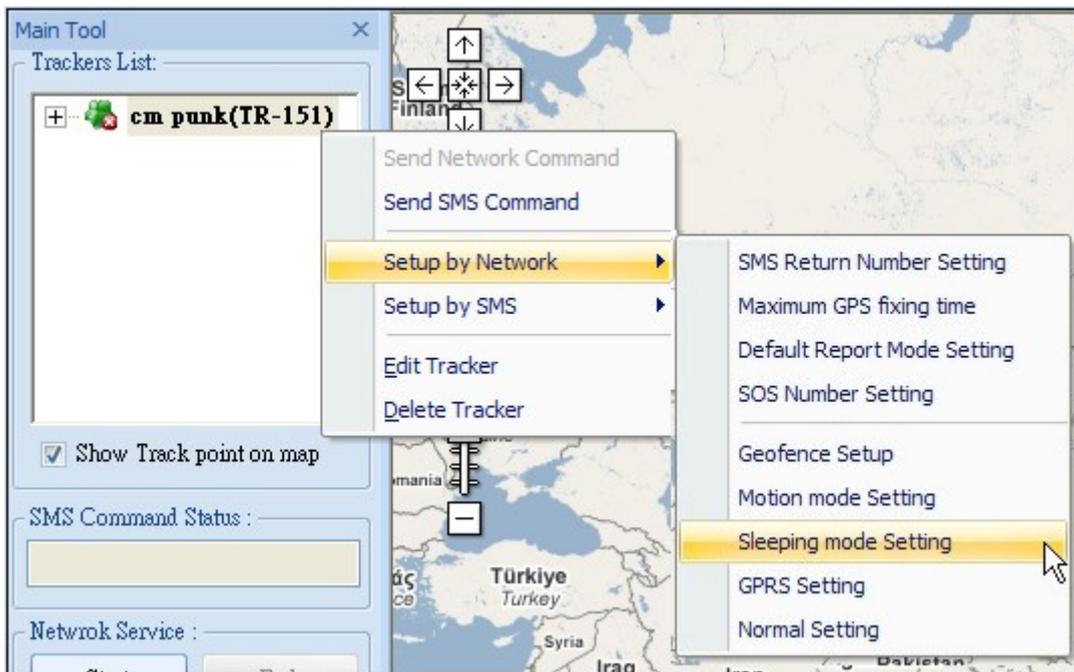
4.6.7 Set the Sleeping Mode's parameters

When TR-151 is under sleeping mode, its GSM module and GPS module will be turned off, the motion sensor will be turned on. Just like being under parking mode, it will send out SMS while it senses vibration. But TR-151 will not receive SMS under sleeping mode.

Making TR-151 to enter sleeping mode, you have to adjust **DIP switch 4 to ON** when TR-151 is powered off. TR-151 will enter sleeping mode when you power it on again. If you want to exit from sleeping mode, please turn off the power, adjust **DIP switch 4 to OFF**, and then power it on again.

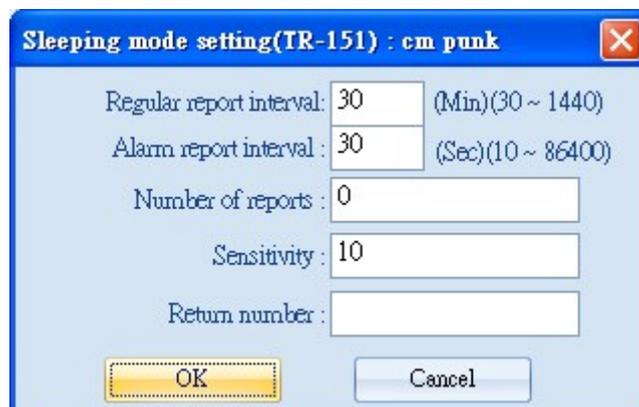
You can set the parameters of sleeping mode by network command.

Step 1: Select the TR-151 and right click to select Setup by Network → Sleeping Mode Setting



Step 2: Enter the parameters on the window of sleeping mode setting.

You can refer to [4.2.1.3 Sleep mode setup](#) to enter the parameters



Step 3: Click **OK** button to send out the setting by network

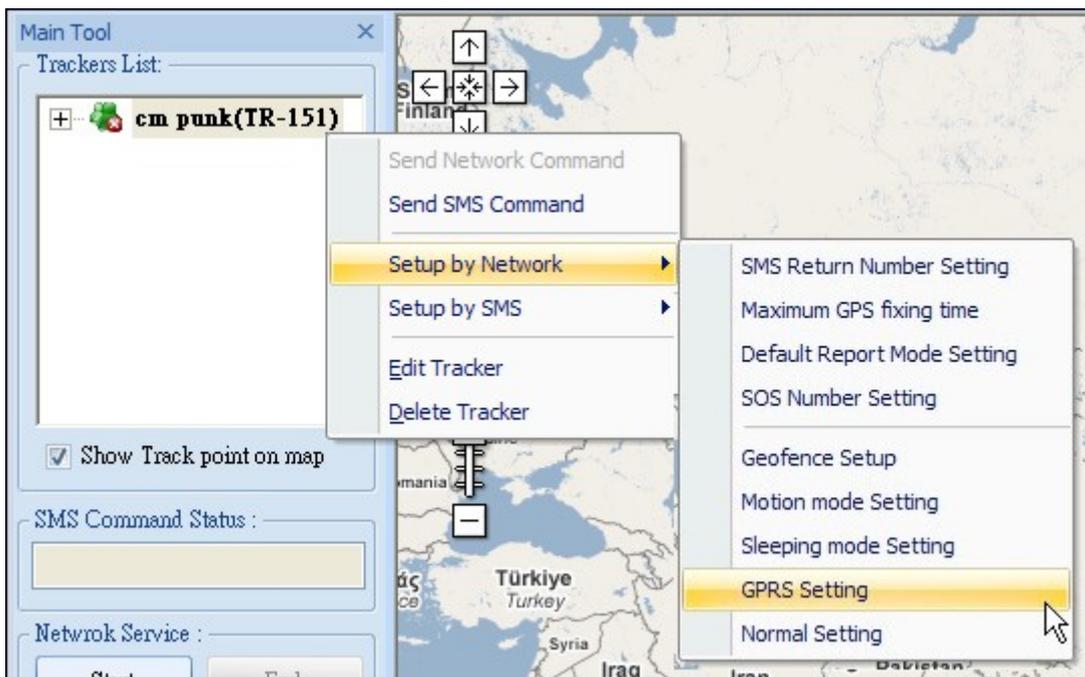
NOTE:

1. If you enter 0 in the field of **Number of reports**, TR-151 will not stop sending the report until TR-151 does not sense the vibration.
2. The Sensitivity is that while TR-151 senses the vibration over the sensitivity, it will send out the position report.

4.6.8 Set the GPRS parameters

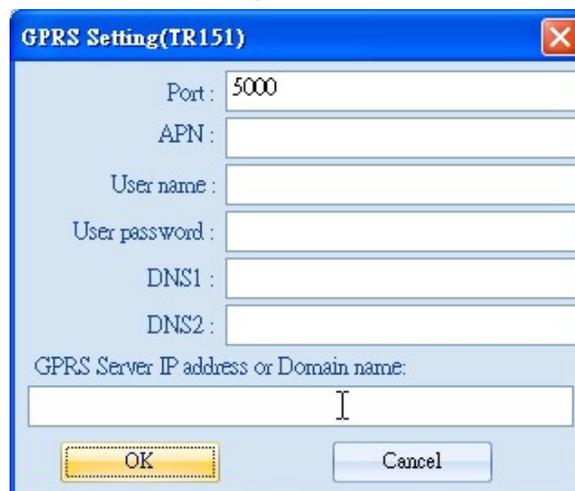
You can set the GPRS parameters by network command.

Step 1: Step 1: Select the TR-151 and right click to select Setup by Network → GPRS Setting



Step 2: Enter the parameters on the window of GPRS setting.

You can refer to [4.2.1.4 TR-151 GPRS setting](#) to enter the parameters

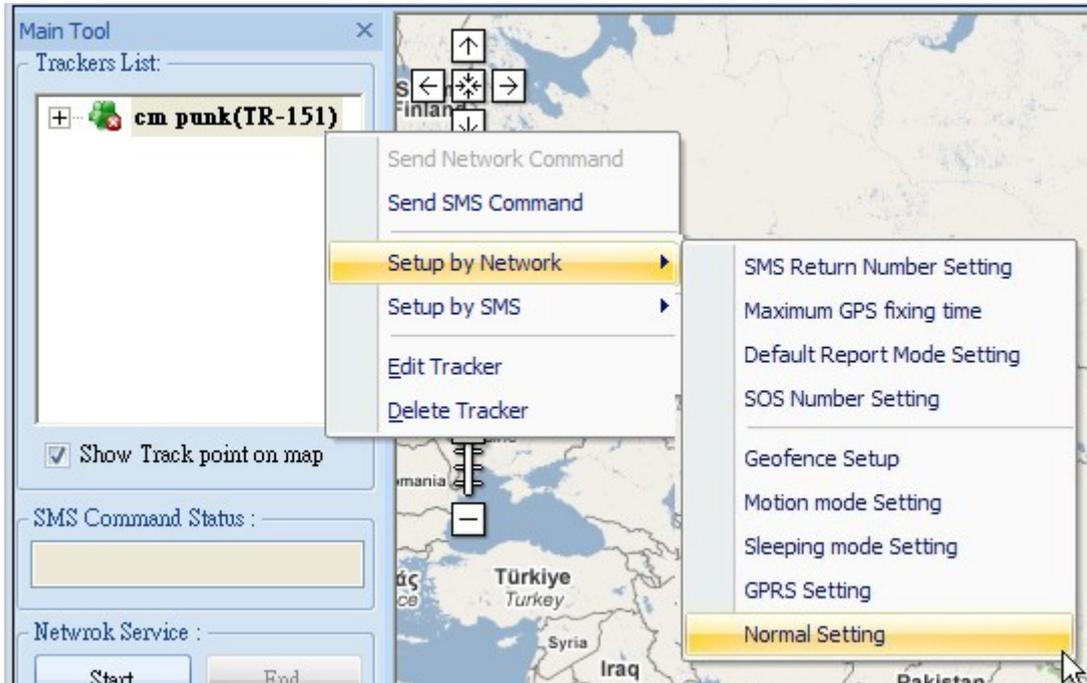


Step 3: Click **OK** button to send out the setting by network command

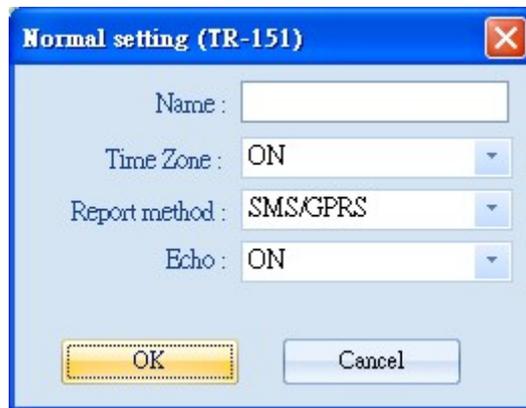
4.6.9 Set the Normal Setting

You can set the Normal setting parameters by network command.

Step 1: Step 1: Select the TR-151 and right click to select Setup by Network → GPRS Setting



Step 2: Enter the parameters on the window of Normal setting.



Item	Description
Name	Enter a name for changing the present name of TR-151
Time Zone	On: SMS sent from TR-151 will be converted to local time. Off: SMS sent from TR-151 will include the Coordinated Universal Time (UTC).
Report Method	Select TR-151 to send position report by SMS or GPRS or SMS+GPRS
Echo	On: Enable TR-151 to send return SMS or command to the phone

	number or server to confirm it has received the command Off: Disable TR-151 to send return SMS or command to the phone number or server to confirm it has received the command
--	---

Step 3: Click **OK** button to send out the setting by network command

4.7 Update TR-151's Firmware

You can update TR-151's firmware by the TR Management Center.

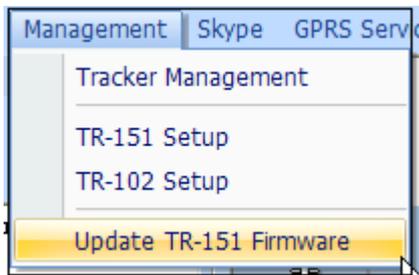
Step 1: Please make TR-151 enter setting mode by adjusting DIP switch 3 to ON position under power-off status.

Step 2: Please connect TR-151 and PC by the USB cable.

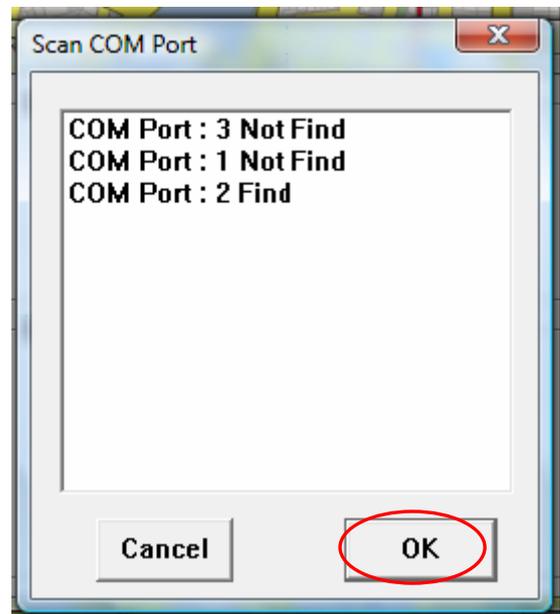
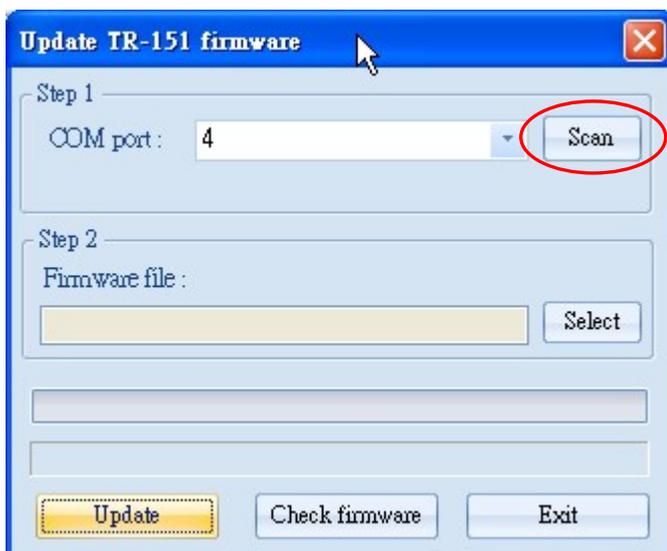
Step 3: Please turn on the power of TR-151.

Step 4: Please run the "TR Management Center" program.

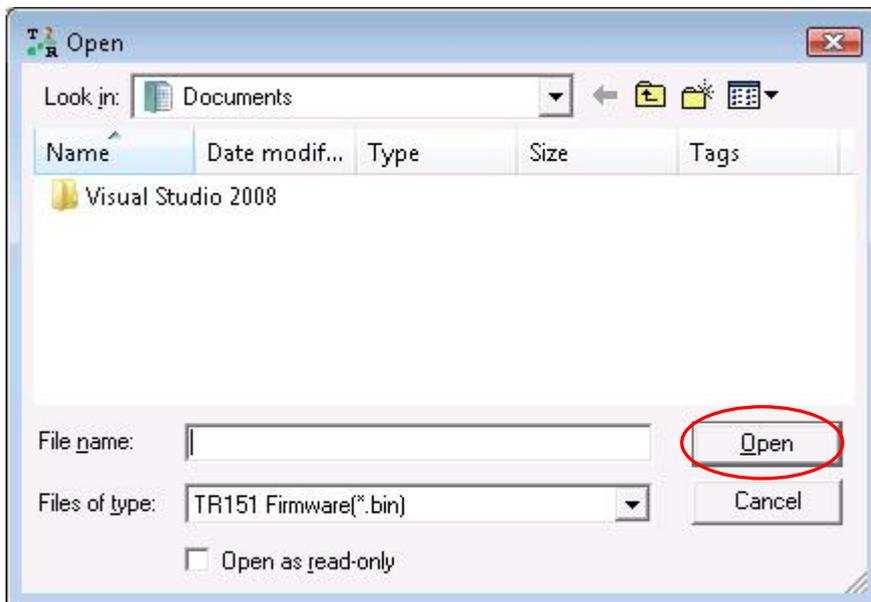
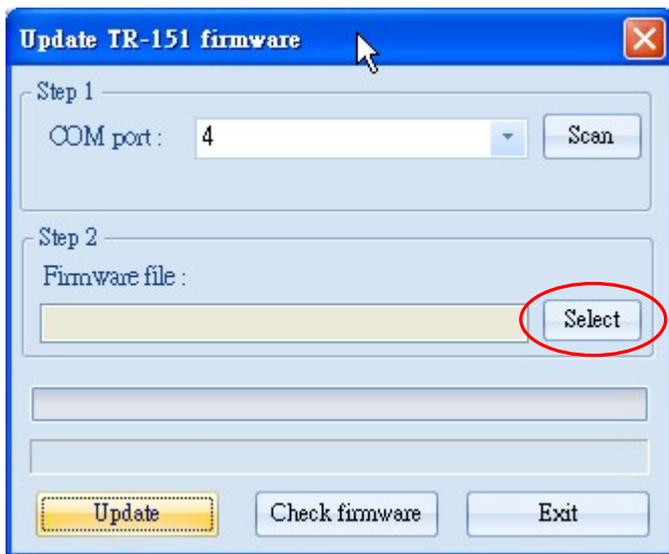
Step 5: Please select **Management** → **Update TR-151 Firmware**



Step 6: Please click **Scan** to scan the COM port, and then click **OK**.



Step 7: Please click **Select** and locate the firmware file, once found click **Open**.



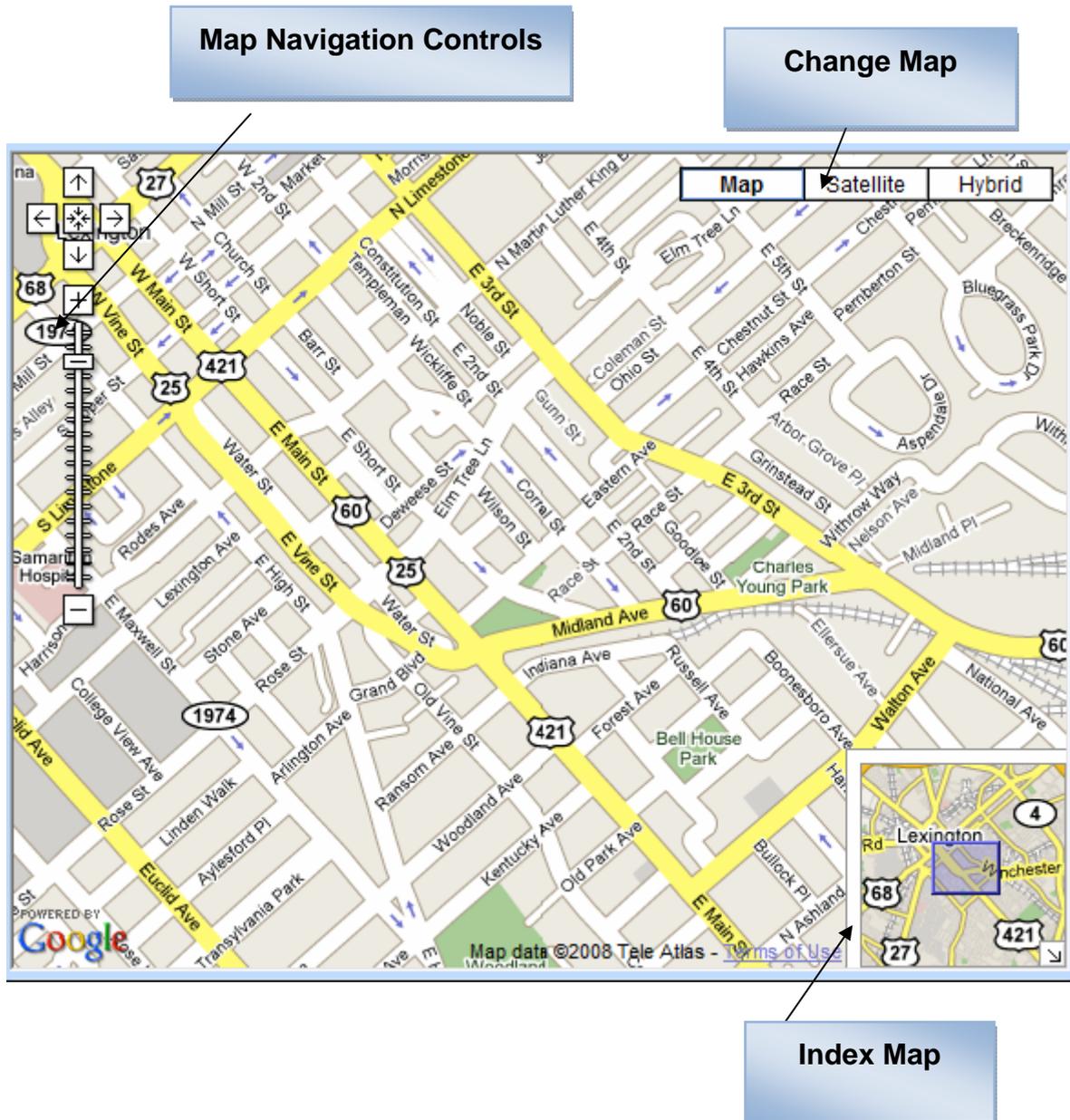
Step 8: Please click Update to update TR-151's firmware.

4.8 Using Google Map

Google Map is an online map developed by Google Inc. It offers access to major maps of the world and is constantly updated.

As Google Map is integrated into TR Management center, TR Management center can work under Internet connected status. If you start TR Management center under no Internet connection, a warning window of No Internet connection will appear.

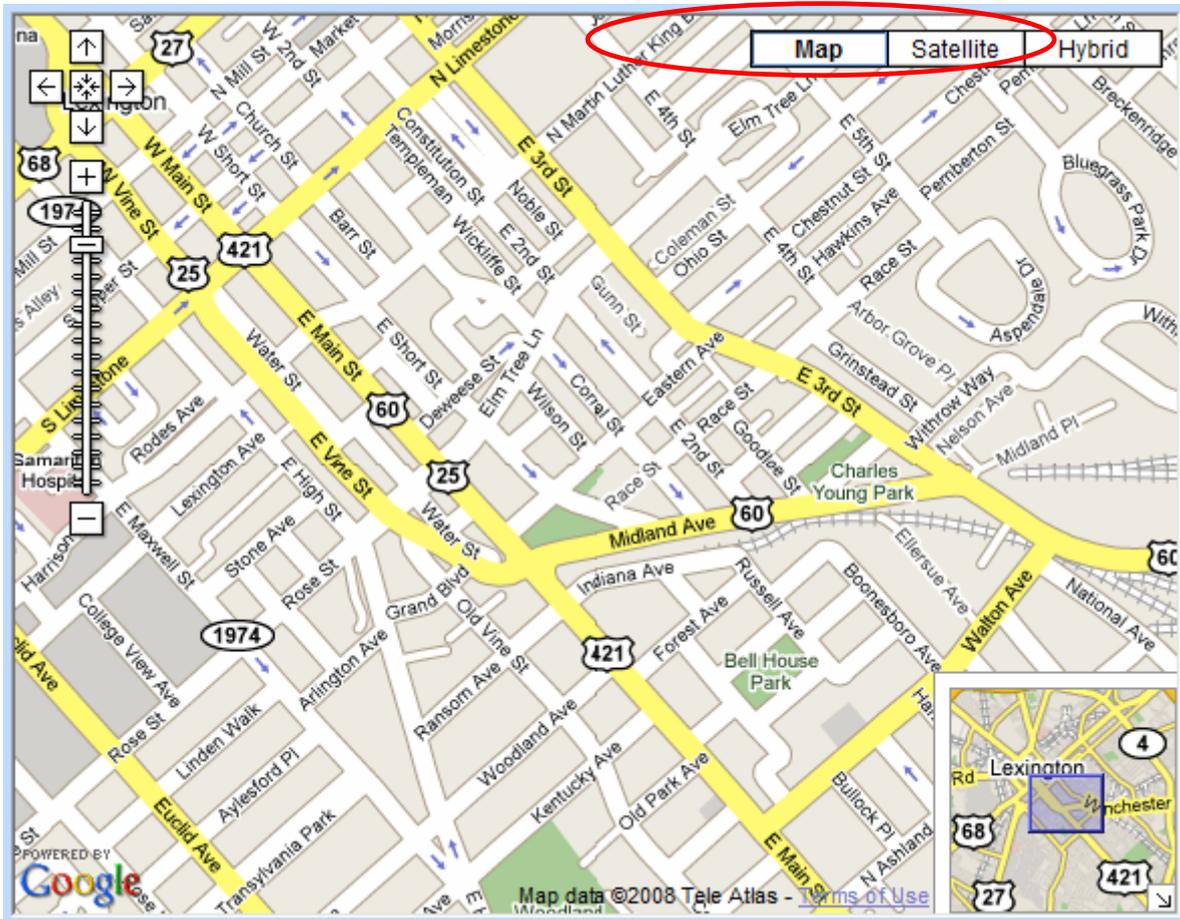
Below please see the introduction of Google Map



4.8.1 Google map data

Google Map includes the basic map, satellite map, hybrid map and other map data.

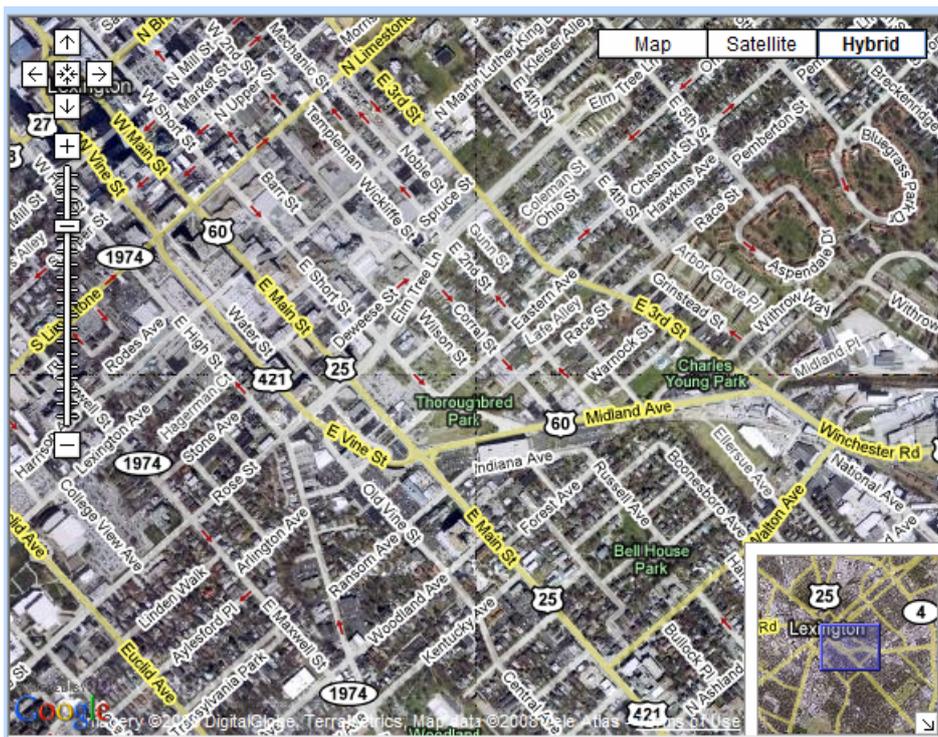
You can switch the map by the buttons on the upper right corner of Google map.



Basic Map



Satellite Map



Hybrid Map

4.8.2 Google map operation

Move the map: You can move the map by right clicking and dragging the map. Or you can move



the map by the tool on the Google map.

Zoom the map: You can zoom in or zoom out the map by scrolling forward or backward the



mouse. Or you can zoom in or out the map by the tool

5. Appendix 1: GPRS Setting

Country	Network	APN	User Name	Password
Albania	Vodafone	Twa	guest	guest
Argentina	CTI	internet.ctimovil.com.ar	guest	guest
Argentina	Movistar	internet.gprs.unifon.com.ar internet.unifon	wap	wap
Argentina	Personal	gprs.personal.com	[mobile number]	adgj
Australia	Optus	internet	guest	guest
Australia	Telstra	telstra.internet	guest	guest
Australia	Telstra (data bundles)	telstra.datapack	[blank]	Telstra
Australia	Telstra (pay by time)	telstra.pcpack	[blank]	Telstra
Australia	Three	3netaccess	a	a
Australia	Vodafone	vfinternet.au	guest	guest
Austria	Drei	drei.at	guest	guest
Austria	Max Online	gprsinternet	GPRS	[blank]
Austria	Max Online (Business)	business.gprsinternet	GPRS	[blank]
Austria	Max Online (Metro)	gprsmetro	GPRS	[blank]
Austria	Mobilkom A1	a1.net	ppp@a1plus.at	ppp
Austria	OneNet	web.one.at	web	web
Austria	tele.ring	web	web@telering.at	web
Azerbaijan	Azercell	internet	guest	guest
Bangladesh	Grameen Phone	gpinternet	[blank]	[blank]
Belarus	VELCOM	web.velcom.by unlim.velcom.by	web unlim	web unlim

Belgium	Mobistar (personal)	internet.be	mobistar	mobistar
Belgium	Mobistar (business)	web.pro.be	mobistar	mobistar
Belgium	Orange	orangeinternet	guest	guest
Belgium	Proximus (Internet)	internet.proximus.be	guest	guest
Belgium	Proximus (intranet)	intraprox.be	guest	guest
Botswana	Mascom Wireless	internet.mascom	guest	guest
Brazil	Claro	claro.com.br	claro	claro
Brazil	Oi	gprs.oi.com.br	guest	guest
Brazil	Oi (WAP)	wapgprs.oi.com.br	oiwap	oioioi
Brazil	TIM	tim.br	tim	tim
Brazil	Velox	wap.telcel.com	iesgprs	iesgprs2002
Bulgaria	GloBul	internet.globul.bg	globul	[none]
Bulgaria	M-Tel	mms-gprs.mtel.bg	mtel	mtel
Cameroon	MTN Cameroon	INTERNET	guest	guest
Canada	KORE Wireless	apn.zerogravitywireless.com	[blank]	[blank]
Canada	Microcell (Fido)	internet.fido.ca	fido	fido
Canada	Rogers AT&T	internet.com	wapuser1	wap
Chile	Entel PCS	imovil.entelpcs.cl	entelpcs	entelpcs
Chile	Telefonica Movil	web.tmovil.cl	web	web
China	China Mobile	cmnet	guest	guest
China	China Unicom	[none]	guest	guest
Croatia	T-Mobile	web.htgpr	38591	38591

Croatia	VIPNET START	gprs0.vipnet.hr	38591	38591
Croatia	VIPNET PRO	gprs5.vipnet.hr	38591	38591
Croatia	VIPNET 3G	3g.vip.hr	38591	38591
Colombia	Movistar	internet.movistar.com.co	movistar	movistar
Congo	Vodacom	vodanet	vodalive	[blank]
Costa Rica	IceCelular	icecelular	guest	guest
Czech Republic	Cesky Mobil (contract)	internet	guest	guest
Czech Republic	Cesky Mobil (CM Prepay)	cinternet	guest	guest
Czech Republic	Telefonica (contract)	internet	guest	guest
Czech Republic	Telefonica (Go)	gointernet	guest	guest
Czech Republic	Vodafone (contract)	internet	guest	guest
Czech Republic	Vodafone (pre-pay)	ointernet	guest	guest
Czech Republic	T-Mobile	internet.t-mobile.cz	guest	guest
Denmark	3	[none]	guest	guest
Denmark	Orange	web.orange.dk	guest	guest
Denmark	Sonofon	[none]	guest	guest
Denmark	TDC	internet	guest	guest
Dominican Republic	Orange	orangenet.com.do	guest	guest
Egypt	Click Vodafone	internet.vodafone.net	internet	internet
Egypt	MobiNil	mobilnilweb	guest	guest
Estonia	EMT	internet.emt.ee	guest	guest

Estonia	RLE	internet	guest	guest
Finland	Dna	internet	guest	guest
Finland	Elisa (Radiolinja)	internet	rlnet	internet
Finland	Saunalahti	internet.saunalahti	guest	guest
Finland	Sonera	internet	[blank]	[blank]
Finland	Song	internet.song.fi	song@internet	songnet
France	Bouygues	ebouygtel.com	guest	guest
France	Bouygues (B2Bouygtel)	b2bouygtel.com	guest	guest
France	Orange (contract)	orange.fr	orange	orange
France	Orange MIB	orange-mib	mportail	mib
France	Orange Mobicarte	orange-acte	orange	orange
France	SFR	websfr	guest	guest
Germany	D2 Vodafone	web.vodafone.de	guest	guest
Germany	E-Plus	internet.eplus.de	eplus	gprs
Germany	O2 (3G)	surfo2	guest	guest
Germany	O2 (GPRS)	internet	guest	guest
Germany	Quam	quam.de	quam	quam
Germany	T-Mobile D1	internet.t-mobile	internet.t-d1.de	t-mobile
Ghana	Areeba (formerly Spacefon)	internet.spacefon.com	guest	guest
Greece	Cosmote	internet	guest	guest
Greece	Telestet	gnet.b-online.gr	MSISDN, e.g. 3093XXXXXX	24680
Greece	TIM	gint.b-online.gr	web	web

Greece	Vodafone	internet.vodafone.gr	guest	guest
Guatemala	Comcel	Wap.tigo.gt	Wap	Wap
Guatemala	PCS Digital	ideasalo	guest	guest
Guyana	GT&T Cellink Plus	wap.cellinkgy.com	test	test
Hong Kong	CSL	hkcs1 or internet	guest	guest
Hong Kong	New World	internet	guest	guest
Hong Kong	Orange	web.orangehk.com	guest	guest
Hong Kong	People	internet	guest	guest
Hong Kong	SmarTone	internet	guest	guest
Hong Kong	Sunday	internet	guest	guest
Hong Kong	Three	web-g.three.com.hk	guest	guest
Hungary	Pannon (normal)	net	guest	guest
Hungary	Pannon (flat rate)	netx	guest	guest
Hungary	Pannon (compressed)	snet	guest	guest
Hungary	T-Mobile (subscription)	internet	[supplied]	[supplied]
Hungary	T-Mobile (non-sub.)	internet	wap	Wap
Hungary	T-Mobile (MMS)	mms-westel	mms	[supplied]
Hungary	Vodafone (contract) (compr.)	internet.vodafone.net	guest	guest
Hungary	Vodafone (contract) (un-comp.)	standardnet.vodafone.net	guest	guest

Hungary	Vodafone (pre-pay) (comp.)	vitamax.internet.vodafone.net	guest	guest
Hungary	Vodafone (pre-pay) (un-comp.)	vitamax.snet.vodafone.net	guest	guest
India	AirTel	airtelgprs.com	guest	guest
India	BPL	bplgprs.com	bplmobile	[blank]
India	BSNL	celloneportal	guest	guest
India	Hutch (normal)	www	guest	guest
India	Hutch (Gujarat)	web	guest	guest
India	Idea Cellular	internet	guest	guest
India	MTNL Mumbai	mmsmtnlmum	mtnl	mtnl123
India	MTNL Mumbai (Plan 2)	gprsmtnlmum	mtnl	mtnl123
Indonesia	Excelcomindo	www.xlgprs.net	xlgprs	proxl
Indonesia	IM3	www.indosat-m3.net wap.indosat-m3.net	gprs	im3
Indonesia	Indosat (Matrix)	satelindogprs.com indosatgprs	guest	guest
Indonesia	Telkomsel	internet telkomsel	wap	wap123
Ireland	Meteor	isp.mymeteor.ie	my	meteor
Ireland	O2 (contract)	open.internet	gprs	gprs
Ireland	O2 (pre-pay)	pp.internet	gprs	gprs
Ireland	Vodafone (contract)	isp.vodafone.ie	vodafone	vodafone

Ireland	Vodafone (pre-pay)	live.vodafone.com	vodafone	vodafone
Israel	Cellcom	internetg	guest	guest
Israel	MTC-Vodafone	apn01	guest	guest
Israel	Orange	orangeinternet	guest	guest
Italy	Blu	INTERNET	guest	guest
Italy	H3G	tre.it	guest	guest
Italy	TIM	ibox.tim.it	guest	guest
Italy	Vodafone (Omnitel)	web.omnitel.it	guest	guest
Italy	Wind	internet.wind internet.wind.biz	Wind	Wind
Jamaica	Cable & Wireless	wap	guest	guest
Jamaica	Digicel	web.digiceljamaica.com	wapuser	wap03jam
Japan	Vodafone (J-Phone)	vodafone	ai@vodafone	vodafone
Jersey	(See UK)			
Kazakhstan	Beeline	internet.beeline.kz	internet.beeline	[blank]
Kenya	Safaricom	web.safaricom.com	web	web
Laos	ETL	etlnet	guest	guest
Latvia	LMT	internet.lmt.lv	[blank]	[blank]
Latvia	Tele2	internet.tele2.lv	gprs	internet
Lebanon	Cellis FTML	internet.ftml.com.lb	plugged	plugged
Lebanon	MTC Touch	gprs.mtctouch.com.lb	guest	guest
Lithuania	Bite GSM	bang	guest	guest
Lithuania	Omnitel (contract)	gprs.omnitel.net	guest	guest
Lithuania	Omnitel	gprs.startas.lt	omni	omni

	(no contract)			
Luxembourg	LUXGSM	web.pt.lu	guest	guest
Luxembourg	Tango	internet	tango	tango
Luxembourg	VOXmobile	vox.lu	guest	guest
Macau	CTM	ctm-mobile	guest	guest
Macau	Macau Hutchison Telecom (Internet)	web.hutchisonmacau.com	hutchison	1234
Macau	Macau Hutchison Telecom (MMS)	mms.hutchisonmacau.com	hutchison	1234
Malaysia	DIGI	diginet	guest	guest
Malaysia	Celcom	celcom.net.my	guest	guest
Malaysia	Maxis 2G (contract)	internet.gprs.maxis	guest	guest
Malaysia	Maxis 3G (contract)	unet	maxis	wap
Malaysia	Maxis (pre-pay)	net	maxis	net
Malaysia	Timecel	timenett.com.my (timenet.com.my?)	guest	guest
Malaysia	TM Touch	internet	guest	guest
Malta	Go Mobile (contract)	gosurfing	guest	guest
Malta	Go Mobile (pre-pay)	rtgsurfing	guest	guest
Mexico	Telcel	internet.itelcel.com	webgprs	webgprs2002
Moldavia	Moldcell	internet	gprs	gprs
Morocco	Maroc Telecom	iam	wac	1987
Morocco	Medi Telecom	wap.meditel.ma	MEDIWAP	MEDIWAP
Netherlands	KPN Mobile	internet	KPN	gprs

Netherlands	O2	internet	guest	guest
Netherlands	T-Mobile (Ben) active	internet	guest	guest
Netherlands	Telfort	internet	telfortnl	password
Netherlands	Vodafone (normal)	web.vodafone.nl	vodafone	vodafone
Netherlands	Vodafone (business)	office.vodafone.nl	vodafone	vodafone
New Zealand	Vodafone (unrestricted)	internet	guest	guest
New Zealand	Vodafone (restricted)	www.vodafone.net.nz	guest	guest
Nicaragua	Alo Pcs	internet.ideasalo.ni	internet	internet
Nigeria	Globacom (Internet)	gprs	wap	[blank]
Nigeria	Globacom (WAP)	glowap	wap	wap
Nigeria	MTN Nigeria	web.gprs.mtnnigeria.net	wap	gprs
Nigeria	Vmobile	wap.vmobile	wap	wap
Norway	Netcom	internet.netcom.no	netcom	netcom
Norway	TalkMore	(same as Netcom)		
Norway	Telenor Mobil (Vodafone)	Internet internet.vodafone.net	guest	guest
Pakistan	UFone	ufone.internet	ufone	ufone
Panama	Cable & Wireless	apn01.cwpanama.com.pa	xxx	xxx
Paraguay	CTI	internet.ctimovil.com.py	ctigprs	ctigprs999
Peru	Claro (TIM)	tim.pe	tim	tulibertad
Philippines	Globe Telecoms (Web)	internet.globe.com.ph	globe	globe

Philippines	Globe Telecoms (WAP)	www.globe.com.ph	globe	globe
Philippines	Smart	internet	witsductoor	banonoy
Philippines	Sun Cellular	minternet	guest	guest
Poland	ERA	erainternet	erainternet	erainternet
Poland	Heyah	heyah.pl	heyah	heyah
Poland	Orange	internet	internet	internet
Poland	Polkomtel	www.plusgsm.pl	guest	guest
Portugal	Optimus	internet	guest	guest
Portugal	TMN	internet	guest	guest
Portugal	Vodafone (Telecel)	internet.vodafone.pt	guest	guest
Russia	Beeline	internet.beeline.ru	beeline	beeline
Romania	Connex (Vodafone)	internet.connex.ro	internet.connex.ro	connex
Romania	Orange	internet	guest	guest
Russia	Megafon (dv)	internet.dv	guest	guest
Russia	Megafon (kvk)	internet.kvk	guest	guest
Russia	Megafon (Itmsk)	internet.ltmsk	guest	guest
Russia	Megafon (Moscow)	internet.msk	gdata	gdata
Russia	Megafon (mc)	internet.mc	guest	guest
Russia	Megafon (NWGSM)	internet.nw	guest	guest
Russia	Megafon (Siberia)	internet.sib	guest	guest

Russia	Megafon (UGSM)	internet.ugsm	guest	guest
Russia	Megafon (usi)	internet.usi.ru	guest	guest
Russia	Megafon (Volga)	internet.volga	guest	guest
Russia	Motiv (uses BeeLine)	internet.beeline.ru	beeline	beeline
Russia	MTS	internet.mts.ru internet.kuban	mts	mts
Russia	NCC	internet	ncc	[supplied]
Russia	NTC	internet.ntc	guest	guest
Russia	PrimTel	internet.primtel.ru	guest	guest
Saint Lucia	Cable & Wireless	internet	guest	guest
Saint Vincent & the Grenadines	Digicel	wap.digiceloecs.com	wapoecs	wap03oecs
Saudi Arabia	STC	jawalnet.com.sa	guest	guest
SĚnĚgal	Tigo	wap.sentelgsm.com	guest	guest
Serbia- Montenegro	Mobtel Srbija	internet	mobtel	gprs
Serbia- Montenegro	Telekom Srbija	gprsinternet	mts	064
Serbia- Montenegro	Telekom Srbija (MMS service)	mms	mts	064
Serbia- Montenegro	Telekom Srbija (WAP service)	gprswap	mts	064
Singapore	M1	mobilenet	guest	guest
Singapore	SingTel	internet	guest	guest
Singapore	Starhub	shwapint	guest	guest
Slovakia	Eurotel	internet	guest	guest

Slovakia	Globtel	internet	guest	guest
Slovakia	Orange	internet	jusernejm	pasvord
Slovenia	Mobitel (Internet)	internet	mobitel	internet
Slovenia	Mobitel (Internet Pro)	internetpro	mobitel	internet
Slovenia	Simobil	[none]	guest	guest
South Africa	Cell-C	internet	guest	guest
South Africa	MTN	internet	guest	guest
South Africa	Vodacom	internet	guest	guest
South Africa	Virgin Mobile	vdata	guest	guest
Spain	Amena	internet	CLIENTE	AMENA
Spain	Telefonica (Movistar)	movistar.es	movistar	movistar
Sri Lanka	Dialog GSM (contract)	www.dialogsl.com	guest	guest
Sri Lanka	Dialog GSM (pre-pay)	ppwap	guest	guest
Sri Lanka	Mobitel	isp	guest	guest
Spain	Vodafone (Airtel)	airtelnet.es	vodafone	vodafone
Sweden	Tele2, Comviq	isplnk1.swip.net	gprs	internet
Sweden	Tele2 (3G)	internet.tele2.se	wap	wap
Sweden	Telenor (GPRS)	internet.vodafone.net	guest	guest
Sweden	Telenor (3G)	services.vodafone.net	guest	guest
Sweden	Telia	online.telia.se	guest	guest
Sweden	Tre (3G)	data.tre.se	void	void

Switzerland	Orange	internet	guest	guest
Switzerland	Sunrise	internet	internet	internet
Switzerland	Swisscom	gprs.swisscom.ch	guest	guest
Taiwan	Chunghwa Telecom	emome or internet	guest	guest
Taiwan	Far EasTone	fetnet01	guest	guest
Taiwan	KG Telecom	internet	guest	guest
Taiwan	Taiwan Cellular	internet	guest	guest
Thailand	AIS	internet	ais	ais
Thailand	DTAC	www.dtac.co.th	guest	guest
Turkey	Aycell	aycell	guest	guest
Turkey	Telsim	telsim	telsim	telsim
Turkey	Türkcell	internet	gprs	gprs
UAE	Etisalat	mnet	mnet	mnet
UK	3	three.co.uk	guest	guest
UK	Jersey Telecom	pepper	abc	abc
UK	O2 (contract)	mobile.o2.co.uk	web	password
UK	O2 (contract) -faster-	mobile.o2.co.uk	faster	password
UK	O2 (pre-pay)	payandgo.o2.co.uk	payandgo	payandgo
UK	Orange (Pay Monthly)	orangeinternet	user	pass
UK	Orange (Pay and Go)	orangewap	Multimedia	Orange
UK	T-Mobile	general.t-mobile.uk	user	pass

UK	Virgin Mobile	goto.virginmobile.com	user	[space]
UK	Vodafone (contract)	internet	web	webs
UK	Vodafone (pre-pay)	pp.vodafone.co.uk	wap	wap
Ukraine	Djuice	www.djuice.com.ua	igprs	igprs
Ukraine	Jeans	www.jeans.ua	guest	guest
Ukraine	Kyivstar	www.kyivstar.net	igprs	internet
Ukraine	Mobi-GSM	internet.urs	guest	guest
Ukraine	UMC	www.umc.ua	guest	guest
Uruguay	ANCEL	gprs.ancel	guest	guest
Uruguay	CTI	internet.ctimovil.com.uy	ctiweb	ctiweb999
Uruguay	Movistar	webapn.movistar.com.uy	movistar	movistar
USA	Cingular (ex AT&T)	proxy	guest	guest
USA	Cingular (With acceleration)	ISP.CINGULAR	ISPDA@ CINGULARGPRS .COM	CINGULAR1
USA	Cingular (NO acceleration)	ISP.CINGULAR	ISP@ CINGULARGPRS .COM	CINGULAR1
USA	Cingular (non-contract)	WAP.CINGULAR	WAP@ CINGULARGPRS .COM	CINGULAR1
USA	T-Mobile (Internet)	internet2.voicestream.com	guest	guest
USA	T-Mobile (VPN)	internet3.voicestream.com	guest	guest
USA	T-Mobile (non-contract)	wap.voicestream.com	guest	guest
Uzbekistan	Uzdunrobita	net.urd.uz	user	pass
Venezuela	Digitel TIM	gprsweb.digitel.ve	guest	guest

6. Appendix 2: Setting Free Web Service

Free web service is provided on <http://traq.gstraq.com/login.php> by Globalsat Corporation

Before using the service, please adjust TR-151 by the tool in the product CD

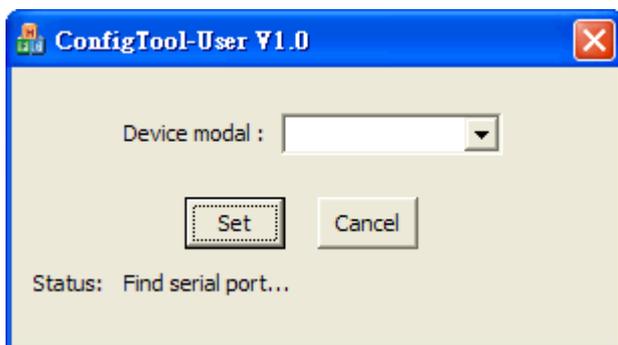
Please insert the product CD in the CD ROM of PC.

You will see the window below.



Please click the “**Set Free Web Service**”

The window for setting free web service will be brought like the window below.



Please make TR-151 enter setting mode by adjusting DIP switch 3 to the position of ON.

Please connect TR-151 to PC by USB cable.

Please turn on the power of TR-151.

Please click **Set** button when the program finds the COM port of TR-151 like the screenshot below.

